Remote Desktop Manager

Remote Connections & Passwords. Everywhere!

User Manual

2020.1

Devolutions

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Overview

Part I

1 Overview

1.1 Remote Desktop Manager

Remote Desktop Manager is an application that integrates a comprehensive set of tools and managers to meet the needs of any IT team. It is designed to centralize remote connection technologies, credentials, and secure the access to these resources. Most connections are established using either an external library or third-party software.

Remote Desktop Manager is compatible with several relevant tools and technologies, including: **Apple Remote Desktop**, **Citrix**, **Dameware**, **FTP**, **Hyper-V**, **LogMeIn**, **Radmin**, **RDP (Microsoft Remote Desktop)**, **SSH Port Forward**, **SSH Shell**, **TeamViewer, Telnet**, **Remote Desktop Services**, **VMware**, **VNC**, **SCP**, **Wayk Now**, **X Windows**, and more!

THE REMOTE DESKTOP MANAGER ECOSYSTEM

Remote Desktop Manager is available in two editions:

Free	For individuals only, no information can be shared with colleagues. The most popular remote access technologies are supported, and passwords can be stored securely.
Enterprise	Used by teams, this edition offers user permissions, roles, advanced logging, etc. Typically uses a Database Management System (DBMS) for storing the information and sharing it according to **your** security requirements. Devolutions also offers two specialized services for either Cloud-Based storage, or to get full Active Directory Integration.

Remote Desktop Manager is also offered on multiple platforms, as seen below.

✓ Purchasing an Enterprise license grants the right to use ALL the various client applications.

You must use a desktop application to create a team data source. This explains why the mobile applications are free. They do allow for simple usage by an individual much like the Free Edition, but they can only **use**, not **manage**, a Team data source.

Platform	Free Edition	Enterprise Edition
Windows	✓	✓
macOS	✓	✓
iOS		✓ (Free App)
Android		✓ (Free App)

1.2 Security

All passwords stored in the data sources are encrypted using a strong encryption algorithm, to the extent that if a user attempts to access the data directly in the database, it will be considered unreadable.

If you choose to store passwords locally, Remote Desktop Manager will use the same mechanism used by mstsc.exe (Remote Desktop Manager client), which stores the passwords in the Windows Credential Manager. It must be noted that the password will not be able to be viewed due to being encrypted by Windows. For obvious reasons, this choice also means that credentials stored in this fashion are not shared. Please refer to Windows Credential Manager for more information.

U.S. FEDERAL GOVERNMENT APPROVED ENCRYPTION

Our application integrates an Advanced Encryption Standard (AES) algorithm to protect sensitive data in the database.

This cipher is proven to be very secure. AES/Rijndael became effective as a U.S. Federal government standard and is approved by the National Security Agency (NSA) for top secret information.

TIPS

Encryption of data while in transit is offered natively by our cloud services. Whenever you decide to use an on-premise solution, encryption of data in transit must be implemented by using the tools involving your chosen technologies. Most customers with security concerns choose one of the supported Advanced Data Sources. Follow instructions specific to the chosen solution.

The encryption key is ***built-in*** the application and is therefore the same for ***all*** copies of the software in circulation. It is **imperative** that you follow our recommended steps and apply a Security Provider to encrypt not only the passwords, but also **all connection data** stored in the data source. This will provide protection over your data at rest, using a key under your **exclusive** control.

We recommend you follow these steps to ensure security:

- Use an Advanced Data Source and grant user access by assigning permissions.
- Use encrypted communication with the database when available.
- Use the Data Source Settings (System Settings) to control settings impacting security.
- Use the Security Provider to encrypt entries completely instead of just the password.
- If using the offline mode, add your own password to add an additional layer of protection to the local cache. Go to ***File – Options – Security***.
- Require a password to launch the application, and even better: require two factor authentication. ***File – Options – Security***.
- If your data source supports it, choose not to save password in the data source, which will prompt for the credentials on the first connection.
- Use our policies to enforce some of these settings at the system level.

1.3 System Requirements

Remote Desktop Manager requires the following prior to installation:

MINIMUM REQUIREMENTS

Windows Desktop:

- Windows 10
  - Version 1607, 1703, 1709, 1803, 1809, 1903 and 1909
- 8.1
- 7 SP1

Windows Server:

- Windows Server 2019
  - Version 1709, 1803 and 1809
- 2016
- 2012 R2
- 2012
- 2008 R2 SP1

Microsoft .NET Framework 4.7.2

1 GHz or faster processor

512MB RAM

1024 x 768 screen resolution

500+ MB hard drive space

64-BIT SUPPORT

Remote Desktop Manager is compatible with all 64-bit versions of Windows.

REMOTE DESKTOP SERVICES AND THIN CLIENT SUPPORT

Remote Desktop Manager can be installed on Remote Desktop Services and thin client.

MANUAL/PORTABLE DEPLOYMENT

Deploying manually using our zip file is documented as being a Portable (USB) deployment. In this case, the prerequisites will need to be handled manually as well. Please consult Prerequisite Software for details.

1.3.1 Prerequisite Software

Specific prerequisite software need to be installed on your computer prior to running Remote Desktop Manager.

> These are managed automatically by our installers. The only situations where one would perform a manual installation of the prerequisite software is when the zip archive is used for deployment or if there is no internet connection.

SETTINGS

The following package must be installed prior to proceeding with the Remote Desktop Manager installation:

- Microsoft .NET Framework 4.7.2.

1.4 The Devolutions Platform

Our platform offers multiple products to help in managing all of aspects of an IT infrastructure.

The flagship product is Remote Desktop Manager, the strongest edition admittedly being for the Windows operating system.

APPLICATIONS	DESCRIPTION	INSTALLATION
Remote Desktop Manager (RDM)	Application used to manage and centralize remote access technologies, passwords, documents and shared information.	Windows, macOS, iOS, Android
Remote Desktop Manager Agent	Tool used to run commands on remote systems. It listens for commands from a master Remote Desktop Manager. It resolves a lot of issues brought on by remote management, in particular removing the need to use Microsoft's WinRM and managing lists of *TrustedHosts*.	Windows
Remote Desktop Manager Jump	Feature that uses the Remote Desktop Manager Agent to launch any of our supported technologies on a remote Windows Host. It transforms it in what is called alternatively a Jump Server, or Bastion Server, or Service Host.	Windows
Devolutions Password Server (DPS)	Enterprise Grade data store for creating a centralized database for your team. Integrates with AD to drastically reduce time spent on managing permissions. It is installed on-premises and offers many advanced features.	Windows
Devolutions Web Login (DWL)	Web browser extension technology that interacts with our Remote Desktop Manager and Password Vault Manager desktop applications to obtain credentials and automatically fill authentication fields in your browser.	Windows, macOS

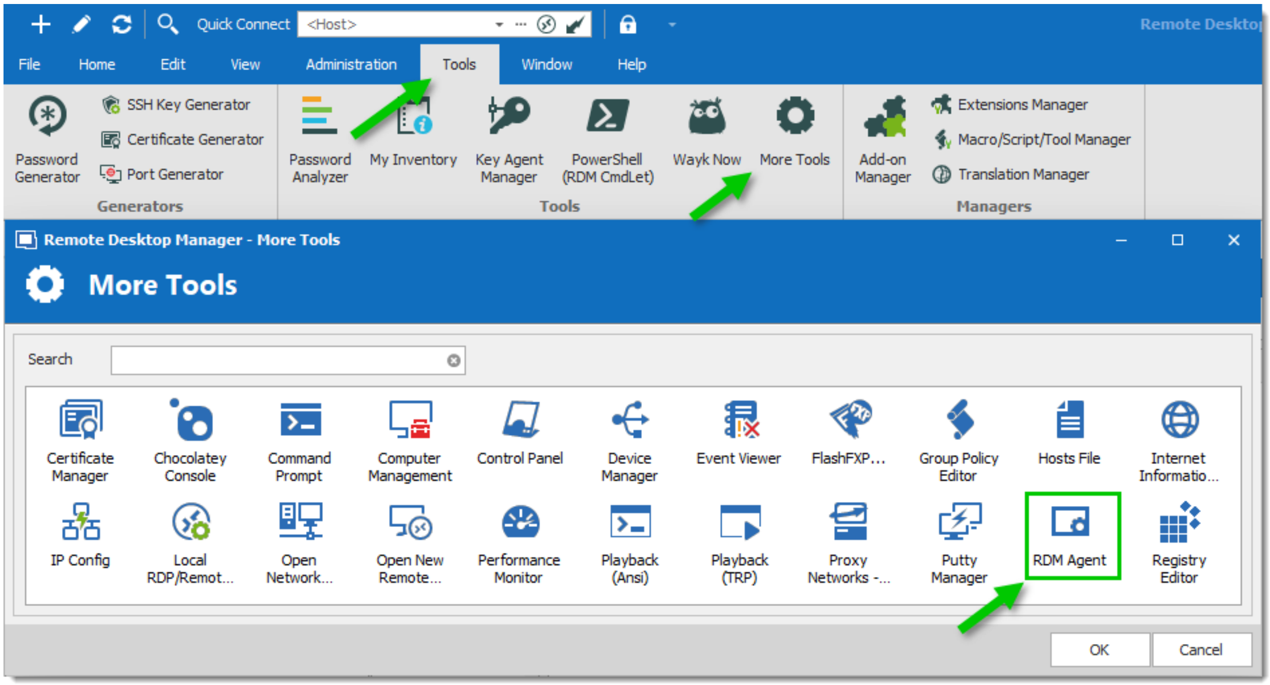
1.4.1 Remote Desktop Manager Agent

> Please note that if your Windows profile is corrupted, Remote Desktop Manager Agent and Remote Desktop Manager Jump might not work.

The Remote Desktop Manager Agent can run commands on remote hosts, but what is really useful is that it can send commands to multiple hosts at the same time. Since Remote Desktop

Manager uses a secure RDP channel to communicate with the Remote Desktop Manager Agent, it can only operate against Windows-based hosts.

It supports both environment and Remote Desktop Manager variables. Remote Desktop Manager variables (i.e. $HOST$, basically all the ones surrounded by dollar signs) are resolved on the client against the running session, while environment variables (i.e. %windir%, basically all the ones surrounded by percent signs) will be resolved on the remote host at execution time. You can use Remote Desktop Manager variables while running file based scripts (.ps1) within the command. The file based script variables (.ps1) will be resolved prior to sending the script to the destination host.



RDM Agent

SCENARIOS

The Remote Desktop Manager Agent can be used to run scripts from another Remote Desktop Manager installation. Since it uses an RDP channel for communication, it saves you from remote management headaches such as opening various ports in your firewall. This requires the lightweight installation model of just the agent package (Methods 2-4 below).

It is also used by Remote Desktop Manager Jump for supporting many technologies. However, it does require a full Remote Desktop Manager installation on the remote host for those features.

INSTALLATION

Installing Remote Desktop Manager Agent on a remote host can be achieved in 4 different ways:

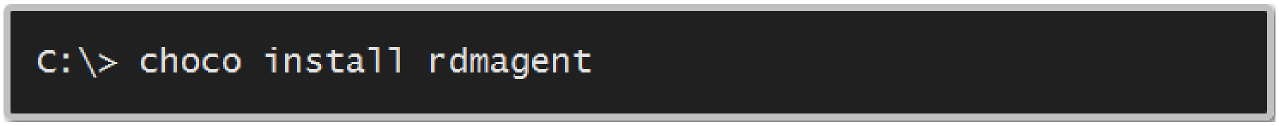
> ✓ The Remote Desktop Manager Agent must be configured to automatically start when a Windows session is established. Method 1 below performs that automatically, but in other cases, you must configure this manually using Windows features (*startup* folder or *Run* registry key). Please consult the documentation of your operating system for details.

1. Install Remote Desktop Manager and select Tools – More Tools – RDM Agent. It will launch and auto-register the Agent to automatically start with Windows.

2. Download Remote Desktop Manager Agent from https://remotedesktopmanager.com/Home/Download, and install the agent on the remote computer.

3. Copy the files Devolutions.Utils.dll, Devolutions.Windows.Utils.dll and RDMAgent.exe from the installation folder of the Remote Desktop Manager version that is used by your team, or download the zip file containing those files at https://remotedesktopmanager.com/Home/Download and deploy them on the remote host in the folder of your choice.

4. Via Chocolatey at https://chocolatey.org/packages/rdmagent.



```
C:\> choco install rdmagent
```

Chocolatey command line

Many new users using this technology wonder why a full installation of Remote Desktop Manager is required. There are three factors that make this a good solution:

- Remote Desktop Manager on the remote host does not require a data source, it’s an empty shell.

- The logging of the activity is brought back to your data source.

- Every technology supported by Remote Desktop Manager can be used remotely.

1.4.2 Remote Desktop Manager Jump

Remote Desktop Manager Jump connects to a remote host, often called a **Jump Box, Service Host, or a Bastion Server**, which in turn connects to other hosts.

This can be compared to RD Gateway from Microsoft and to some extent SSH port forwarding.

✓ The Jump is performed through Remote Desktop Manager Agent. The Agent needs to be **CURRENTLY EXECUTING** in a Windows Session on the remote host, or set to automatically start upon login. We have decided NOT to have this available through a service at this time.

? Remote Desktop Manager must be installed on the jump host for the agent to be able to run commands. The application does not have to connect to any data source, as Remote Desktop Manager only serves as a shell for the agent to run commands.

HOW DOES IT WORK?

▶ Watch Video

Both instances of Remote Desktop Manager Jump or Remote Desktop Manager and RDM Agent running on the Jump Host communicate through an RDP channel. Commands are sent securely over the RDP channel and are then executed on the **Service Host**. Commands include running a script or opening a remote session of any type. It can even launch a VPN client on the **Service Host** prior to running the remote session.

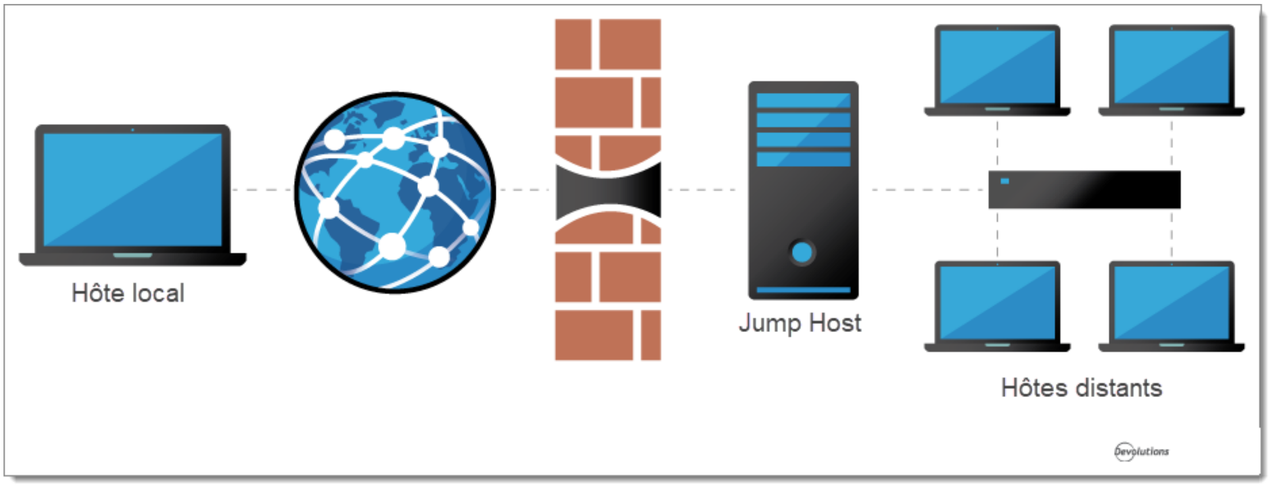
Please consult the Configure Remote Desktop Manager Jump topic.

USAGE SCENARIOS

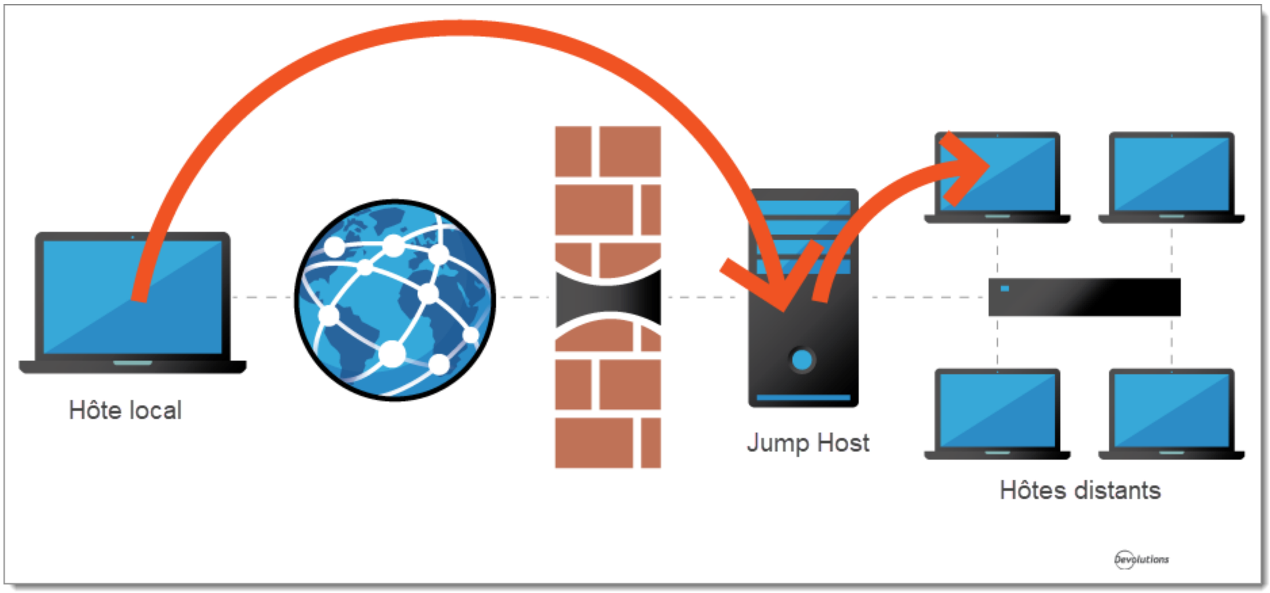
There are two targeted scenarios:

1. ACCESSING A SECURE NETWORK THROUGH A SINGLE HOST

This allows you to have a strict firewall policy that allows connections only from a specific IP address. This configuration only grants you access to hosts that are accessible from the Jump Box. Let's imagine you have the following infrastructure:



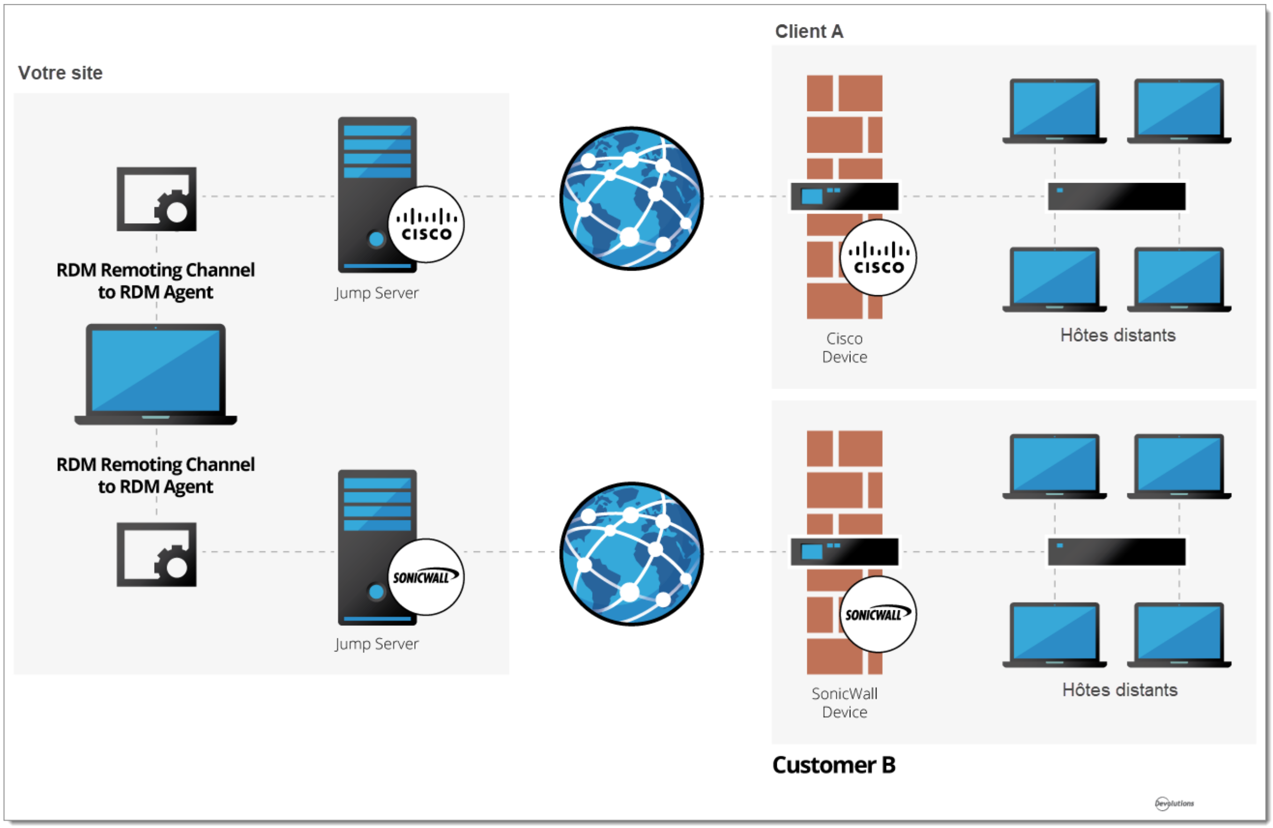
You need to access the remote hosts, but you want to limit risks and expose only the jump host to the internet traffic. This allows you to create strict firewall rules and to open only a single port. Therefore, it forces you to connect to the jump host before hopping to a remote host.



Remote Desktop Manager Jump helps achieve that goal simply and efficiently.

2. WORKAROUND LIMITATIONS OF SOME VPN CLIENTS

These limitations make it impossible to use multiple VPN clients concurrently on the same workstation. In this case, you can have multiple virtual machines, each running a single VPN client. Using these virtual machines as jump boxes allows you to connect to the virtual machine, launch the VPN client, then launch the remote session.



Remote Desktop Manager Jump to handle incompatible VPN clients

Getting Started

Part II

2 Getting Started

2.1 Using Remote Desktop Manager

DESCRIPTION

Remote Desktop Manager is highly flexible and can work for both individuals and teams. Please follow the checklist that applies to your environment:

- Checklist for Individuals: For individuals but also for teams of three users or less that do not want to implement security.
- Checklist for Teams: For a team environment that wishes to implement security.

2.2 Checklist for Individuals

Please follow these simple steps to get started with Remote Desktop Manager for **individuals** or for teams of **three users or less that do not want to implement security**.

CHECKLIST FOR INDIVIDUALS (ENTERPRISE EDITION)	
Step 1 - Register your license serial.	
Step 2 - Choose a data source type (individuals).	
Step 3 - Set up your data source with a master key or encryption.	
Step 4 - Set up your Devolutions Online Backup with Devolutions Account.	
Step 5 - Create your Default Settings.	
Step 6 - Import your data.	

REGISTER REMOTE DESKTOP MANAGER

Remote Desktop Manager Enterprise Edition grants you a 30 day trial. Refer to the procedure in the Registration Enterprise Edition topic to register your license key. If you decide not to register by the end of the 30 day trial, your data will not be altered or erased, and you will have full access to it once you provide a license key. Please consult our Free Edition or Enterprise Edition topic to register.

CHOOSE YOUR DATA SOURCE TYPE

> When choosing any data source type that is not **on-premises**, you need to think about the safety of the data at rest and during transport. We strongly recommend that you further encrypt your data by applying a master key for file-based solutions, or a Security Provider for Advanced Data Sources. This ensures **only you** can read the data.

Upon first launch, Remote Desktop Manager uses an SQLite data source. The data sources are elaborated further in the Data Sources overview topic. Consult Choosing your data source (Individuals) for help selecting a data source.

SET UP YOUR DEVOLUTIONS ONLINE BACKUP

The Online Backup allows you to securely backup your information for the following data sources: Devolutions Online Drive, SQLite, XML and Microsoft Access. The backup is automatically executed 30 seconds after any modifications made to the data source content. It is best practice to always back up your data source. If using another type of data source, please consult our Backup Best Practices topic to use the best solution for your chosen data source.

CREATE YOUR DEFAULT SETTINGS

In ***File - Templates - Default Settings***, you will be able to create, edit or reset your default settings when a new entry is created. Each entry type is supported and can have a default template defined to fit your requirements.

IMPORT YOUR DATA

The final step is to Import all of your data into Remote Desktop Manager. You can import your sessions, logins and contacts in a few easy steps.

2.2.1 Select the Data Source type - Individuals

This topic is for individuals or for teams of **three users or less** that do not want to implement security.

To help you select a data source, here is a set of concerns and the list of data sources that can serve in such context. If you have multiple concerns, simply create the intersection of all sets to isolate a list of choices.

When choosing any data source type that is not **on-premises**, you need to think about the safety of the data at rest and during transport. We strongly recommend that you further encrypt your data by applying a master key for file-based solutions, or a Security Provider for Advanced Data Sources. This ensures **only you** can read the data.

DATA SOURCE	LOCAL	SELF-HOSTED	CLOUD BASED	SHARED BETWEEN YOUR COMPUTERS	WORKS OFFLINE	MULTI-USER
SQLite	X				X	
XML	X				X	
Devolutions Online Drive			X	X	X	
Dropbox (Note)			X	X		Note 1
Amazon S3,			X	X		Note 1
FTP, SFTP		X		X		Note 1
Web		X		Note 2		Note 2
Devolutions Online Database - Basic			X	X	X	3 users

NOTES

NOTE 1

There is no protection in the case of data contention issues. The last one saving the file will win! This is for **single** users with **multiple** computers, **not for multiple users** using the data concurrently.

NOTE 2

The master XML is maintained by a single user and synchronized to a web site that is hosted as per your requirements. Accessing the data through a URL ensures it is read-only for other users.

2.3 Checklist for Teams

Here's a checklist to help you get started with Remote Desktop Manager when working in a team environment.

CHECKLIST FOR TEAMS	
Step 1 - Register your license.	
Step 2 - Add your Data Source (for teams).	
Step 3 - Select your Security Provider.	
Step 4 - Create your folder structure.	
Step 5 - Create your Default Settings.	
Step 6 - Create Users.	
Step 7 - Create Roles.	
Step 8 - Create Entries.	
Step 9 - Grant Permissions.	

CHECKLIST FOR TEAMS	
Step 10 - Import your Data.	

REGISTER REMOTE DESKTOP MANAGER

Remote Desktop Manager Enterprise Edition grants you a 30 day trial. Refer to the procedure in the Registration Enterprise Edition topic to register your license key. If you decide not to register by the end of the 30 day trial, your data will not be altered or erased, and you will have full access to it once you provide a license key. Please consult our Free Edition or Enterprise Edition topic to register.

ADD A DATA SOURCE

Watch Video

> When choosing any data source type that is not **on-premises**, you need to think about the safety of the data at rest and during transport. We strongly recommend that you further encrypt your data by applying a master key for file-based solutions, or a Security Provider for Advanced Data Sources. This ensures **only you** can read the data.

Upon first launch, Remote Desktop Manager uses a local SQLite data source. Learn more about adding your own Data Source.

For help selecting a data source tailored to your needs, please see Choosing your data source (Teams).

SELECT YOUR SECURITY PROVIDER

Select your Security Provider before importing or creating any data in your database so nobody can read your entry configuration data, even when people have a direct access to your database.

CREATE YOUR FOLDER STRUCTURE

Watch Video

Top level folders are at the foundation of a solid security structure. Your folder structure (Folder entries) should represent your company structure. For example, you can create a folder for your Production team, one for your Staging team and one for your Testing team.

CREATE YOUR DEFAULT SETTINGS

Watch Video

In ***File - Options*** you can set options for Remote Desktop Manager and create default settings Templates. Each entry type is supported and can have a default template defined to fit your requirements. After you configure the options, use the Custom Installer to share the pre-configured version with your team.

CREATE USERS Watch Video

Remote Desktop Manager supports advanced User Management. User accounts must be created manually by an administrator of the database.

CREATE ROLES

Create Roles to easily manage your security system. You can then assign users to Roles, making it easy to grant permissions to a set of users instead of having to manage permissions individually.

CREATE ENTRIES Watch Video

An Entry is how you save information about your sessions (e.g. RDP, SSH connections), credentials, websites, VPNs, Synchronizers and documents.

GRANT PERMISSIONS Watch Video

Once your users are created you can then grant Permissions for role-based access control. The permissions granted on the folder can be inherited by each entry set under that folder.

IMPORT YOUR DATA

The final step is to Import all of your data into Remote Desktop Manager. You can import your sessions, logins and contacts in a few easy steps.

2.3.1 Select the Data Source type - Teams

This topic is for teams that need the functionality offered by our Enterprise Edition.

When choosing any data source type that is not **on-premises**, you need to think about the safety of the data both at **rest** and during **transport**. We strongly recommend that you further encrypt your data by applying a master key for file-based solutions, or a Security Provider for Advanced Data Sources. This ensures **only you** can read the data.

To help you select a data source, here is a set of concerns and the list of data sources that can serve in such context. If you have multiple concerns, simply create the intersection of all sets to isolate a list of choices.

CONCERN	Devolutions Password Server	SQL SERVER	SQL AZURE	MYSQL/ MARIADB	DODB PRO	DODB ENT
The database is not accessible to end users	X	Note 1 & 2	Note 1	Note 1	Note 1	Note 1
AD accounts used for authentication	X	X				
AD group membership used to assign permissions	X					
The data is stored on-premises	X	X		X		
Activity Logs	X	X	X	X		X
Data accessible globally	Note 3	Note 4	X	Note 4	X	X
Optional local cache of connections	X	X	X	X	X	X

NOTES

NOTE 1

The administrators can create accounts for end users without divulging the passwords. A locked data source definition is imported for each end user. This obviously requires a lot of manual operations by the administrator.

NOTE 2

Integrated Security is the name of a Microsoft technology that does not sends credentials to get access to a SQL Server instance, but rather the token resulting from authentication in your Windows computer. This therefore allows the users to connect directly to the database using other tools. It should not be used if you need to prevent direct access to the database.

Our SQL Server data source offers a third option, namely the Custom (Devolutions) user type. It allows for the user to be impersonated and therefore not be made aware of the credentials used to connect to the database. Please consult User Management for details.

NOTE 3

You should not expose a Devolutions Password Server instance to the Internet without being able to protect it from DDoS attacks. Strong passwords must be used as well as obscure account names that are not easily inferred using social data mining.

NOTE 4

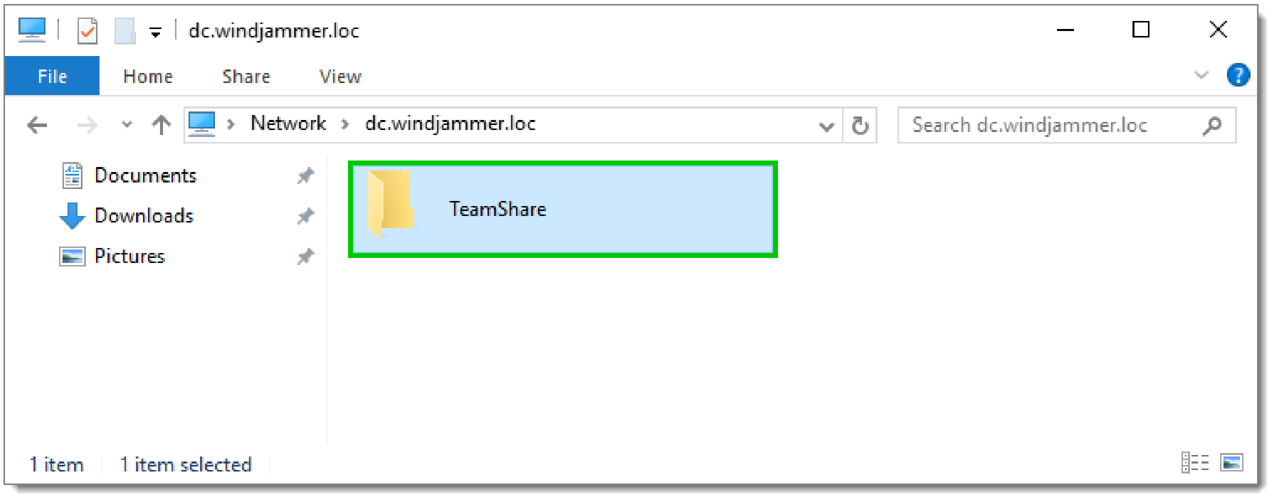
You can indeed expose a database to the Internet, but you must use SSL/TLS to encrypt traffic, you must ALSO protect against DDoS attacks. Cloud services, like Azure or Amazon Web Services, have that concern in the forefront. The default settings of the firewall should be to block everything, you will then open only the most limited set of ports, while filtering on a short list of acceptable origins for requests.

2.3.2 Set up a team folder for default settings

You must create a team folder on a server drive to store your default settings templates in order to share them with your team.

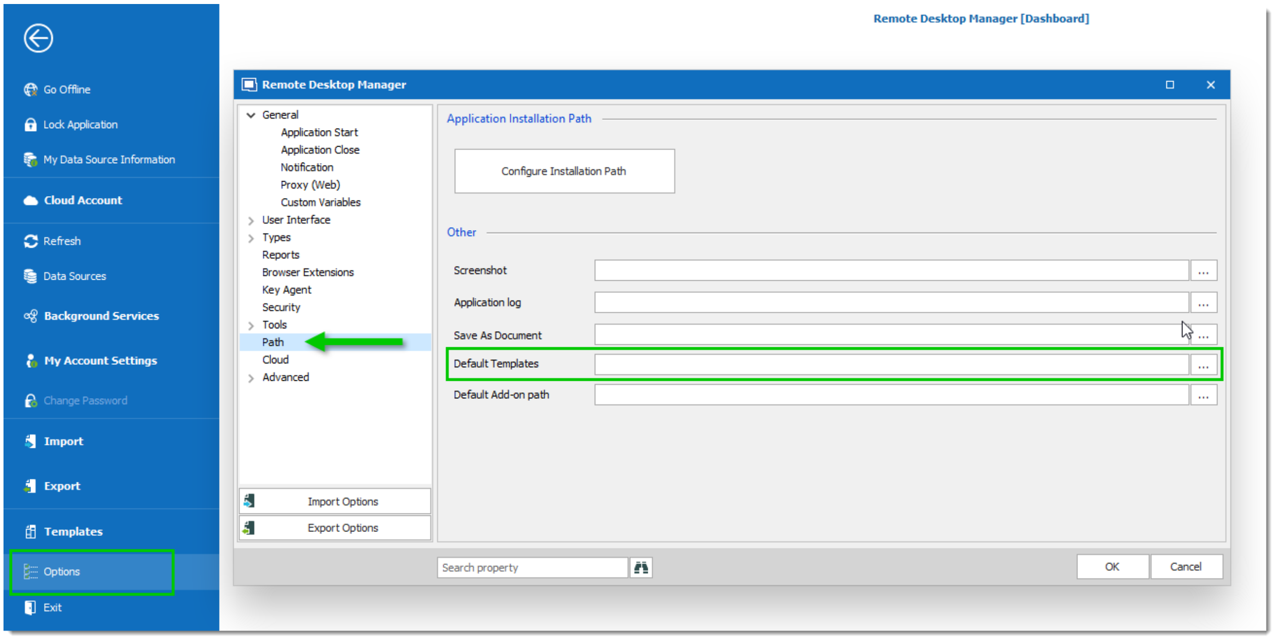
SETTINGS

1. Start by accessing your server drive (such as \\servercommon) and create a new team folder to hold all your team default settings templates.



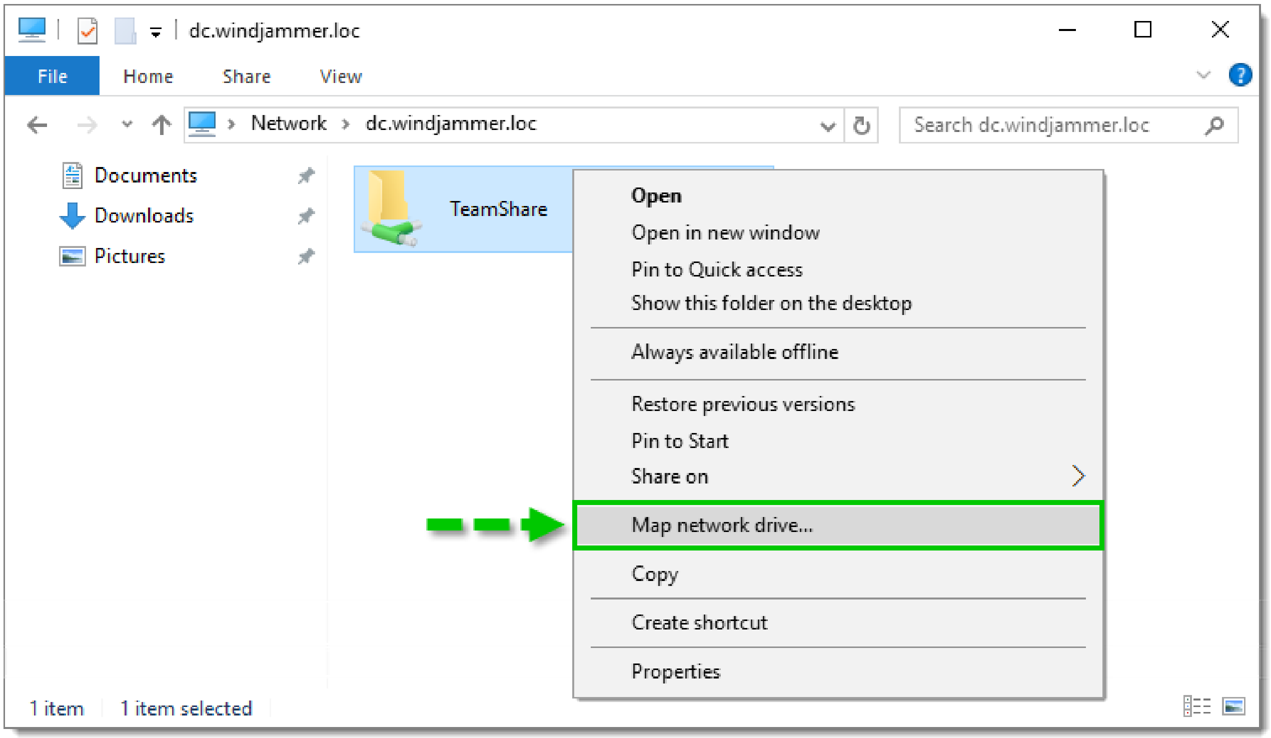
Server Drive - Team Folder

2. Go to ***File - Options - Path*** and enter the path of your newly created folder stored on your server drive. All your default templates will then automatically be saved in that folder.



File - Options - Path

3. If you have remote workers, ensure they have access to the shared server in offline mode. Map your network drive and then follow the instructions here for the offline mode access when using Windows 10.



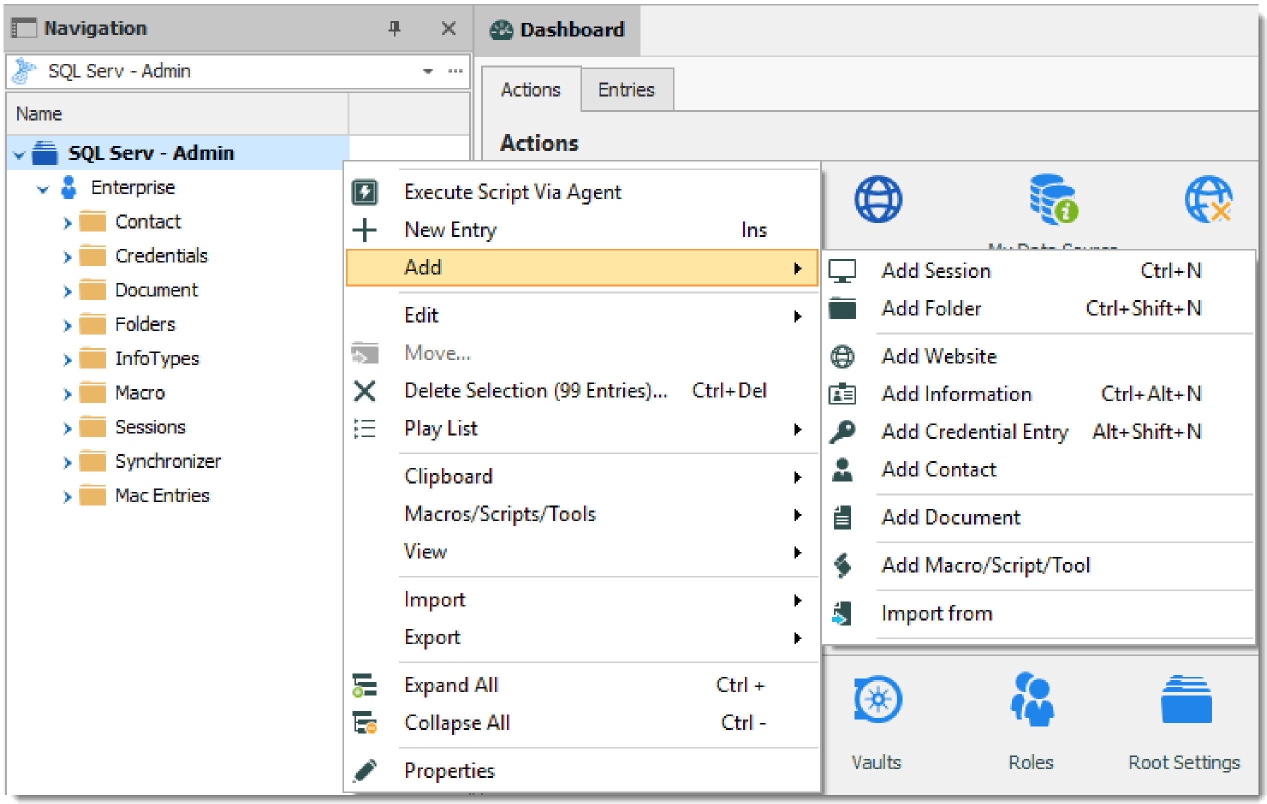
Map Network Drive

2.4 Creating an Entry

When getting started with Remote Desktop Manager, you must configure your entries. There are many types of entries; you should know what third party or technology you will use in order to choose the appropriate entry type(s) that you plan on configuring.

CREATING AN ENTRY FROM THE CONTEXT MENU

On the main application window, simply right-click on **the name of the data source** and select **Add** from the menu. To initialize a new session, you can specify either the type of session, or a template. You will be prompted to customize your settings in the entry properties window.



Adding a new entry

CREATING AN ENTRY WITH DRAG & DROP

You can also create a session by dragging and dropping an .rdp file in the main application window. By doing so, Remote Desktop Manager will ask you whether to import the content and create a new session, or create a session linked to the .rdp file. It is also possible to drag and drop the **LogMeIn** desktop shortcut to create a **LogMeIn** session.

> It is possible that drag and drop will not work because of your security settings. They may prevent applications running in different contexts from interacting. For example, if Remote Desktop Manager is running in an elevated context (administrator mode) and Internet Explorer is running in default mode, Windows will not allow you to drag a URL link in the application.

CREATING AN ENTRY BY IMPORTING ITS CONFIGURATION

You can also import entries by using the Import Computer Wizard, or by importing its configuration directly from any compatible applications supported by our import tools. You can learn more in the Import section.

2.5 Managing Credentials

Depending on your organization's security policies, there are multiple ways of handling credentials. We can manage a wide range of scenarios, the most popular are listed below. It is critical to understand that these are the credentials used to connect to **remote hosts**, not the ones you use to launching **Remote Desktop Manager**.

Most of these selections do not exist in the **Free** edition of Remote Desktop Manager as they depend on features offered by an **Advanced Data Source**.

A few key points that the admin of the solution must be aware of:

Password visibility	You can store passwords in a **Credential** entry (**Username / Password** entry, which (by default) makes the password **USABLE**, but not **VISIBLE**, by the end user. We provide multiple Credential entry types, you should always consider carefully which type you are using based on your security and administrative needs.
Credentials set on folders	Our folders can have credentials defined. This is useful because in the great majority of cases, one reuses the same credentials for a whole branch of the network infrastructure. To make use of credentials defined in a folder, the child sessions must be adjusted to use **Inherited Credentials**.
Entry location	When storing entries in the tree view, users with the ***View*** permissions on that entry (or folder by inheritance) will be able to make use of them. This is how you would share credentials with other members of your team. A Private Vault exists for users to store private information that should be seen by no one else. Credentials stored this way can still be accessed in the Public area of the system by referencing them or through the **User Specific Settings** feature described below.
User Specific Settings	User Specific Settings are **partial overrides** for settings of your entries, most notably the **Credentials**. When applying such an override, one can choose the type in the credentials **directly** in the override or one can choose to instead link to credentials stored elsewhere, such as the Private Vault.

Here are the most common scenarios and how to address them. In the majority of cases, we prefer to have sessions using **Inherited credentials**, meaning it climbs up the tree until it has access to a set of credentials, be it defined, linked, or overridden in an entry.

SCENARIO	STRATEGY
One set of credentials is used by all of the staff, be it for the whole system or for a branch in your tree view (Customer, Department, etc).	Set the credentials on the Vault Settings. All children use **Inherited Credentials**.
Each user has its own credentials for many different branches (often corresponds to customers/departments, etc).	Make use of the User Specific Settings on each branch. All children use **Inherited Credentials**.
Each user has its own credentials managed by an administrator.	This solution involves a little more work. The admin must create a folder for each user, then grant permissions ONLY to that user. The user will then use **User Specific Settings** to specify that the credentials stored in that folder is used to override what is defined in the entries.
Each team uses the same credentials.	Much like directly above, but all the members of the team have access to the folder. All of them must use the **User Specific Settings**.
Each user uses their domain account.	Have the sessions configured to use My personal credentials. Each user will be prompted to define them once per workstation that they use.

Installation

Part III

3 Installation

3.1 Client

Remote Desktop Manager can be downloaded as setup files, or as a binary compressed (zip) file.

INSTALLATION

Depending on the downloaded media, either run the setup, or extract the files from the archive in any folder and launch the executable. If you wish to use a portable device, or run multiple independent copies of the application, please consult Portable (USB).

LICENSE

Remote Desktop Manager Enterprise Edition comes with a 30 day-trial. If you possess a purchased license of the Enterprise Edition, please follow the instructions at Register Enterprise Edition. To register the Free Edition, please refer to the Register Free Edition.

DATA SOURCE

By default, a local data source is created using the SQLite format. You can add as many data sources as needed. Please consult Data Source Overview for more information.

> To use a SQL Server or SQL Azure data source, refer to the Configure SQL Server topic.

EXTERNAL APPLICATIONS

Configure your installation path for all external applications you intend to utilize such as RealVNC, Putty, Filezilla, etc. Set the paths in ***File – Options – Path.***

REMOTE DESKTOP SERVICES

Please consult the Remote Desktop Services topic.

3.1.1 Ancillary Files

DESCRIPTION

Remote Desktop Manager generates ancillary files on your workstation. The table below lists out an example of ancillary files and their locations.

As described in Configuration File Location, the default path for most of these files are customizable. For this reason, we use the ***[CONFIG]*** token in this documentation to denote when a file is stored in a configuration folder that can be relocated, or the ***[PROFILE]*** token to indicate that they are stored in the local profile. By default, these point to the **same exact folder**. The only method to separate them is by using a customized configuration.

Since you can also deploy on a portable device, sometimes known as using the XCOPY deployment model, we will use the ***[INSTALLDIR]*** token to indicate that the file is in the same location as Remote Desktop Manager.

The ***Override Source*** column indicates if an available mechanism can relocate the files of that category elsewhere.

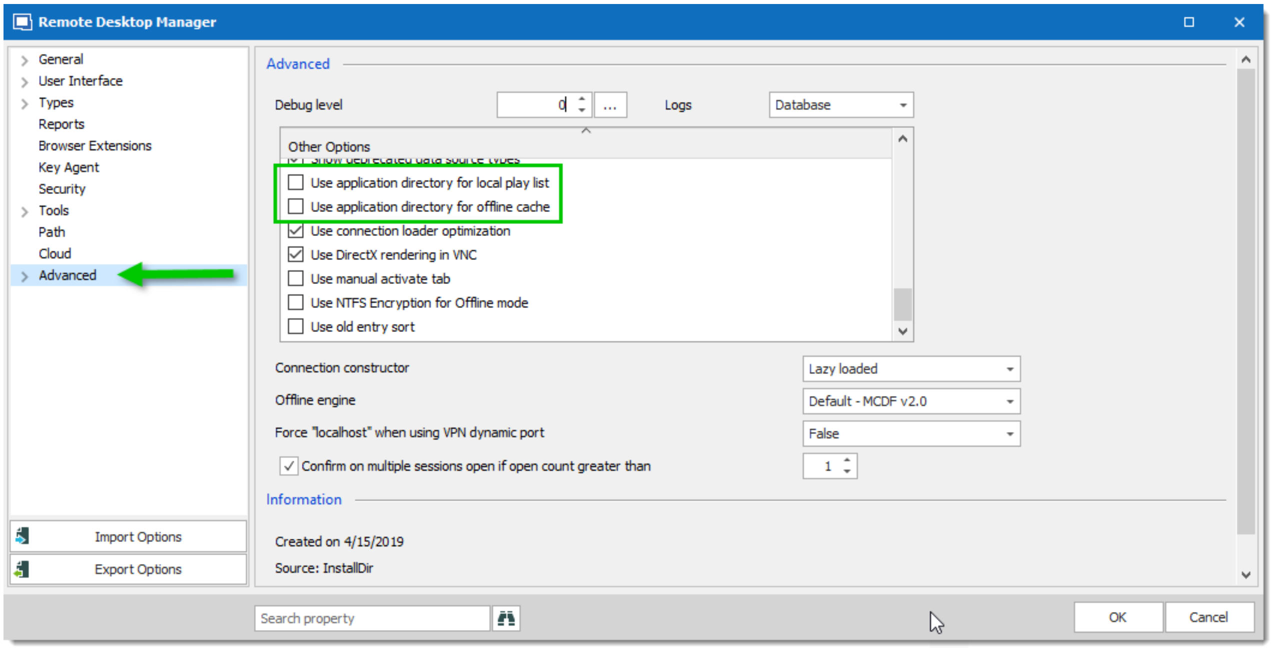
SUMMARY

FILE(S)	LOCATION	OVERRIDE SOURCE
Configuration File(s) (*.cfg, *.ext)	[CONFIG]	None
Data File(s) (*.xml, *.db)	[CONFIG] or custom path.	None
Default Settings	[CONFIG]	Data source settings (System Settings)
Layout Files (*.lyt)	[CONFIG]	None
Log Files (*.log, *.debug)	[CONFIG]	None

FILE(S)	LOCATION	OVERRIDE SOURCE
Offline/Cache data (offline.db)	[PROFILE]\[Datasource]	***Use application directory for online cache*** will use instead [INSTALLDIR]
Local Play lists	[PROFILE]\[Datasource]\Playlists	***Use application directory for local playlist*** will use instead [INSTALLDIR]
Local Templates	They are serialized directly in the configuration file of the application.	None
Themes	[CONFIG]	None

OFFLINE AND LOCAL PLAY LIST OPTION

Offline and local play list options can be accessed by navigating to ***File - Options - Advanced***.



Advanced

Debug level 0 ... Logs Database

Other Options

☐ Use application directory for local play list
☐ Use application directory for offline cache
☑ Use connection loader optimization
☑ Use DirectX rendering in VNC
☐ Use manual activate tab
☐ Use NTFS Encryption for Offline mode
☐ Use old entry sort

Connection constructor: Lazy loaded
Offline engine: Default - MCDF v2.0
Force "localhost" when using VPN dynamic port: False
☑ Confirm on multiple sessions open if open count greater than 1

Information

Created on 4/15/2019
Source: InstallDir

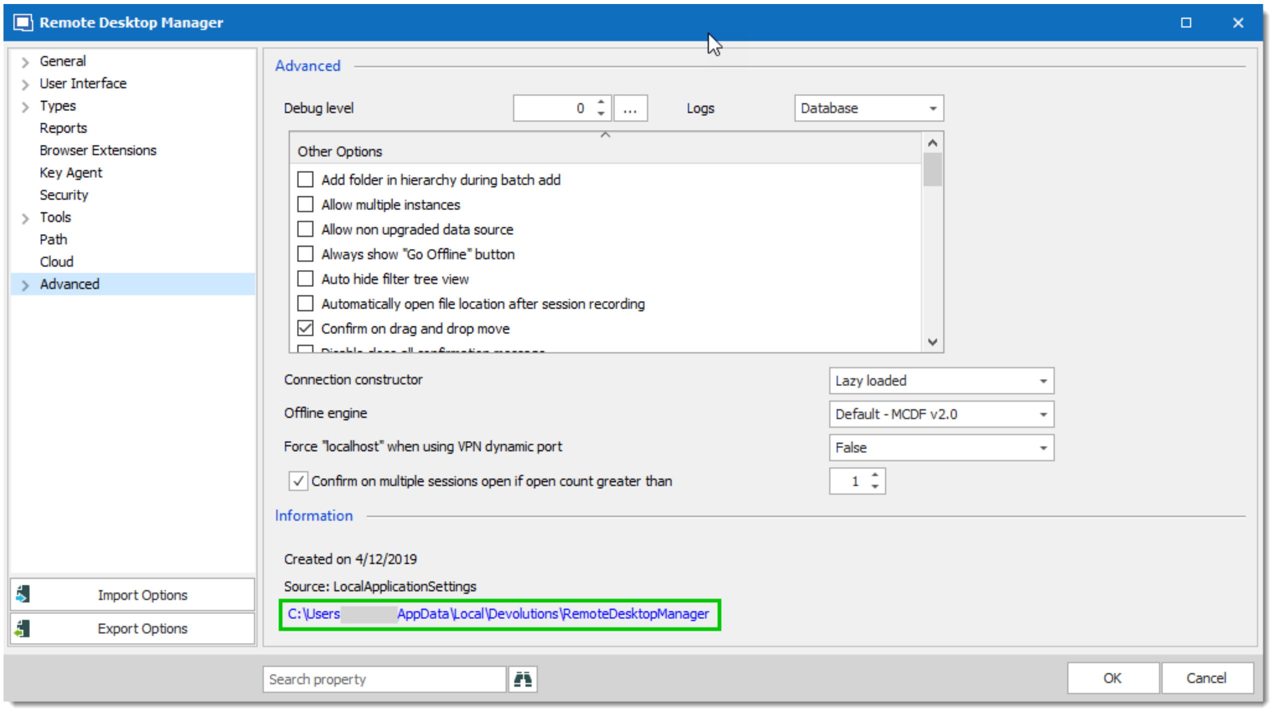
Options - Advanced

3.1.2 Configuration File Location

DEFAULT LOCATION

Remote Desktop Manager saves its configuration in a file named RemoteDesktopManager**.cfg**. This file contains all of the application settings and configured data sources. All of the data source settings are encrypted for security reasons.

> You can retrieve the installation folder of Remote Desktop Manager by clicking ***File – Options – Advanced***. A hyperlink displays the installation folder.



Advanced

Debug level 0 ... Logs Database

Other Options

- □ Add folder in hierarchy during batch add
- □ Allow multiple instances
- □ Allow non upgraded data source
- □ Always show "Go Offline" button
- □ Auto hide filter tree view
- □ Automatically open file location after session recording
- ☑ Confirm on drag and drop move

Connection constructor: Lazy loaded

Offline engine: Default - MCDF v2.0

Force "localhost" when using VPN dynamic port: False

☑ Confirm on multiple sessions open if open count greater than 1

Information

Created on 4/12/2019

Source: LocalApplicationSettings

C:\Users [redacted] AppData\Local\Devolutions\RemoteDesktopManager

Options - Advanced

The configuration file can be located in different folders depending on certain conditions:

CASE	CONFIGURATION FILE LOCATION
Installed under "Program Files" or "Program Files (x86)"	%LocalAppData%\Devolutions\RemoteDesktopMa

CASE	CONFIGURATION FILE LOCATION
Application running on Terminal Server	`%AppData%\Devolutions\RemoteDesktopManager`. This is the roaming profile and avoids multi-user conflicts.
Other	Installation folder

Having the configuration file in the installation folder allows you to run multiple versions of the application side-by-side.

OVERRIDE THE DEFAULT PATH

There are two ways to change the folder where the configuration file is stored:

1. Create a file named **"Override.cfg"** in the application folder. Remote Desktop Manager opens this file and reads the first line. It should contain the desired installation folder (without the file name). If you wish to use the current installation path, put a period in the file. Here are a few examples:

EXAMPLES	
c:\RDM	The config file is saved in the designated folder.
.	The period is used to specify the Remote Desktop Manager installation folder.
%AppData%\Devolutions\RemoteDesktopManager	Specify the application roaming data folder.

2. By adding a key in the registry: **CurrentUser\SOFTWARE\RemoteDesktopManager, OptionPath**. Set the desired path in the key **OptionPath**. You must not include the file name in the value, just the path.

DEFAULT CONFIGURATION FOR REMOTE DESKTOP SERVICES ENVIRONMENT

Please refer to Remote Desktop Services for details.

3.1.3 Custom Installer Service

DESCRIPTION

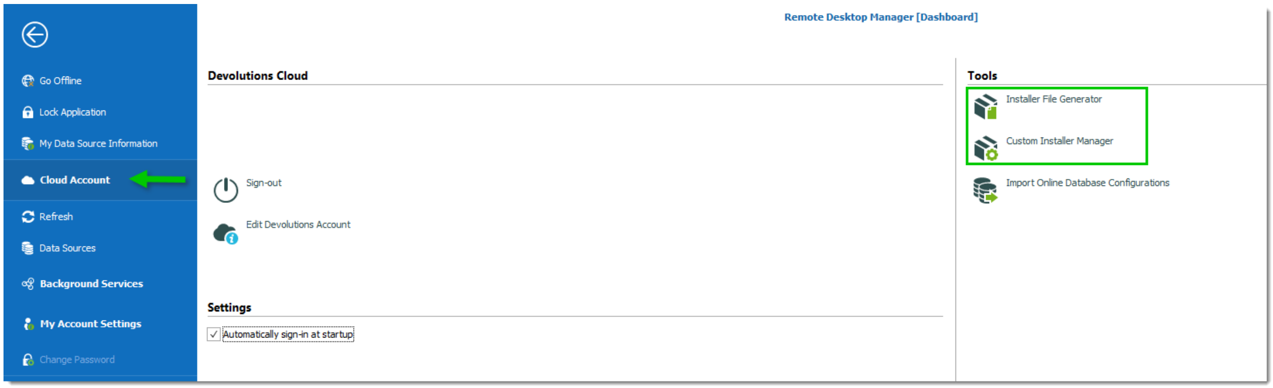
- Generate and download custom installation packages for Remote Desktop Manager.
- Include preconfigured data sources in the package for quick enterprise wide deployment.
- Insert license serial in the installation package for easier management.
- Download the installer as a Windows Installer (.MSI file) or as an executable (.EXE file).

The Custom Installer Service, offered through our Devolutions Customer Portal services, replicates the configuration from a Remote Desktop Manager instance. This configuration is used to create an installer file (*.rdi), which will be used to create the installation package intended for distribution. The configuration can contain the license serial, data sources, credentials, database templates and more. It is best practice to have a Remote Desktop Manager installation used specifically to create the installation package.

The Custom Installer Service uploads a configuration file to our online services. You should not use the service to redistribute passwords for data sources or an Online Database account.

Please note that you ***MUST*** create an installer file using Remote Desktop Manager before creating the installer on the Web portal. This is described here in the Installer File Generator topic.

The Custom Installer Service can be found in with the Devolutions Account tools, located in ***File – Devolutions Account – Tools***. You must be signed in to access it.



File - Devolutions Account - Tools

The following topics will help you get started to set up your customized installers with Remote Desktop Manager.

- Create an Installation Package
- Installer File Generator
- Option Selection Dialog

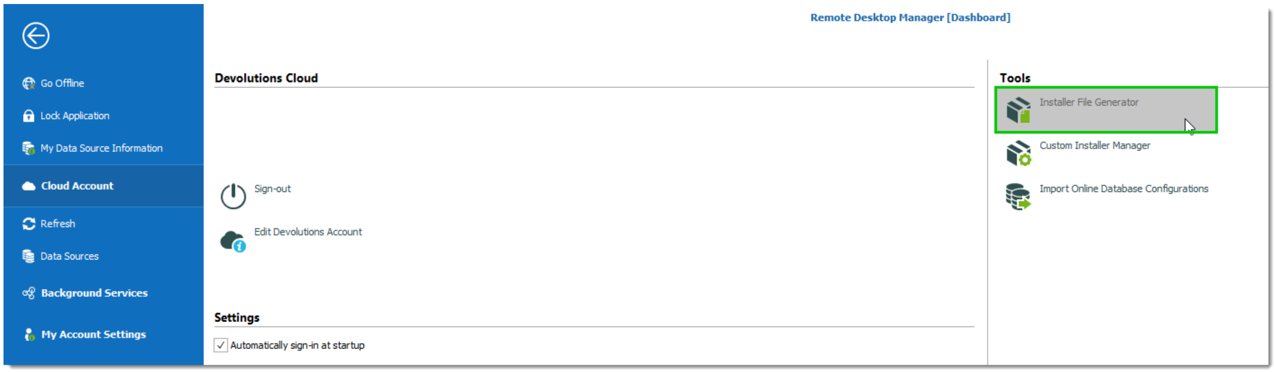
3.1.3.1 Installer File Generator

DESCRIPTION

When creating an installation package with the Custom Installer Manager, an installer file is necessary to determine what to include in the installation configuration. It is risky to create an installer file for each new version since you have to repeat the process manually every time. Instead, it is possible to create the configuration once, save the resulting file (*.rdi), and reuse it as many times as needed.

CREATING AN INSTALLER FILE

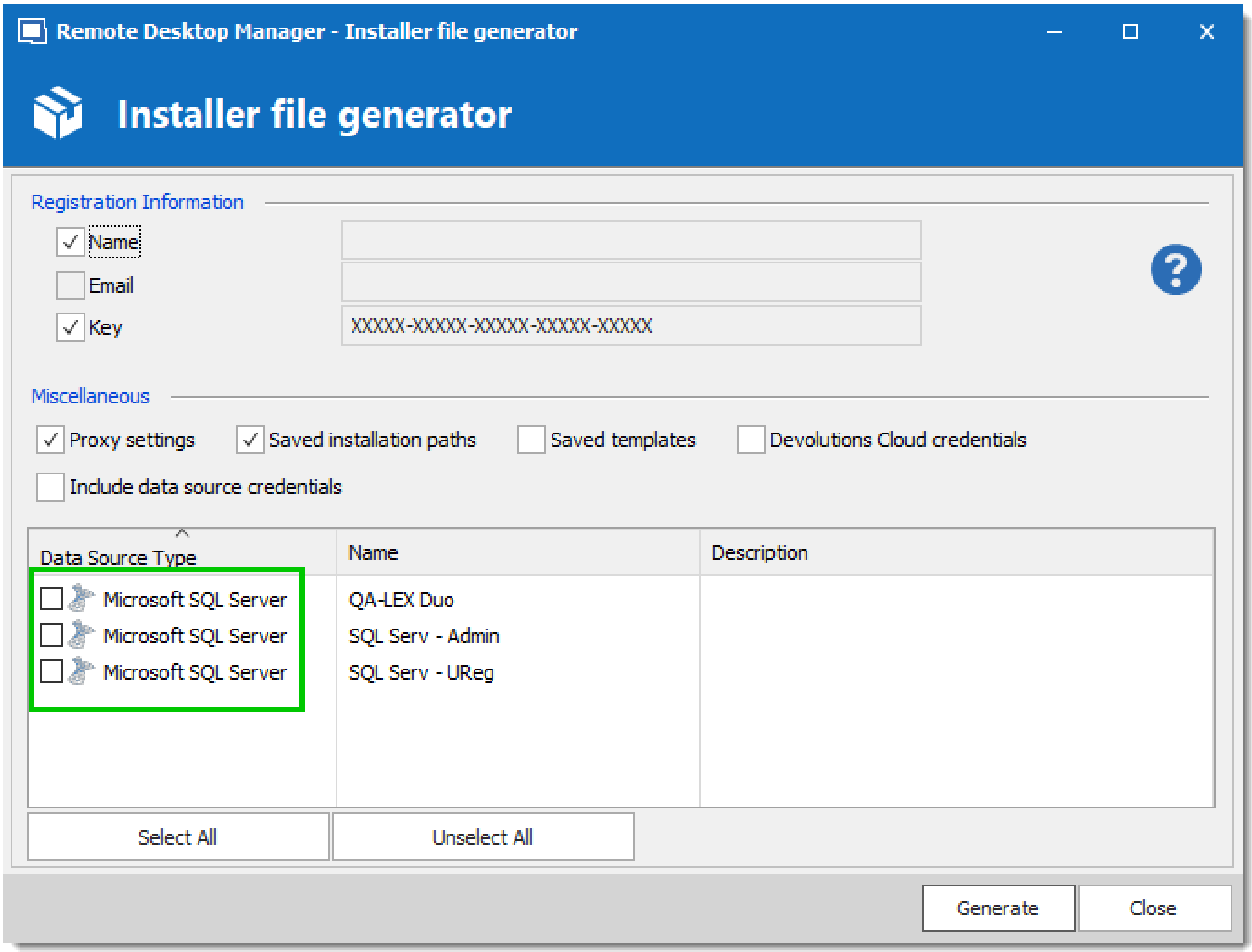
1. Click on ***File – Devolutions Account – Installer File Generator.***



☑ Automatically sign-in at startup

File - Devolutions Account - Installer File Generator

2. Select which data sources to include. You can also include the name and serial key for the registration.



☑ Name
□ Email
☑ Key XXXXX-XXXXX-XXXXX-XXXXX-XXXXX

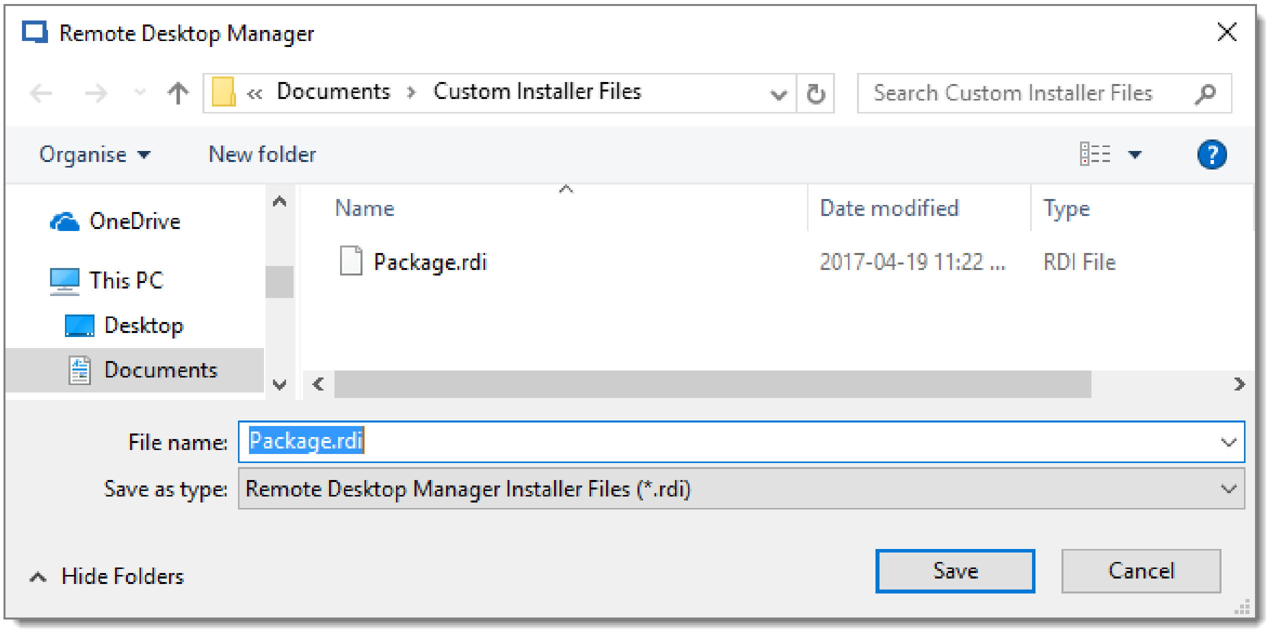
☑ Proxy settings ☑ Saved installation paths □ Saved templates □ Devolutions Cloud credentials

□ Include data source credentials

Data Source Type	Name	Description
□ Microsoft SQL Server	QA-LEX Duo	
□ Microsoft SQL Server	SQL Serv - Admin	
□ Microsoft SQL Server	SQL Serv - UReg	

Installer File Generator

3. Click on **Generate** and save the file.

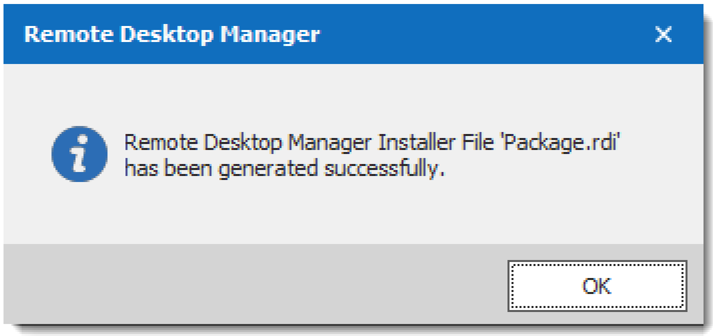


File name: Package.rdi

Save as type: Remote Desktop Manager Installer Files (*.rdi)

Save the installer file

An information dialog is displayed when the file has been generated.



Remote Desktop Manager Installer File 'Package.rdi' has been generated successfully.

Package.rdi has been generated successfully

This file can be used in the Custom Installer Manager when creating an installation package.

For more information on how to create a custom installer package, please consult our Custom Installer Manager topic.

3.1.3.1.1 Option Selection Dialog

DESCRIPTION

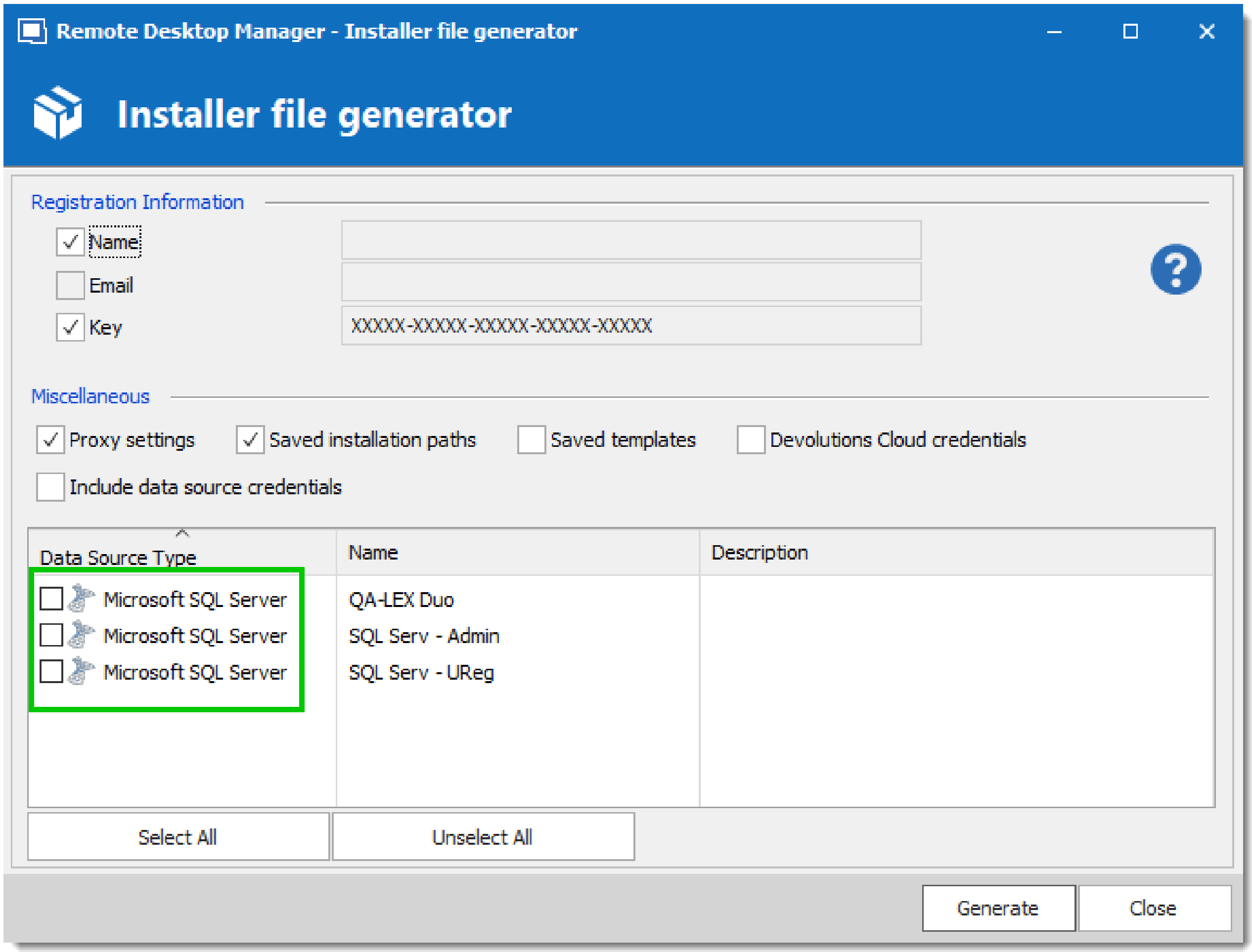
When generating the installer file, you must decide what to include in the configuration. This process will replicate the configuration of the Remote Desktop Manager instance currently used, and will generate an installer file (*.rdi). Once it has been generated, the installer file can be used as many times as needed to create custom installers. For security reasons, some settings that may contain credentials, such as ***Saved Templates***, are disabled by default. Enable these at your own risk.

> The same dialog is used for the Custom Installer Service and for exporting the Remote Desktop Manager configuration file. Some options must NOT be used for the Custom Installer Service to prevent sharing credentials that must stay confidential. Please read the documentation carefully.

> Remote Desktop Manager may install required add-ons automatically when it detects that they are needed (configured in ***File – Options – General – Application Start***). If you need to customize the application's installation path of an Add-on, you must perform the modification, then create the installation package. This setting will be replicated in the installer file (*.rdi).

SETTINGS

You can open the Installer File Generator from ***File – Devolutions Account – Installer File Generator***.



Registration Information

- ☑ Name
- □ Email
- ☑ Key: XXXXX-XXXXX-XXXXX-XXXXX-XXXXX

Miscellaneous

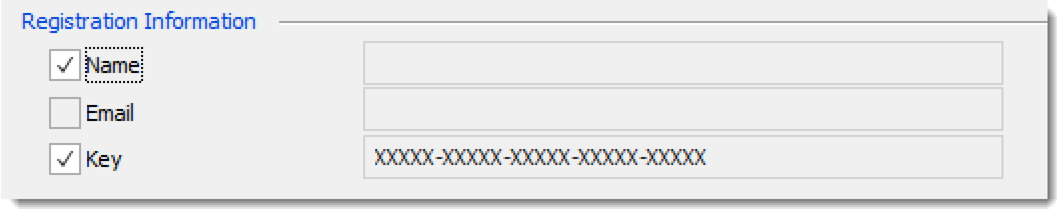
☑ Proxy settings ☑ Saved installation paths □ Saved templates □ Devolutions Cloud credentials

□ Include data source credentials

Data Source Type	Name	Description
□ Microsoft SQL Server	QA-LEX Duo	
□ Microsoft SQL Server	SQL Serv - Admin	
□ Microsoft SQL Server	SQL Serv - UReg	

Installer File Generator

REGISTRATION INFORMATION


Registration Information

- ☑ Name
- □ Email
- ☑ Key: XXXXX-XXXXX-XXXXX-XXXXX-XXXXX

Installer File Generator - Registration Information

OPTION	DESCRIPTION
Name	Company registration name.

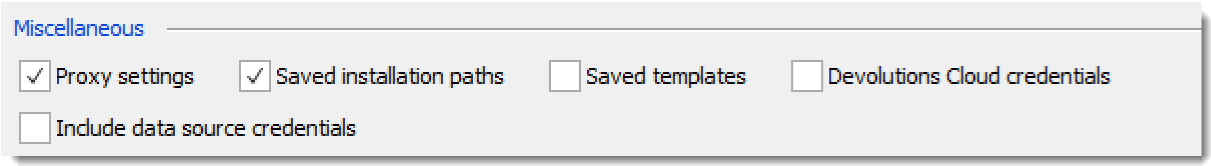
OPTION	DESCRIPTION
Email	Registration email if using a generic address.
Key	License serial.

MISCELLANEOUS

Do not redistribute the Devolutions Account **credentials**. Doing so would share these to ALL users having access to the online account used to create the installer package.

All Local templates will be included. If any contain credentials, it may cause a security risk. Ensure you are sharing only what is needed.

The data sources you decide to redistribute should **NOT** contain identifiable credentials. Use of integrated security is highly recommended. You can also use environment variables for the username.



Miscellaneous

☑ Proxy settings ☑ Saved installation paths □ Saved templates □ Devolutions Cloud credentials

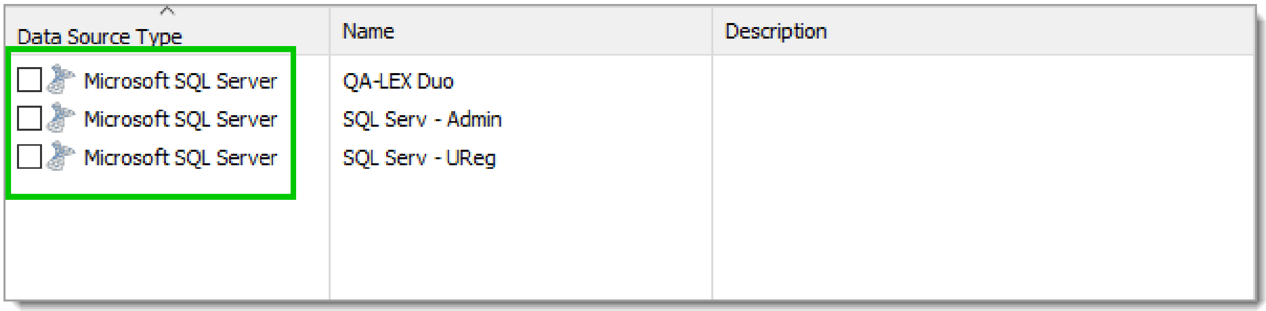
□ Include data source credentials

Installer File Generator - Miscellaneous

OPTION	DESCRIPTION
Saved installation paths	Preserves your installation paths configured for external third party applications. Use this only when all of the user's machines use the same paths.
Saved templates	Includes your local templates in the custom installer. Database templates are stored in the data source and may be a better option in you need to share them.

OPTION	DESCRIPTION
Filter history	Preserves your search/filter history
Proxy settings	Includes your Internet proxy settings
Devolutions Account credentials	Includes your Devolutions Account credentials used to create the custom installer. Please, consult security warning above.
Include data source credentials	Includes the credentials for all selected data sources below. Please, consult security warning above.

DATA SOURCES



Data Source Type	Name	Description
☐ Microsoft SQL Server	QA-LEX Duo	
☐ Microsoft SQL Server	SQL Serv - Admin	
☐ Microsoft SQL Server	SQL Serv - UReg	

Data Source List

Select the data sources that must be included in the configuration. In the description column you will see details about each data sources. You should **ONLY** share data sources that are either using **Integrated Security**, or that are using an environment variable for the username. Passwords for accessing a data source should **NEVER** be shared.

3.1.3.2 Custom Installer Manager

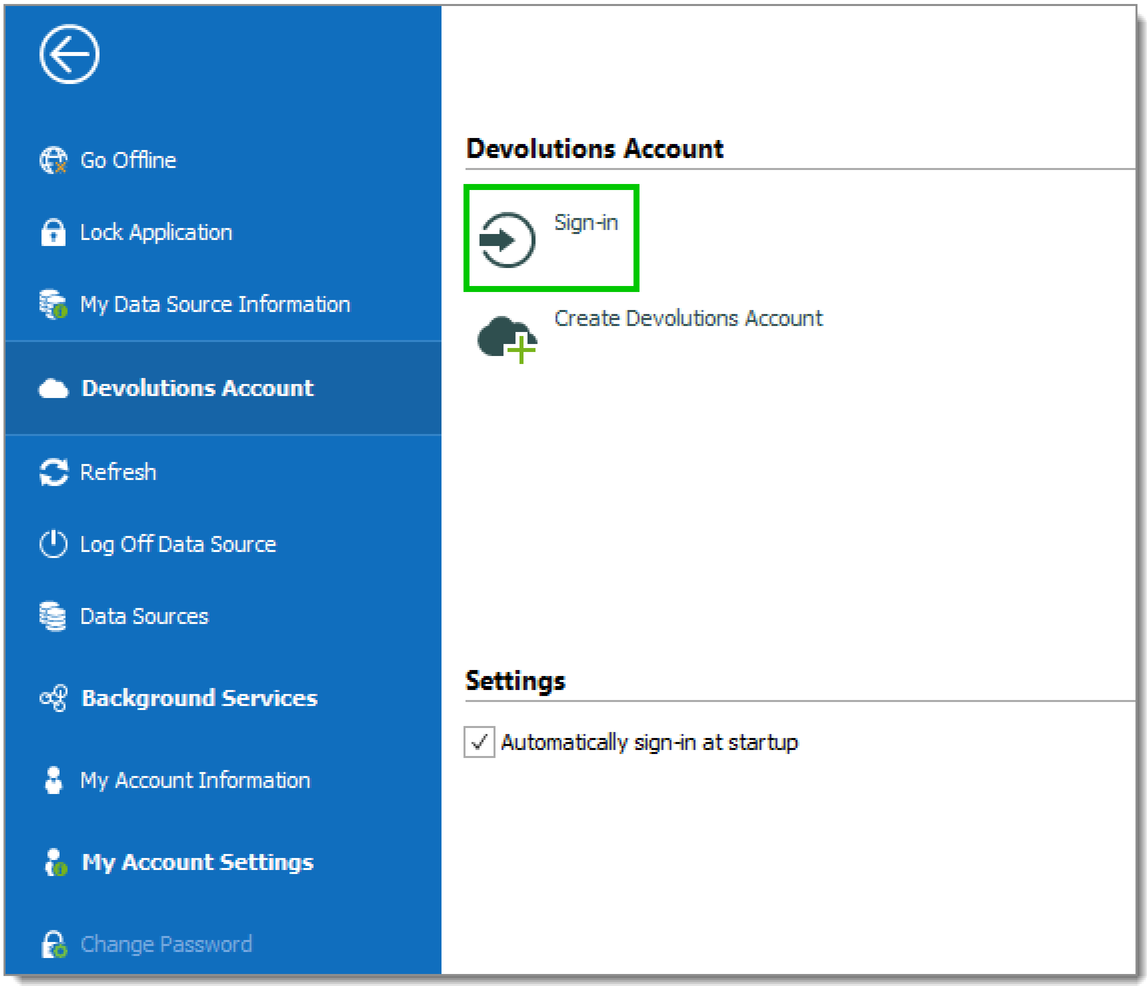
DESCRIPTION

For stability reasons, in large installation bases, the latest official release is not available to the Custom Installer Service for an undetermined period while we ensure that no major issues are present. We recommend using this time with your organization to perform integration tests on a few workstations before upgrading your entire team.

Please ensure you have read and understood the content of Custom Installer Service Overview prior to subscribing to the service.

CREATE AN INSTALLATION PACKAGE

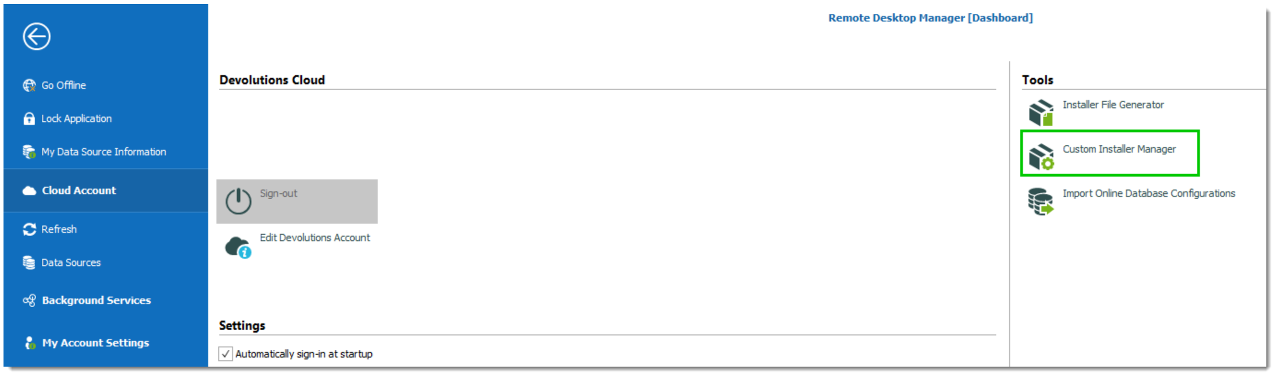
1. Click on ***File – Devolutions Account – Sign-in*** to connect to your Devolutions Account.



☑ Automatically sign-in at startup

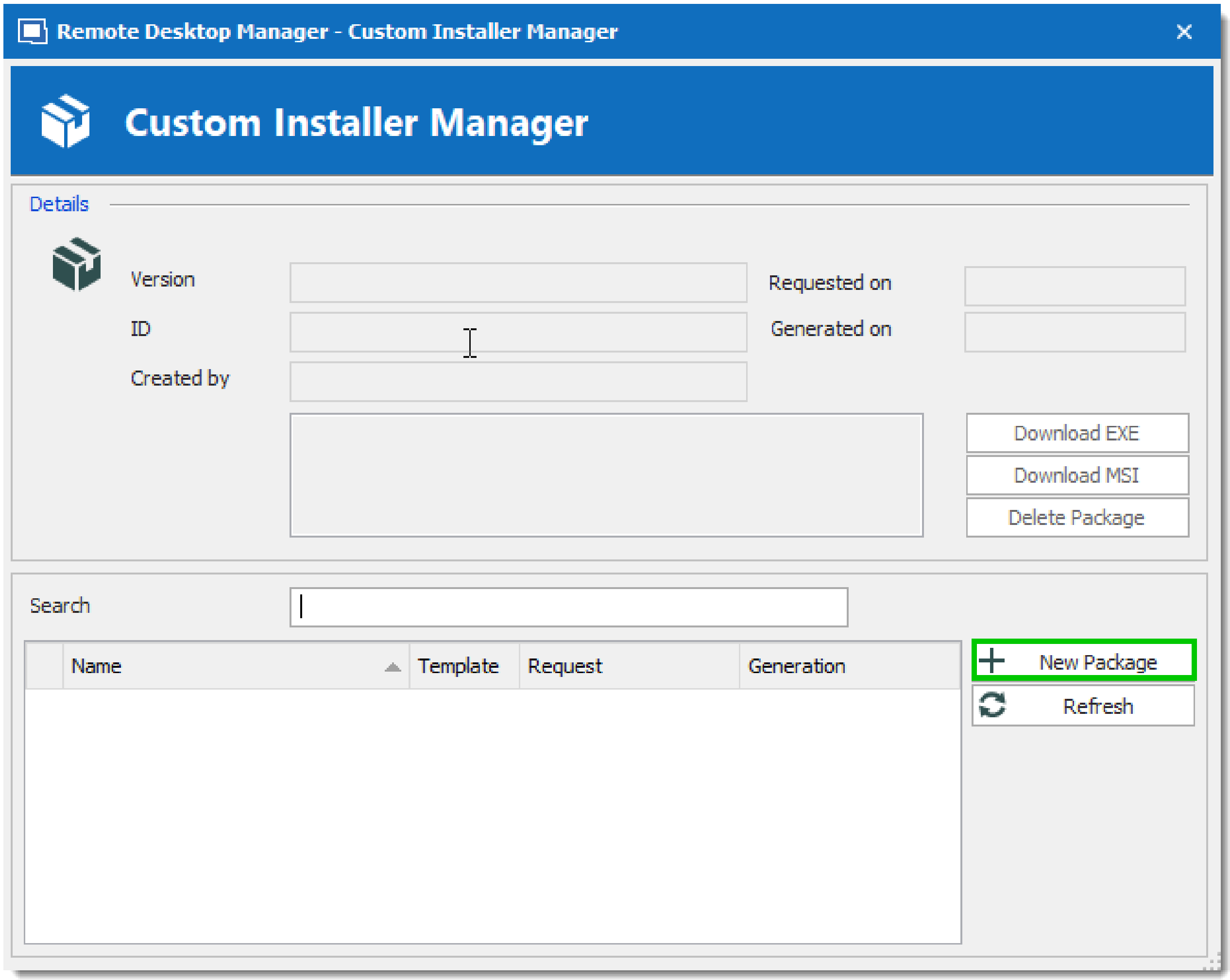
Devolutions Account Sign-in

2. Click on **Custom Installer Manager** to create a new custom installer with specific settings.



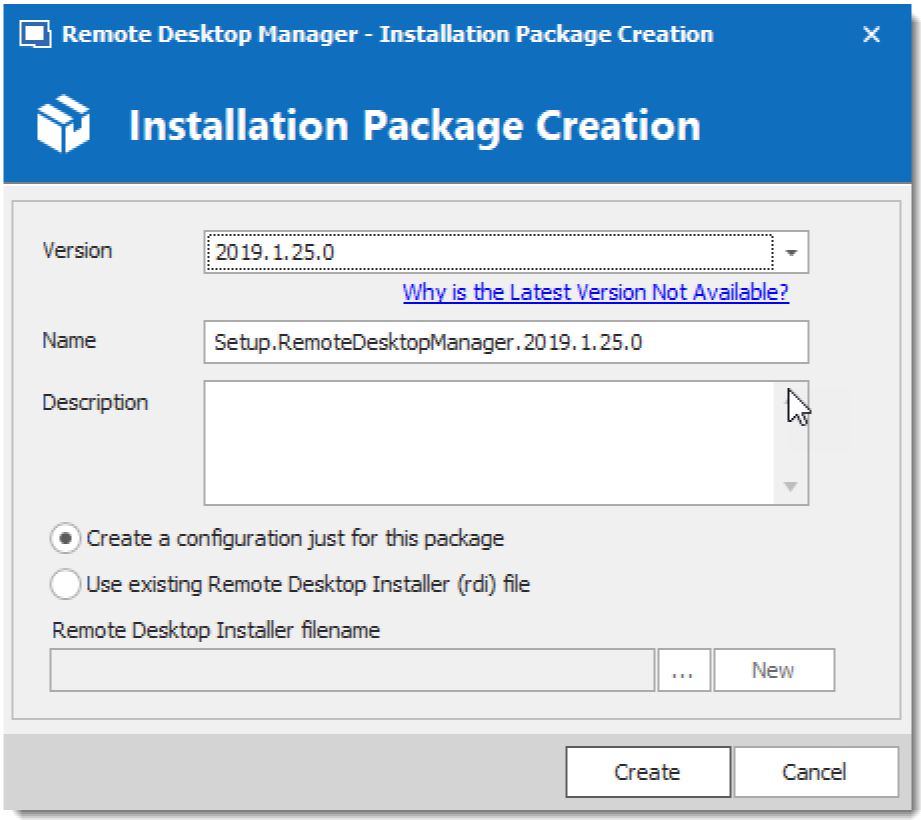
File - Devolutions Account - Custom Installer Manager

3. Click on **New Package**.



Custom Installer Manager - New Package

4. Select the application version, enter a name for your package and click on **Create**. You can either create a new configuration or use an existing Remote Desktop Manager Installer (*.rdi) file. For more information, please consult our Installer File Generator topic.


Remote Desktop Manager - Installation Package Creation
Installation Package Creation
Why is the Latest Version Not Available?
...
New
Create
Cancel

Version: 2019.1.25.0

Name: Setup.RemoteDesktopManager.2019.1.25.0

Description:

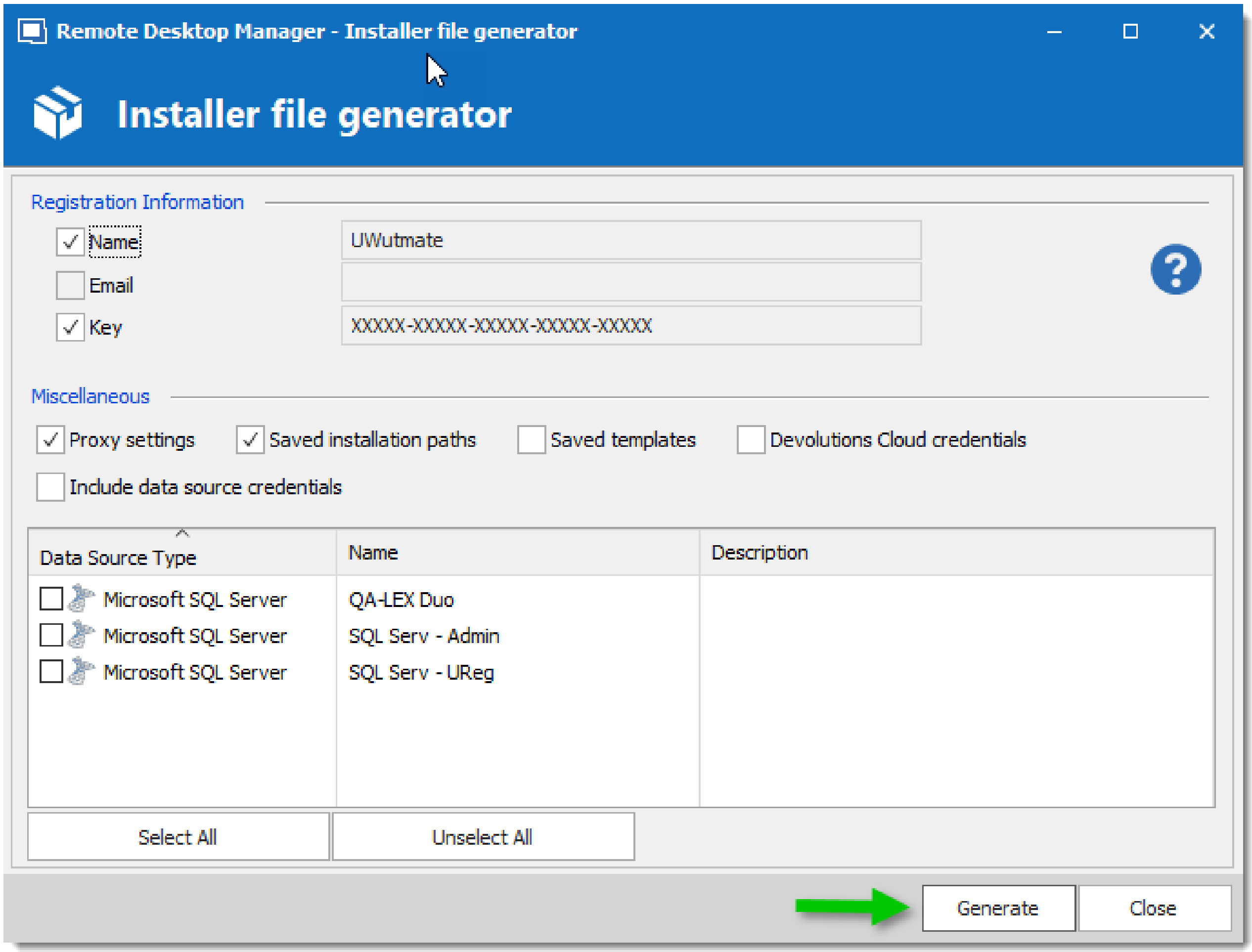
● Create a configuration just for this package

○ Use existing Remote Desktop Installer (rdi) file

Remote Desktop Installer filename:

Installation Package Creation

When choosing to create a new configuration, select what to include in the custom installer, then click on **Generate**.



Remote Desktop Manager - Installer file generator

Installer file generator

Registration Information

☑ Name: UWutmate

□ Email:

☑ Key: XXXXX-XXXXX-XXXXX-XXXXX-XXXXX

Miscellaneous

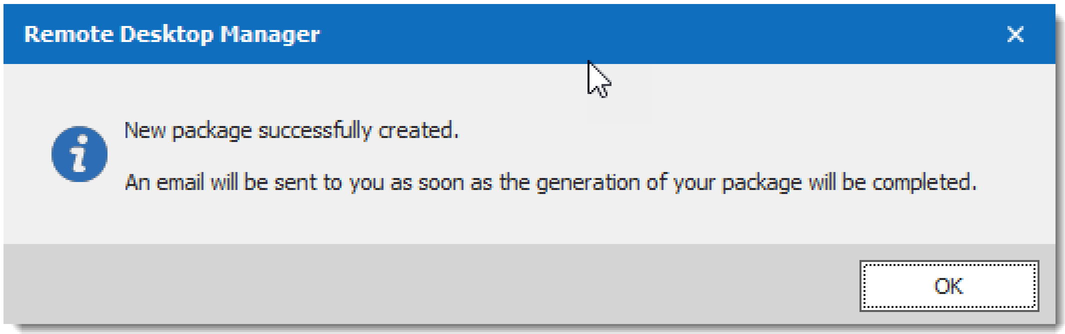
☑ Proxy settings ☑ Saved installation paths □ Saved templates □ Devolutions Cloud credentials

□ Include data source credentials

Data Source Type	Name	Description
□ Microsoft SQL Server	QA-LEX Duo	
□ Microsoft SQL Server	SQL Serv - Admin	
□ Microsoft SQL Server	SQL Serv - UReg	

Installer File Generator

5. Once the installation package has been created, the request is submitted to our online service. A confirmation dialog window appears if successful.



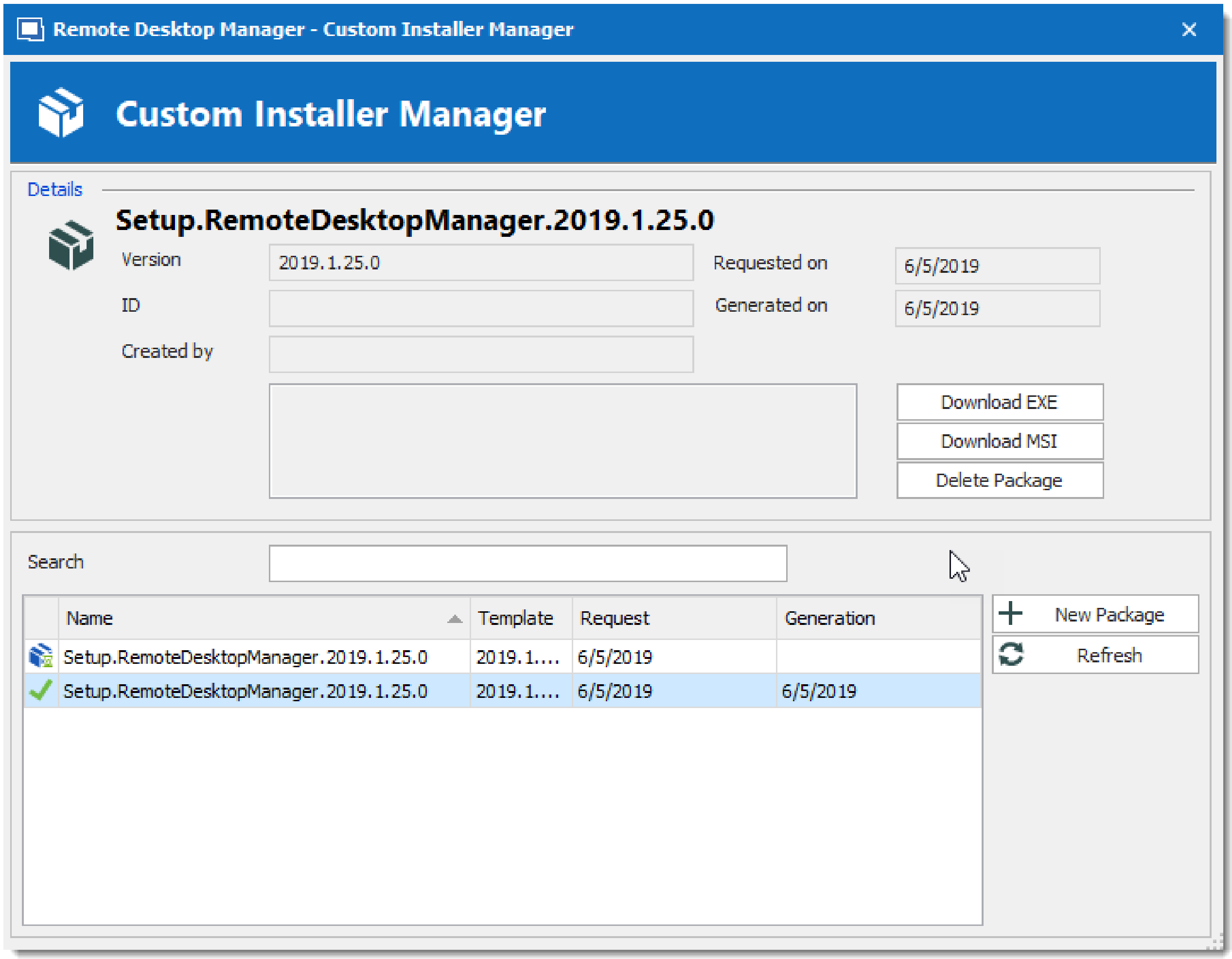
Remote Desktop Manager

New package successfully created.

An email will be sent to you as soon as the generation of your package will be completed.

New package successfully created

6. The Custom Installer Manager will display an hourglass ⏳ icon indicating that the package is being processed. When the package has been successfully generated, the Custom Installer Manager will display a green check mark ✓. Note that this process can take a while.



Remote Desktop Manager - Custom Installer Manager

Custom Installer Manager

Details

Setup.RemoteDesktopManager.2019.1.25.0

Version: 2019.1.25.0

ID:

Created by:

Requested on: 6/5/2019

Generated on: 6/5/2019

Search:

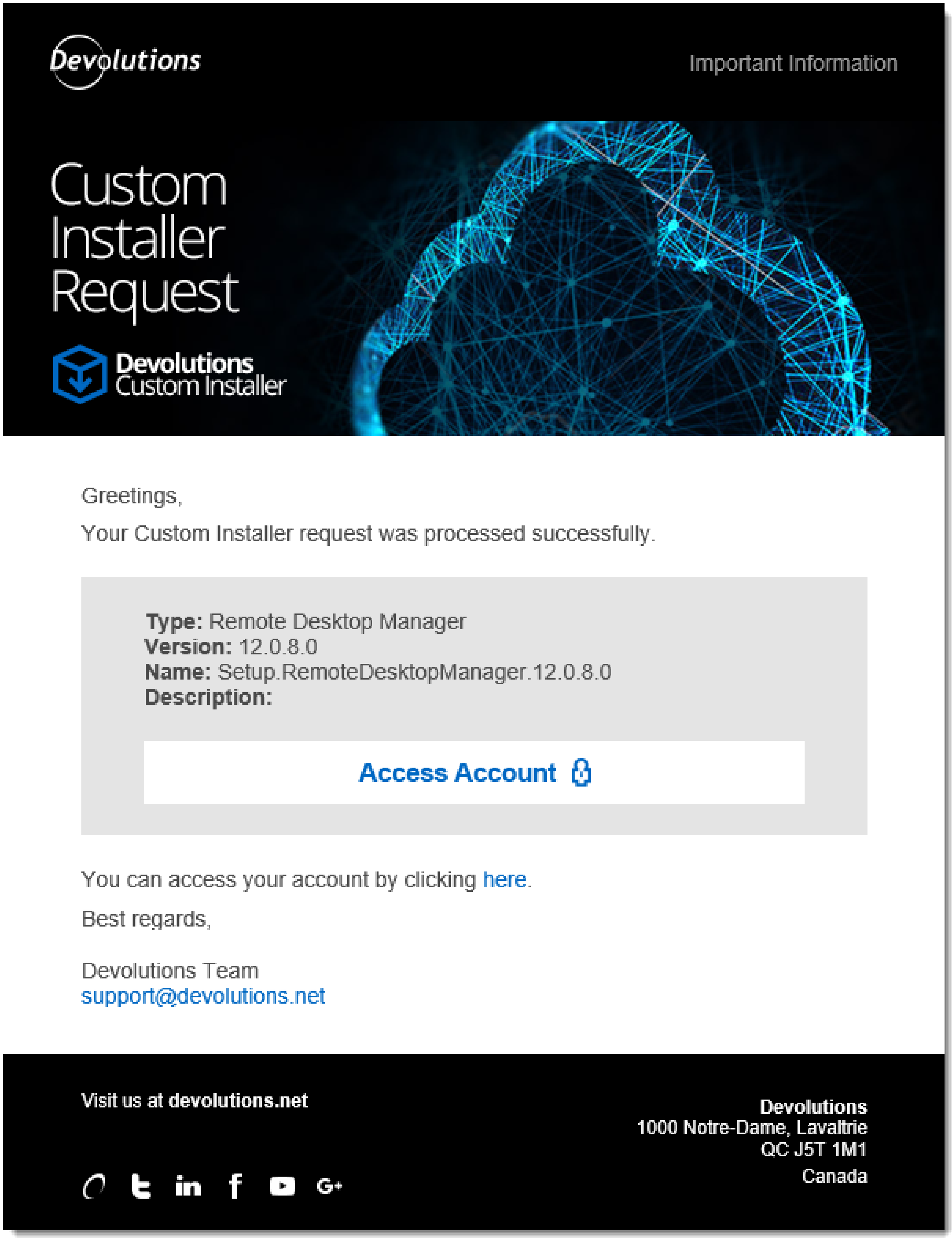
	Name	Template	Request	Generation
	Setup.RemoteDesktopManager.2019.1.25.0	2019.1....	6/5/2019	
✓	Setup.RemoteDesktopManager.2019.1.25.0	2019.1....	6/5/2019	6/5/2019

Custom Installer Manager

setup.exe is in fact what is called a ***bootstrapper,*** it will ensure the installer runs with the required privileges. Use the msi only if you are sure the installer will run with all rights and process elevation.

DOWNLOADING AN INSTALLATION PACKAGE

Upon completion you will receive a confirmation email.



Greetings,

Your Custom Installer request was processed successfully.

Type: Remote Desktop Manager
Version: 12.0.8.0
Name: Setup.RemoteDesktopManager.12.0.8.0
Description:

You can access your account by clicking here.

Best regards,

Devolutions Team
support@devolutions.net

Visit us at **devolutions.net**

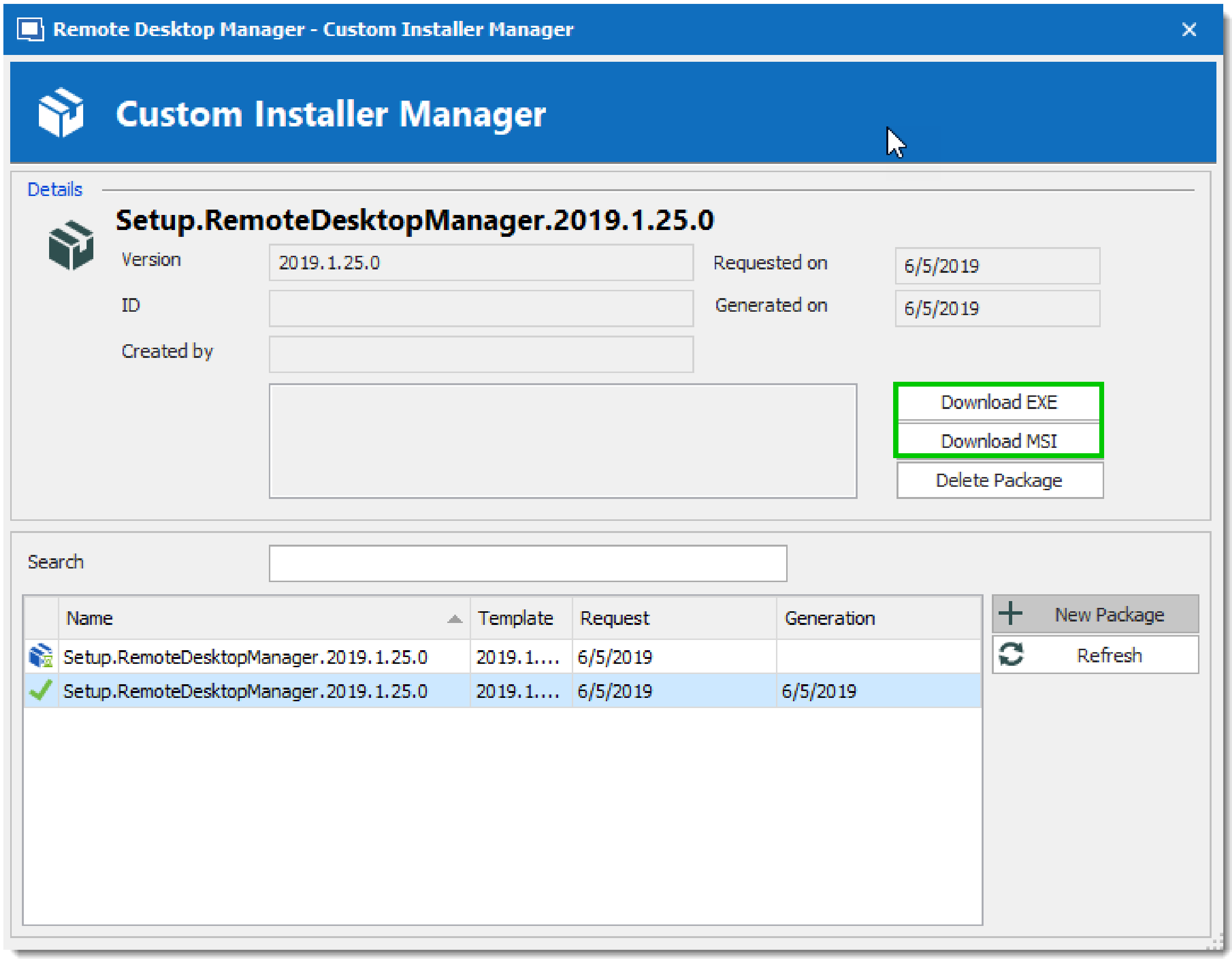
Devolutions
1000 Notre-Dame, Lavaltrie
QC J5T 1M1
Canada

Email Confirmation - Custom Installer Processed

From here, there are two ways of downloading the package. You can download it directly from the **Custom Installer Manager**, or you can log in to the **Devolutions Account** you created the installer with.

DOWNLOAD WITH THE CUSTOM INSTALLER MANAGER

From the **Custom Installer Manager**, click on Download EXE or Download MSI.



Remote Desktop Manager - Custom Installer Manager

Custom Installer Manager

Details

Setup.RemoteDesktopManager.2019.1.25.0

Version	2019.1.25.0	Requested on	6/5/2019
ID		Generated on	6/5/2019
Created by			

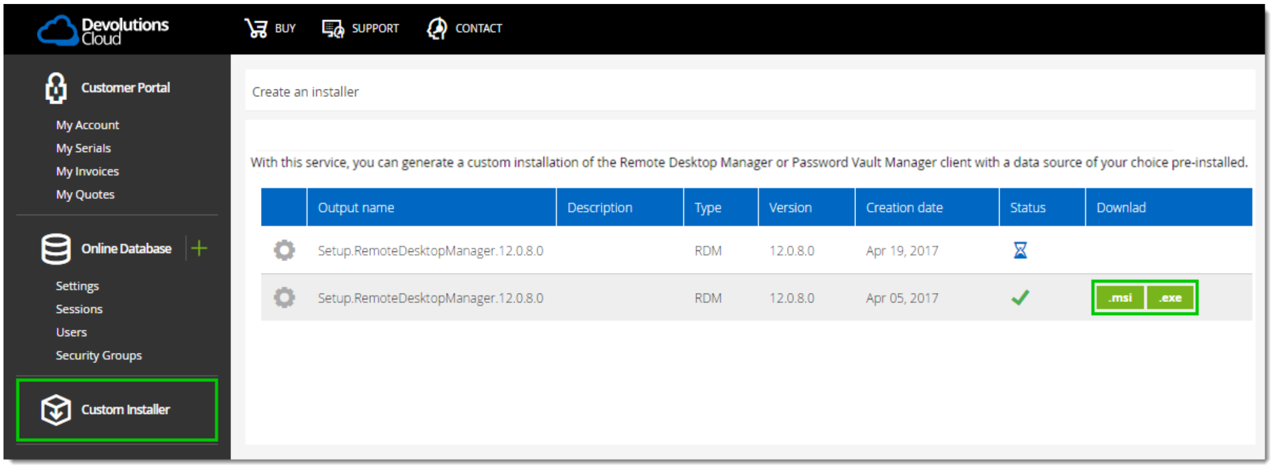
Search

Name	Template	Request	Generation
Setup.RemoteDesktopManager.2019.1.25.0	2019.1....	6/5/2019	
✓ Setup.RemoteDesktopManager.2019.1.25.0	2019.1....	6/5/2019	6/5/2019

Custom Installer Manager - Download Package

DOWNLOAD FROM THE DEVOLUTIONS CUSTOMER PORTAL

From the Devolutions Customer Portal you created the custom installer with, navigate to the **Custom Installer** section. Click on ***.msi*** or ***.exe*** to download the custom installer on your computer.



Create an installer

With this service, you can generate a custom installation of the Remote Desktop Manager or Password Vault Manager client with a data source of your choice pre-installed.

	Output name	Description	Type	Version	Creation date	Status	Downlad
⚙	Setup.RemoteDesktopManager.12.0.8.0		RDM	12.0.8.0	Apr 19, 2017	⌛	
⚙	Setup.RemoteDesktopManager.12.0.8.0		RDM	12.0.8.0	Apr 05, 2017	✓	.msi .exe

Devolutions Customer Portal - Download Custom Installer Package

3.1.4 For All Users

DESCRIPTION

Remote Desktop Manager's current installation package does require to install with elevated privileges, as well as making the application available to all users of the computer where you are installing. That being said, feedback has shown that it does complete successfully across a wide spectrum of our community's environments. Follow this procedure to reduce deployment issues in the future.

PROCEDURE

> ✖ This procedure registers all file types associations, this mean that rdp files will from now on be opened with Remote Desktop Manager. If you wish to avoid this, install manually using the Custom mode, and choose every option but that rdp association.

1. Copy the installer to a folder available for all users of the workstation. e.g. *c:\Deploy*

2. Open an **Elevated Command** prompt (right click on the shortcut and select *Run as administrator*).

3. Run the following command, adapted for the version that you are installing

```
msiexec /i Setup.{APPNAME}.{VERSION}.msi /Quiet /Passive INSTALLMODE=Complete
```

We also **recommend disabling the auto-update** check as all further installations or upgrades should be performed by an administrator **AND** using elevated privileges.

If you wish to proceed with upgrades from within Remote Desktop Manager, **it must** have been started using *Run as administrator*.

NOTES

The Microsoft installer technology copies the installer package under a new randomized name as well as register it in a database. Our experience shows that this copy has a way of disappearing and that the database becomes corrupted. We often have to direct our community to use https://support.microsoft.com/en-us/mats/program_install_and_uninstall

The *Quiet* and *Passive* parameters are just to ensure that you do not have to make a choice during the installation. We found that this reduces the risk of errors.

3.1.5 Portable (USB)

DESCRIPTION

Remote Desktop Manager can be used as a portable application. Here are the steps required to ensure that it runs correctly:

The portable installation mode allows you to run multiple versions of Remote Desktop Manager, using various license serials and configurations.

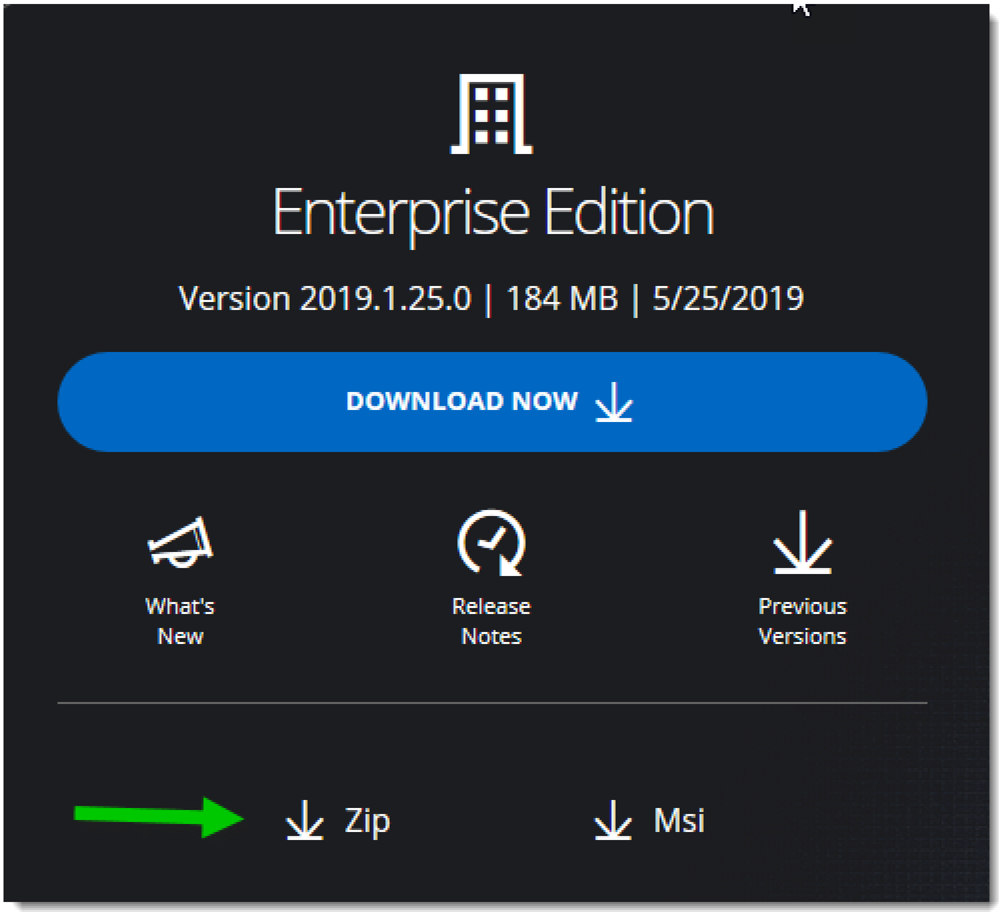
This procedure is not recommended for running Remote Desktop Manager from a network shared by multiple users. This would prevent identifying individual users and there would be conflicts with user preferences.

Remote Desktop Manager stores the offline cache in your Windows profile by default. If you are using an Advanced Data Source and plan to use the offline mode, use the Options in the Advanced category to have the offline cached stored in the application folder instead.

✓ The following steps ensures true portability and ease of maintenance. It can easily be adapted to your liking.

PROCEDURE

1. Download the "Zip" package of Remote Desktop Manager.



Zip File Download

2. Create a RemoteDesktopManager folder on your portable device.
3. In the installation folder created in step 2, create two folders:

   3.1. A ***config*** folder.

   3.2. A ***data*** folder.

   3.3. A ***tools*** folder (optional, only if you intend to use external tools like Filezilla).

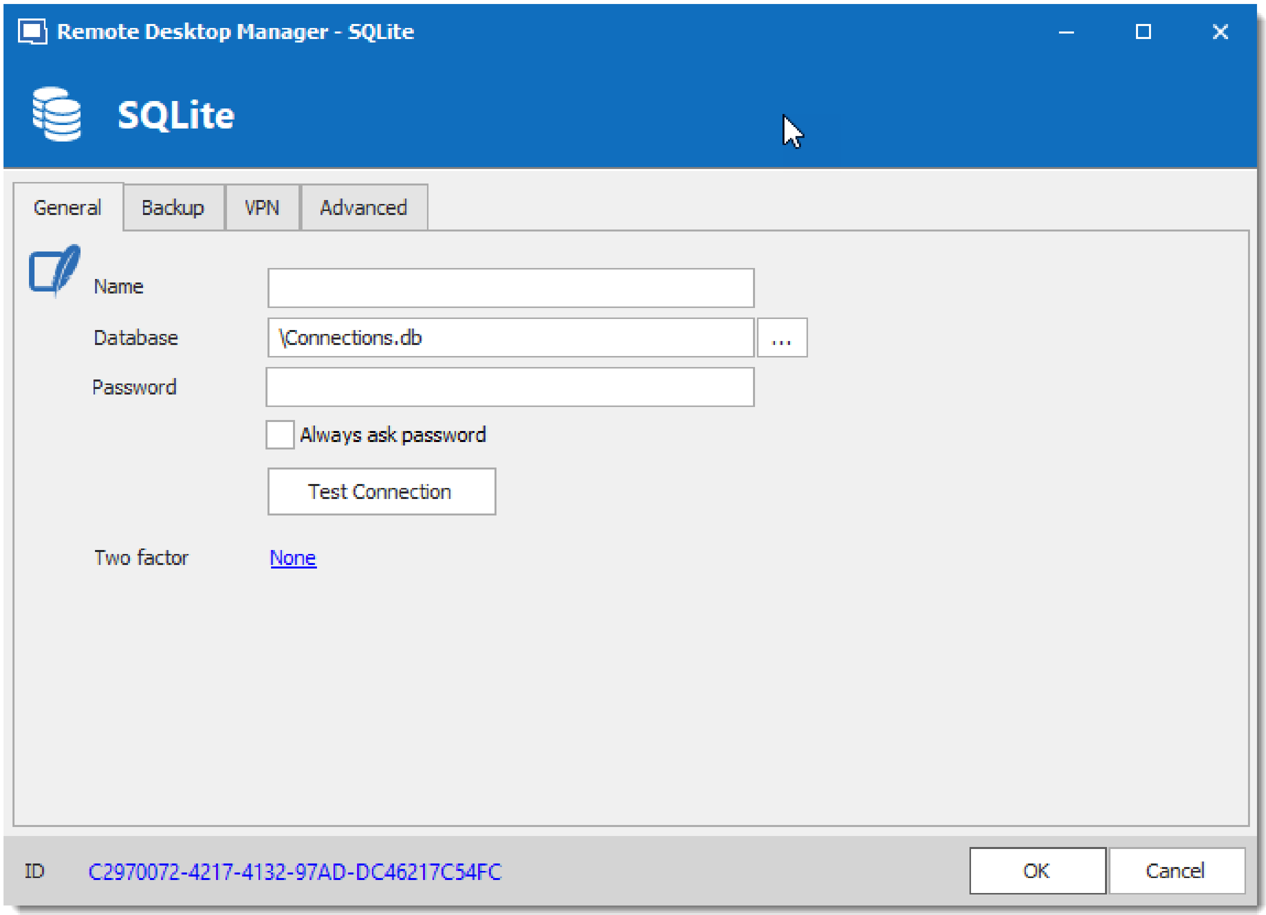
4. Unzip Remote Desktop Manager in the installation folder.

5. Create a text file named **override.cfg** in the installation folder. Set the content of the file to .
   `\config`

6. Open Remote Desktop Manager and display the data sources window using ***File – Data sources***.

7. Create a new data source of a type that can be stored on your portable device. i.e. SQLite, XML, etc.

8. Configure the data source using a relative path so it is stored on the portable device: .
   `\Data\Connections.db`



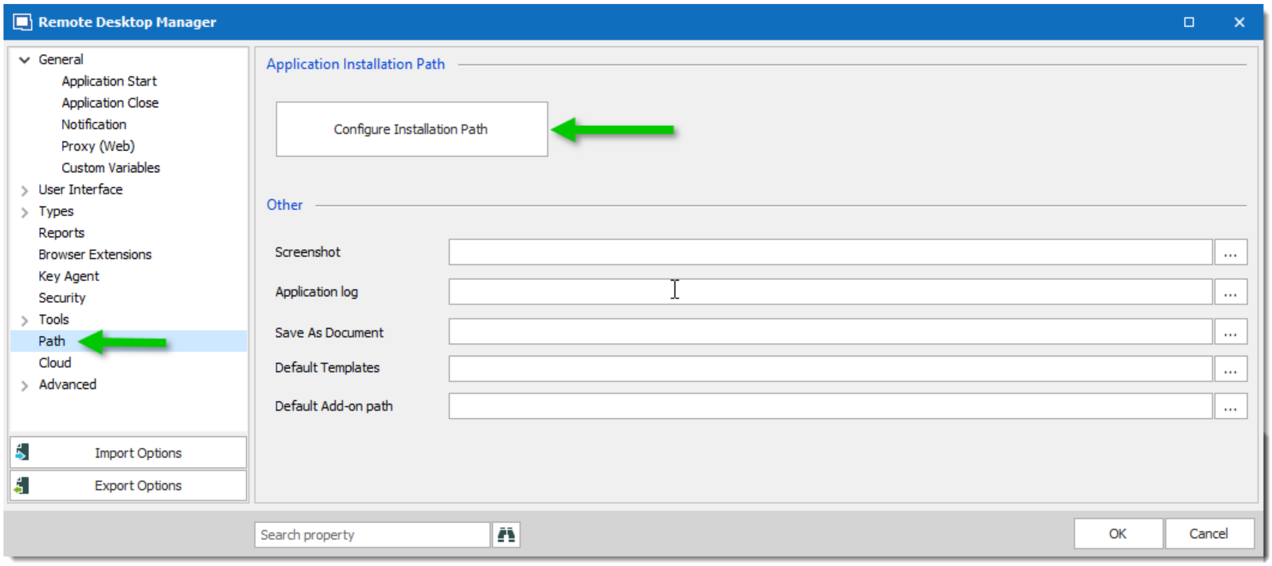
Database: \Connections.db

Two factor: None

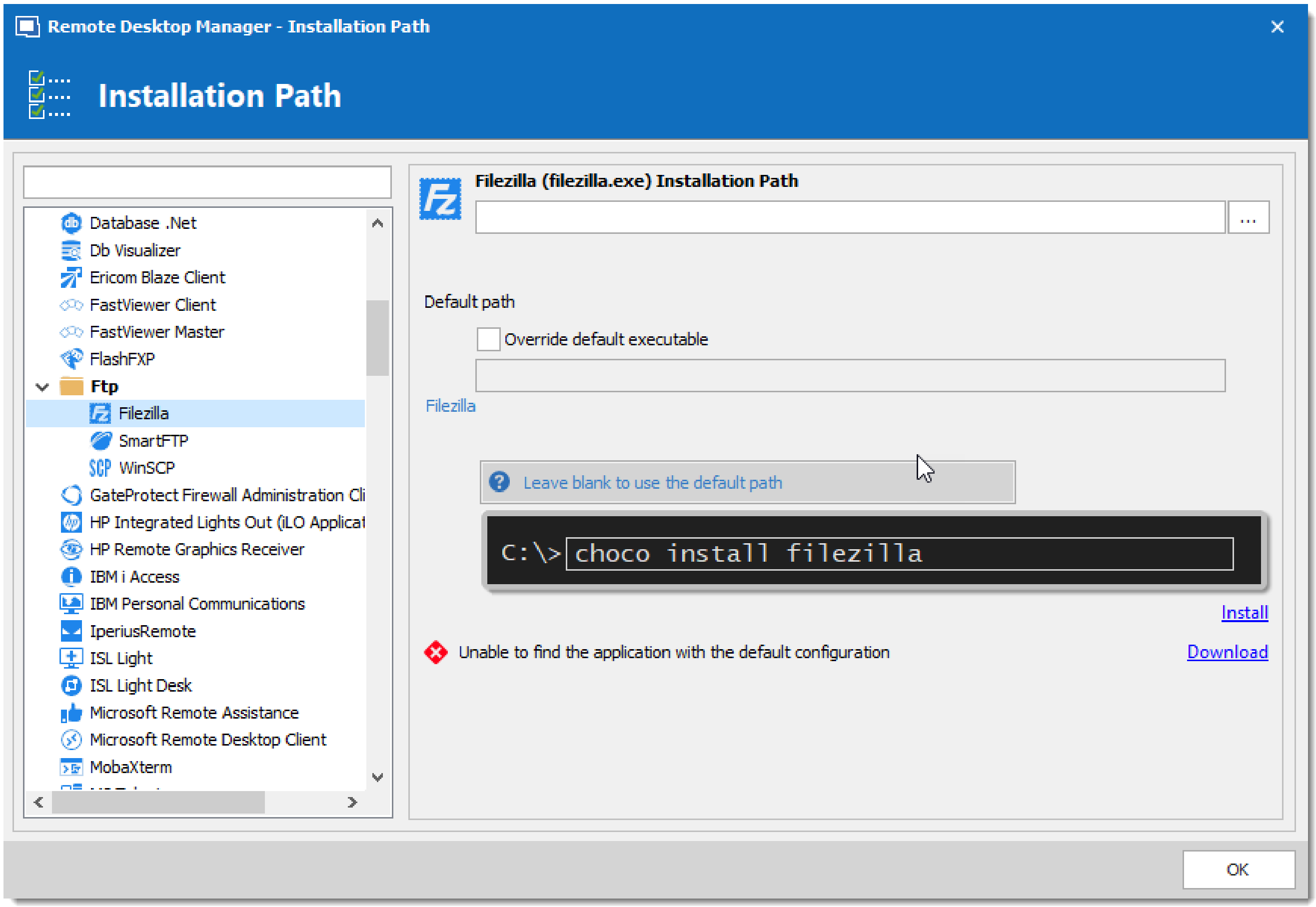
ID: C2970072-4217-4132-97AD-DC46217C54FC

SQLite Data Source

10. Configure your portable applications (FileZilla, UltraVNC, etc.) in the same manner (relative to the installation folder). Click on **Configure Installation Path** to select your preferred portable application.



Options - Path - Configure Installation Path


Remote Desktop Manager - Installation Path
Installation Path
Database .Net
Db Visualizer
Ericom Blaze Client
FastViewer Client
FastViewer Master
FlashFXP
Ftp
Filezilla
SmartFTP
WinSCP
GateProtect Firewall Administration Cli
HP Integrated Lights Out (iLO Applicat
HP Remote Graphics Receiver
IBM i Access
IBM Personal Communications
IperiusRemote
ISL Light
ISL Light Desk
Microsoft Remote Assistance
Microsoft Remote Desktop Client
MobaXterm
Filezilla (filezilla.exe) Installation Path
Default path
☐ Override default executable
Filezilla
Leave blank to use the default path
Install
Download
OK

```
C:\> choco install filezilla
```

Unable to find the application with the default configuration

Filezilla Installation Path

11. You can now delete the pre-existing *Local data source* that had been created automatically.

3.1.6 Previous Version

DESCRIPTION

Sometimes you may need an older version installer package. If the version wasn't an official release or had been replaced by an ulterior build, you may not always see it on your download page.

PROCEDURE

All our builds are available and it's easy to recreate the download link by simply changing the version number from other download links.

For example, downloading Remote Desktop Manager 11.0.12.0 can be done using this hyperlink: http://cdn.devolutions.net/download/Setup.RemoteDesktopManager.11.0.12.0.exe

You can simply copy the link to your address bar, and replace the version number by the one you are looking for. Ex: http://cdn.devolutions.net/download/Setup.RemoteDesktopManager.11.0.8.0.exe

You can download the needed version from one of the links in the sections below as well.

REMOTE DESKTOP MANAGER ENTERPRISE EDITION .EXE

REMOTE DESKTOP MANAGER ENTERPRISE EDITION MSI PACKAGE

REMOTE DESKTOP MANAGER ENTERPRISE EDITION ZIP FILE

REMOTE DESKTOP MANAGER FREE EDITION .EXE

REMOTE DESKTOP MANAGER FREE EDITION .MSI PACKAGE

REMOTE DESKTOP MANAGER FREE EDITION ZIP FILE

3.1.7 Registration

DESCRIPTION

REMOTE DESKTOP MANAGER ENTERPRISE EDITION

Please refer to the Enterprise Edition topic to properly register your version. If you decide not to register at the end of the 30 days trial, your data will not be altered or erased, and you will have full access to it once you provide a valid license serial.

REQUEST A TRIAL

It is possible to request a 30 days trial to try Remote Desktop Manager - Enterprise Edition with all its features. Form more information, please consult the Trial Request Topic.

REMOTE DESKTOP MANAGER FREE EDITION

Remote Desktop Manager Free Edition is similar to the Enterprise edition. Remote Desktop Manager Free Edition must be registered following the 30 days trial period to ensure continued use. Registration is free, please refer to the Free Edition topic.

DEVOLUTIONS PASSWORD SERVER

Consult Create Devolutions Password Server Instance to register a new Devolutions Password Server instance.

If you want to activate your renewal license key, consult How To Activate Your Renewal Subscription for Devolutions Password Server.

DEVOLUTIONS ONLINE DATABASE

Please consult Online Database Registration to register a new Devolutions Online Database.

3.1.7.1 Enterprise Edition

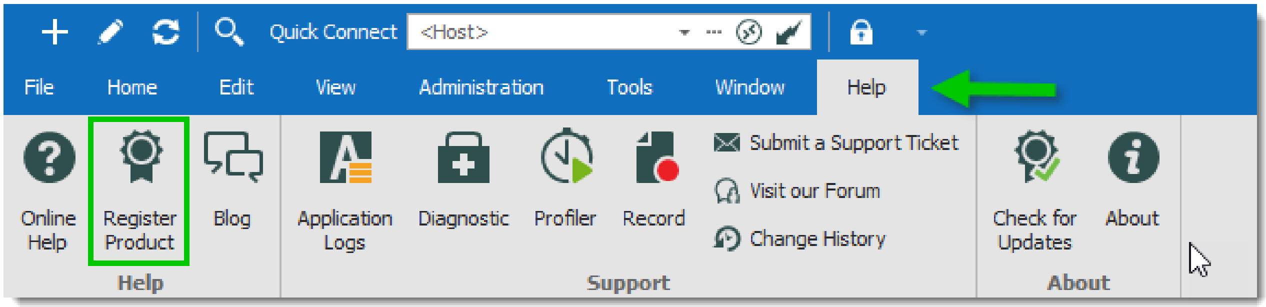
DESCRIPTION

Remote Desktop Manager can be registered by manually providing a license serial or with a license serial stored in a data source.

It is possible to request a trial to try Remote Desktop Manager for 30 days. If you decide not to register the application with an Enterprise Edition license serial at the end of the 30 days period, your data will not be altered or erased, and you will have full access to it once you provide a license serial.

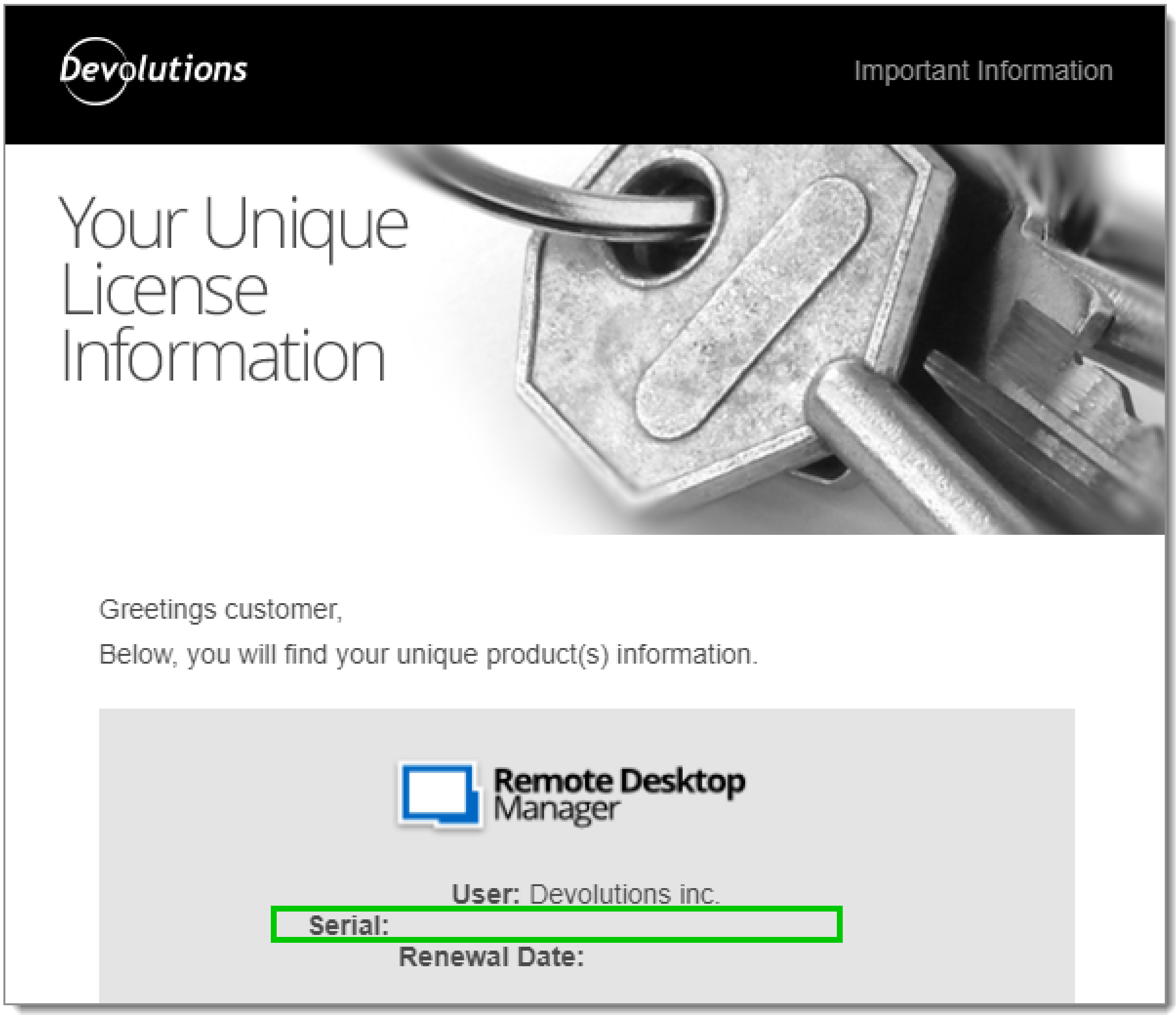
MANUAL REGISTRATION

To register your Remote Desktop Manager - Enterprise Edition, open ***Help – Register Product***.



Help - Register Product

License serials are delivered by email. Locate the email containing the Remote Desktop Manager license serial.



Devolutions

Important Information

Your Unique License Information

Greetings customer,

Below, you will find your unique product(s) information.

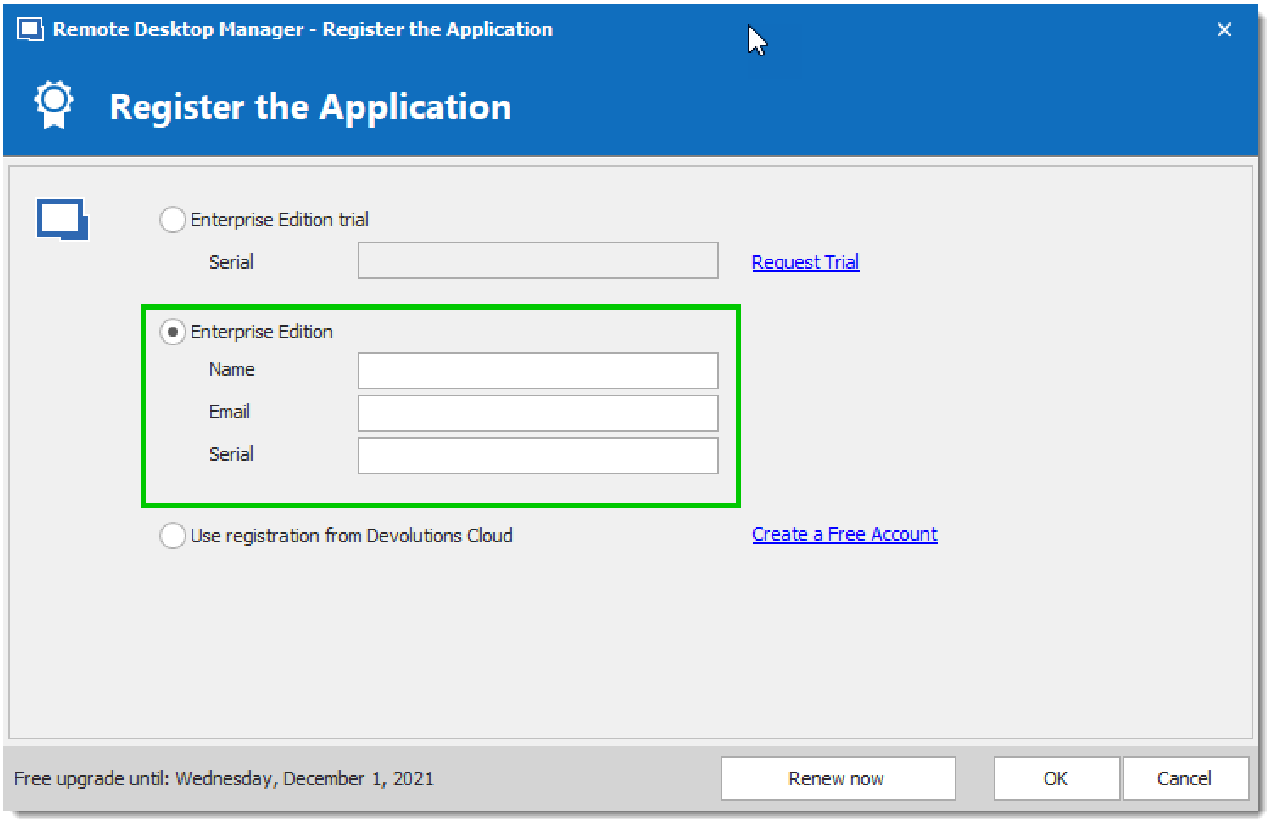
User: Devolutions inc.

Serial:

Renewal Date:

Devolutions License Serial Email

Enter the username, email, and serial number, then click ***OK***.



Remote Desktop Manager - Register the Application

Register the Application

○ Enterprise Edition trial

Serial

● Enterprise Edition

Name

Email

Serial

○ Use registration from Devolutions Cloud

Free upgrade until: Wednesday, December 1, 2021

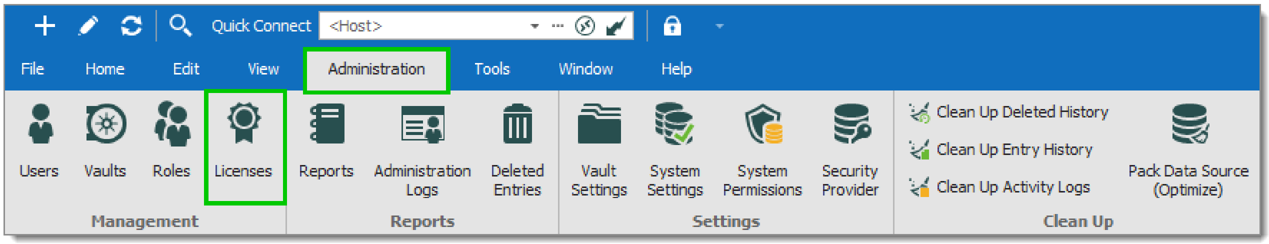
Register Enterprise Edition

REGISTRATION FROM THE DATA SOURCE

When the license serial is stored in the Data Source Settings (System Settings) of an Advanced Data Source, there is no need to register Remote Desktop Manager as the license serial is retrieved directly from it. When launching the application for the first time, simply add the data source containing the serial.

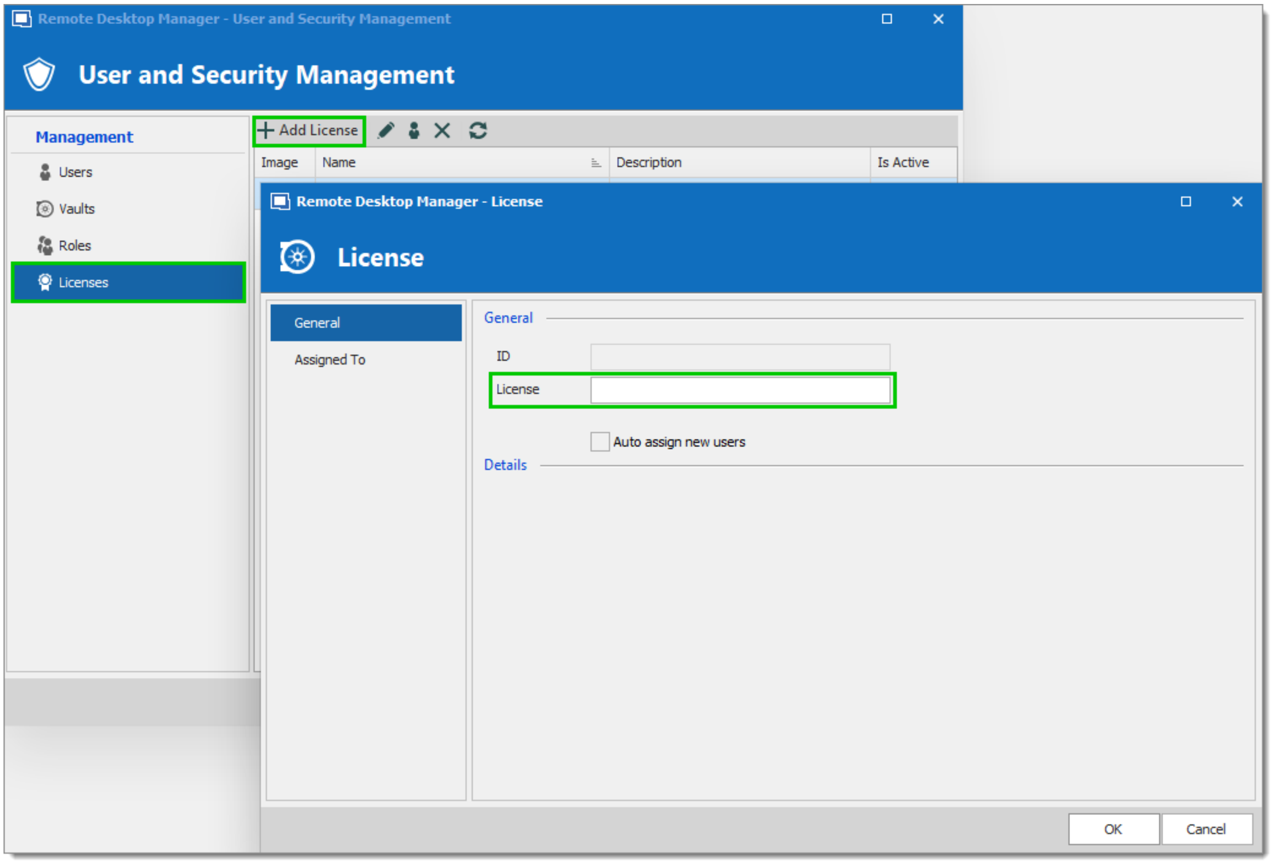
FOR ADMINISTRATORS

To add a license serial, navigate to ***Administration - Licenses***.



Administration - Licenses

In ***Licenses***, click on ***Add License***. Enter the license serial and click ***OK***.



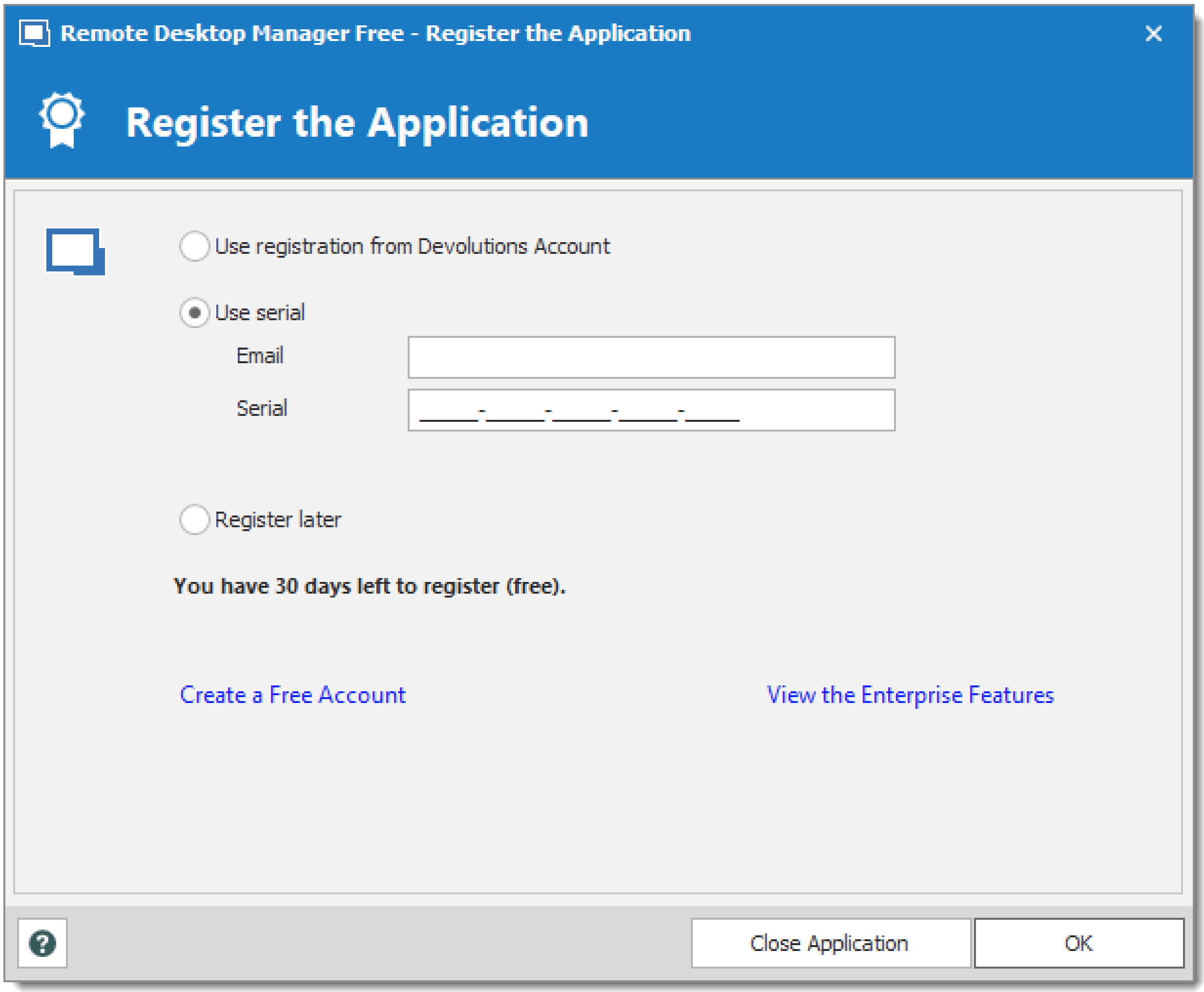
User and Security Management - Add License

3.1.7.2 Free Edition

DESCRIPTION

[Remote Desktop Manager Free Edition]() requires a free registration after 30 days to be able to continue the use of the application.

The **Register the Application** window will display at each Remote Desktop Manager launch until you have registered the product license. It shows the number of remaining days and your registration choice.



Remote Desktop Manager Free - Register the Application

Register the Application

○ Use registration from Devolutions Account

● Use serial

Email

Serial _____-_____-_____-_____-_____

○ Register later

You have 30 days left to register (free).

Register the Application

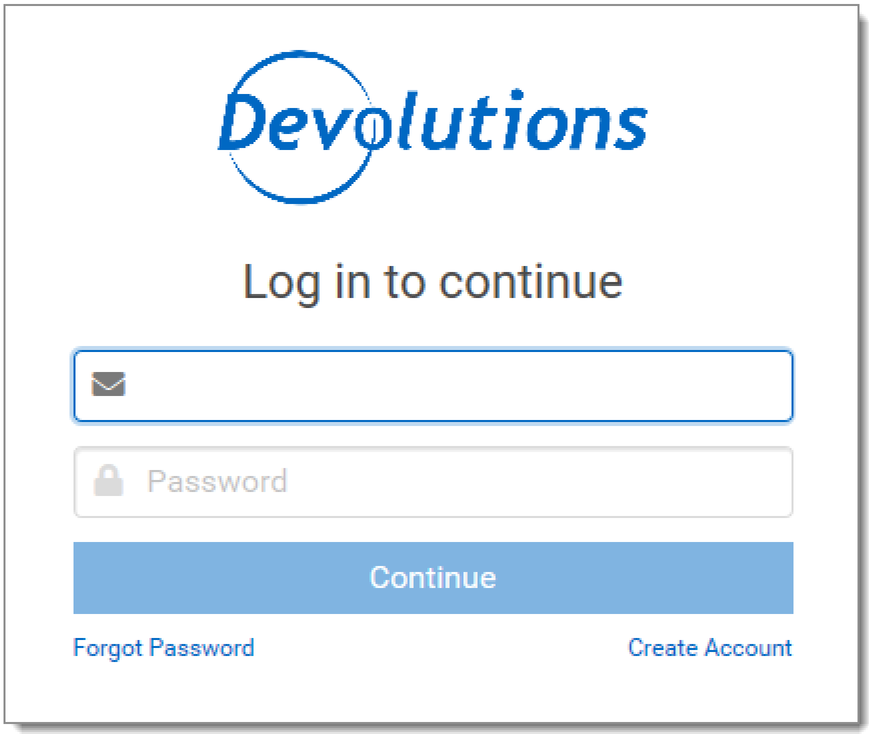
USE REGISTRATION FROM DEVOLUTIONS ACCOUNT

Every owner of a Devolutions Account is assigned a free license serial for Remote Desktop Manager in their Customer Portal.

To get a Devolutions Account, click on **Create a Free Account** in the register window**.**

To register your application follow these steps:

1. Select **Use registration from Devolutions Account**.
2. Click **Ok**.
3. Fill in your credentials and **Continue**.



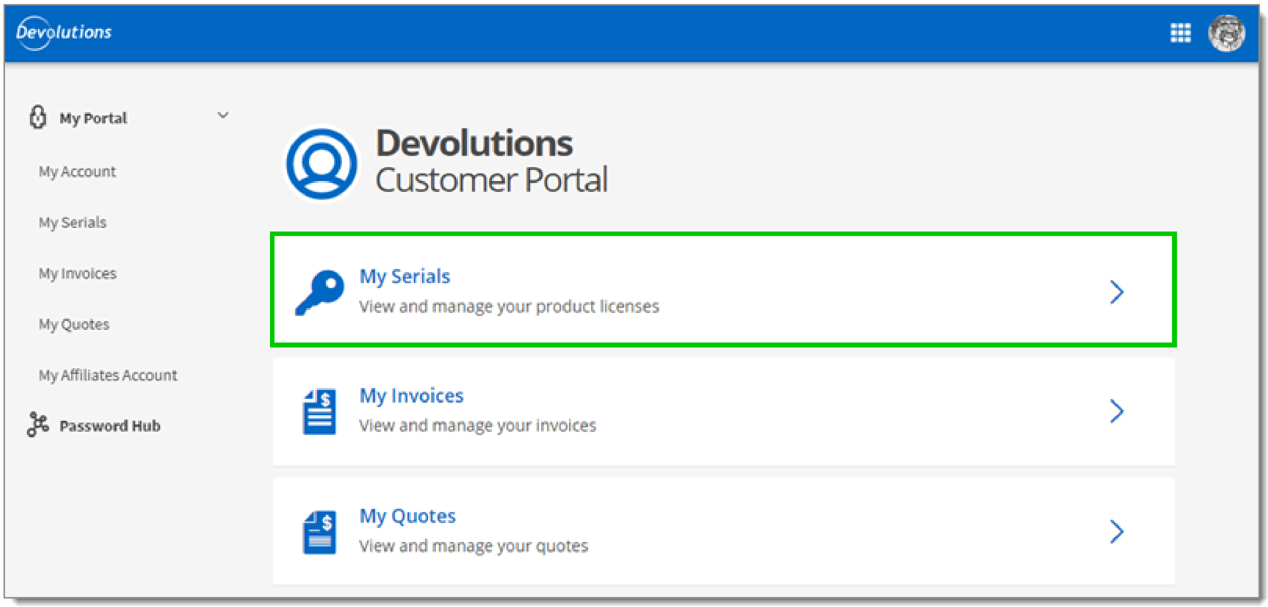
Devolutions Account Login

The license serial will be retrieved automatically.

REGISTER THE FREE EDITION WITHOUT AN INTERNET CONNECTION

In the event that you need to register the application without an internet connection, the information must be entered manually. You will need the license serial from your Customer Portal.

Log in to Customer Portal and click on **My Serials**.



Devolutions Customer Portal

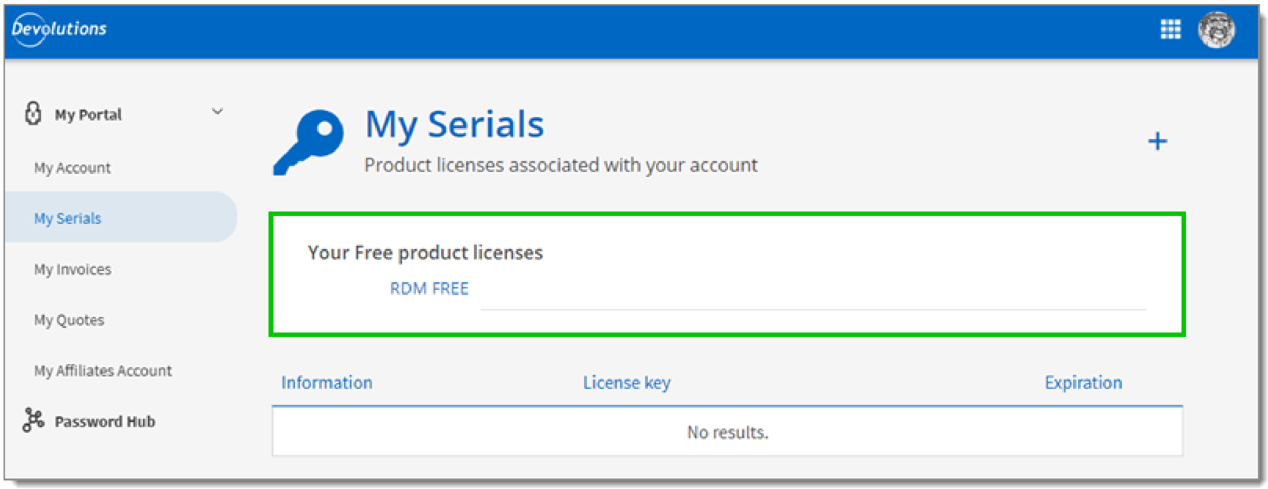
My Serials
View and manage your product licenses

My Invoices
View and manage your invoices

My Quotes
View and manage your quotes

Customer Portal - My Serials

Copy the license serial for the **Free Remote Desktop Manager Edition**.



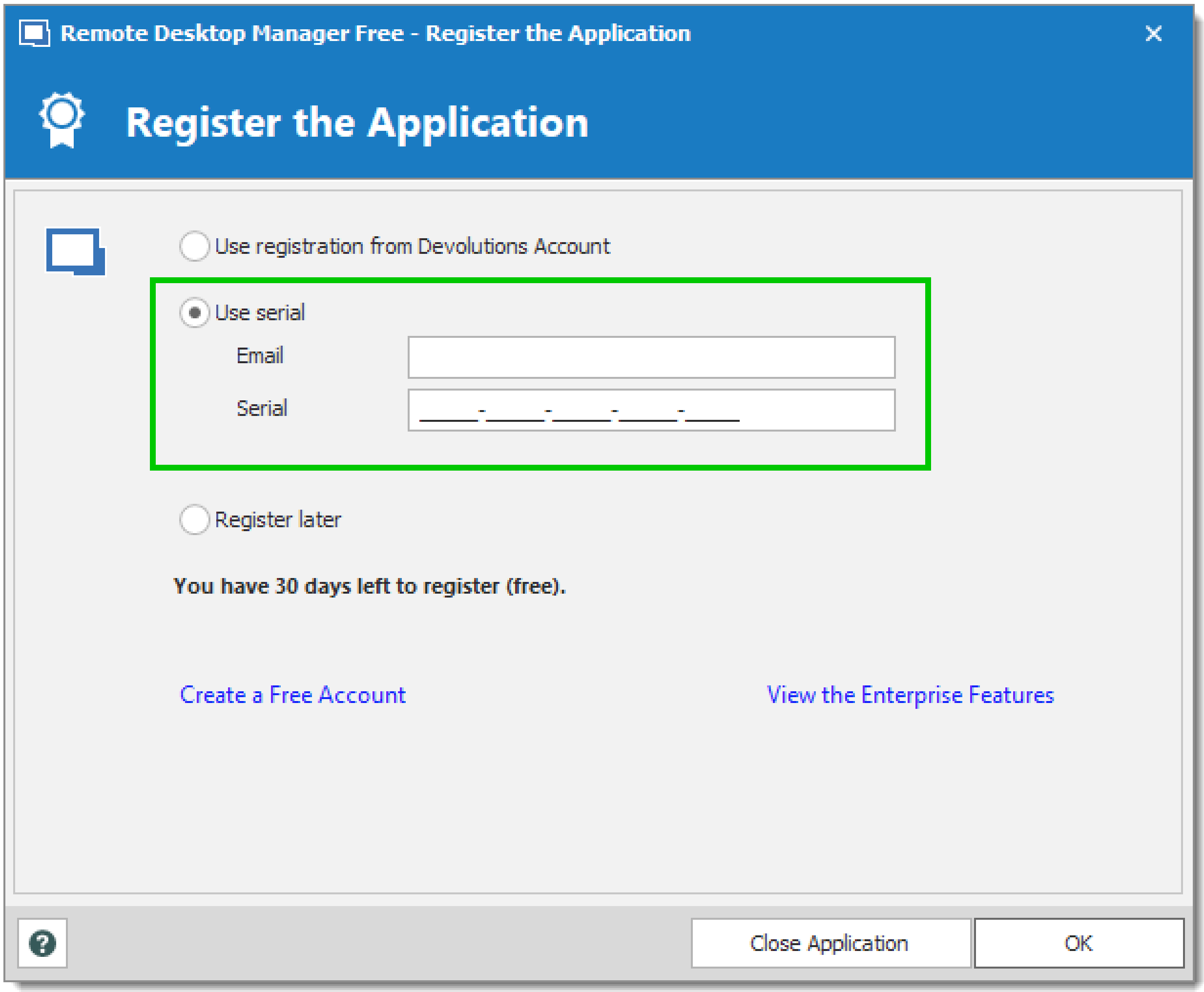
My Serials
Product licenses associated with your account

Your Free product licenses
RDM FREE

Information	License key	Expiration
No results.		

Free Product Licenses

Paste the license serial, enter an email address and press Ok.


Remote Desktop Manager Free - Register the Application
Register the Application
○ Use registration from Devolutions Account
● Use serial
Email
Serial
○ Register later
You have 30 days left to register (free).
Create a Free Account
View the Enterprise Features
Close Application
OK

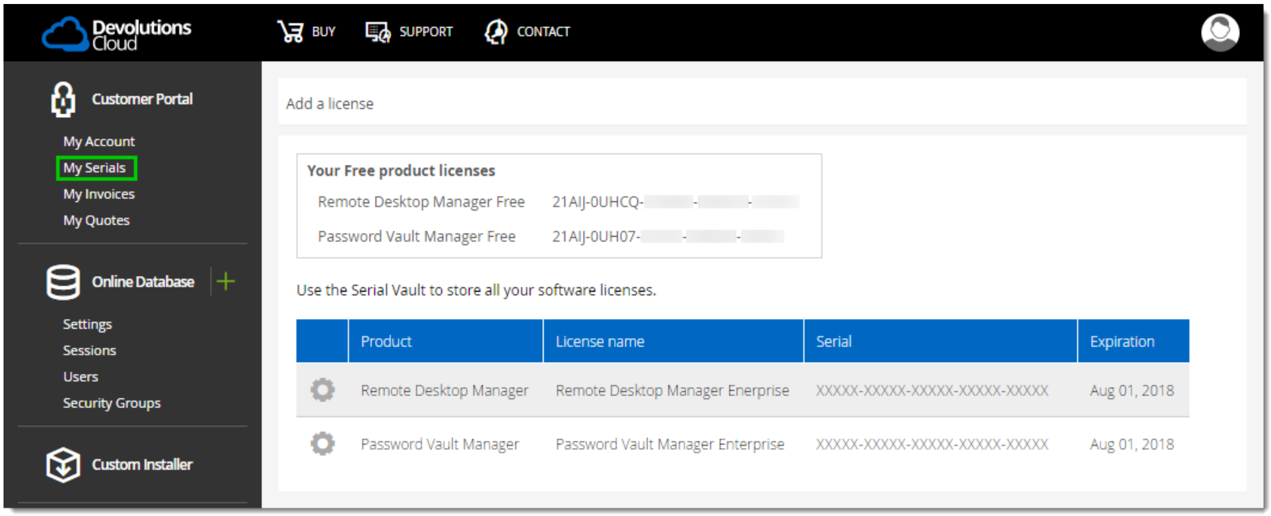
Register Manually

3.1.7.3 Register from Devolutions Portal

DESCRIPTION

It is possible to register the product with a license serial stored in a Devolutions Customer Portal.

When creating a Devolutions Account a free license serial is provided for the free edition of Remote Desktop Manager. License serials purchased for the enterprise edition can be stored in the **My Serials** section of the Devolutions Customer Portal.



Your Free product licenses

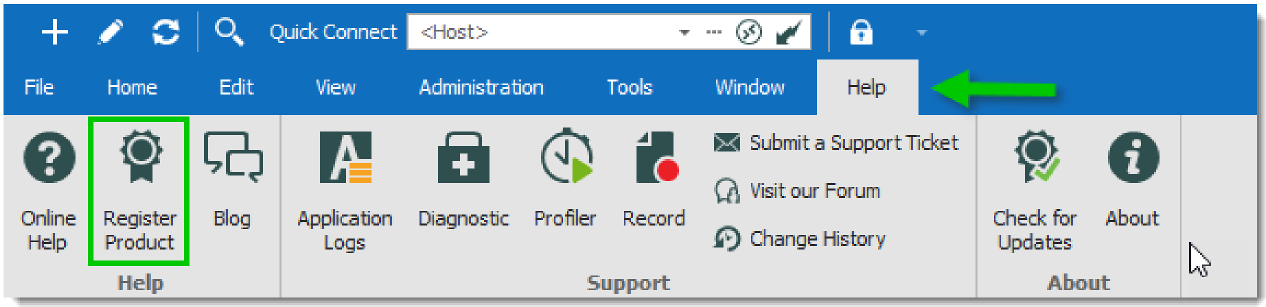
Remote Desktop Manager Free	21AIJ-0UHCQ-[redacted]
Password Vault Manager Free	21AIJ-0UH07-[redacted]

Use the Serial Vault to store all your software licenses.

	Product	License name	Serial	Expiration
⚙	Remote Desktop Manager	Remote Desktop Manager Enerprise	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Aug 01, 2018
⚙	Password Vault Manager	Password Vault Manager Enterprise	XXXXX-XXXXX-XXXXX-XXXXX-XXXXX	Aug 01, 2018

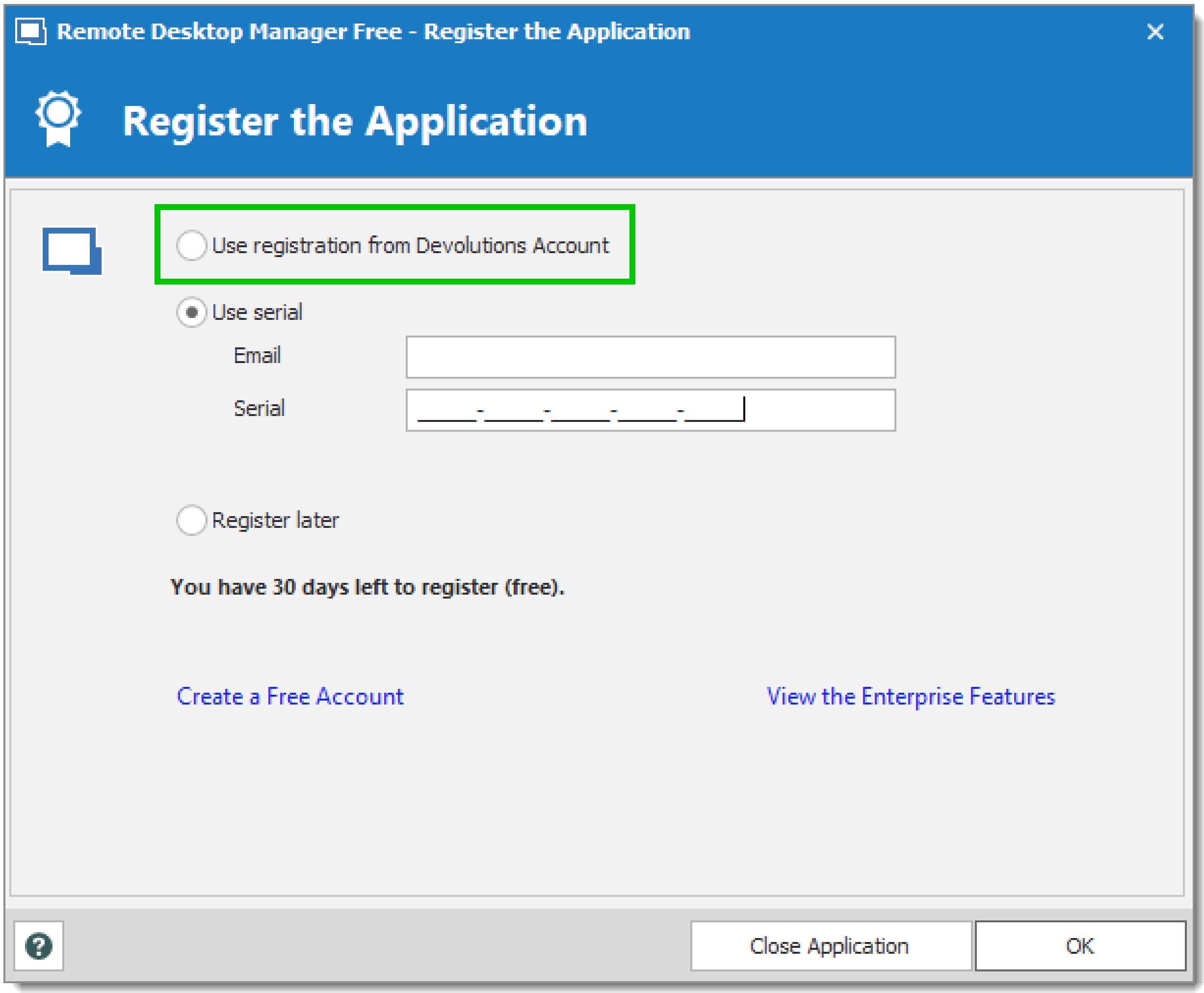
Devolutions Customer Portal - My Serials

1. To register the product, navigate to ***Help – Register Product***.



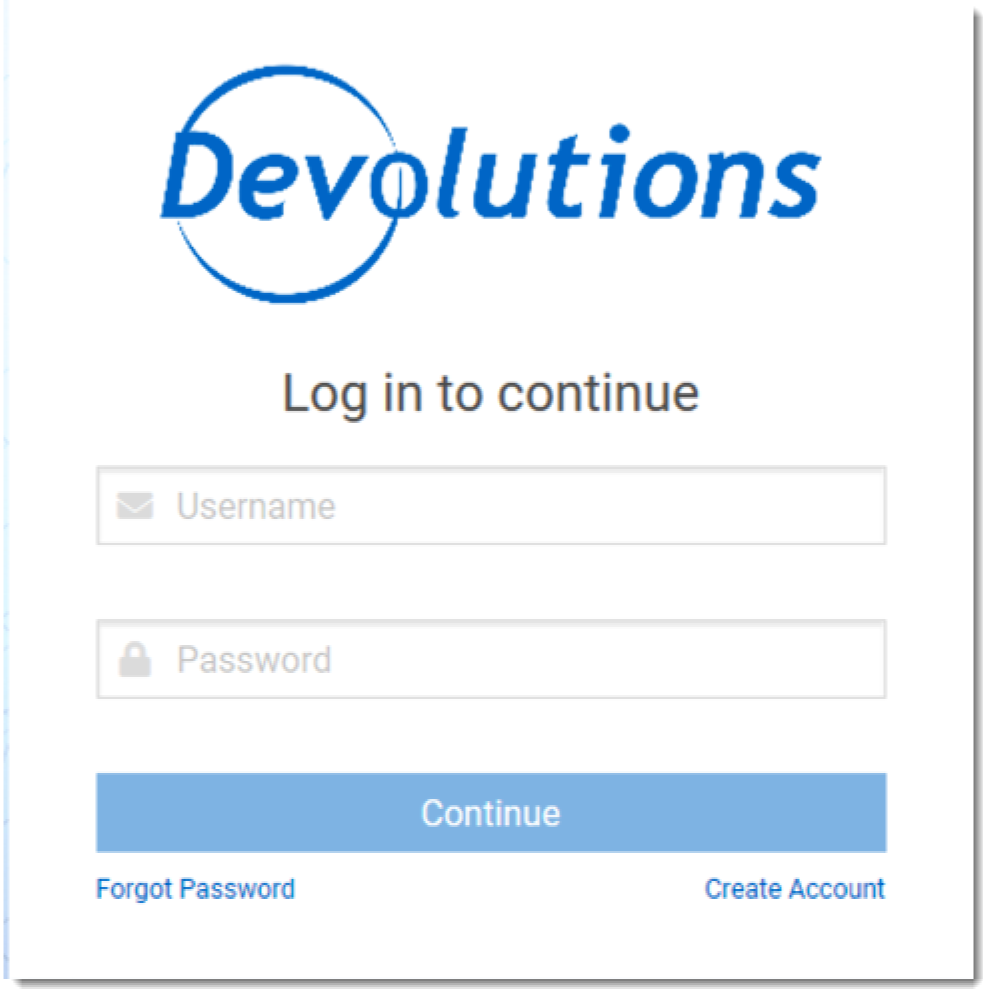
Register product

2. In the ***Select your Application Edition*** window, select ***Use registration from Devolutions Account***.


Remote Desktop Manager Free - Register the Application
Register the Application
○ Use registration from Devolutions Account
● Use serial
Email
Serial
○ Register later
You have 30 days left to register (free).
Create a Free Account
View the Enterprise Features
Close Application
OK

Select the Registration

3. Enter the credentials of the Devolutions Account, then click **Connect**.



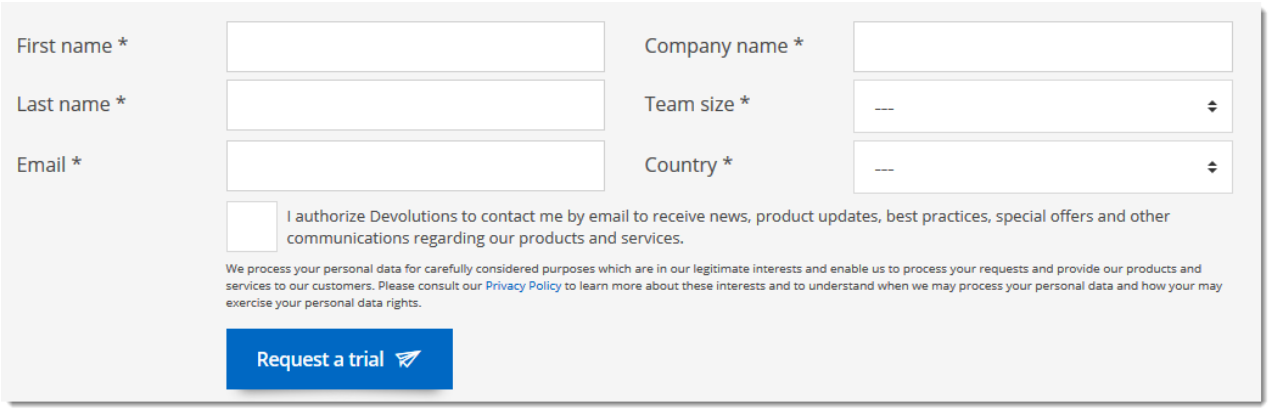
Prompt for Devolutions Account credentials

3.1.7.4 Trial Request

DESCRIPTION

When launching Remote Desktop Manager for the first time, the application registration window is displayed. If you are not ready to buy Remote Desktop Manager, you must request a trial to use the application. The trial is valid for 30 days, after which the application cannot be used unless a valid Enterprise Edition license serial is provided.

Navigate to ***Help – Register Product***, click on ***Request Trial***, and fill in the form.



First name *

Last name *

Email *

Company name *

Team size * ---

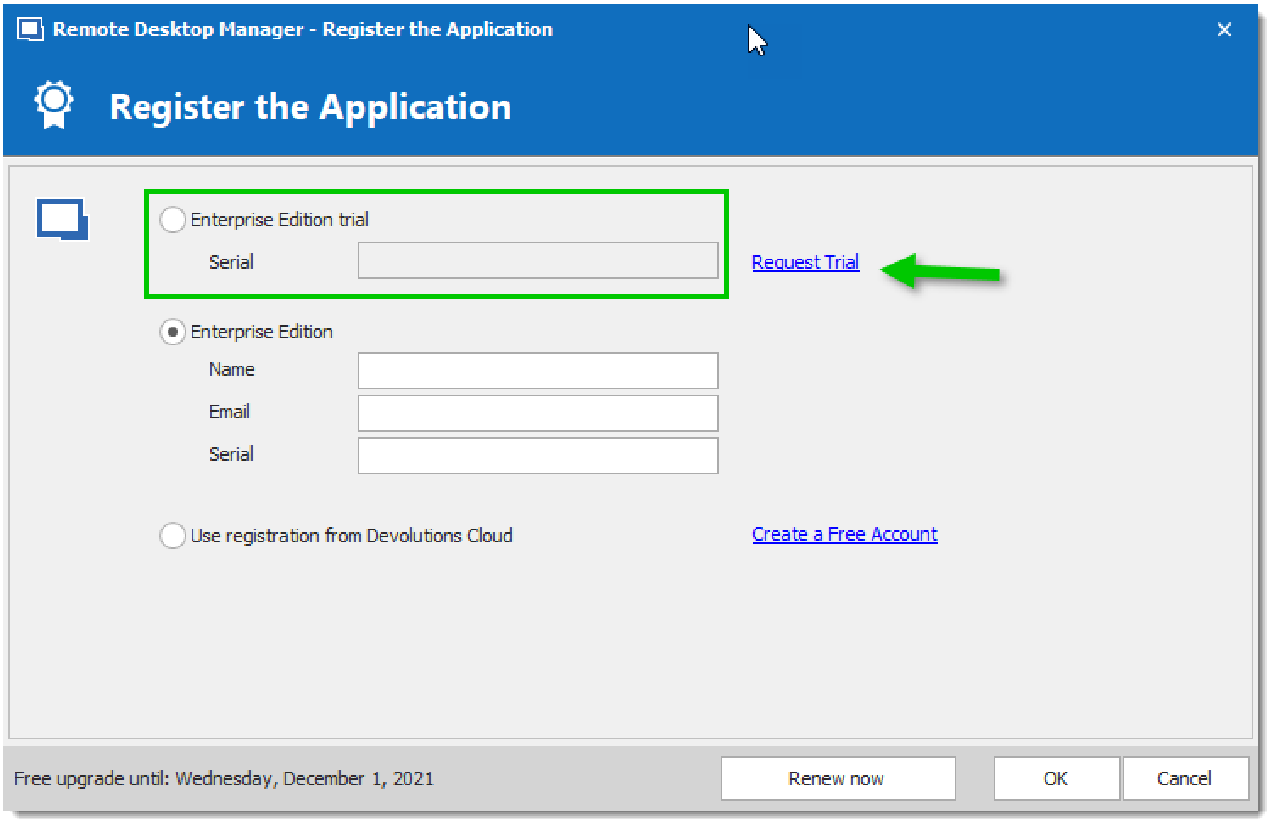
Country * ---

□ I authorize Devolutions to contact me by email to receive news, product updates, best practices, special offers and other communications regarding our products and services.

We process your personal data for carefully considered purposes which are in our legitimate interests and enable us to process your requests and provide our products and services to our customers. Please consult our Privacy Policy to learn more about these interests and to understand when we may process your personal data and how your may exercise your personal data rights.

Trial request for Remote Desktop Manager

When the trial has been requested, an email containing the trial license serial is sent to the address provided in the form above.



○ Enterprise Edition trial

Serial

● Enterprise Edition

Name

Email

Serial

○ Use registration from Devolutions Cloud

Free upgrade until: Wednesday, December 1, 2021

Register Enterprise Edition Trial

3.1.8 Remote Desktop Services

DESCRIPTION

Remote Desktop Manager has an excellent support for running under a Remote Desktop Services environment. A master configuration file can be created to distribute settings for all new users of the system or even to update existing user's configuration.

Please ensure that you have followed Microsoft's recommendation on how to set up an RDS environment. It will severally impact the performance if default Windows installations are performed.

https://docs.microsoft.com/en-us/windows-server/administration/performance-tuning/role/remote-desktop/session-hosts

Each user must have a unique application data folder (Roaming profiles or similar technologies). Remote Desktop Manager saves some user preferences to the local configuration file. The folder can be wiped out whenever the user logs out of the Windows Session, but it must be accessible for the duration of Remote Desktop Manager execution.

The **Devolutions Web Login (DWL)** was created for a normal desktop environment. It uses Inter-process communication (IPC) with the client application. Using it on a remote desktop server introduces a level of risk that may be unacceptable for corporate users.

If you insist on using it, it is critical that each user is assigned a distinct port and that port be kept secret. An application key **must be set** as well. The first client application that starts will be able to use the port exclusively. ALL **Devolutions Web Login** calling on that port ***will get the responses***, unless an application key is set.

In summary, safe usage of **DWL** requires a manual configuration of both **RDM** and **DWL** on each user profiles.

PROCEDURE

1. Install by following the procedure For All Users. This ensures that the Microsoft Installer Database does contain all of the needed information for all user profiles of the host.

2. After installing Remote Desktop Manager, configure your preferences. We recommend going through all the configuration options to find the set of options that you wish to distribute. The data sources deserve special interest since it is much better when they are configured by an administrator. You may even take the opportunity to lock the data sources to protect against any modification by the users. Please refer to Lock Data Source for more information.

When using Advanced Data Sources, for effective logging methods, proper session security and user-based features, it is **CRITICAL** that each user has their own account to authenticate against the data source.

Redistributing a data source registration should follow one of the patterns below:

- The data source is configured to always ask the username and password;
- You are using integrated security against SQL Server;
- You use environment variables for the username, and require the password. (we recommend `%USERDOMAIN%\%USERNAME%` or `%USERDNSDOMAIN%\%USERNAME%`)

3. When Remote Desktop Manager is configured to your liking, use ***File – Options – Export Options***. This will allow you to choose exactly the data sources to include, as well as the various categories of settings. Please refer to Export Options for further details. Save the file with the name *default.cfg*

Do not check the options to include ***Devolutions Account Credentials*** as well as any data source that contains saved credentials while also enabling ***Include data source credentials***.

4. Move that file in the installation folder of Remote Desktop Manager, if you have used the default installation settings, it is under %ProgramFiles(x86)%\Devolutions\RemoteDesktopManager.

WORKFLOW

NEW USERS

Whenever a new user creates a profile on the system, Remote Desktop Manager detects the presence of the *default.cfg* file and uses it as a template to create the user's configuration file.

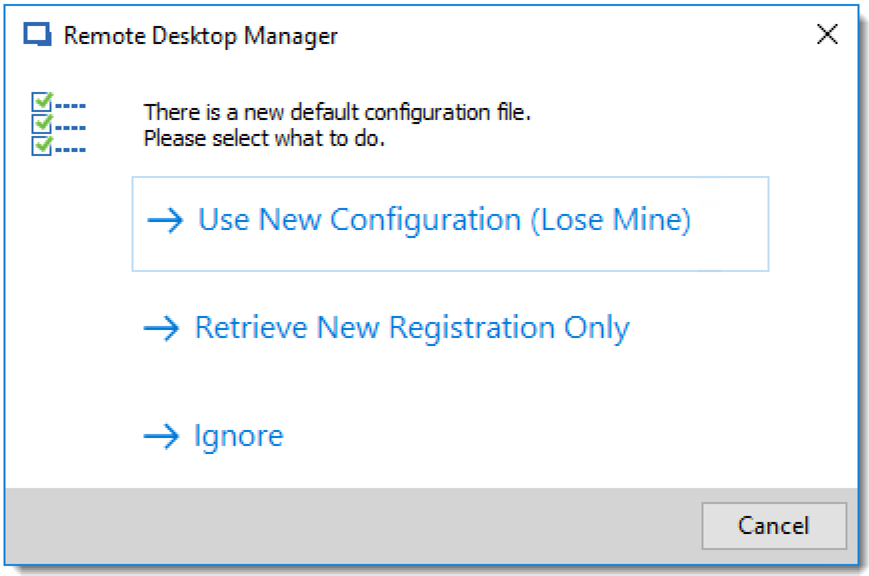
EXISTING USERS

A group policy exists to force the new configurations to be accepted automatically.

If the user chooses to ignore the new configuration file when presented with the dialog below, he will not be presented with the choice until the date/time of the *default.cfg* file has changed.

If the main concern is deploying a new license key, and you are using of of the Advanced Data Sources, you should rather use the Data source settings (System Settings) - Serial feature.

Whenever Remote Desktop Manager is started and it detects a new *default.cfg* file, the following dialog will appear:



Remote Desktop Manager
→ Use New Configuration (Lose Mine)
→ Retrieve New Registration Only
→ Ignore
Cancel

There is a new default configuration file.
Please select what to do.

New default.cfg detected

By selecting ***Use New Configuration (Lose Mine)***, the user's configuration is simply overwritten. If you only wish to update the Remote Desktop Manager license key after a renewal, choose ***Retrieve New Registration Only***.

3.2 Database Upgrade

DESCRIPTION

This topic applies to installations with data sources that are using a **database** as their data store.

Some Remote Desktop Manager releases must alter the database structure. These are performed automatically for you but it is best practice to perform a backup of your data source beforehand. Additionally, If you are in a team environment **you must be the sole user connected to the database** during the upgrade.

⊗	The user performing the update must have administrative privileges on the underlying database. (**SYSDBA** or **DB_OWNER)**.

⊗	Perform a database backup and ensure that you can quickly perform a restore if required.

⊗	If your organization allows for a read/write offline cache, ensure that all of your users have merged their offline edits.

STEPS

Follow these steps for a successful version update:

1. Ensure you are the sole user of the database during the upgrade process. If you environment allows for offline use, have your team switch to the offline mode; or have them switch to another data source.

2. Back up your database using the database tools.

3. Install the desired version of Remote Desktop Manager, using the Portable (USB) deployment model may be desirable if you are doing this on your personal workstation.

4. Open Remote Desktop Manager while logged on as a user with administrative rights. You must also be **SYSDBA** or **DB_OWNER**.

5. You may be prompted with an upgrade message when your data source is accessed. If so accept the upgrade.
   or
   Using ***File – Data sources***, locate your data source to upgrade and open its property window. Switch to the ***Upgrade*** tab, then click on ***Update Database***

6. Wait for a confirmation dialog.

7. Close the dialog.

8. Ensure your Remote Desktop Manager application is currently using that data source.

9. Press CTRL-F5 to force a full refresh.

10. Validate the content and perform a check of the technologies that are critical in your environment.

11. Update the client software on all workstations.

3.3 Uninstall

INSTRUCTIONS

Remote Desktop Manager doesn't install anything in the Windows System directory. The only registry settings created are for the auto-run functionality and the installation path. As a result, Remote Desktop Manager can be uninstalled easily.

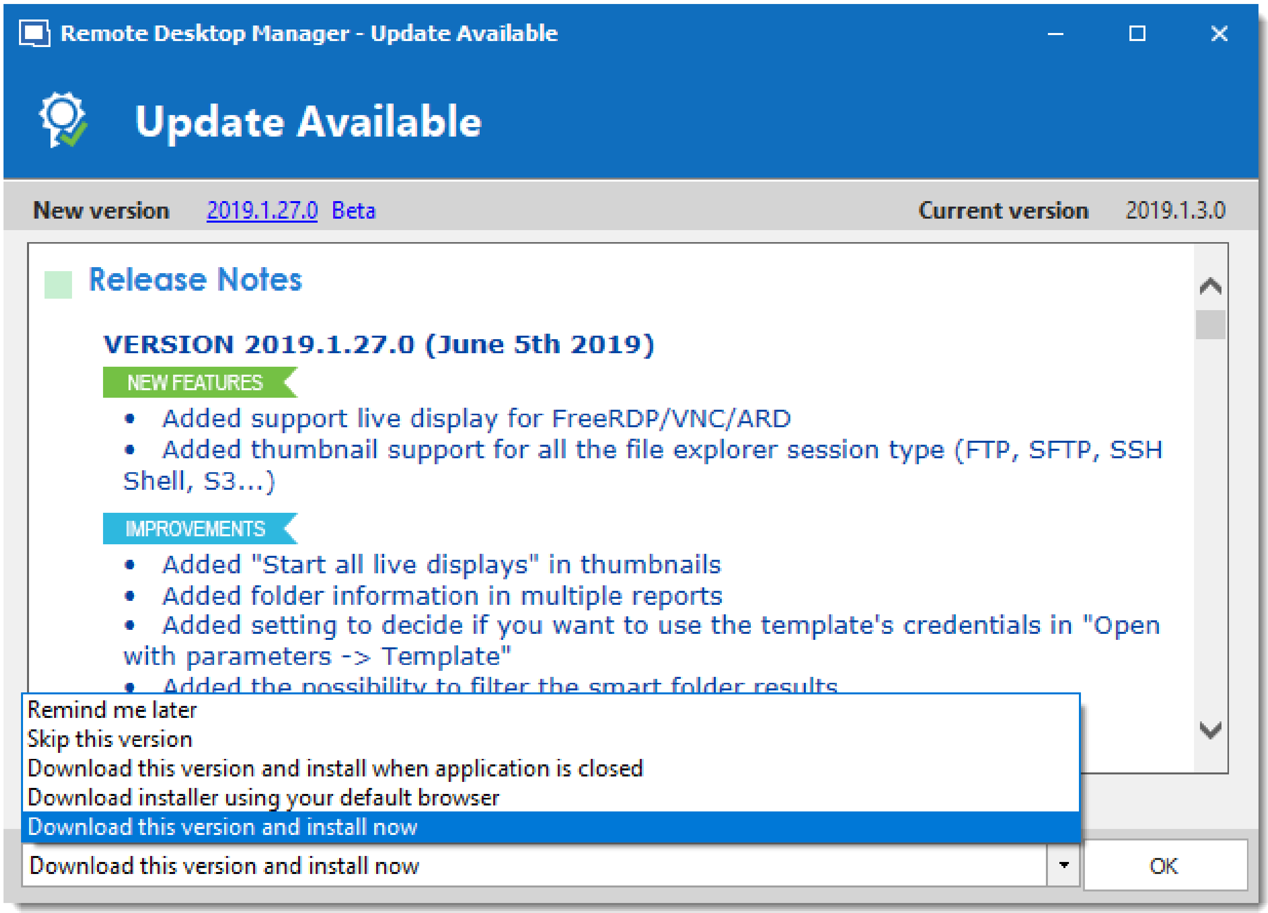
You can run the uninstaller if it was installed with the default setup file or delete the installation folder directly if it was installed from the binaries.

The application configuration files are saved in **"%LocalAppData%\Devolutions\RemoteDesktopManager"** or **"%AppData%\Devolutions\RemoteDesktopManager"** by default. It's possible that you may want to delete this folder for a complete uninstall.

> ℹ Please note that if you are using a local data source like SQLite or XML, your data source may be saved in the configuration folder. Perform a backup of the data source prior to the deletion of the folder.

3.4 Update

The ***Update*** feature prompts the user to update to a newer version of the application and displays the release notes. The user's choice for the previous update is shown as selected.



Remote Desktop Manager - Update Available

Update Available

New version 2019.1.27.0 Beta   Current version 2019.1.3.0

Release Notes

VERSION 2019.1.27.0 (June 5th 2019)

NEW FEATURES

- Added support live display for FreeRDP/VNC/ARD
- Added thumbnail support for all the file explorer session type (FTP, SFTP, SSH Shell, S3...)

IMPROVEMENTS

- Added "Start all live displays" in thumbnails
- Added folder information in multiple reports
- Added setting to decide if you want to use the template's credentials in "Open with parameters -> Template"
- Added the possibility to filter the smart folder results

Remind me later
Skip this version
Download this version and install when application is closed
Download installer using your default browser
Download this version and install now
Download this version and install now
OK

Update

OPTION	DESCRIPTION
Remind me later	Remind to update the next time the application is opened.
Skip this version	Do not update the application with this version.
Download this version and install when the application is closed	Download the version and wait for the application to be closed before installing.
Download installer using your default browser	Download the installer externally using your default web browser.
Download this version and install now	Immediately download the new version and install it.

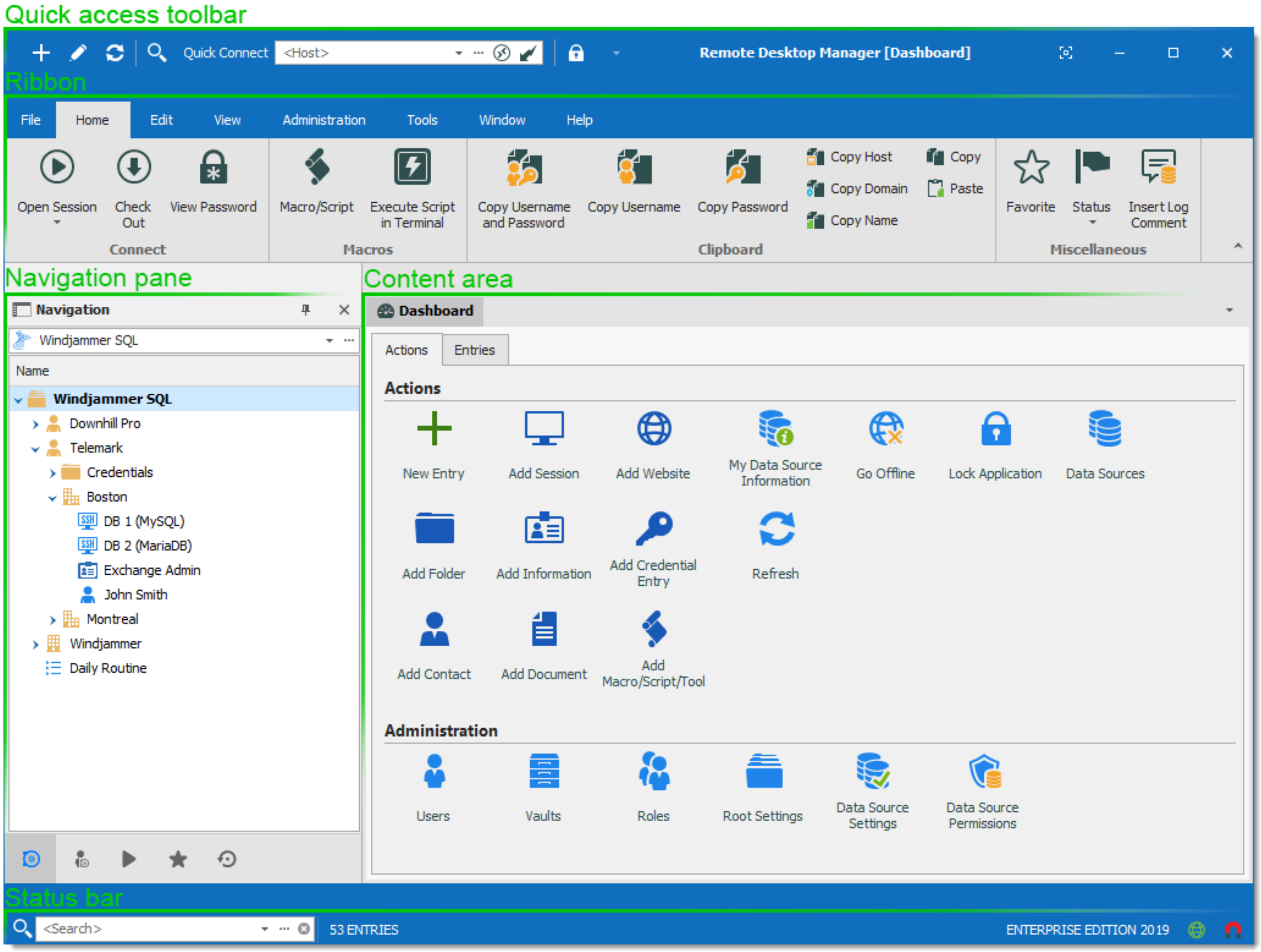
User Interface

Part IV

4 User Interface

4.1 Main Screen

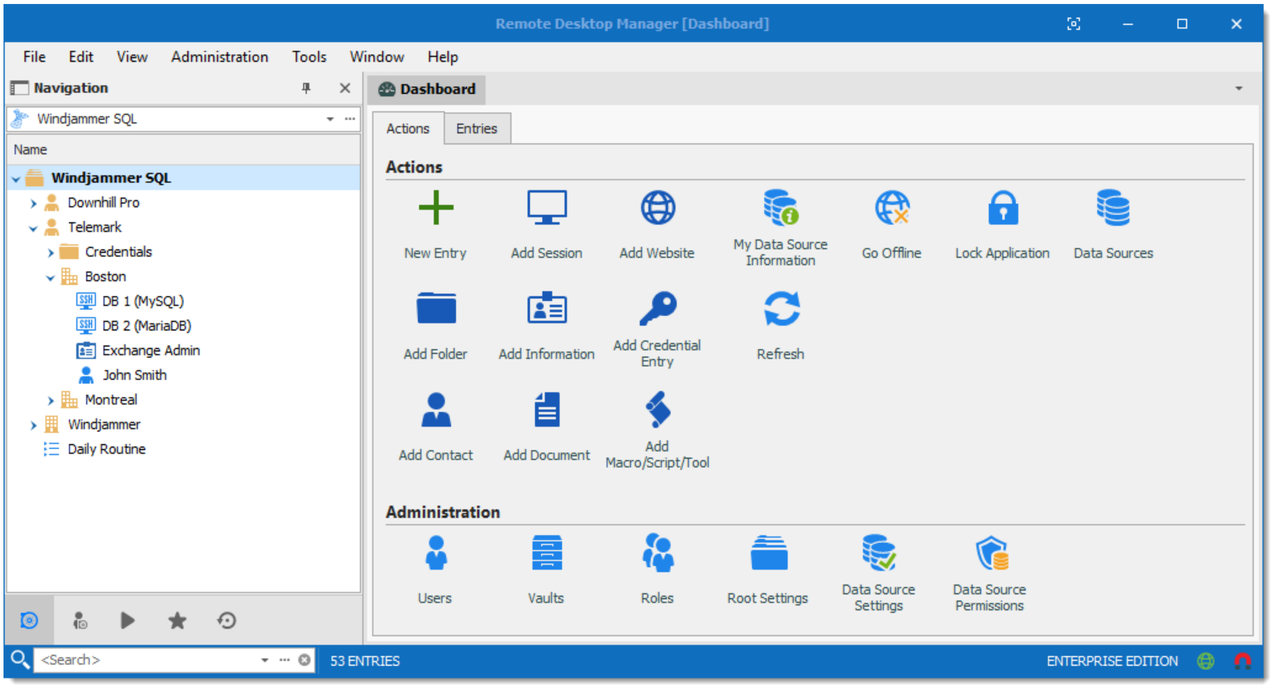
Illustrated below is the default Remote Desktop Manager main screen. Go to ***File – Options – User Interface*** to change the current style. We have various settings for you to customize your experience, such as different themes, shortcuts and more!



Overview of the default user interface

MENU USER INTERFACE STYLE

With the Menu user interface style, the ***Ribbon*** is been replaced by a standard menu, and the ***Quick Access toolbar*** is not present. This setting can be found in ***File – Options – User Interface – Ribbon Interface***.



Menu user interface style

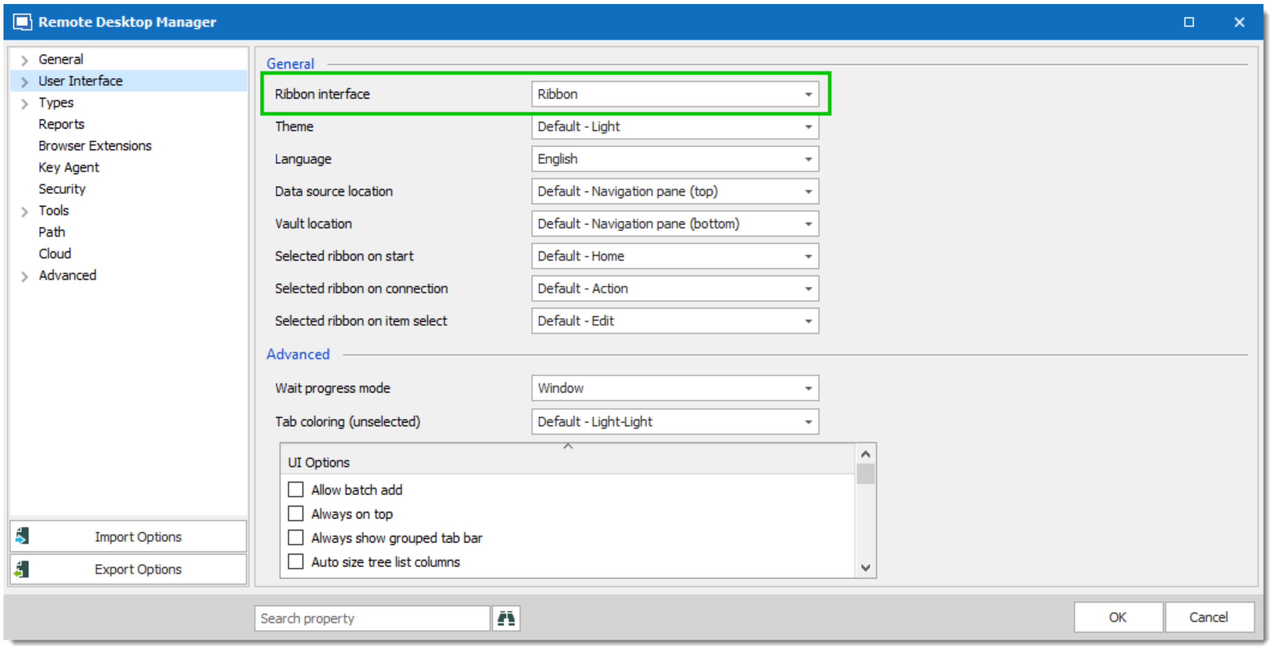
4.2 Style

Remote Desktop Manager supports different User Interface Styles (sometimes known as skins). These greatly influence the visual aspect of the User Interface as well as its mode of operation. Three styles currently exist:

- Ribbon
- Menu

CONFIGURATION

To select the User Interface style you must go in **File – Options – User Interface** and modify the **Ribbon interface**.



General

Ribbon interface: Ribbon

Theme: Default - Light

Language: English

Data source location: Default - Navigation pane (top)

Vault location: Default - Navigation pane (bottom)

Selected ribbon on start: Default - Home

Selected ribbon on connection: Default - Action

Selected ribbon on item select: Default - Edit

Advanced

Wait progress mode: Window

Tab coloring (unselected): Default - Light-Light

UI Options

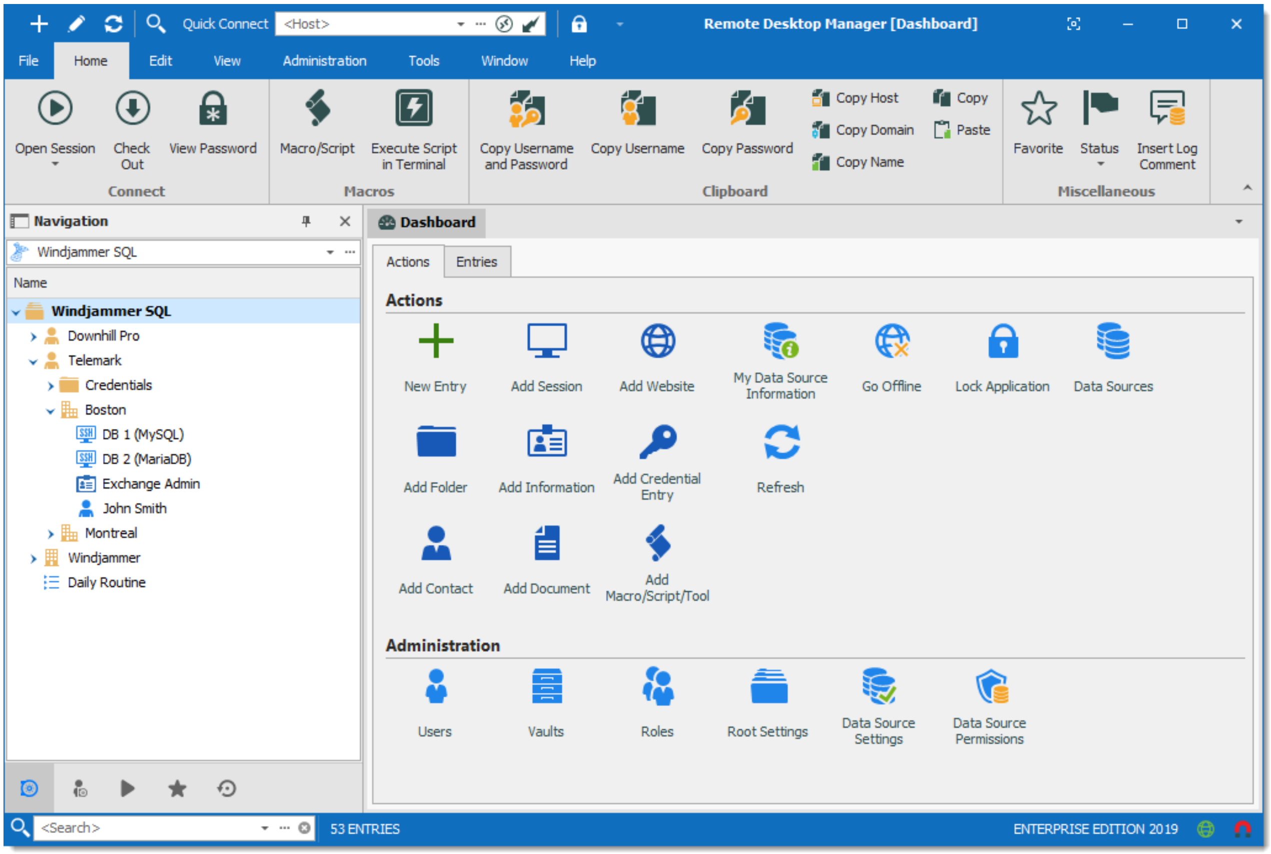
- □ Allow batch add
- □ Always on top
- □ Always show grouped tab bar
- □ Auto size tree list columns

Options - User Interface

EXISTING STYLES

RIBBON

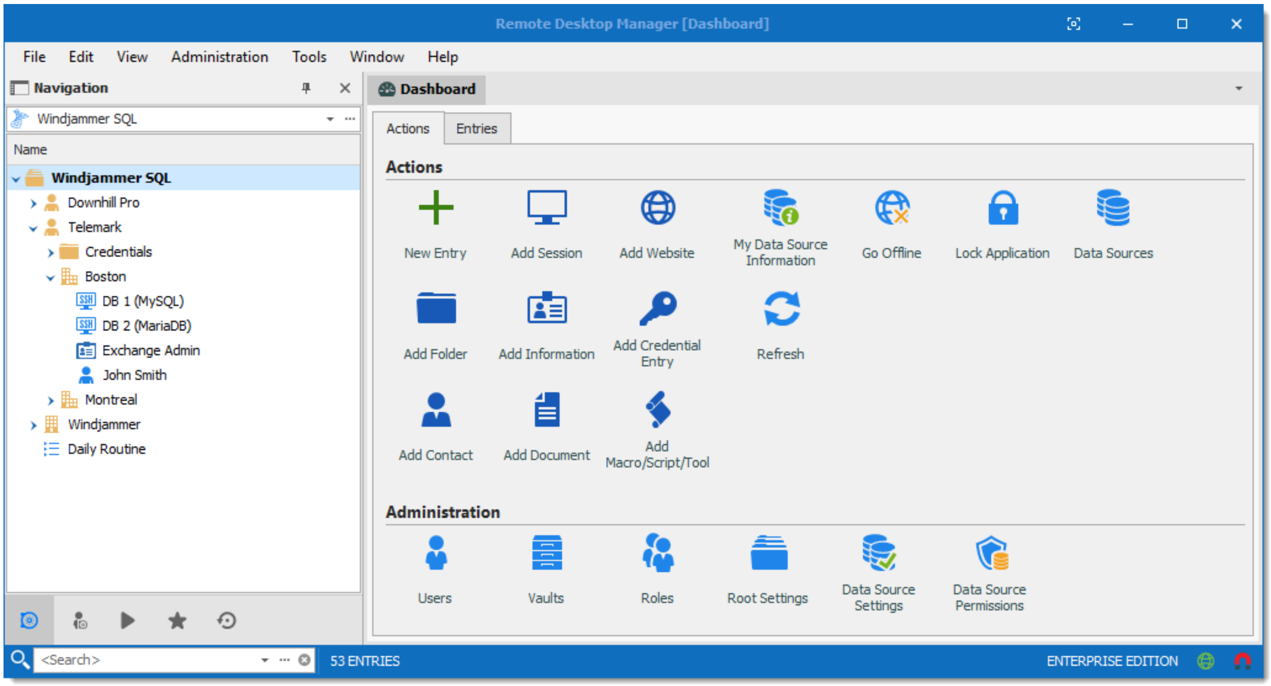
The latest style sports a ribbon. Icons and text makes it easy to explore features.



Ribbon User Interface

MENU

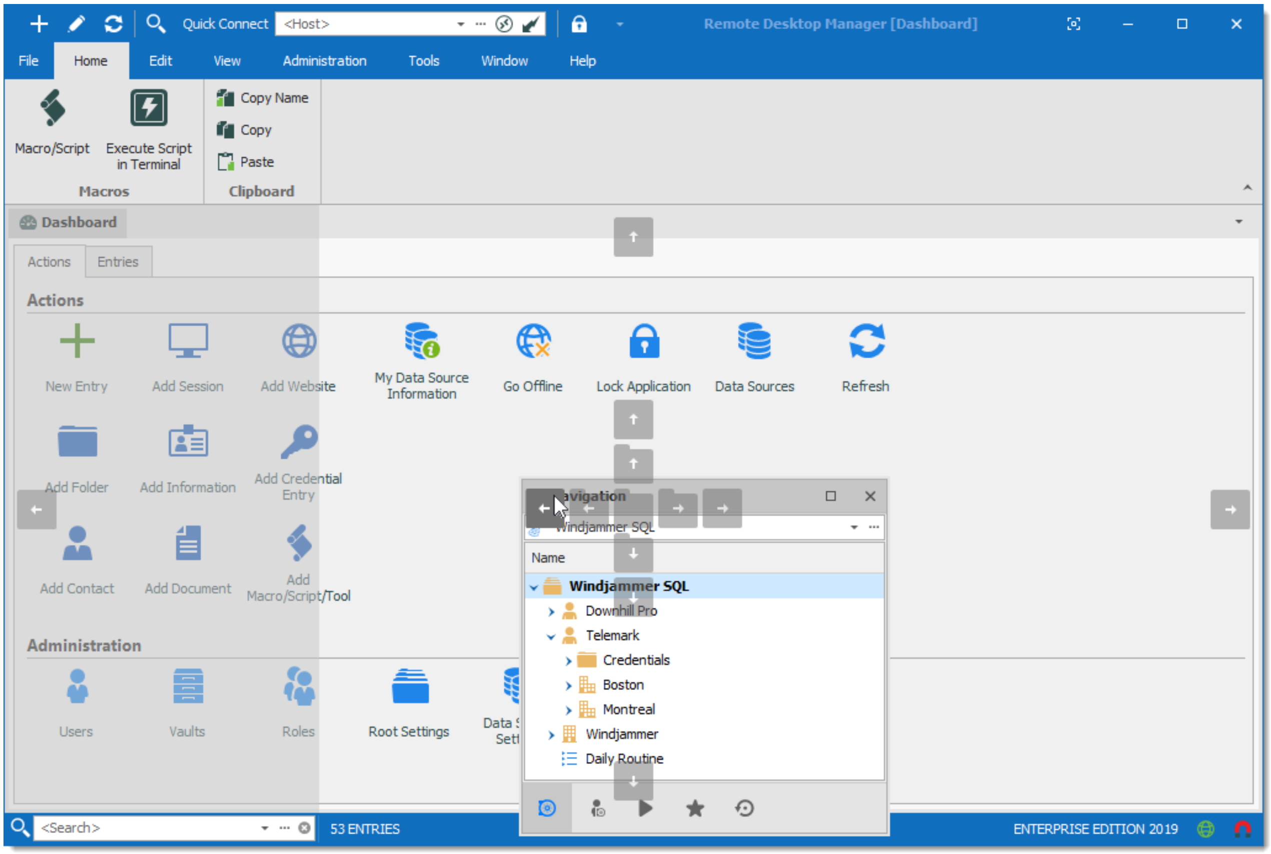
Previous generation style, it holds a standard menu to invoke commands.



Default User Interface

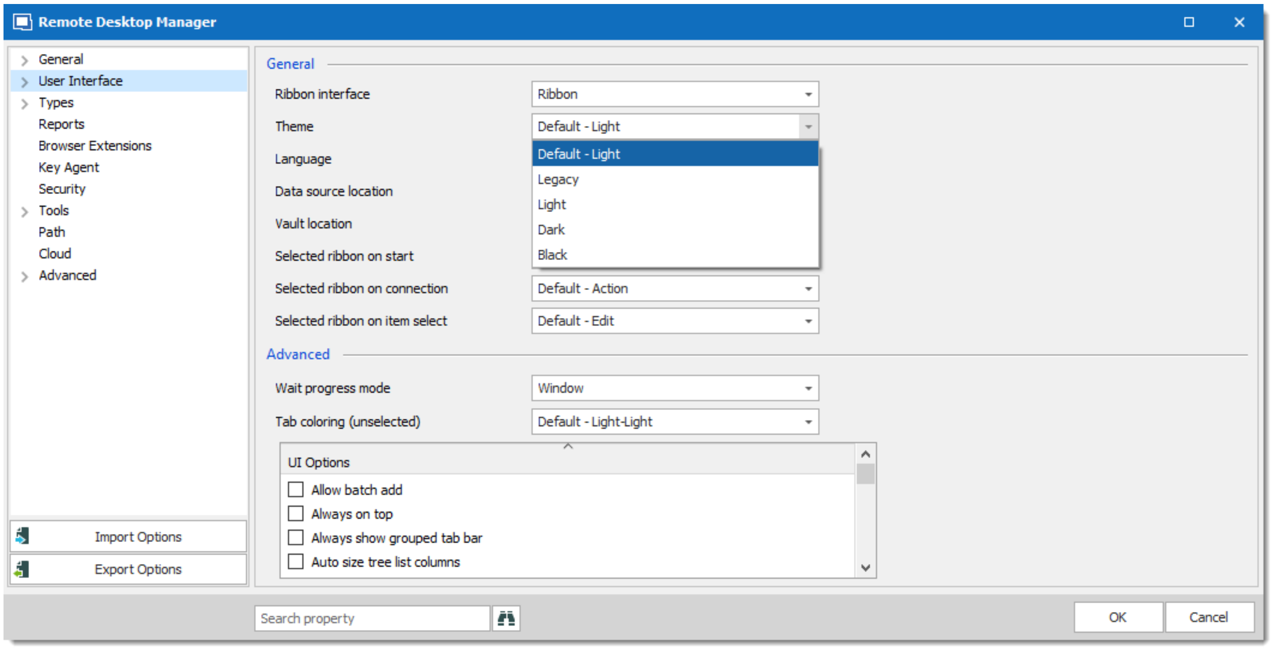
CUSTOMIZING YOUR UI

Customizable styles (Default Ribbon and Default Menu) have dockable areas that can be rearranged to your liking. Simply left-clicking then dragging the sub-components will result in drop zones appearing. This allows you to drop the sub component where you choose, even outside of the main form if you'd like.



4.3 Theme

The themes will modify the color and shade of Remote Desktop Manager.



General

Ribbon interface: Ribbon

Theme: Default - Light

- Default - Light
- Legacy
- Light
- Dark
- Black

Language

Data source location

Vault location

Selected ribbon on start

Selected ribbon on connection: Default - Action

Selected ribbon on item select: Default - Edit

Advanced

Wait progress mode: Window

Tab coloring (unselected): Default - Light-Light

UI Options

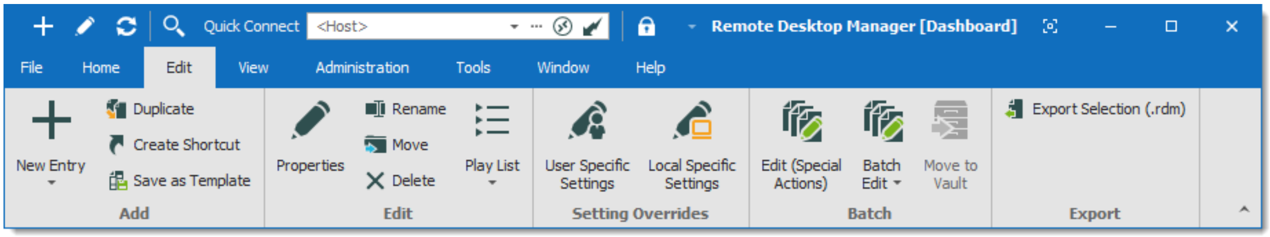
- ☐ Allow batch add
- ☐ Always on top
- ☐ Always show grouped tab bar
- ☐ Auto size tree list columns

User Interface - Theme

OPTION	DESCRIPTION
Default - Light	Use the default theme, which is the Light theme.
Legacy	Use the old look of Remote Desktop Manager (version 7 of RDM)
Light	Use a clear theme with tones of white, gray, and blue.
Dark	Use a dark theme with tone of gray and black.
Black	Use the darkest theme, mainly with tones of black.

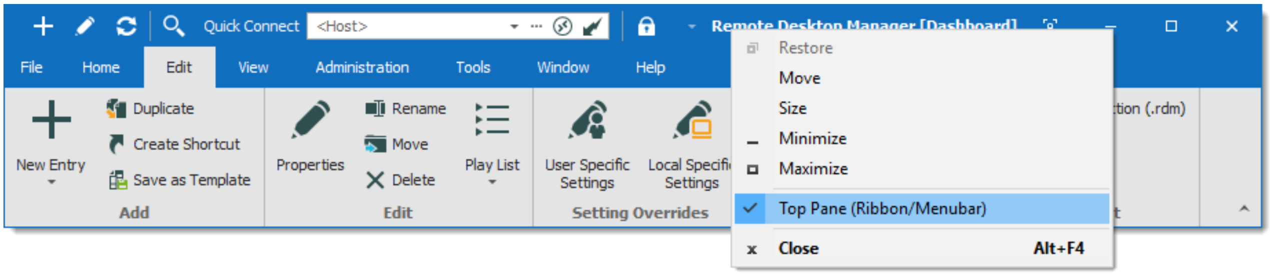
4.4 Top Pane

The ***Top Pane*** contains the Quick Access Toolbar and the Ribbon / Menu.

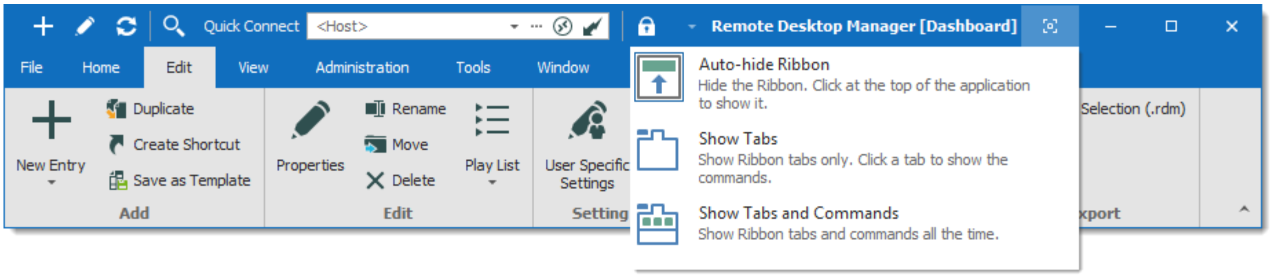


Remote Desktop Manager top pane

It can be hidden to maximize the work area.



Hide the top pane completely



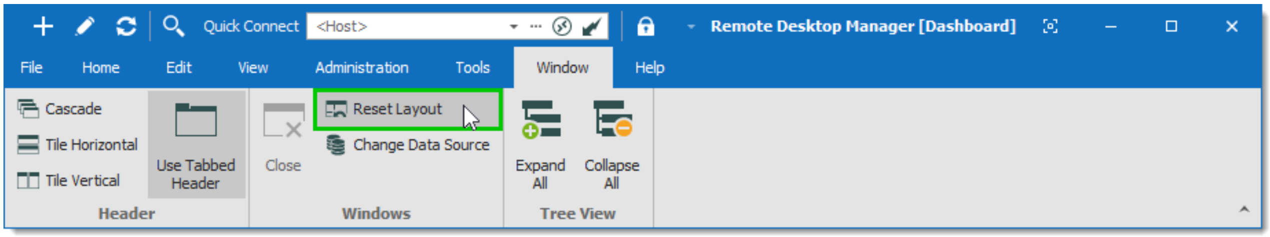
Auto-hide Ribbon
Hide the Ribbon. Click at the top of the application to show it.

Show Tabs
Show Ribbon tabs only. Click a tab to show the commands.

Show Tabs and Commands
Show Ribbon tabs and commands all the time.

Hide the ribbon

If you end up confused by your modified settings and would like to reset it to its original layout, navigate to the ***Windows*** tab and select ***Reset Layout***.

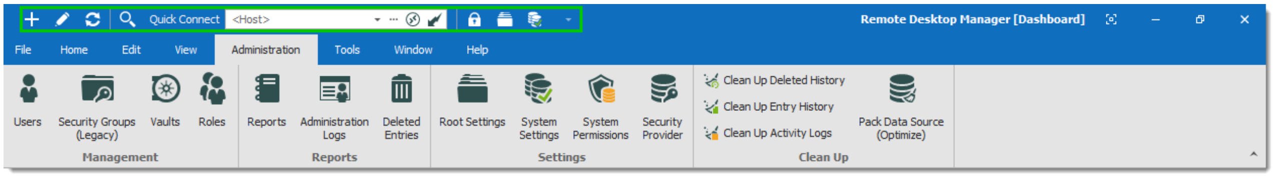


Windows – Reset layout

4.4.1 Quick Access Toolbar

The ***Quick Access Toolbar***, which is found at the top of the application, It is composed of multiple parts:

- System menu icon.
- Favorite commands.
- Quick Connect control.
- Lock command.

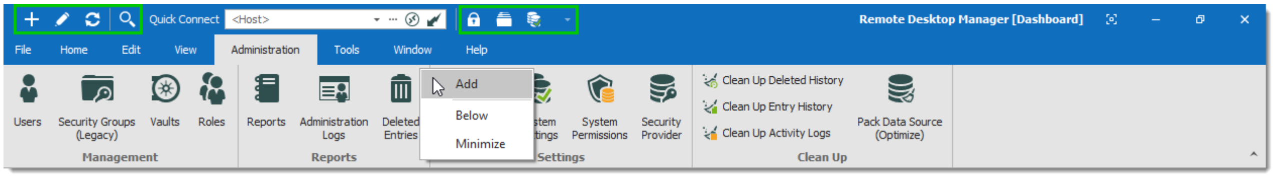


Quick Access Toolbar

Quick Access Toolbar buttons are flagged locally on the current machine by the current user. These local buttons are saved in a file named **RemoteDesktopManager.qtb**. By default, this file is located in **%localappdata%\Devolutions\RemoteDesktopManager**.

FAVORITE COMMANDS

Commands contained in the ribbon can be added in the quick access toolbar. These are the favorite commands. To add a command to the quick access toolbar, right-click any icon in the ribbon the select **Add**.



Favorite Commands

COMMAND	DESCRIPTION
🗋	Create a new entry in your current data source.
✎	Open the properties window of your selected entry.
⟳	Refresh your data source.
🔍	Open the filter dialog window to allow you to do a quick search.

Right-Click on any command to display the contextual menu. To remove an item from the quick access toolbar, right-click on the item and select **Remove**. To add an item to the quick access toolbar, right-click an item in the ribbon and select **Add**. Use this to customize your workspace with your preferences.

QUICK CONNECT CONTROL

Please refer to Quick Connect for a detailed description.

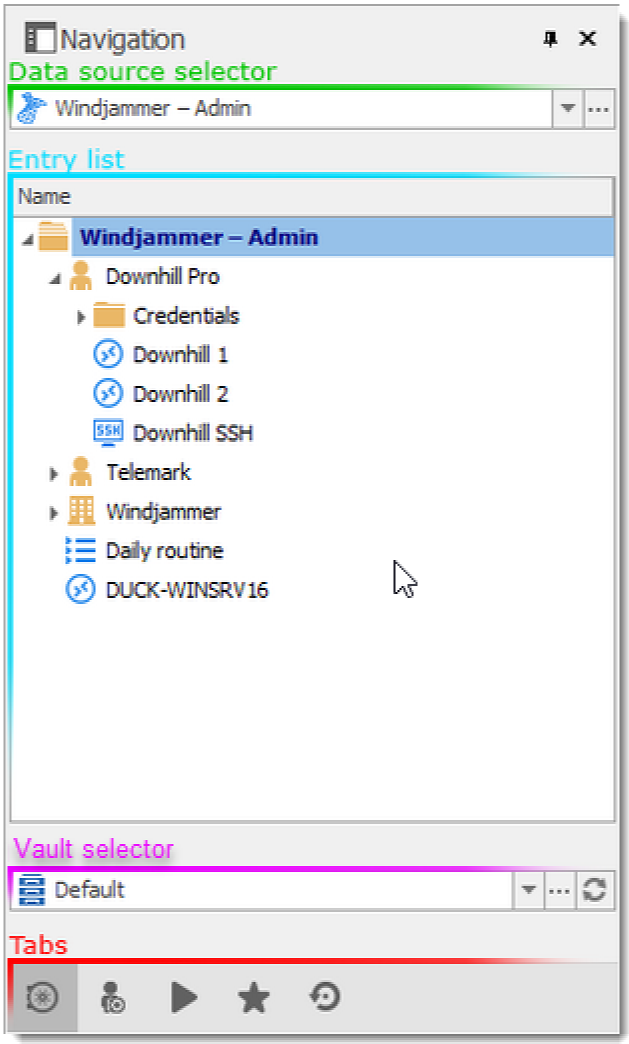
LOCK APPLICATION COMMAND

This command will minimize the application. When you attempt to restore it you will be prompted for the password. Applies only to data sources protected by a password.

4.5 Navigation Pane

DESCRIPTION

The **Navigation Pane** is one of the main components of Remote Desktop Manager user interface. It lists all the available entries in the current data source, and allows to switch to another data source or Vault.



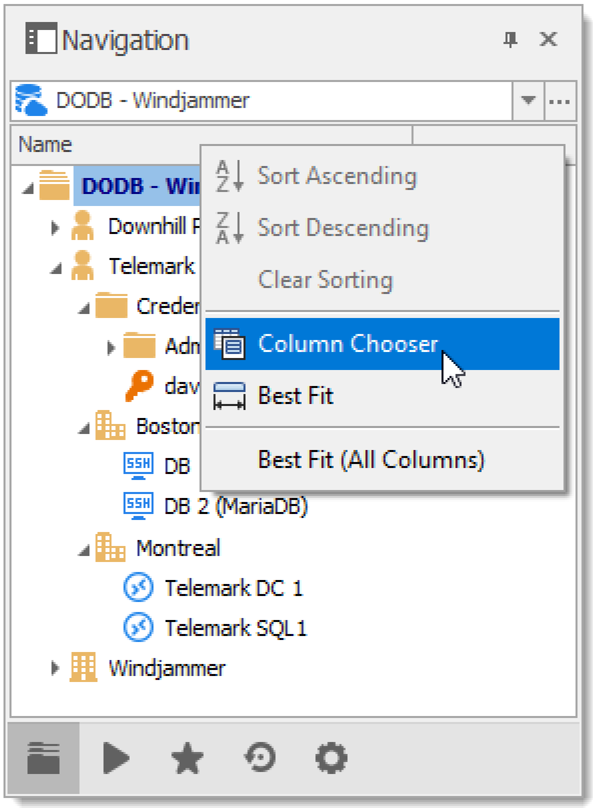
Navigation Pane

ELEMENT	DESCRIPTION
Data source selector	Allows to switch to another configured data source.

ELEMENT	DESCRIPTION
Entry list	Displays the content of the current data source, depending on the selected tab. It allows to select entries and perform action on them.
Vault selector	Allows to switch to another configured Vault in the data source.
Tabs	Allows to switch to different views of the entry list, such as the Favorite entries or the Opened sessions.

COLUMN CHOOSER

Choose the columns to display in the tree view. Right-clicking on the column name in the Navigation Pane and select **Column Chooser**.



Navigation Pane – Column Chooser

For more information on each tab, please consult the following topics:

- Vault
- Private Vault

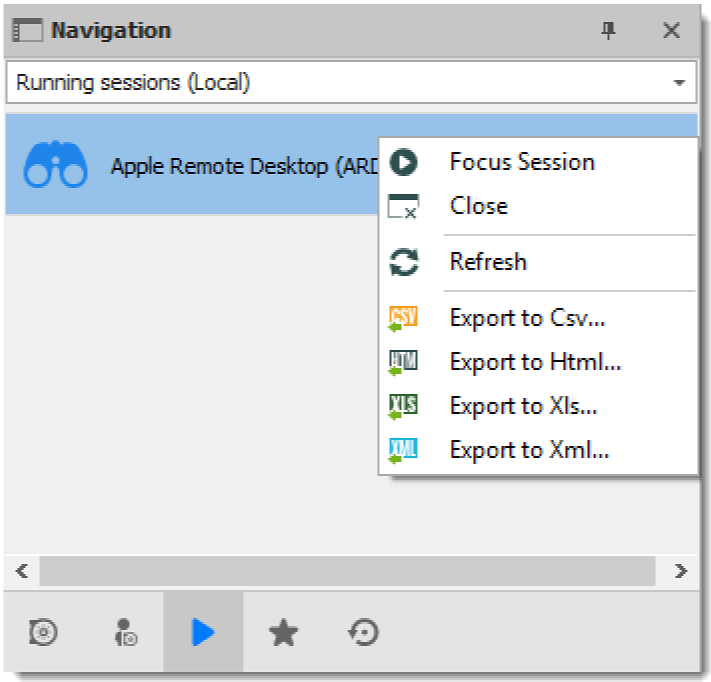
- Opened Sessions
- Favorite Entries
- Most Recently Used Entries

4.5.1 Opened Sessions

DESCRIPTION

The **Opened Sessions** tab shows currently running sessions by type, and for the local machine only. You can give the focus to an opened session by double-clicking it from the list. All of the embedded sessions are listed, and the external sessions will appear if Remote Desktop Manager is able to discover the specific type of session.

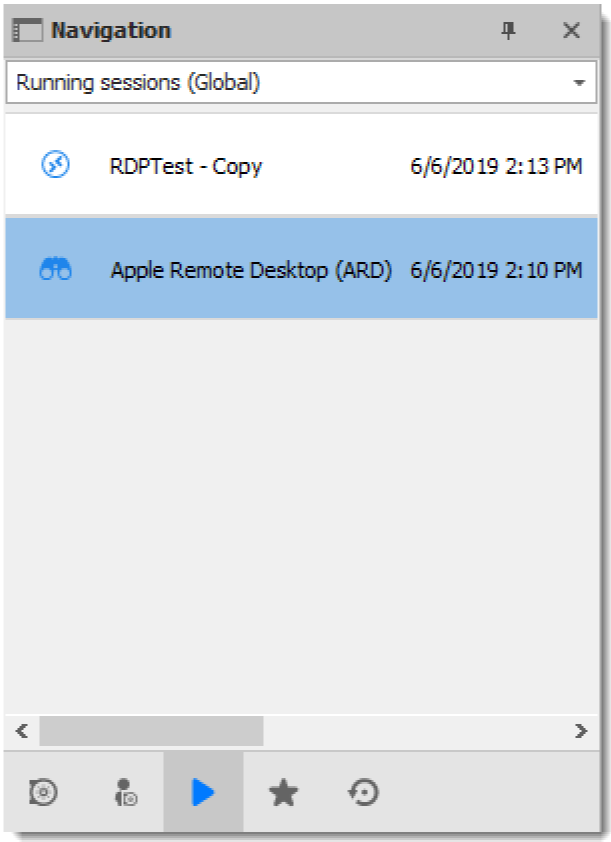
LOCAL SESSIONS



Local Opened Sessions

GLOBAL SESSIONS

With the SQL Server and Devolutions Online Database data sources, you can monitor currently running sessions, provided that they have been opened within Remote Desktop Manager.



	RDPTest - Copy	6/6/2019 2:13 PM
	Apple Remote Desktop (ARD)	6/6/2019 2:10 PM

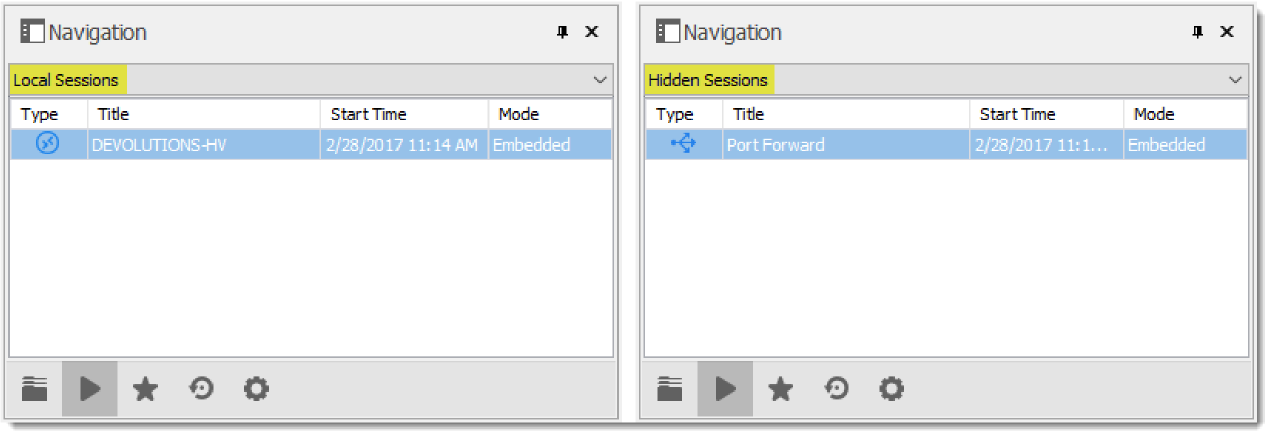
Global Opened Sessions

For many reasons beyond our control, it's possible for a session to be terminated without Remote Desktop Manager knowing that this has taken place. This can happen, for example, if Remote Desktop Manager isn't running when another application ends. As a result, any terminated session will remain listed in the log. You may manually mark it as closed via the contextual menu by selecting **Flag as Closed**.

To review a detailed log, double click on a session entry.

HIDDEN SESSIONS

Some sessions, like **SSH Port Forward**, can be hidden from the dashboard when the connection is established. When these sessions are hidden, they are not displayed in the **Local Sessions**. Select **Hidden Sessions** from the combo box above the entry list to display hidden sessions only.



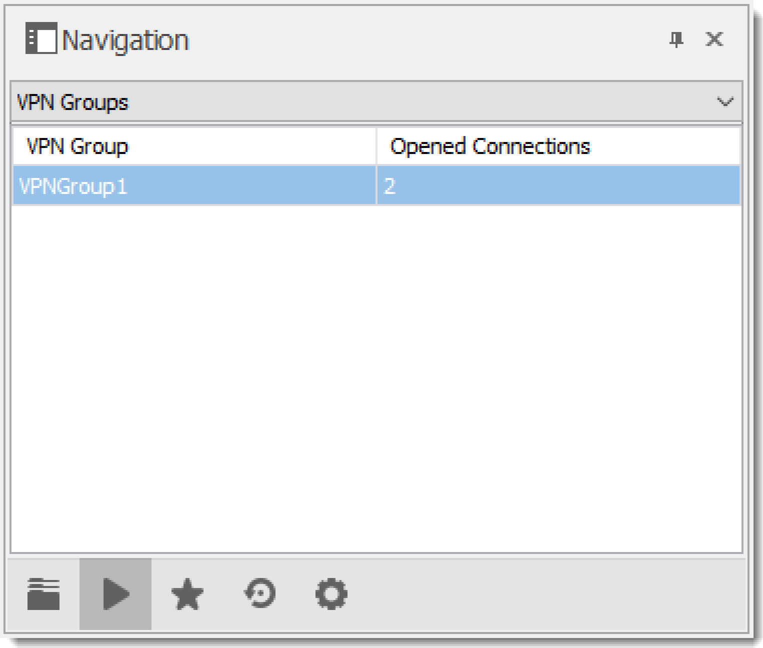
Type	Title	Start Time	Mode
	DEVOLUTIONS-HV	2/28/2017 11:14 AM	Embedded

Type	Title	Start Time	Mode
	Port Forward	2/28/2017 11:1...	Embedded

Local Sessions Versus Hidden Sessions

VPN GROUPS

Sessions can be configured to use a VPN Group. When multiple session are using the same VPN group, it will appear in this section with the count of opened connections using this VPN group.



VPN Group	Opened Connections
VPNGroup1	2

VPN Groups

NOTES

- Remote Desktop Manager tries to detect opened sessions even if they weren't launched from the application. It uses the name of the process to accomplish this task.

- VPN sessions do not appear in the list.

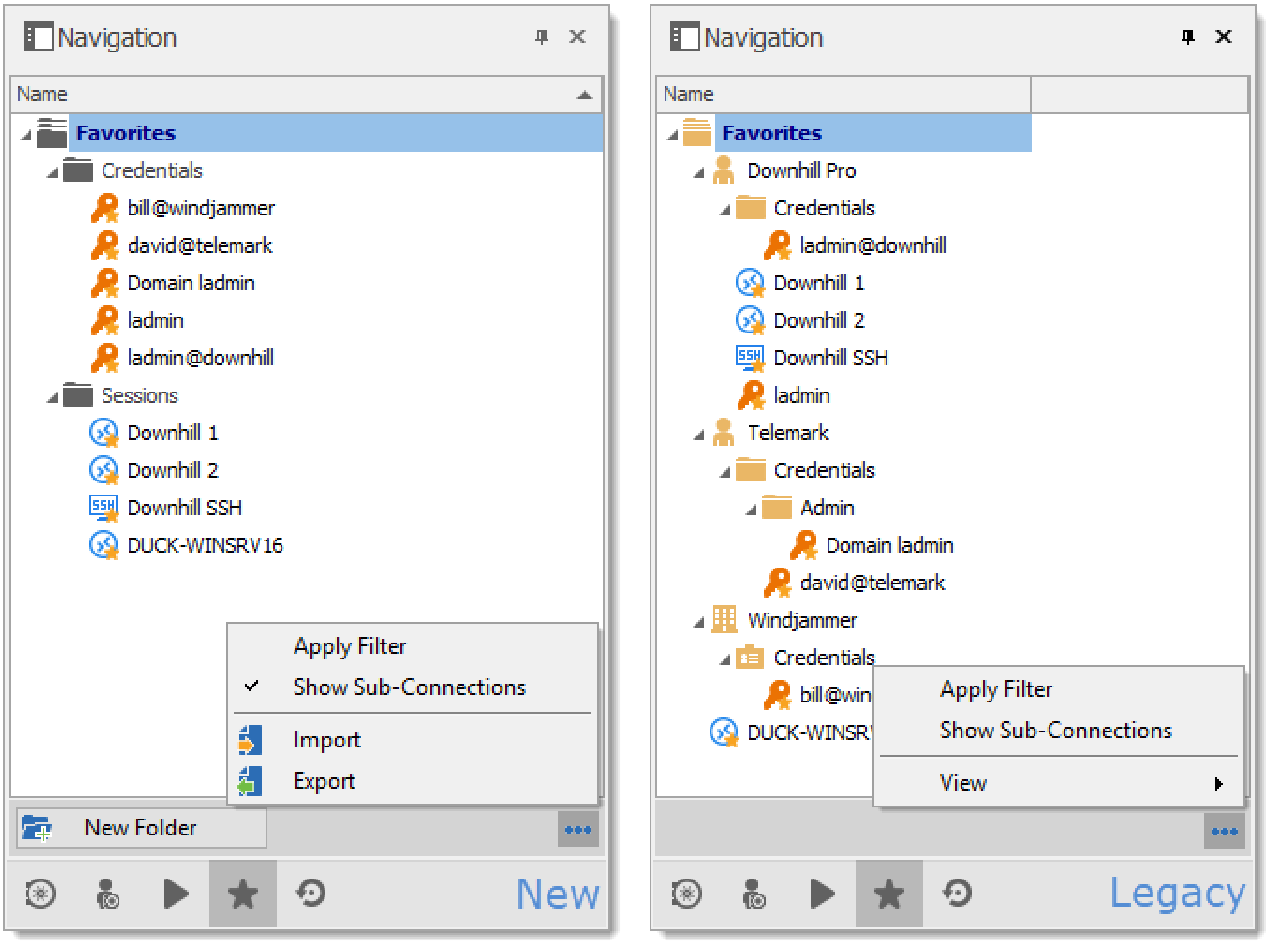
4.5.2 Favorite Entries

DESCRIPTION

The **Favorites** tab contains entries flagged as favorite by the current user. Favorites are not shared and they roam with the user profile.

This is useful when the number of managed entries becomes too great or when a strict directory structure must be maintained.

> The favorites feature has been completely reorganized in beta version 12.9.0.0. To revert to the legacy interface, navigate to ***File – Options – User Interface – Favorites***, then enable the **Use legacy favorite UI** option.

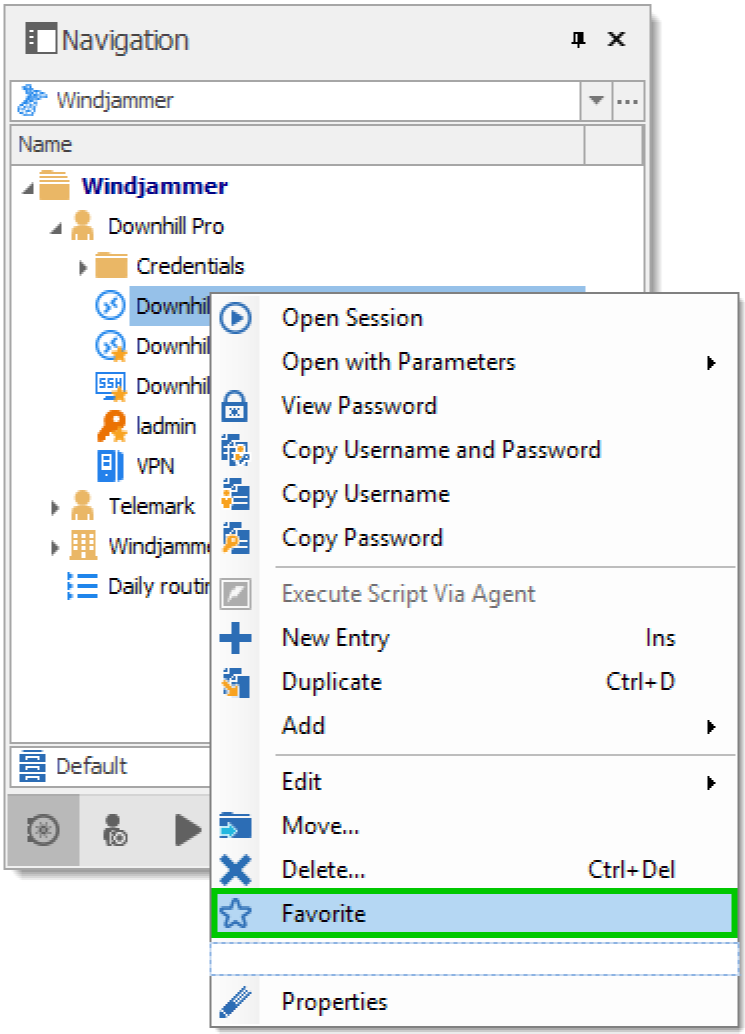


New and Legacy favorite UI

When using the legacy favorite interface, the favorites view can be personalized the same way as the Vault. Click on ••• to select a preferred **View**.

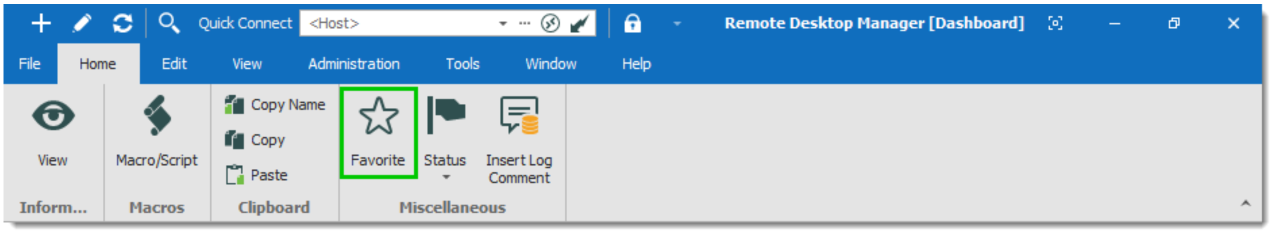
FLAG AN ENTRY AS FAVORITE

Right-click an entry in the Navigation Pane, then select **Favorite**.



Flag an entry as favorite

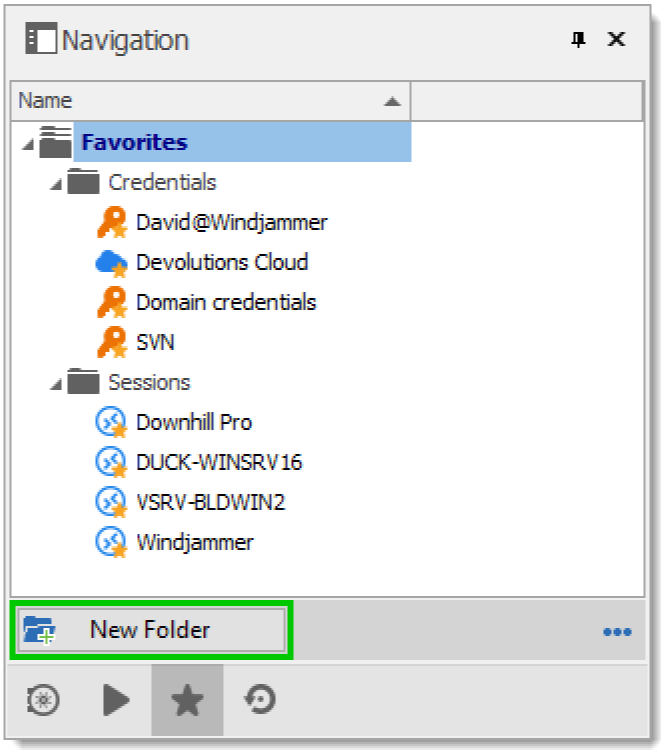
The same command is located in the ribbon ***Home*** tab in the ***Miscellaneous*** section.



Home – Miscellaneous – Favorite

ORGANIZE THE FAVORITES

Favorites does not necessarily replicate the folder structure of the Vault. Add folders in the favorite view to organize your favorite entries, or enable the legacy favorite interface.



Add folders to organize favorites

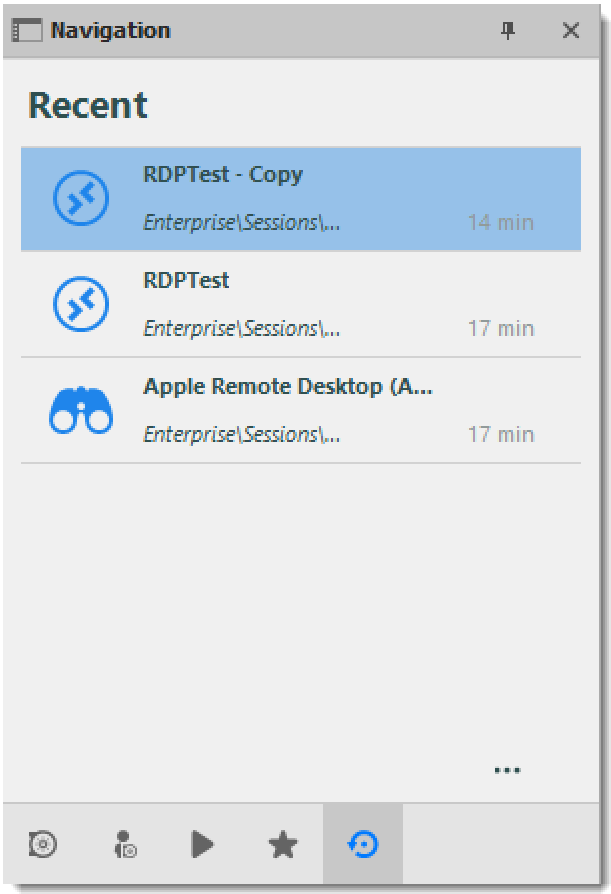
ICON OVERLAY

If desired, an icon overlay ★ can be displayed in the Vault over favorite entries. To display the icon overlay, navigate to ***File – Options – User Interface – Favorites***, then enable the **Show favorite icon in connection list** option.

4.5.3 Most Recently Used Entries

DESCRIPTION

This tab show the most recently used sessions on the local computer.



Most Recently Used Entries

The most recently used entries view can be personalized the same way as the tree view. Click on the ••• button to select your preferred view.

To delete the most recently used entries history, select **Clear Most Recently Used Entries...**

By default, 10 items will be kept in the most recently used entries history. This setting can be changed in ***File - Options - General - Recent***.

4.6 Content Area

DESCRIPTION

The content area contains the various dashboards to manage RDM, as well as embedded sessions. There is a single dashboard active at a time, depending on the currently selected node in the Navigation Pane.

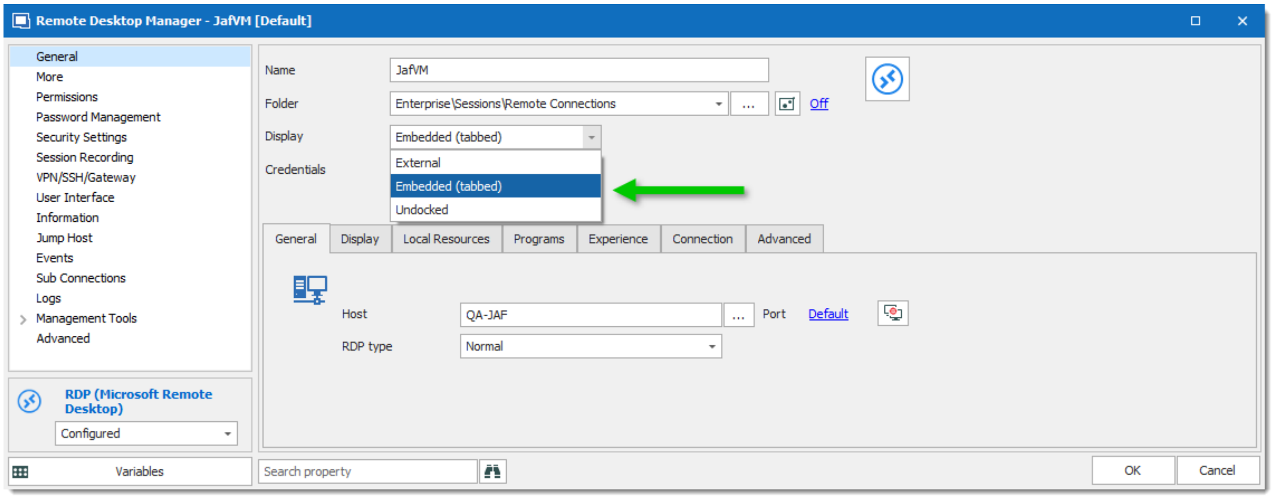
The options change depending on the entry:

- Sessions.
- Information Entries.
- Folders.
- Credentials.
- Macros/Scripts/Tools.

4.6.1 Embedded Sessions

DESCRIPTION

The **Embedded (tabbed)** display mode allows you to open multiple sessions as tabs withing Remote Desktop Manager, similar to the tabs in your standard web browser. Embedded sessions are one of the 3 available display modes, the other 2 being **External** and **Undocked**.

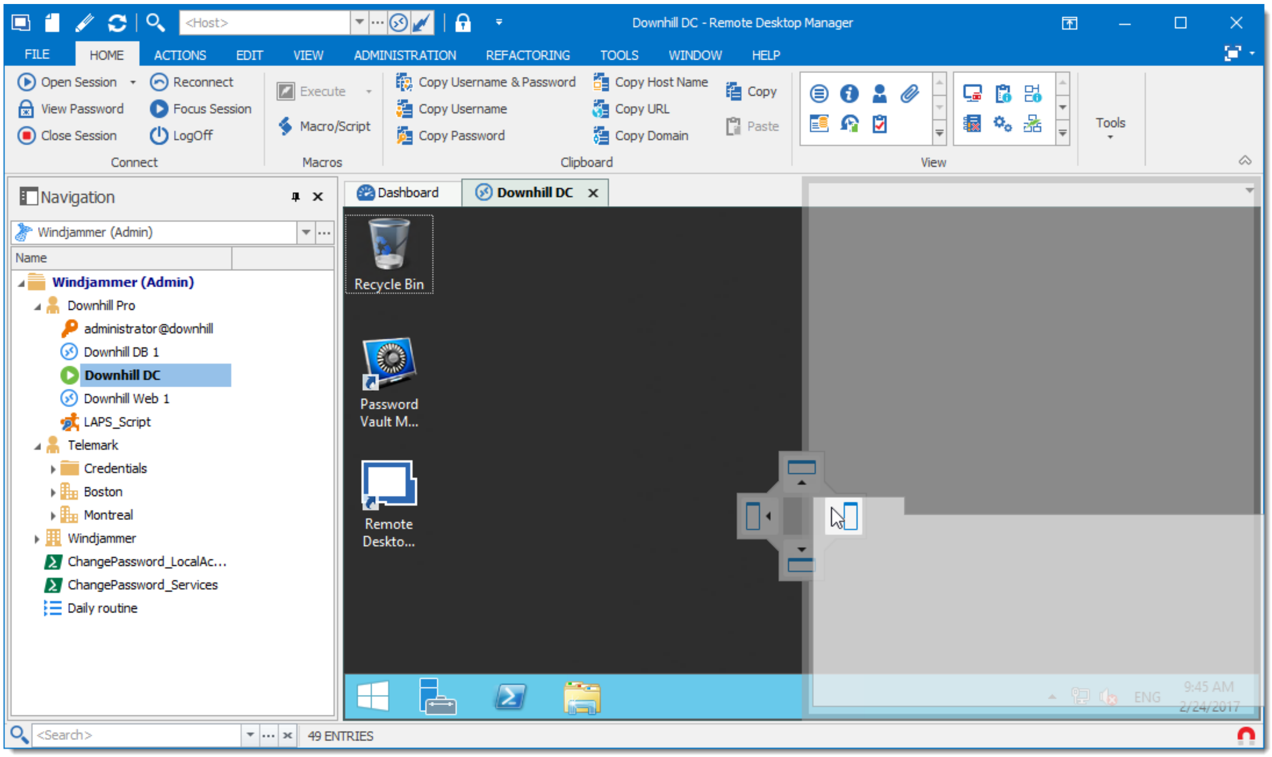


Name: JafVM
Folder: Enterprise\Sessions\Remote Connections
Display: Embedded (tabbed)
Credentials
Host: QA-JAF
Port: Default
RDP type: Normal

Display Mode Settings

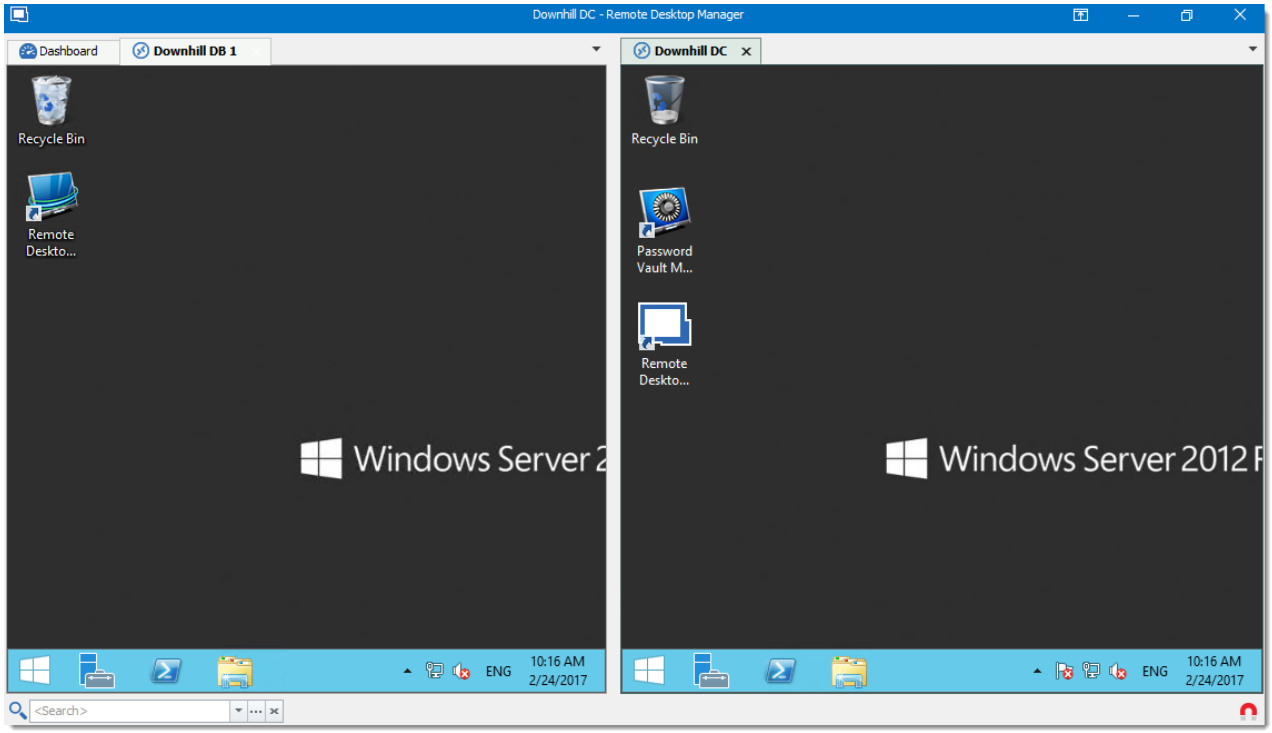
SPLIT WINDOWS

Within a Remote Desktop Manager embedded session is the option to display multiple tabbed windows simultaneously. As illustrated below, select and hold down on a tab and drag it towards the center of the screen to access the four-sided directional control. Aim the directional control to anchor the tab to the top, bottom, left or right of the adjacent tab.



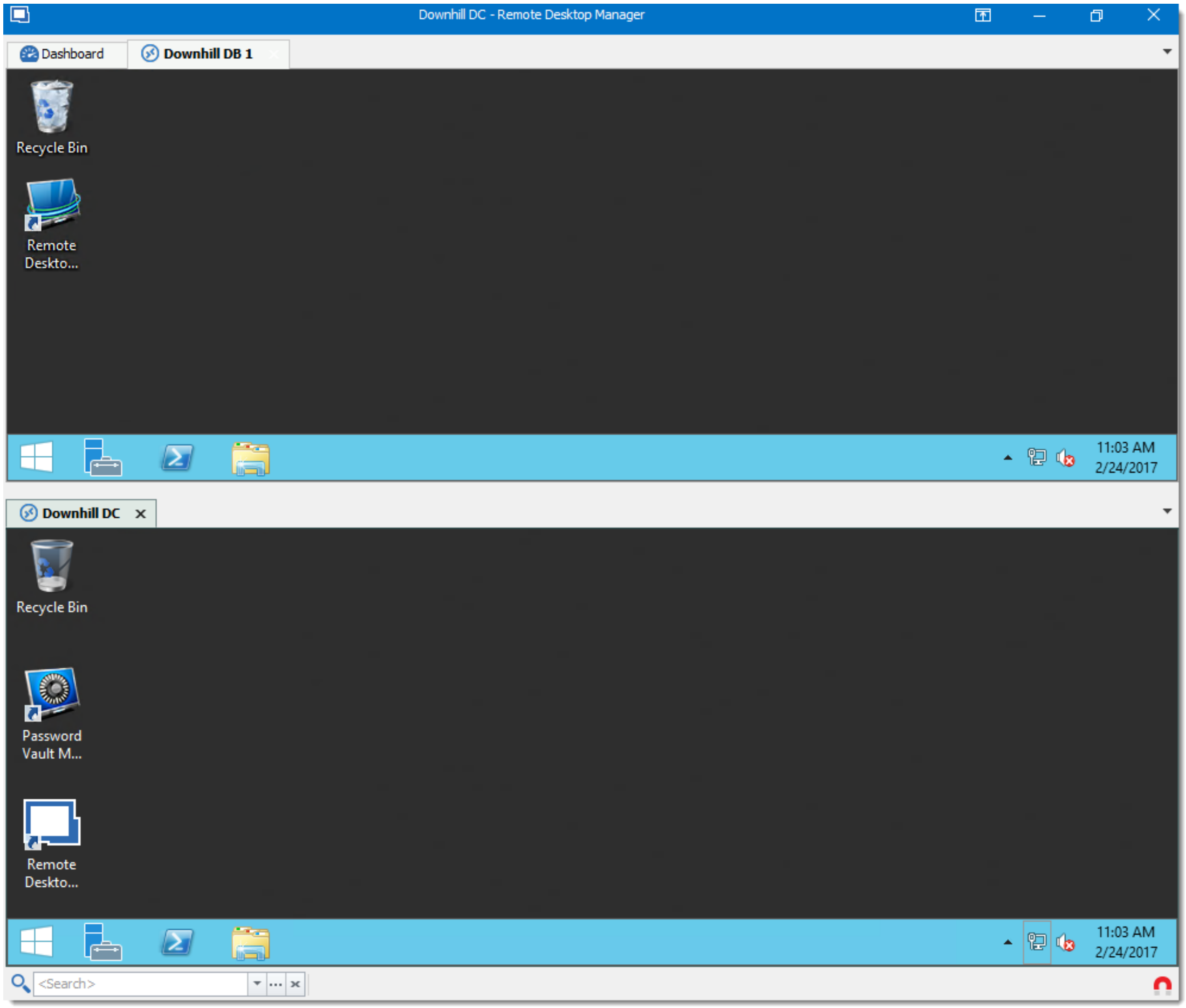
Split Window - Drag And Drop

Below is an example of a side-by-side split window.



Split Window - Side-By-Side

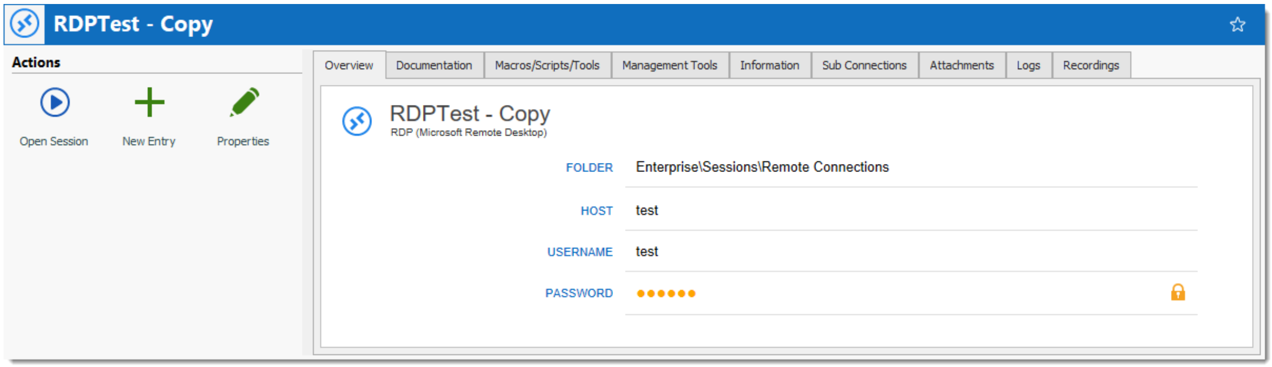
Below is an example of a top-down split window.



4.6.2 Dashboard

DESCRIPTION

The **Dashboard** displays commands and information related to the selected entry. The dashboard contents depend on the type of the selected entry.



RDPTest - Copy
RDP (Microsoft Remote Desktop)

FOLDER Enterprise\Sessions\Remote Connections
HOST test
USERNAME test
PASSWORD ●●●●●●

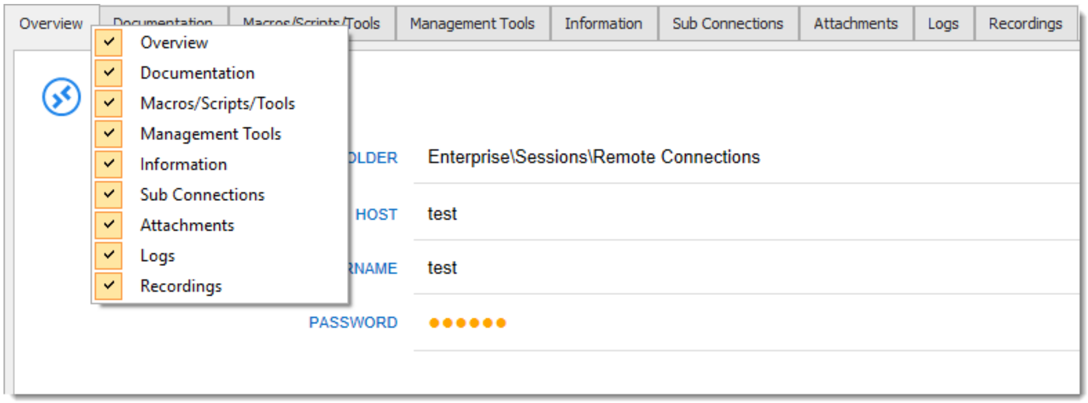
Dashboard for credential entry

The different tabs available in the dashboard:

- **Actions** - Add special Open actions to dashboard, similar to ***Open Session*** *or* ***Properties*** in the contextual menu. Configure in **File** – **Options** – **User Interface**
- **Overview**
- **Documentation**
- **Macros/Scripts/Tools**
- **Management Tools**: Configure the Hyper-V, VMware, XenServer Dashboard before using the dashboard.
- **Information**
- **Sub Connections**
- **Attachments**
- **Logs**
- **Recordings**

The tabs can be hidden if they are not necessary for a user.

Simply right-click any tab, then select an item to toggle the visibility of its relative tab.



OLDER Enterprise\Sessions\Remote Connections
HOST test
RNAME test
PASSWORD ●●●●●●

4.6.3 Wake-on-LAN

DESCRIPTION

Wake-on-LAN is an Ethernet computer networking standard, which allows a computer to be turned on or woken up by a network message. This is an OS-agnostic feature that works by broadcasting a specially crafted “magic” packet at the data link layer. The target computer sits in a low-power state with only its network card switched on, and when it receives the magic packet, the network card “wakes up” the computer, powering it on and booting it up.

Wake-on-LAN is supported in the Enterprise edition of Remote Desktop Manager. Plus, the destination motherboard must support it, and it must be enabled. The computer must also be in the local area network (LAN) and not connected in a VPN.

An important thing to note is that Wake-on-LAN operates below the IP level. This means that the sending machine needs to be on the LAN, so we cannot send them over remote IP-based connections, such as over SSH or VPN. WOL broadcasts packets to the target computer over UDP. You can configure which port it uses, the default is 9. If you want to wake up a machine on a different subnet, your router must forward UDP port 9, or whatever you change the port assignment to. Most users do not have to configure their router or worry about this.

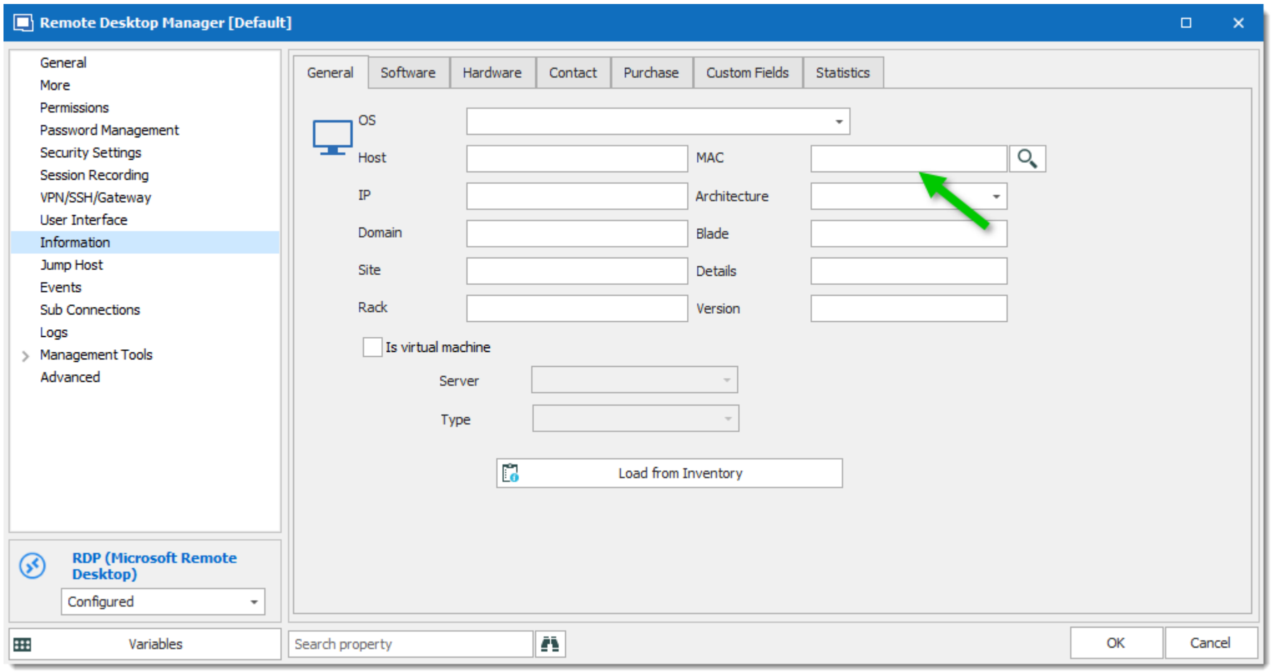
ENABLING WAKE-ON-LAN

The first step is to check that your computer supports Wake-on-LAN. There’s a few things to check:

- Your network card must support Wake-on-LAN
- Your power supply must support Wake-on-LAN
- Wake-on-LAN must be enabled in BIOS
- Your router must be configured to forward broadcast packets
- Your OS must be configured to enable Wake-on-LAN

CONFIGURE REMOTE DESKTOP MANAGER

You must add a valid MAC address (Media Access Control address) in the session's configuration. The input field can be found in the **Information** tab and in the **Computer** child tab. The field name is MAC.



Session configuration - Wake-on-LAN

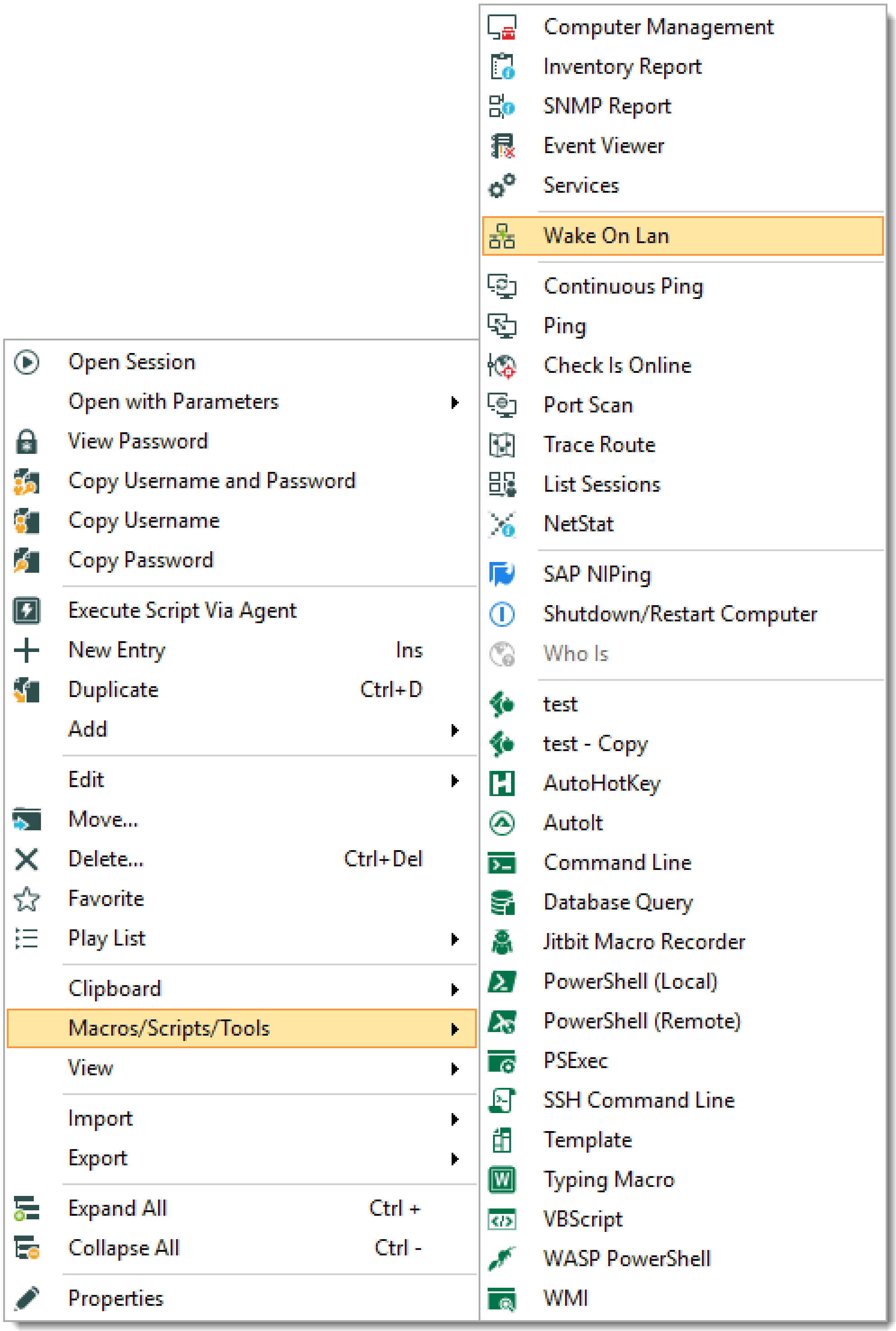
You can use the Discover button to automatically determine the MAC address. If this is unsuccessful, you will need to enter it manually.

ABOUT THE MAC ADDRESS DISCOVERY

The discovery process will initially attempt using the ARP protocol. This is fast and does not require authentication, but there are requirements on the network aspect that may not be met. If ARP was not successful, another attempt is made using WMI. This is slower and requires authentication. RDM will use the credentials as configured in entry properties, or the credentials entered in the session tools tab (custom credentials or Credential repository).

USE WAKE-ON-LAN

If the settings are correctly configured, you can invoke the Wake-on-LAN from the session's context menu, which can be found in the ***Macros/Scripts/Tools - Wake-on-LAN*** menu.



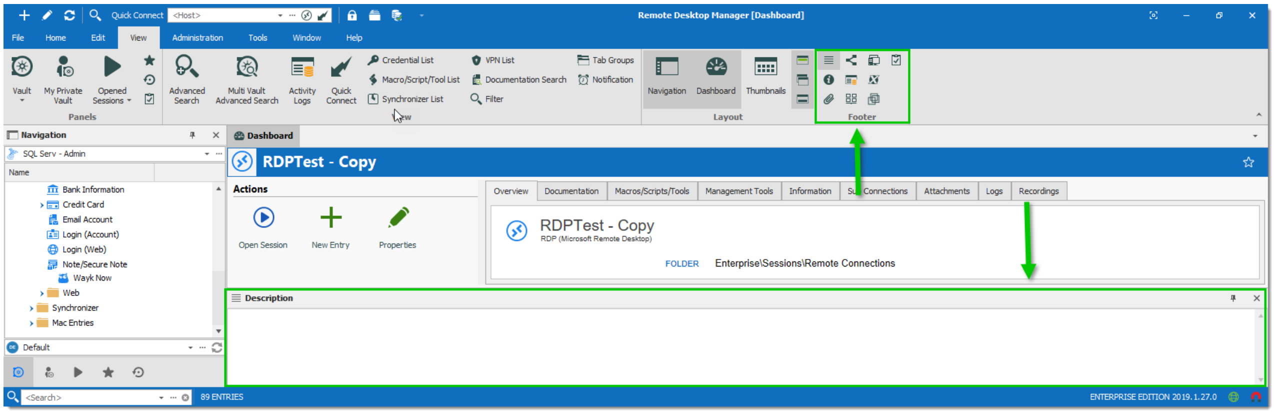
Session tools - Wake-on-LAN

4.7 Panes (Footer)

DESCRIPTION

Although the panes are by default in the footer, most tabbed windows can be moved around and docked to your liking. That applies to the Default (Ribbon) or Default (Menu) styles.

Use the ***View – Footer*** commands from the ribbon to control the visibility of individual panes.

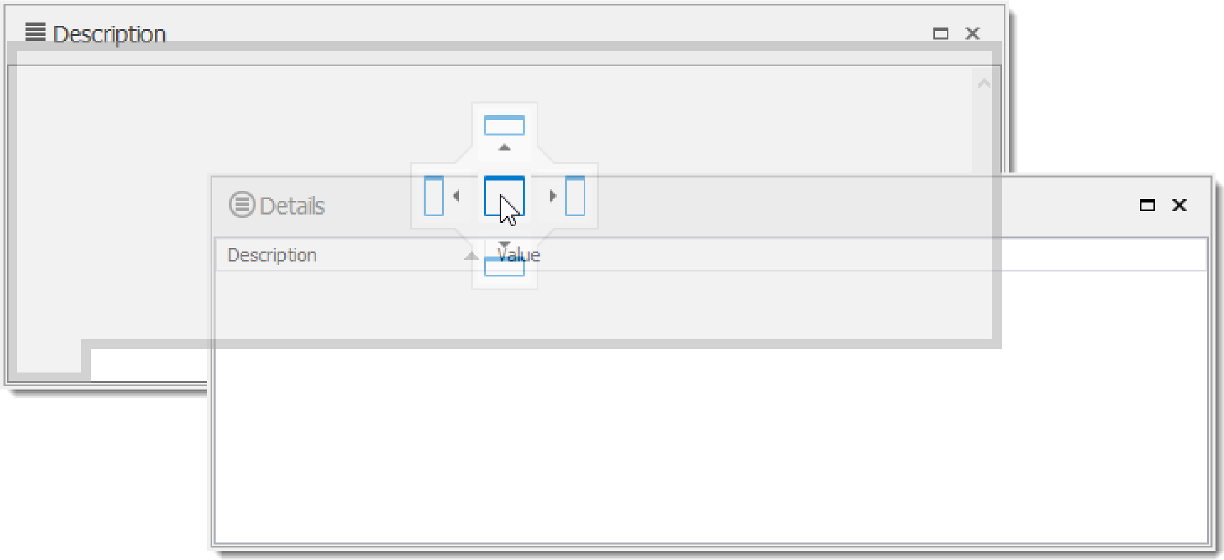


Footer Area

DOCKED FOOTER

Upon first use, the footer panes are undocked by default. You can dock them to a single panel with a simple drag & drop. Just drag a pane into another one, then drop the it in the center of the directional control.

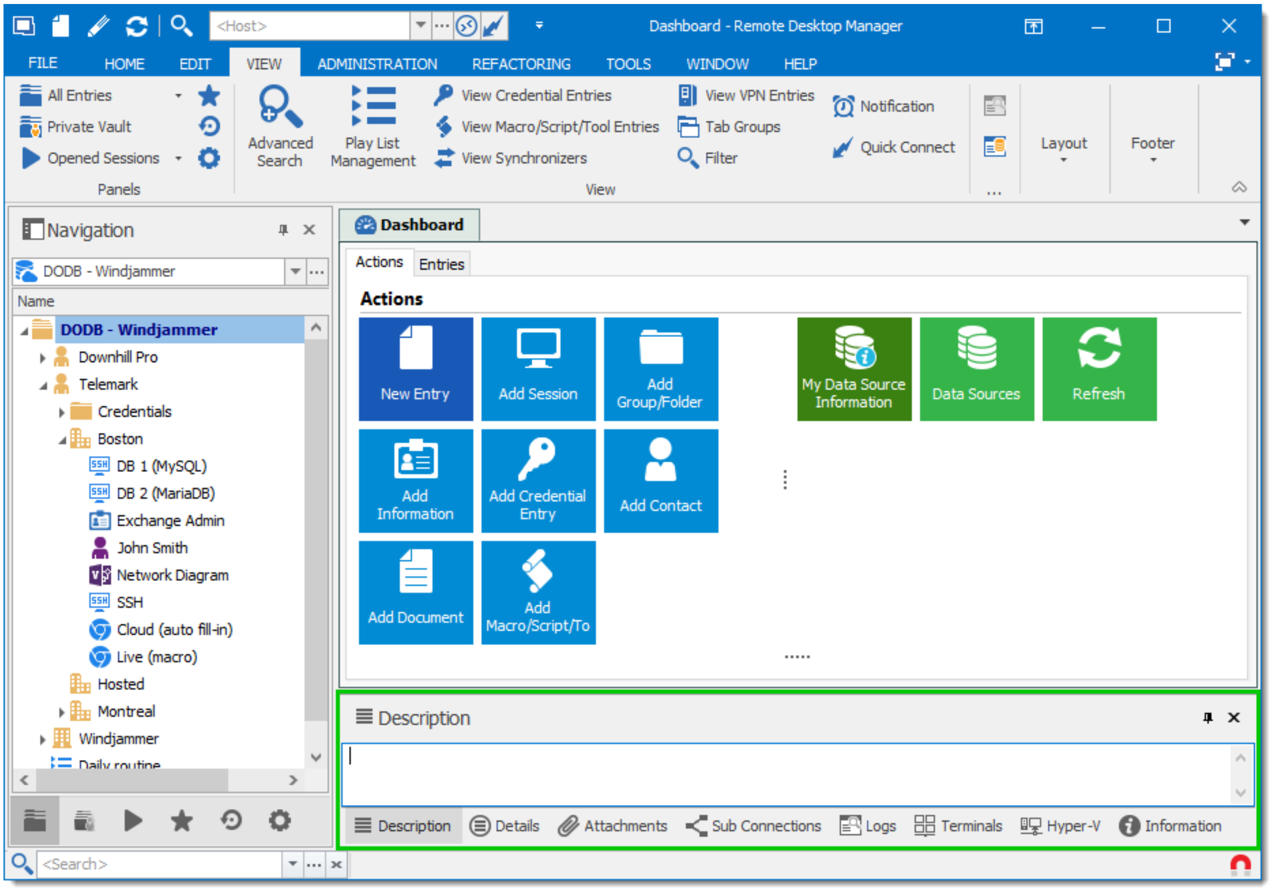
Here, we drop the ***Details*** pane to make it tabbed with the ***Description*** pane.



Dock a footer pane into another

You can use the same directional control to dock the footer panes into the main window.

Here is a personalized setup of the footer panes.



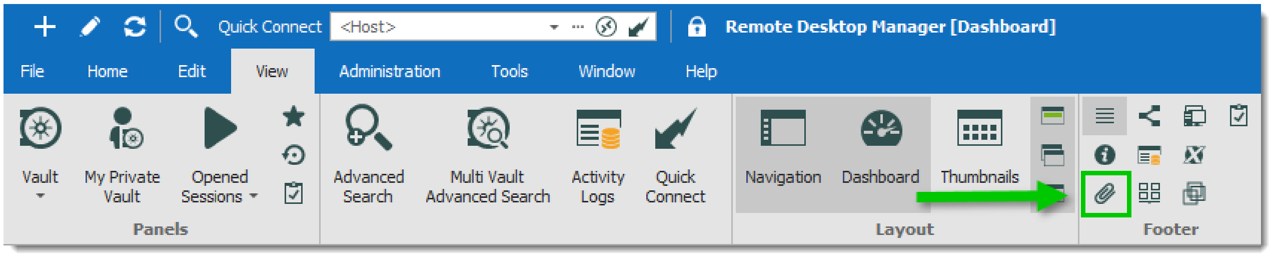
Footer panes docked in the main window

4.7.1 Attachments

DESCRIPTION

Files are attached to an entry and are stored directly in the database.

To enable the attachment pane, navigate to ***View – Footer*** in the ribbon, then select ***Attachments***.

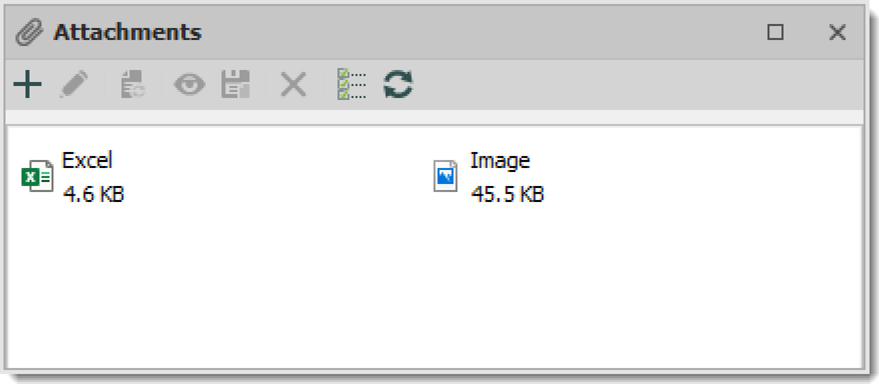


View – Footer – Attachments

This feature is only available when using an Advanced Data Source.

The files in attachment are not available in offline mode.

For architectural reasons, the documents stored in our Advanced Data Sources are **NOT** protected from deletion. Once they are deleted, **they cannot be restored**. Please keep a safe copy of all documents in another storage device. Support for this feature will be added in a coming update to our products.



Attachment list

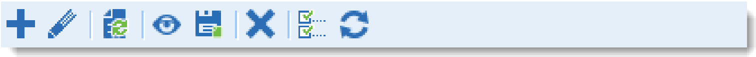
The attachment type and size are limited only by your bandwidth and the data source. You can also view a saved attachment from:

- the session context menu;
- the session properties; or
- directly on the dashboard.

The refresh button allows you to update directly the selected document. Use it to save your local modifications after an edit.

ACTIONS

Use the toolbar above the attachment list to manage the selected attachment.



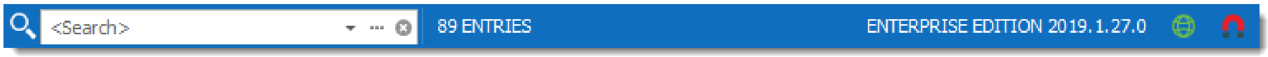
Attachment toolbar

OPTION	DESCRIPTION
Add attachment	Select a local file to add.
Edit attachment	Edit the selected attachment.
Update document	Update the selected attachment.
View attachment	Open the selected attachment.
Save attachment as...	Save the attachment on a local drive.
Delete attachment	Delete the selected attachment.
Details	Display details about the selected attachment, above the attachment list.
Refresh	Refresh the attachment list.

4.8 Status Bar

The status bar rests at the bottom of the application. It is composed of multiple parts

- Search / Filter.
- Remote Desktop Manager version label.
- The Online / Offline toggle.
- Grab input toggle.



Status bar

SEARCH / FILTER

Please consult the Search/Filter for detailed explanations.

ONLINE / OFFLINE TOGGLE

This feature is indicated by the green globe between the version label and the Grab input toggle. Clicking it will change your connection between offline and online (for RDM only). You can tell which connection state you are currently using by the color of the globe. Green is online and orange is offline.

GRAB INPUT TOGGLE

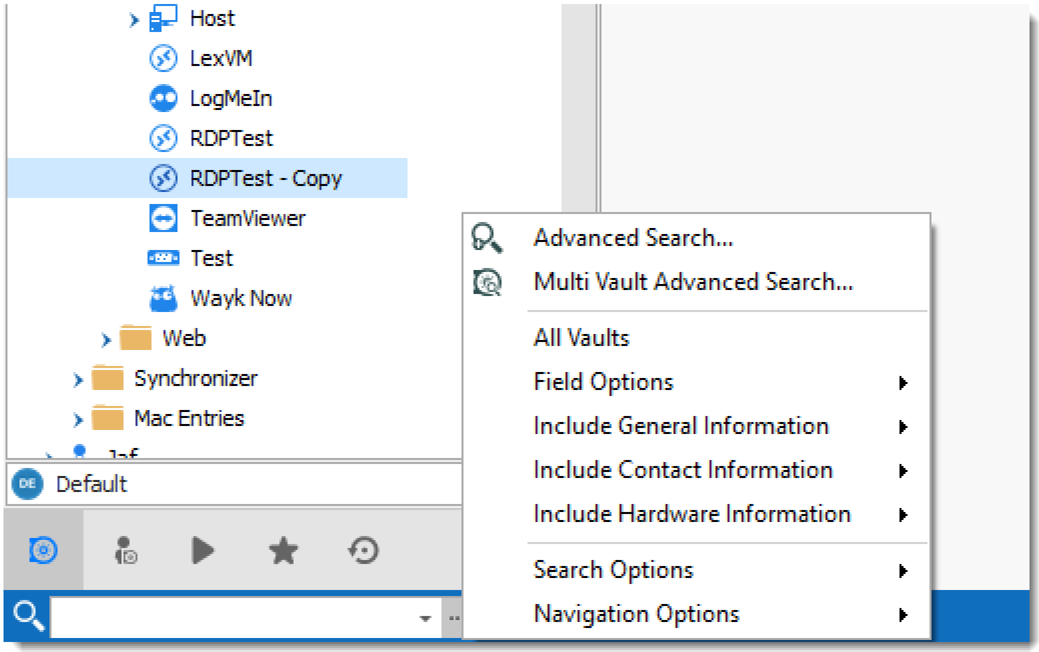
Please consult Grab Input for detailed explanations.

4.8.1 Search/Filter

It is possible to apply a filter in the Navigation Pane tree view by typing some characters in the filter box. The filter is applied using the specified settings in the application ***File – Options – User Interface – Filter***.

ELLIPSIS BUTTON

Select the ellipsis button to display the options.



Ellipsis button

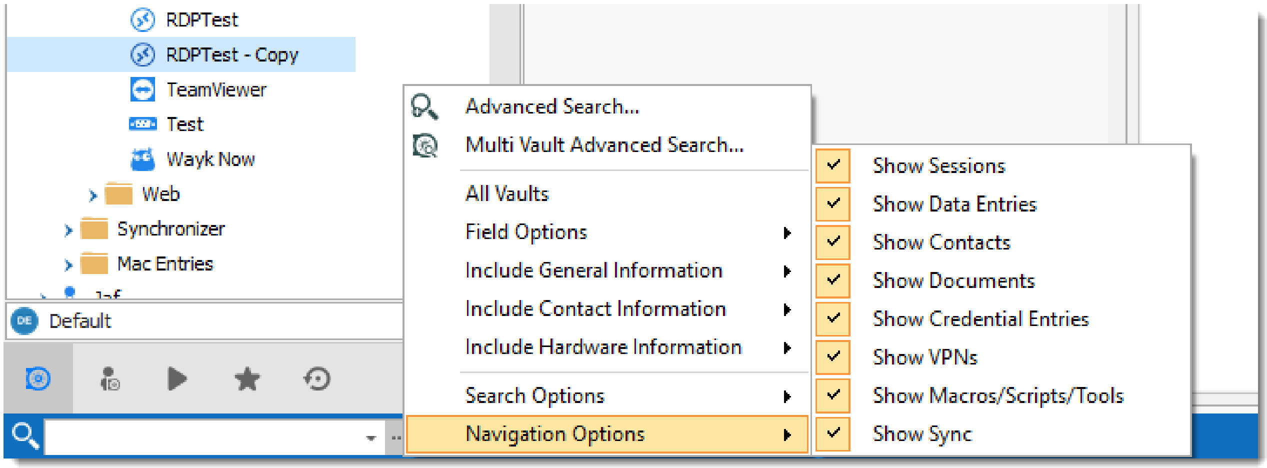
The filter expression is matched against fields as selected in the filter options such as:

- Search multiple or all Vaults at once.
- Field Options (Include Folder, Host, Username, etc.).
- General Information (Domain, IP, etc.).
- Contact Information (Name, Email, Phone number, etc.).
- Hardware Information (Serial number, Manufacturer, etc.).

It's possible to exclude results by choosing to display entries that match certain criteria:

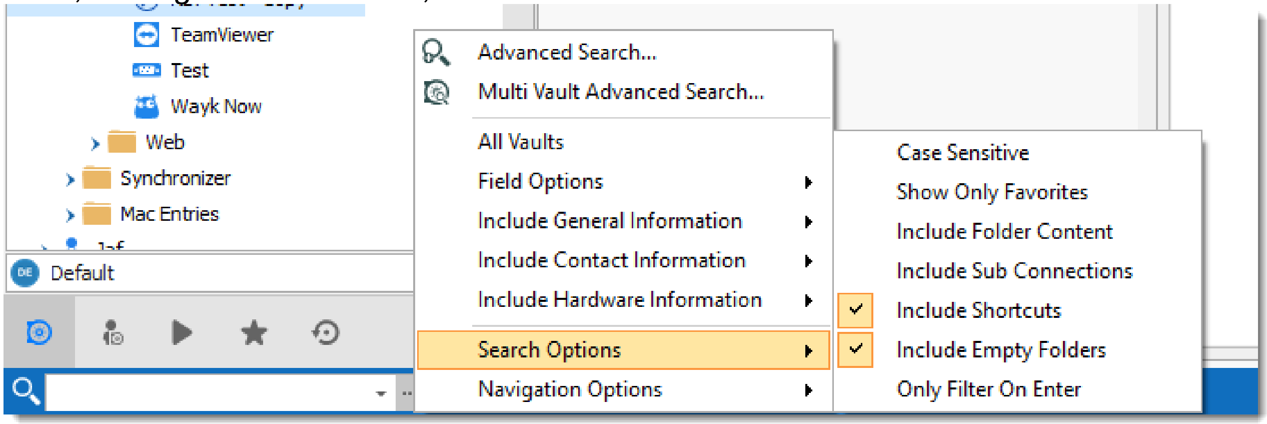
- Session types (credentials, script tools, VPN, etc.)
- If the session is marked as a Favorites

In Navigation options, you can limit the search parameters to specific entry types. Such as Sessions, Data Entries, etc.



Search Types

The Search Options offers the chance to customize your search, such as including shortcuts or favorites, making it case sensitive, and more!



Search Options

KEYBOARD SHORTCUT

Use the keyboard shortcut CTRL+F to quickly have access to the Search / Filter control. This can be disabled in ***File - Options - User Interface - Keyboard.***

You can set the focus back on the Navigation Pane by using the keyboard shortcut Ctrl+L, this also can be disabled in the options.

BOOLEAN FILTER

Here a few implementation notes for the Boolean filter:

- We use the C# nomenclature (&& for AND, || for OR)

- Evaluated left-to-right
- No parentheses matching
- Double-quotes (") are not required or removed, they are part of the text filter, do not use them unless you are looking for a double-quote.
- Leading/trailing white-spaces are trimmed

EXAMPLES (THIS WILL WORK)

- Boise && Laptop
- Boise&&Laptop
- Boise && Laptop
- Baton Rouge || Boise && Laptop
- Laptop && Baton Rouge

EXAMPLES (THIS WILL NOT WORK AS EXPECTED)

- Laptop && "Baton Rouge"

- Will work but filter for the string "Baton Rouge" and not the string Baton Rouge

- Laptop && (Baton Rouge || Boise)

- Will work but filter for Laptop and the string (Baton Rouge || Boise)

4.8.2 Grab Input

DESCRIPTION

The **grab keyboard input** is used to capture the keyboard shortcuts when a session is running. It can be disabled momentarily to ensure that the shortcut is sent to the running session.

Ctrl+F is a shortcut that often interferes. It is used to focus Remote Desktop Manager's search/filter toolbar. However, it is almost always present in applications in the remote session and when you use the shortcut, Remote Desktop Manager sets the focus in the search/filter toolbar instead. This conflict can be avoided by disabling the feature.

Grab keyboard input

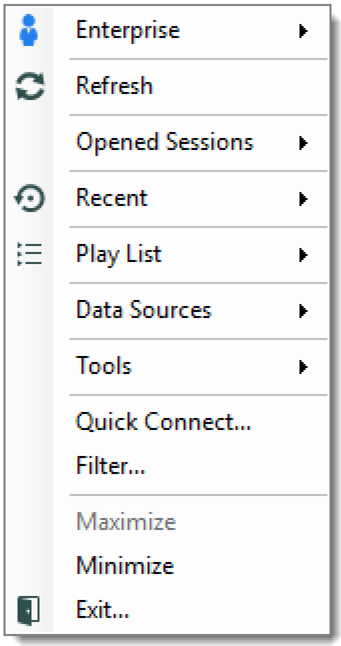
4.9 Tray Icon

DESCRIPTION

Remote Desktop Manager allows the user to control the application from the Windows system tray. You can also customize its content.

TRAY ICON CONTEXT MENU

Right-click on the Windows tray menu bar to access the context menu. You can launch sessions, change data source, use the Quick Connect feature, and more.



Tray Icon Context Menu

OPTION	DESCRIPTION
Sessions List	Displays the sessions from the current data source. Sessions are listed by default. It is possible to show only those marked as favorites.

OPTION	DESCRIPTION
Refresh	Refreshes the data source.
Opened Sessions	Lists all the currently open sessions.
Recent	Lists the Most Recently Used Entries.
Play List	Allows the user to launch a Play List from the tray icon.
Data Sources	Lists the available Data sources and allows the user to switch from one to another. This section appears only if enabled and more than one data source is configured.
Tools	Lists all the configured tools.
Quick Connect	Prompts for the Quick Connect dialog to open an add-hoc connection with a specific type, or a selected template.
Filter	Launches the Search/Filter feature.
Maximize	Restores the application to full screen.
Restore	Restores the application from minimize.
Minimize	Minimizes the application in the task bar.
Exit	Closes the application.

TRAY ICON PREFERENCES

The application options contain many settings that allows for customizing the system tray icon preferences. To change these, Navigate to ***File – Options – User Interface – Trayicon/Taskbar***.

Data Sources

Part V

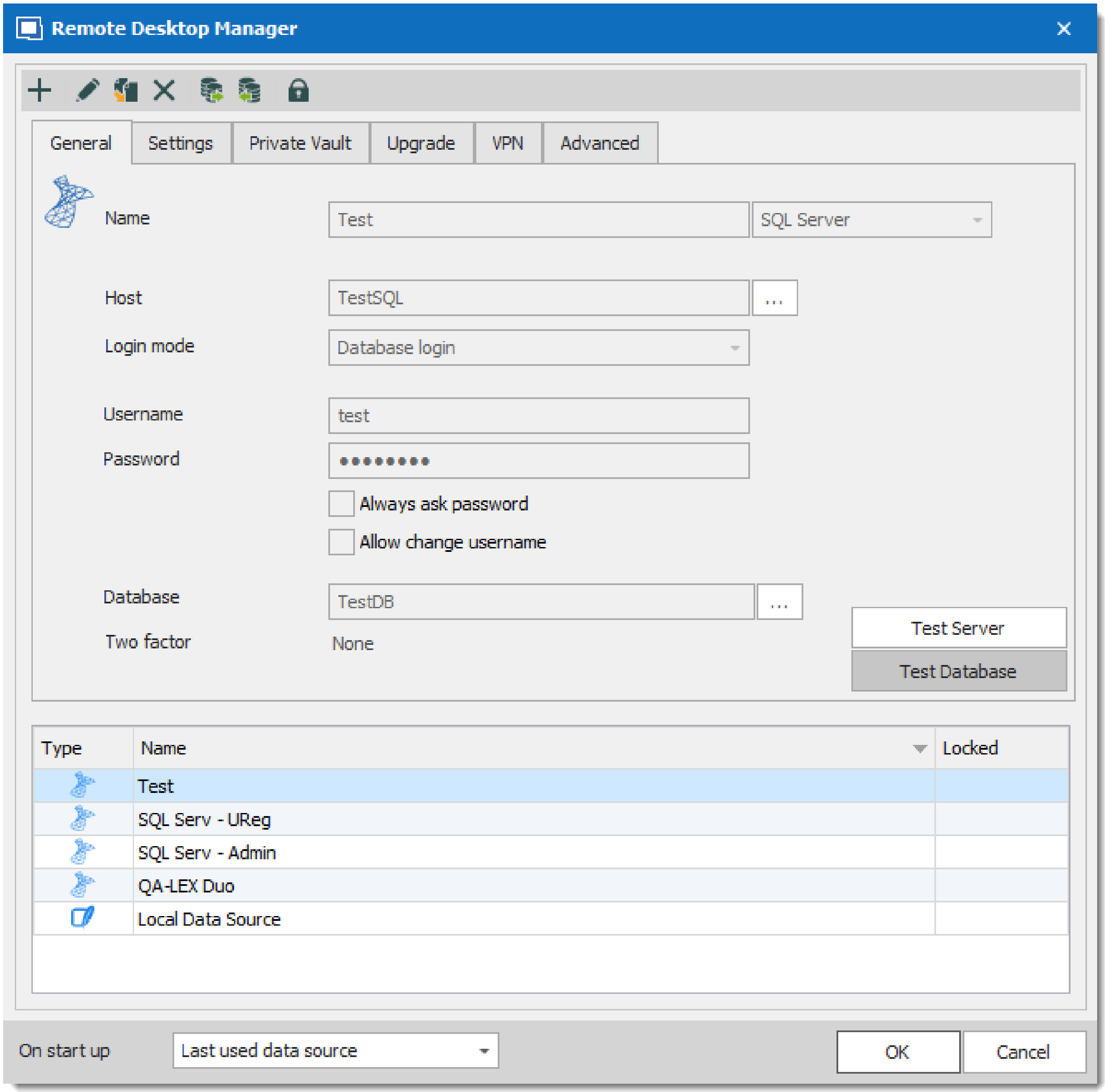
5 Data Sources

DESCRIPTION

The data sources are at the heart of Remote Desktop Manager, they are the container that holds entries.

SETTINGS

A data source can be a local file or a database (either local or shared). Multiple data sources can be managed at the same time as seen below.



Name: Test — SQL Server

Host: TestSQL

Login mode: Database login

Username: test

Password: ••••••••

□ Always ask password

□ Allow change username

Database: TestDB

Two factor: None

Type	Name	Locked
	Test	
	SQL Serv - UReg	
	SQL Serv - Admin	
	QA-LEX Duo	
	Local Data Source	

On start up: Last used data source

Data Source

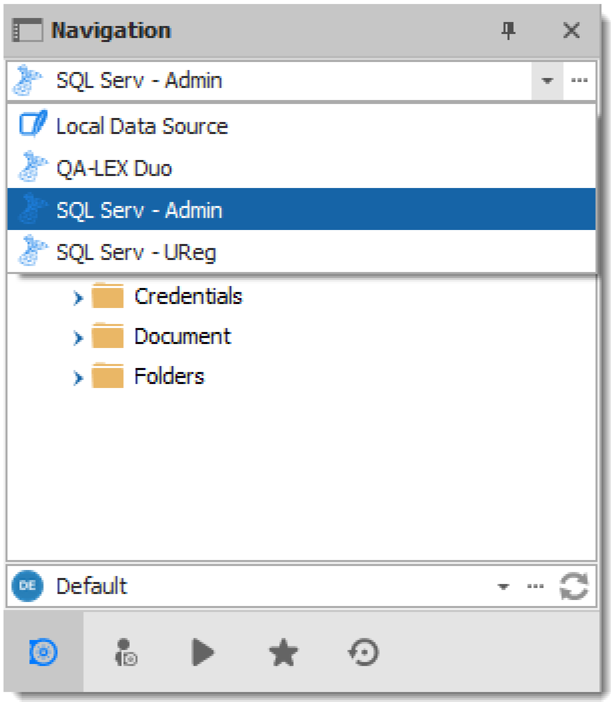
CREATE A DATA SOURCE

Please consult our Create a new data source topic for more information.

MULTIPLE DATA SOURCES

Multiple data sources can be configured, but there is only one active at a time.

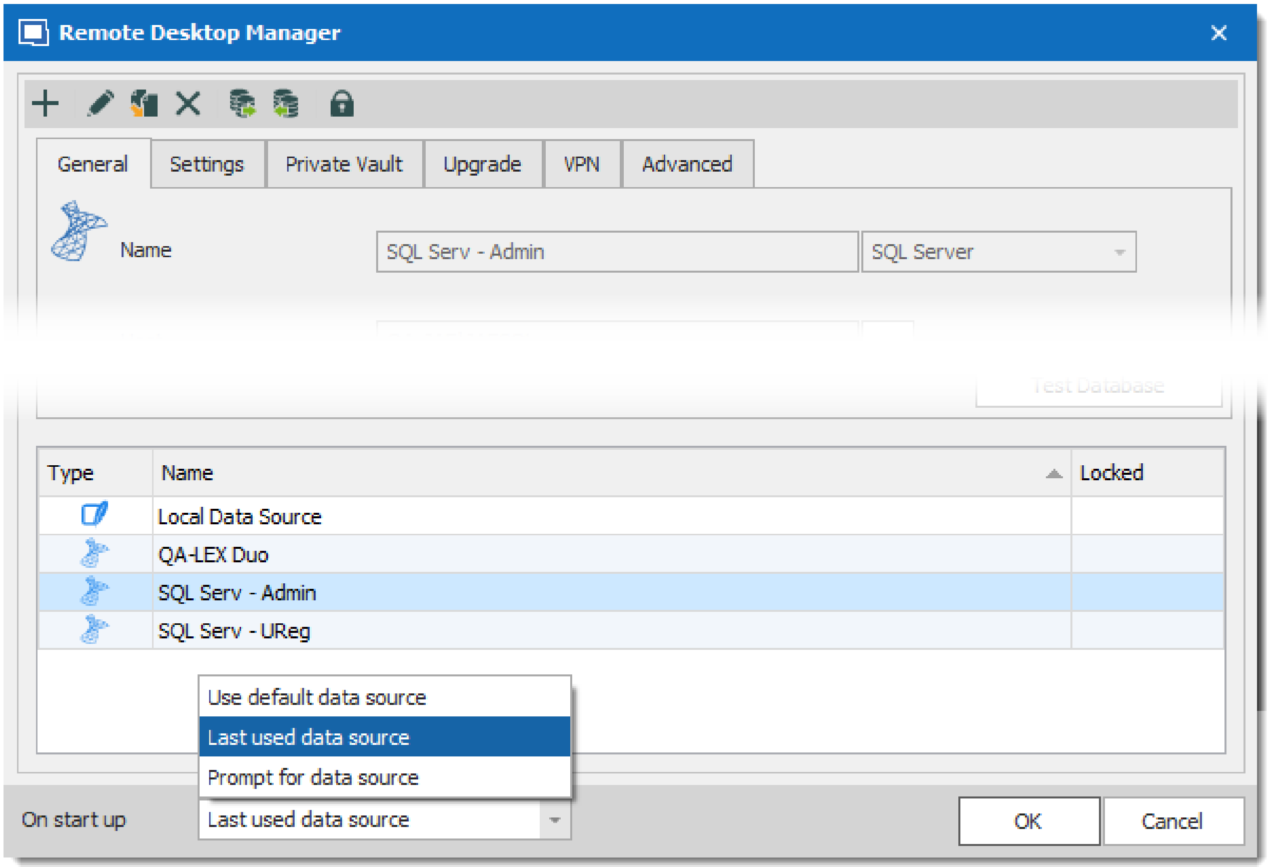
Switch from one data source to another by using the data source drop down list.



Select a Data Source

STARTUP DATA SOURCE

You may assign a data source to open automatically when Remote Desktop Manager starts.



Name: SQL Serv - Admin | SQL Server

Type	Name	Locked
	Local Data Source	
	QA-LEX Duo	
	SQL Serv - Admin	
	SQL Serv - UReg	

On start up: Last used data source

Startup Data Source

OPTION	DESCRIPTION
Use default data source	Select the data source to connect to when the application starts.
Last used data source	Connect to the last used data source.
Prompt for data source	Prompt the user to for a data source to connect to.

DATA SOURCE SETTINGS (SYSTEM SETTINGS)

Advanced Data Sources can manage a lot more settings related to the database and security. Those settings are saved directly in the database. For more information, please consult the Data Source Settings (System Settings) topic.

5.1 2-Factor Authentication

DESCRIPTION

> This feature is only available for the following data sources: Devolutions Password Server, MariaDB, Microsoft Access, Microsoft SQL Azure, Microsoft SQL Server, MySQL and SQLite.

Two-factor authentication identifies users by two different components: something that the user knows (often a password) and something that the user possesses (e.g. a validation code sent to a mobile device).

If one of the components is missing or supplied incorrectly, the user's identity is not established with sufficient certainty and then access to the data source will remain blocked.

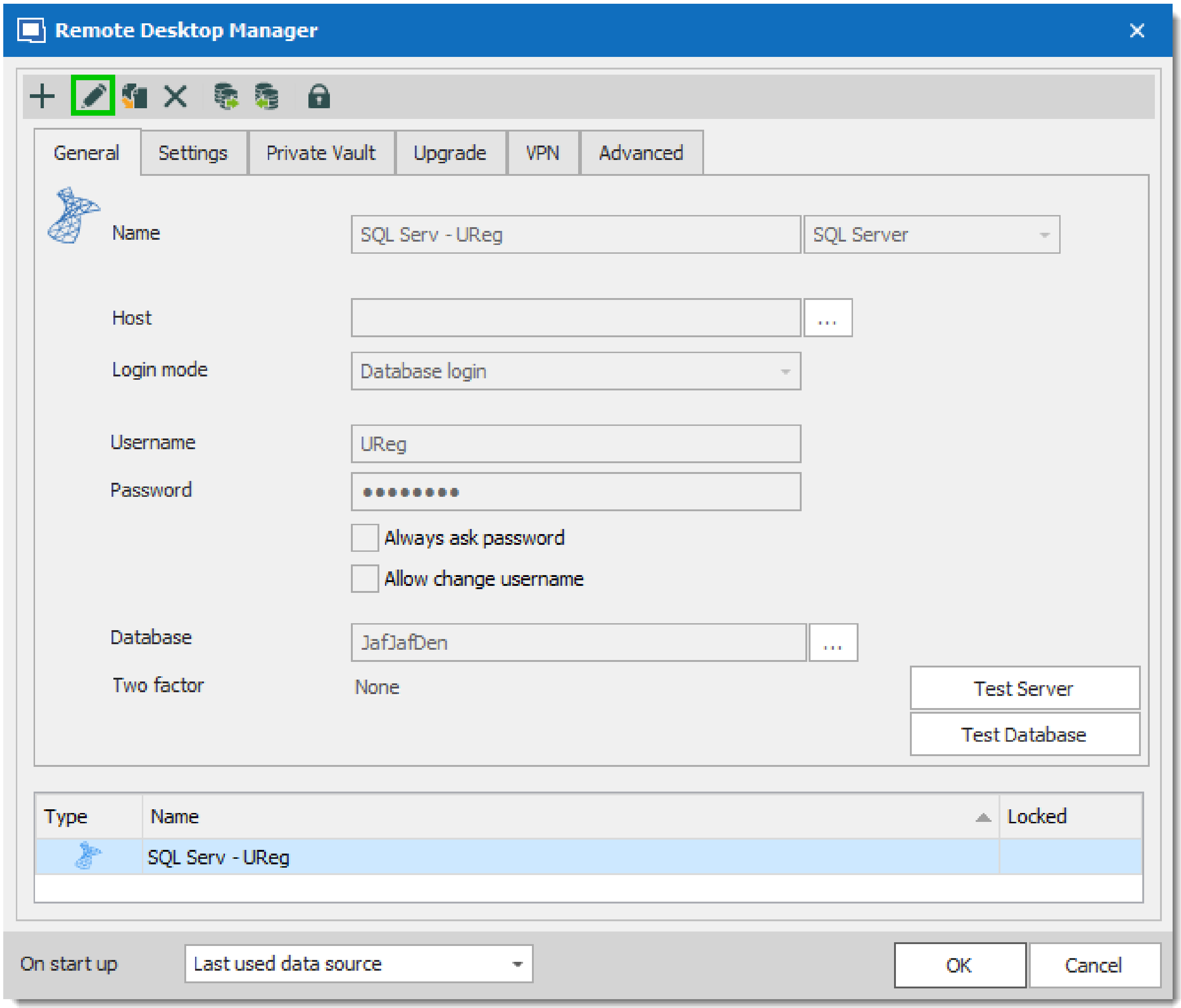
Remote Desktop Manager supports Google Authenticator, Yubikey, Duo and AuthAnvil.

HOW TO CONFIGURE TWO-FACTOR AUTHENTICATION

Example of how to configure 2FA with Google Authenticator

SETTINGS

1. Two factor authentication is set in the **Data Source Configuration**. You can set 2FA when creating a new data source or edit an existing data source. To edit your data source, click ***File – Data Sources***. Click the pencil ✎ to edit the data source.



Name: SQL Serv - UReg | SQL Server

Host:

Login mode: Database login

Username: UReg

Password: ●●●●●●●●

□ Always ask password

□ Allow change username

Database: JafJafDen

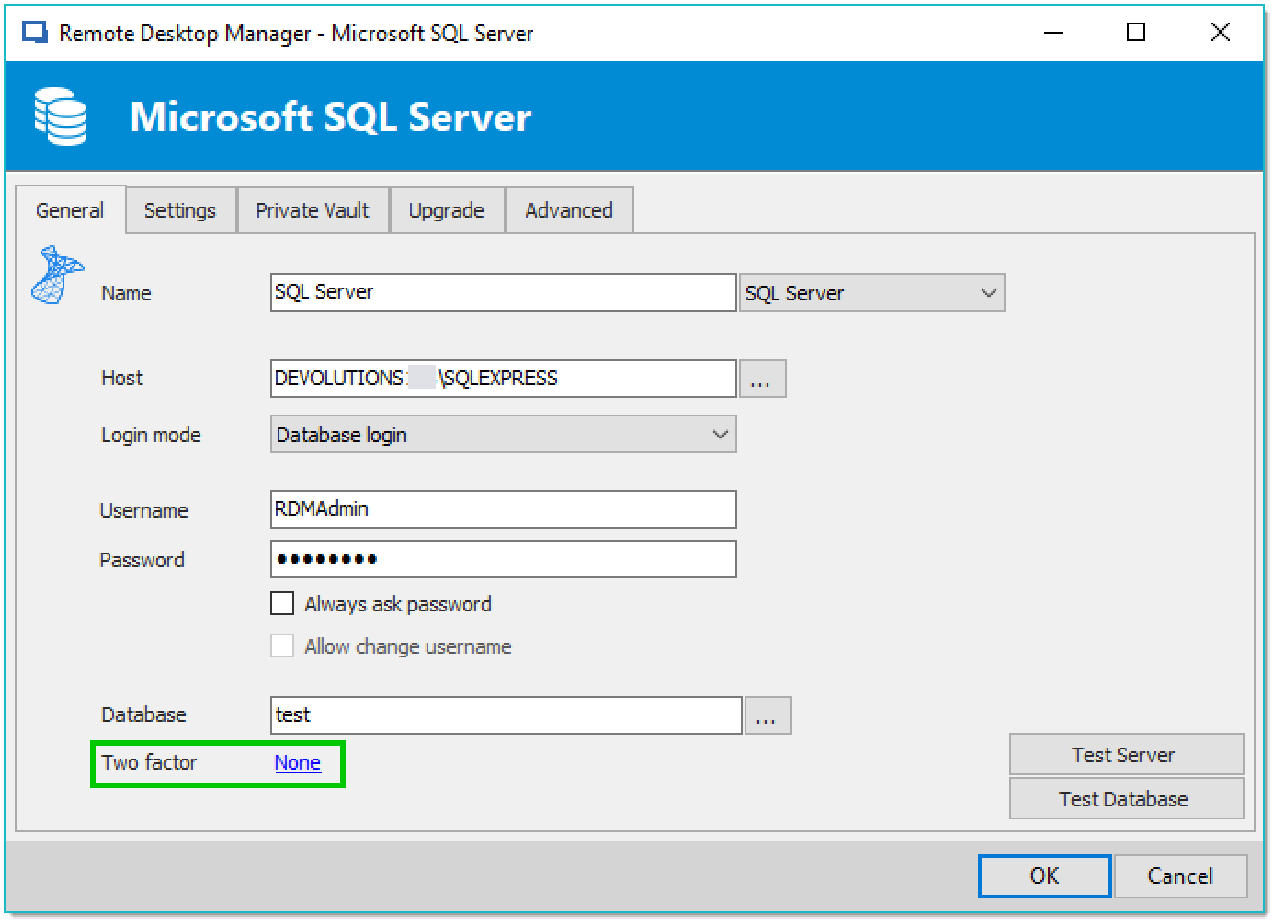
Two factor: None

Type	Name	Locked
	SQL Serv - UReg	

On start up: Last used data source

Edit - Data Source Configuration

2. To set 2FA on the data source, click the **None** hyperlink.



Remote Desktop Manager - Microsoft SQL Server

Microsoft SQL Server

Name: SQL Server | SQL Server

Host: DEVOLUTIONS[redacted]\SQLEXPRESS

Login mode: Database login

Username: RDMAdmin

Password: ●●●●●●●●●

□ Always ask password

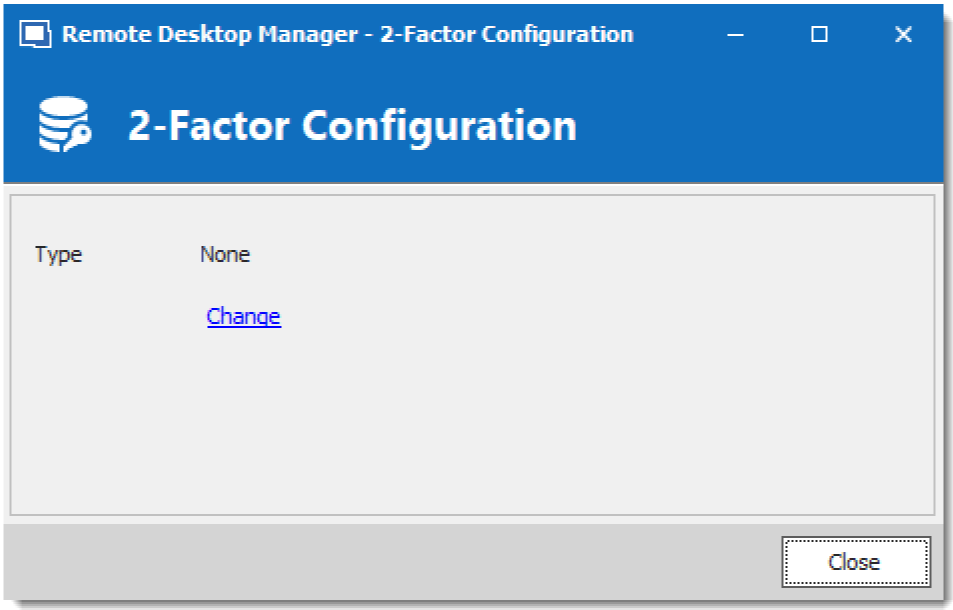
□ Allow change username

Database: test

Two factor: None

Data Source Configuration

3. In the next window, click **Change**.



Remote Desktop Manager - 2-Factor Configuration

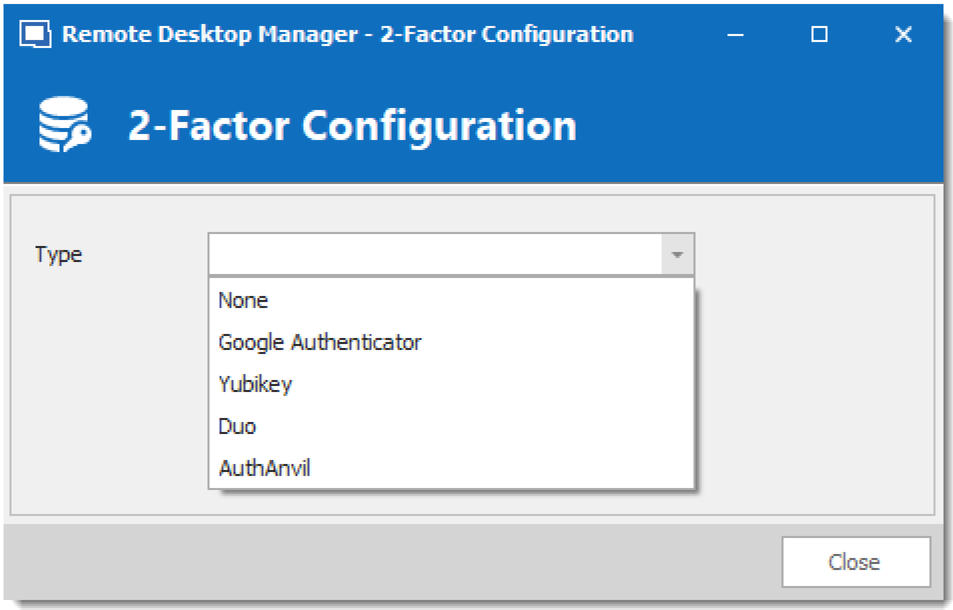
2-Factor Configuration

Type: None

Change

Two-Factor Configuration window

3. Choose the type of 2-Factor Authentication you wish to use.



Two-Factor Configuration window

4. Once you have selected your 2FA click **Save** to start the configuration.

To configure the 2FA you use, please see the topic about supported 2FA types:

- Google Authenticator
- Yubikey
- Duo
- AuthAnvil

5.1.1 Google Authenticator

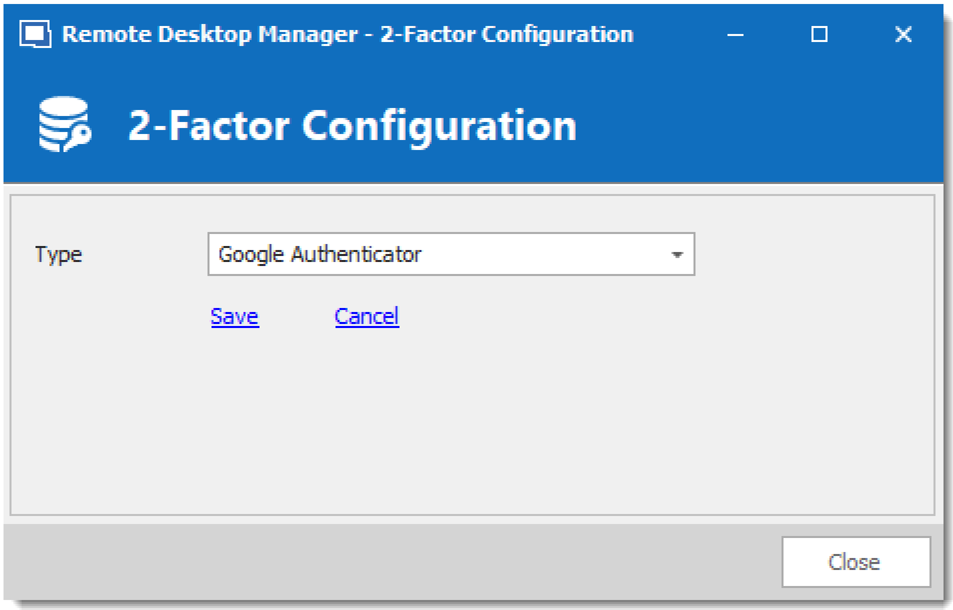
DESCRIPTION

Remote Desktop Manager allows you to use Google Authenticator to provide an additional security layer when opening a data source.

SETTINGS

Before you start the configuration, make sure you have installed the Google Authenticator application on a supported device.

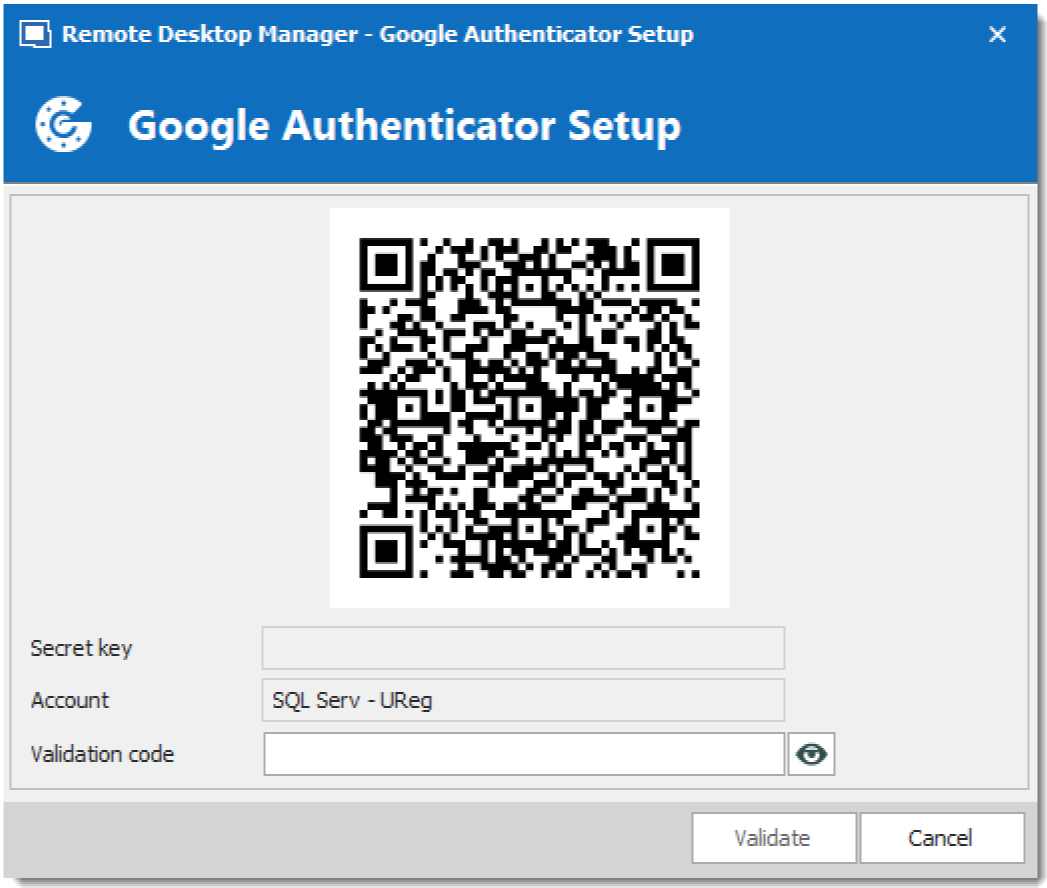
1. Select Google Authenticator as your 2-Factor Authentication and click on **Save**.



Type: Google Authenticator

Google Authenticator Configuration

2. Once you have installed the application, scan the QR code on your screen with the Google Authenticator application to setup Remote Desktop Manager in Google Authenticator. When Remote Desktop Manager is configured in Google Authenticator, enter the Validation code provided by Google Authenticator in Remote Desktop Manager. Enter the Validation code and then click on **Validate**.


Remote Desktop Manager - Google Authenticator Setup
Google Authenticator Setup
Validate
Cancel

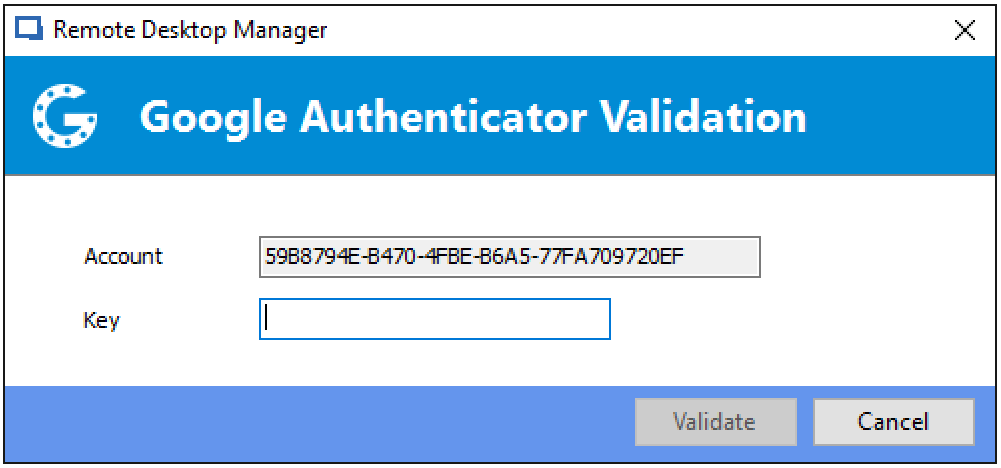
Secret key

Account: SQL Serv - UReg

Validation code

Google Authenticator Setup

3. Relaunch Remote Desktop Manager and select the protected data source to be prompted for the Google Authenticator code.



Account: 59B8794E-B470-4FBE-B6A5-77FA709720EF

Key

Google Authenticator Validation

Google Authenticator generates a new validation code every 30 seconds. Please consult your device application documentation for more details.

5.1.2 Yubikey

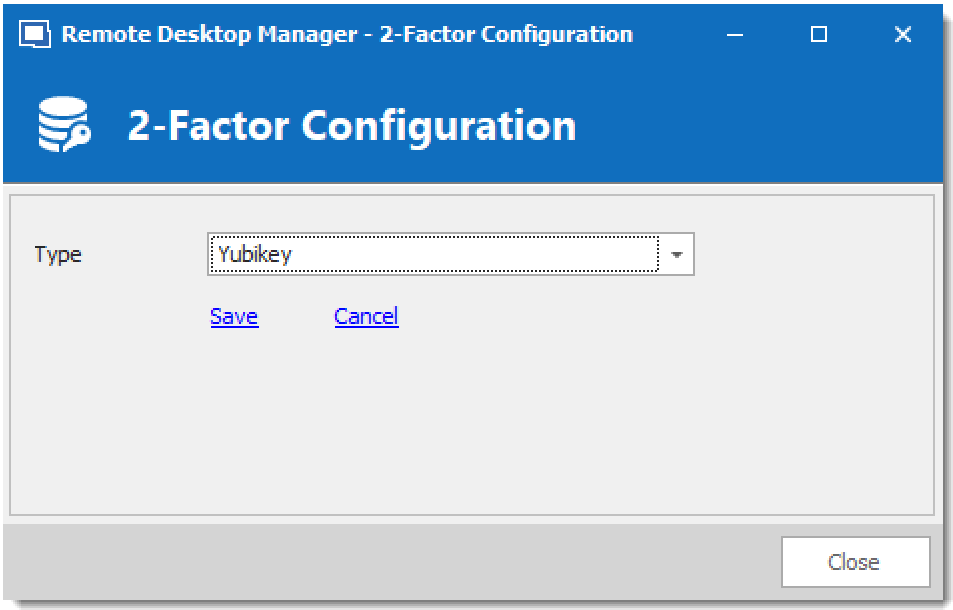
DESCRIPTION

Remote Desktop Manager allows you to use a Yubikey to provide an additional security layer when opening a data source.

SETTINGS

Before you start the configuration, make sure you have a Yubikey in your possession.

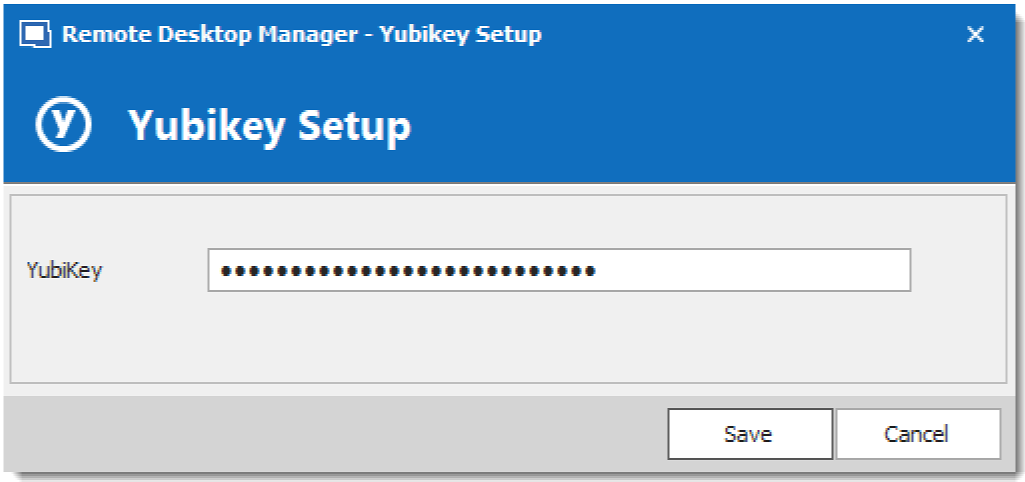
1. Select Yubikey as your 2-Factor Authentication and click on **Save**.



Type: Yubikey

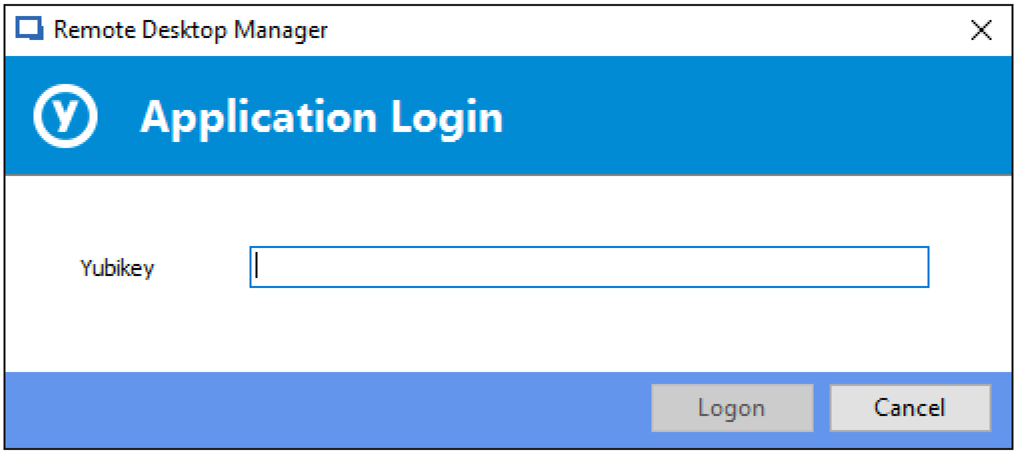
Yubikey Configuration

2. Insert the Yubikey into a USB port of your computer and hold the gold button on the Yubikey to have the code filled in the field, then click on ***Save***.



Yubikey Authentication

3. Relaunch Remote Desktop Manager and select your protected data source to be prompted for a Yubikey code.



Yubikey Application login

5.1.3 Duo

DESCRIPTION

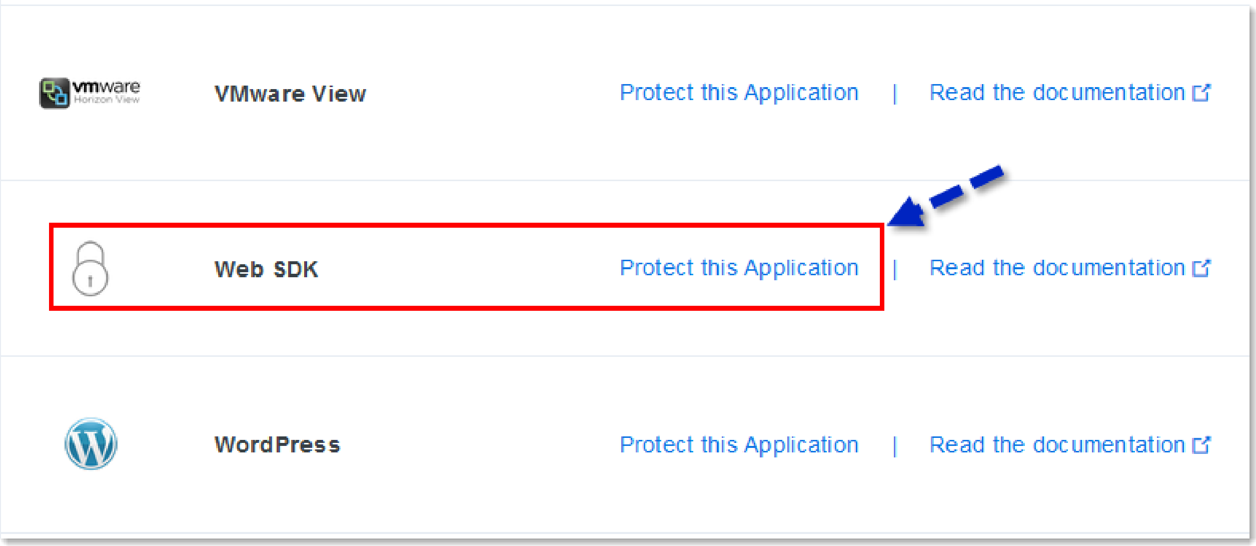
Remote Desktop Manager allows you to configure a Duo Authentication to provide an additional security layer when opening a data source.

SETTINGS

Before you start the configuration, make sure you have created yourself a Duo account and also have installed the Duo application on your compatible device.

There is three methods to use with Duo: by land line, by text message or by using their application.

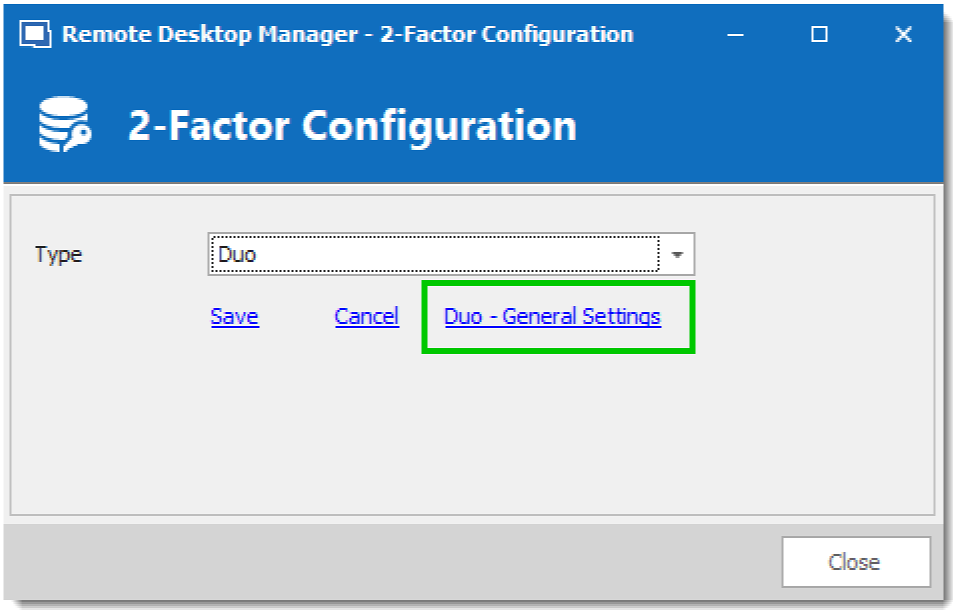
1. In your Duo account you will need to protect the application **Web SDK**.



vmware Horizon View	VMware View	Protect this Application	Read the documentation
	Web SDK	Protect this Application	Read the documentation
	WordPress	Protect this Application	Read the documentation

Web SDK application

2. In Remote Desktop Manager select Duo as your Two factor authentication and click on **Duo – General Settings**.



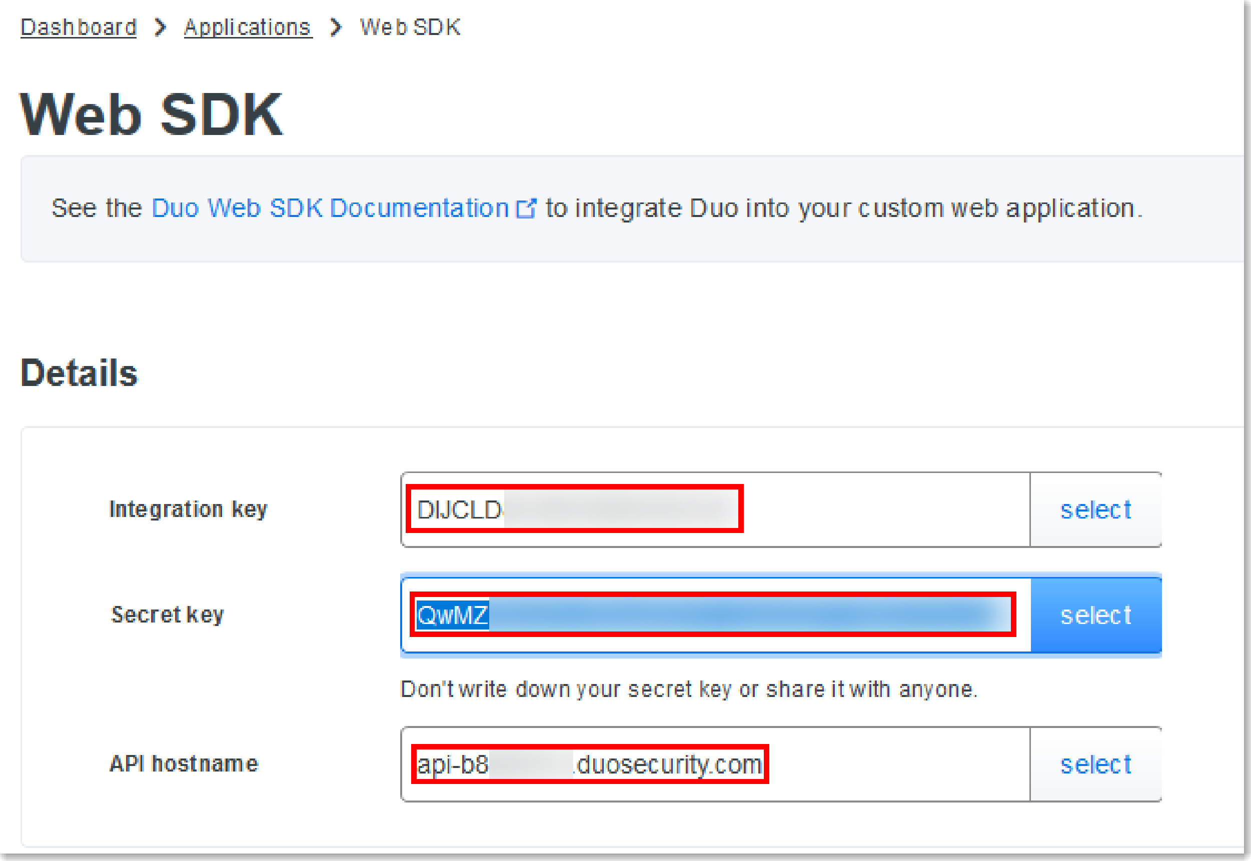
Remote Desktop Manager - 2-Factor Configuration

2-Factor Configuration

Type: Duo

2-Factor Configuration

3. All the information necessary to fill in the **Duo Settings** fields will be generated by your Duo account.



Dashboard > Applications > Web SDK

Web SDK

See the Duo Web SDK Documentation to integrate Duo into your custom web application.

Details

Integration key: DIJCLD[redacted]

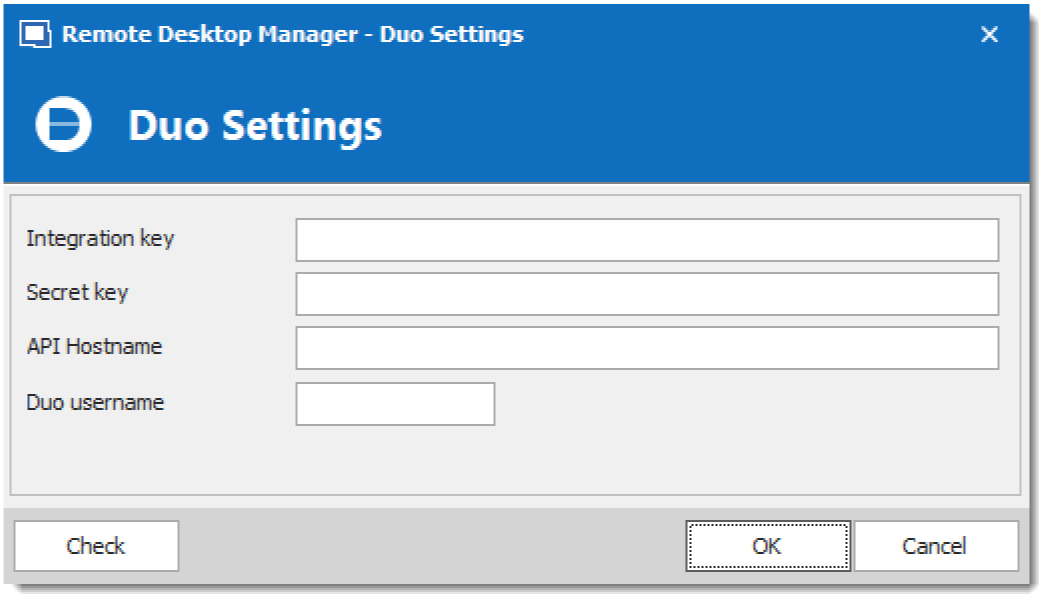
Secret key: QwMZ[redacted]

Don't write down your secret key or share it with anyone.

API hostname: api-b8[redacted].duosecurity.com

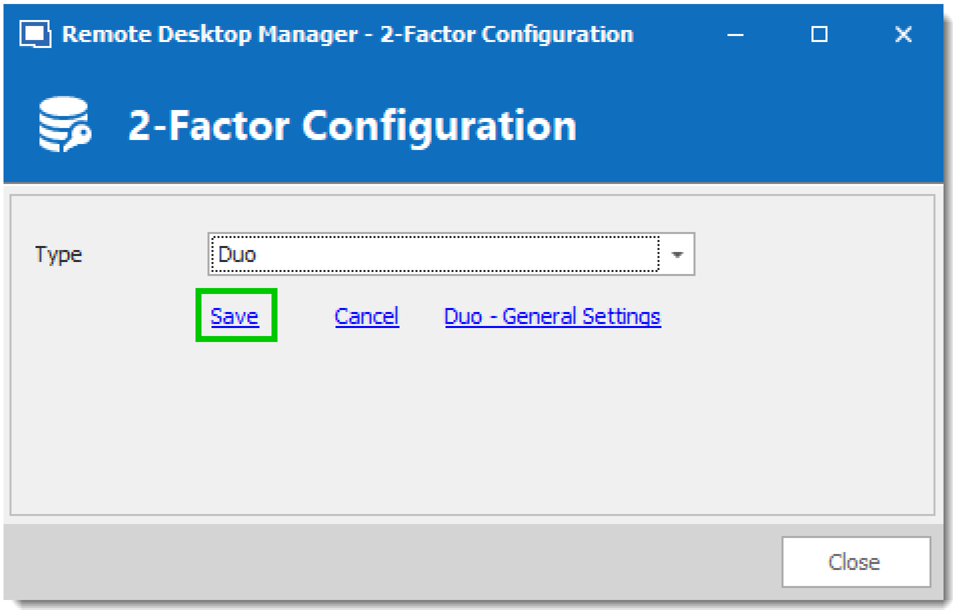
Duo Account - Web SDK

4. Copy and paste all the information and click on **Check** to validate the information.



Duo Settings

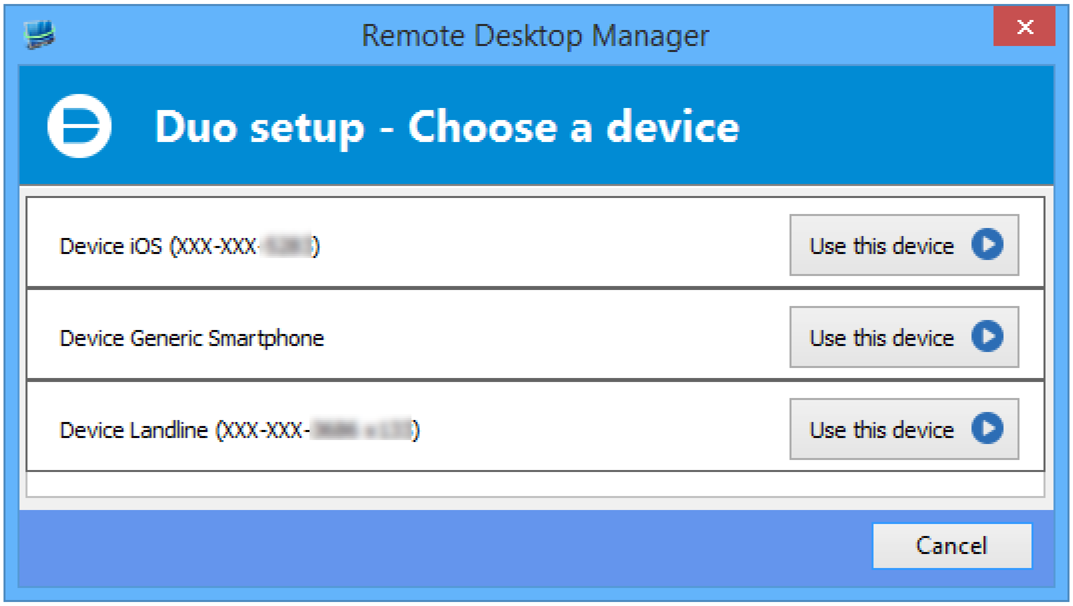
5. Click on **Save** to authenticate yourself with your Duo account that has just been activated.



Type: Duo

Duo Confiugration - Save settings

6. If you have more than one device connected to your Duo account, select the device you wish to use for your 2-Factor authentication.



Remote Desktop Manager

Duo setup - Choose a device

Device iOS (XXX-XXX-[redacted])

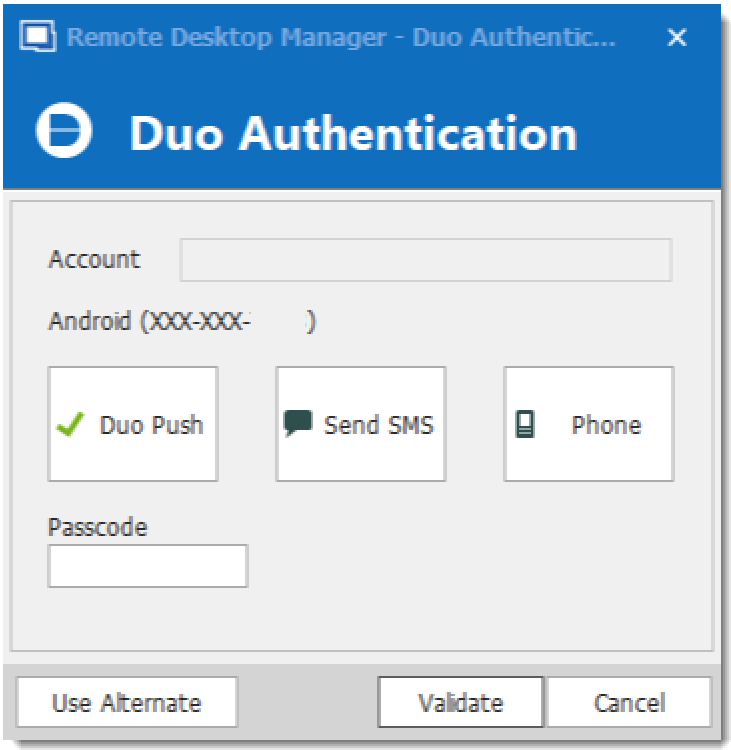
Device Generic Smartphone

Device Landline (XXX-XXX-[redacted])

Duo setup - Choose a device

7. Select the method by which you would like to receive your Duo Passcode.

- **Duo Push**: The code is "pushed" to your Duo application.
- **Send SMS**: You will receive the code by SMS on your registered phone number.
- **Phone**: You will receive a phone call and a computer generated voice will dictate the code to you.



Duo Setup

Once you have completed all the steps, you will be prompted with the Duo Authentication every time you connect to your secured data source.

5.1.4 AuthAnvil

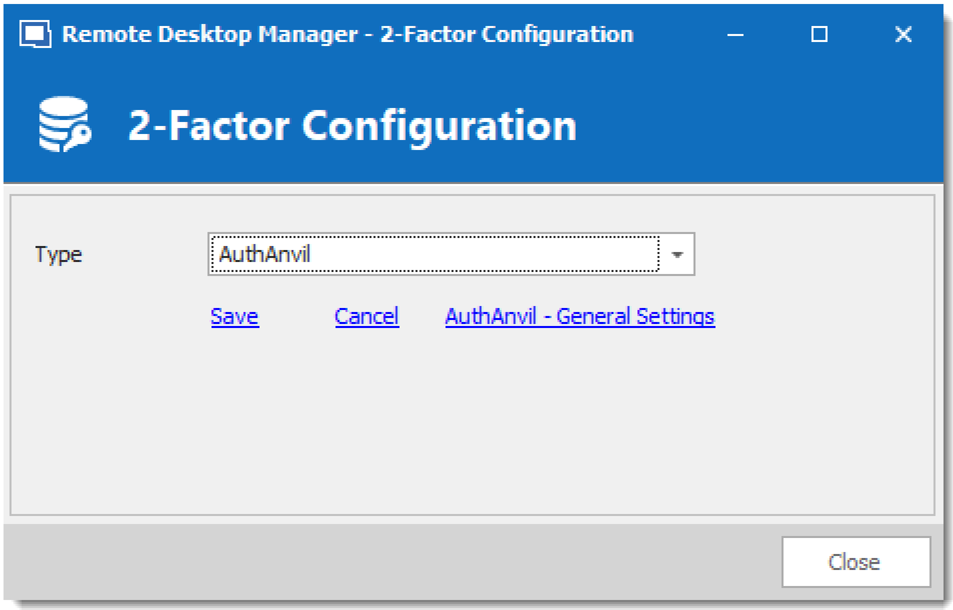
DESCRIPTION

Remote Desktop Manager allows you to use AuthAnvil Authenticator to provide an additional security layer when opening a data source.

SETTINGS

> Before you start the configuration in Remote Desktop Manager, make sure you have created and configured your AuthAnvil account. For more information please consult https://authanvil.com/features/two-factor-authentication.

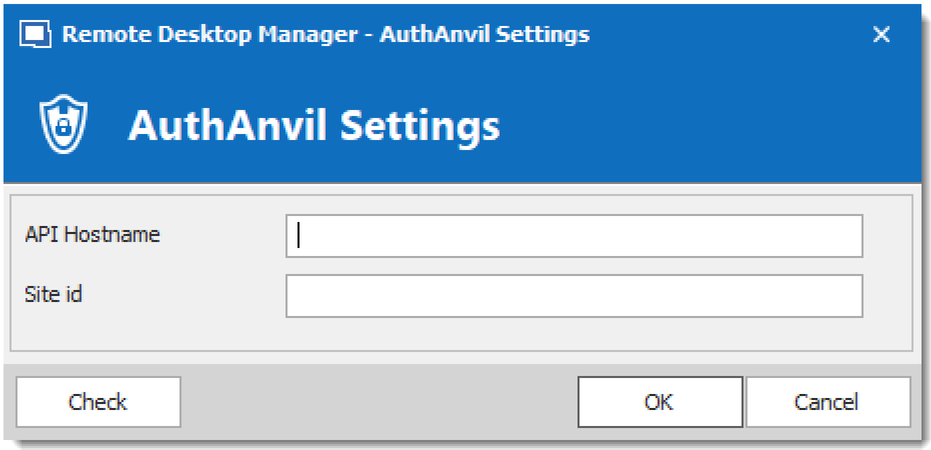
1. Select AuthAnvil in Remote Desktop Manager as your 2-Factor Authentication and click on **Save**.


Remote Desktop Manager - 2-Factor Configuration
2-Factor Configuration
Save
Cancel
AuthAnvil - General Settings
Close

Type: AuthAnvil

AuthAnvil Configuration

2. Enter the information of your AuthAnvil account and click on **Check** to validate the entered information.



AuthAnvil Settings

5.2 Caching

DESCRIPTION

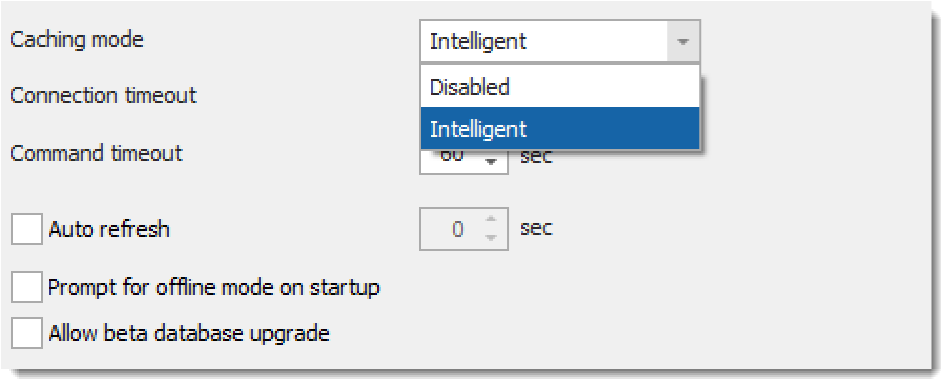
The caching mode will determine how the client will refresh the content of the data source when changes are detected. On large data sources caching is essential as it increases performance significantly.

This feature is only available when using an Advanced Data Source.

If the cache is outdated, press **CTRL + Refresh** or **CTRL + F5** to refresh the local cache. This will force the application to retrieve the entire content of the data source to recreate the cache.

SETTINGS

The **Caching mode** option can be access via the ***File – Data Sources – Edit Data Source – Advanced tab*** of an Advanced Data Source.



Caching mode: Intelligent

Connection timeout

Command timeout 60 sec

☐ Auto refresh 0 sec

☐ Prompt for offline mode on startup

☐ Allow beta database upgrade

Caching Mode

OPTION	DESCRIPTION
Disabled	No client caching.
Intelligent	Intelligent cache has the ability to handle many more sessions without experiencing performance degradation. In the case of intelligent cache each modification performs a token update on the server. When Remote Desktop Manager performs a refresh action it will query the data source for any changes (delta) of changes to be applied client side since it last checked the data source. The delta of the changes is then sent to the application and applied locally.

OPTION	DESCRIPTION
	When first opening the data source Remote Desktop Manager will loaded the session from the offline file then refresh to get the up-to date information.

LOCATION

The client cache is persisted to disk in ***%LocalAppData%\Devolutions\RemoteDesktopManager\[GUID:DataSourceID]***

There are three engines for the cache:

- SQLite (offline.db).
- MCDF (offline.mcdf).
- MCDF v2.0 (offline.mcdf2).

If using a version of Remote Desktop Manager prior to 11.2, the default engine will be the **SQLite**, in that case the database is encrypted using a non-portable computed key hash.

If using version 11.2 or newer of Remote Desktop Manager the default cache engine will be the **Microsoft Compound Document Format (MCDF)** files.

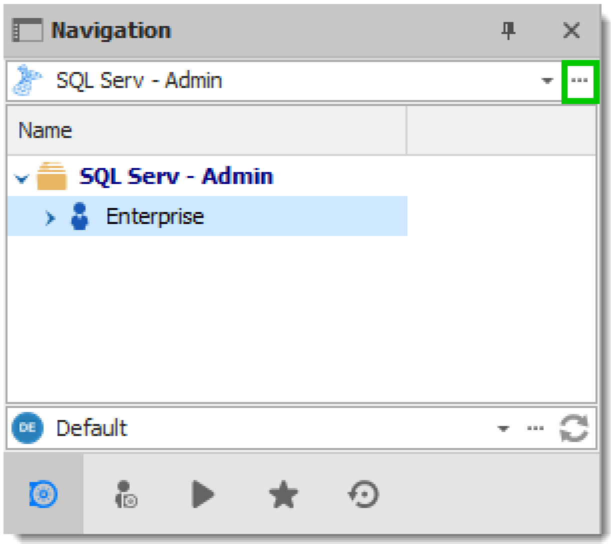
You can enhance the security of the offline file by setting the Enhanced security in ***File – Options – Security – Offline Security.***

Depending on the configuration of the Caching mode & the Offline mode the offline file may still exist since the file servers as a dual purpose caching & offline line support.

5.3 Create a data source

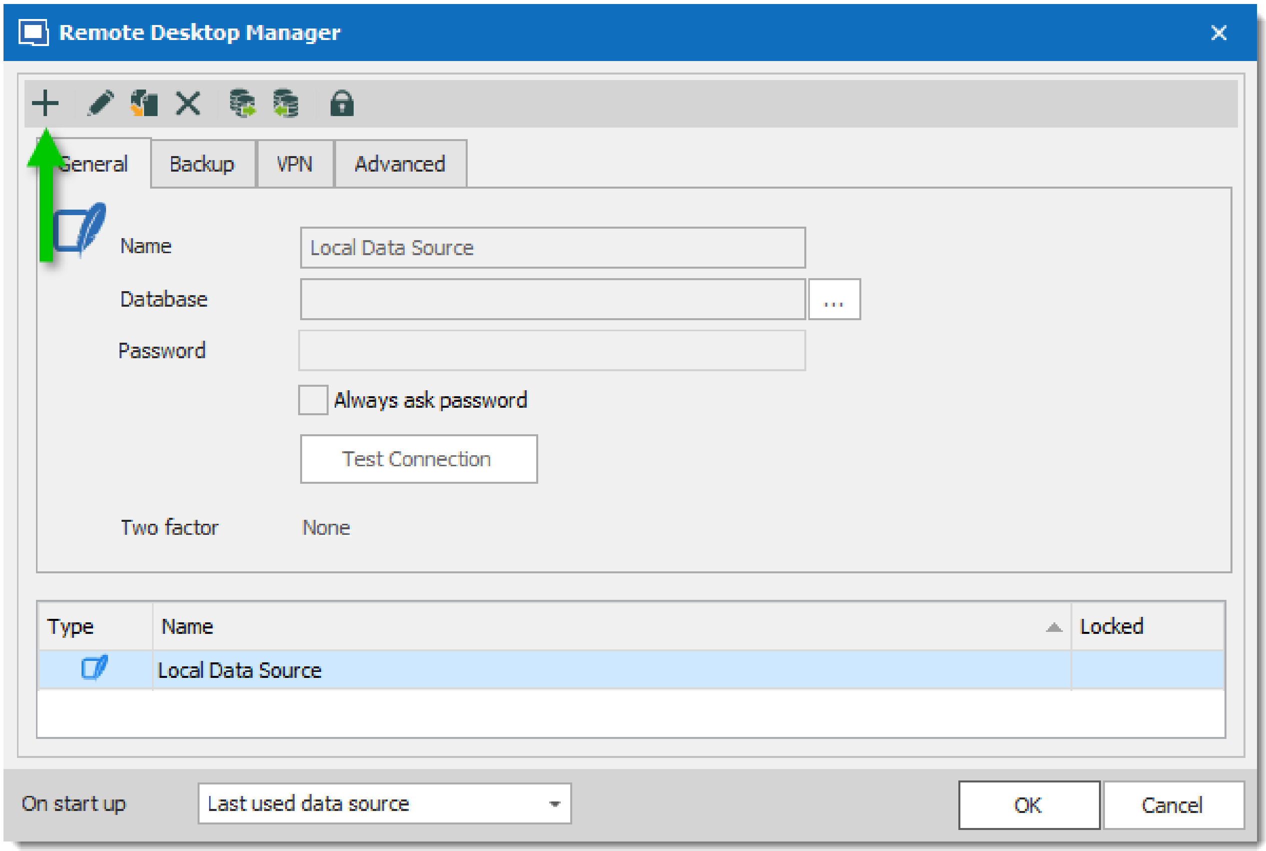
SETTINGS

1. Open the **Data Source Configuration** window by clicking the **ellipsis** button at the top of the Navigation Pane.



Open Data Source menu

2. Click the **Add a New data source** ➕ button.



Name: Local Data Source

Database:

Password:

□ Always ask password

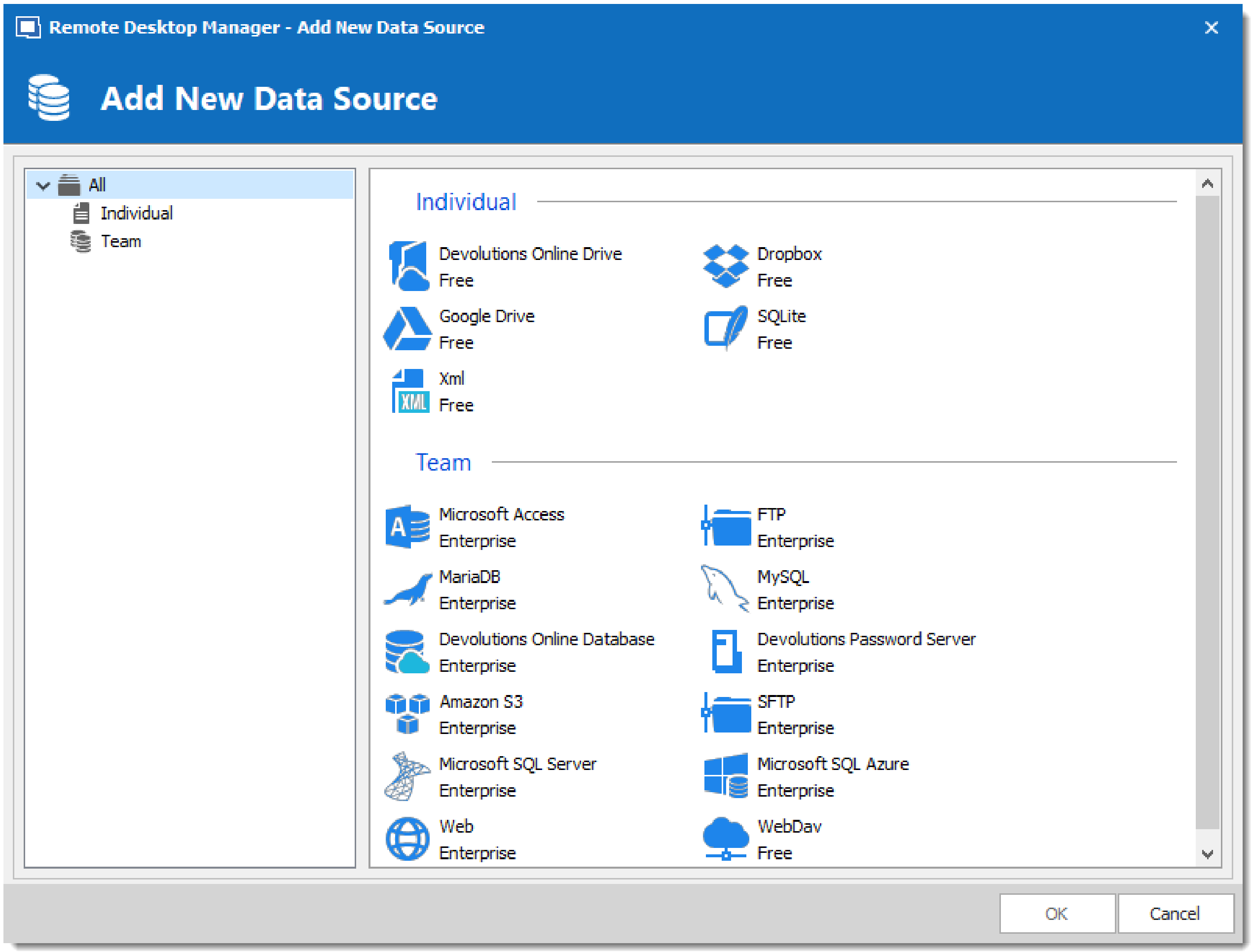
Two factor: None

Type	Name	Locked
	Local Data Source	

On start up: Last used data source

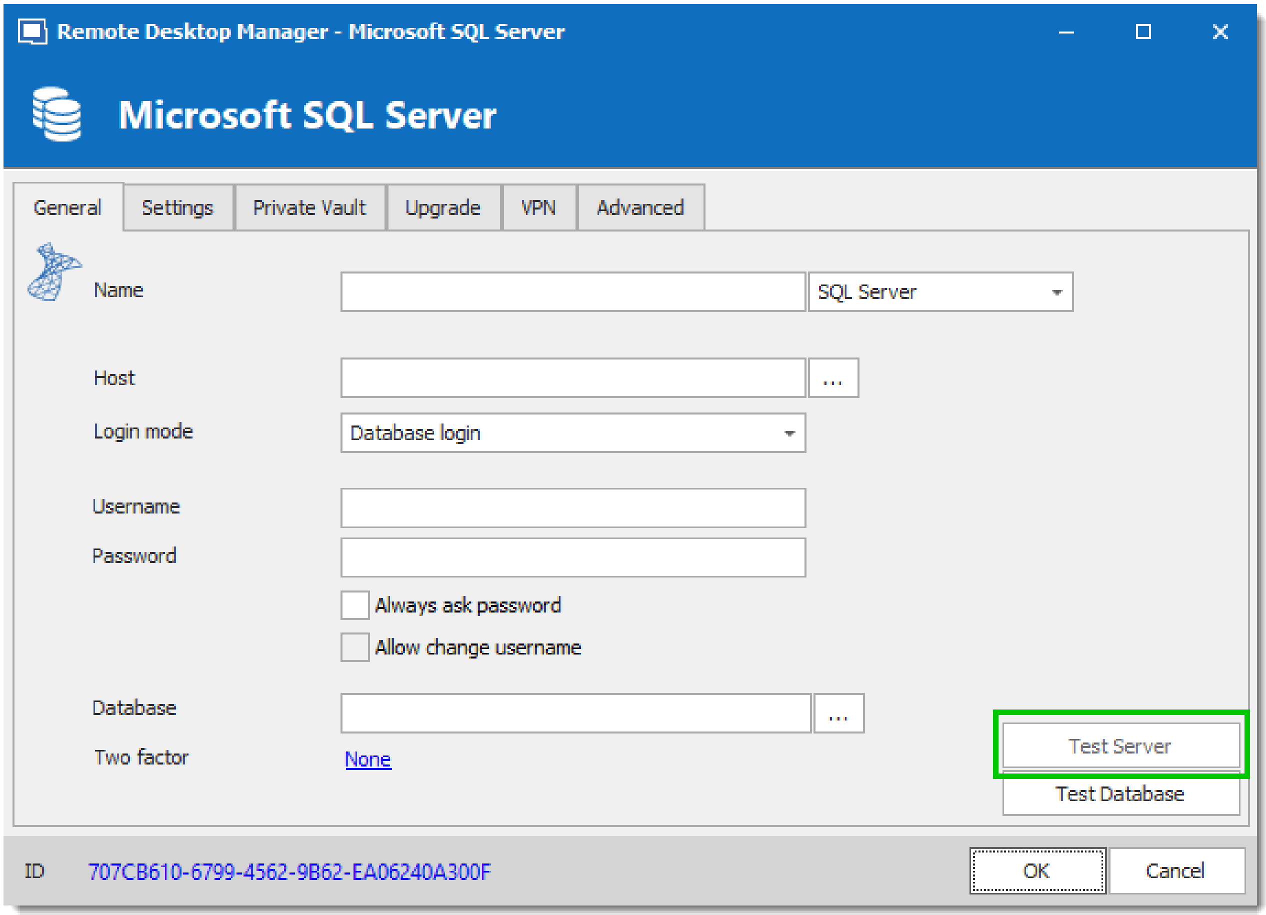
Add a new Data Source

3. Select the type of data source to create.



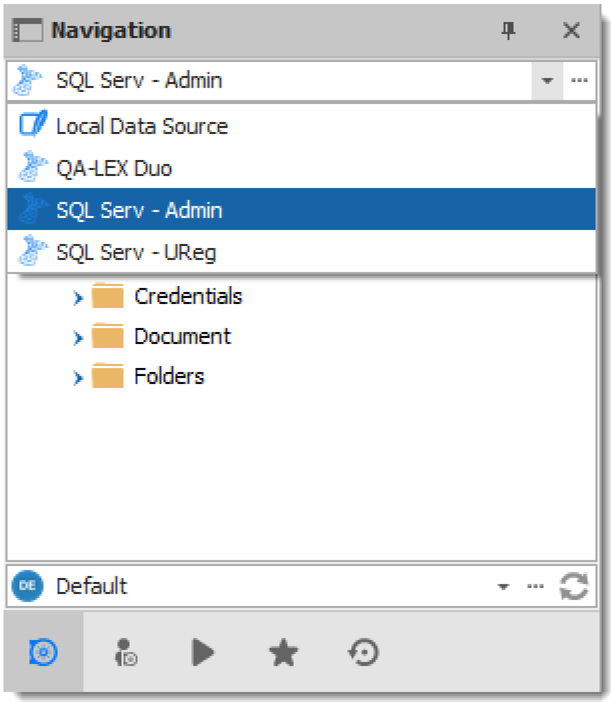
Select your Data Source type

4. Configure the connection settings. To validate the information, click the **Test Server** or **Test Connection** (depending on the type of data source being creating).



SQL Server - Connection Tab

5. Once created, select the new data source by selecting it from the data source drop down list at the top of the Navigation Pane.



Select your Data Source

5.4 Data Source Types

DESCRIPTION

Remote Desktop Manager supports multiple types of data source. To start, decide which data source you'll be using.

> ✓ Upon initial installation, you will be running from a local data source which is a SQLite database.

DATA SOURCE TYPES

NAME	DESCRIPTION	PROS AND CONS
Devolutions Online	Remote Desktop Manager uses Devolutions Online Drive to store and	Pros:

NAME	DESCRIPTION	PROS AND CONS
Drive	synchronize your sessions. Access your sessions from anywhere using a simple Internet connection. For more information, please consult our Online Drive topic.	• Quick. • Reliable. • The service is free. Cons: • No possibility for sharing. • No security management.
Devolutions Password Server	Remote Desktop Manager uses Devolutions Password Server to store session information. For more information, please consult our Devolutions Password Server topic.	Pros: • Quick. • Reliable. • Secure. • Supports all features, such as attachments, connection log, Offline Mode and User Management. • Active Directory integration. Cons • Installation required.
Dropbox	Remote Desktop Manager uses the Dropbox API to retrieve the XML file from the configured repository. For more information, please consult our Dropbox topic.	Pros: • Can be shared in read-only mode. • Backups (by Dropbox) are automatic. • Storage infrastructure is free (if within your free storage quota).

NAME	DESCRIPTION	PROS AND CONS
		Cons: • No security management. • There is a possibility for conflict or data corruption to occur. • Doesn't support all features, such as attachments, connection logs and User Management.
MariaDB	Remote Desktop Manager uses MariaDB to save and manage all sessions. This is one of the available data source for a multi-user environment. For more information, please consult our MariaDB topic.	Pros: • Quick. • Reliable. • The database is free and can be installed on Linux. • Supports all features, such as attachments, connection log, Offline mode and User Management. Cons: • MariaDB needs to be installed.
Microsoft SQL Azure	Remote Desktop Manager uses the Microsoft cloud platform to save and manage all sessions. For more information, please consult our SQL Azure topic.	Pros: • Quick. • Reliable. • Secure.

NAME	DESCRIPTION	PROS AND CONS
		• Supports all features, such as attachments, connection log, Offline mode and User Management. Cons: • Microsoft Azure needs to be configured.
Microsoft SQL Server	Remote Desktop Manager uses SQL Server to save and manage all sessions. This is one of the available data source for a multi-user environment. For more information, please consult our SQL Server (MSSQL) topic.	Pros: • Quick. • Reliable. • Secure. • Supports all features, such as attachments, connection log, Offline mode and User Management. • SQL Server Express is free. Cons: • SQL Server must be installed.
MySQL	Remote Desktop Manager uses a MySQL database to save and manage all sessions. This is one of the available data source for a multi-user environment. For more information, please consult our MySQL topic.	Pros: • Quick. • Reliable. • The database is free and can be installed on Linux.

NAME	DESCRIPTION	PROS AND CONS
		• Supports all features, such as attachments, connection log, Offline mode and User Management. Cons: • MySQL needs to be installed.
SQLite	Remote Desktop Manager uses a SQLite database to store session information. For more information, please consult our SQLite topic.	Pros: • Quick. • Reliable. • The database is free. • Supports all features, such as attachments & connection logs. Cons: • No possibility for sharing. • No security management.
WebDAV	Remote Desktop Manager uses an HTTP connection to retrieve the XML file on a WebDav server. For more information. please consult our WebDAV topic.	Pros: • Can be shared in read-only mode. • Easy to deploy online. Cons: • No security management.

NAME	DESCRIPTION	PROS AND CONS
XML	Remote Desktop Manager saves the settings directly in a file with the XML format. For more information, please consult our XML topic.	Pros: • Easy backup. • Can be edited manually or by an external system. • Nothing to install. Cons: • No possibility of sharing. • No security management. • There is a possibility for conflict or data corruption to occur. • Doesn't support all features, such as attachments, connection logs and User Management.

5.4.1 Advanced Data Sources

DESCRIPTION

Advanced Data Sources are highly configurable data sources, typically running on an advanced management system, such as a database management system or our own online services.

Advanced Data Sources greatly increase the set of managing features available to administrators, such as:

- Document uploads and Entry Attachments.
- Auditing and logging.
- Advanced security with User management and Role-based security system.
- Offline mode.
- Multi-Factor Authentication

> For architectural reasons, the documents stored in our Advanced Data Sources are **NOT** protected from deletions. Once they are deleted, **they cannot be restored**. Please keep a safe copy of all documents in another storage device. Support for this feature will be added in a coming update to our products.

Currently the Advanced Data Sources are:

- Devolutions Password Server.
- MariaDB.
- MySQL.
- Microsoft SQL Azure.
- Microsoft SQL Server (MSSQL).

5.4.1.1 Devolutions Online Database

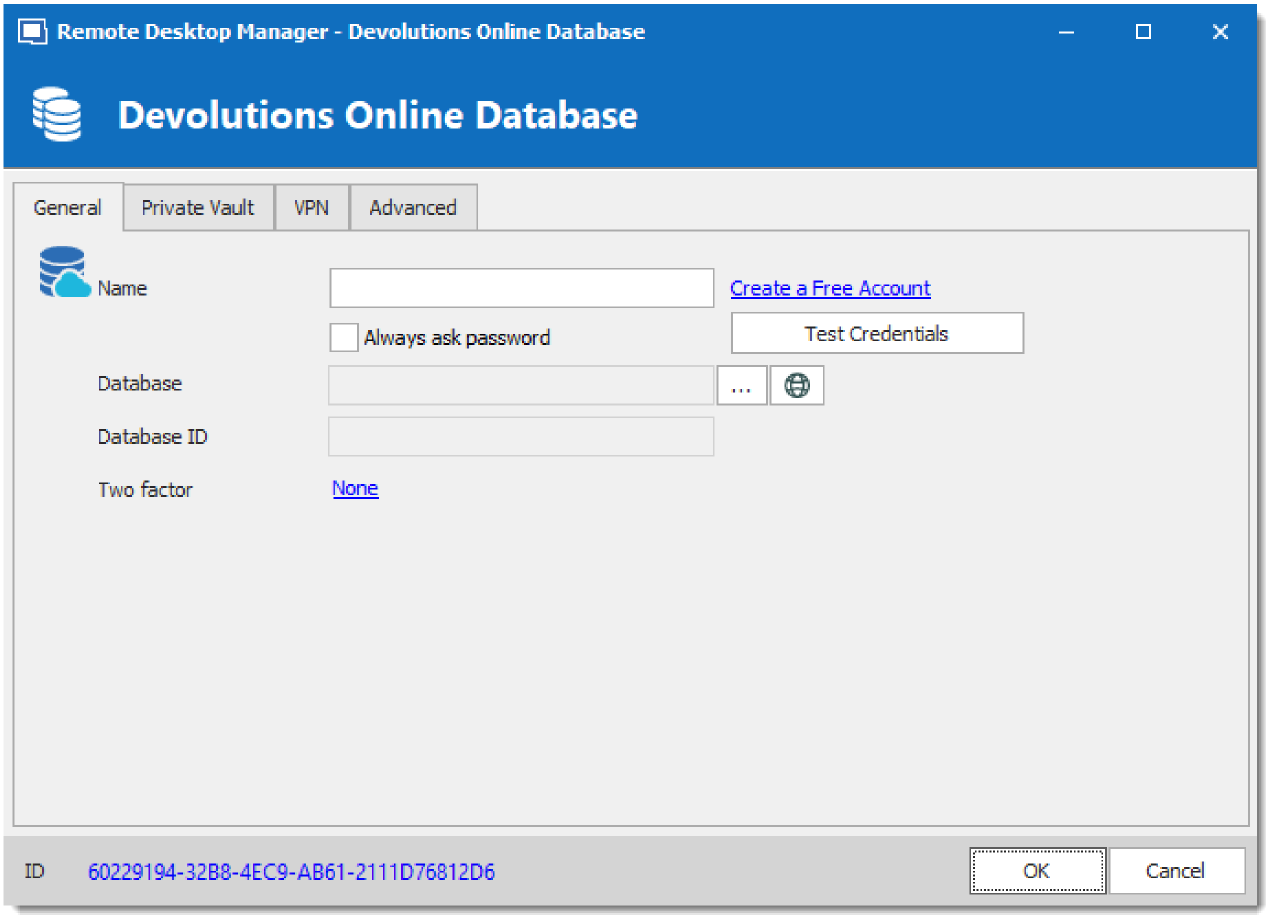
DESCRIPTION

Please consult topic Online Database for information on this service.

> The Role Management feature is not available in Devolutions Online Database. Only the Security Group Management system is offered with this type of data source.

SETTINGS

GENERAL


Remote Desktop Manager - Devolutions Online Database
Devolutions Online Database
General
Private Vault
VPN
Advanced
Create a Free Account
Test Credentials
...
OK
Cancel

Name

□ Always ask password

Database

Database ID

Two factor None

ID 60229194-32B8-4EC9-AB61-2111D76812D6

Devolutions Online Database - General Tab

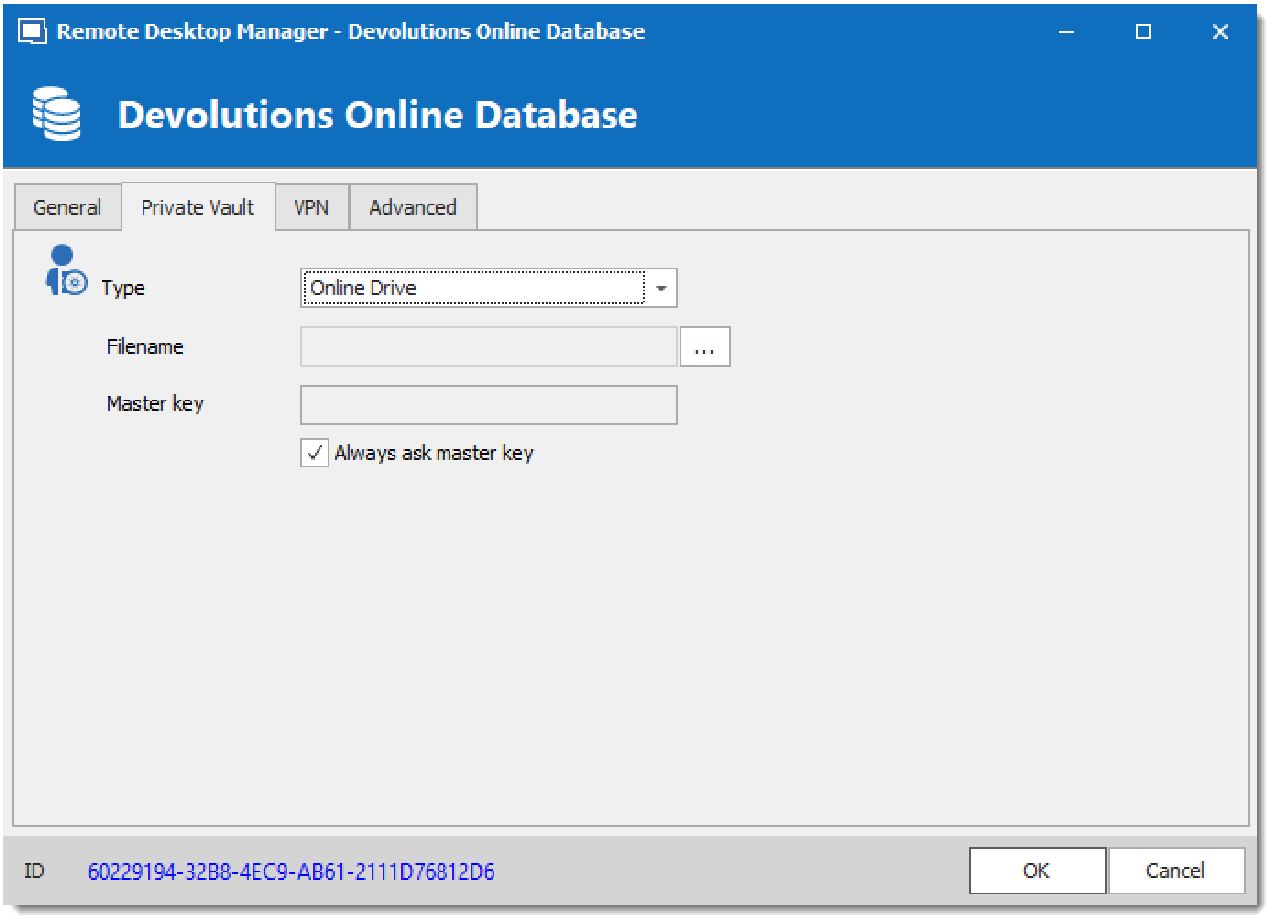
OPTION	DESCRIPTION
Name	Name of the data source.
Always ask password	Always ask password when connecting to the data source.
Create a Free account	Create a new Devolutions Account.
Database	Name of the data base created online. You must use the ellipsis button to select it from the list of online data sources available to the name.
Database ID	Unique Key to identify the data source.

OPTION	DESCRIPTION
Two factor	Enable the 2-Factor Authentication to access your data source.
Test Credentials	Test the credentials that you have configured to connect on Remote Desktop Manager Online.

PRIVATE VAULT

Connect your **Devolutions Online Database** to a **Private Vault** stored in a **Devolutions Online Drive** file (.dod), thus creating your own **Private Vault** containing entries and credentials that no one else has access to.

For more information please see Private Vault.


Remote Desktop Manager - Devolutions Online Database
Devolutions Online Database
General
Private Vault
VPN
Advanced
OK
Cancel

Type: Online Drive

Filename:

Master key:

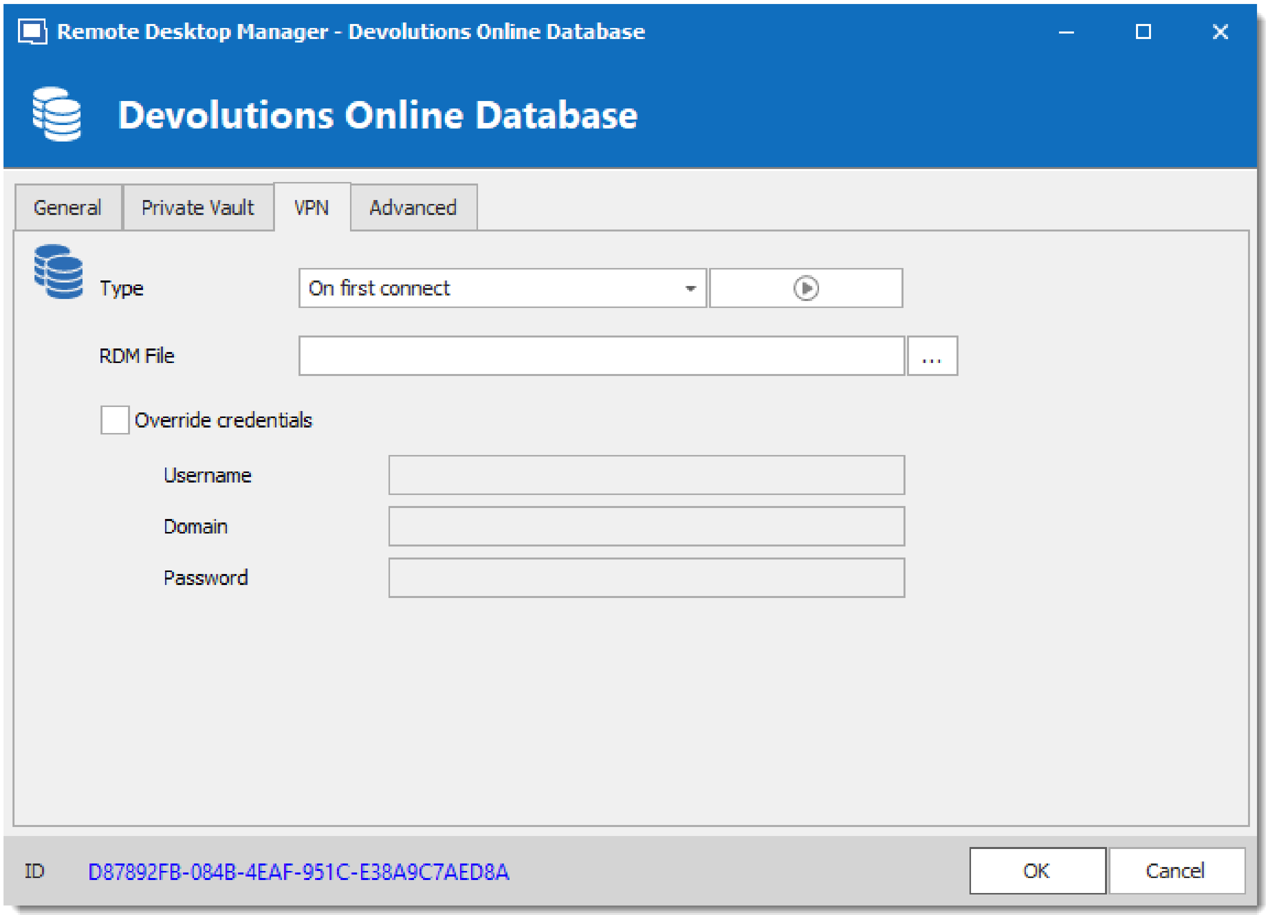
☑ Always ask master key

ID 60229194-32B8-4EC9-AB61-2111D76812D6

Devolutions Online Database - Private Vault

VPN

Open a VPN to access your data prior to connecting to your **Devolutions Online Database**.


Remote Desktop Manager - Devolutions Online Database
Devolutions Online Database
General
Private Vault
VPN
Advanced
OK
Cancel

Type: On first connect

RDM File:

□ Override credentials

Username:

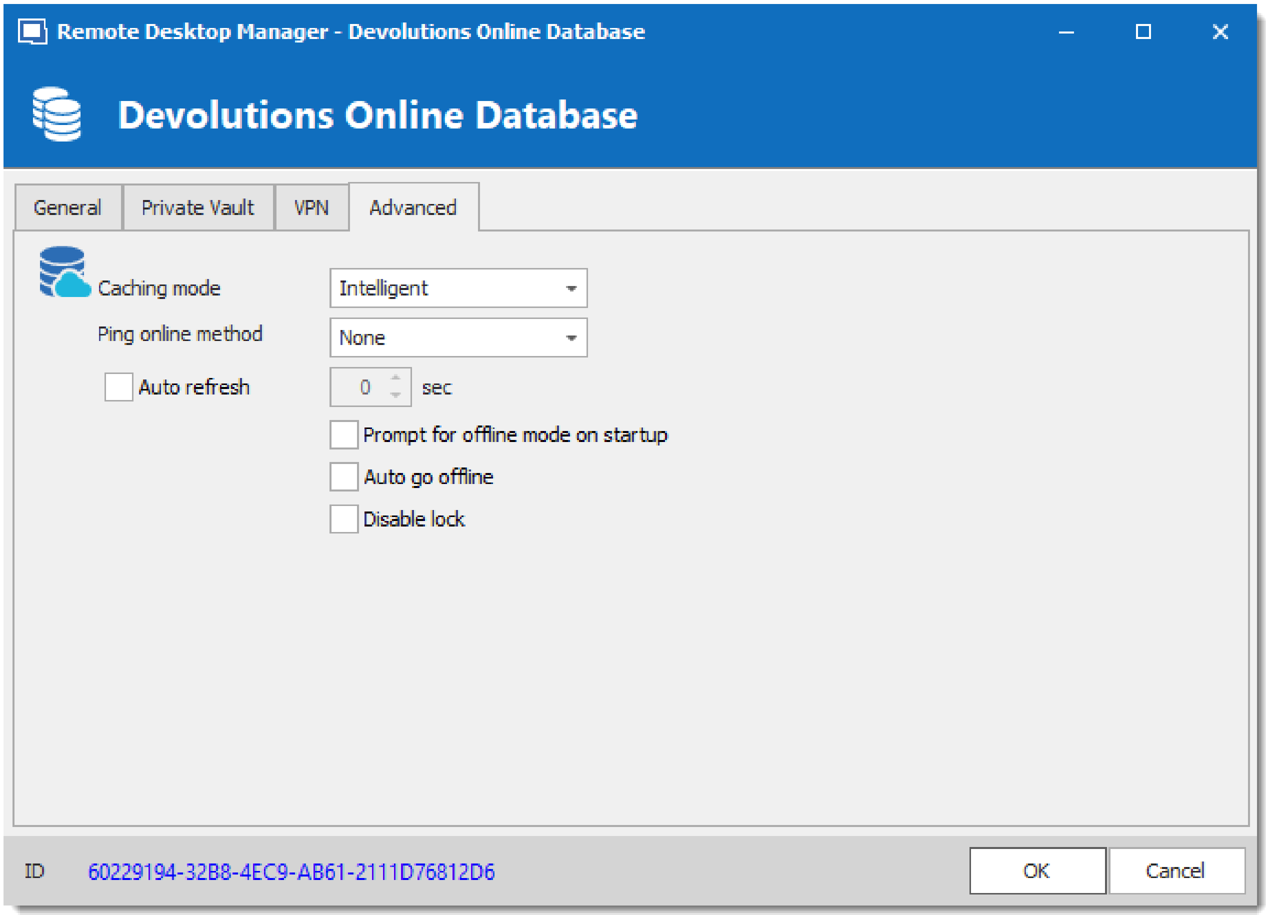
Domain:

Password:

ID D87892FB-084B-4EAF-951C-E38A9C7AED8A

Devolutions Online Database - VPN

ADVANCED


Remote Desktop Manager - Devolutions Online Database
Devolutions Online Database
General
Private Vault
VPN
Advanced
OK
Cancel

Caching mode: Intelligent
Ping online method: None
□ Auto refresh 0 sec
□ Prompt for offline mode on startup
□ Auto go offline
□ Disable lock
ID 60229194-32B8-4EC9-AB61-2111D76812D6

Devolutions Online Database - Advanced

OPTION	DESCRIPTION
Caching mode	Determine how the entries will be loaded from the data source. See Caching topic for more information.
Ping online method	Indicate the prefer ping online. Select between: • **None** • **Web request**
Auto refresh	Set the interval for the automatic refresh.
Prompt for offline mode on startup	Every time you will connect to your data source, you will be prompted to use the data source in offline mode.

OPTION	DESCRIPTION
Auto go offline	If the ping online method doesn't work it will automatically go offline.
Disable lock	Disable the option to lock the data source directly. The application still can be locked but the user is not prompted for the data source password when unlocking the application.

5.4.1.2 Devolutions Password Server

DESCRIPTION

Devolutions Password Server (DPS) allows to control access to privileged accounts and manage sessions through a secure solution. For more information, consult the product's web site here.

HIGHLIGHTS

- Highly secured server for your company.
- Shared connection and credentials with multiple users.
- Installed on-premises; can be deployed online.
- Support Windows authentication and Active Directory group integration.
- Optimized client and server side caching.

Devolutions Password Server supports **Microsoft SQL Server** and **Microsoft SQL Azure** as a data store.

For more information, please consult these topics:

- Devolutions Password Server installation instructions
- Devolutions Password Server Security Checklist

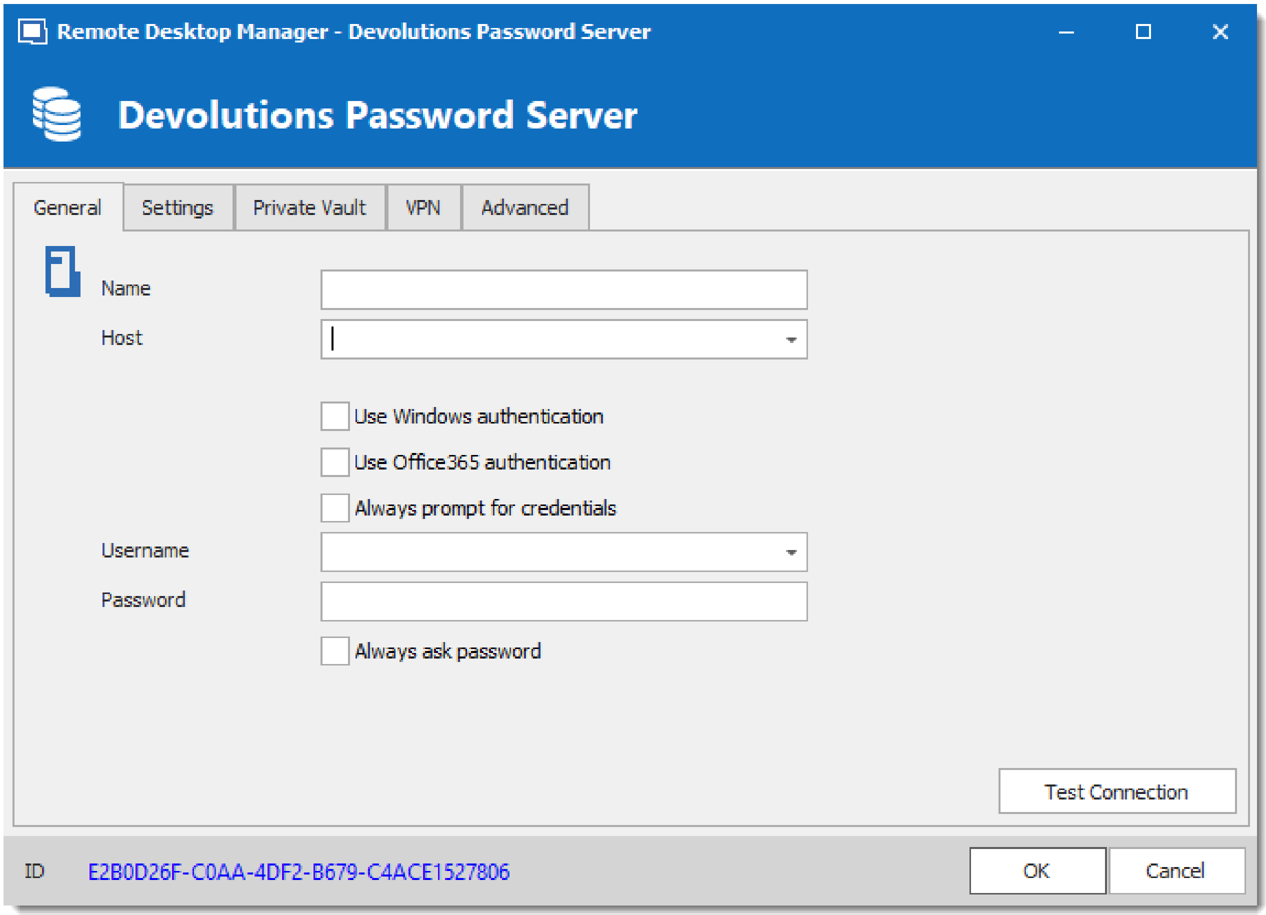
CONFIGURE THE SERVER DATA SOURCE ON ALL YOUR CLIENT MACHINES

Enter a name of the data source and the URL for the Host. Ensure you use the correct protocol if SSL is required by the server (https).

Export the data source, then import the file in your client workstations as described Import/Export Data Source.

SETTINGS

GENERAL


Remote Desktop Manager - Devolutions Password Server
Devolutions Password Server
General
Settings
Private Vault
VPN
Advanced
Test Connection
OK
Cancel

Name

Host

□ Use Windows authentication

□ Use Office365 authentication

□ Always prompt for credentials

Username

Password

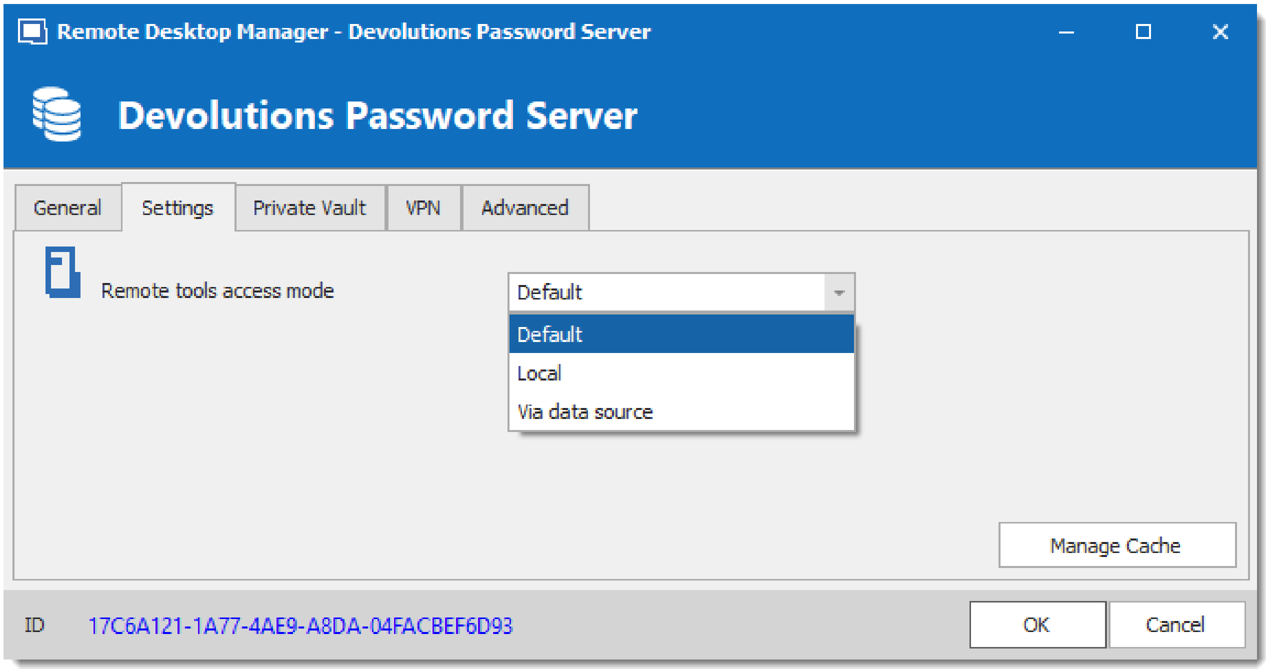
□ Always ask password

ID E2B0D26F-C0AA-4DF2-B679-C4ACE1527806

Devolutions Password Server - General

OPTION	DESCRIPTION
Name	Enter a name for the data source.
Host	Enter the URL of the DVLS instance. Example: `http://<hostname or IP address>/<instance name>`
Use Windows authentication	Use the same credentials are your current Windows user.
Use Office365 authentication	Use the same credentials as your current Office365 user.
Always prompt for credentials	Always ask for the username and password when connecting to the data source.
Username	Enter the username to connect to the data source.
Password	Enter the password to connect to the data source.
Always ask password	Always ask for the password when connecting to the data source.
Test Connection	Test the connection with Devolutions Password Server to validate the credentials.

SETTINGS



Remote Desktop Manager - Devolutions Password Server
Devolutions Password Server
General
Settings
Private Vault
VPN
Advanced
Manage Cache
OK
Cancel

Remote tools access mode: Default

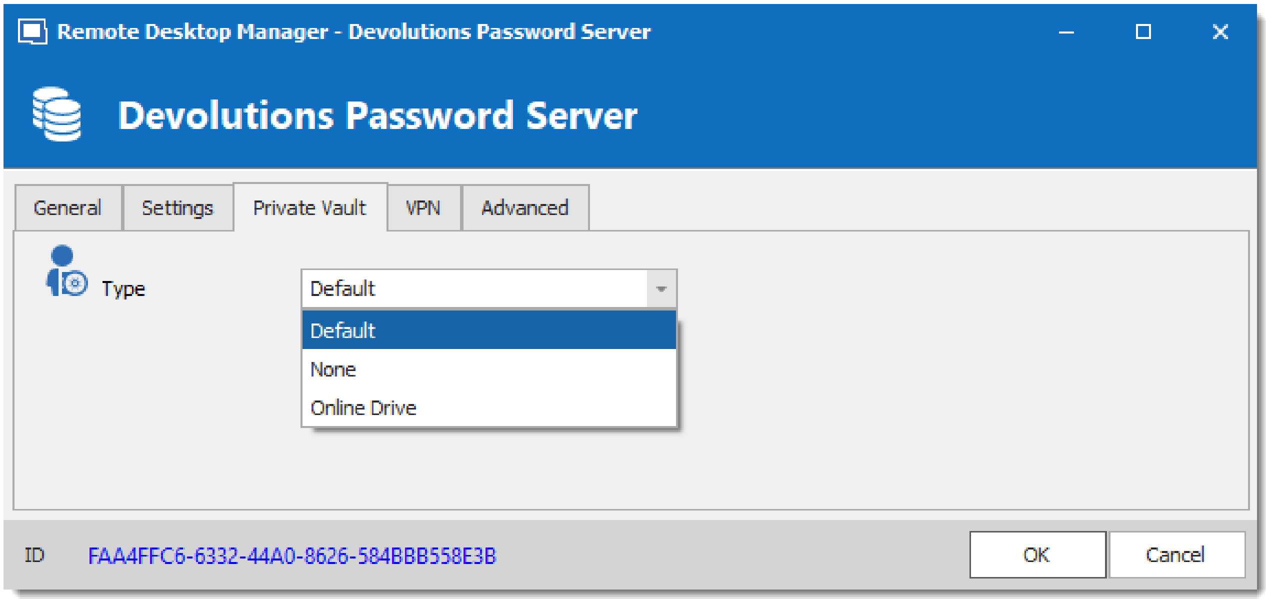
- Default
- Local
- Via data source

ID 17C6A121-1A77-4AE9-A8DA-04FACBEF6D93

Devolutions Password Server - Settings

OPTION	DESCRIPTION
Remote tools access mode	Select whether the Remote Tools will be accessed locally or through the host.
Manage Cache	Manage the data source cache. On large data sources caching is a must and will increase performance significantly. For more information, please consult the Manage Cache topic.

PRIVATE VAULT

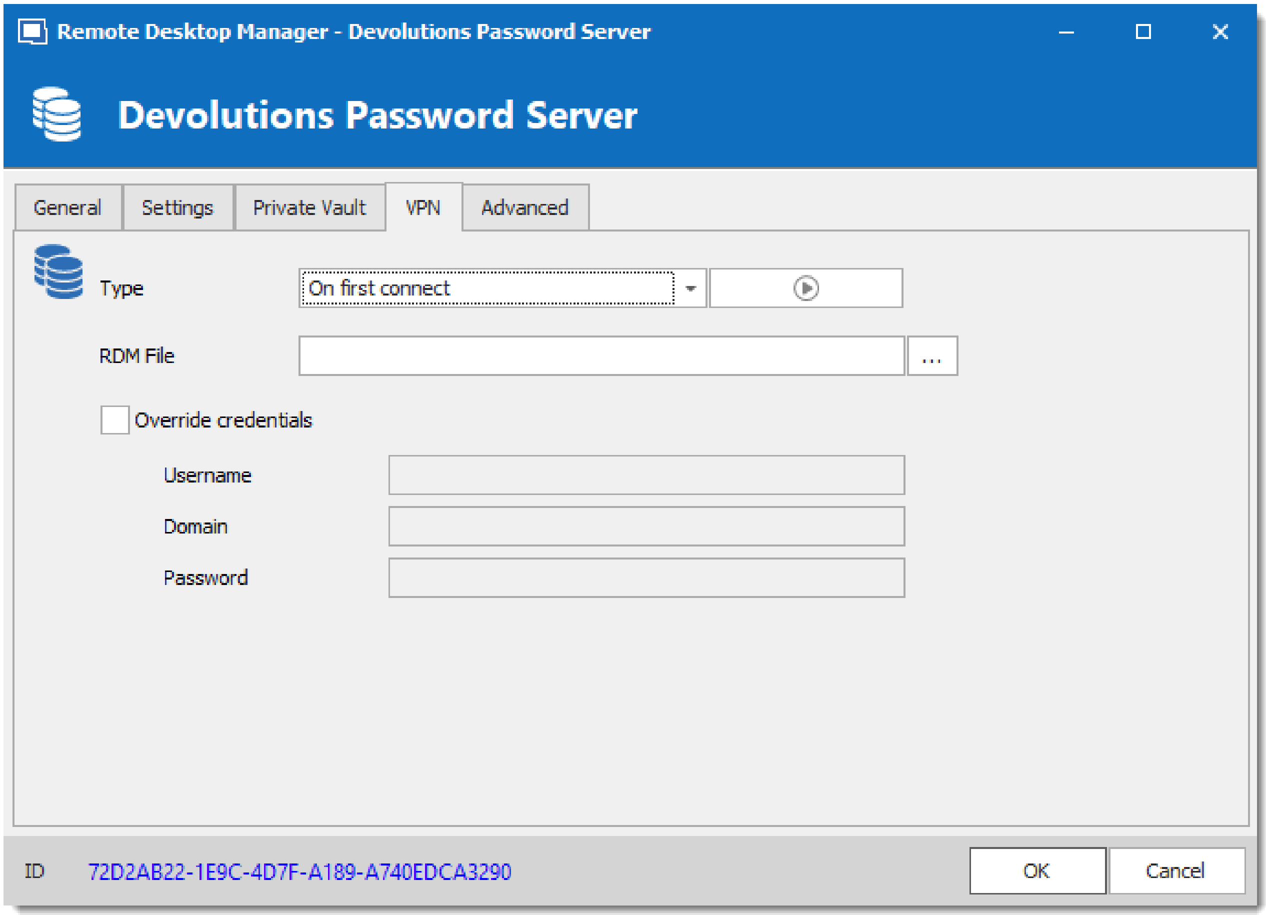

Remote Desktop Manager - Devolutions Password Server
Devolutions Password Server
General
Settings
Private Vault
VPN
Advanced
Type
Default
Default
None
Online Drive
ID
FAA4FFC6-6332-44A0-8626-584BBB558E3B
OK
Cancel

Devolutions Password Server – Private Vault

OPTION	DESCRIPTION
Type	Select the type of Private Vault to use. Select between: • **Default**: use the default Private Vault, which is stored in the database. • **None**: disable the Private Vault for all users. • **Online Drive**: use a Devolutions Online Drive file (*.dod) as a Private Vault.

VPN

Open a VPN to access your data prior to connecting to your **Devolutions Password Server**.


Remote Desktop Manager - Devolutions Password Server

Devolutions Password Server

Type: On first connect

RDM File

□ Override credentials

Username

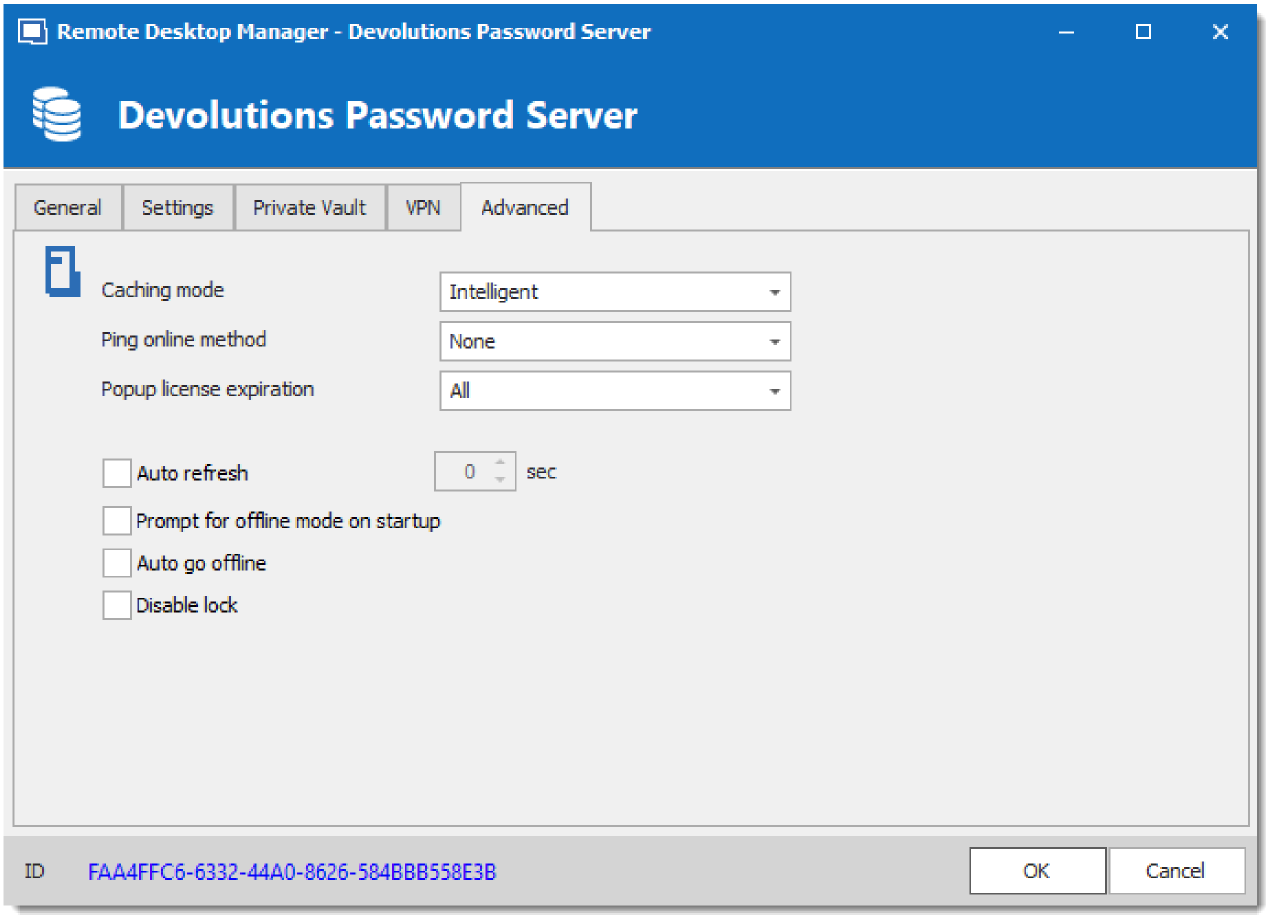
Domain

Password

ID 72D2AB22-1E9C-4D7F-A189-A740EDCA3290

Devolutions Password Server - VPN

ADVANCED


Remote Desktop Manager - Devolutions Password Server
Devolutions Password Server
General
Settings
Private Vault
VPN
Advanced
OK
Cancel

Caching mode: Intelligent

Ping online method: None

Popup license expiration: All

□ Auto refresh 0 sec

□ Prompt for offline mode on startup

□ Auto go offline

□ Disable lock

ID FAA4FFC6-6332-44A0-8626-584BBB558E3B

Devolutions Password Server - Avanced

OPTION	DESCRIPTION
Caching mode	Determines how the entries will be reloaded in the data source. For more information, please consult the Caching topic.
Ping online method	Indicate the preferred ping online method. Select between: • **None** • **Web request**
Popup license expiration	Determine how the application advises of the license expiration. Select between: • **All** • **Only Administrator(s)**

OPTION	DESCRIPTION
	• **Disabled**
Auto refresh	Set the interval for the automatic refresh.
Prompt for offline mode on startup	Ask to use the data source in offline mode when the user connects to the data source.
Auto go offline	Use the data source in offline mode when the ping method does not respond.
Disable lock	Disable the option to lock the data source directly. The application still can be locked but the user is not prompted for the data source password when unlocking the application.

5.4.1.3 MariaDB

DESCRIPTION

Remote Desktop Manager uses **MariaDB** as a drop-in replacement for **MySQL**. It is only supported in the Enterprise edition.

For added security, you can enable SSL Encryption to communicate with your instance of MariaDB Server.

Please follow directions on https://dev.mysql.com/doc/connector-net/en/connector-net-6-10-connection-options.html.

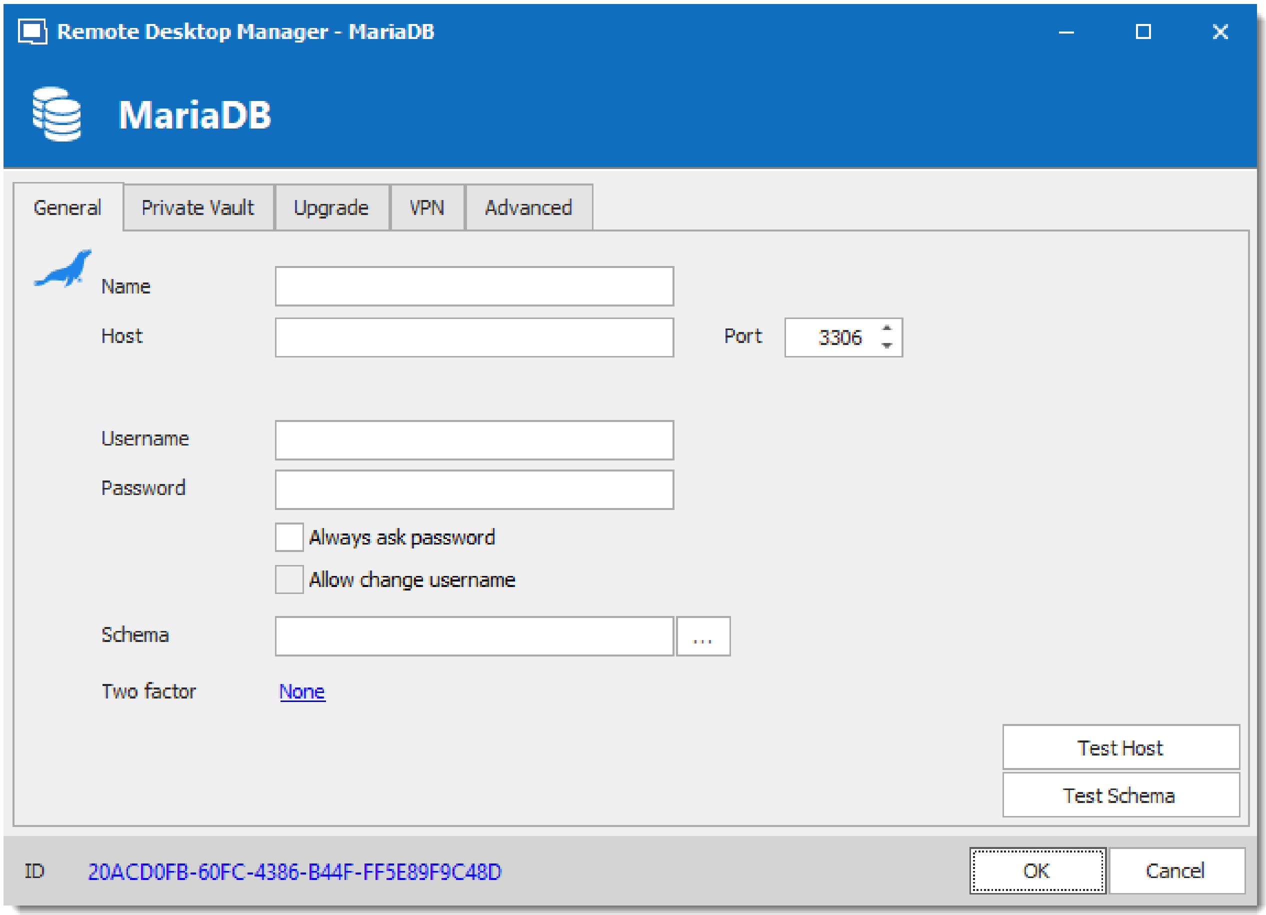
HIGHLIGHTS

- The data can be shared on a MariaDB database installed on any Operating System MySQL supports.

- Full connection log and attachments support.

SETTINGS

GENERAL



Port 3306

□ Always ask password

□ Allow change username

Two factor None

ID 20ACD0FB-60FC-4386-B44F-FF5E89F9C48D

MariaDB - General

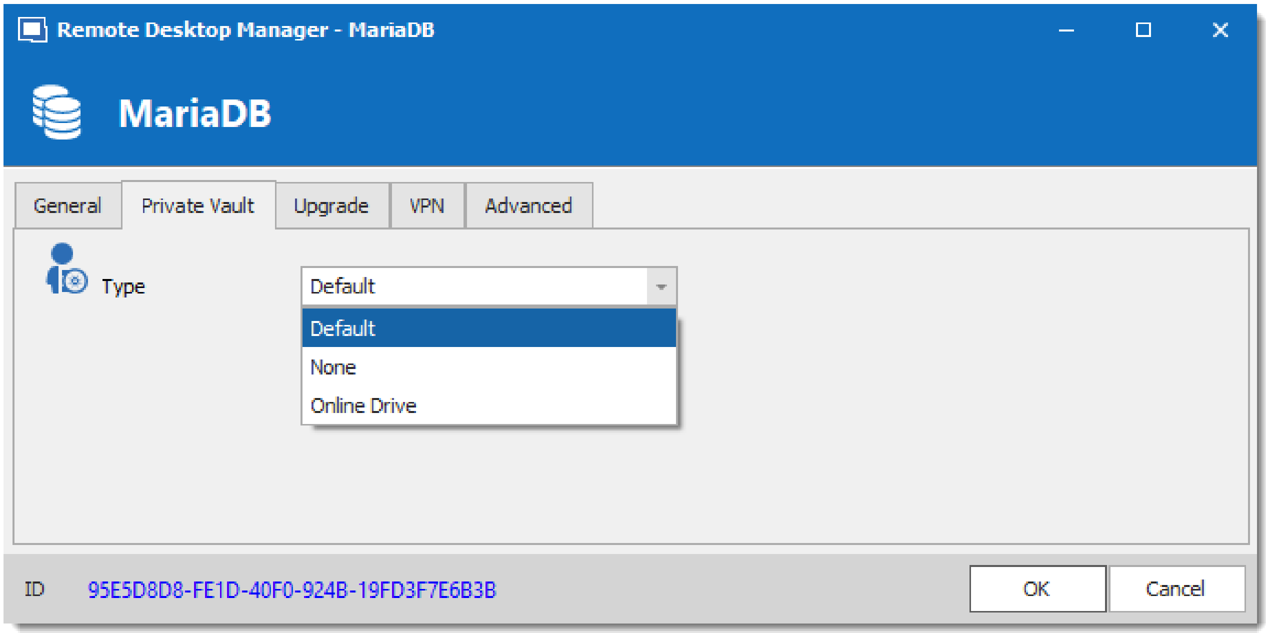
OPTION	DESCRIPTION
Name	Name of the data source.
Host	Name of the host (server name) where the data source will be stored.
Username	Username used to access the host server.

OPTION	DESCRIPTION
Password	Password used to access the host server.
Always ask password	Always prompts for the user to input a password when connecting to the data source.
Allow change username	Allows the user to change the username. This specific setting will save the currently type username (unlike similar features such as "Always prompt for credentials").
Schema	Name of the schema (database) on the MySQL server.
Two factor	Enable the 2-Factor Authentication to access your data source.
Test Host	Test the connection with the host (server name) to validate if the proper information has been provided.
Test Schema	Test the connection with the schema to validate if the proper information has been provided.

PRIVATE VAULT

Connect your **MariaDB** to a **Private Vault** stored in a **Devolutions Online Drive** file (.dod), thus creating your own **Private Vault** containing entries and credentials that no one else has access to.

For more information please see Private Vault.



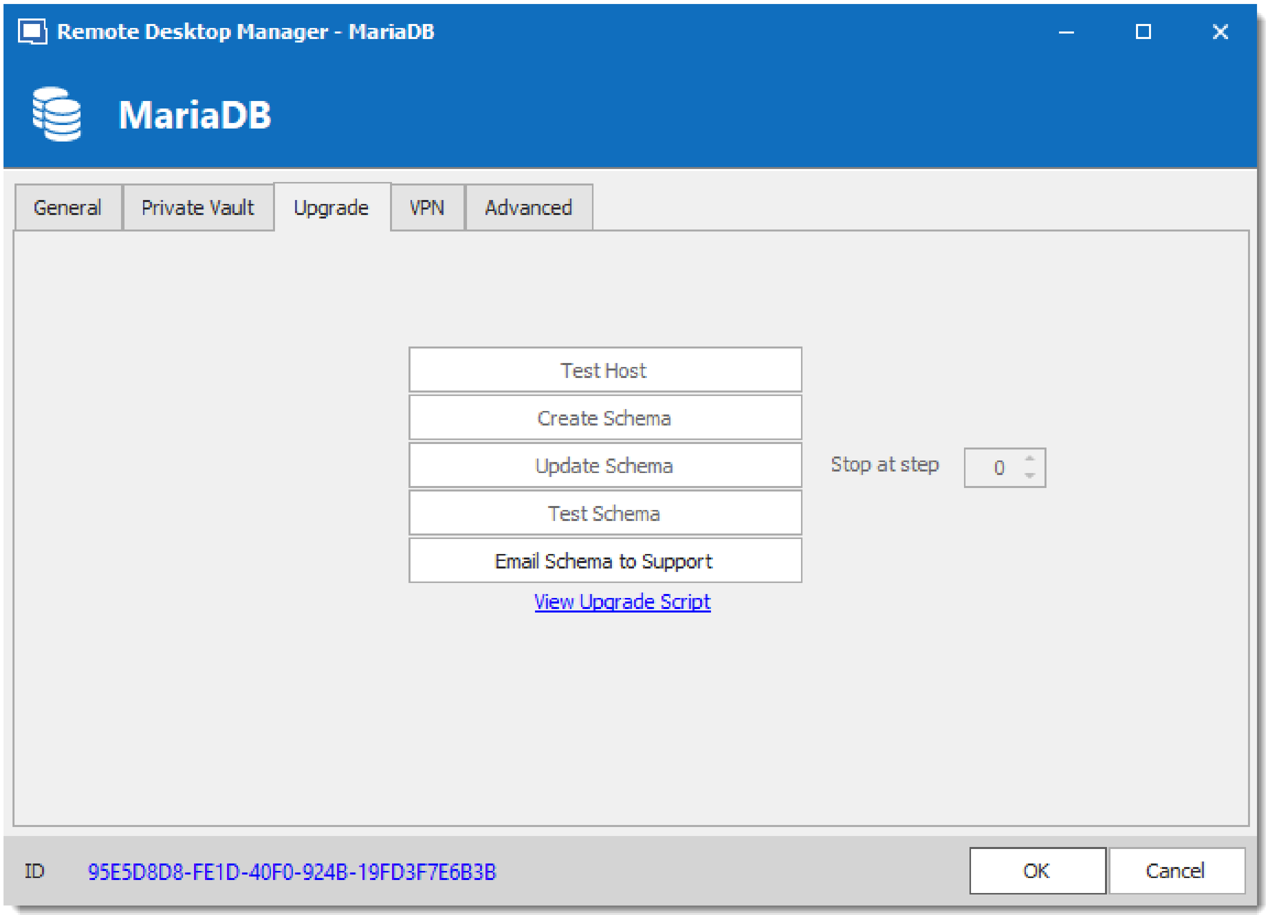
Type: Default

- Default
- None
- Online Drive

ID 95E5D8D8-FE1D-40F0-924B-19FD3F7E6B3B

MariaDB - Private Vault

UPGRADE



Stop at step 0

ID 95E5D8D8-FE1D-40F0-924B-19FD3F7E6B3B

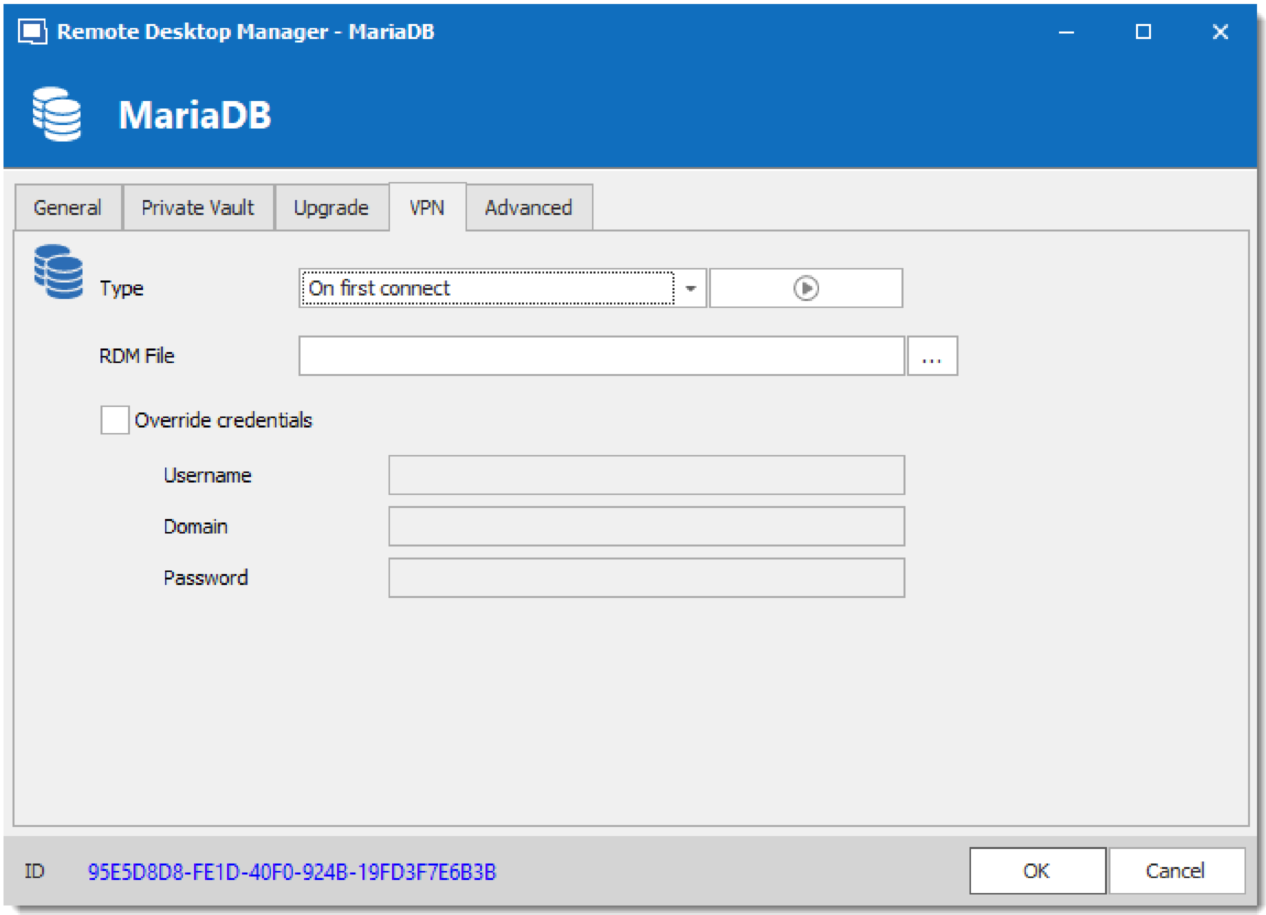
MariaDB - Upgrade Tab

OPTION	DESCRIPTION
Test Host	Test the connection with the Host (server name) to validate if the proper information has been provided.
Create Schema	Create the schema (database) on the MariaDB server to use Remote Desktop Manager.
Update Schema	Update the schema (database) on the MariaDB server, if required, to use Remote Desktop Manager.
Test Schema	Test the connection with the schema (database) to validate if the proper information has been provided.

OPTION	DESCRIPTION
Email Schema to Support	Send your schema (database) to the Devolutions Support team.
View Upgrade Script	Prompts a window to provide information about the Upgrade Script.

VPN

Open a VPN to access your data prior to connecting to your **MariaDB**.



Remote Desktop Manager - MariaDB

MariaDB

Type: On first connect

RDM File

□ Override credentials

Username

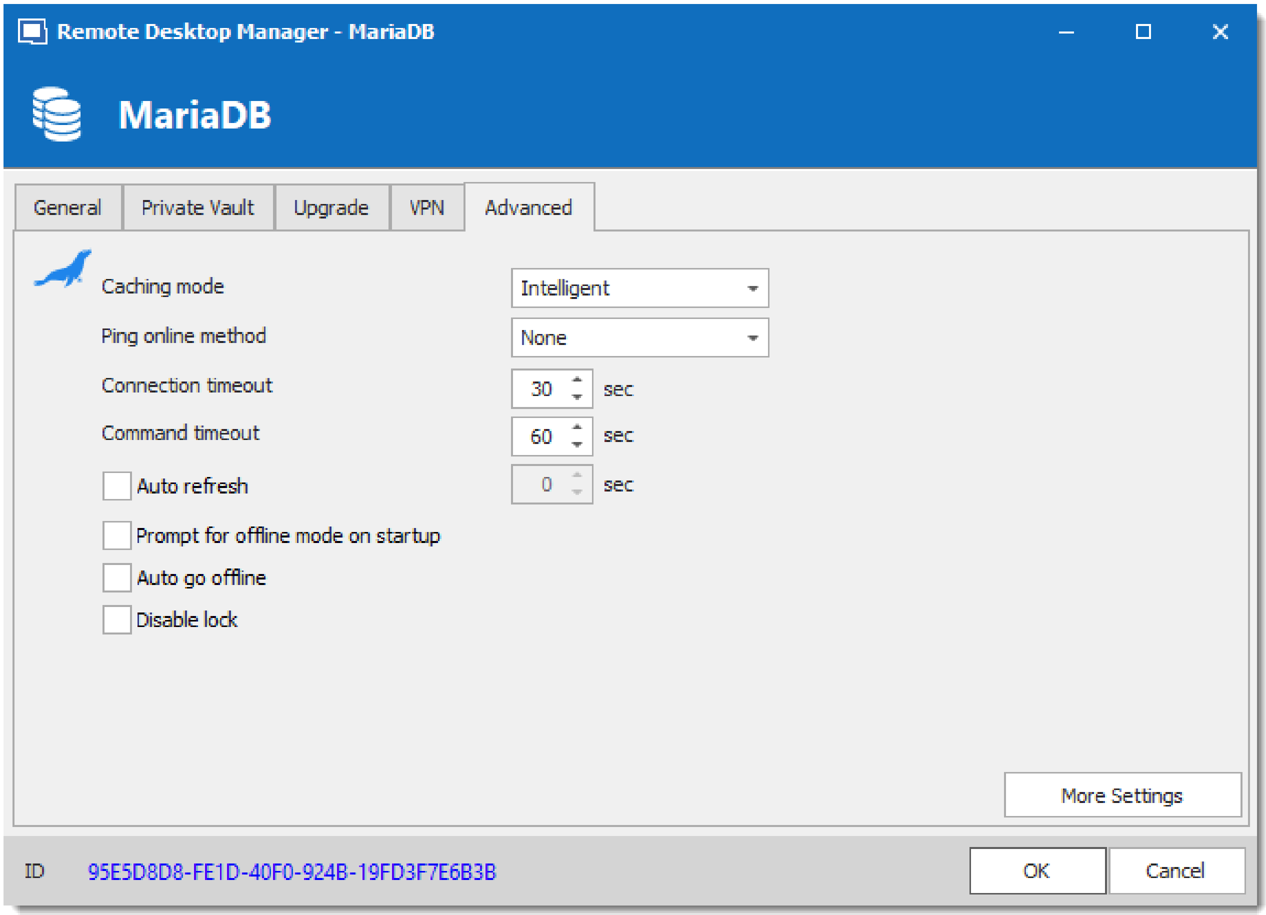
Domain

Password

ID 95E5D8D8-FE1D-40F0-924B-19FD3F7E6B3B

MariaDB - VPN

ADVANCED



Remote Desktop Manager - MariaDB

MariaDB

General | Private Vault | Upgrade | VPN | Advanced

Caching mode: Intelligent

Ping online method: None

Connection timeout: 30 sec

Command timeout: 60 sec

□ Auto refresh 0 sec

□ Prompt for offline mode on startup

□ Auto go offline

□ Disable lock

ID 95E5D8D8-FE1D-40F0-924B-19FD3F7E6B3B

MariaDB - Advanced

OPTION	DESCRIPTION
Caching mode	Determine how the entries will be reloaded in the data source. See Caching topic for more information.
Ping online method	Indicate the prefer ping online. Select between: • **None** • **Port Scan**
Connection timeout	Waiting time before a connection timeout.

OPTION	DESCRIPTION
Command timeout	Waiting time before a command timeout.
Auto refresh	Set the interval for the automatic refresh.
Prompt for offline mode on startup	Every time you will connect to your data source, you will be prompted to use the data source in offline mode.
Auto go offline	If the ping online method doesn’t work it will automatically go offline.
Disable lock	Disable the option to lock the data source directly. You can still lock the application but you won't be prompted for the database password if this option is disabled.
More Settings	Directly edit the connection string values.

5.4.1.4 Microsoft SQL Azure

DESCRIPTION

With the Microsoft SQL Azure data source, Remote Desktop Manager uses the Microsoft cloud platform to save and manage entries.

The following features are also supported:

- **Always on availability group**
- **Clustering**
- **Log shipping**
- **Database mirroring**

MINIMUM REQUIREMENT FOR AZURE SQL DATABASE FOR RDM

Microsoft SQL Azure offers different service tier in their purchase model for DTUS.

We recommend at minimum a Standard tier package S0 for 5 users and more.

Visit their website for more information

HIGHLIGHTS

- Supports User Management with a superior security model.
- Supports Offline mode for when the server or network is unavailable.
- Supports entry logs and attachments.
- Used to create an online database. Get more information on Microsoft SQL Azure.

For Azure AD authentication, download and install the “Microsoft Active Directory Authentication Library for Microsoft SQL Server“.

Please download it here : https://www.microsoft.com/en-us/download/details.aspx?id=48742.

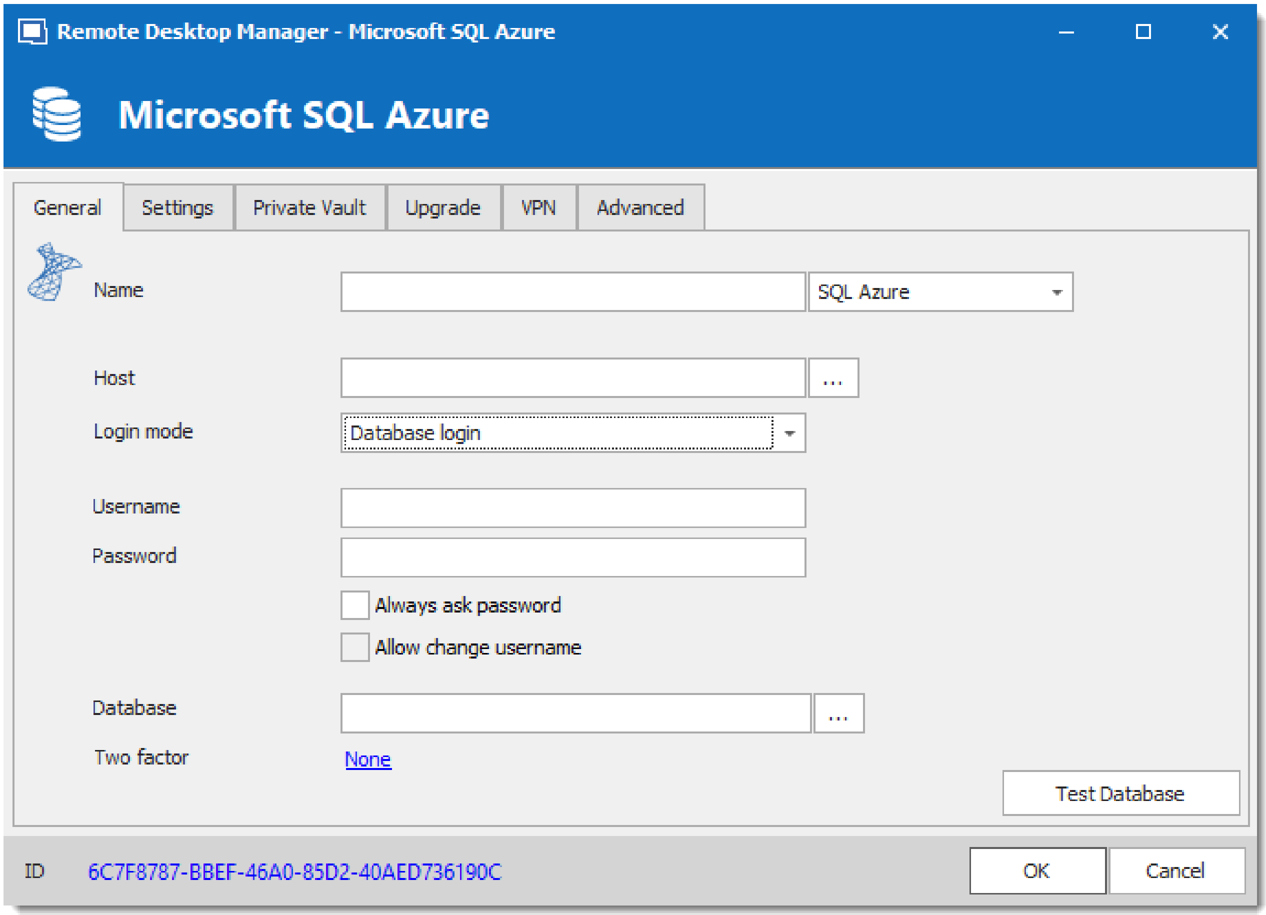
A proper database backup strategy should be implemented to prevent possible data loss. Please refer to the Backups topic.

CONFIGURATION

Consult the Configure SQL Azure topic for more information on the configuration.

SETTINGS

GENERAL



SQL Azure

Login mode: Database login

□ Always ask password

□ Allow change username

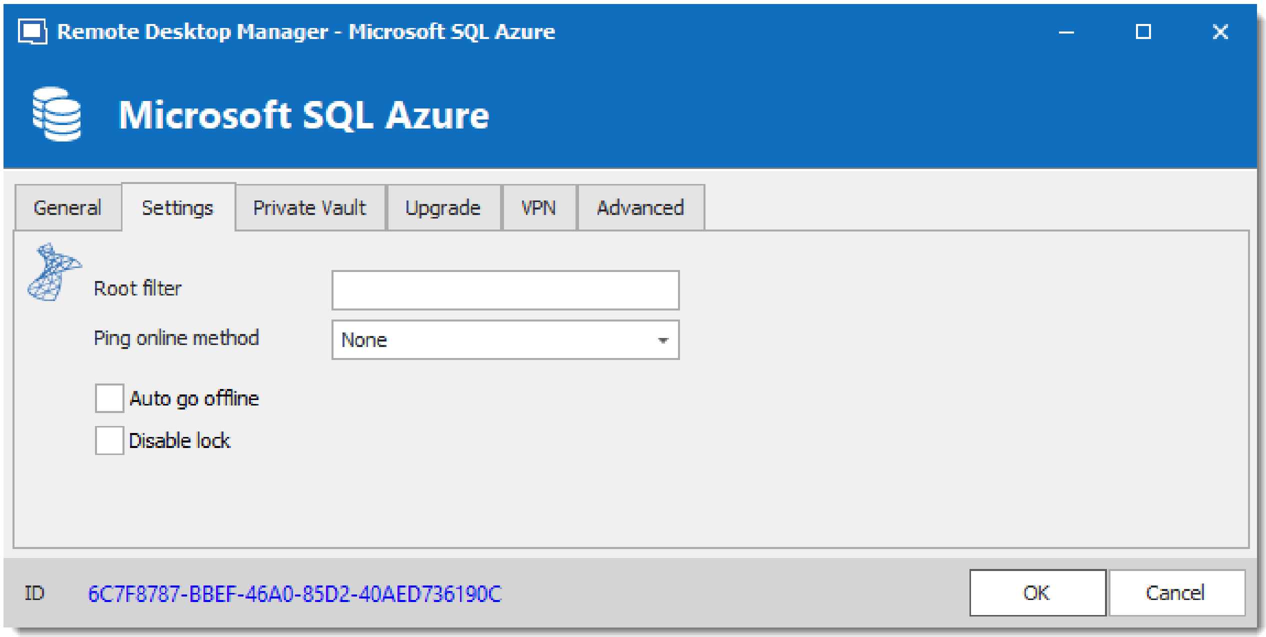
Two factor: None

ID 6C7F8787-BBEF-46A0-85D2-40AED736190C

Microsoft SQL Azure - General

OPTION	DESCRIPTION
Name	Enter a name for the data source.
Host	Enter the server hostname or IP address.
Login mode	Specify the authentication mode to use. Select between: • **Database login** • **Custom login** • **Active Directory Password** • **Active Directory Integrated** • **Active Directory Interactive (with MFA support)**
Username	Enter the username to access the SQL Azure database.
Password	Enter the password to access the SQL Azure database.
Always ask password	Prompt for the password when a user connects to the data source.
Allow change username	Allow the username to be edited when connecting to the data source. (Only with Always ask password enabled)
Database	Enter the name of the SQL Azure database.
Two factor	Enable the 2-Factor Authentication.
Test Database	Test the connection with the database to validate if the proper information has been provided.

SETTINGS



Root filter

Ping online method: None

□ Auto go offline

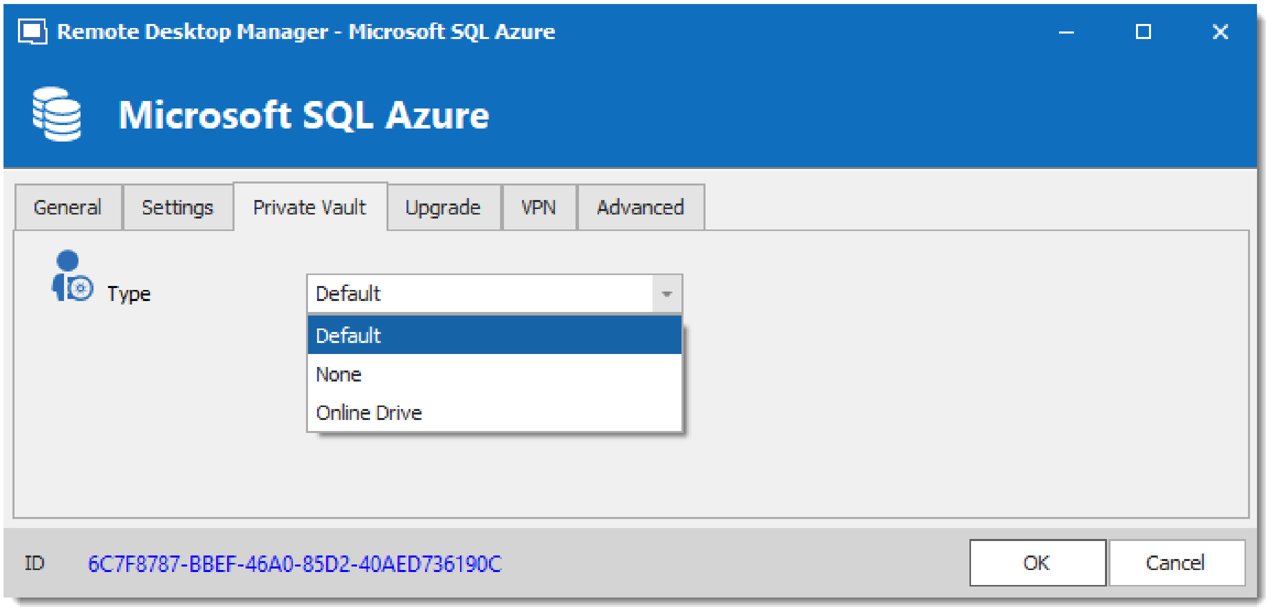
□ Disable lock

ID 6C7F8787-BBEF-46A0-85D2-40AED736190C

Microsoft SQL Azure - Settings Tab

OPTION	DESCRIPTION
Root filter	Enter the name of a root level folder to display only the entries contained in that folder.
Ping online method	Indicate the preferred ping online method. Select between: • **None** • **Ping** • **Port Scan**
Auto go offline	Use the data source in offline mode when the ping method does not respond.
Disable lock	Disable the option to lock the data source directly. You can still lock the application but you won't be prompted for the data source password if this option is disabled.

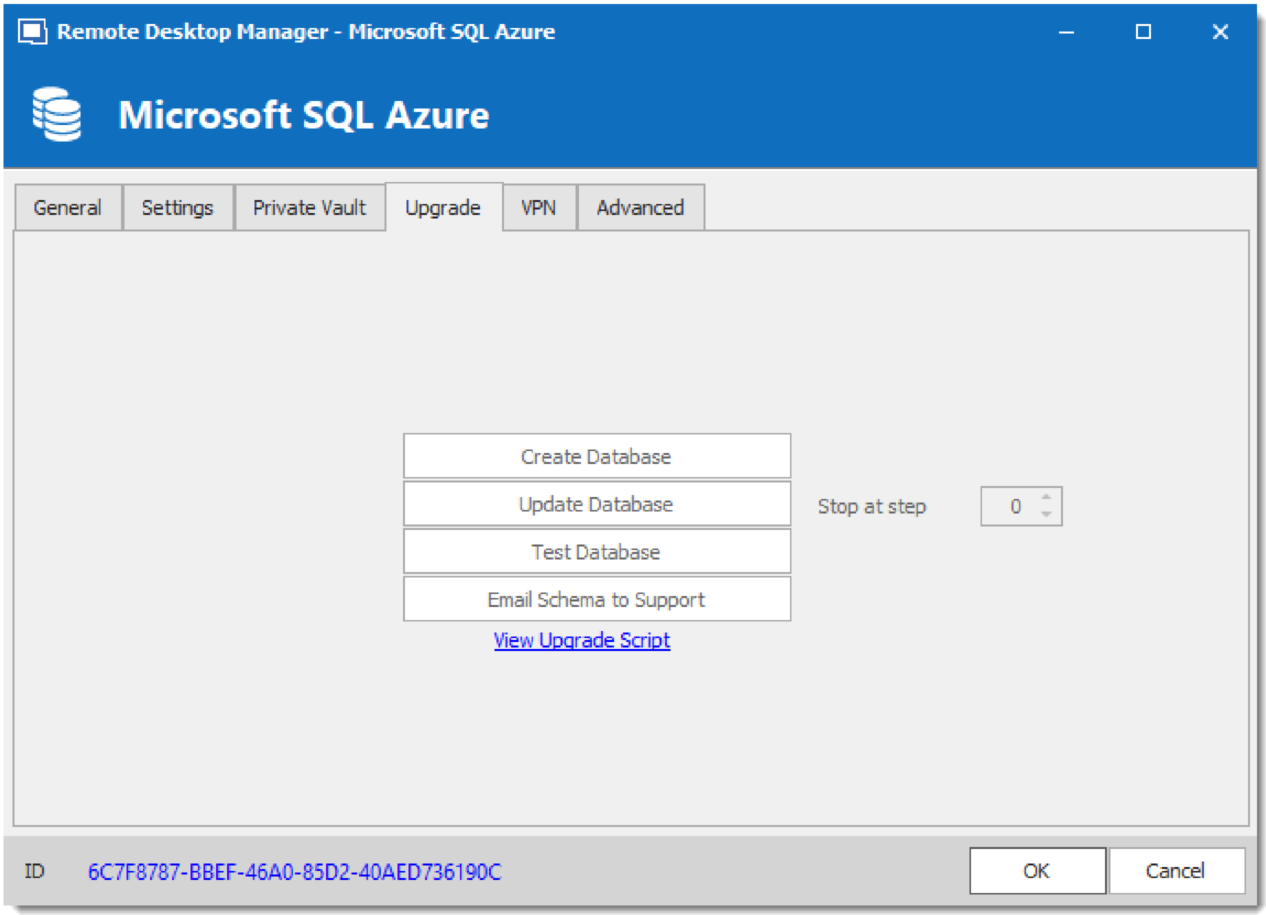
PRIVATE VAULT



Microsoft SQL Azure - Private Vault Tab

OPTION	DESCRIPTION
Type	Select the type of Private Vault to use. Select between: • **Default**: use the default Private Vault, which is stored in the database. • **None**: disable the Private Vault for all users. • **Online Drive**: use a Devolutions Online Drive file (*.dod) as a Private Vault.

UPGRADE



Stop at step 0

ID 6C7F8787-BBEF-46A0-85D2-40AED736190C

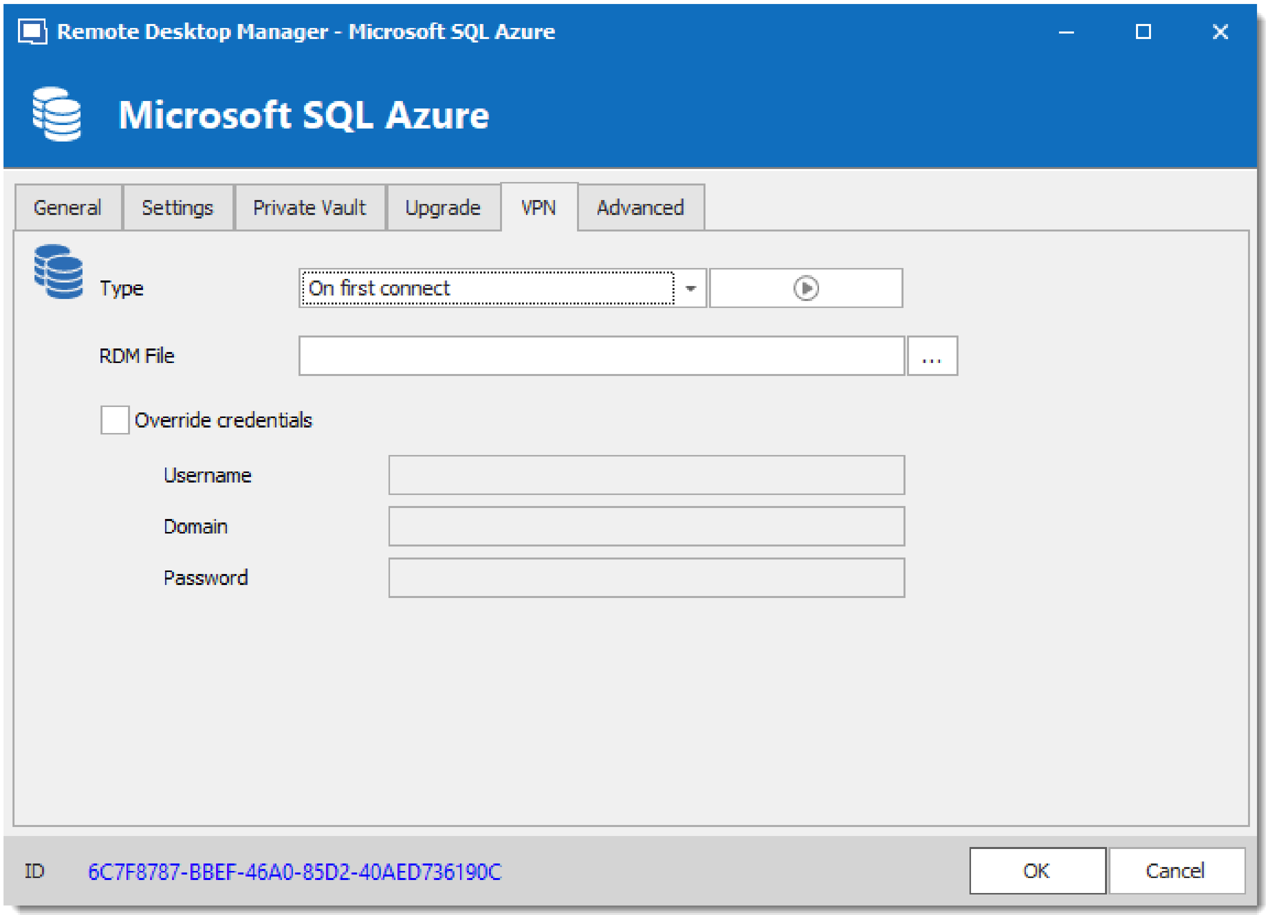
Microsoft SQL Azure - Upgrade Tab

OPTION	DESCRIPTION
Create Database	Create the database on the SQL server to use Remote Desktop Manager.
Update Database	Update the database on the SQL server, if required to use Remote Desktop Manager.
Test Database	Test the connection with the database to validate if the proper information has been provided.
Email Schema to Support	Send your schema to the Devolutions Support team.

OPTION	DESCRIPTION
View Upgrade Script	Prompts a window to provide information about the Upgrade Script.

VPN

Open a VPN to access your data prior to connecting to your **Microsoft SQL Azure** database.



Type: On first connect

RDM File:

□ Override credentials

Username:

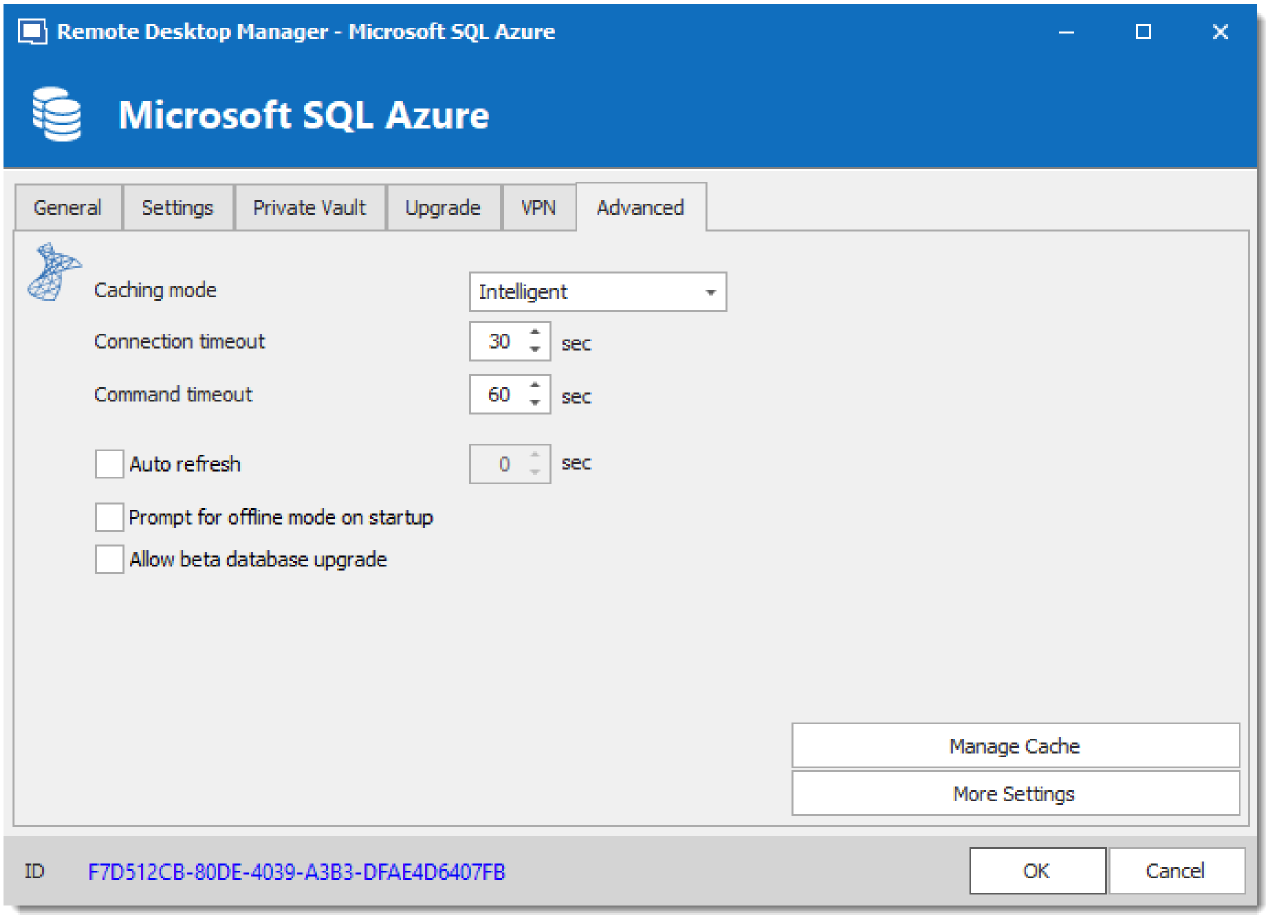
Domain:

Password:

ID 6C7F8787-BBEF-46A0-85D2-40AED736190C

Microsoft SQL Azure - VPN

ADVANCED



Caching mode: Intelligent

Connection timeout: 30 sec

Command timeout: 60 sec

□ Auto refresh: 0 sec

□ Prompt for offline mode on startup

□ Allow beta database upgrade

ID F7D512CB-80DE-4039-A3B3-DFAE4D6407FB

Microsoft SQL Azure - Advanced Tab

OPTION	DESCRIPTION
Caching mode	Determines how the entries will be reloaded in the data source. For more information, please consult the Caching topic.
Connection timeout	Set the delay of the connection timeout.
Command timeout	Set the delay of the command timeout.
Auto refresh	Set the interval for the automatic refresh.
Prompt for offline mode on	Ask to use the data source in offline mode when a user connects to the data source.

OPTION	DESCRIPTION
startup	
Allow beta database upgrade	Allow beta upgrade of the database (when using a beta version of Remote Desktop Manager).
Manage Cache	Manage the data source cache. On large data sources caching is a must and will increase performance significantly. For more information, please consult the Manage Cache topic.
More Settings	Edit the connection string values directly.

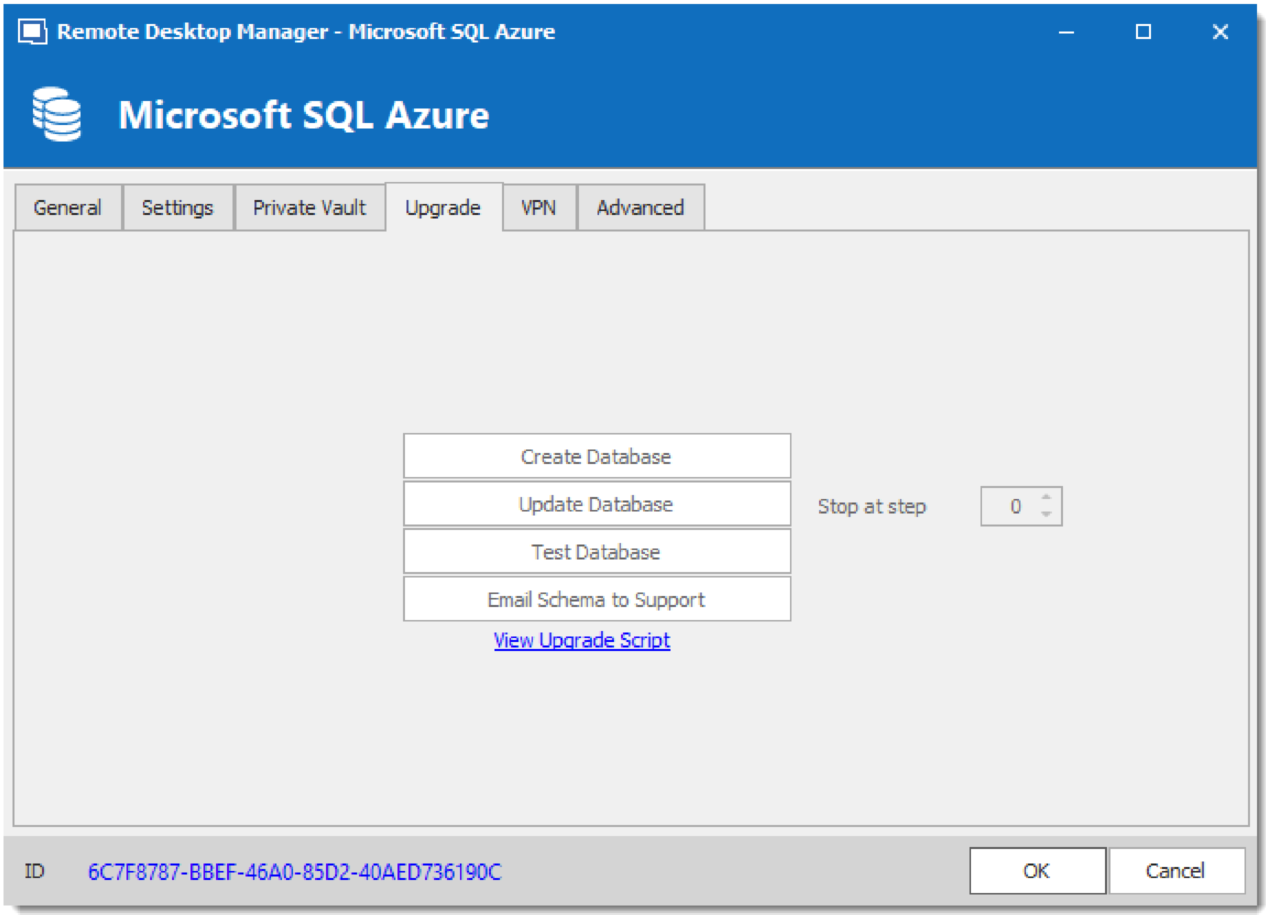
5.4.1.4.1 Configure SQL Azure

DESCRIPTION

1. Make sure that you have a valid **Microsoft SQL Azure** subscription to be able to create your database.

2. Follow the steps in the Create a data source topic. On Step 4, before testing server or otherwise verifying the connection, continue with the steps below.

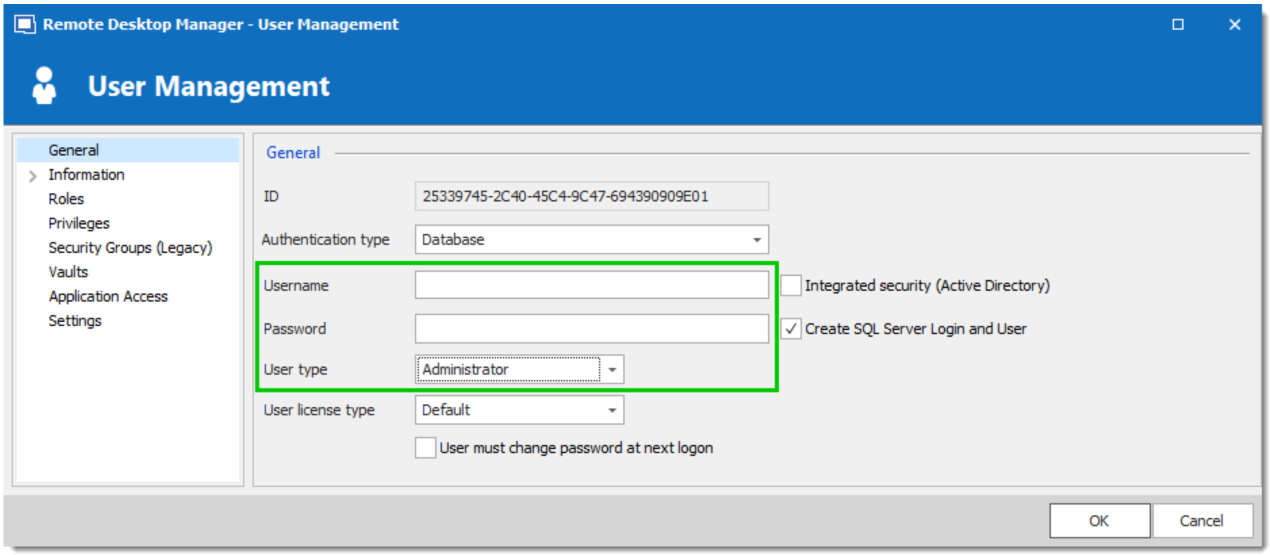
3. Select the **Upgrade** tab and click the **Create Database** button. If the database is already created on the Microsoft SQL Azure Server, click the **Update Database** button to add the appropriate tables to the database.



Upgrade Tab

4. Once the database is created, create an administrator account for the database via the Administration - User Management menu.

If the database is created using a system administrator (example: SA), we recommend to keep this user only for the database creation and the database upgrade. A Remote Desktop Manager administrator account must be created first. Then, regular users are created with this administrator account.



General

ID 25339745-2C40-45C4-9C47-694390909E01

Authentication type: Database

Username

Password

User type: Administrator

User license type: Default

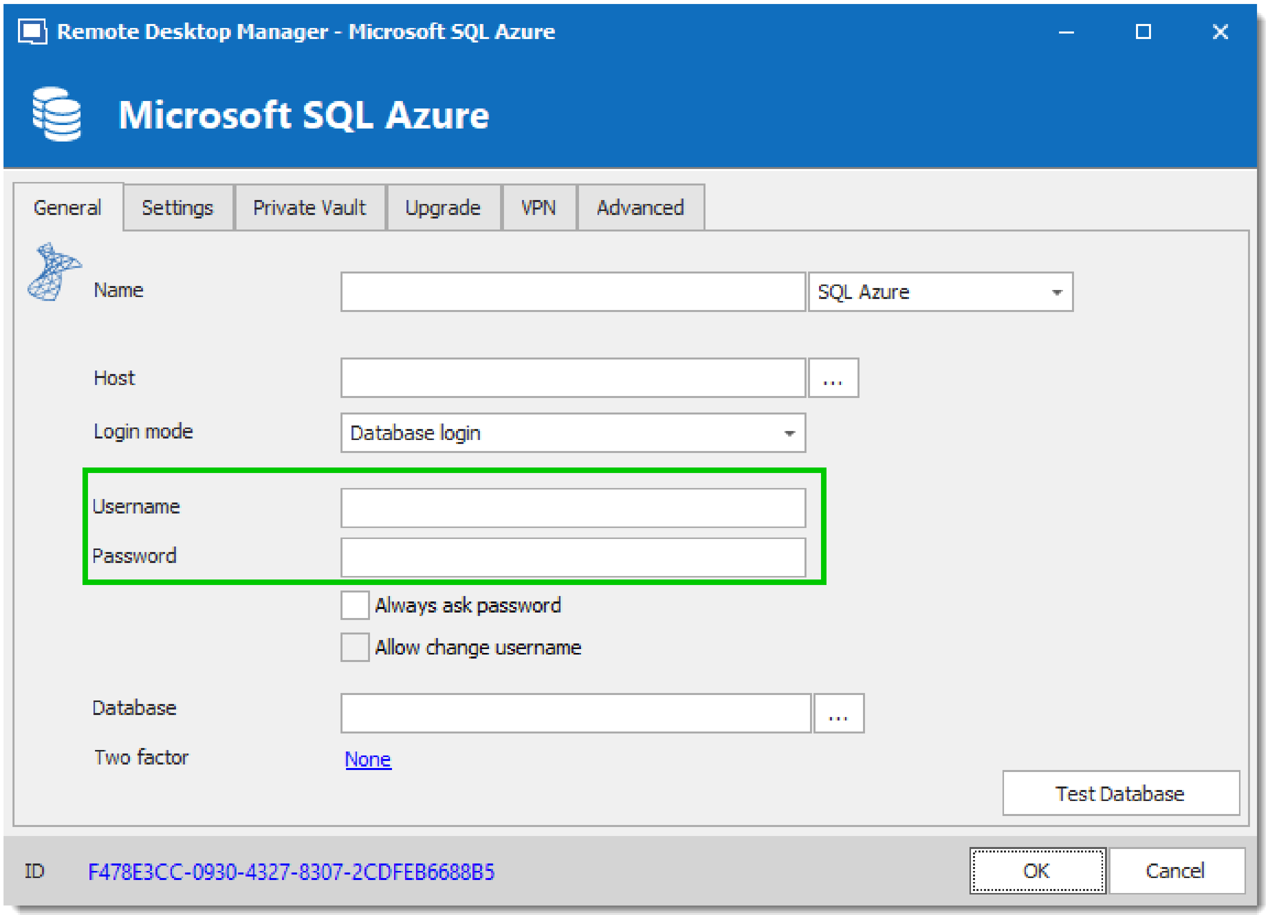
□ User must change password at next logon

□ Integrated security (Active Directory)

☑ Create SQL Server Login and User

Create a Remote Desktop Manager Administrator Account

5. Connect on the Microsoft SQL Azure database with the Remote Desktop Manager administrator account. To do so, edit the data source used to create the database and change the login information for the administrator account that you have created.



Name: SQL Azure

Host

Login mode: Database login

Username

Password

□ Always ask password

□ Allow change username

Database

Two factor: None

ID F478E3CC-0930-4327-8307-2CDFEB6688B5

Connection to the Database with the RDM Administrator Account

The Microsoft SQL Azure data source is now correctly configured.

5.4.1.4.2 Configure Active Directory Password

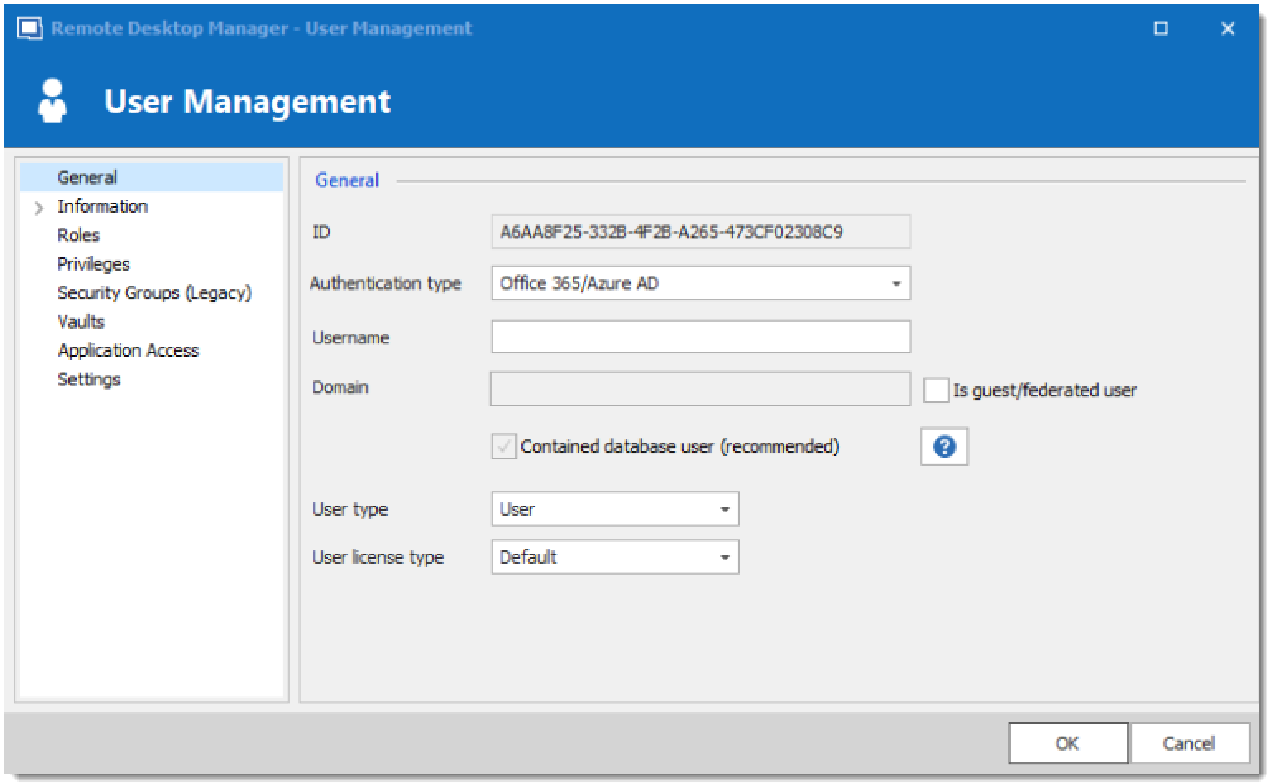
DESCRIPTION

For Azure AD authentication, download and install the “Microsoft Active Directory Authentication Library for Microsoft SQL Server“.

Please download it here : https://www.microsoft.com/en-us/download/details.aspx?id=48742.

From the **Ribbon**, navigate to ***Administration – Users***, and add a new user.

Select "Office365/Azure AD" as the authentication type;

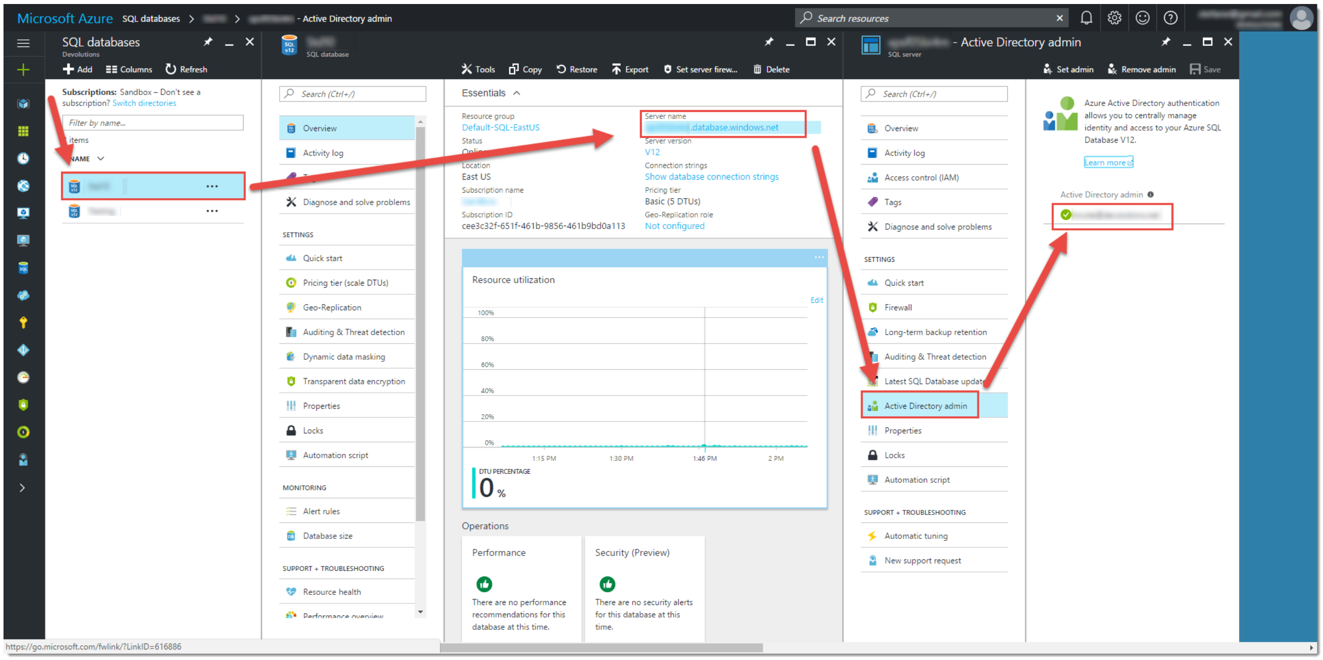


ID: A6AA8F25-332B-4F2B-A265-473CF02308C9
Authentication type: Office 365/Azure AD
Username:
Domain:
□ Is guest/federated user
☑ Contained database user (recommended)
User type: User
User license type: Default

Set the Authentication type to Office365/Azure AD

Note: When creating SQL Active Directory users, you must be logged in with an Azure Active Directory user. Otherwise it will fail and you will be notified of the error.

Use the servers defined Azure AD Admin to create your other users (to start). Once you've created other admin users, you can use them to create more users.



Resource group
Default-SQL-EastUS
Status
Online
Location
East US
Subscription name
[redacted]
Subscription ID
cee3c32f-651f-461b-9856-461b9bd0a113
Server name
[redacted].database.windows.net
Server version
V12
Connection strings
Show database connection strings
Pricing tier
Basic (5 DTUs)
Geo-Replication role
Not configured

There are no performance recommendations for this database at this time.

There are no security alerts for this database at this time.

Azure Active Directory authentication allows you to centrally manage identity and access to your Azure SQL Database V12.

Learn more

Active Directory admin
[redacted]

https://go.microsoft.com/fwlink/?LinkID=616886

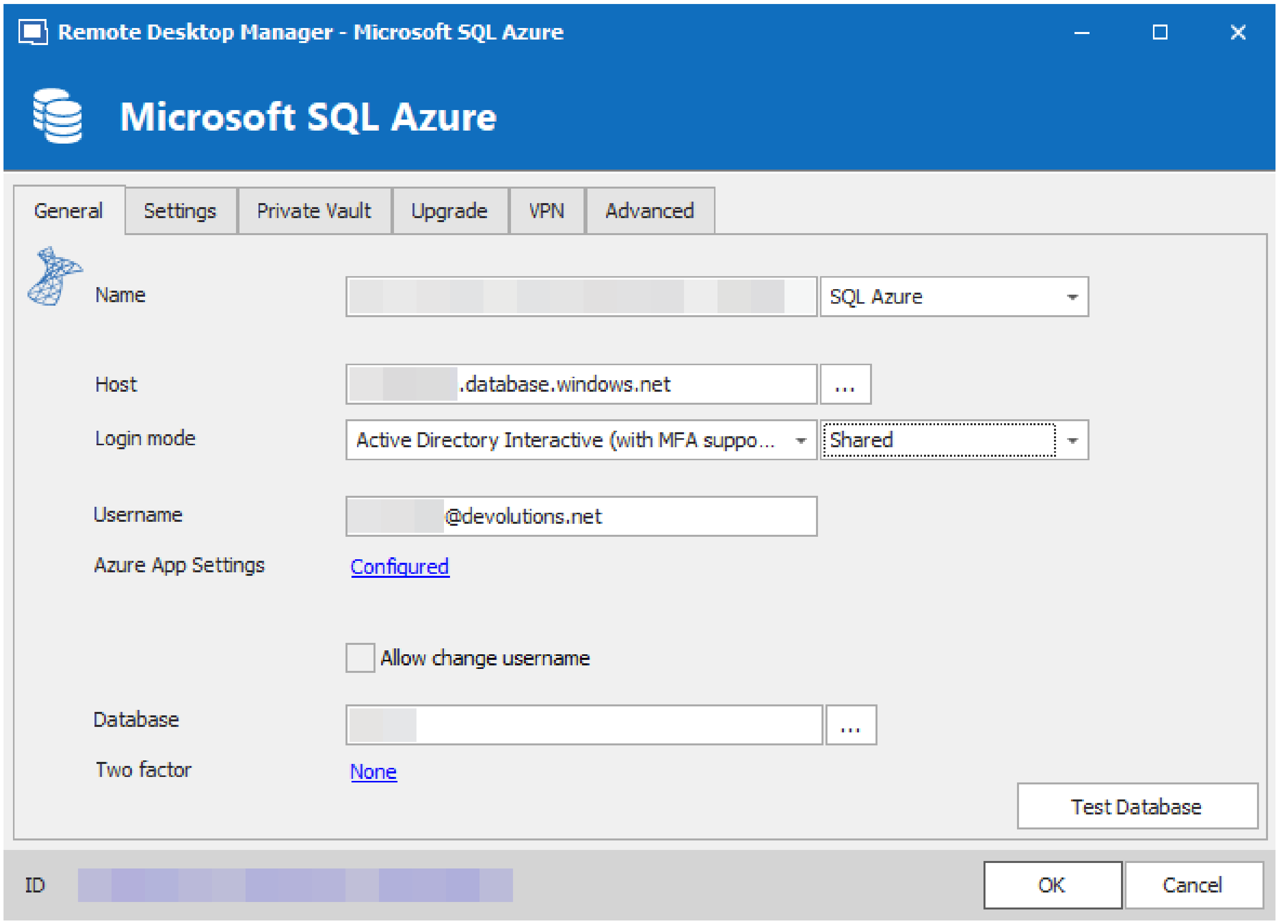
Azure AD Portal

5.4.1.4.3 Configure Active Directory Interactive (with MFA Support)

DESCRIPTION

Active Directory Interactive (with MFA Support) allow you to authenticate on your Microsoft SQL Azure data source using your Office365 account + MFA.

SETTINGS



Remote Desktop Manager - Microsoft SQL Azure

Microsoft SQL Azure

Name [redacted] SQL Azure

Host [redacted].database.windows.net ...

Login mode Active Directory Interactive (with MFA suppo... Shared

Username [redacted]@devolutions.net

Azure App Settings Configured

☐ Allow change username

Database [redacted] ...

Two factor None

ID [redacted]

Azure with MFA

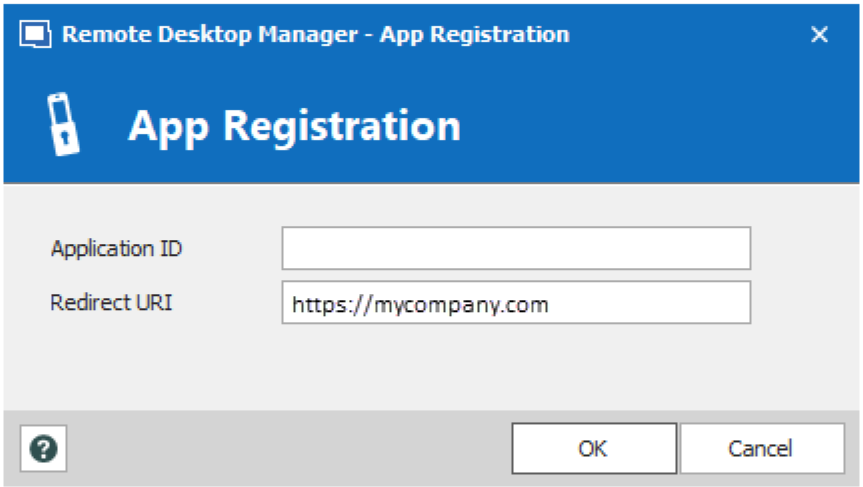
1. Select **Active Directory Interactive (with MFA Support)** from the **Login mode** dropdown menu.

2. If you have several Microsoft SQL Azure data sources, you would need to decide if you want to authenticate on each of them at the first connection or only once for all of them.

OPTION	DESCRIPTION
Default	Prompt to authenticate on each data source.
Shared	Prompt to authenticate on the first data source and will use the same login on the other data sources. Easier to switch from one data source to another if you have several of them.

3. Enter the complete email address to authenticate in the **Username** field.

4. Click on **Configure** to set the Azure App Settings.



Application ID

Redirect URI https://mycompany.com

App Registration

5. Configure the database to authenticate in the **Database** field.

5.4.1.4.3.1 Configure Azure Active Directory App Registration

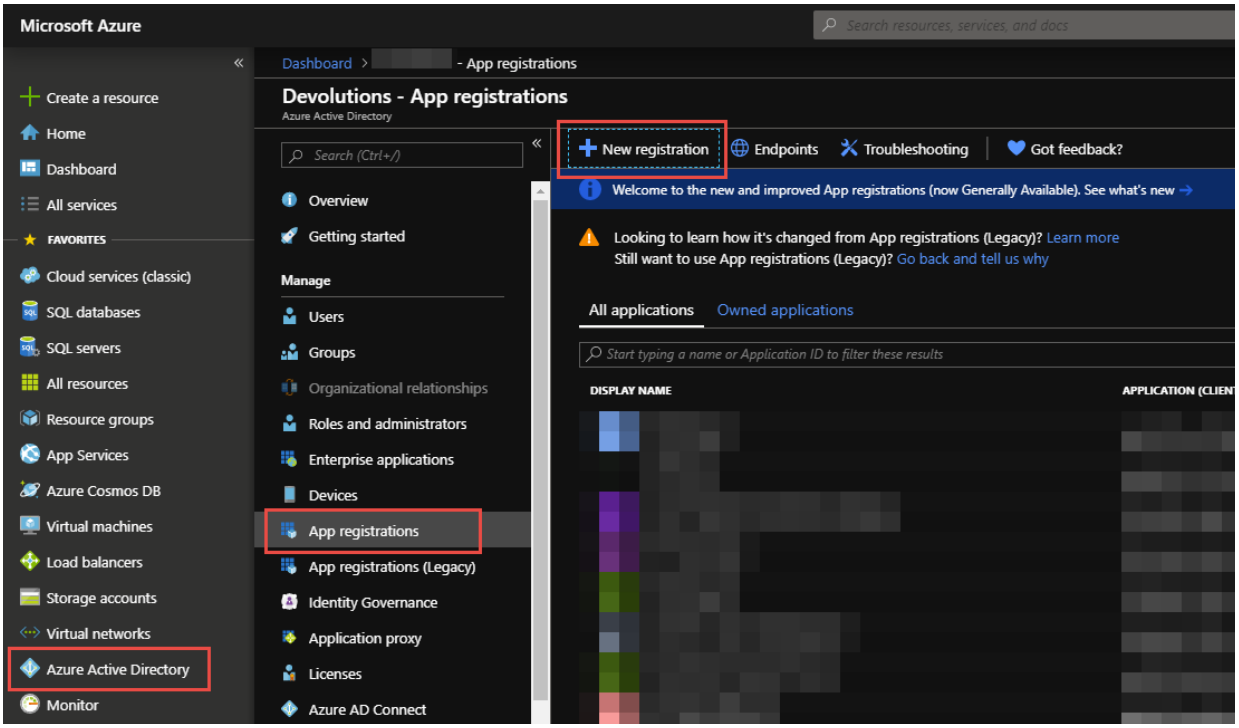
DESCRIPTION

To be able to use the **Active Directory Interactive (with MFA Support)** authentication method in Remote Desktop Manager, a new app needs to be registered in the Microsoft SQL Azure console (Active Directory admin) with the appropriate API permissions.

SETTINGS

1. Login on Azure Portal.

2. In the **Azure Active Directory** section, select **App registrations** and then, **New registration**.



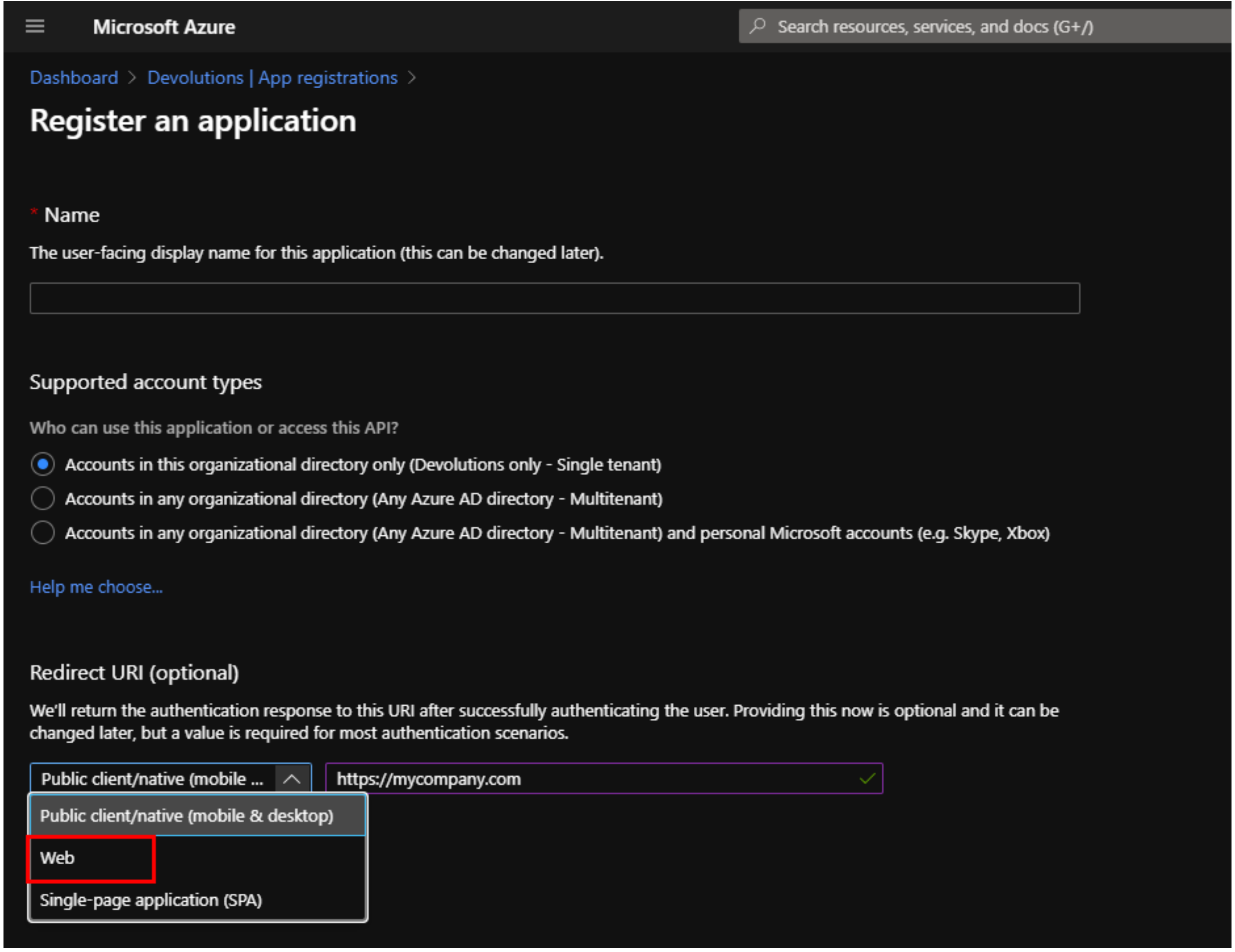
Welcome to the new and improved App registrations (now Generally Available). See what's new →

Looking to learn how it's changed from App registrations (Legacy)? Learn more
Still want to use App registrations (Legacy)? Go back and tell us why

[redacted]

App Registration

3. Configure the **Name**, **Supported account types** and **Redirect URL** as indicated below.



Microsoft Azure
Search resources, services, and docs (G+/)
Dashboard > Devolutions | App registrations >

Register an application

* Name

The user-facing display name for this application (this can be changed later).

Supported account types

Who can use this application or access this API?

- ● Accounts in this organizational directory only (Devolutions only - Single tenant)
- ○ Accounts in any organizational directory (Any Azure AD directory - Multitenant)
- ○ Accounts in any organizational directory (Any Azure AD directory - Multitenant) and personal Microsoft accounts (e.g. Skype, Xbox)

Redirect URI (optional)

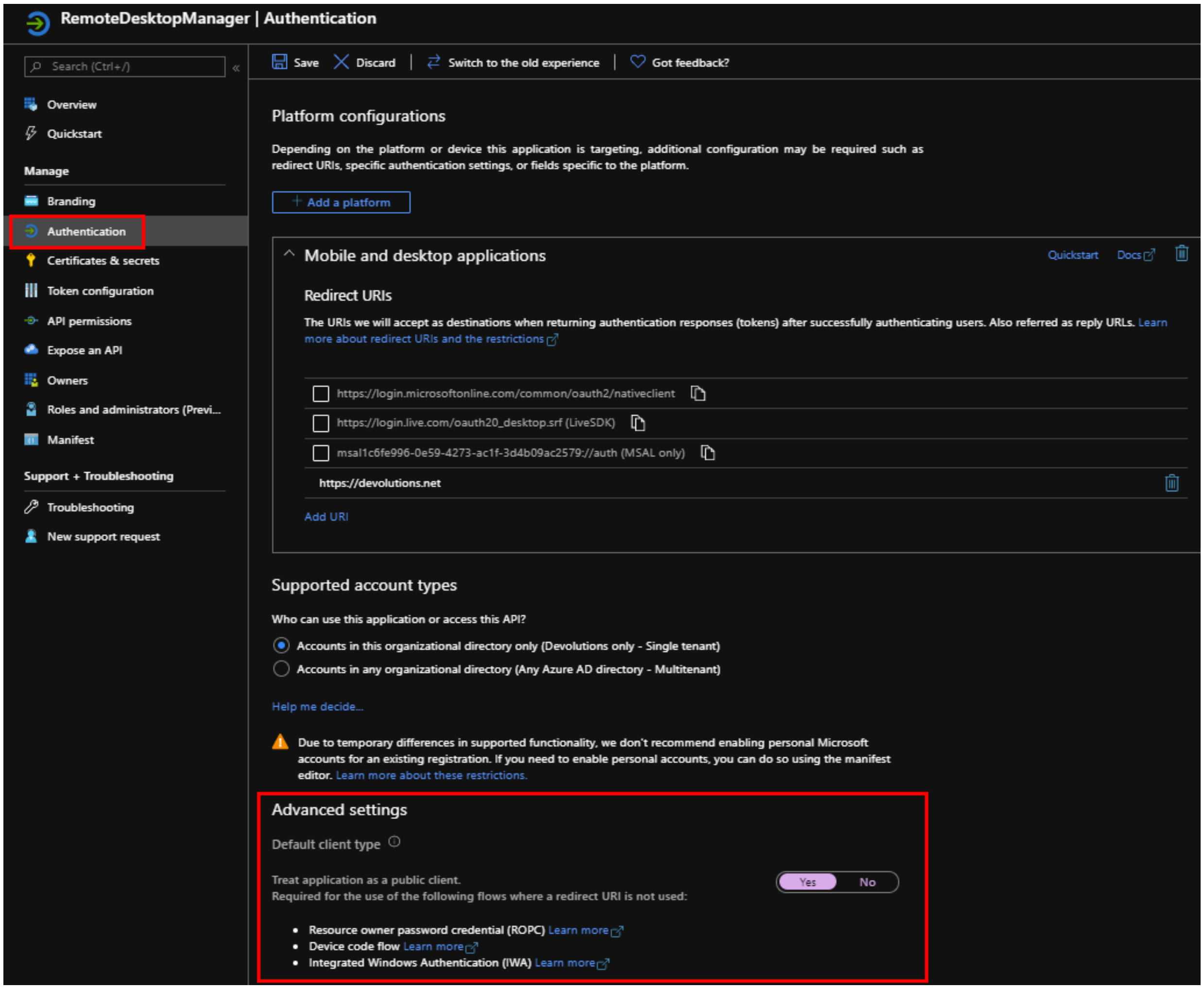
We'll return the authentication response to this URI after successfully authenticating the user. Providing this now is optional and it can be changed later, but a value is required for most authentication scenarios.

Public client/native (mobile ... https://mycompany.com

Public client/native (mobile & desktop)
Web
Single-page application (SPA)

Supported Account Types

4. **Optional step**: Click on the ***Authentication*** section and switch to ***Yes***, if you desire the ***Integrated Windows Authentification (IWA)*** option.



Platform configurations

Depending on the platform or device this application is targeting, additional configuration may be required such as redirect URIs, specific authentication settings, or fields specific to the platform.

Mobile and desktop applications

Redirect URIs

The URIs we will accept as destinations when returning authentication responses (tokens) after successfully authenticating users. Also referred as reply URLs. Learn more about redirect URIs and the restrictions

- □ https://login.microsoftonline.com/common/oauth2/nativeclient
- □ https://login.live.com/oauth20_desktop.srf (LiveSDK)
- □ msal1c6fe996-0e59-4273-ac1f-3d4b09ac2579://auth (MSAL only)

https://devolutions.net

Supported account types

Who can use this application or access this API?

● Accounts in this organizational directory only (Devolutions only - Single tenant)

○ Accounts in any organizational directory (Any Azure AD directory - Multitenant)

Help me decide...

Due to temporary differences in supported functionality, we don't recommend enabling personal Microsoft accounts for an existing registration. If you need to enable personal accounts, you can do so using the manifest editor. Learn more about these restrictions.

Advanced settings

Default client type

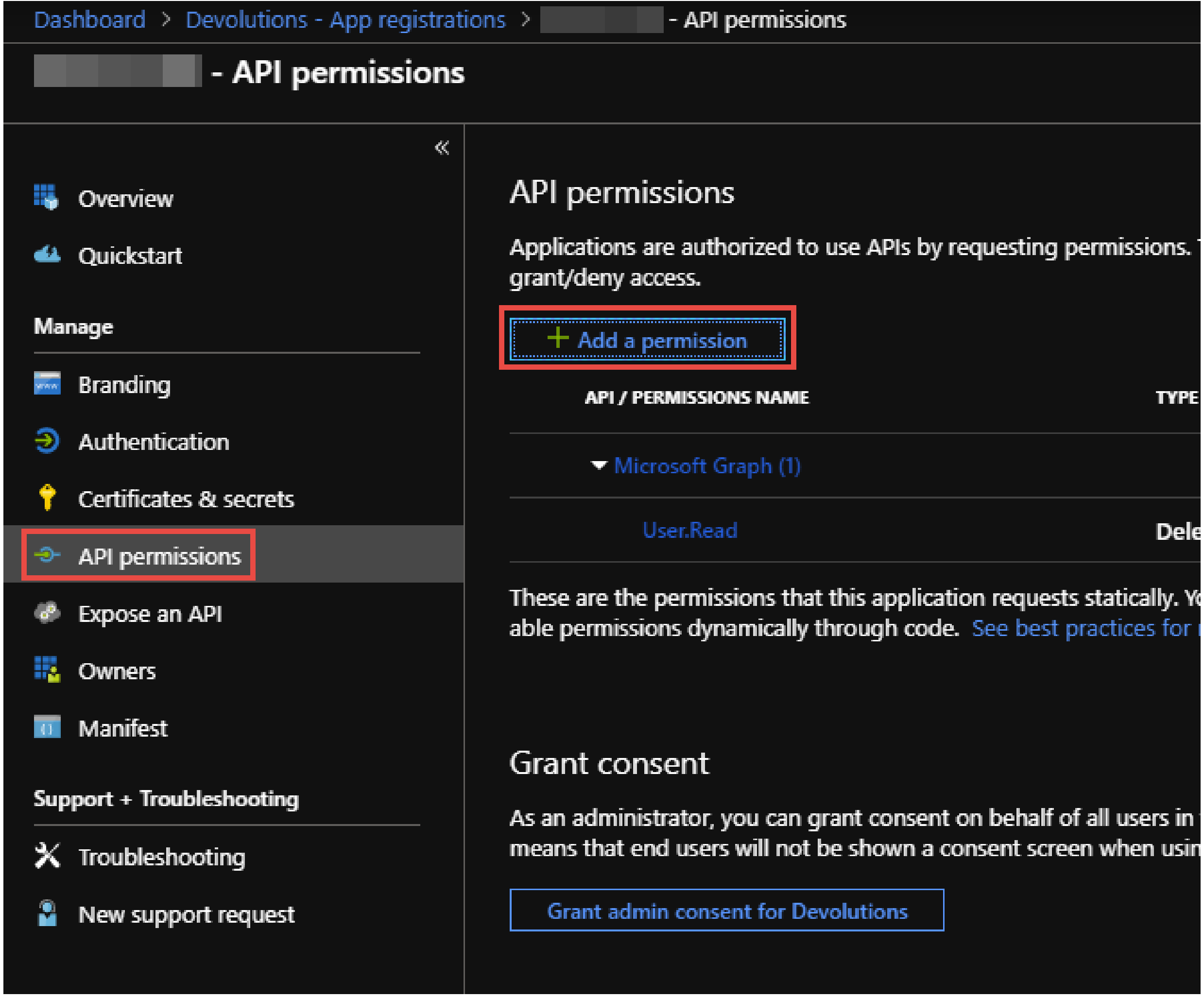
Treat application as a public client.
Required for the use of the following flows where a redirect URI is not used:

[✓ Yes] No

- Resource owner password credential (ROPC) Learn more
- Device code flow Learn more
- Integrated Windows Authentication (IWA) Learn more

Authentication

5. Click on the **API Permissions** section and configure it as indicated below.



API permissions

Applications are authorized to use APIs by requesting permissions. T
grant/deny access.

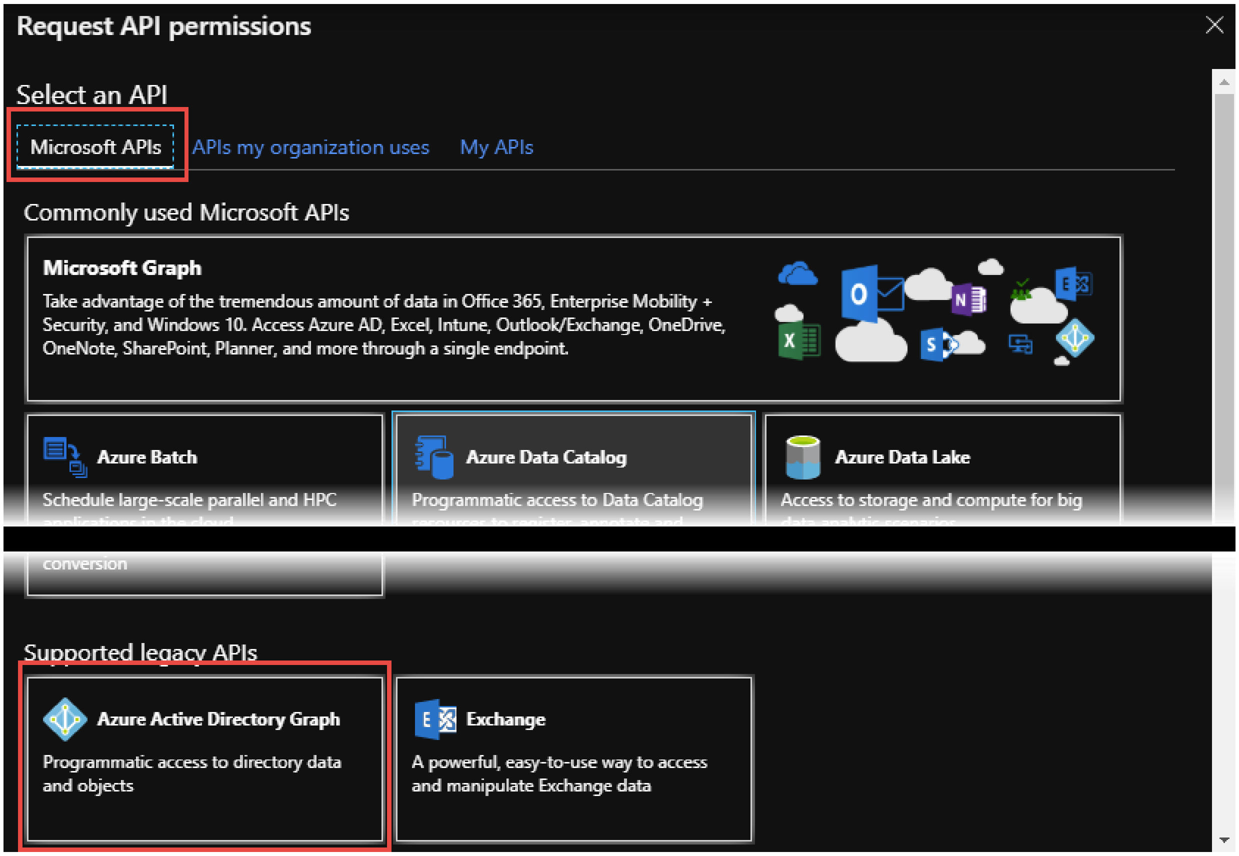
These are the permissions that this application requests statically. Yo
able permissions dynamically through code. See best practices for r

Grant consent

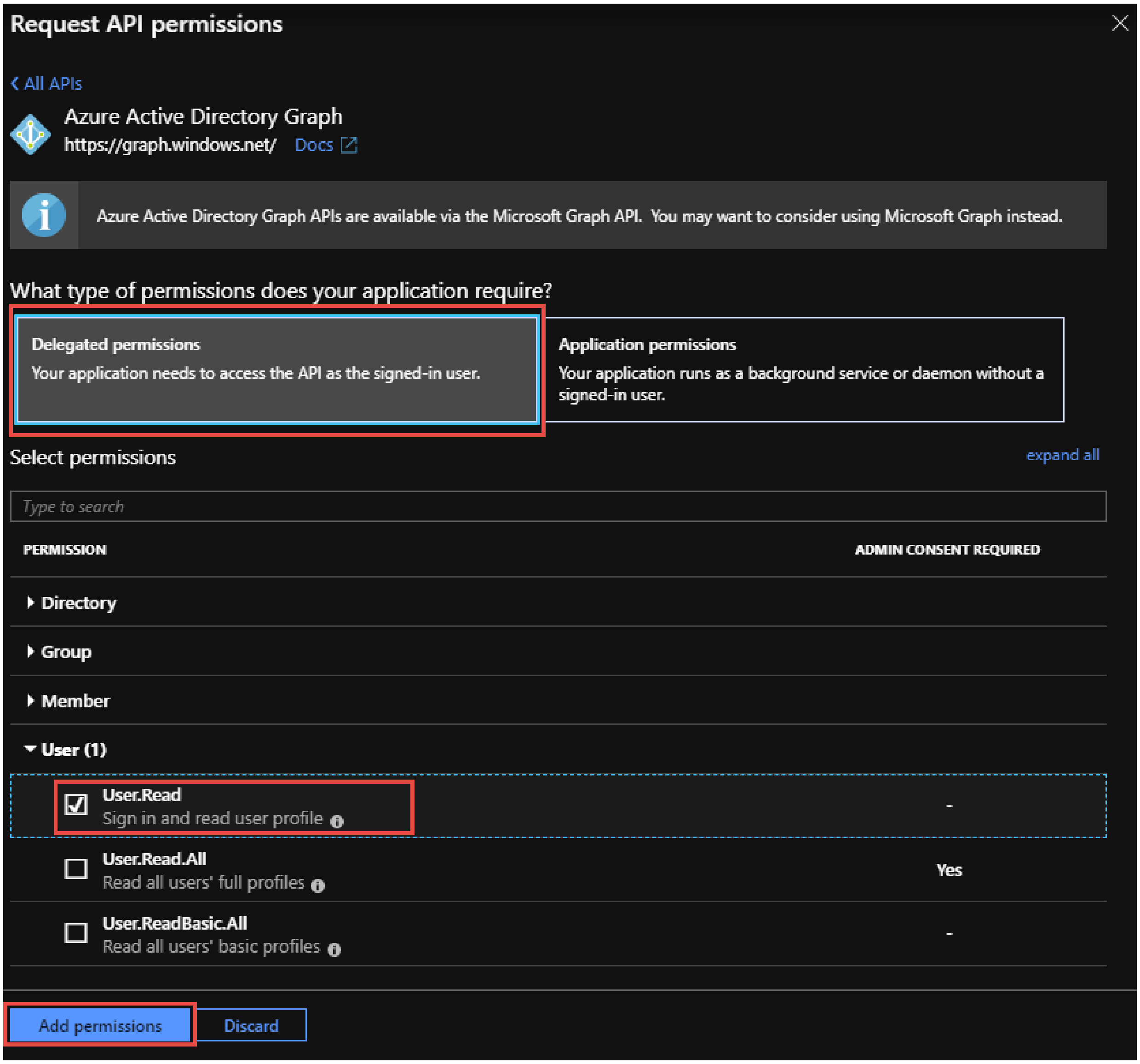
As an administrator, you can grant consent on behalf of all users in t
means that end users will not be shown a consent screen when usin

API Permissions

6. Select ***Azure Active Directory Graph – Delegated Permissions – User – User.Read*** *and click on* **Add Permissions**.


Request API permissions
Select an API
Microsoft APIs
APIs my organization uses
My APIs
Commonly used Microsoft APIs
Microsoft Graph
Take advantage of the tremendous amount of data in Office 365, Enterprise Mobility + Security, and Windows 10. Access Azure AD, Excel, Intune, Outlook/Exchange, OneDrive, OneNote, SharePoint, Planner, and more through a single endpoint.
Azure Batch
Schedule large-scale parallel and HPC
Azure Data Catalog
Programmatic access to Data Catalog
Azure Data Lake
Access to storage and compute for big
conversion
Supported legacy APIs
Azure Active Directory Graph
Programmatic access to directory data and objects
Exchange
A powerful, easy-to-use way to access and manipulate Exchange data

Azure Active Directory Graph



Request API permissions

‹ All APIs

Azure Active Directory Graph
https://graph.windows.net/ Docs

Azure Active Directory Graph APIs are available via the Microsoft Graph API. You may want to consider using Microsoft Graph instead.

What type of permissions does your application require?

Delegated permissions
Your application needs to access the API as the signed-in user.

Application permissions
Your application runs as a background service or daemon without a signed-in user.

Select permissions

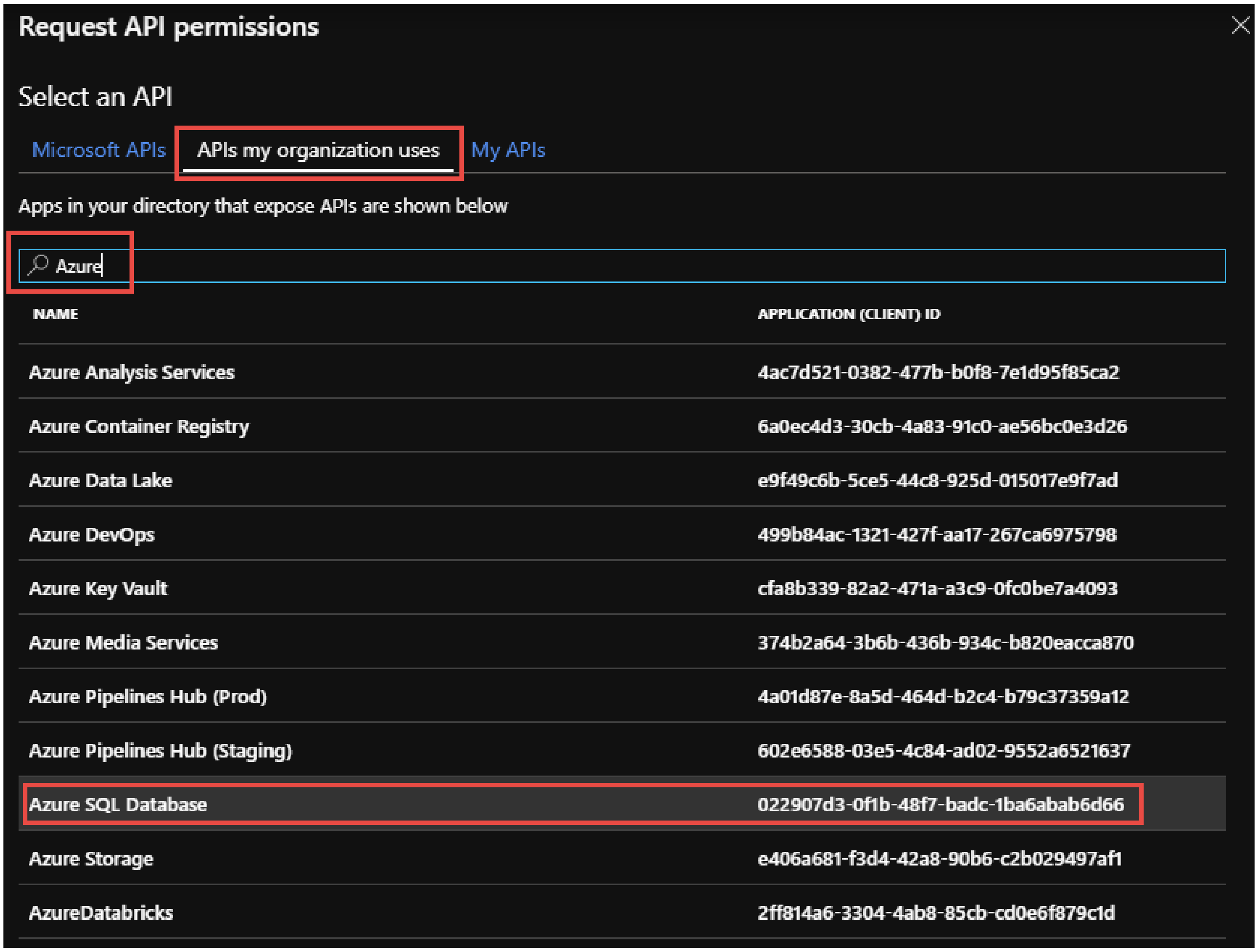
expand all

Type to search

PERMISSION	ADMIN CONSENT REQUIRED
▸ Directory	
▸ Group	
▸ Member	
▾ User (1)	
☑ User.Read Sign in and read user profile	-
□ User.Read.All Read all users' full profiles	Yes
□ User.ReadBasic.All Read all users' basic profiles	-

User.Read

7. We would need to add a second permission. To do so, select **APIs my organization uses**, then type **Azure** and select **Azure SQL Database**.



Request API permissions

Select an API

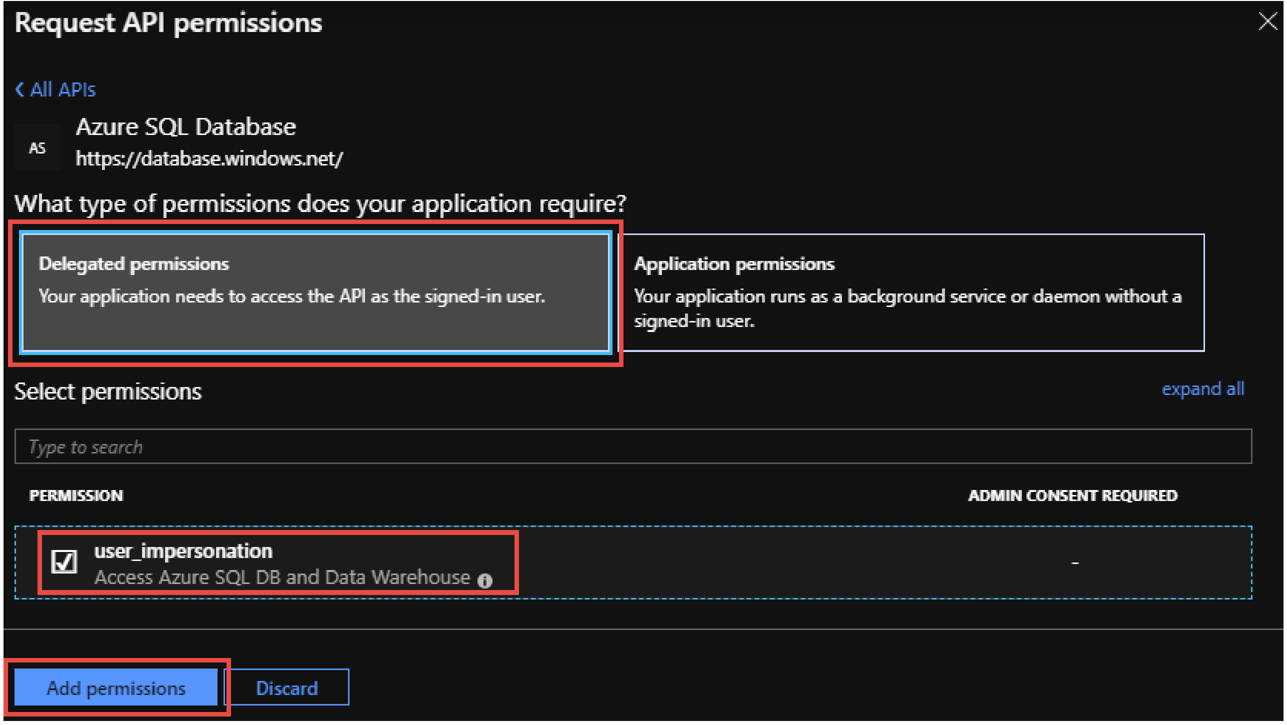
Apps in your directory that expose APIs are shown below

Azure

NAME	APPLICATION (CLIENT) ID
Azure Analysis Services	4ac7d521-0382-477b-b0f8-7e1d95f85ca2
Azure Container Registry	6a0ec4d3-30cb-4a83-91c0-ae56bc0e3d26
Azure Data Lake	e9f49c6b-5ce5-44c8-925d-015017e9f7ad
Azure DevOps	499b84ac-1321-427f-aa17-267ca6975798
Azure Key Vault	cfa8b339-82a2-471a-a3c9-0fc0be7a4093
Azure Media Services	374b2a64-3b6b-436b-934c-b820eacca870
Azure Pipelines Hub (Prod)	4a01d87e-8a5d-464d-b2c4-b79c37359a12
Azure Pipelines Hub (Staging)	602e6588-03e5-4c84-ad02-9552a6521637
Azure SQL Database	022907d3-0f1b-48f7-badc-1ba6abab6d66
Azure Storage	e406a681-f3d4-42a8-90b6-c2b029497af1
AzureDatabricks	2ff814a6-3304-4ab8-85cb-cd0e6f879c1d

APIs my organization uses

8. Select ***Delegated permissions – user_impersonation*** and click **Add permissions**.



Azure SQL Database
https://database.windows.net/

What type of permissions does your application require?

Delegated permissions
Your application needs to access the API as the signed-in user.

Application permissions
Your application runs as a background service or daemon without a signed-in user.

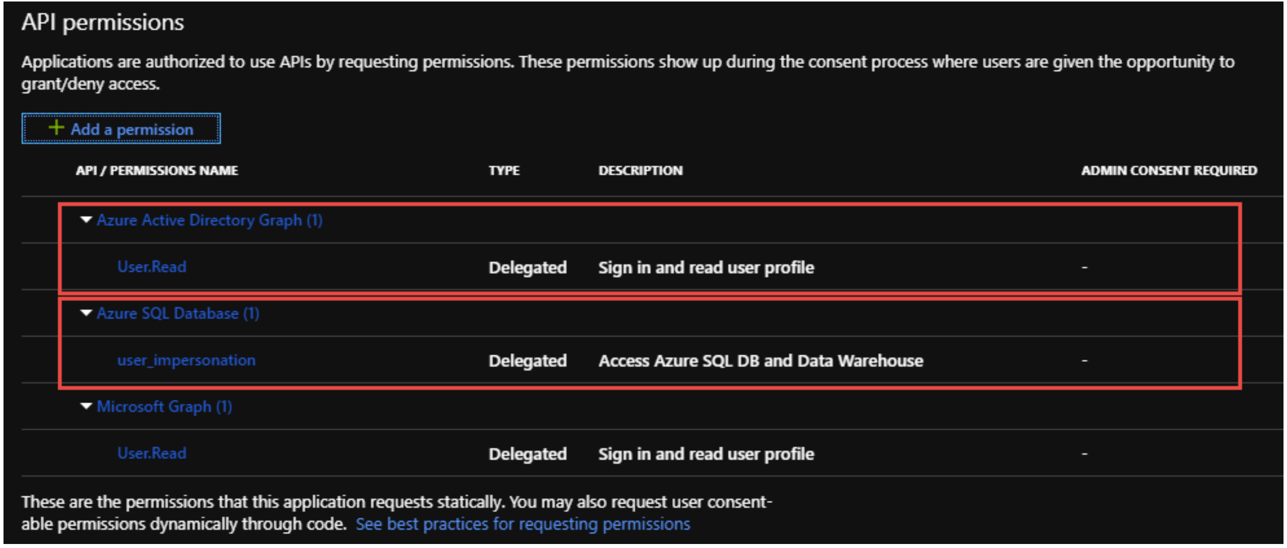
Select permissions

Type to search

PERMISSION	ADMIN CONSENT REQUIRED
☑ user_impersonation Access Azure SQL DB and Data Warehouse	-

user_impersonation

9. The **API permissions** should look like this.



Applications are authorized to use APIs by requesting permissions. These permissions show up during the consent process where users are given the opportunity to grant/deny access.

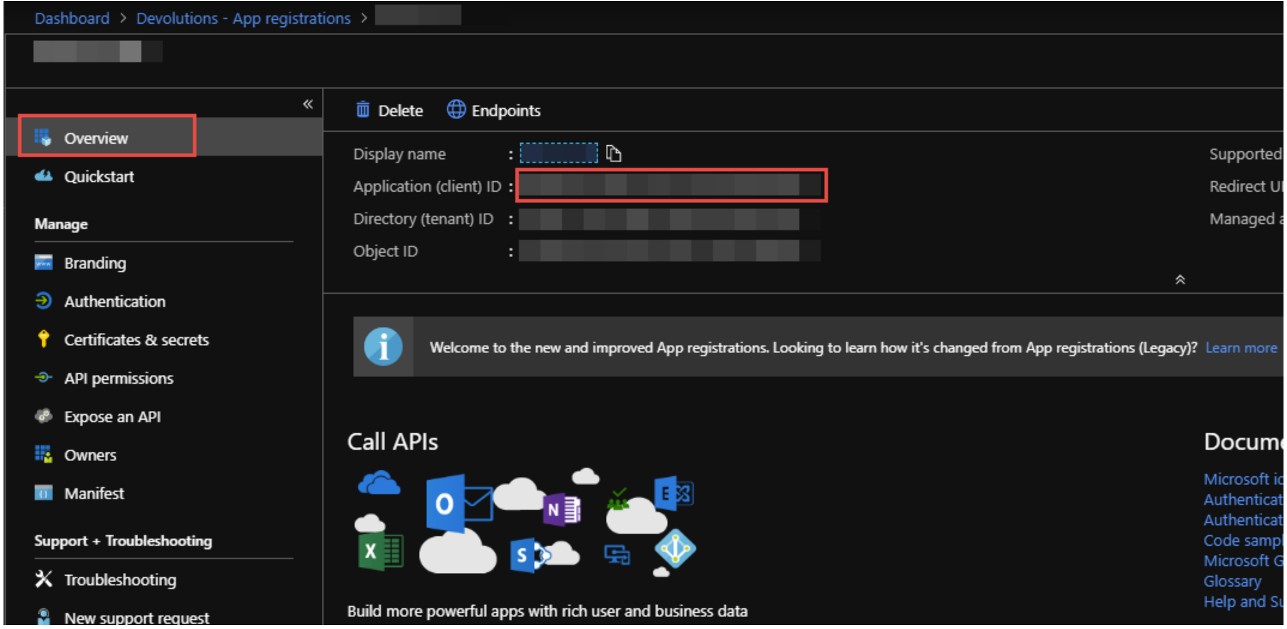
API / PERMISSIONS NAME	TYPE	DESCRIPTION	ADMIN CONSENT REQUIRED
▾ Azure Active Directory Graph (1)			
User.Read	Delegated	Sign in and read user profile	-
▾ Azure SQL Database (1)			
user_impersonation	Delegated	Access Azure SQL DB and Data Warehouse	-
▾ Microsoft Graph (1)			
User.Read	Delegated	Sign in and read user profile	-

These are the permissions that this application requests statically. You may also request user consent-able permissions dynamically through code. See best practices for requesting permissions

API / Permissions Name

10. Your **Azure Active Directory App Registration** is now completed.

11.Copy the **App Registration's Application (client) ID**.

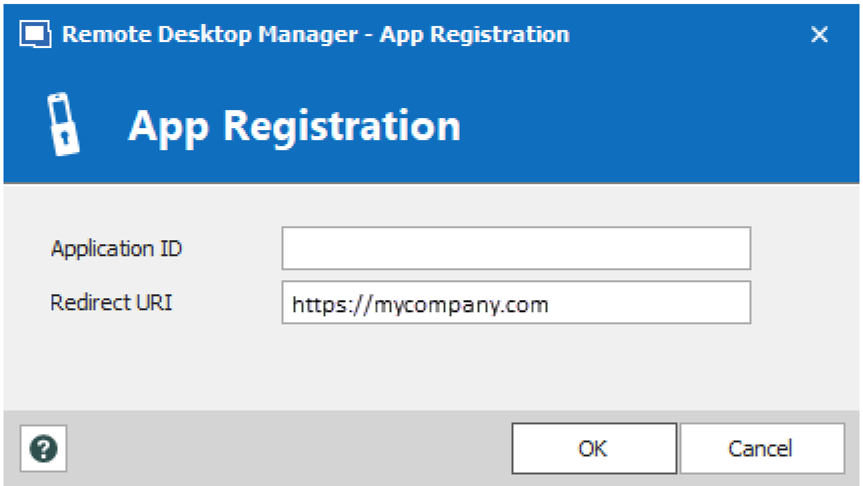


Display name :
Application (client) ID :
Directory (tenant) ID :
Object ID :

Welcome to the new and improved App registrations. Looking to learn how it's changed from App registrations (Legacy)? Learn more

Application (client) ID

12.Paste the **Application ID** inside Remote Desktop Manager, in the **App Registration** section.



Application ID:
Redirect URI: https://mycompany.com

App Registration

5.4.1.5 Microsoft SQL Server

DESCRIPTION

With the Microsoft SQL Server data source, Remote Desktop Manager uses the power of Microsoft SQL Server to save and manage entries.

Supported Microsoft SQL Server:

- 2019 on Windows and Linux (all editions)
- 2017 on Windows and Linux (all editions)
- 2016 Service Pack 2
- 2014 Service Pack 3
- 2012 Service Pack 4

The following features are also supported:

- **Always on availability group**.
- **Clustering**.
- **Log Shipping**.
- **Database mirroring**.

HIGHLIGHTS

- Supports user management with a superior security model.
- Supports Offline mode for when the server or network is unavailable.
- Supports full entry logs and attachments.
- Supports Vaults to organize thousands of entries.

A proper database backup strategy should be implemented to prevent possible data loss. Please refer to the Backups topic.

Depending on the Recovery Model of the underlying database, some maintenance operations may have to be scheduled to run regularly in order to maintain the health of the database. Please consult Recovery Model.

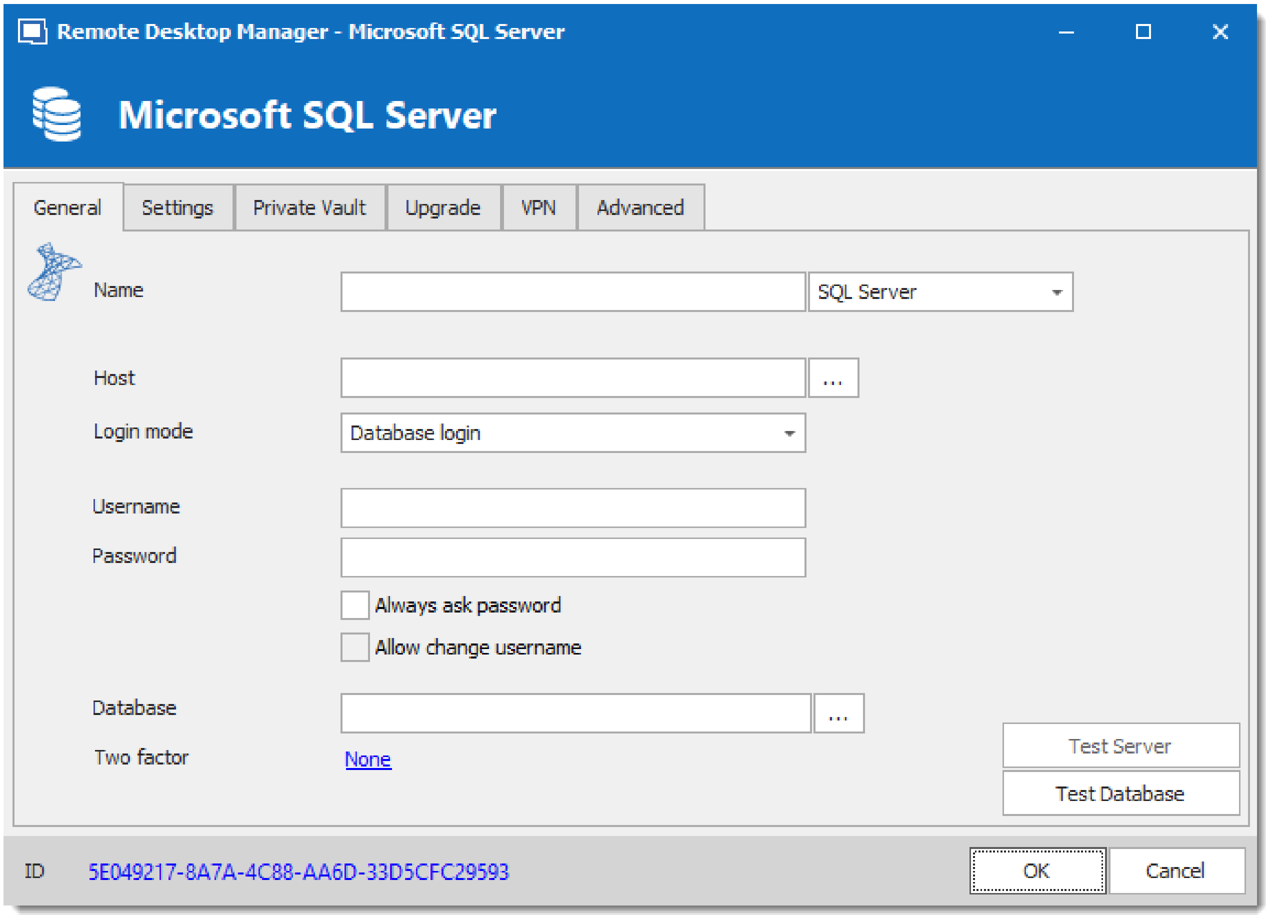
Using either **Database Login** or **Integrated Security** is inherently less secure because it means that the end user can connect directly to the database using any tool available. We do have table and column level security, but security conscious organizations will consider this unacceptable. It is recommended to use our **Custom login** model.

CONFIGURATION

Consult the Configure SQL Server topic for more information on the configuration.

SETTINGS

GENERAL



Name | SQL Server
Host | ...
Login mode | Database login
Username
Password
□ Always ask password
□ Allow change username
Database | ...
Two factor | None

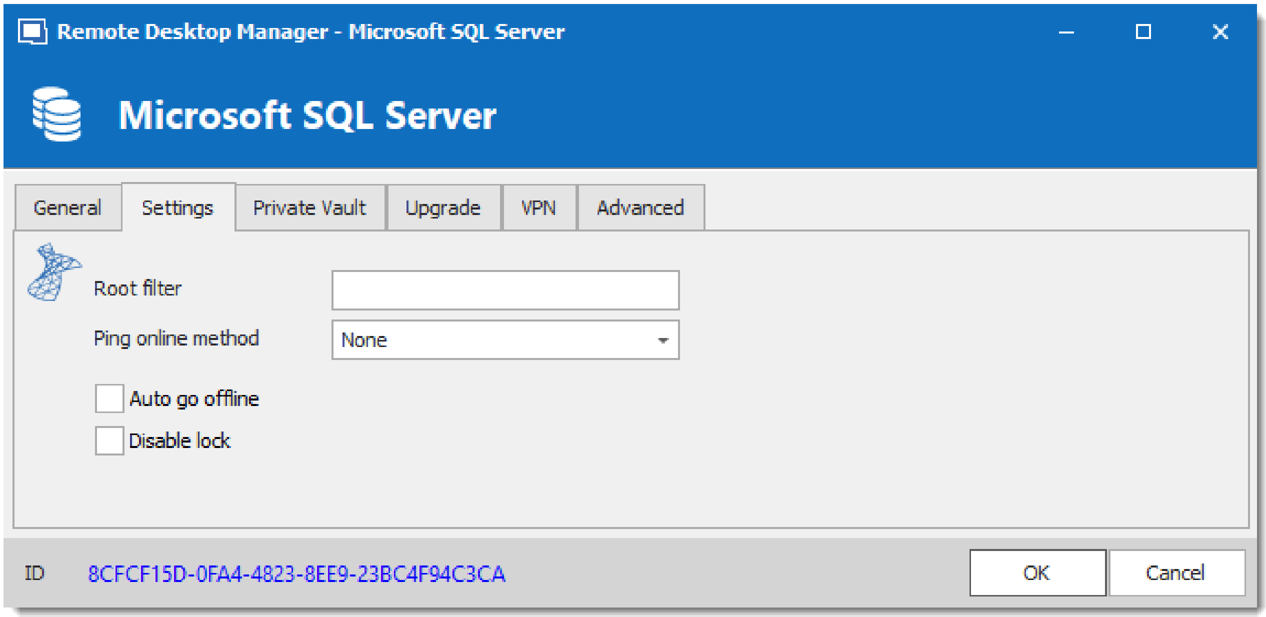
ID 5E049217-8A7A-4C88-AA6D-33D5CFC29593

Microsoft SQL Server - General Tab

OPTION	DESCRIPTION
Name	Enter a name for the data source.
Host	Enter the server hostname or IP address.
Login mode	Specify the authentication mode to use. Select between: • **Database login** • **Integrated Security (Active directory)** • **Custom Login**
Username	Enter the username to access the SQL Azure database.

OPTION	DESCRIPTION
Password	Enter the password to access the SQL Azure database.
Always ask password	Prompt for the password when a user connects to the data source.
Allow change username	Allow the username to be edited when connecting to the data source. (Only with Always ask password enabled)
Database	Enter the name of the SQL Azure database.
Two factor	Enable the 2-Factor Authentication.
Test Server	Test the connection with the server to validate if the proper information has been provided.
Test Database	Test the connection with the database to validate if the proper information has been provided.

SETTINGS



Root filter

Ping online method: None

□ Auto go offline

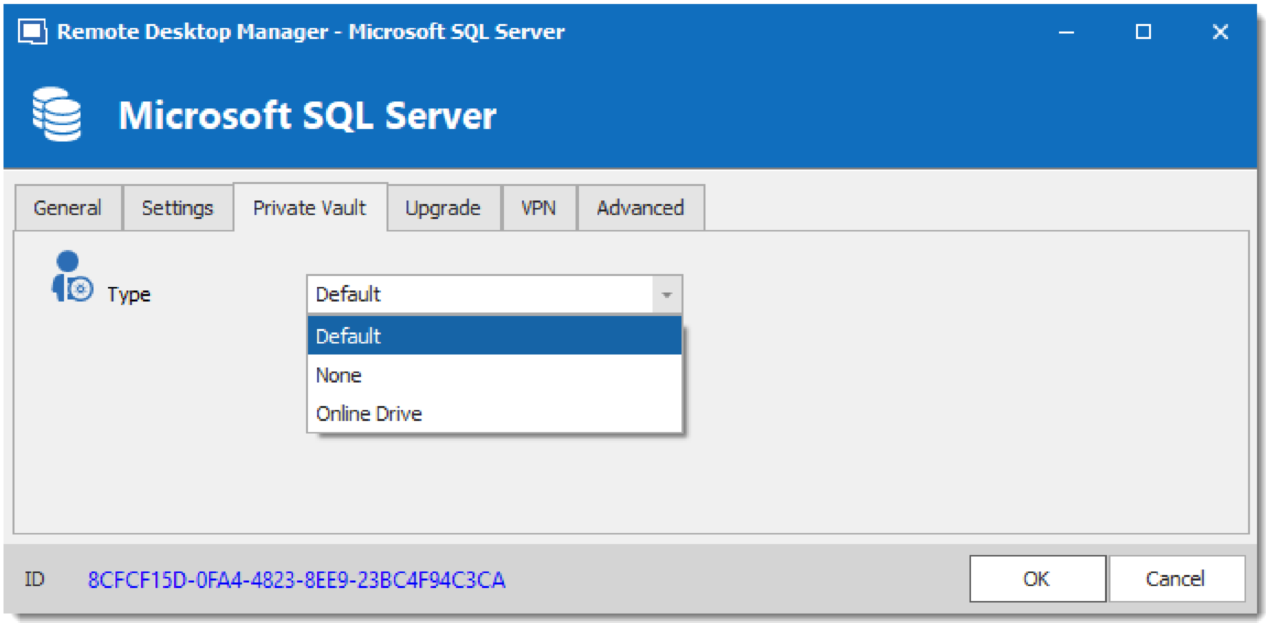
□ Disable lock

ID 8CFCF15D-0FA4-4823-8EE9-23BC4F94C3CA

Microsoft SQL Server - Settings Tab

OPTION	DESCRIPTION
Root filter	Enter the name of a root level folder to display only the entries contained in that folder.
Ping online method	Indicate the preferred ping online method. Select between: • **None** • **Ping** • **Port Scan**
Auto go offline	Use the data source in offline mode when the ping method does not respond.
Disable lock	Disable the option to lock the data source directly. You can still lock the application but you won't be prompted for the data source password if this option is disabled.

PRIVATE VAULT



Type: Default

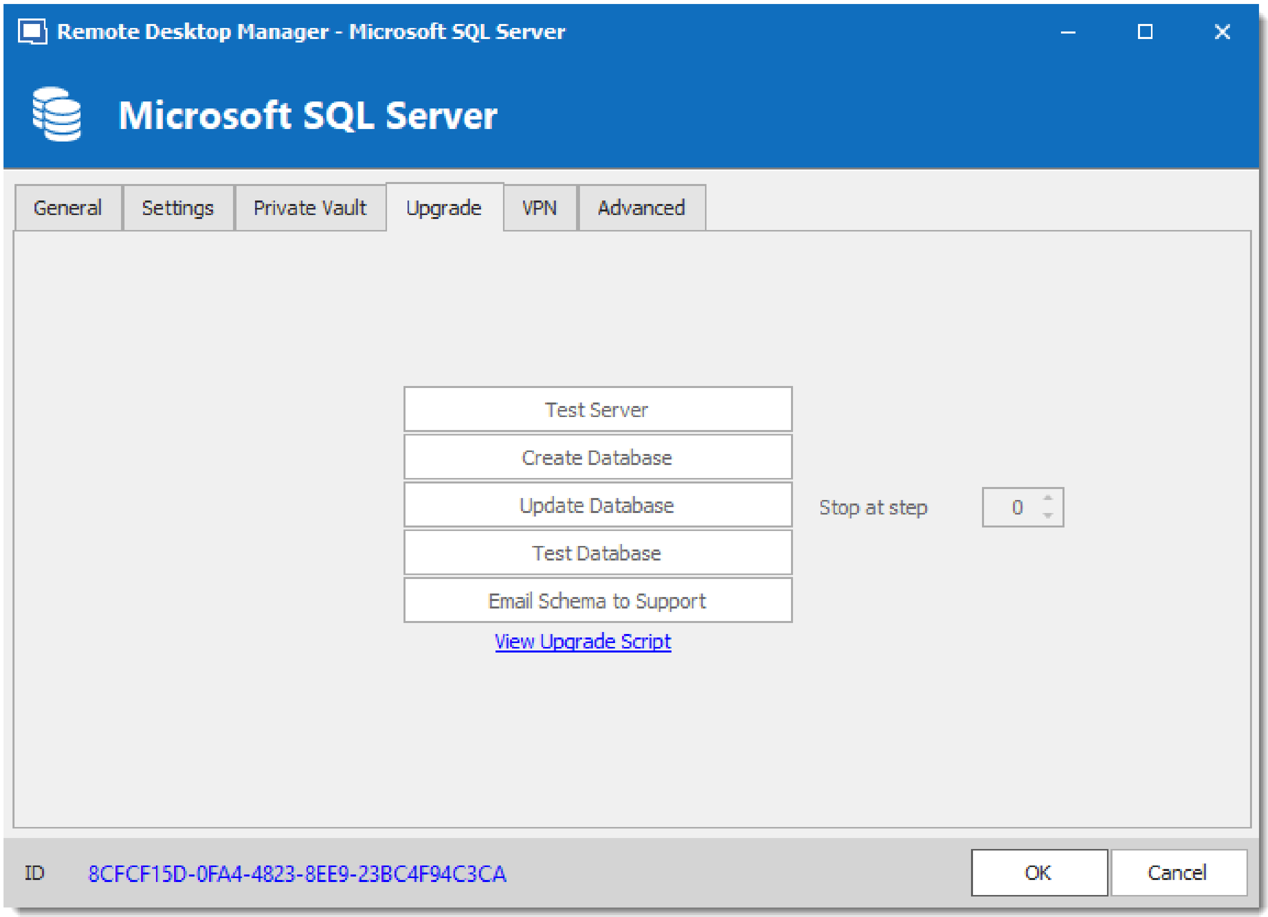
Default
None
Online Drive

ID 8CFCF15D-0FA4-4823-8EE9-23BC4F94C3CA

Microsoft SQL Server - Private Vault Tab

OPTION	DESCRIPTION
Type	Select the type of Private Vault to use. Select between: • **Default**: use the default Private Vault, which is stored in the database. • **None**: disable the Private Vault for all users. • **Online Drive**: use a Devolutions Online Drive file (*.dod) as a Private Vault.

UPGRADE



ID 8CFCF15D-0FA4-4823-8EE9-23BC4F94C3CA

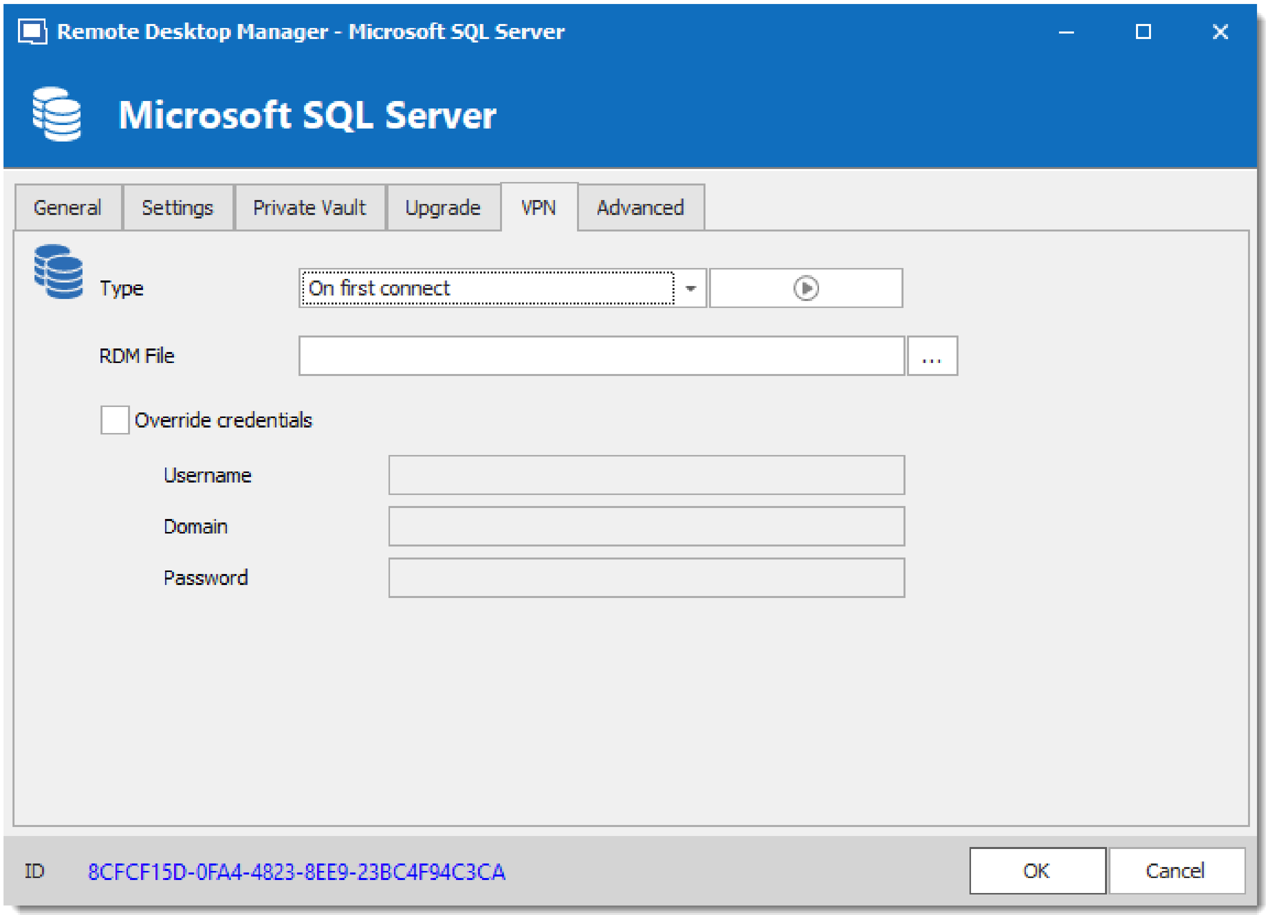
Microsoft SQL Server - Upgrade Tab

OPTION	DESCRIPTION
Test Server	Test the connection with the server to validate if the proper information has been provided.
Create Database	Create the database on the SQL server.
Update Database	Update the database on the SQL server.
Test Database	Test the connection with the database to validate if the proper information has been provided.
Email Schema to Support	Send your schema to the Devolutions support team.

OPTION	DESCRIPTION
View Upgrade Script	Open the upgrade script in a new window.

VPN

Open a VPN to access your data prior to connecting to your **Microsoft SQL Server**.



Remote Desktop Manager - Microsoft SQL Server

Microsoft SQL Server

Type: On first connect

RDM File:

□ Override credentials

Username:

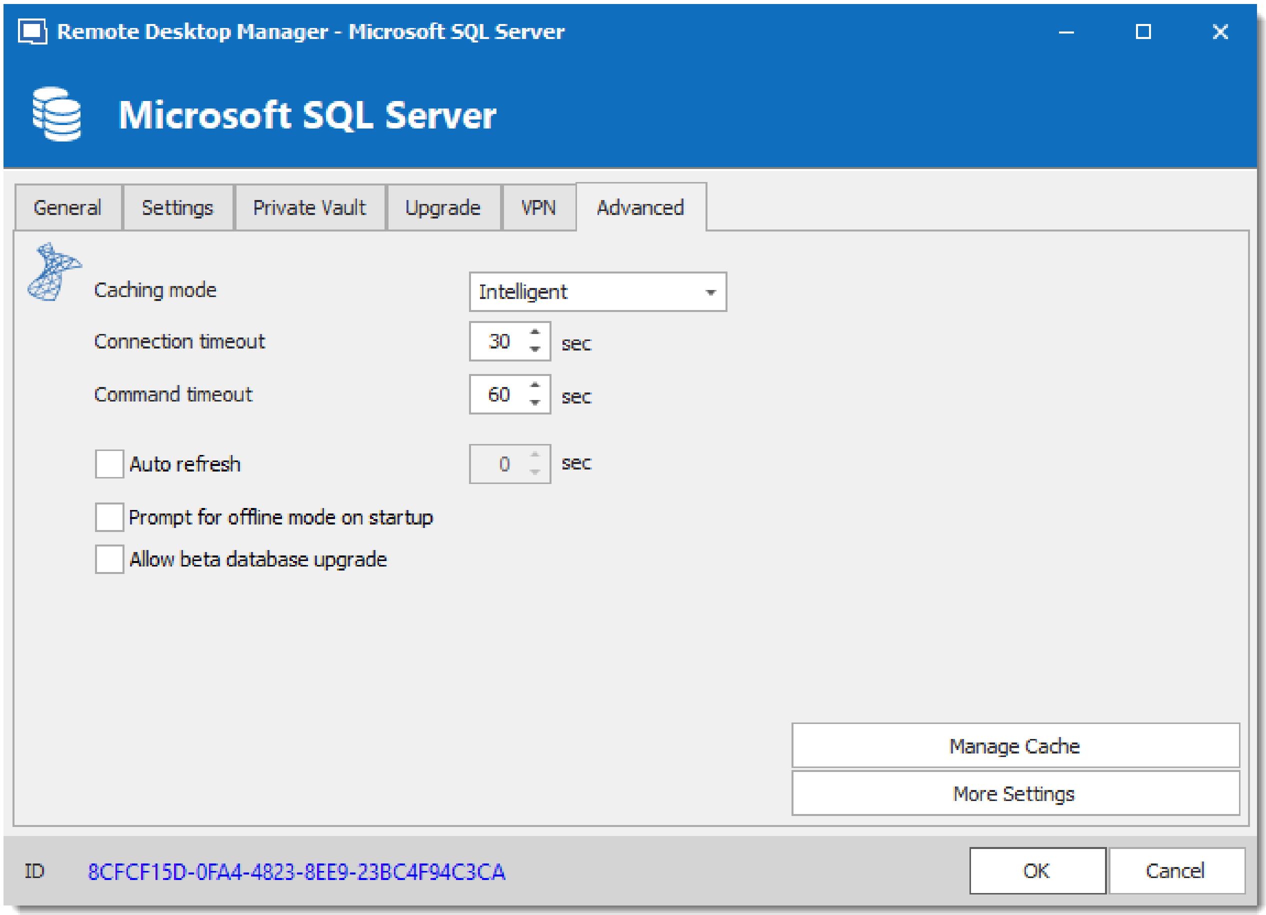
Domain:

Password:

ID 8CFCF15D-0FA4-4823-8EE9-23BC4F94C3CA

Microsoft SQL Server - VPN Tab

ADVANCED



Caching mode: Intelligent

Connection timeout: 30 sec

Command timeout: 60 sec

□ Auto refresh: 0 sec

□ Prompt for offline mode on startup

□ Allow beta database upgrade

ID 8CFCF15D-0FA4-4823-8EE9-23BC4F94C3CA

Microsoft SQL Server - Advanced Tab

OPTION	DESCRIPTION
Caching mode	Determines how the entries will be reloaded in the data source. For more information, please consult the Caching topic.
Connection timeout	Set the delay of the connection timeout.
Command timeout	Set the delay of the command timeout.
Auto refresh	Set the interval for the automatic refresh.
Prompt for offline mode on	Ask to use the data source in offline mode when the user connects to the data source.

OPTION	DESCRIPTION
startup	
Allow beta database upgrade	Allow beta upgrade of the database (when using a beta version of Remote Desktop Manager).
Manage Cache	Manage the data source cache. On large data sources caching is a must and will increase performance significantly. For more information, please consult the Manage Cache topic.
More Settings	Edit the connection string values directly.

5.4.1.5.1 Configure SQL Server

DESCRIPTION

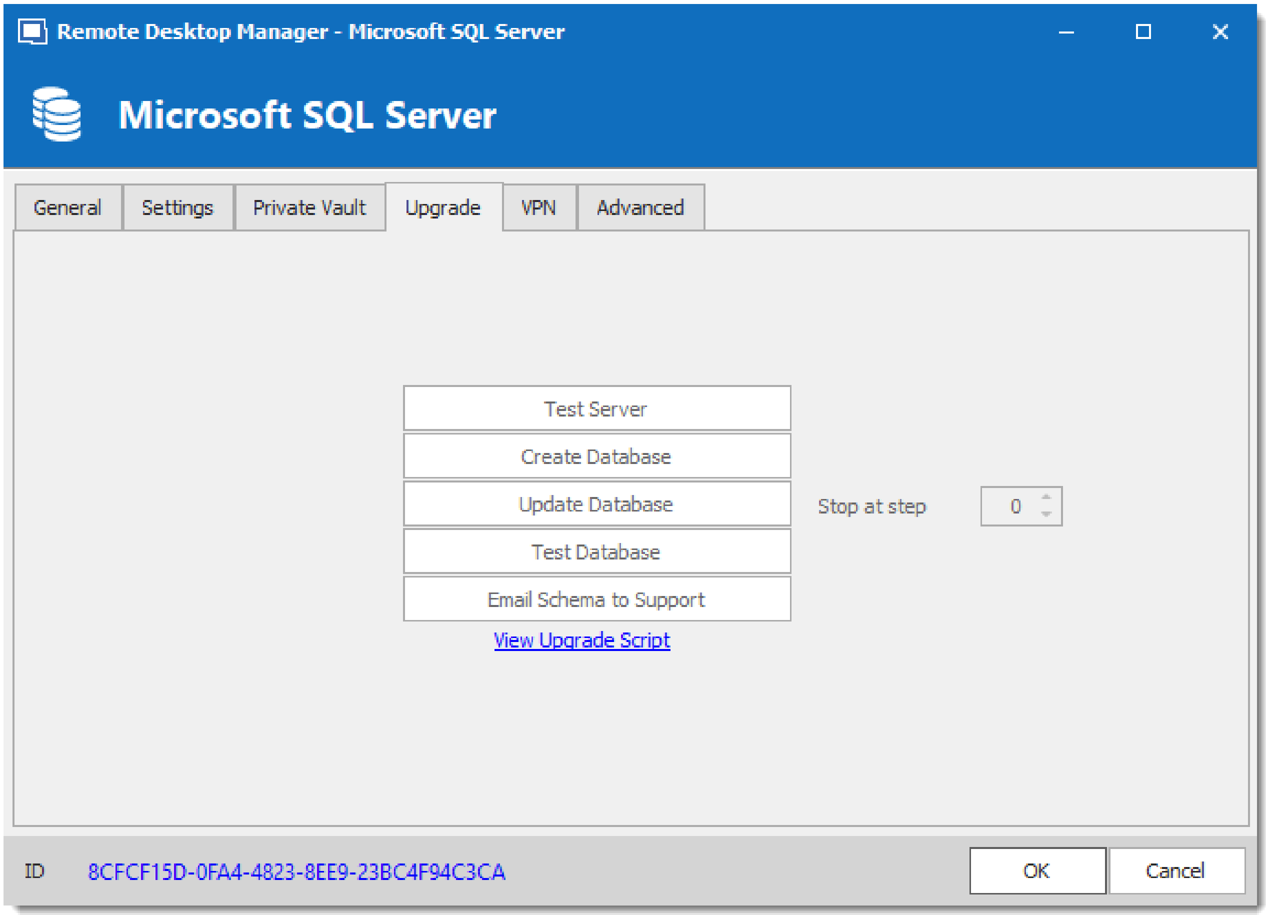
1. Install **Microsoft SQL Server** or **Microsoft SQL Server Express**.

> Newly installed Microsoft SQL Server instances do not allow remote connections. Please follow the directions in SQL Server.

> For added security, you can enable SSL Encryption to communicate with your instance of SQL Server. However, due to a framework limitation, this is not compatible with our iOS and Android versions of Remote Desktop Manager.
>
> Please follow directions on https://support.microsoft.com/en-us/kb/316898

2. Follow the steps in the Create a data source topic. On Step 4, before testing server or otherwise verifying the connection, continue with the steps below.

3. Select the **Upgrade** tab and click the **Create Database** button. If the database is already created on the Microsoft SQL Server, click the **Update Database** button to add the appropriate tables to the database.



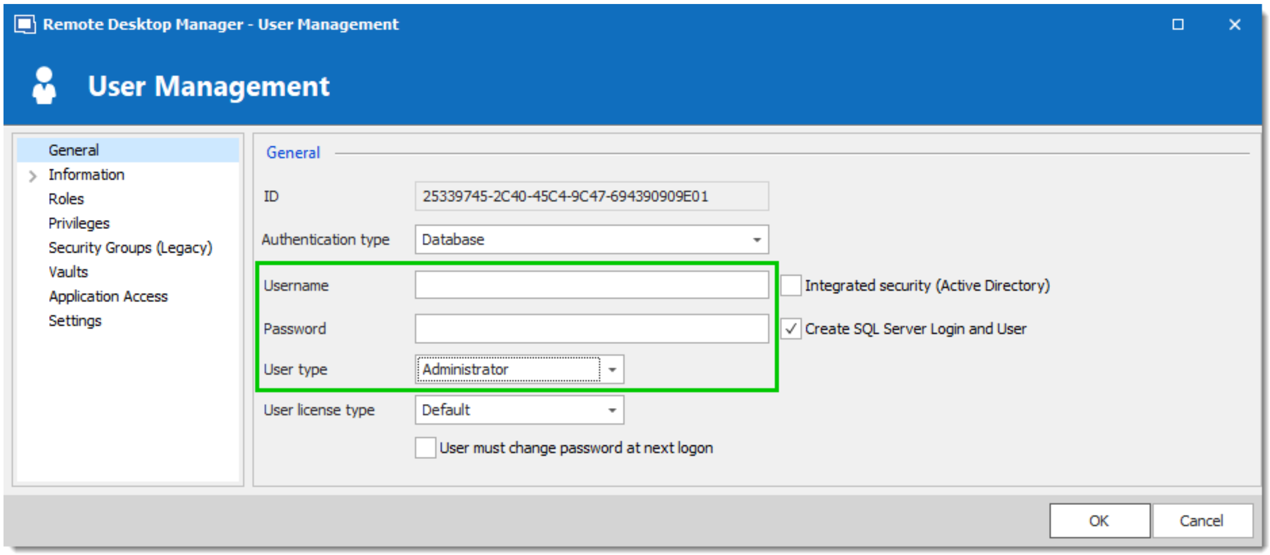
Stop at step 0

ID 8CFCF15D-0FA4-4823-8EE9-23BC4F94C3CA

Upgrade Tab

4. Once the database is created, create an administrator account for the database via the Administration - Users menu.

If the database is created using a system administrator (example: SA), we recommend to keep this user only for the database creation and the database upgrade. A Remote Desktop Manager administrator account must be created first. Then, regular users are created with this administrator account.



Remote Desktop Manager - User Management

User Management

General

ID: 25339745-2C40-45C4-9C47-694390909E01

Authentication type: Database

Username:

Password:

User type: Administrator

User license type: Default

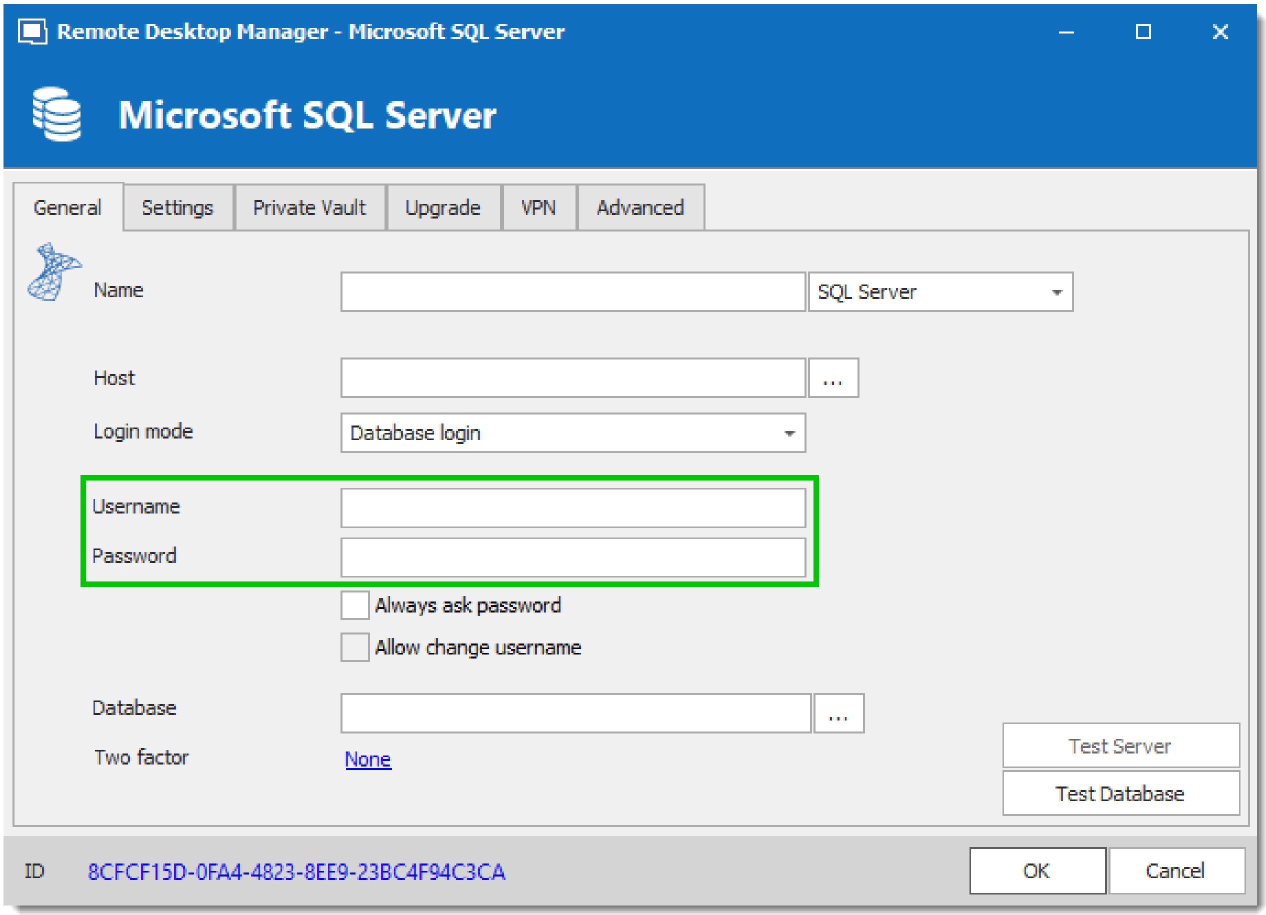
□ Integrated security (Active Directory)

☑ Create SQL Server Login and User

□ User must change password at next logon

Create a Remote Desktop Manager Administrator Account

5. Connect to the Microsoft SQL Server database with the Remote Desktop Manager administrator account. To do so, edit the data source used to create the database and change the login information for the administrator account created with Remote Desktop Manager.



Remote Desktop Manager - Microsoft SQL Server

Microsoft SQL Server

Name: SQL Server

Host:

Login mode: Database login

Username:

Password:

□ Always ask password

□ Allow change username

Database:

Two factor: None

ID 8CFCF15D-0FA4-4823-8EE9-23BC4F94C3CA

Connection to the Database with the RDM Administrator Account

The Microsoft SQL Server data source is now correctly configured.

5.4.1.5.2 Recovery Model

DESCRIPTION

Microsoft SQL Server backup and restore operations occur within the context of the recovery model of the database. Recovery models are designed to control transaction log maintenance. A recovery model is a database property that controls how transactions are logged, whether the transaction log requires (and allows) backing up, and what kinds of restore operations are available. Three recovery models exist: **simple**, **full**, and **bulk-logged**. Typically, a database uses the full recovery model or simple recovery model. A database can be switched to another recovery model at any time.

> If the Recovery Model is set to Full, it is critical that regular backups of BOTH the database and the transaction log are performed. Not performing these backups will result in the database files to increase in size at an alarming rate. This will severely impact the performance in the long run.

> For further information regarding SQL Recovery Models, refer to https://msdn.microsoft.com/en-CA/library/ms189275.aspx.

5.4.1.5.3 Encrypting Connections to SQL Server

DESCRIPTION

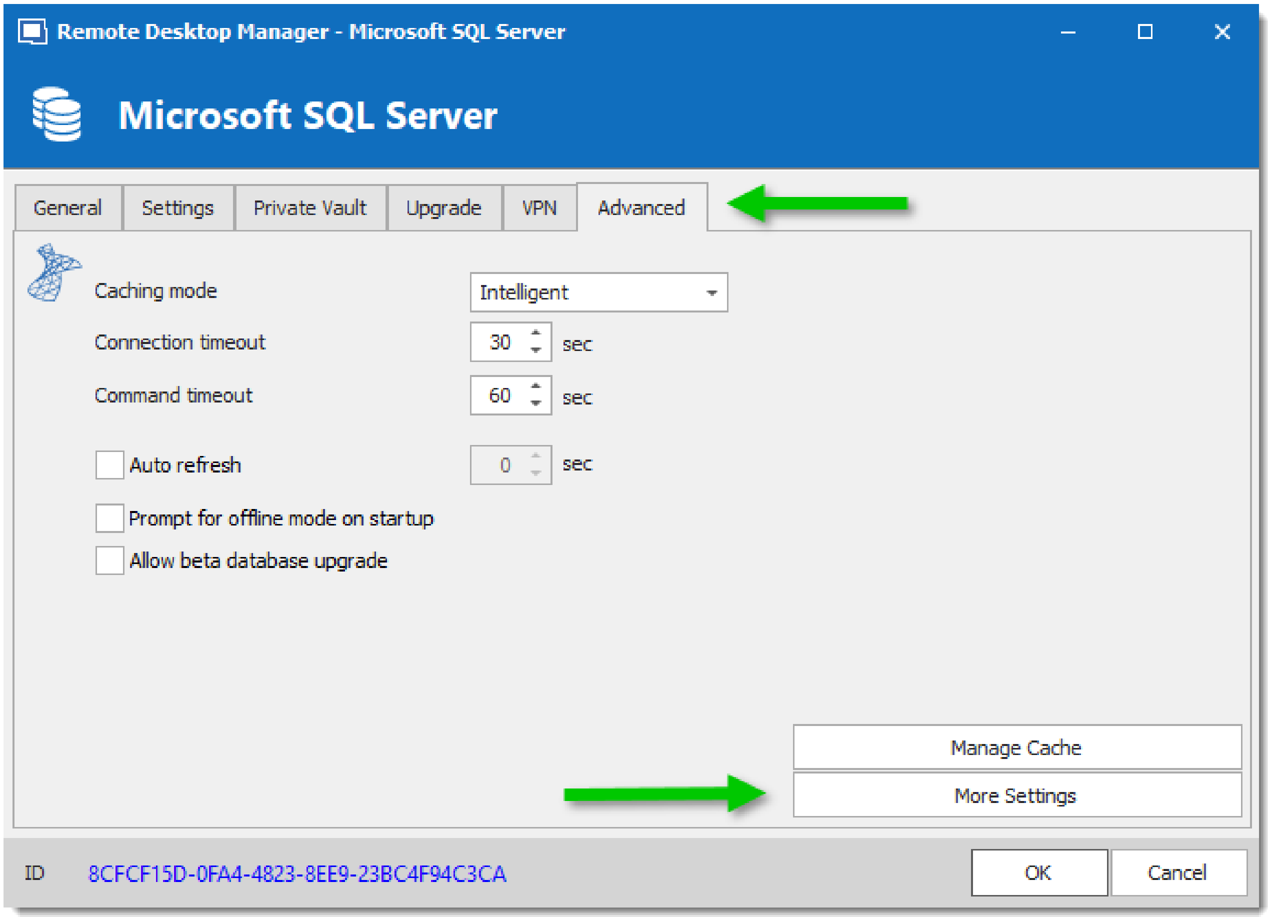
To ensure that the communication between Remote Desktop Manager and the Microsoft SQL Server database is encrypted, an extensive procedure must be followed on the Microsoft SQL Server instance.

Please consult this Microsoft technet article that provides detailed instructions: Encrypting Connections to SQL Server (technet).

After it has been properly configured, the only modification to perform in Remote Desktop Manager is to set a property in the **More Settings** of the data source.

PROCEDURE

1. Create or edit an Microsoft SQL Server data source, access the **Advanced** tab and click the **More Settings** button.



Caching mode: Intelligent

Connection timeout: 30 sec

Command timeout: 60 sec

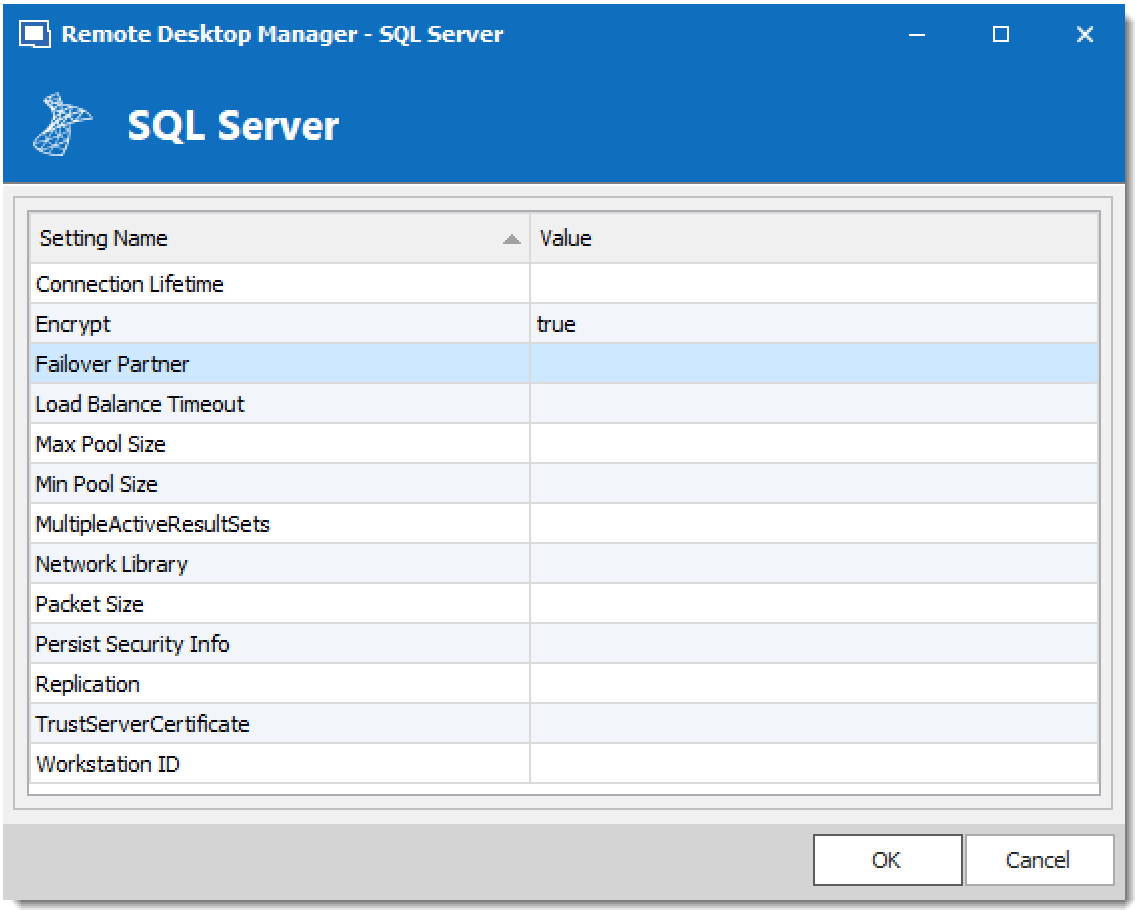
□ Auto refresh 0 sec

□ Prompt for offline mode on startup

□ Allow beta database upgrade

ID 8CFCF15D-0FA4-4823-8EE9-23BC4F94C3CA

2. Set the **Encrypt** property value to **true**. Click **OK** to validate.



Setting Name	Value
Connection Lifetime	
Encrypt	true
Failover Partner	
Load Balance Timeout	
Max Pool Size	
Min Pool Size	
MultipleActiveResultSets	
Network Library	
Packet Size	
Persist Security Info	
Replication	
TrustServerCertificate	
Workstation ID	

5.4.1.6 MySQL

DESCRIPTION

Remote Desktop Manager uses a MySQL database to store the session data. It is only supported in the Enterprise edition.

For added security, you can enable SSL Encryption to communicate with your instance of MySQL Server.

Please follow directions in those links;

- https://dev.mysql.com/doc/connector-net/en/connector-net-tutorials-ssl.html
- https://dev.mysql.com/doc/connector-net/en/connector-net-6-10-connection-options.html

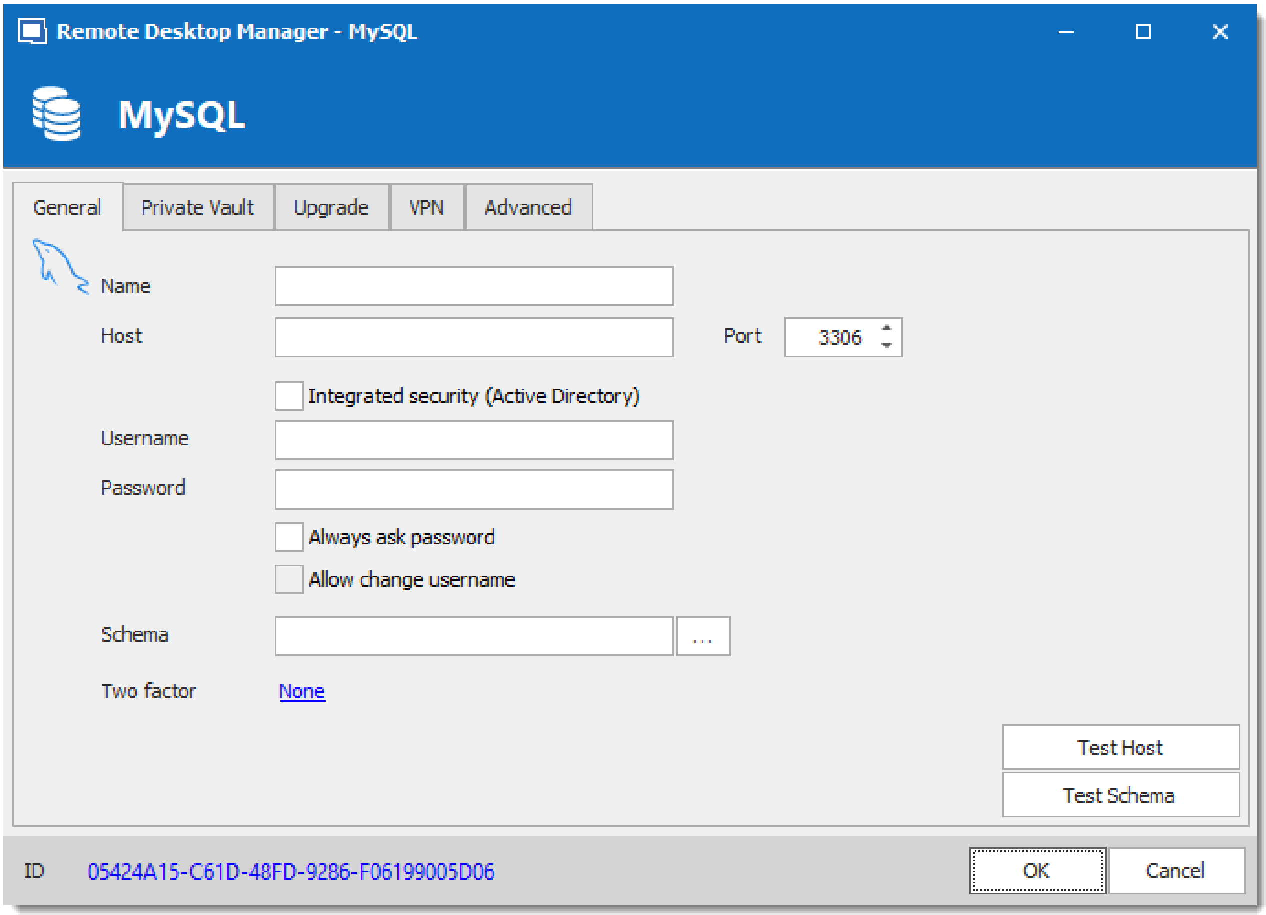
✓ We recommend using MySQL version 5.5.62 for this data source.

HIGHLIGHTS

- The data can be shared on a MySQL database installed on any Operating System MySQL supports.
- Full connection log and attachment support.
- Integrated Security support (Requires a v5.5.16 commercial distribution of MySQL).

SETTINGS

GENERAL



Port 3306

□ Integrated security (Active Directory)

□ Always ask password

□ Allow change username

Two factor None

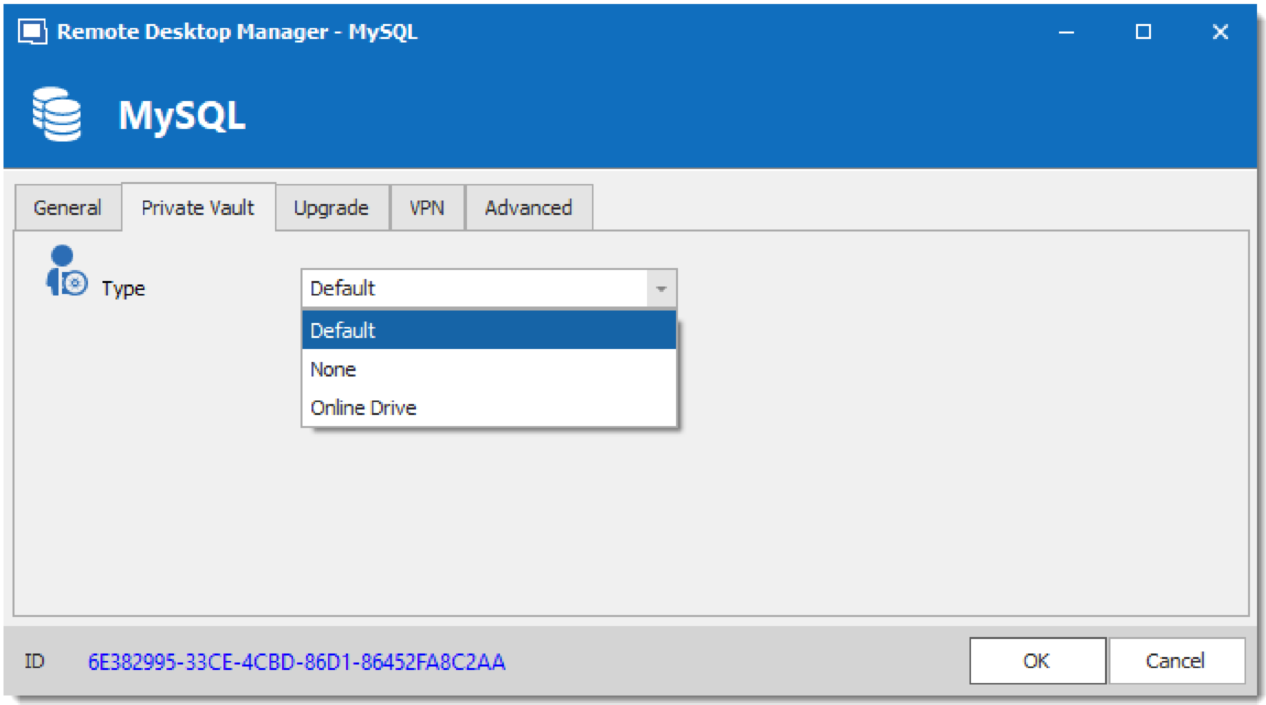
ID 05424A15-C61D-48FD-9286-F06199005D06

MySQL - General Tab

OPTION	DESCRIPTION
Name	Name of the data source.
Host	Name of the server where the data source will be store.
Port	If not using the default port, enter your Port number.
Integrated Security	When enabling the Integrated Security, the user and password field will be disabled because the operating system will provide a cached copy automatically. Please see Integrated Security for more information.
Username	Username to access the MySQL server.

OPTION	DESCRIPTION
Password	Password to access the MySQL server.
Always ask password	Prompt for the password when a user connects to the data source.
Allow change username	Allow the username to be edited when connecting to the data source. (Only with Always ask password enabled)
Schema	Name of the schema on the MySQL server for the utilization of Remote Desktop Manager.
Two factor	Enable the 2-Factor Authentication to access your data source.
Test Host	Test the connection with the Host (server) to validate if the proper information has been provided.
Test Schema	Test the connection with the schema to validate if the proper information has been provided

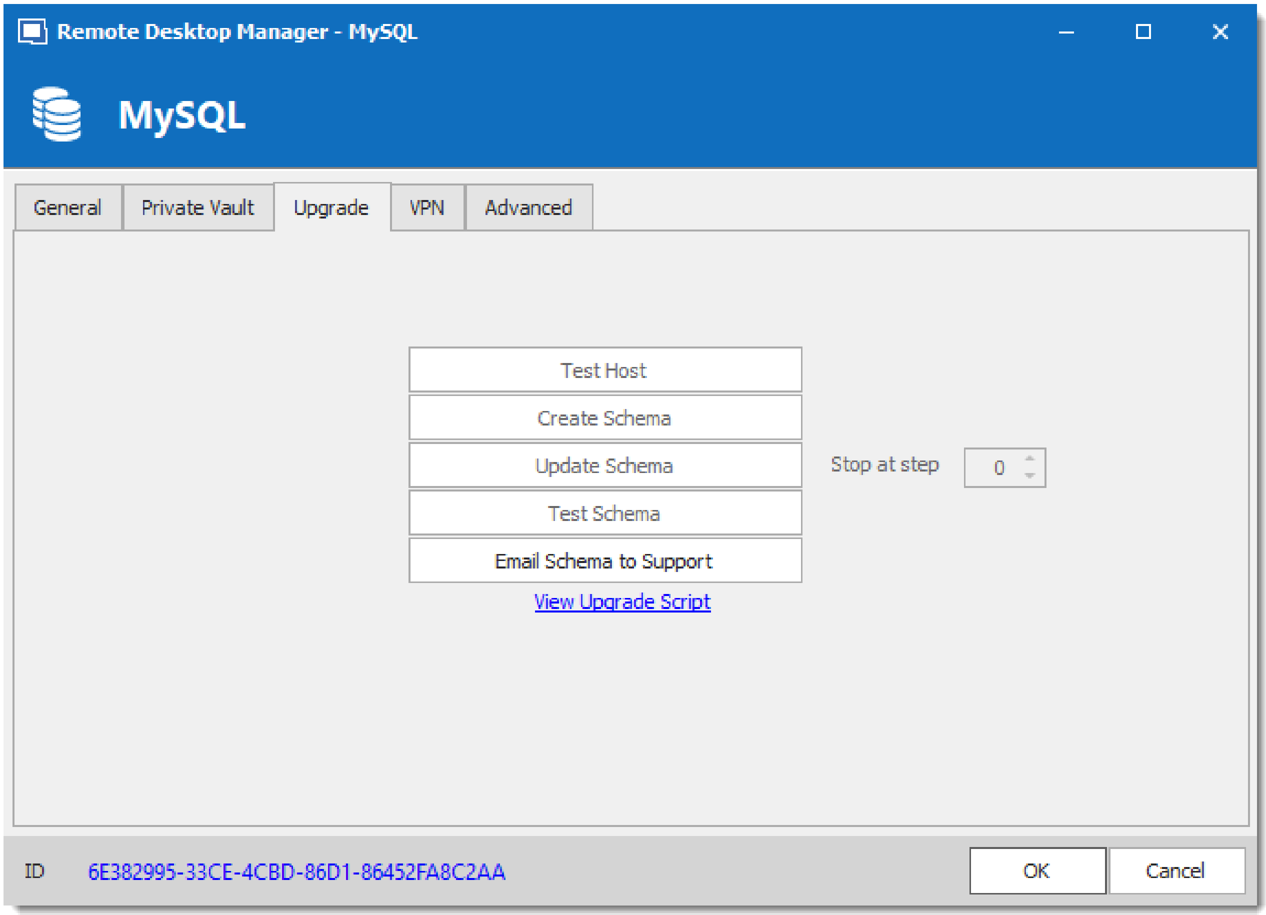
PRIVATE VAULT



MySQL - Private Vault Tab

OPTION	DESCRIPTION
Type	Select the type of Private Vault to use. Select between: • **Default**: use the default Private Vault, which is stored in the database. • **None**: disable the Private Vault for all users. • **Online Drive**: use a Devolutions Online Drive file (*.dod) as a Private Vault.

UPGRADE



Stop at step 0

ID 6E382995-33CE-4CBD-86D1-86452FA8C2AA

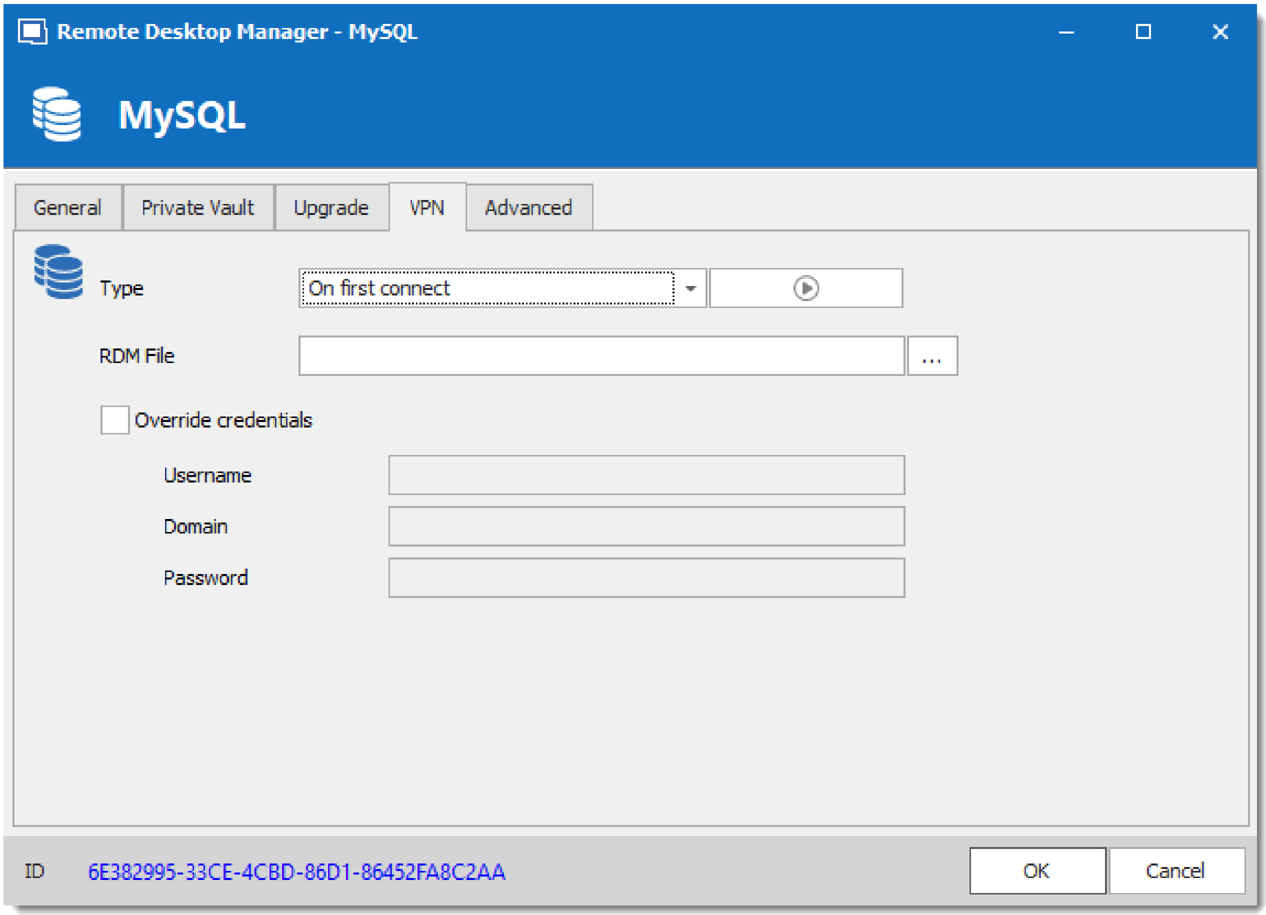
MySQL - Upgrade Tab

OPTION	DESCRIPTION
Test Host	Test the connection with the host (server) to validate if the proper information has been provided.
Create Schema	Create the schema on the MySQL server to use Remote Desktop Manager.
Update Schema	Update the schema on the MySQL server, if required, to use Remote Desktop Manager.
Test Schema	Test the connection with the schema to validate if the proper information has been provided.

OPTION	DESCRIPTION
Email Schema to Support	Send your schema to the Devolutions Support team.
View Upgrade Script	Open the upgrade script in a new window.

VPN

Open a VPN to access your data prior to connecting to your **MySQL** database.



Type: On first connect

RDM File:

□ Override credentials

Username:

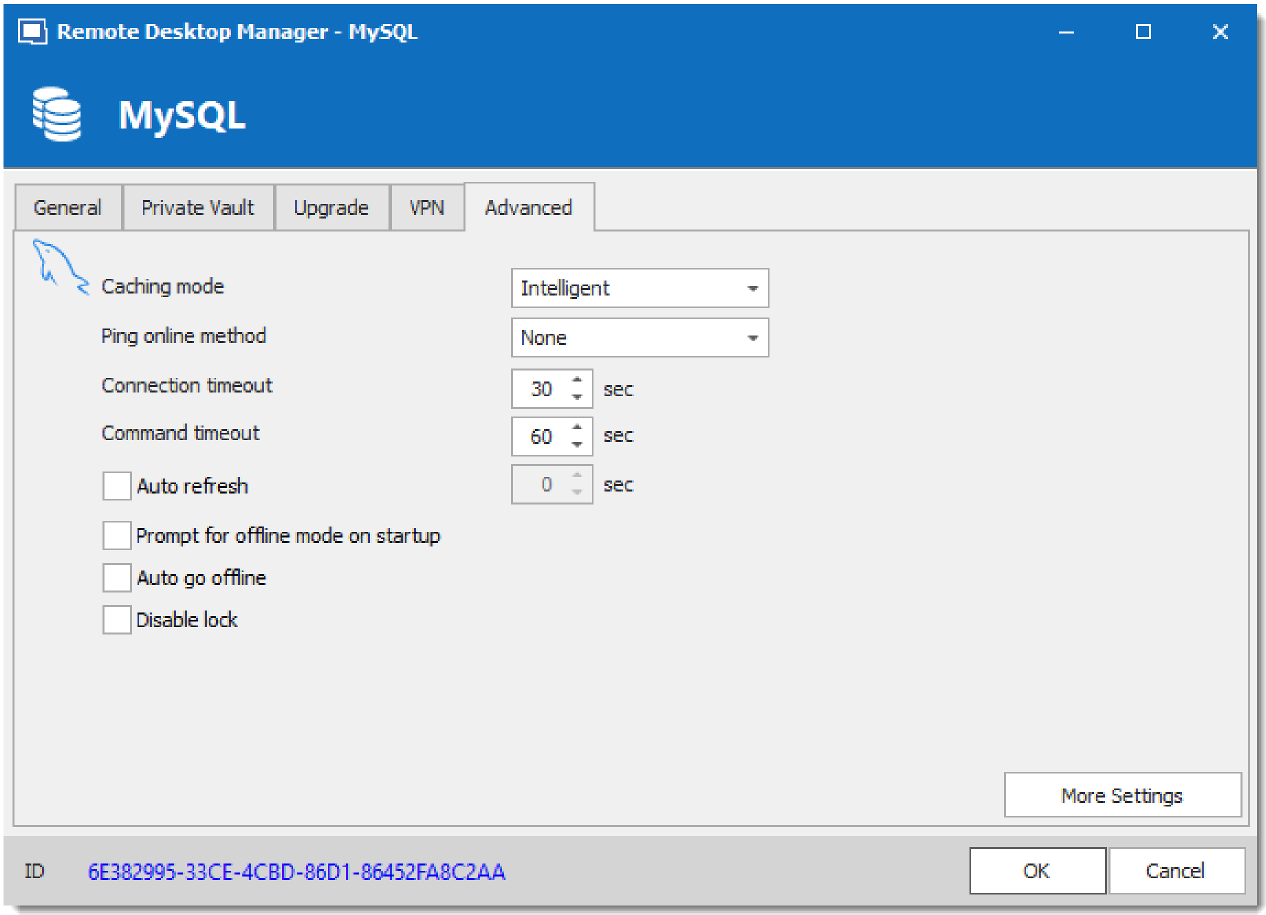
Domain:

Password:

ID 6E382995-33CE-4CBD-86D1-86452FA8C2AA

MySQL - VPN Tab

ADVANCED



Remote Desktop Manager - MySQL

MySQL

Caching mode: Intelligent

Ping online method: None

Connection timeout: 30 sec

Command timeout: 60 sec

□ Auto refresh 0 sec

□ Prompt for offline mode on startup

□ Auto go offline

□ Disable lock

ID 6E382995-33CE-4CBD-86D1-86452FA8C2AA

MySQL - Advanced Tab

OPTION	DESCRIPTION
Caching mode	Determine how the entries will be reload in the data source. See Caching topic for more information.
Ping online method	Indicate the preferred ping online method. Select between: • **None** • **Ping** • **Port Scan**
Connection timeout	Waiting time before a connection timeout.

OPTION	DESCRIPTION
Command timeout	Waiting time before a command timeout.
Auto refresh	Set the interval for the automatic refresh
Prompt for offline mode on startup	Every time you will connect to your data source, you will be prompted to use the data source in offline mode.
Auto go offline	If the ping online method doesn’t work it will automatically go offline.
Disable lock	Disable the option to lock the data source directly. You can still lock the application but you won't be prompted for the database password if this option is disabled.
More Settings	Edit the connection string values directly.

TROUBLESHOOTING

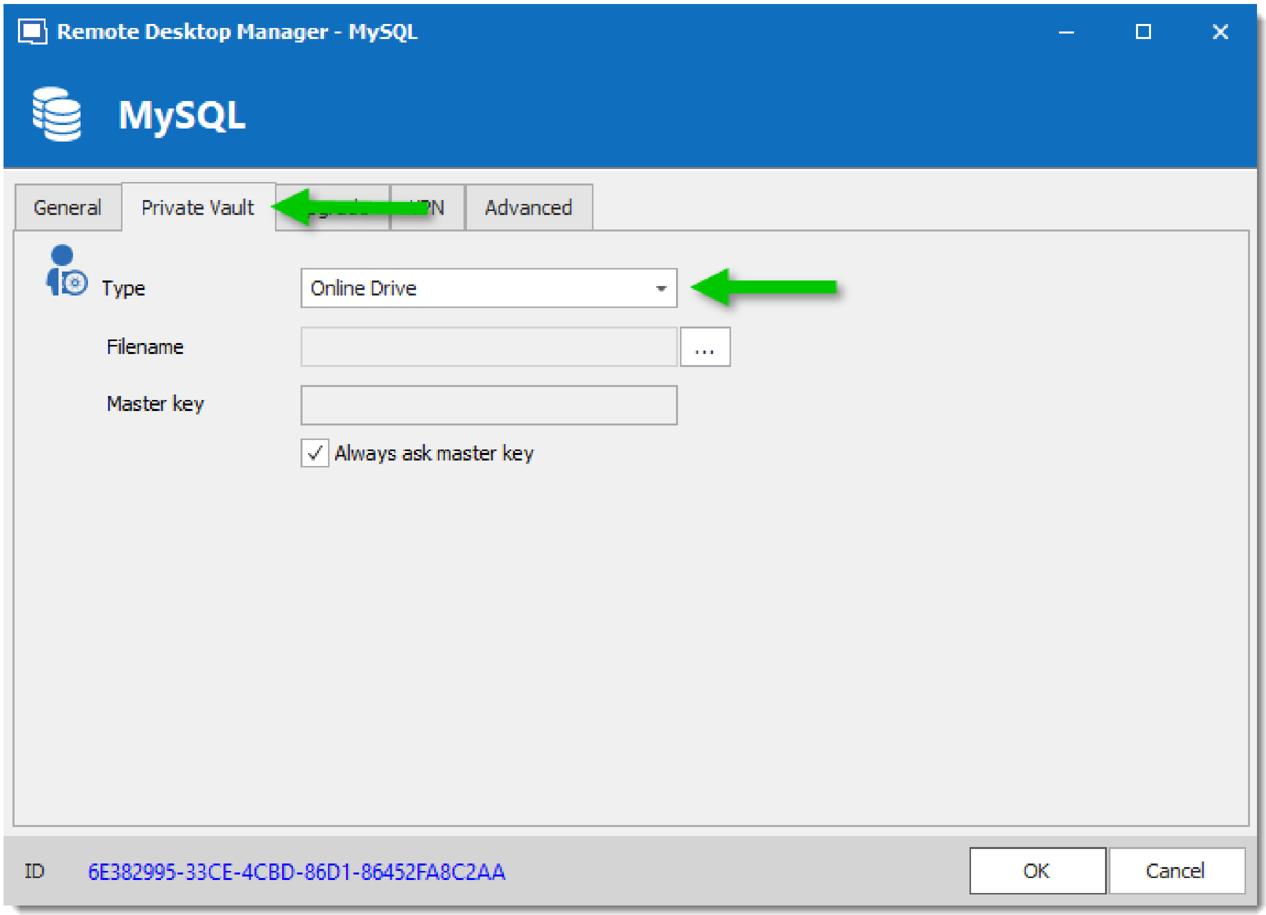
Consult MySQL troubleshooting for more information.

5.4.1.7 Private Vault

DESCRIPTION

The **Private Vault** allows you to connect a personal Vault stored in a **Devolutions Online Drive** file directly to your **Advanced Data Source**, thus allowing you to store information that only you can have access to. For more information about the Private Vault please follow this link.

1. In the **Private Vault** tab of your Advanced Data Source, select **Online Drive** in the **Type**.



Type: Online Drive

Filename

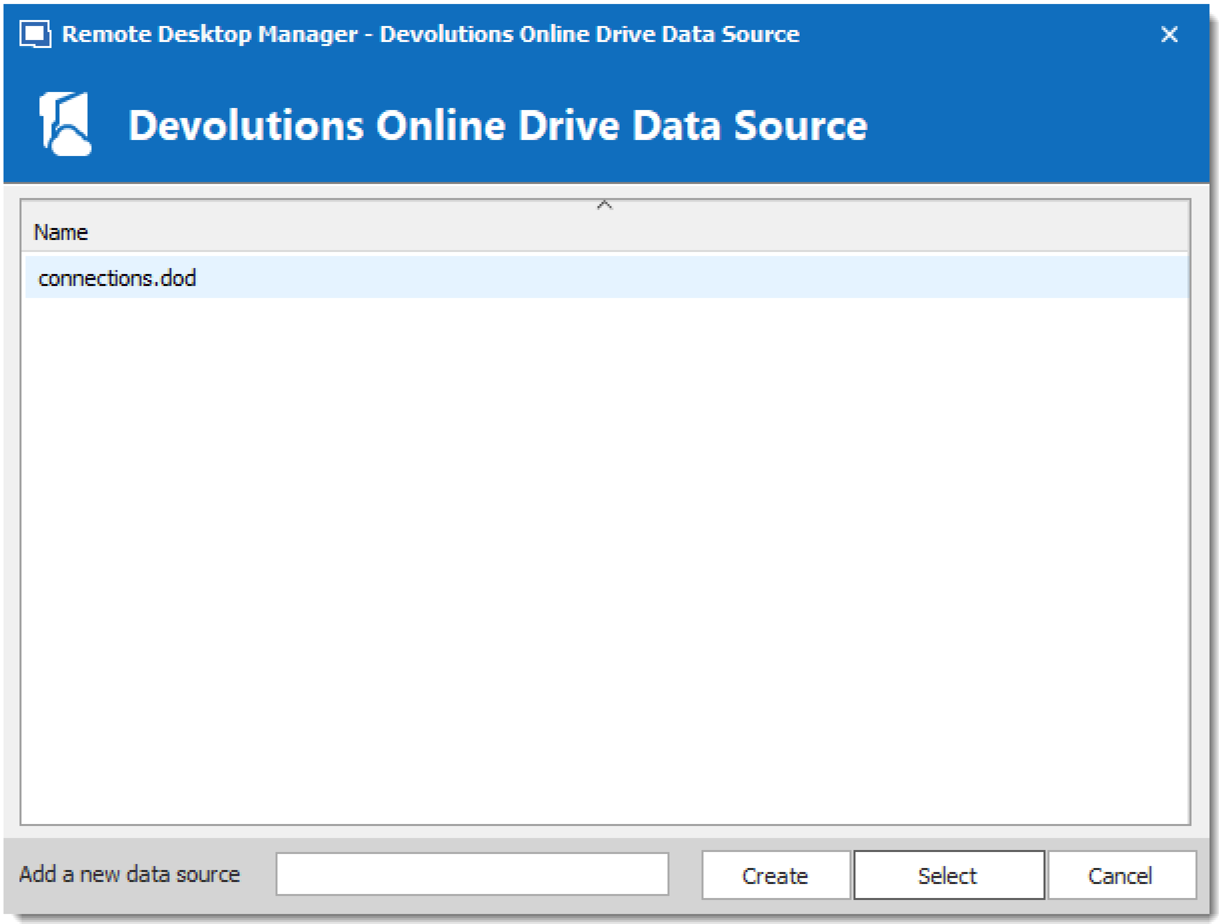
Master key

☑ Always ask master key

ID 6E382995-33CE-4CBD-86D1-86452FA8C2AA

Devolutions Online Database Data Source

2. Click on the **ellipsis** next to the **Filename** field. A list containing your pre-existing Devolutions Online Drive files will prompt. You may choose to use an existing file (.dod) or if you wish you can enter a name in the **New data source field** and click on **Create** to automatically create a new Devolutions Online Drive file.


Remote Desktop Manager - Devolutions Online Drive Data Source
Devolutions Online Drive Data Source
Name
connections.dod
Add a new data source
Create
Select
Cancel

Devolutions Online Drive Data Source

5.4.2 DropBox

DESCRIPTION

Remote Desktop Manager uses the Dropbox API to retrieve a XML file from the configured repository. There is no need to install the Dropbox client on the machine to open the data source. It is also possible to configure more than one Dropbox account on the same machine.

HIGHLIGHTS

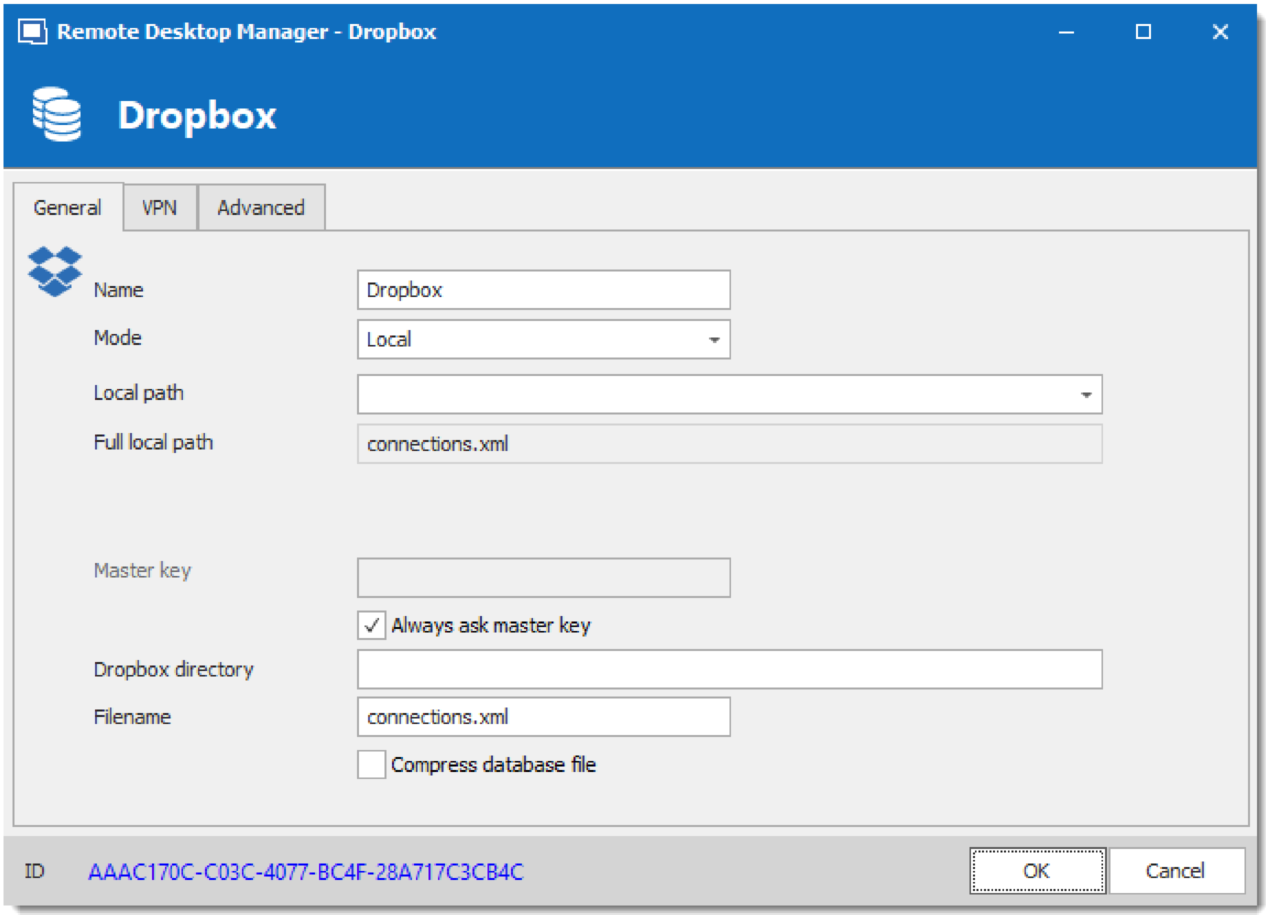
- This data source can be shared over the Internet between multiple locations.

- The data source supports auto refresh.
- This is a file-based data source, based on the XML data source.
- To avoid data corruption, the session list should be modified in one location at a time.
- No need to have the Dropbox client installed to use the Dropbox data source.
- Each Dropbox data source can use a different Dropbox account.

> ! Although it can be shared between multiple locations, there is no conflict management for the configuration. If you share with other users you may get update conflicts and run into issues. This data source type is meant for **a single user using multiple computers, not multiple users**.

SETTINGS

GENERAL



Name: Dropbox

Mode: Local

Local path:

Full local path: connections.xml

Master key:

☑ Always ask master key

Dropbox directory:

Filename: connections.xml

□ Compress database file

ID AAAC170C-C03C-4077-BC4F-28A717C3CB4C

Dropbox - General Tab

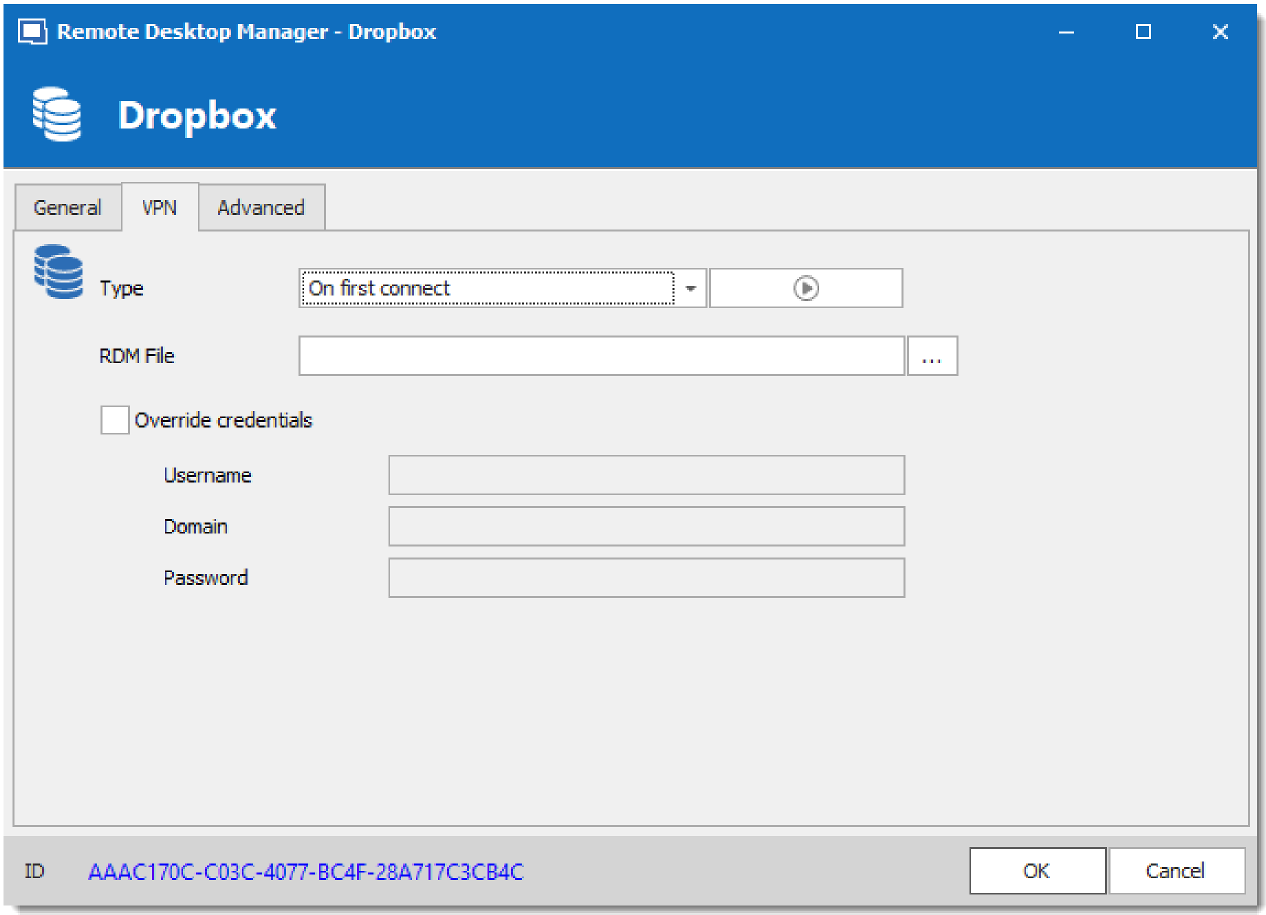
Remote Desktop Manager supports the 2-Factor Authentication of Dropbox. When the button **Validate with Dropbox** is pressed and the 2-Factor Authentication is enabled in Dropbox, a window prompt will open and ask for the Dropbox account password, then a second prompt will open for the security code. The security code can be received by SMS or generated by Google Authenticator.

OPTION	DESCRIPTION
Name	Name of the data source.
Mode	Select the mode that is preferred to configure the data source. Select between: • **Account**

OPTION	DESCRIPTION
	• **Local**
Local path (Local Mode)	Contains the local path where the Dropbox files are accessible.
Email (Accout Mode)	Contains the email address associated with the Dropbox account.
Validate with Dropbox (Account Mode)	Button to validate the email address with the Dropbox account.
Master key	Add an additional layer of security to your data source by using master key.
Always ask master key	Connecting to the data source will always prompt for the master key.
Dropbox directory	Indicate the folder in Dropbox. It should not contains any drive since it's stored online. Leave it empty to use the default Dropbox root.
Filename	Indicate the filename used to store the data on the data source.
Compress database file	Activate this option if you wish to compress your database file.

VPN

Open a VPN to access your data prior to connecting to your **Dropbox**.



Type: On first connect

RDM File

□ Override credentials

Username

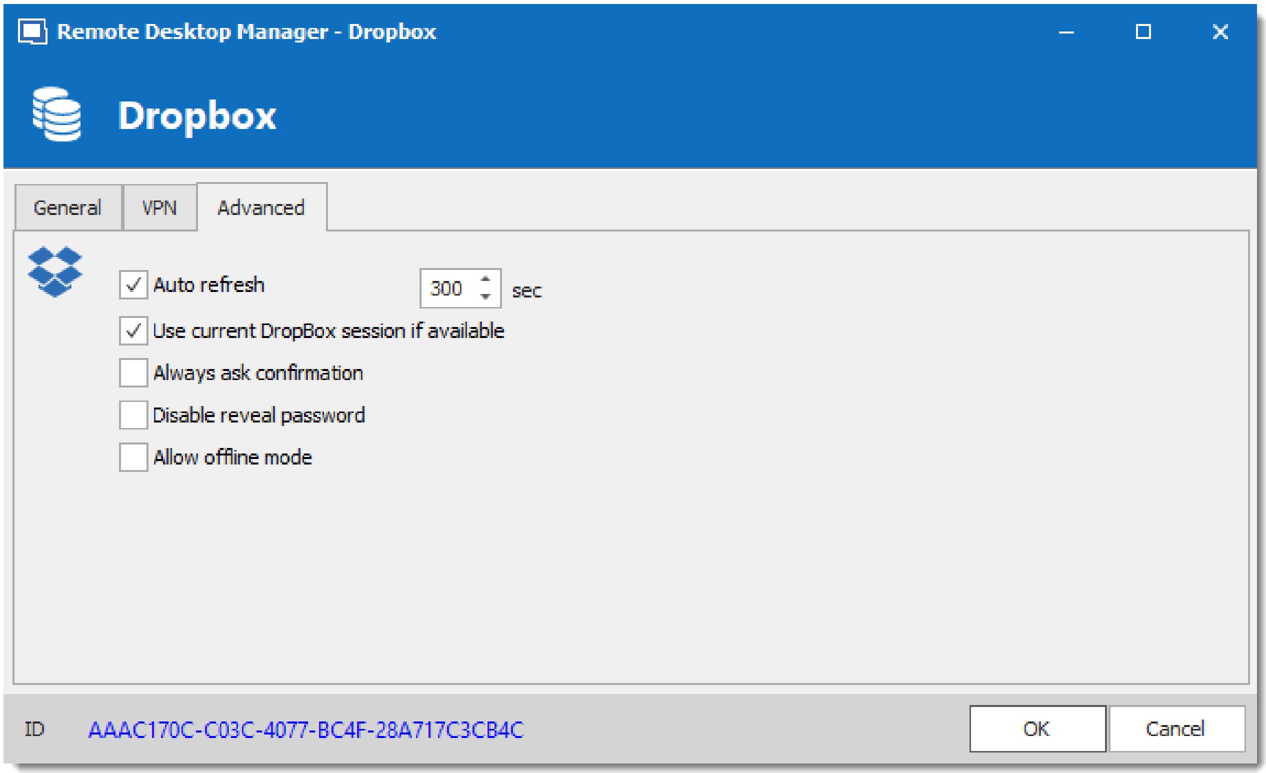
Domain

Password

ID AAAC170C-C03C-4077-BC4F-28A717C3CB4C

Dropbox - VPN Tab

ADVANCED



☑ Auto refresh 300 sec

☑ Use current DropBox session if available

☐ Always ask confirmation

☐ Disable reveal password

☐ Allow offline mode

ID AAAC170C-C03C-4077-BC4F-28A717C3CB4C

Dropbox - Advanced Tab

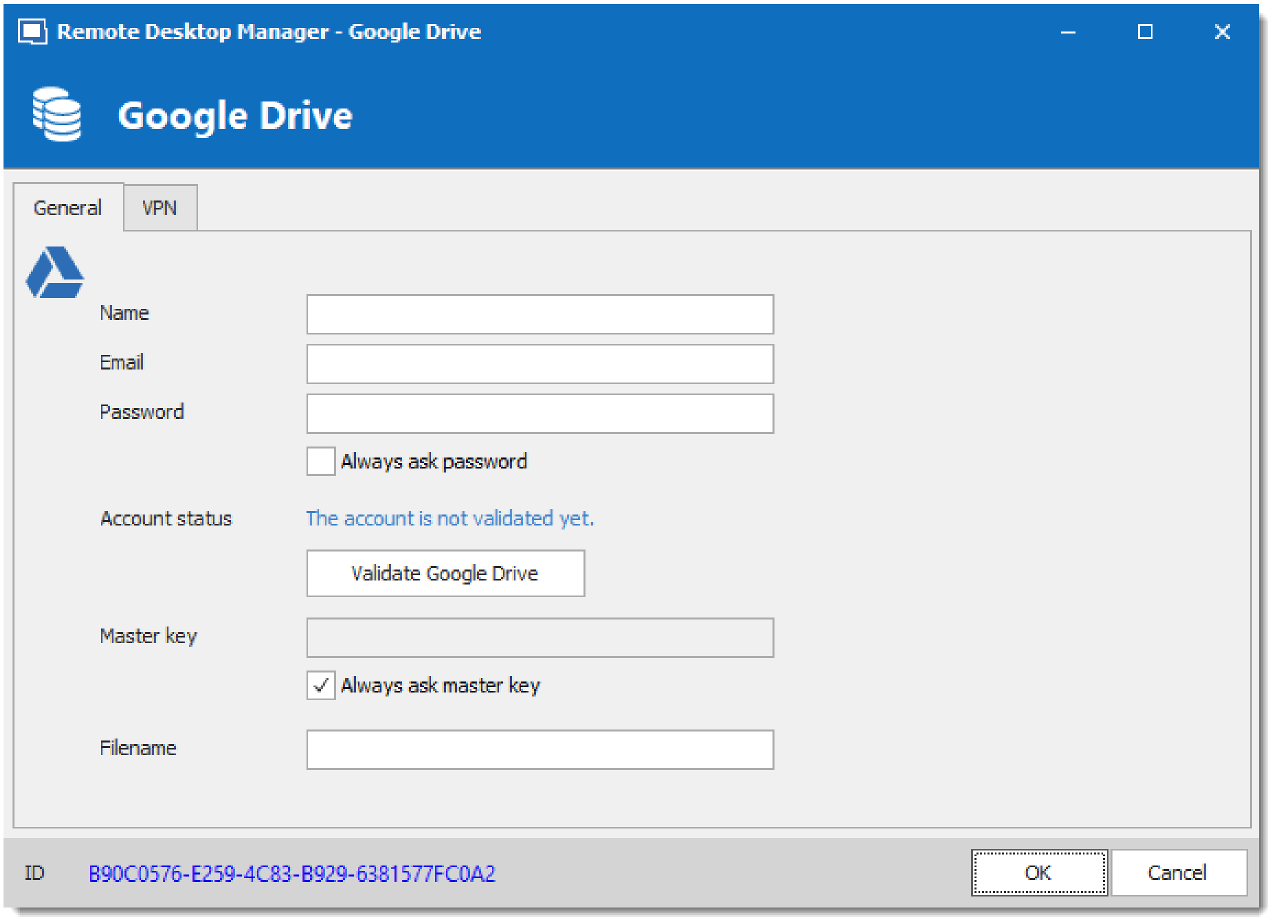
OPTION	DESCRIPTION
Auto refresh	Set the interval to use between each automatic refresh.
Use current Dropbox session if available	This option will use the Dropbox account who has been already validated without any other validation.
Always ask for confirmation	Always ask for confirmation when connecting to the data source.
Disable reveal password	Disable the reveal password feature when a user access this data source.
Allow offline mode	Allow the data source to be used in Offline mode.

5.4.3 Google Drive

DESCRIPTION

Remote Desktop Manager downloads and uploads the session settings directly from file located on an FTP site.

GENERAL



Name

Email

Password

□ Always ask password

Account status: The account is not validated yet.

Master key

☑ Always ask master key

Filename

ID B90C0576-E259-4C83-B929-6381577FC0A2

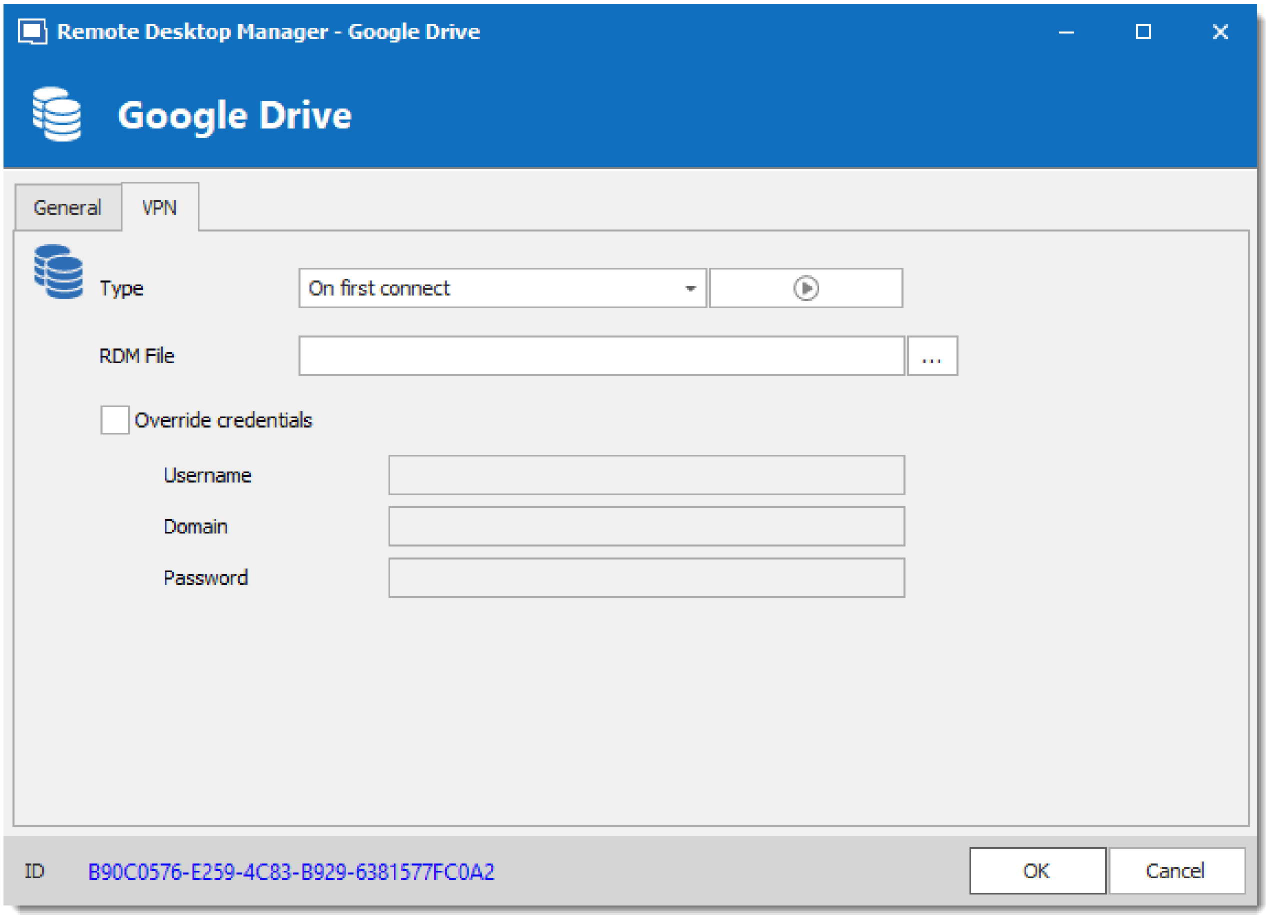
Google Drive - General Tab

OPTION	DESCRIPTION
Name	Enter the name of the data source.

OPTION	DESCRIPTION
Email	Enter the Google email to access Google Drive.
Password	Enter the password of the Google account.
Always ask password	Always ask for the password when connecting to the data source.
Account status	Indicated if the account has been validated with Google Drive. Credentials must be validated before using the data source.
Validate Google Drive	This contextual button attempts validates the credentials currently in use (or removes currently validated credentials).
Master key	Enter the master key of the data source (If enabled).
Always ask master key	Enabling this option will prompt for a master key whenever you are connecting to the data source.
Filename	Enter the Google Drive path of the data source's file.

VPN

Open a VPN to access your data prior to connecting to your **Google Drive**.



Type: On first connect

RDM File:

□ Override credentials

Username:

Domain:

Password:

ID B90C0576-E259-4C83-B929-6381577FC0A2

Google Drive - VPN Tab

5.4.4 Devolutions Online Drive

DESCRIPTION

The Devolutions Online Drive stores and synchronizes your remote connections and credentials data in our Cloud services. You can access your sessions from anywhere via an Internet connection.

It is an online file storage service dedicated to a single file type, Remote Desktop Manager's connection list. Devolutions Online Drive is completely free and has no limitations as to how many sessions you might have, it is for **single users** as it cannot share files.

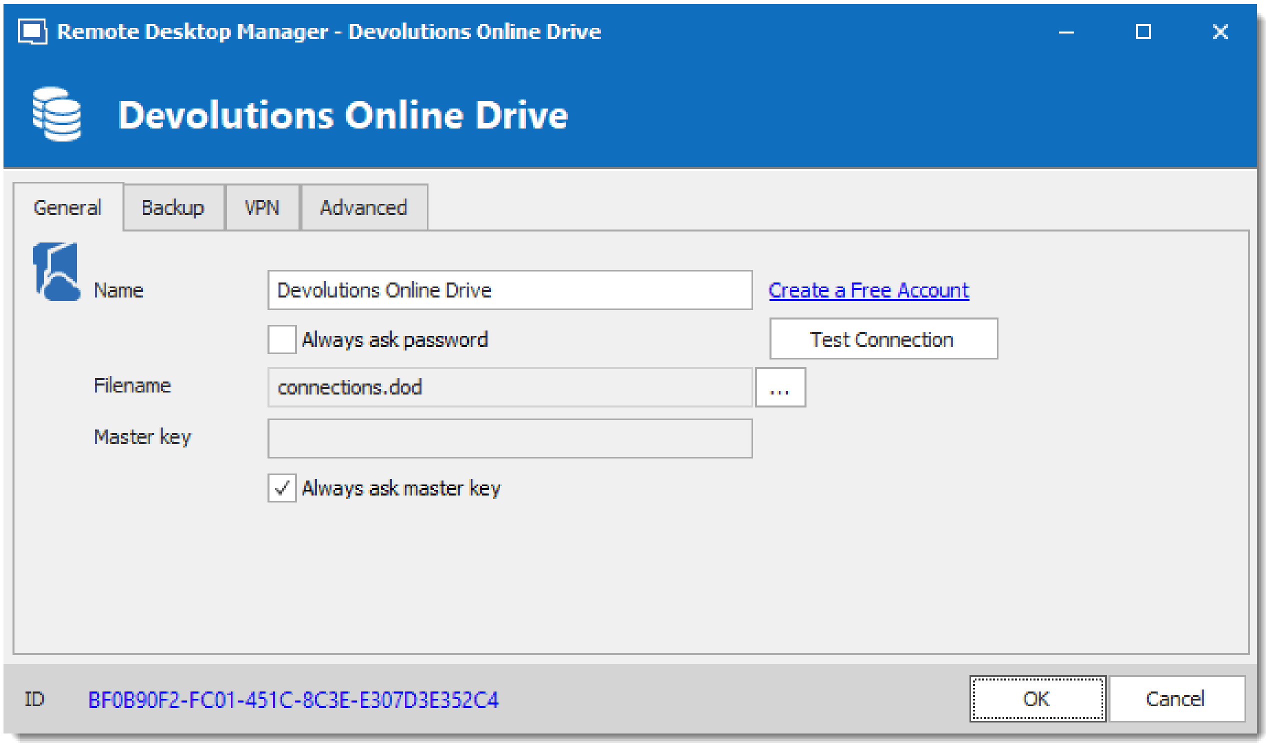
Please consult the Online Drive topic for information on this service.

Since this service is hosted in the cloud, we strongly recommend that you further encrypt your data by applying a Master key. This will ensure that the file will be unreadable by no one but you.

Even though this is a cloud service, you **MUST** use our Online Backup service to keep history of your data. Devolutions offers a free backup service, and we do not maintain multiple versions of the Online Drive content. This makes it critical that you enable the backup feature. This service will keep multiple versions of your file and is the best option.

SETTINGS

GENERAL



Name: Devolutions Online Drive

□ Always ask password

Filename: connections.dod

Master key:

☑ Always ask master key

ID BF0B90F2-FC01-451C-8C3E-E307D3E352C4

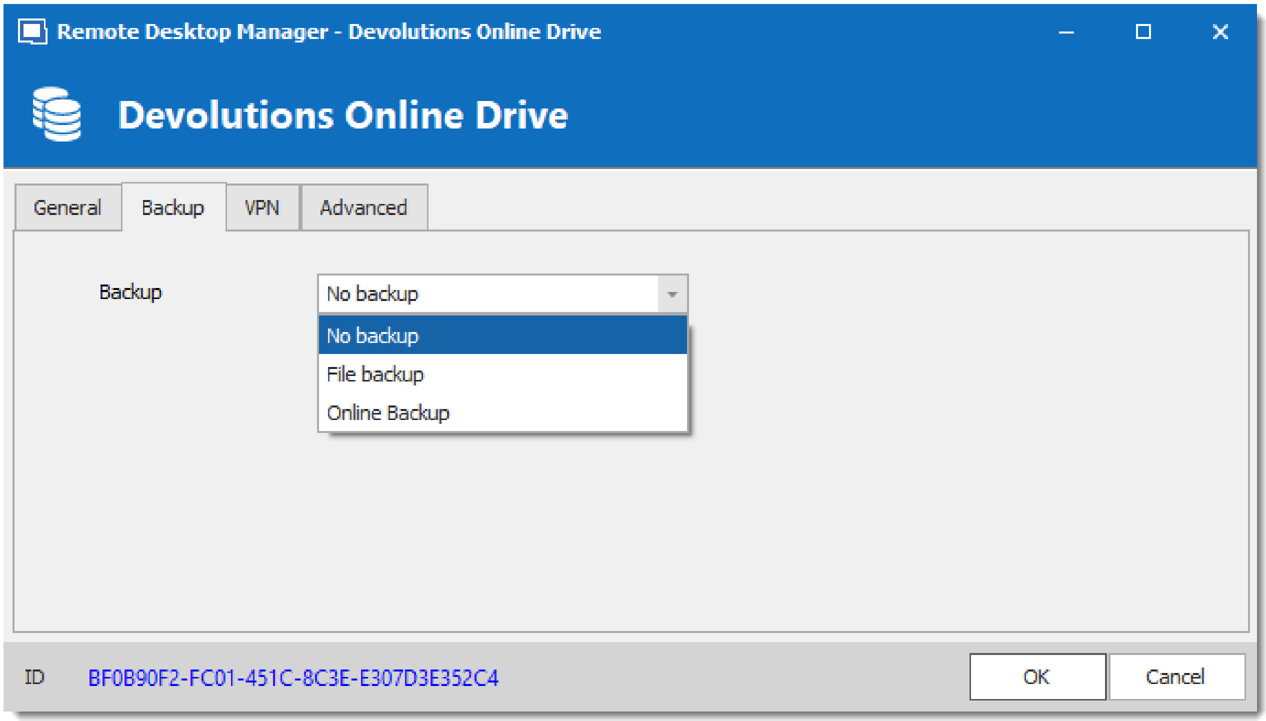
Devolutions Online Drive - General Tab

OPTION	DESCRIPTION
Name	Enter the name of the data source.
Create a free account	Create a new Devolutions Account.

OPTION	DESCRIPTION
Always ask password	Prompts for the password every time a connection to the Devolutions Online Drive is attempted.
Test Connection	Test the connection with Devolutions Online Drive to validate the provided credentials.
Filename	Indicate the filename used to store the data on the Devolutions Online Drive.
Master key	Contains a master key to access the data source.
Always ask master key	Ask for the master key every time a connection to the Devolutions Online Drive is attempted.

BACKUP

Please consult the Online Backup topic for information on this service.



Backup: No backup

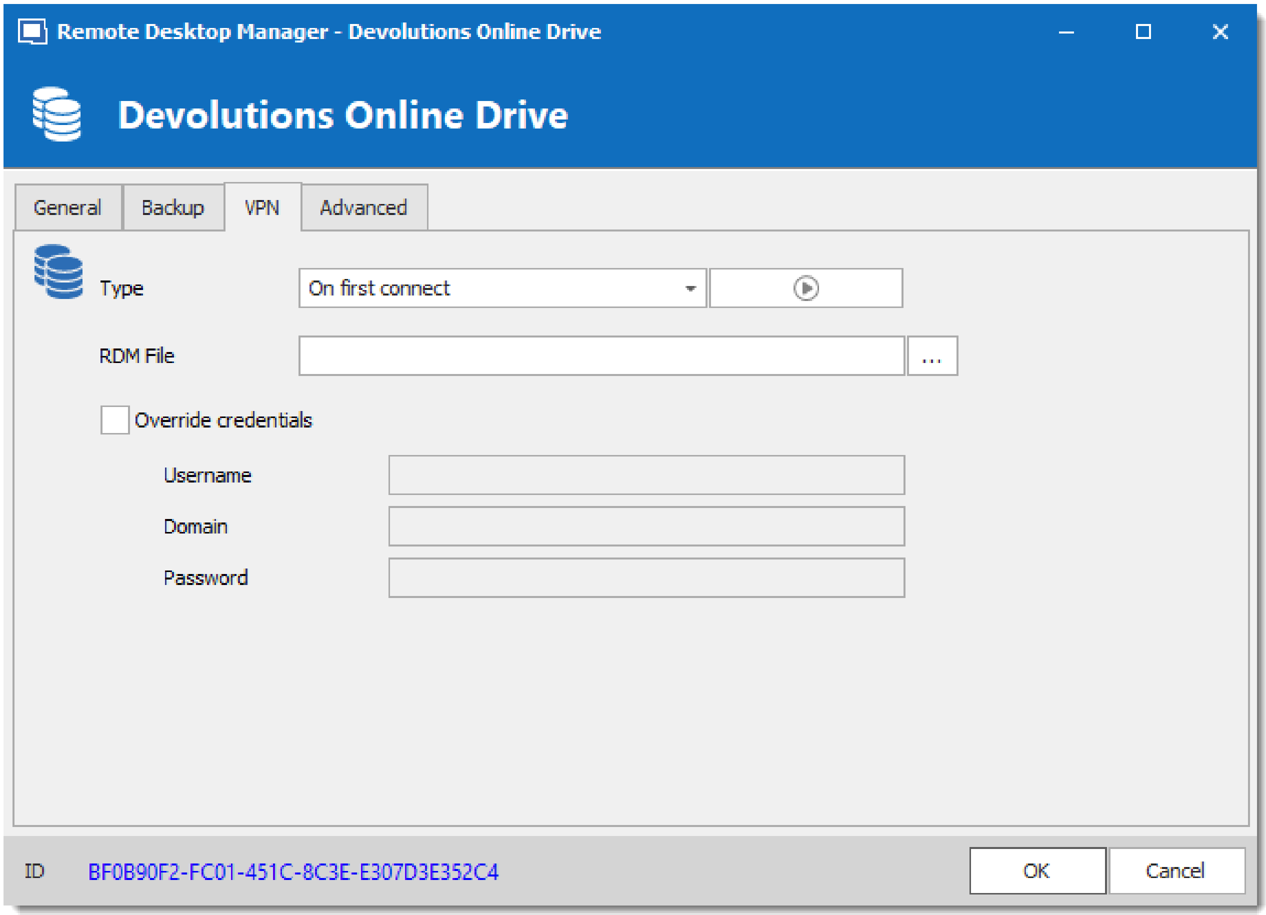
ID BF0B90F2-FC01-451C-8C3E-E307D3E352C4

Devolutions Online Drive - Backup Tab

OPTION	DESCRIPTION
Backup	Choose the backup mode. Select between: • **None**: No backup of the data source will be created. • **File backup**: The backup will be saved to a local file when a modification occurs in the data source. • **Online Backup**: An Online Backup (using the Online Backup) will automatically be created when a modification occurs in the data source.

VPN

Open a VPN to access your data prior to connecting to your **Devolutions Online Drive**.



Remote Desktop Manager - Devolutions Online Drive

Devolutions Online Drive

Type: On first connect

RDM File:

□ Override credentials

Username:

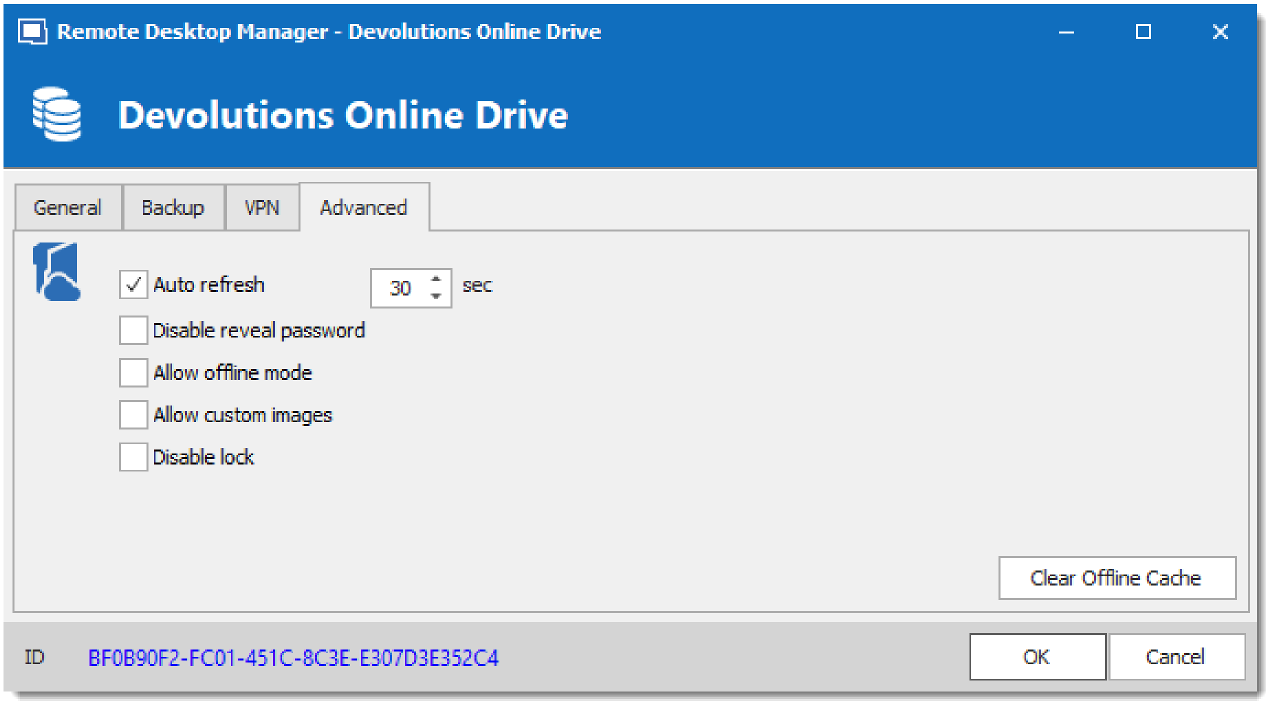
Domain:

Password:

ID BF0B90F2-FC01-451C-8C3E-E307D3E352C4

Devolutions Online Drive - VPN Tab

ADVANCED



☑ Auto refresh 30 sec
□ Disable reveal password
□ Allow offline mode
□ Allow custom images
□ Disable lock

ID BF0B90F2-FC01-451C-8C3E-E307D3E352C4

Devolutions Online Drive - Advanced Tab

OPTION	DESCRIPTION
Auto refresh	Set the interval to use between each automatic refresh.
Disable reveal password	Disable the reveal password feature when a user access the data source.
Allow offline mode	Allows the data source to be used in Offline mode.
Allow custom images	Allows the use of custom images.
Disable lock	Disables the password query for locking application.
Clear Offline Cache	Clear the offline cache on the local computer. This can be very helpful when encountering offline issues.

5.4.5 SQLite

DESCRIPTION

Remote Desktop Manager's SQLite data source is ideal for single user and stand-alone situations. More powerful and more flexible than the XML file format, it also supports a few of the Advanced Data Source options like Logs and Attachments.

HIGHLIGHTS

- Full connection log and attachments support
- The Online Backup Service is available for this data source

All passwords are encrypted by default by Remote Desktop Manager. You can specify a custom password to fully encrypt the content of the SQLite database.

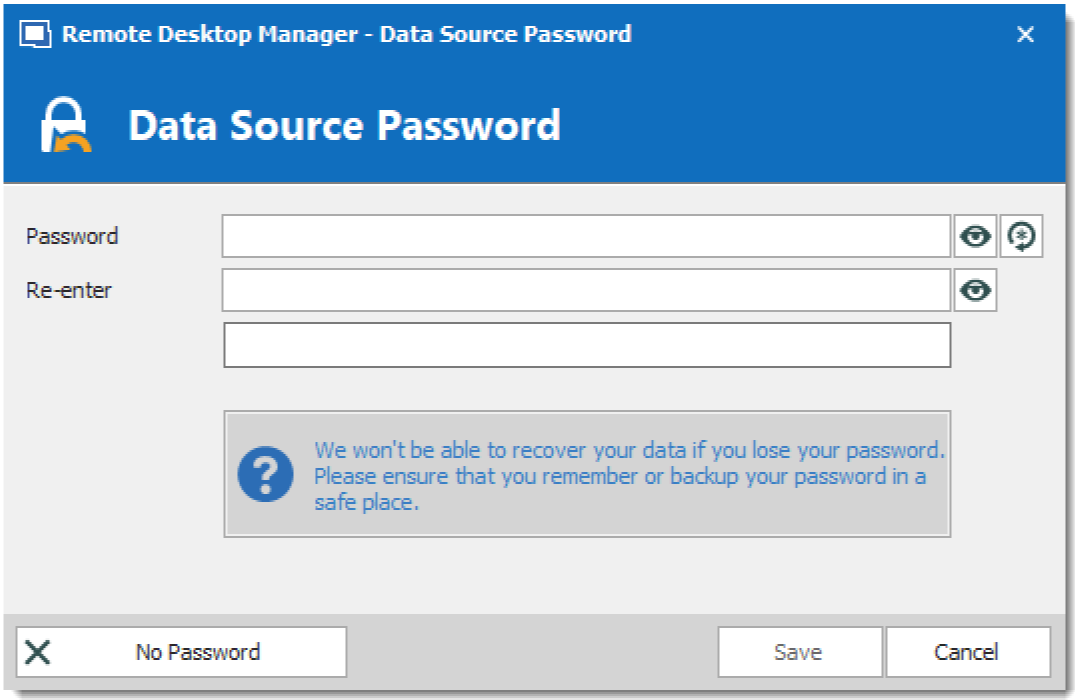
Password recovery is not possible, the data will be unrecoverable if you cannot authenticate. Please ensure you backup the password in a safe place.

SQLite supports an unlimited number of simultaneous readers, but will only allow one writer at any instant in time. For this reason Remote Desktop Manager does not support sharing a SQLite data source between several users by storing it on a network drive. If you want to share your data and work in a team environment with your colleagues, please use one of the Advanced Data Sources. Please consult SQLite.org for more information.

PASSWORD MANAGEMENT

You can specify a password to further encrypt your data. Specify it at creation time. If the data source already exists you can modify the password by using the ***File – Manage Password*** dialog.

Change or clear the password of a SQLite data source.

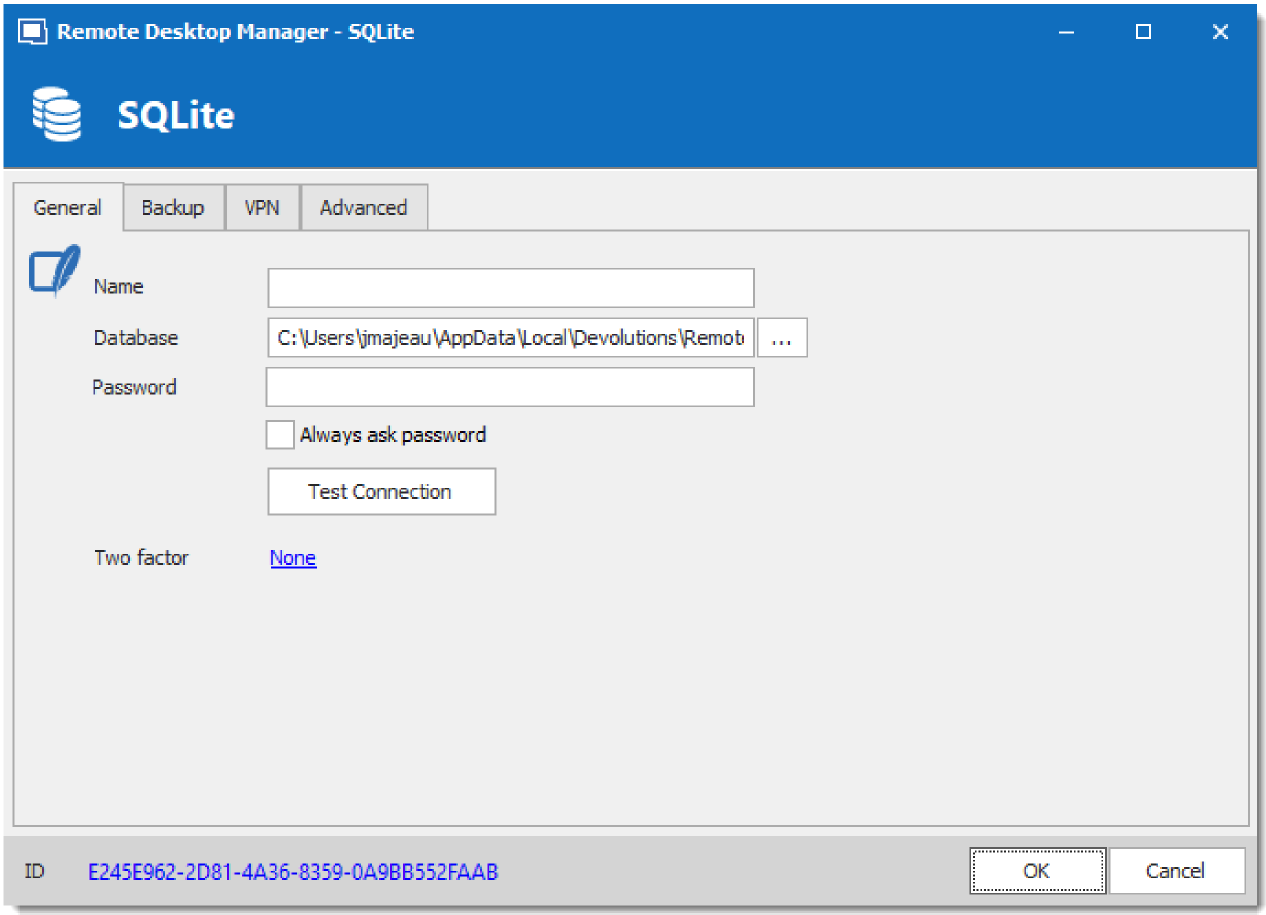


We won't be able to recover your data if you lose your password. Please ensure that you remember or backup your password in a safe place.

Manage password dialog

SETTINGS

GENERAL



Name

Database C:\Users\jmajeau\AppData\Local\Devolutions\Remot

Password

□ Always ask password

Two factor None

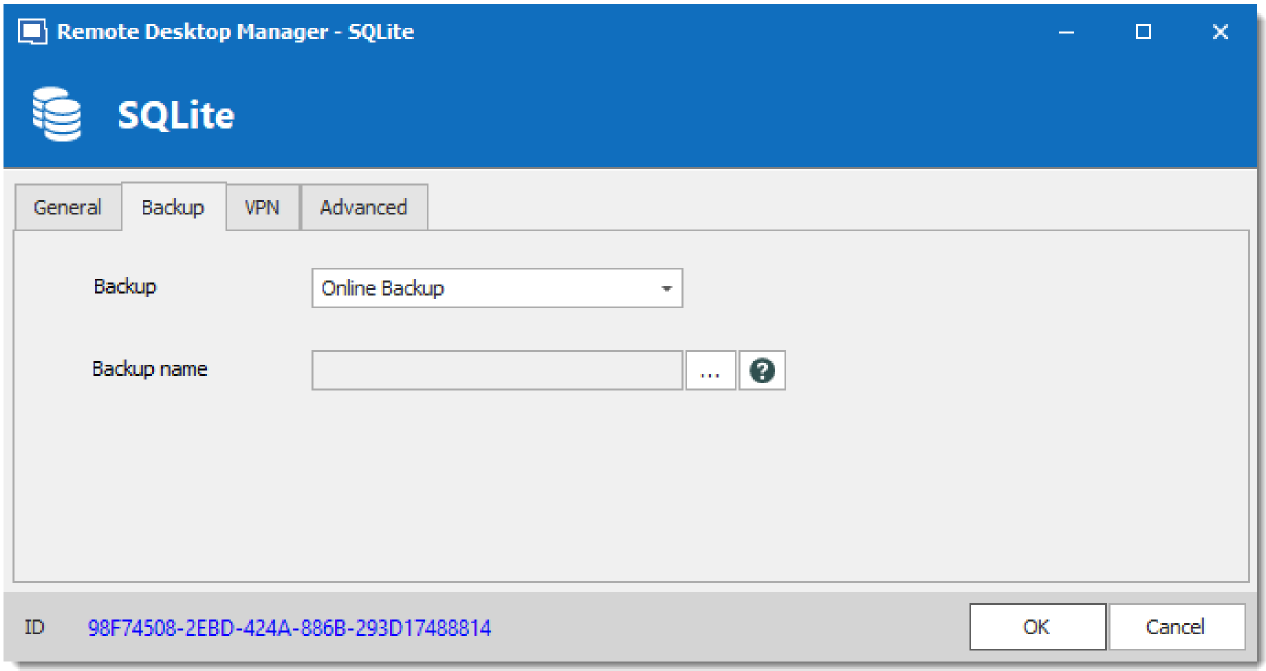
ID E245E962-2D81-4A36-8359-0A9BB552FAAB

SQLite - General Tab

OPTION	DESCRIPTION
Name	Name of the data source.
Database	Indicates the filename of the SQLite database (.db).
Password	Specify a password to further encrypt your data source.
Always ask password	Always ask for the password when connecting to the data source.
Test Connection	Test the current database path and password for conneciton.

OPTION	DESCRIPTION
Two factor	Enable the 2-Factor Authentication to access your data source.

BACKUP



Backup: Online Backup

Backup name:

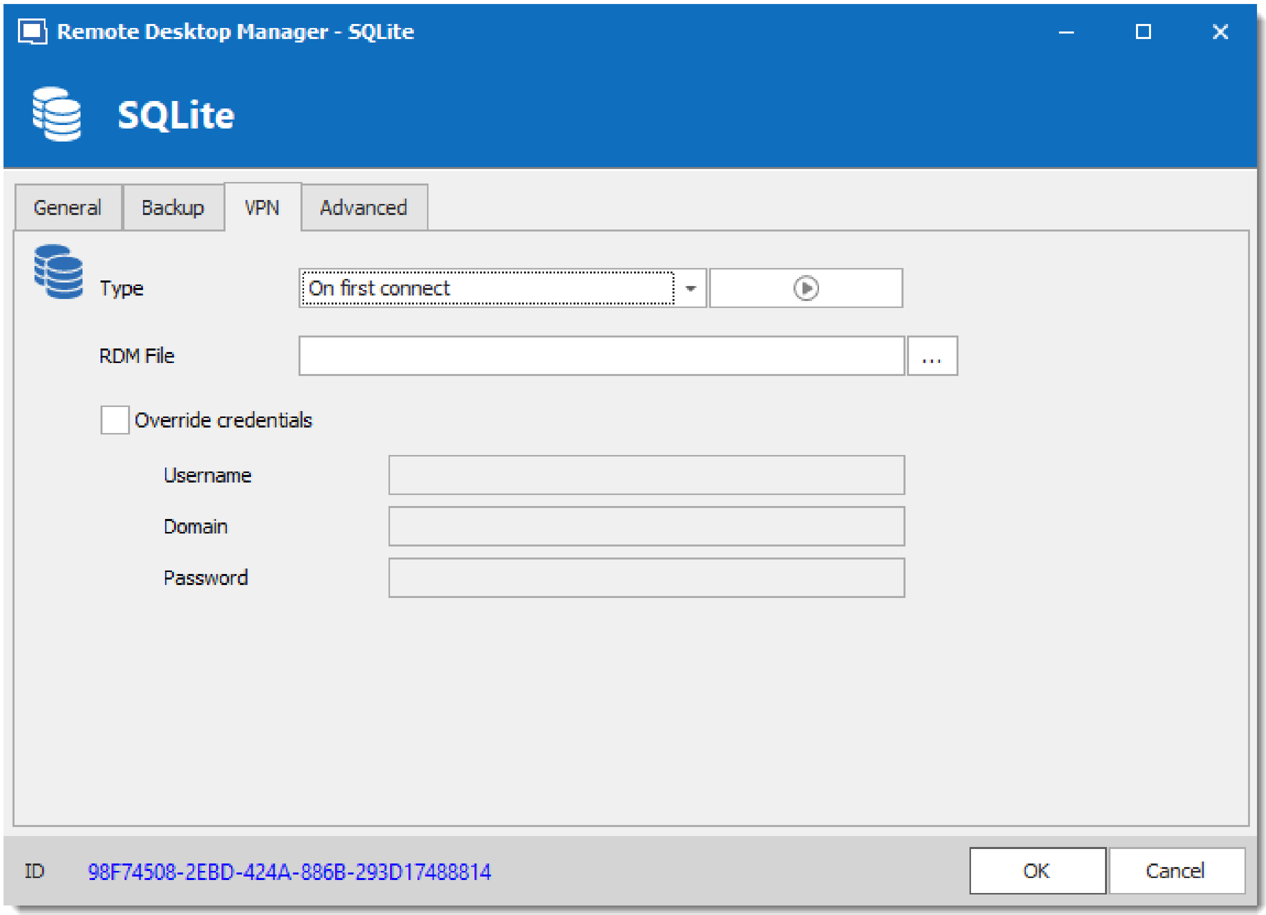
ID 98F74508-2EBD-424A-886B-293D17488814

SQLite - Backup Tab

OPTION	DESCRIPTION
Backup	Select between: • **None**: No backup of your data source will be created. • **File backup**: Your backup will be saved to a chosen file but will not automatically do backup every 30 seconds. • **Online Backup**: An Online Backup (using Online Backup) will automatically be created.

VPN

Open a VPN to access your data prior to connecting to your **SQLite**.



Type: On first connect

RDM File:

□ Override credentials

Username:

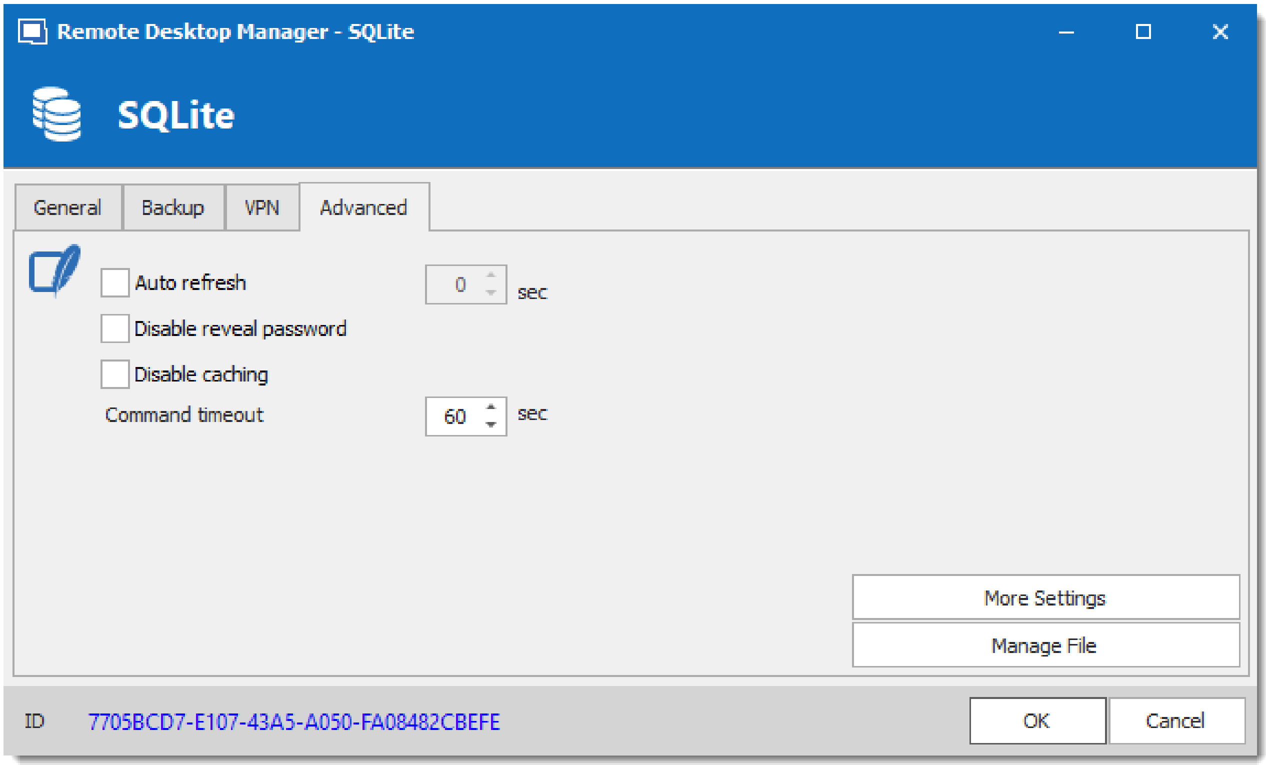
Domain:

Password:

ID 98F74508-2EBD-424A-886B-293D17488814

SQLite - VPN Tab

ADVANCED



□ Auto refresh 0 sec

□ Disable reveal password

□ Disable caching

Command timeout 60 sec

ID 7705BCD7-E107-43A5-A050-FA08482CBEFE

SQLite - Advanced Tab

OPTION	DESCRIPTION
Auto refresh	Set the interval for the automatic refresh.
Disable reveal password	Disable the reveal password feature when a user access this data source.
Disable caching	Entries will be reloaded in Simple mode in the data source. See Caching topic for more information.
Command timeout	Waiting time before a command timeout.
More Settings	Use to directly modify the connection string value.
Manage File	Contains multiple SQLite commands to facilitate managing. You should usually only access these when our support teams demands it.

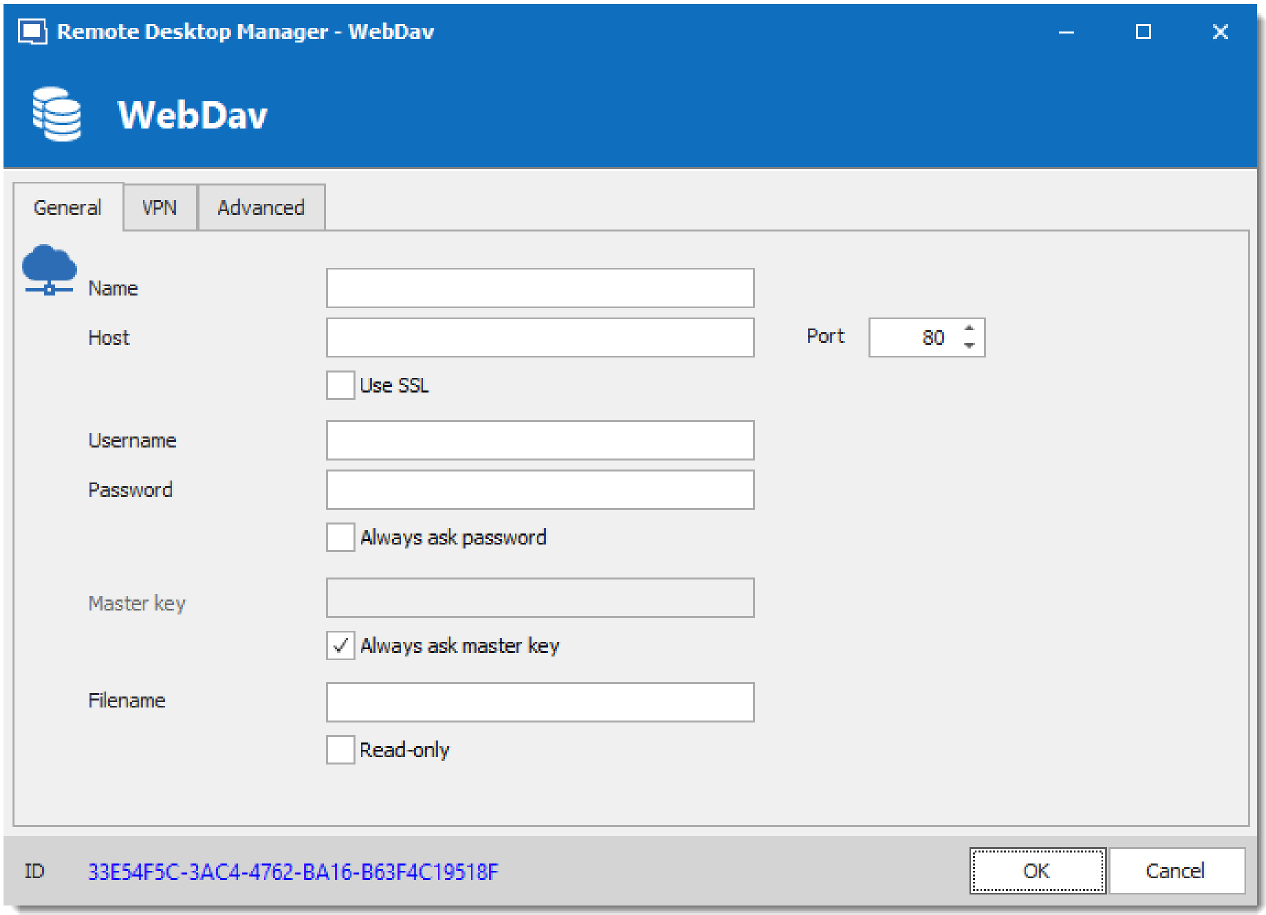
5.4.6 WebDAV

DESCRIPTION

With the WebDAV data source, Remote Desktop Manager downloads and uploads the session settings directly from a file located on a WebDAV site.

SETTINGS

GENERAL



Name

Host

Port 80

□ Use SSL

Username

Password

□ Always ask password

Master key

☑ Always ask master key

Filename

□ Read-only

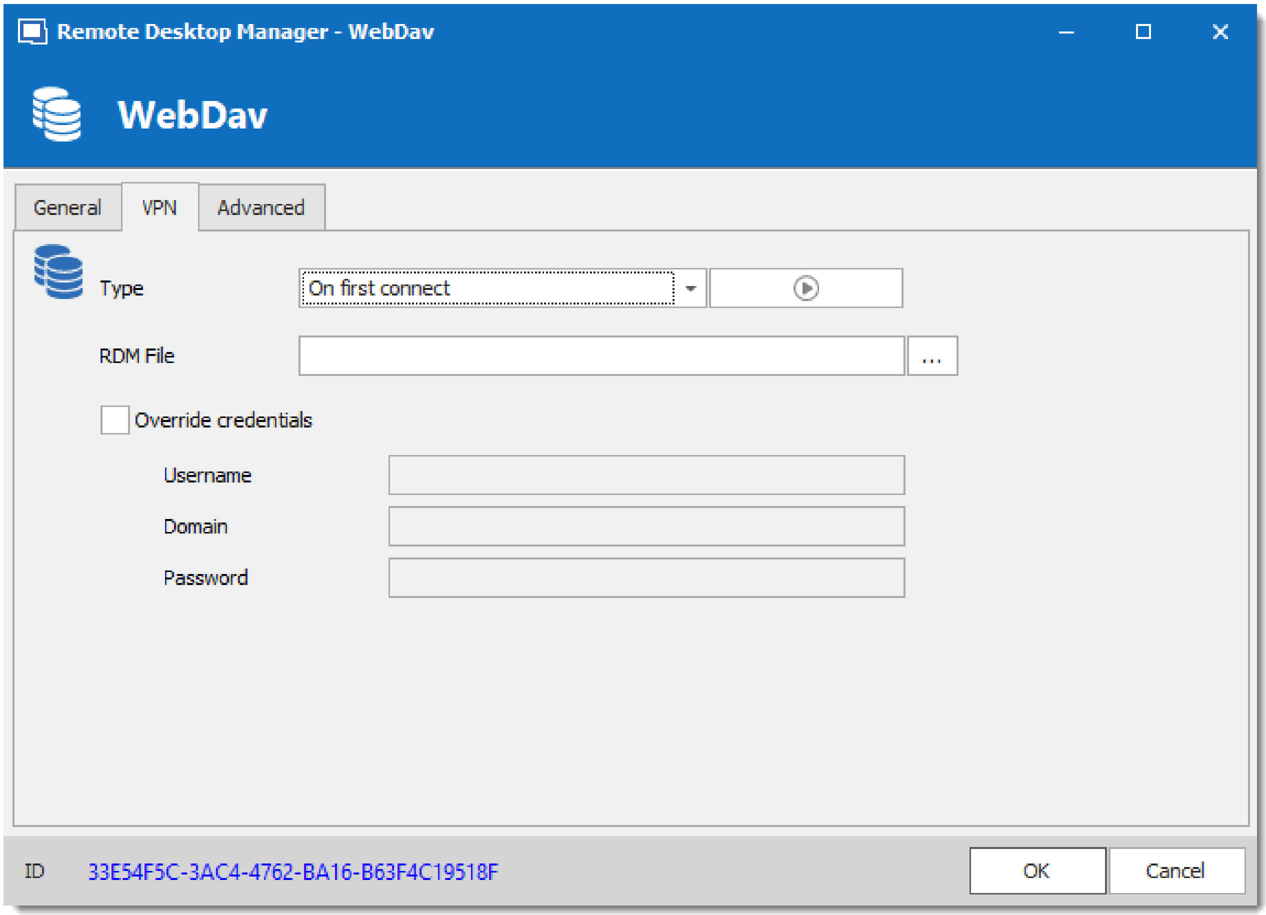
ID 33E54F5C-3AC4-4762-BA16-B63F4C19518F

WebDAV - General Tab

OPTION	DESCRIPTION
Name	Enter the name of the data source.
Host	Enter the hostname or IP address of the remote device.
Port	Enter the port of the remote device.
Use SSL	Use the SSL encryption.
Username	Enter the account username to access to the remote device.
Password	Enter the account password to access to the remote device.
Always ask password	Always ask password input when connecting to the data source.
Master key	Add an additional security layer by encrypting your data source with a master key.
Always ask master key	Always prompt for the master key when connecting to the data source.
Filename	Enter the file name. If it does not exists, it will be created automatically.
Read-only	Set the data source to read-only.

VPN

Open a VPN to access your data prior to connecting to your **WebDAV**.



Type: On first connect

RDM File

□ Override credentials

Username

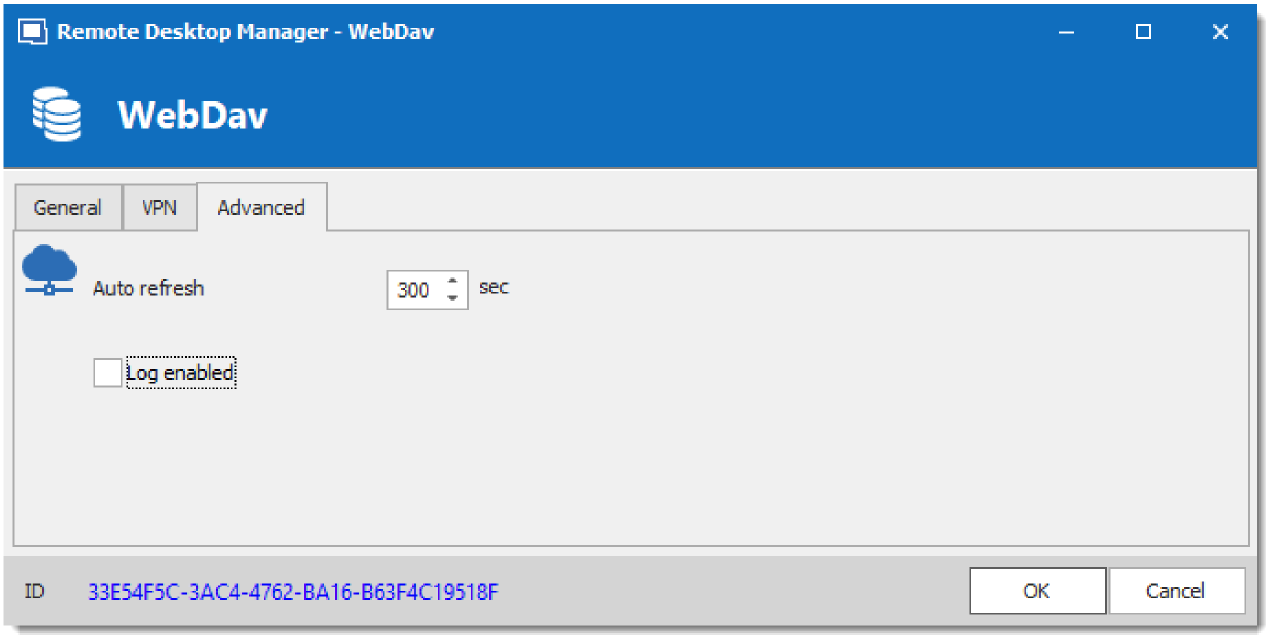
Domain

Password

ID 33E54F5C-3AC4-4762-BA16-B63F4C19518F

WebDAV - VPN Tab

ADVANCED



Auto refresh 300 sec

□ Log enabled

ID 33E54F5C-3AC4-4762-BA16-B63F4C19518F

WebDAV - Advanced Tab

OPTION	DESCRIPTION
Auto refresh	Set the interval for the automatic refresh.
Log enabled	Enables logging and its features.

5.4.7 XML

DESCRIPTION

Remote Desktop Manager saves the settings directly in an XML file format.

HIGHLIGHTS

- This is a very simple data source and it can be modified or generated by an external tool.

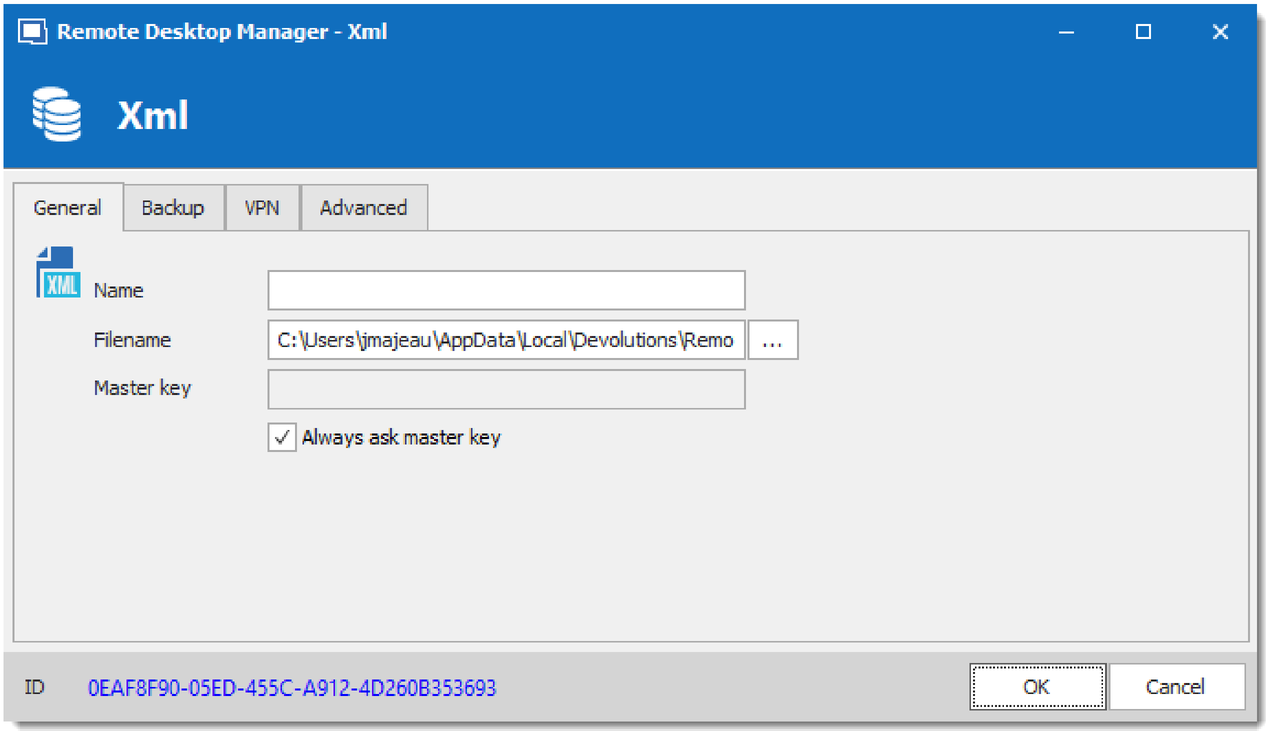
- It is possible to configure an auto refresh interval.
- The Online Backup is available for this data source.

Although it can be shared between multiple locations, there is no conflict management for the configuration. If you share with other users you may get update conflicts or otherwise run into issues. This data source type is meant for a single user using multiple computers, not multiple users.

All passwords are encrypted by default. You can specify a custom password (master key) to fully encrypt the content of the file. It is impossible to recover the data if the master key is lost. Please make sure to remember or backup the master key in a safe place.

SETTINGS

GENERAL



Name

Filename C:\Users\jmajeau\AppData\Local\Devolutions\Remo ...

Master key

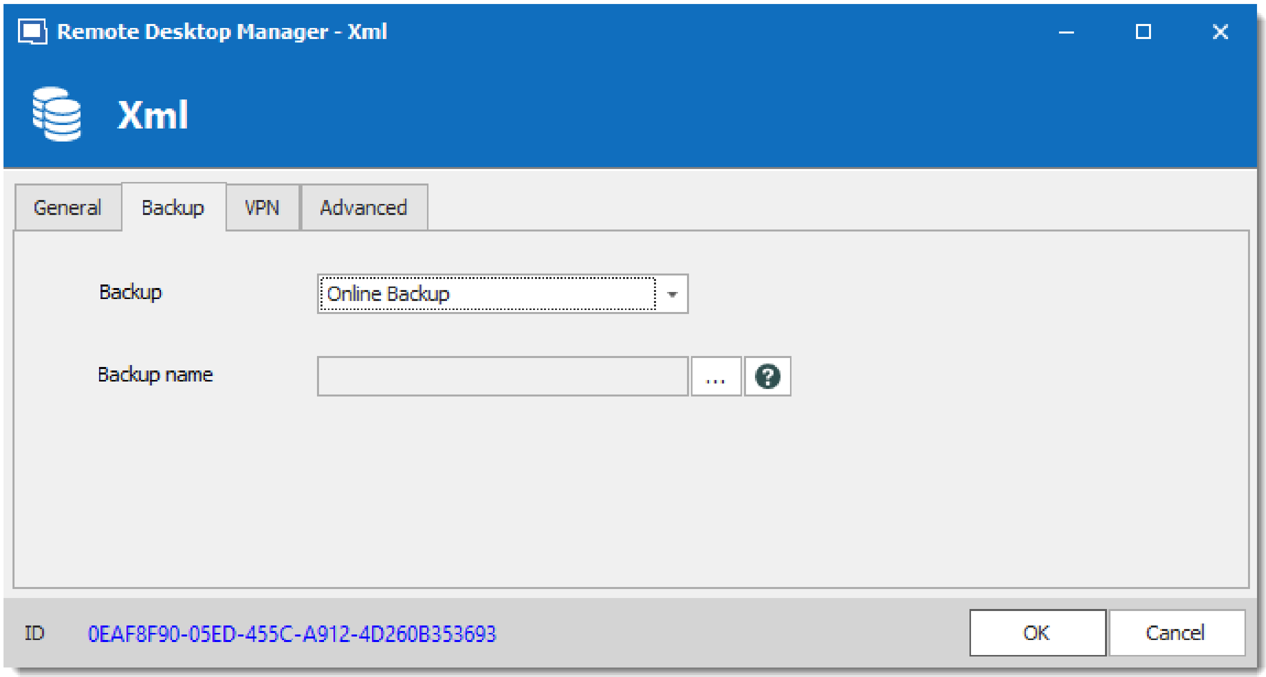
☑ Always ask master key

ID 0EAF8F90-05ED-455C-A912-4D260B353693

XML - General Tab

OPTION	DESCRIPTION
Name	Name of the data source.
Filename	Specify the full path of the XML file used to save the data. Relative paths and environment variables can be used as well.
Master key	Add an additional layer of security by encrypting your data source with a master key.
Always ask master key	Always prompts for the master key when connecting to the data source.

BACKUP



Backup: Online Backup

Backup name:

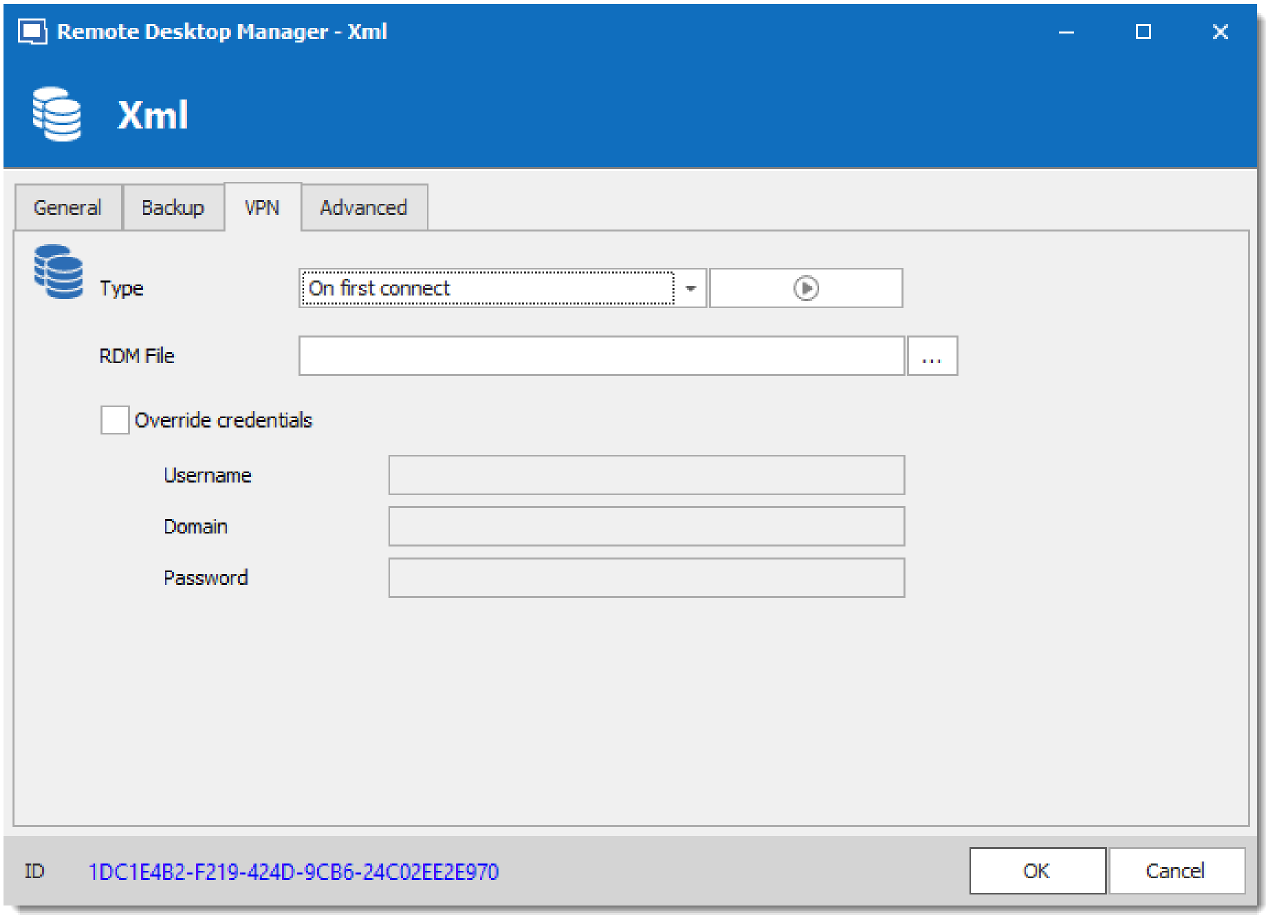
ID 0EAF8F90-05ED-455C-A912-4D260B353693

XML - Backup Tab

OPTION	DESCRIPTION
Backup	Select between: - **None**: No backup of your data source will be created. - **File backup**: Your backup will be saved to a chosen file but will not automatically do backup every 30 seconds. - **Online Backup**: An Online Backup (using Online Backup) will automatically be created.
Backup name	Specify the backup name that will allow you to automatically save your sessions in a safe online storage space and restore them in the event of problems.

VPN

Open a VPN to access your data prior to connecting to your **XML**.



Type: On first connect

RDM File

□ Override credentials

Username

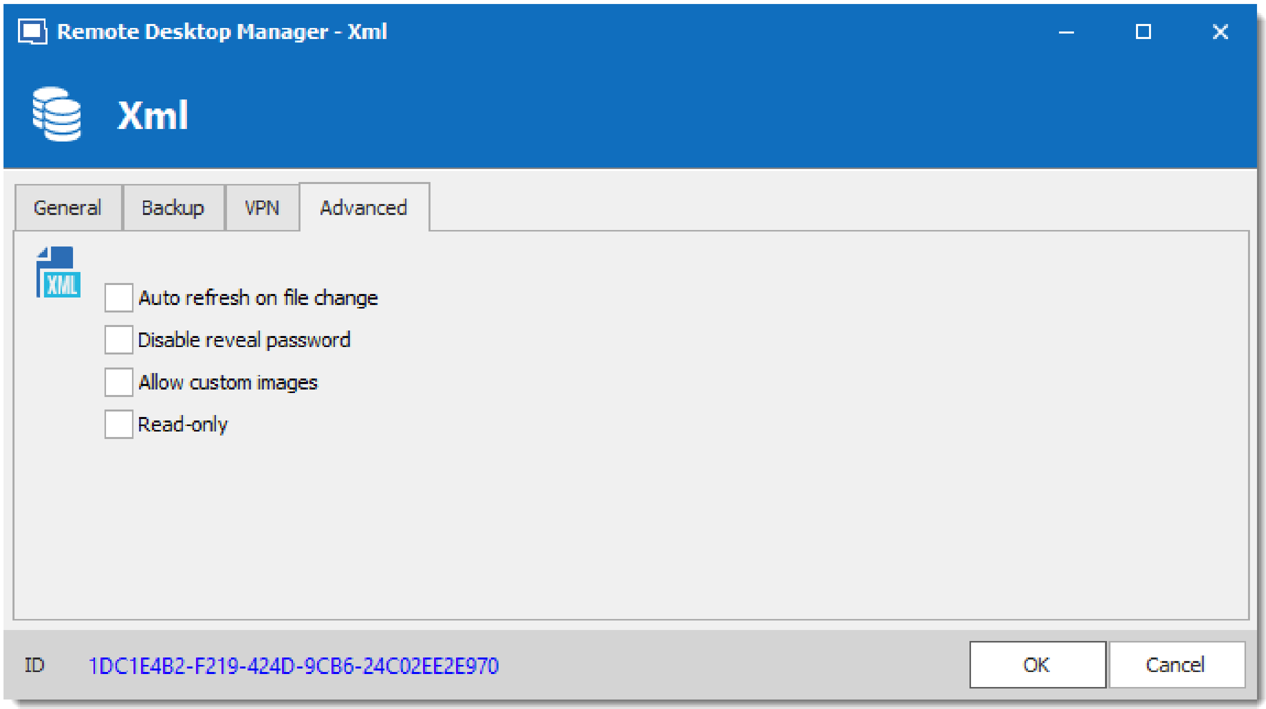
Domain

Password

ID 1DC1E4B2-F219-424D-9CB6-24C02EE2E970

XML - VPN Tab

ADVANCED



□ Auto refresh on file change
□ Disable reveal password
□ Allow custom images
□ Read-only

ID 1DC1E4B2-F219-424D-9CB6-24C02EE2E970

XML - Advanced Tab

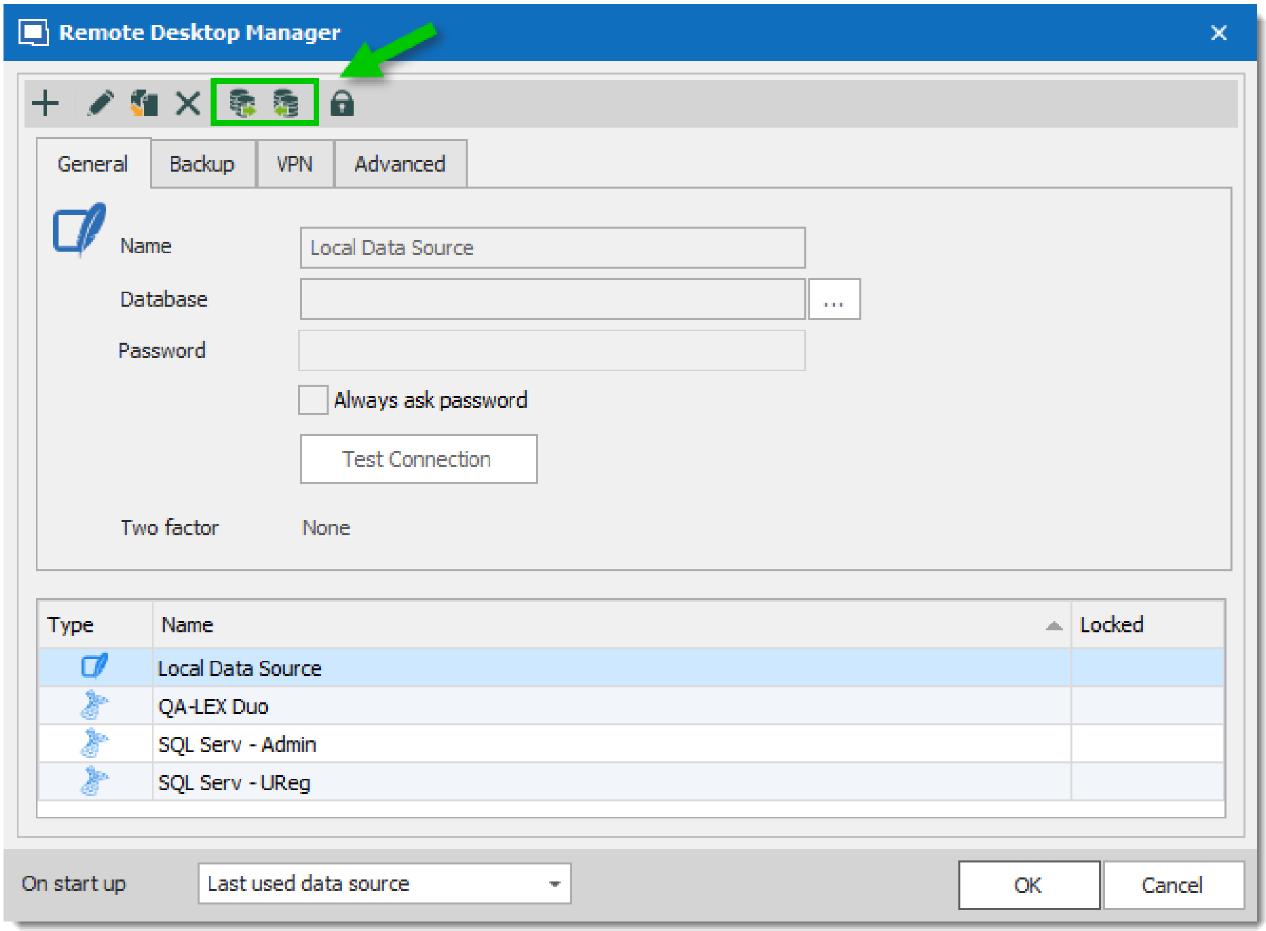
OPTION	DESCRIPTION
Auto refresh on file change	Indicate if the application monitor the file changes to automatically refresh the data source.
Disable reveal password	Disable the reveal password feature when a user accesses this data source.
Allow custom images	This will enable the loading of any custom images in the tree view.
Read-only	Set the data source in read only. No new entry can be created and the existing data cannot be edit.

5.5 Import/Export Data Source

DESCRIPTION

To simplify deployment for multiple users, it is possible to export and import data source configurations. The generated .rdd file contains all the information to recreate the configuration. Please note that the .rdd file does not include the database content. Only the configuration is exported. Use the entries's Export functionality to backup or copy the database's content.

Use ***File – Data Sources*** to access the import or export functionality.



Name: Local Data Source

Database:

Password:

□ Always ask password

Two factor: None

Type	Name	Locked
	Local Data Source	
	QA-LEX Duo	
	SQL Serv - Admin	
	SQL Serv - UReg	

On start up: Last used data source

Data Sources - Import and Export

Whether or not users can **Read/Write** in Offline mode is first decided at the data source's Caching mode level. **This cannot be changed remotely.** If you wish to prevent or allow remote users the Read/Write offline feature, you should do so before exporting your data source.

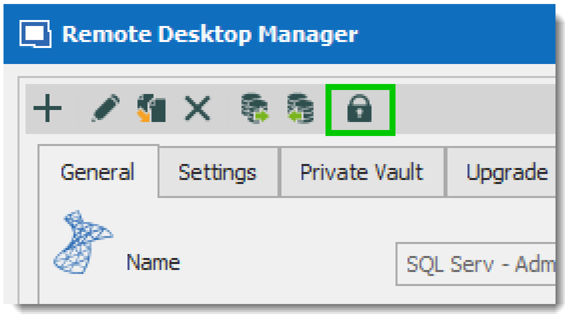
A locked data source can be exported and imported, but the content will be locked unless a password is entered when the data source is selected. See Lock Data Source for more information.

5.6 Lock Data Source

LOCK DATA SOURCE

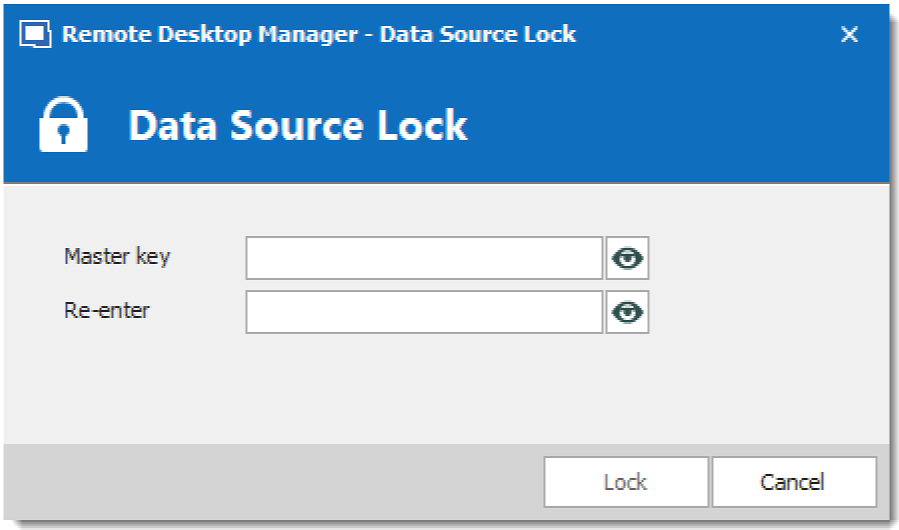
To protect sensitive data in your data source configuration (e.g. server URL or credentials), you may wish to lock the data source configuration before you deploy it to your users. You can do it by using the Lock/Unlock button from the toolbar.

SETTINGS



Lock Data Source toolbar

The locked data source will require a password. The password must be specify when the lock is applied. Use the same password to unlock it or to modify the data source configuration.



Lock Data Source dialog

There is **NO way** of unlocking the data source if the password is lost or forgotten. In such an event, you will need to configure a new data source. However the content of the database will not be lost.

5.7 Offline mode

DESCRIPTION

The offline mode connects to a local copy of the data source when you are not connected to the data source. This is useful when working from a remote location and the network is unreachable or if there is any kind of connectivity issue.

The read/write offline mode adds to users the possibility to manipulate entries while disconnected from the data source. This is useful for off-site personnel or when working in environments that have sporadic network availability.

This feature is not available for all data sources, please consult the help topic of the respective data source to know if it supports offline mode.

The offline cache is first encrypted using our own private key mixed with some information taken from the local computer. This makes it impossible for a copy on another machine to be readable. By default it is also encrypted with Windows NTFS encryption, in which case there is no key saved anywhere.

For added security, offline files are set to expire after a delay. The default expiry is set to 7 days but can be modified via the Data Source Settings (System Settings).

Remote Desktop Manager will prompt for offline mode when the application is unable to reach the data source but the offline mode can be toggled manually with ***File – Go Offline***.

Several features are not available in offline mode, such as:

- Attachments and logs.
- User management (Add/Edit/Delete users).

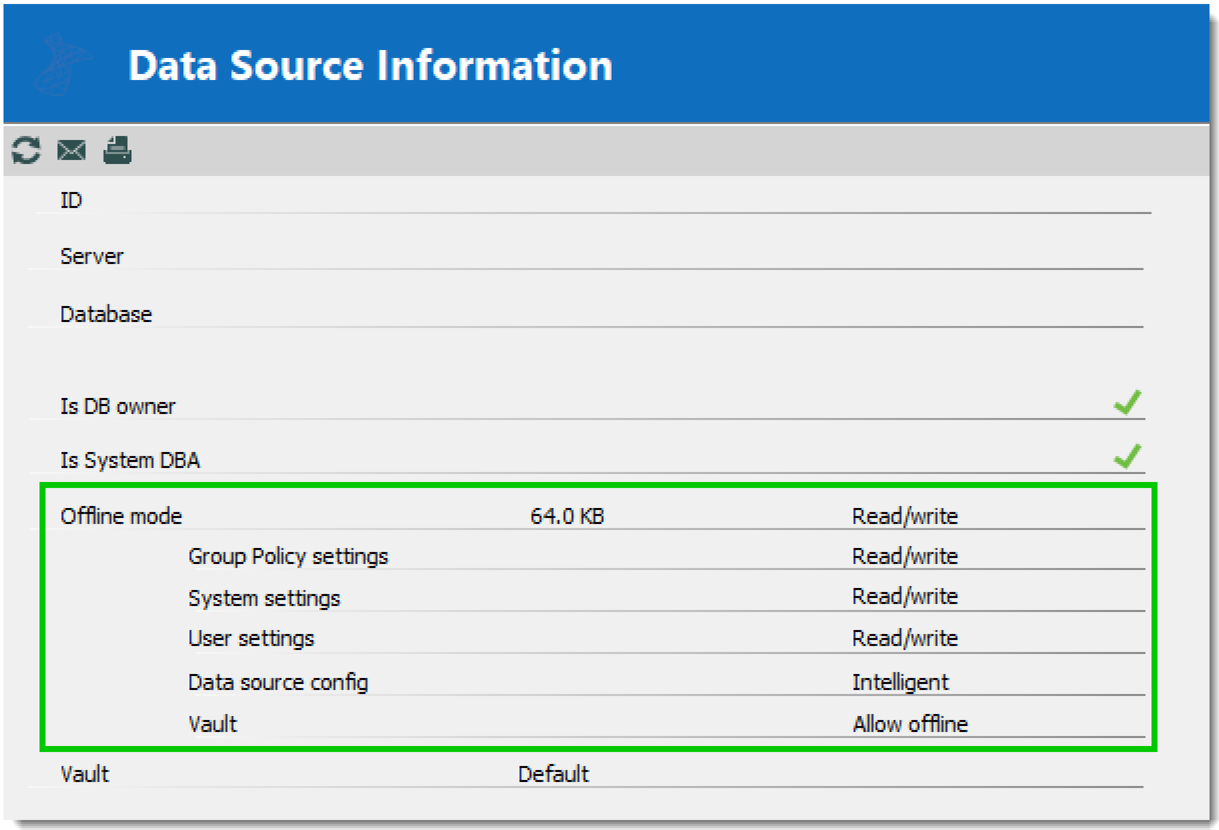
AVAILABILITY

The offline mode availability relies on several settings:

- The data source offline cache must be enabled. **(This step needs to be done before you export your data source to other computers)**
- The user's account.
- The data source settings.
- The group policies.
- At the Vault level.

The lowest setting (in terms of security) prevails over the others, which may prevent you from using the offline mode. If the **Go Offline** button is not available, please consult your administrator.

The **Data Source Information** displays the size of the offline cache file along with the effective modes (disabled, read-only or read/write).



Data Source Information

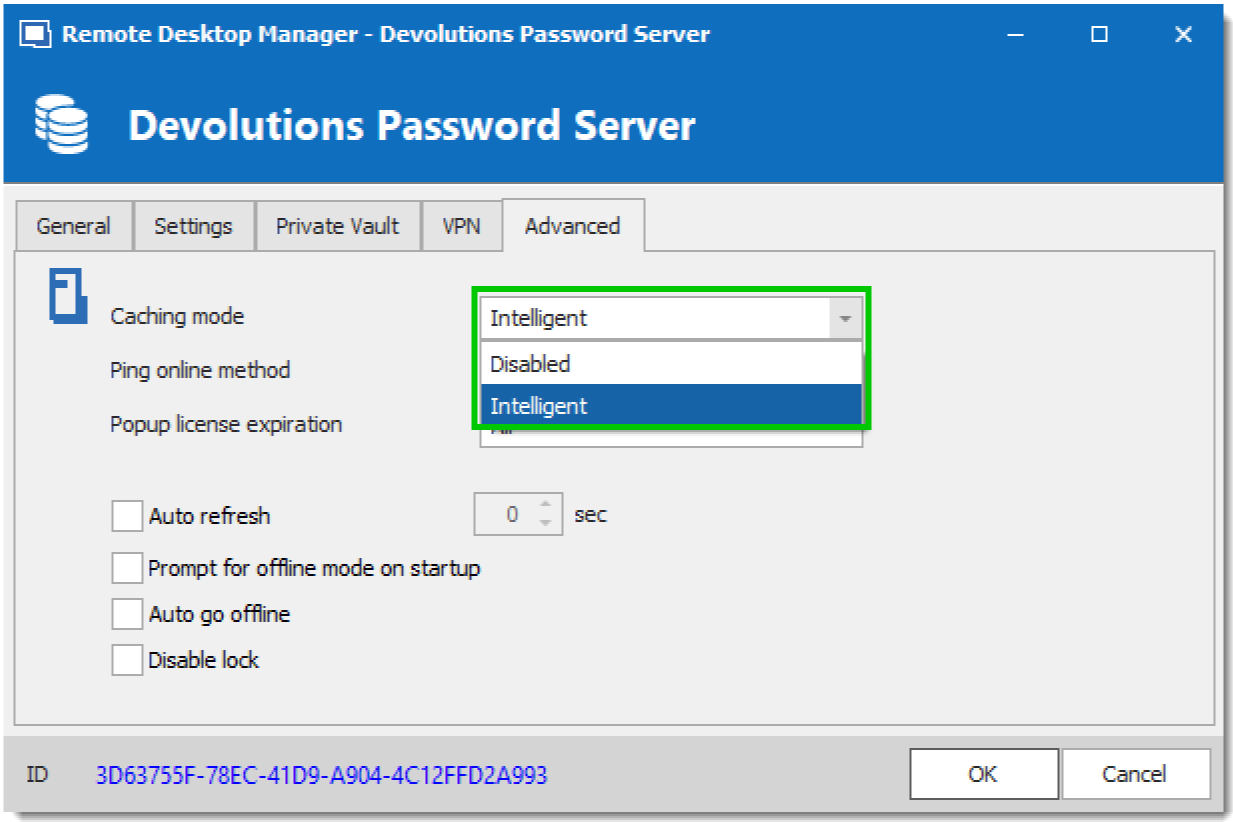
ID		
Server		
Database		
Is DB owner		✓
Is System DBA		✓
Offline mode	64.0 KB	Read/write
Group Policy settings		Read/write
System settings		Read/write
User settings		Read/write
Data source config		Intelligent
Vault		Allow offline
Vault	Default	

My Data Source Information - Offline mode

CACHING MODE

The caching mode must be set to **Intelligent** to enable the offline mode.

This step cannot be modified remotely once you have exported your data source settings. You should take a moment and think about the needs of your data source and select what is appropriate before moving on to exporting.


Remote Desktop Manager - Devolutions Password Server
Devolutions Password Server
General
Settings
Private Vault
VPN
Advanced
Disabled
Intelligent
OK
Cancel

Caching mode: Intelligent

Ping online method

Popup license expiration

□ Auto refresh 0 sec

□ Prompt for offline mode on startup

□ Auto go offline

□ Disable lock

ID 3D63755F-78EC-41D9-A904-4C12FFD2A993

Data Source configuration – Advanced – Caching mode

OPTION	DESCRIPTION
Disabled	Prevent an offline cache from being used.
Intelligent	Use the offline cache only for recent changes.

Read/Write offline mode is not available with the Basic subscription of Devolutions Online Database.

Some features of Remote Desktop Manager are unavailable while offline. Even with read/write access mode, you may not be able to perform all actions, such as adding attachments or managing users since these features are not cached locally. On the other hand, note that the Private Vault is still available in offline mode.

GRANT/DENY OFFLINE

Watch Video

OPTION	DESCRIPTION
Disabled	Prevents an offline cache from being used.
Read-only	Allow to view and use entries only. The content of the data source cannot be modified.
Read/Write	Allow to view, use, and edit entries. Conflicts caused by offline modifications are managed when back online.

Beyond the group policies, the Offline mode is controlled at four levels:

- User permissions.
- Data source settings (System Settings) (server configuration).
- In a Vault's configuration.

A user must be granted Read/Write at all three levels to allow read/write privileges.

USER PERMISSIONS	DATA SOURCE SETTINGS (SYSTEM SETTINGS)	Vault CONFIGURATION	EFFECTIVE ACCESS
Disabled or Read-only or Read/write	Disabled or Read-only or Read/write	**Allow offline disabled**	**Disabled**

USER PERMISSIONS	DATA SOURCE SETTINGS (SYSTEM SETTINGS)	Vault CONFIGURATION	EFFECTIVE ACCESS
Disabled or Read-only or Read/write	Disabled or Read-only or Read/write	Allow offline enabled	**Disabled**
Disabled or Read-only or Read/write	**Disabled**	Allow offline enabled	**Disabled**
Disabled	Disabled or Read-only or Read/write	Allow offline enabled	**Disabled**
Read-only or Read/write	Read-only or Read/write	**Allow offline disabled**	**Disabled**
Read-only or Read/write	Read-only or Read/write	Allow offline enabled	**Read-only**
Read-only or Read/write	**Read-only**	Allow offline enabled	**Read-only**
Read-only	Read-only or Read/write	Allow offline enabled	**Read-only**
Read/write	**Read/write**	**Allow offline enabled**	**Read/write**

You want to know the current effective Offline mode while connected? See My Data Source Information.

5.7.1 Offline Read/Write

DESCRIPTION

The **Read/Write** offline mode allows the user to add, edit and delete entries while the data source is offline. Those changes are saved locally and synchronized with the data source once it is back online.

Some functionalities are not available while offline and you may not be able to perform all actions. Note that the Private Vault is still available in offline mode.

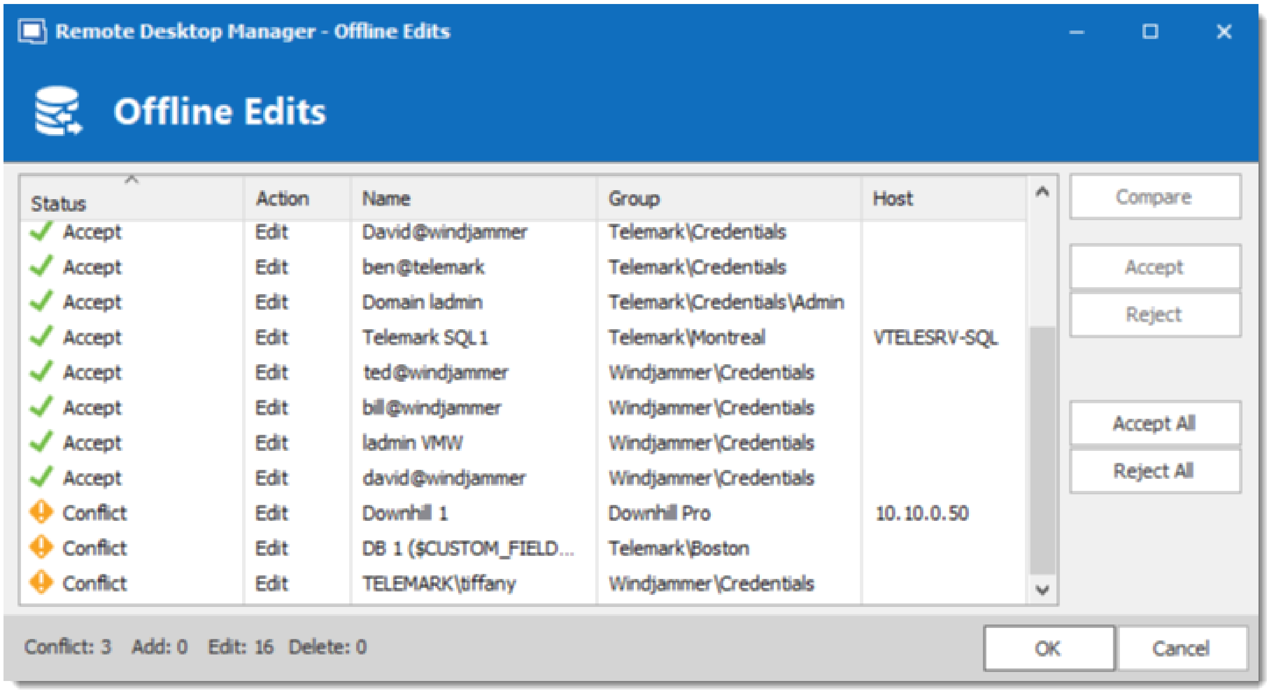
Once offline, the users security settings still applies. Add/Edit/Delete privileges granted by the administrator are still in effect. See User Management.

When an entry is edited by an online user while another user is offline, the local version of the entry stored in the offline cache becomes different from the online version. This causes a conflict when the offline user gets back online.

OFFLINE EDITS WORKFLOW

- Connect to the data source.
- Go offline with ***File – Go Offline***.
- Edit any entry.
- Go back online with ***File – Go Online***.

The **Offline Edits** window is displayed:



Status	Action	Name	Group	Host
✓ Accept	Edit	David@windjammer	Telemark\Credentials	
✓ Accept	Edit	ben@telemark	Telemark\Credentials	
✓ Accept	Edit	Domain ladmin	Telemark\Credentials\Admin	
✓ Accept	Edit	Telemark SQL1	Telemark\Montreal	VTELESRV-SQL
✓ Accept	Edit	ted@windjammer	Windjammer\Credentials	
✓ Accept	Edit	bill@windjammer	Windjammer\Credentials	
✓ Accept	Edit	ladmin VMW	Windjammer\Credentials	
✓ Accept	Edit	david@windjammer	Windjammer\Credentials	
Conflict	Edit	Downhill 1	Downhill Pro	10.10.0.50
Conflict	Edit	DB 1 ($CUSTOM_FIELD...	Telemark\Boston	
Conflict	Edit	TELEMARK\tiffany	Windjammer\Credentials	

Conflict: 3 Add: 0 Edit: 16 Delete: 0

Offline Edits

Use this dialog to accept/reject your offline changes.

You can use the **Compare** action to have a side by side comparison of your changes with the current live entry.

Entries will be marked:

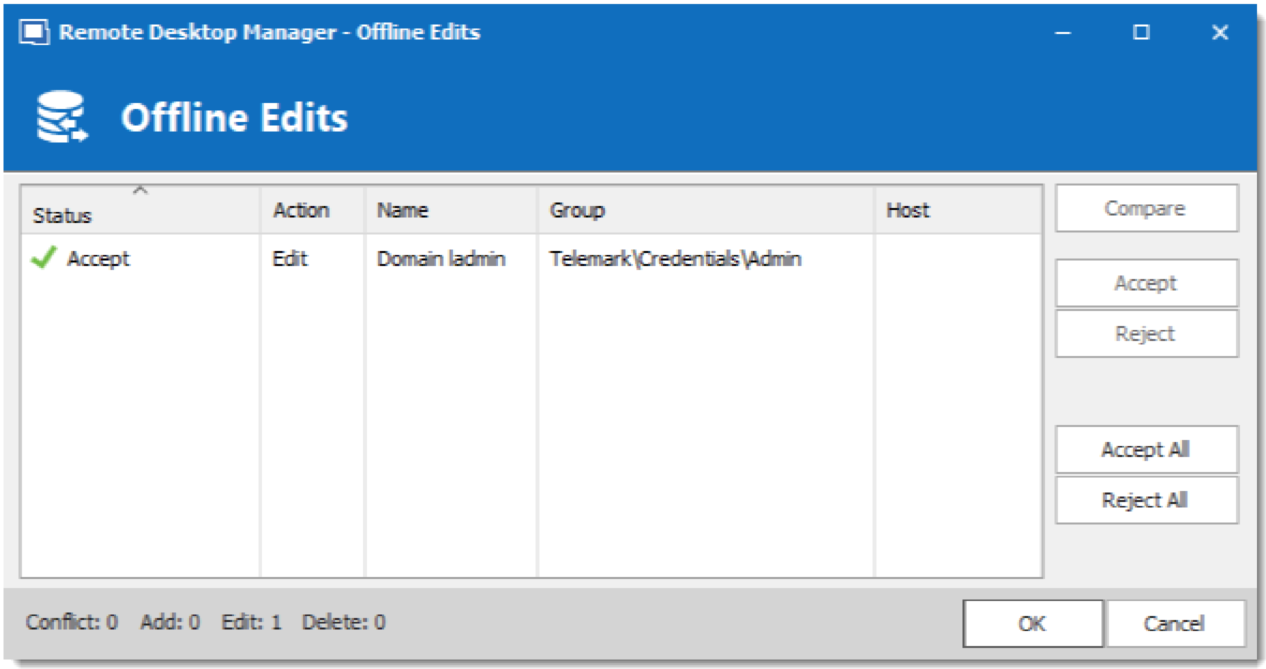
- Accept - when no outside changes have been detected.
- Conflict - when outside changes have been detected since you were last connected.

MULTIPLE OFFLINE EDITS

When multiple users edit the same entry offline simultaneously, a conflict occurs when the second user is back online.

Here is an example of such a case to help resolving conflicts properly:

When the first user returns online, the **Offline Edits** window is displayed. Changes are accepted by default.



Remote Desktop Manager - Offline Edits

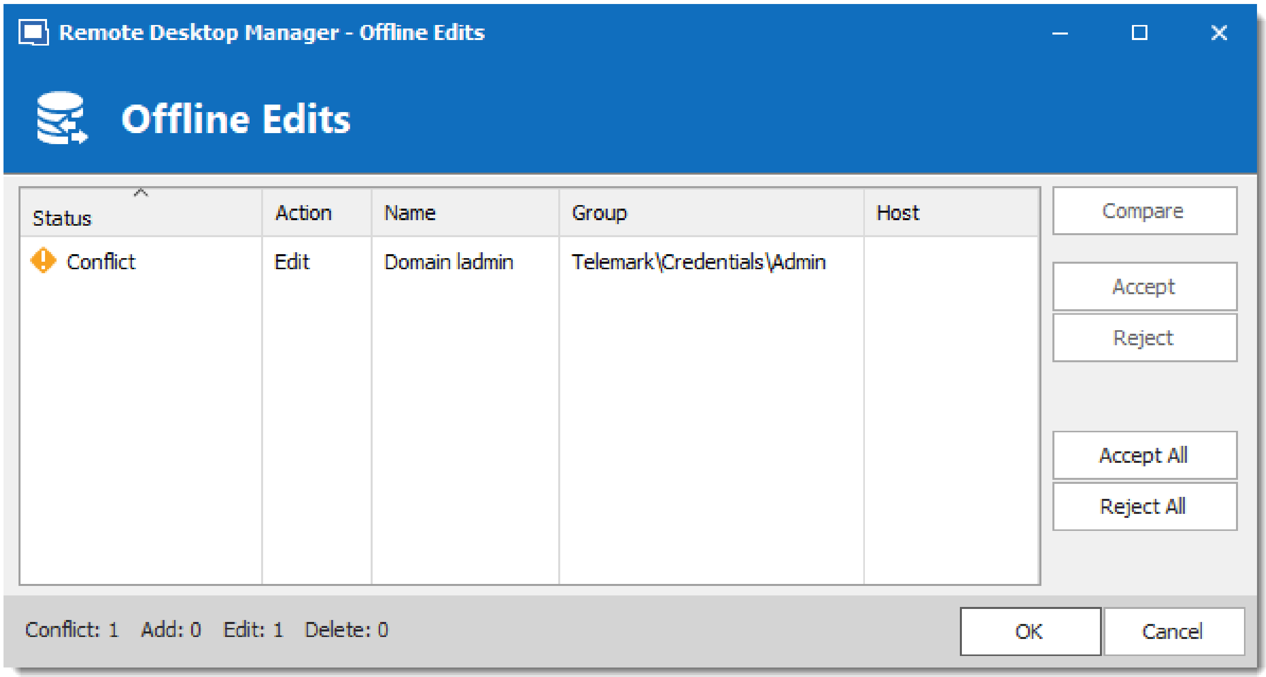
Offline Edits

Status	Action	Name	Group	Host
✓ Accept	Edit	Domain ladmin	Telemark\Credentials\Admin	

Conflict: 0 Add: 0 Edit: 1 Delete: 0

Offline Edits For The First User Back Online

When a second user returns online, a conflict occurs and the **Offline Edits** window is displayed.



Remote Desktop Manager - Offline Edits

Offline Edits

Status	Action	Name	Group	Host
Conflict	Edit	Domain ladmin	Telemark\Credentials\Admin	

Conflict: 1 Add: 0 Edit: 1 Delete: 0

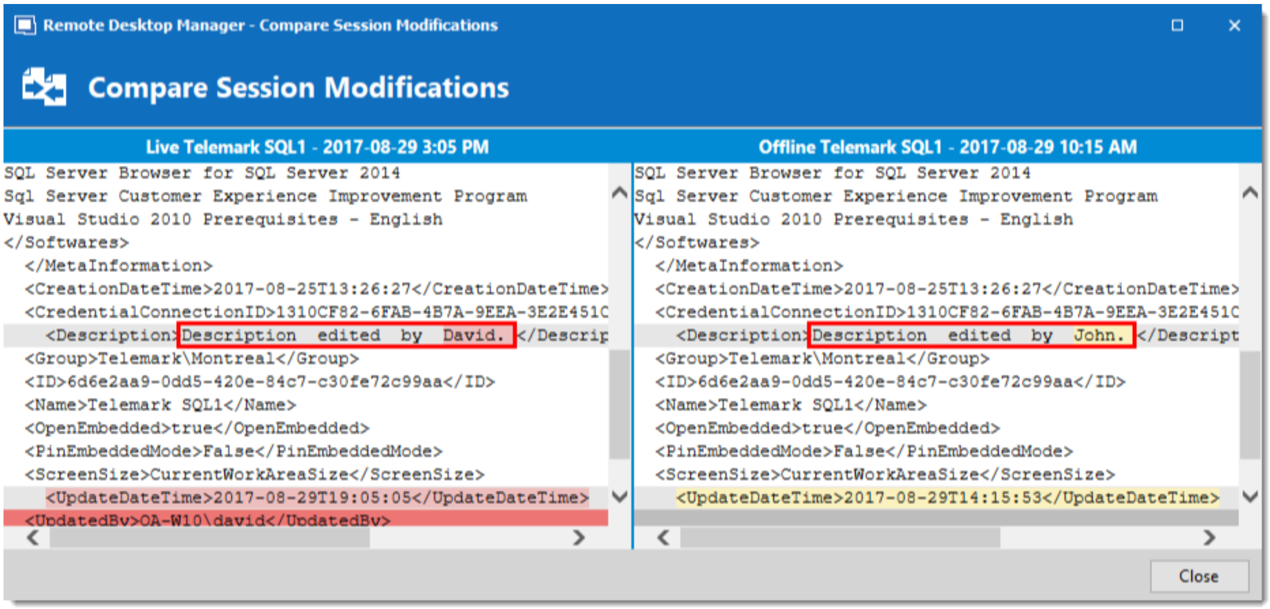
Offline Edits For The Second User Back Online

When the conflict occurs, the user must decide to accept or reject the changes. The different versions of the entry can be compared to view which changes has been made.

COMPARE VERSIONS OF AN ENTRY

Click the **Compare** button to compare the versions of a conflicted entry. Analyze the XML structure of the entry to decide to **Accept** or **Reject** the changes.

The content on the left represents the entry retrieved online, and the content on the right represents the local version of the entry, edited in Offline mode.


Remote Desktop Manager - Compare Session Modifications
Compare Session Modifications
Close

Live Telemark SQL1 - 2017-08-29 3:05 PM

```
SQL Server Browser for SQL Server 2014
Sql Server Customer Experience Improvement Program
Visual Studio 2010 Prerequisites - English
</Softwares>
  </MetaInformation>
  <CreationDateTime>2017-08-25T13:26:27</CreationDateTime>
  <CredentialConnectionID>1310CF82-6FAB-4B7A-9EEA-3E2E451C
    <Description>Description edited by David.</Descrip
  <Group>Telemark\Montreal</Group>
  <ID>6d6e2aa9-0dd5-420e-84c7-c30fe72c99aa</ID>
  <Name>Telemark SQL1</Name>
  <OpenEmbedded>true</OpenEmbedded>
  <PinEmbeddedMode>False</PinEmbeddedMode>
  <ScreenSize>CurrentWorkAreaSize</ScreenSize>
    <UpdateDateTime>2017-08-29T19:05:05</UpdateDateTime>
  <UpdatedBy>OA-W10\david</UpdatedBy>
```

Offline Telemark SQL1 - 2017-08-29 10:15 AM

```
SQL Server Browser for SQL Server 2014
Sql Server Customer Experience Improvement Program
Visual Studio 2010 Prerequisites - English
</Softwares>
  </MetaInformation>
  <CreationDateTime>2017-08-25T13:26:27</CreationDateTime>
  <CredentialConnectionID>1310CF82-6FAB-4B7A-9EEA-3E2E451C
    <Description>Description edited by John.</Descript
  <Group>Telemark\Montreal</Group>
  <ID>6d6e2aa9-0dd5-420e-84c7-c30fe72c99aa</ID>
  <Name>Telemark SQL1</Name>
  <OpenEmbedded>true</OpenEmbedded>
  <PinEmbeddedMode>False</PinEmbeddedMode>
  <ScreenSize>CurrentWorkAreaSize</ScreenSize>
    <UpdateDateTime>2017-08-29T14:15:53</UpdateDateTime>
```

Compare Session Modification

5.8 Manage Cache

DESCRIPTION

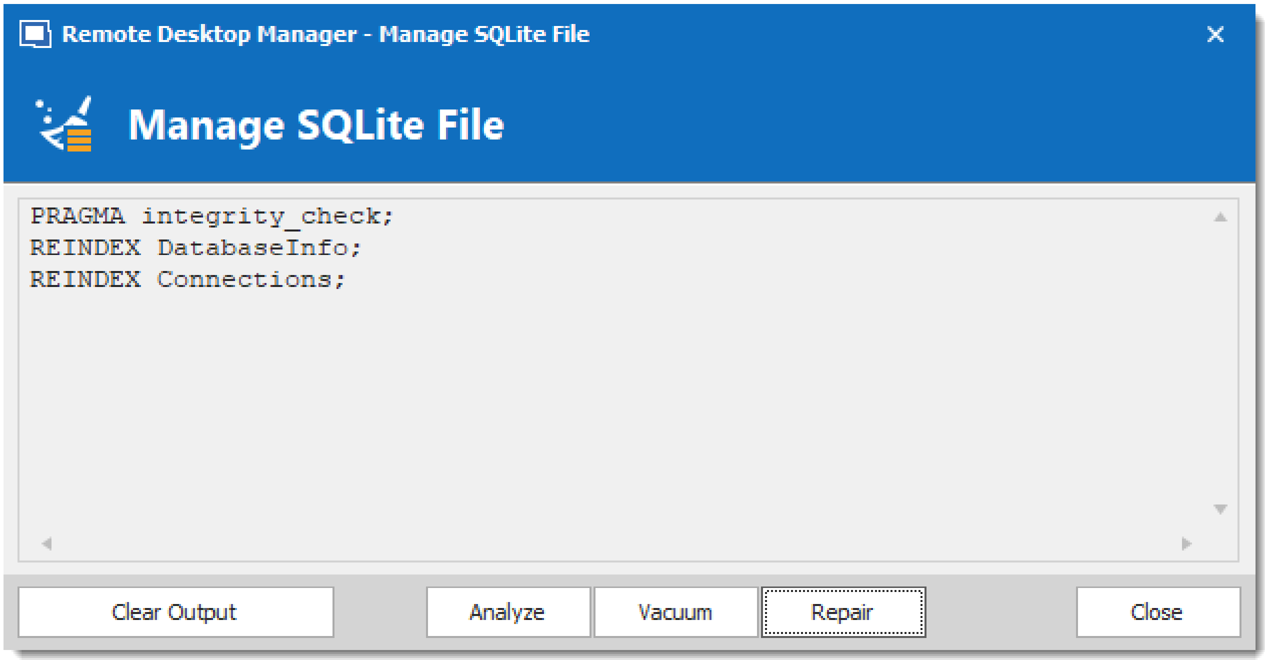
This option allows you to manage your cache which decides how the client will re-load entries when changes are detected. On large data sources caching is a must and will increase performance significantly.

✓ This feature is only available when the offline engine is set to use SQLite. We are phasing out this engine because of multiple issues reported by customers. We recommend you use **MCDFv2**.

The Manage Cache options should usually only be used **upon request from our Support Team** when experiencing cache issue.

SETTINGS

The Manage Cache options will only be available when using an SQLite cache.



```
PRAGMA integrity_check;
REINDEX DatabaseInfo;
REINDEX Connections;
```

Manage Cache

OPTION	DESCRIPTION
Clear output	Clear the output window.
Analyze	Analyze will generate a report of everything that is contained in the cache. It will read the offline data and perform a read/write test to verify if the offline file is valid.

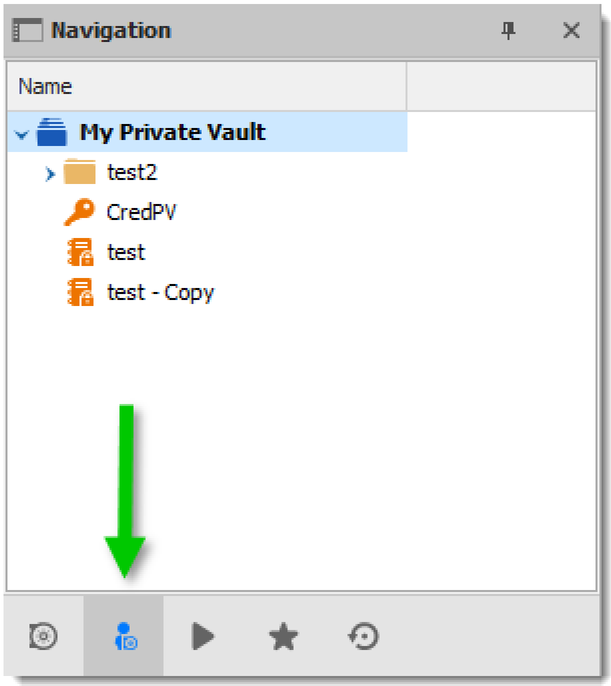
OPTION	DESCRIPTION
Vacuum	This will run an SQLite command to reduce your cache size. The Vacuum should only be used **after trying to execute a Repair** of your cache. If the repair hasn't solved your issue running a Vacuum will usually solve issues when dealing with a corrupted cache.
Repair	The repair will run four different SQLite commands to repair a corrupted cache: ▪ PRAGMA integrigy_check ▪ REINDEX DatabaseInfo ▪ REINDEX Connections ▪ REINDEX Properties

5.9 Private Vault

DESCRIPTION

The **Private Vault** is a user specific Vault for entries of any type. It allows each user to create entries that only them can access. Not even administrators can access a user's Private Vault.

> The Private Vault is available for all Advanced Data Sources.



Navigation Pane – Private Vault

A NOTE ON CREDENTIALS

Credentials in the Private Vault can be used in two ways:

1. From a session using the **Private Vault search**.
2. When using the **User Specific Settings** feature.

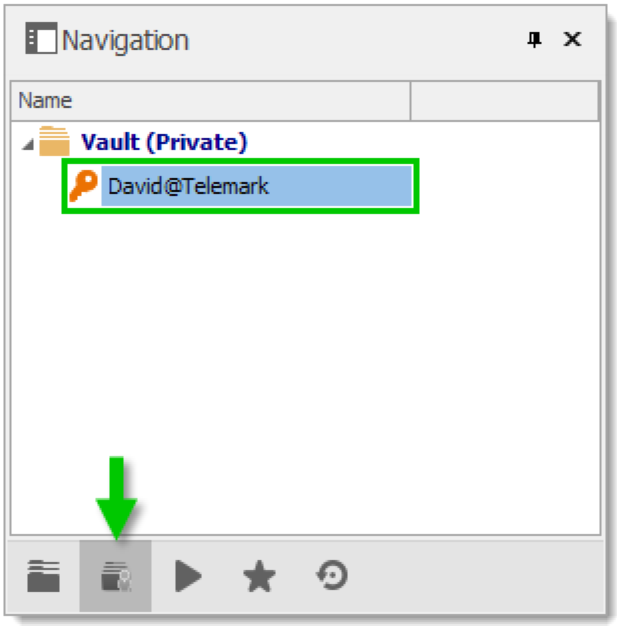
These restrictions can easily be understood when you keep in mind that the Private Vault is in fact contained in the user area of the database. It must be used from within the Private Vault, or by using our extension mechanism that is user specific.

5.9.1 Private Vault Search

The ***Private Vault Search*** links a Private Vault credential entry to a session by providing the name of the credential entry. Once the credential is found, it will automatically be used to open your remote session.

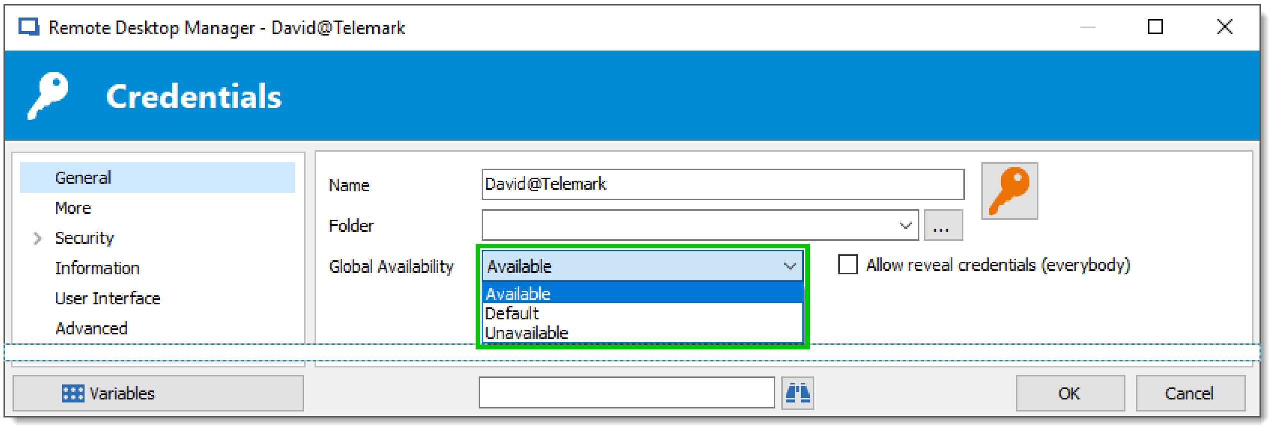
SETTINGS

1. Create a credential entry in the ***Private Vault***.



Private Vault

2. Set the ***Global Availability*** property of the Private Vault credential to ***Available***.



Name: David@Telemark

Folder:

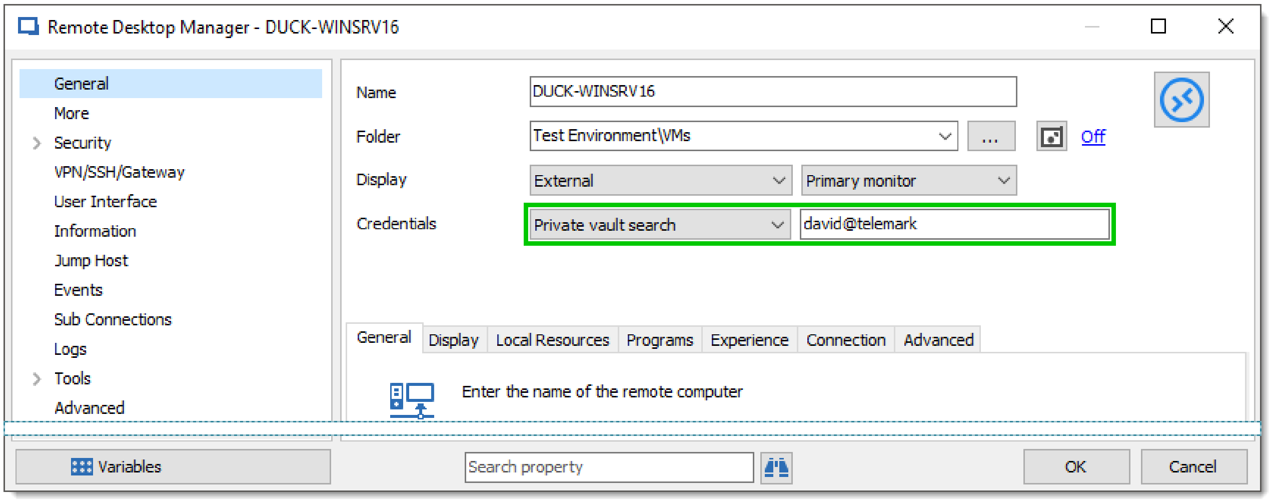
Global Availability: Available

☐ Allow reveal credentials (everybody)

Global Availability

OPTION	DESCRIPTION
Available	Make the credential entry available for Private Vault search.
Default	Use the setting defined in ***File - Options - Types - Credentials - Global Availability***.
Unavailable	Ignore the credential entry when using the Private Vault search.

3. In the remote session, set the ***Credentials*** property to ***Private Vault search*** and enter the **exact name** of the Private Vault credential. The search is not case sensitive, if more than one entry has the same name or if no entry matches the searched name, you will be prompted with a list of all available Private Vault credentials. Variables are supported as well.



Name: DUCK-WINSRV16

Folder: Test Environment\VMs

Display: External | Primary monitor

Credentials: Private vault search | david@telemark

Enter the name of the remote computer

RDP Session - Private Vault Search

4. Open the session as you would normally proceed. Once the credential is found it will automatically be used to open the remote session.

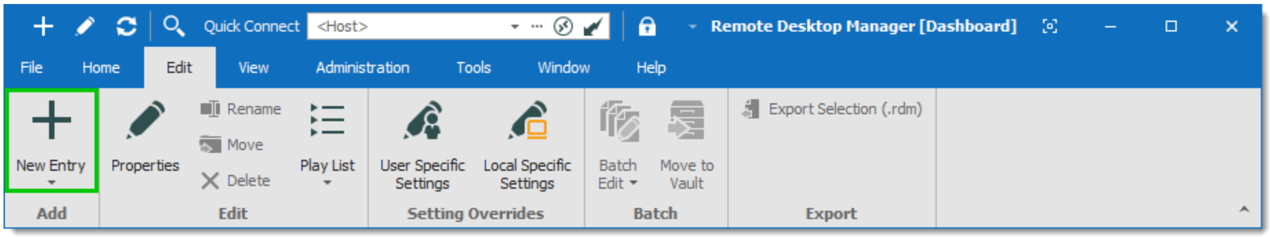
The Private Vault is linked to the database user. Another user will never be able to see your Private Vault credentials even when the ***Global Availability*** is set to ***Available***.

Entries

Part VI

6 Entries

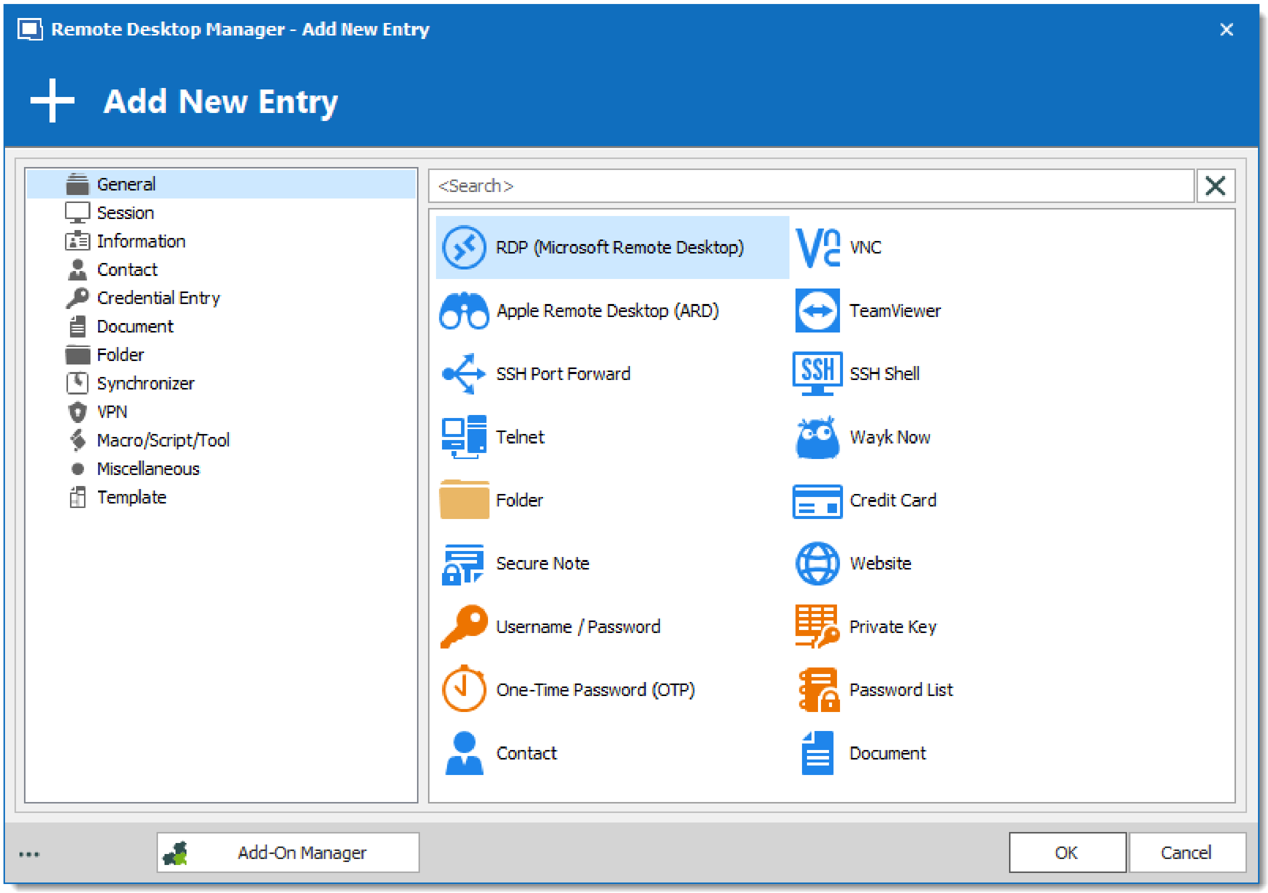
Every item you see in the Navigation Pane is an Entry. Create a new Entry from the ribbon by using the **New Entry** button in the **Edit** tab or by right clicking in the Navigation Pane and clicking on **New Entry**.



New Entry

Entries come in various types and are described in the following sections:

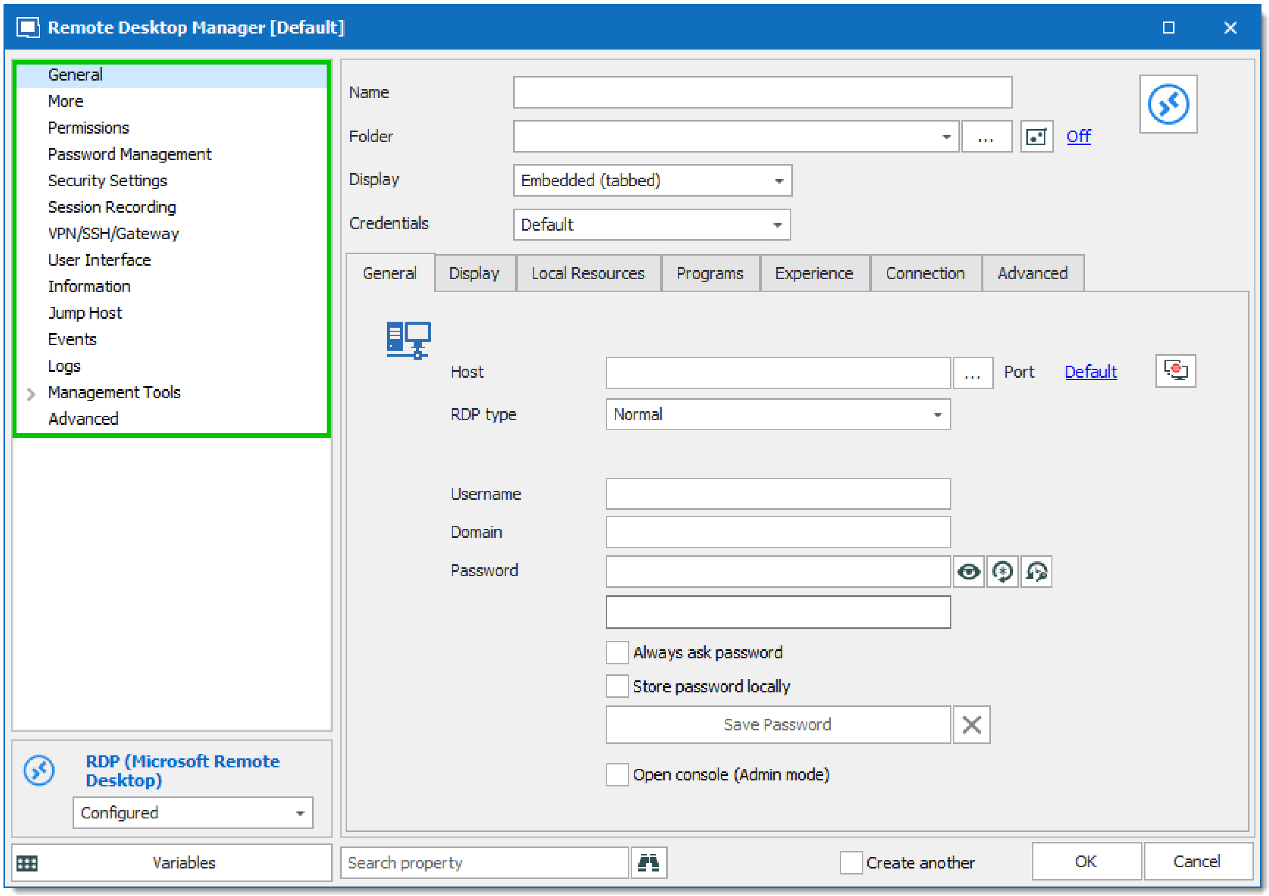
- Session
- Information
- Contact
- Credential Entry
- Document
- Folder
- Synchronizer
- VPN
- Macros/Scripts/Tools



Entry Types

6.1 Common Settings

Some settings are common to most entry types, meaning that they are almost the same for every entry. These options are on the side menu of the properties of entries.



Name
Folder Off
Display: Embedded (tabbed)
Credentials: Default
Host
Port: Default
RDP type: Normal
Username
Domain
Password
□ Always ask password
□ Store password locally
□ Open console (Admin mode)
RDP (Microsoft Remote Desktop): Configured

Common Settings

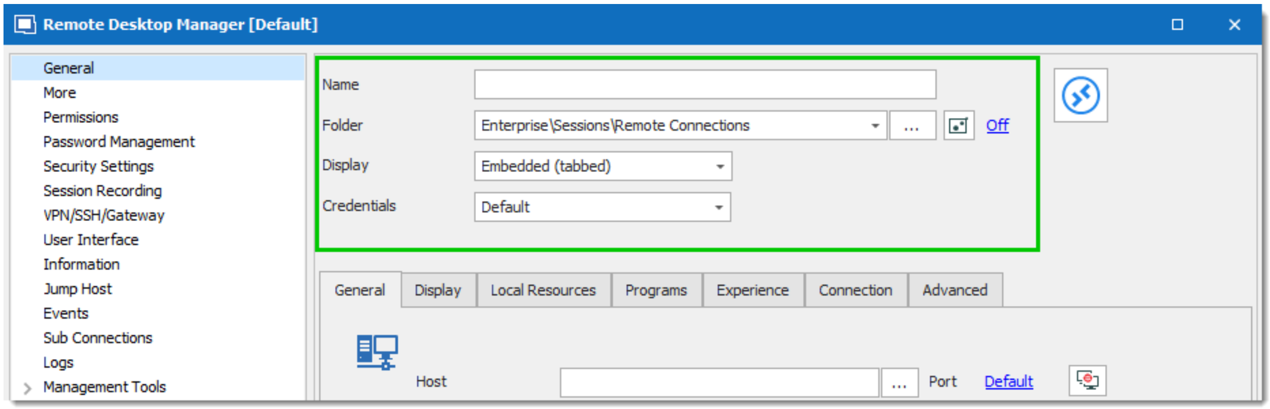
For more information, please consult:

- General
- More
- Permissions
- Security Settings
- Session Recording
- VPN/SSH/Gateway
- User Interface
- Information
- Jump Host
- Events
- Logs
- Management Tools
- Advanced

6.1.1 General

DESCRIPTION

The General side menu contains general information about your entry.



Name

Folder: Enterprise\Sessions\Remote Connections

Display: Embedded (tabbed)

Credentials: Default

Host ... Port

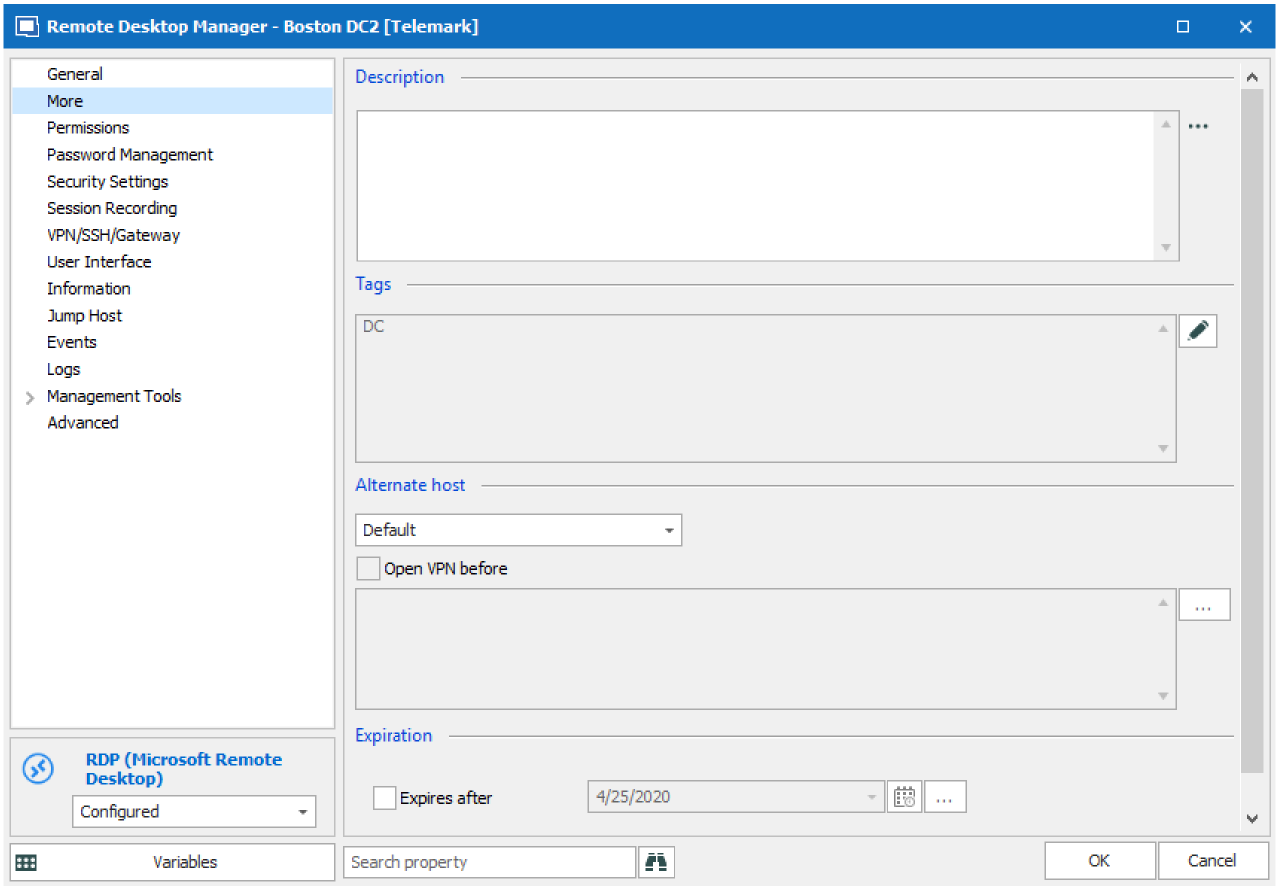
General side menu

SETTINGS

DESCRIPTION	
Name	Enter the name of the session that will be displayed in your treeview. This will be copied to the host field as it's initial value as often the computer name is entered here and can be used directly.
Folder	Used to organize the session in different folders, either in the tray icon context menu or in the tree view. Learn more here.
Display	Allows the session to be opened embedded in Remote Desktop Manager or externally. In the latter case, you may select the monitor on which it will be displayed (if the application and work setup permits it).
Credentials	Used to define the credential source: • **Default:** Uses the username and password from the session type configuration. • **Credential repository:** Links this session to an existing Credential repository entry. This is the solution that allows for reuse and lets you maintain the minimum number of entries whenever the credentials need updating. • **Embedded:** Creates an embedded Credential repository entry. It will be stored within this session's configuration. • **Inherited:** This will use the credentials of the parent of the entry. • **My personal credentials:** This setting will use your account-specific personal credentials. These can be setup in ***File – My Account Settings***. • **None:** This will setup the entry without credentials. • **Private Vault search:** This will allow you to use credential entries currently located in your Private Vault.

6.1.2 More

DESCRIPTION



More

DESCRIPTION

Remote Desktop Manager supports three ways of describing entries:

- **Text**
- **RTF**
- **URL**

The description is displayed in a tooltip when hovering the described entry with the mouse in the tree view.

TAGS

Add tags to use smart folders and saved searches.

ALTERNATE HOST

Alternate Host handles changes in network topology. For example when having a laptop that is being used at home and at the office you may need to connect differently for each location, in those circumstances you can let the system detect how to connect.

EXPIRATION

Enter a date to automatically change your entry Status to **Expired** and to get it listed in the Expired Session Report.

6.1.3 Permissions

DESCRIPTION

Access to entries is managed by permissions set on those entries. Combined together, permissions create a strong layer of security to prevent unwanted access by users of the data source. This system provide a large collection of permissions to choose from, providing great flexibility in access management.

> Security Groups have been deprecated, but are still available for reference purposes. Do not use security groups and role-based access control at the same time.

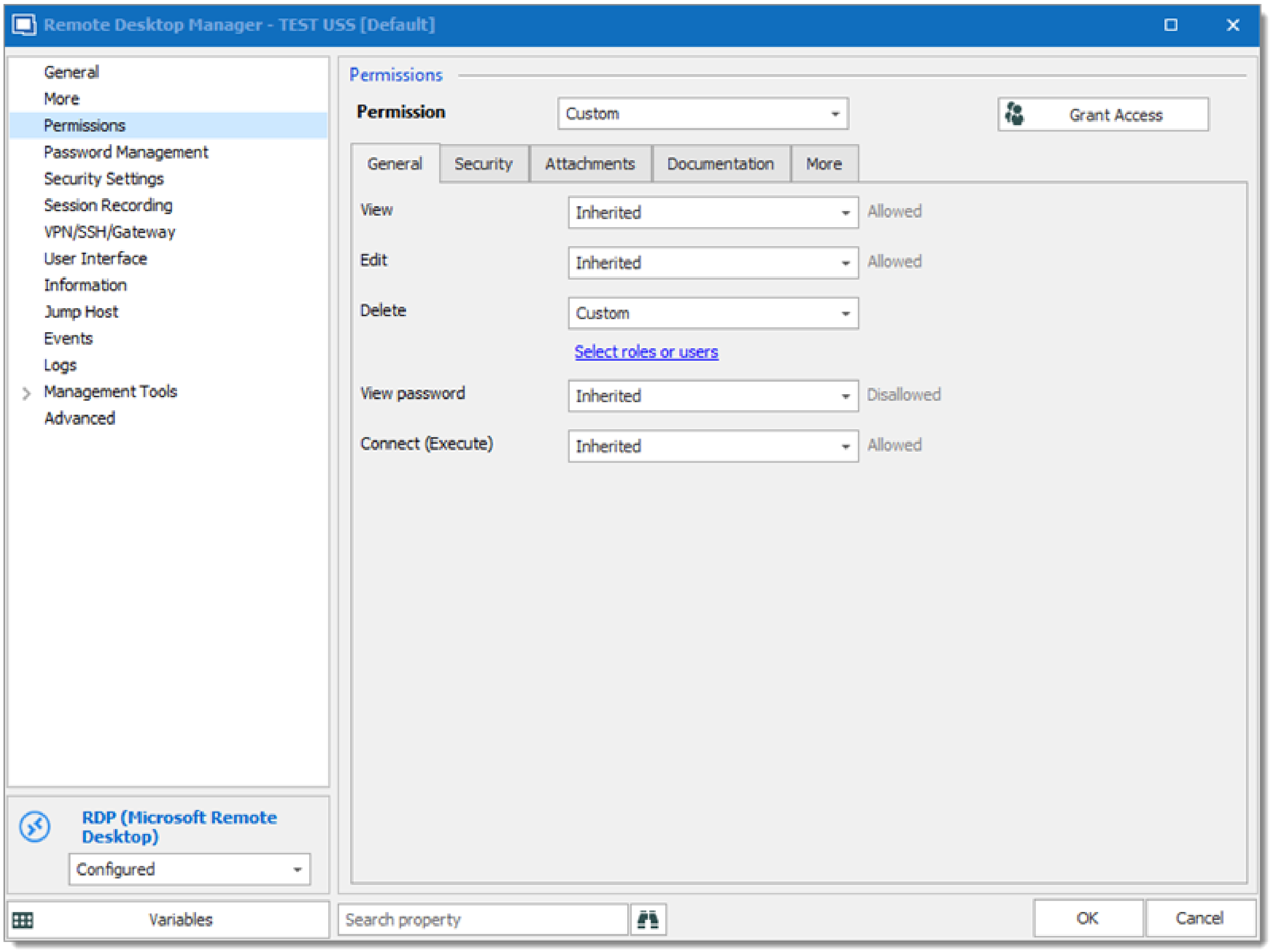
PERMISSIONS

POSSIBLE VALUES

There are four possible values that define how permissions are granted:

- **Inherited**: Inherit the permission from parent folders.
- **Custom**: Specify which users/roles that have permission. Click **Select roles or users** to define who has permissions.
- **Everyone**: Grant the permission to every user.
- **Never**: Block the permission for every user, except administrators.

For examples on using permissions, please consult the Role Based Access Control topics.



Permission: Custom

View: Inherited — Allowed

Edit: Inherited — Allowed

Delete: Custom

View password: Inherited — Disallowed

Connect (Execute): Inherited — Allowed

Permissions - General

SECURITY GROUPS

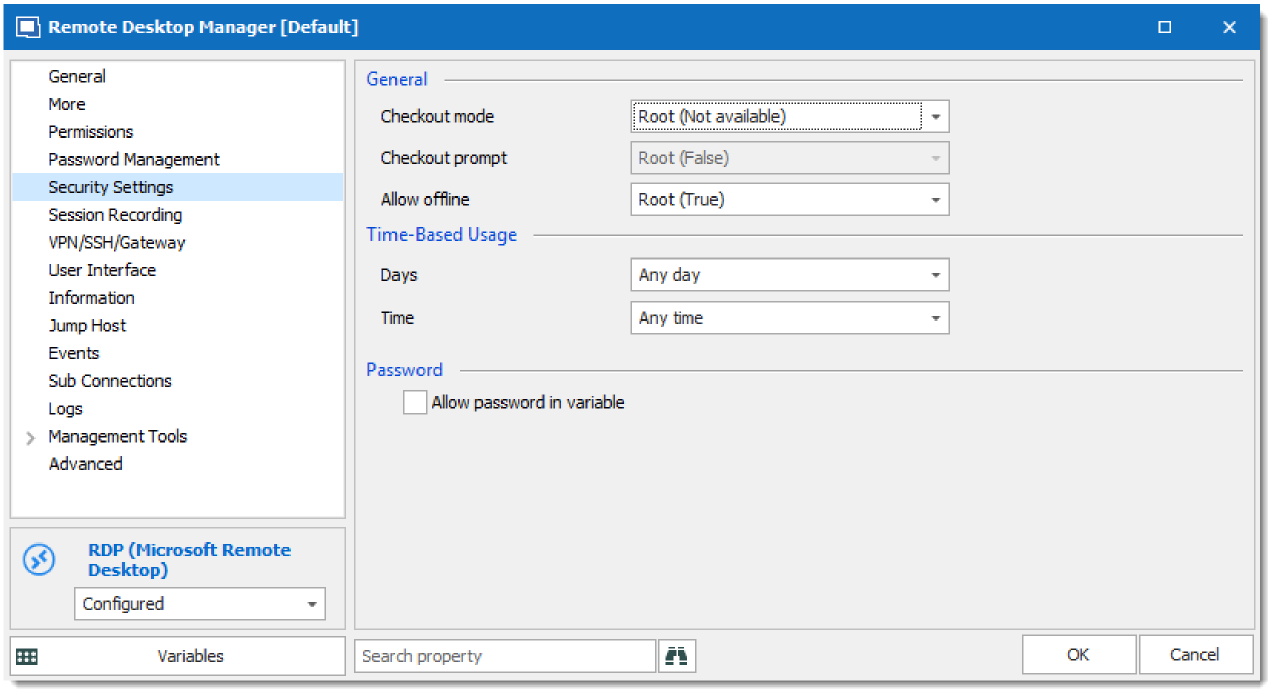
Security groups are a legacy method of controlling access. We strongly recommend using the role-based access control instead.

Security groups were used to protect sessions from a subset of system users. Assign your entry to a security group then control who has access to it and how much control they have on the entry.

6.1.4 Security Settings

DESCRIPTION

The **Security Settings** section is used to manage various settings regarding the edited entry.



Remote Desktop Manager [Default]

General

Checkout mode: Root (Not available)

Checkout prompt: Root (False)

Allow offline: Root (True)

Time-Based Usage

Days: Any day

Time: Any time

Password

□ Allow password in variable

RDP (Microsoft Remote Desktop)

Configured

Common settings – Security Settings

OPTION	DESCRIPTION
Checkout mode	The **Checkout** system locks an entry while it is being used or modified. It prevents users from using or editing an entry at the same time. For more information, please consult the Checkout system topic.
Checkout prompt	Prompt for a comment.
Allow offline	Select if an entry can be used offline. Select between: • **Root** (refers to the data source configuration)

OPTION	DESCRIPTION
	- **True** - **False** - **Inherited**
Time Based Usage	The Time-based usage allows to limit the usage of resources to specific times. This feature is useful to prevent unattended use of entries. Works with Advanced Data Sources.
Allow password in variable	Enable this setting for the $PASSWORD$ variable to be available with the command line.

6.1.4.1 Checkout system

DESCRIPTION

The **Checkout** system locks an entry while it is being used or modified. It prevents users from using or editing an entry at the same time.

The checkout system can be enabled for **sessions**, **documents**, **credentials**, and **information entries**.

You can set the check out mode at the root, folder or entry level.

> This feature is only available when using SQL Server or Devolutions Password Server data sources.

CHECKOUT SYSTEM OVERVIEW

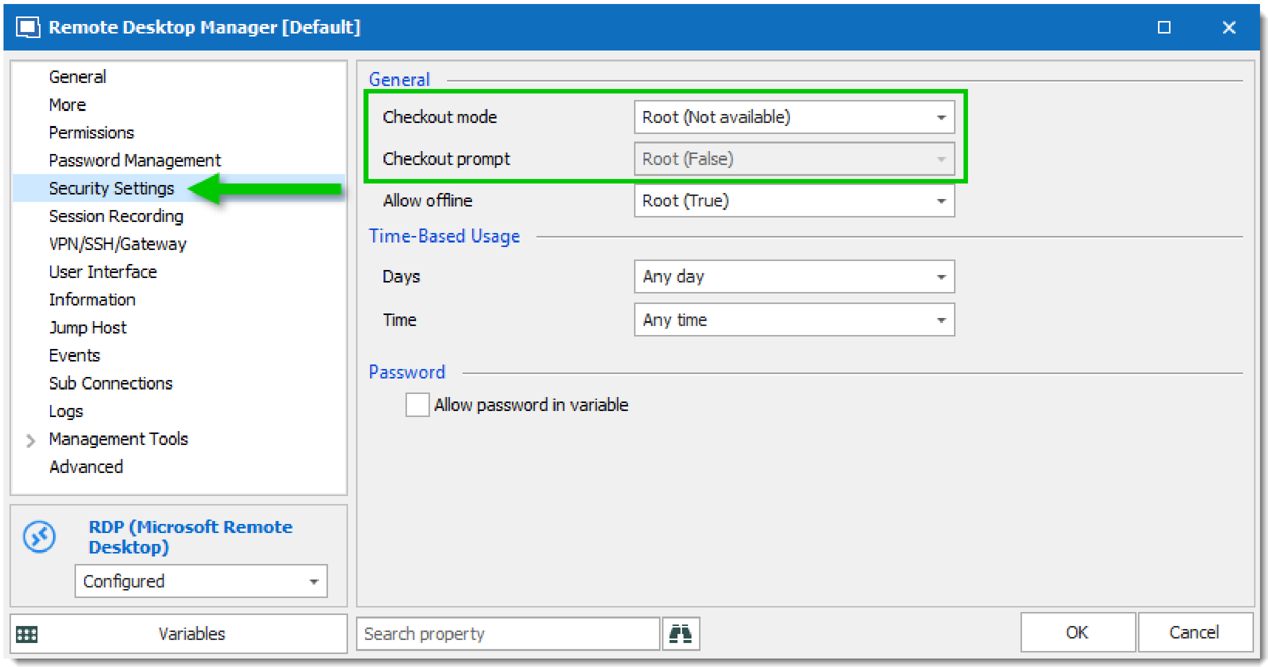
Learn more about checkout modes and setting check out on the root and folders

USE MANUAL CHECKOUT MODE

Configure Manual mode and avoid some common mistakes

SETTINGS

To access the check out system, edit an entry that supports checkout, and navigate to the **Security** section.



General

Checkout mode: Root (Not available)

Checkout prompt: Root (False)

Allow offline: Root (True)

Time-Based Usage

Days: Any day

Time: Any time

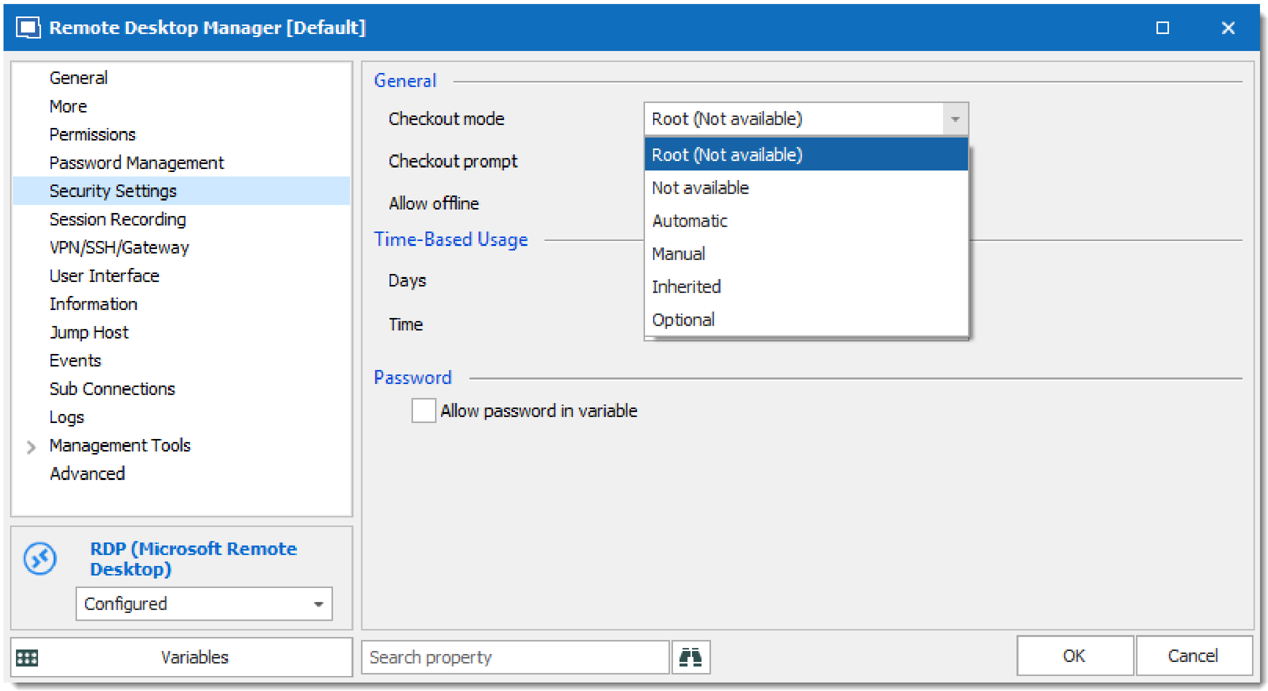
Password

☐ Allow password in variable

Entry properties – Security – Checkout settings

CHECKOUT MODE

Checkout mode enables or disables the checkout system. It also decides how the checkout mode functions.

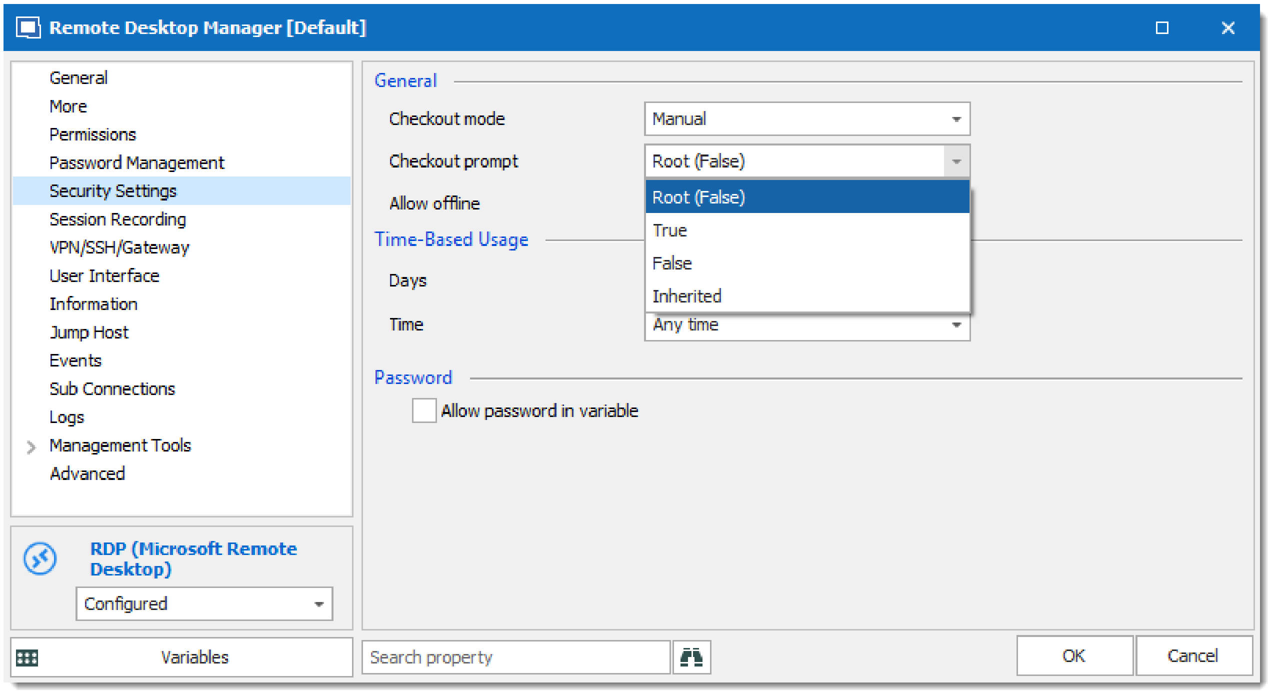


Checkout mode

OPTION	DESCRIPTION
Root	Inherits the checkout mode setting from the root folder.
Not available	Disables the checkout system.
Automatic	Checks out an entry automatically when the entry is opened and automatically checks the entry in when the entry is closed. User can edit properties without checking out the entry.
Manual	Users need to check out the entry manually prior to opening or editing the entry. No action can be performed without checking out the entry.
Inherited	Inherits the check out mode from the parent folder.
Optional	Offers the option to check out an entry manually or use (open and edit) the entry without checking it out.

CHECKOUT PROMPT

Checkout prompt sets if a user must enter a comment when they check out the entry. Administrators can monitor the comments through the logs available on the entry or Activity Logs.



Checkout required

OPTION	DESCRIPTION
Root	Uses the checkout prompt setting from the root folder.
True	Prompts the user for comment when they checkout an entry.
False	Removes the prompt for comment.
Inherited	Inherits the setting from a parent folder.

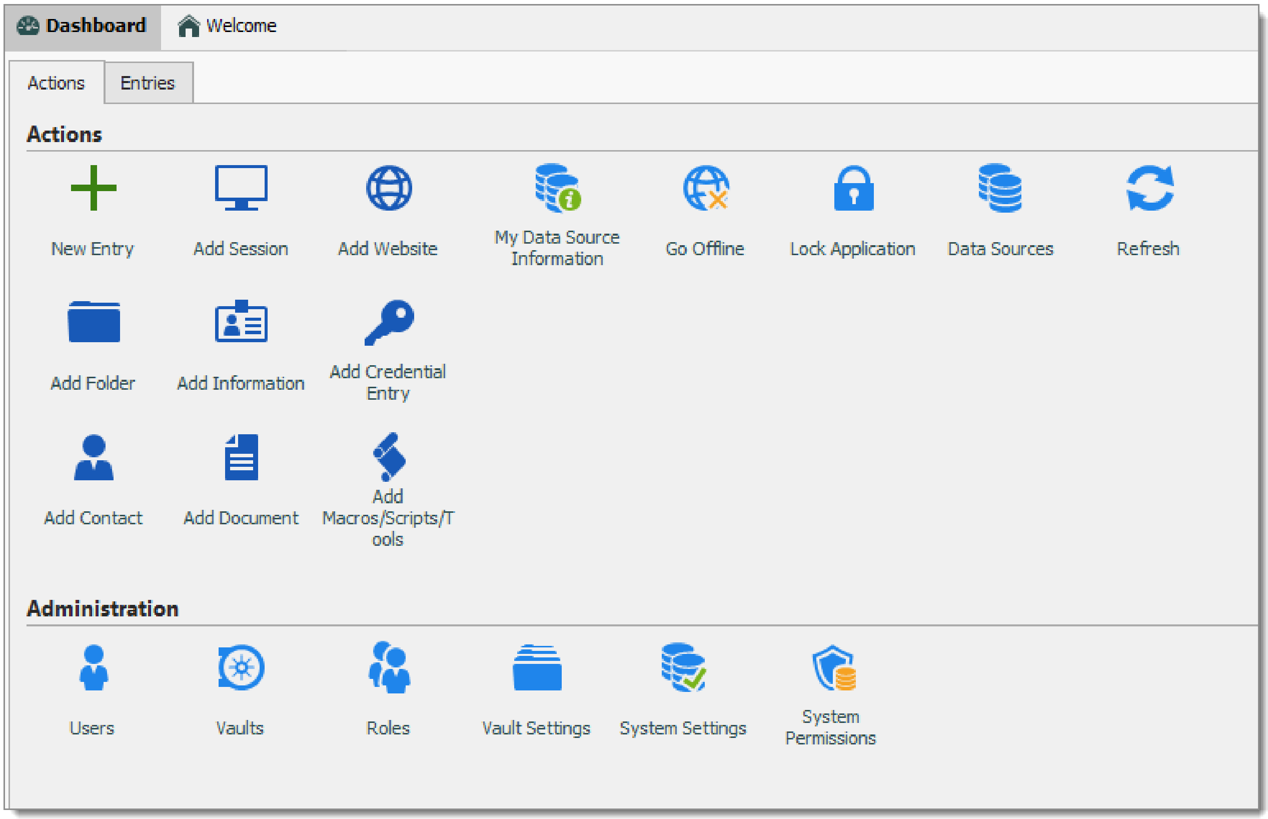
VAULT SETTING

The checkout system **Vault** refer to the settings in the vault root folder.

To set the checkout system vault settings:

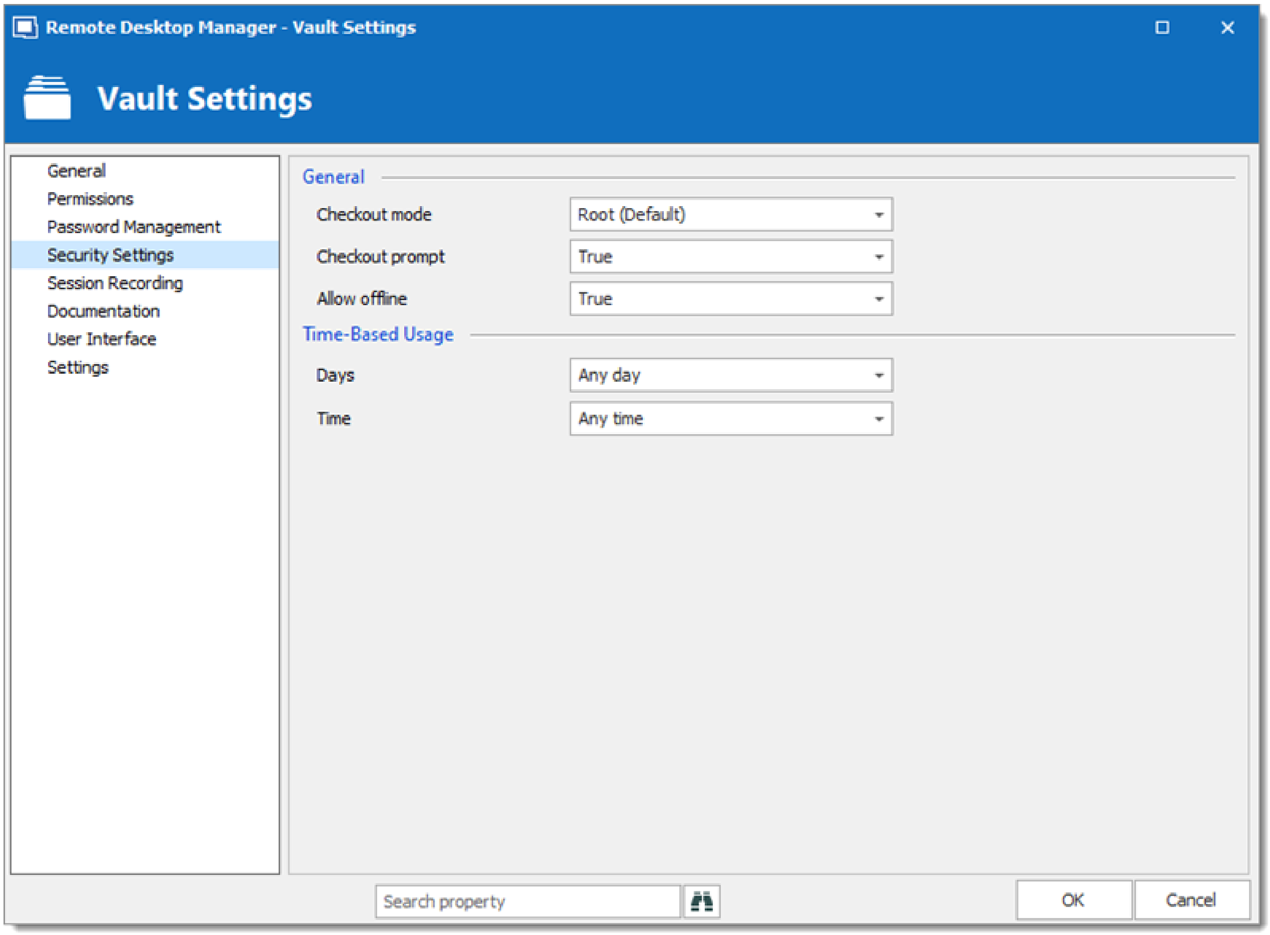
1. Select the vault root folder in the **navigation pane.**

2. Click on the **Vault Settings** button in the **Dashboard**.



Access the Vault Settings

3. In the vault settings, navigate to the **Security** section.



General

Checkout mode	Root (Default)
Checkout prompt	True
Allow offline	True

Time-Based Usage

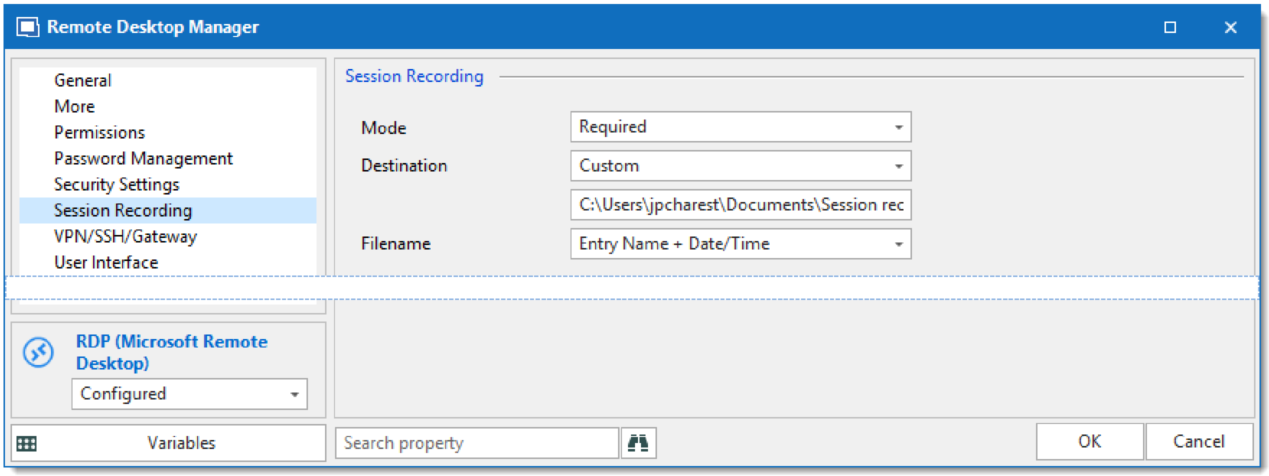
Days	Any day
Time	Any time

Checkout system - Vault Folder

6.1.5 Session Recording

The session recording feature records videos of opened sessions for auditing purpose.

This feature generates two files when recording a session. A video file and an information file.



Session Recording

Mode	Required
Destination	Custom
	C:\Users\jpcharest\Documents\Session rec
Filename	Entry Name + Date/Time

Session Recording Settings

OPTION	DESCRIPTION
Mode	Select how the feature is applied to the session. Select between: • **Default:** inherits the values from the vault settings. • **Optional:** ask the user if they want to record the session at opening. • **Required:** record the session each time it is used. • **Never:** disable session recording for the current session. • **Inherited:** Retrieve the settings from parent folders.
Destination	Select a location to save the recording.
Filename	Select which name is applied to the recorded file.

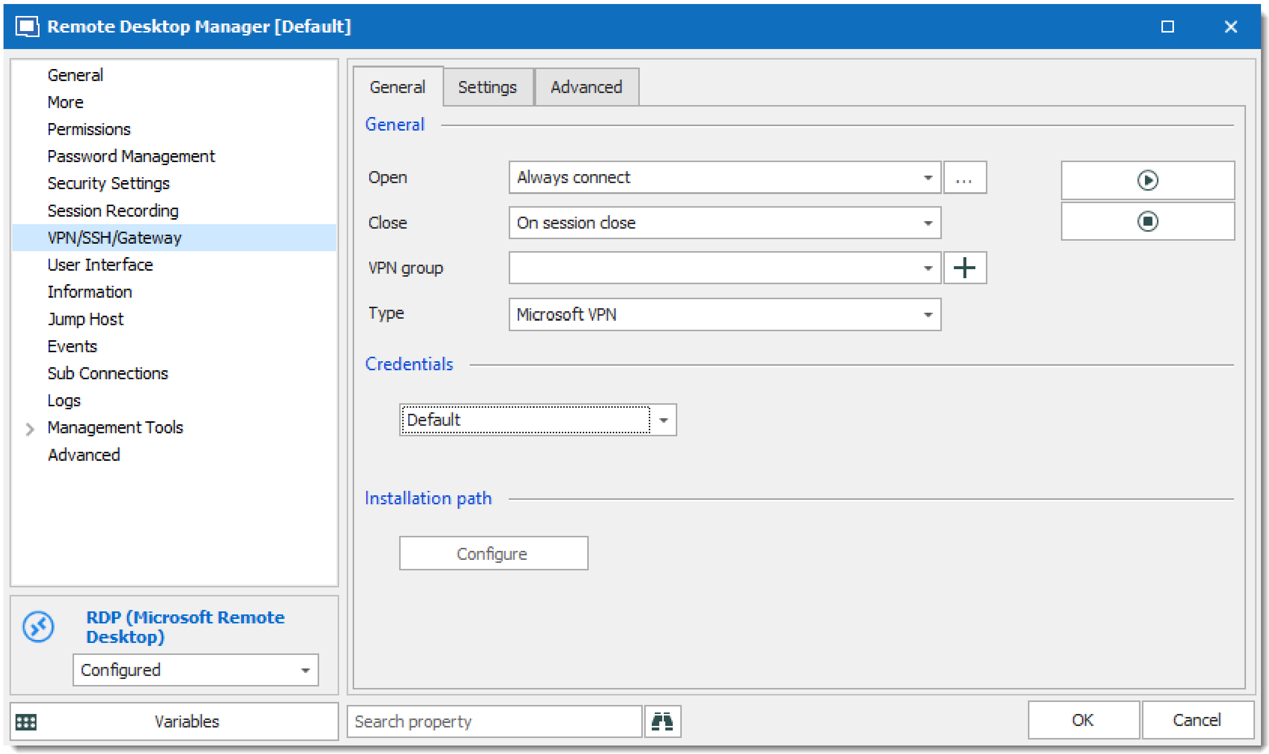
6.1.6 VPN/SSH/Gateway

DESCRIPTION

A VPN connection can be configured in the session properties, in the **VPN/SSH/Gateway** section. The connection can be established automatically, manually or when a specific condition is met.

Although you can configure a VPN details in session properties, it is best practice to link a session entry to a separate VPN entry. Please see, Configure a VPN for multiple sessions to learn more.

GENERAL



Open: Always connect

Close: On session close

VPN group:

Type: Microsoft VPN

Credentials: Default

RDP (Microsoft Remote Desktop): Configured

VPN side menu

Each VPN type has its own set of properties to configure and you must know them in order to properly configure them. For more information about settings see the VPN entry topic

VPN GROUP

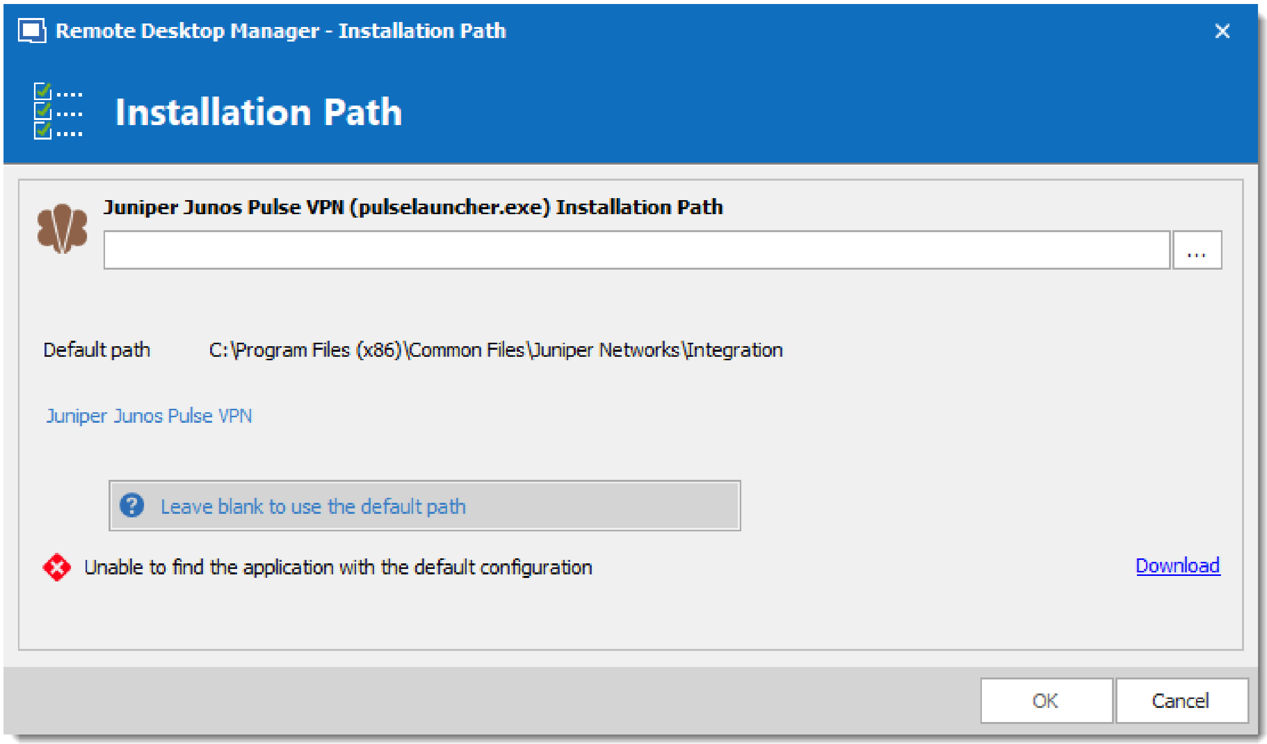
Please consult VPN Group topic for more information.

VPN TYPE

Select which type of VPN you wish to configure inside your session. There are multiple natively supported VPN connection types and many more are available through add-ons. Please consult VPN Add-ons for more information.

INSTALLATION PATH

You can manually configure your VPN installation path. To use the default installation path, leave the field empty.



Juniper Junos Pulse VPN (pulselauncher.exe) Installation Path

Default path C:\Program Files (x86)\Common Files\Juniper Networks\Integration

Juniper Junos Pulse VPN

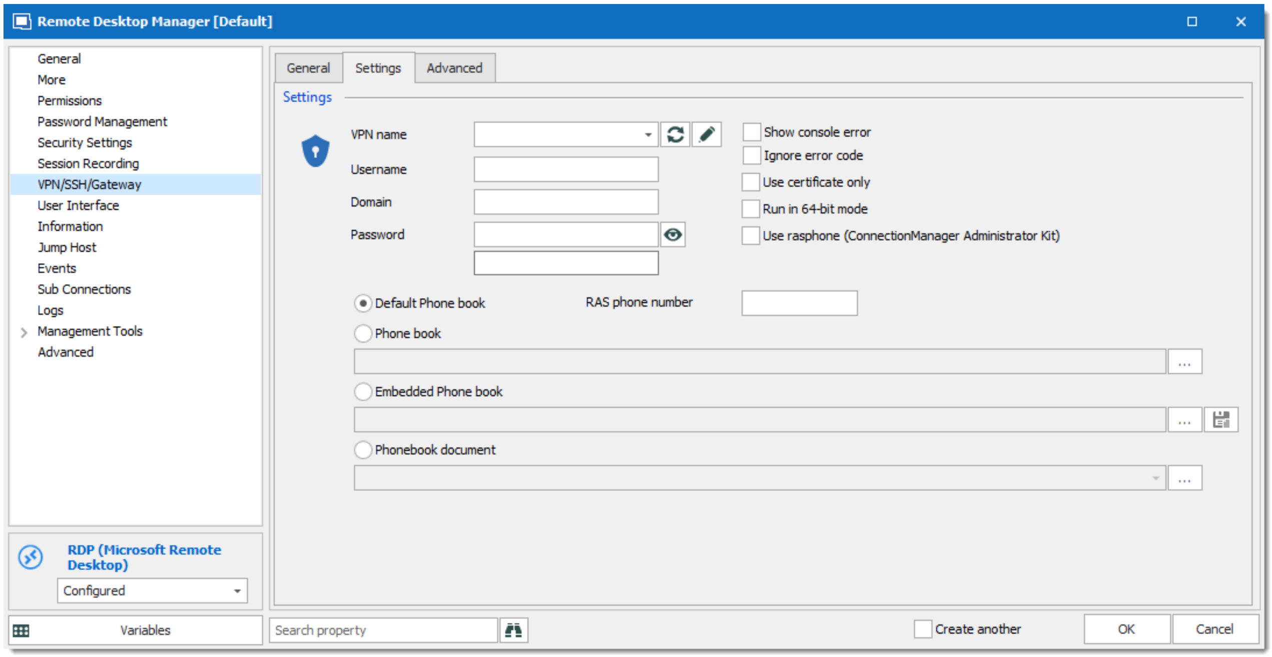
Leave blank to use the default path

Unable to find the application with the default configuration

Installation Path

SETTINGS

Define the VPN settings in this tab. Enter the VPN name and credentials to properly connect to your VPN.



Settings

VPN name

Username

Domain

Password

□ Show console error

□ Ignore error code

□ Use certificate only

□ Run in 64-bit mode

□ Use rasphone (ConnectionManager Administrator Kit)

● Default Phone book

RAS phone number

○ Phone book

○ Embedded Phone book

○ Phonebook document

VPN Settings

VPN WITH PHONEBOOK

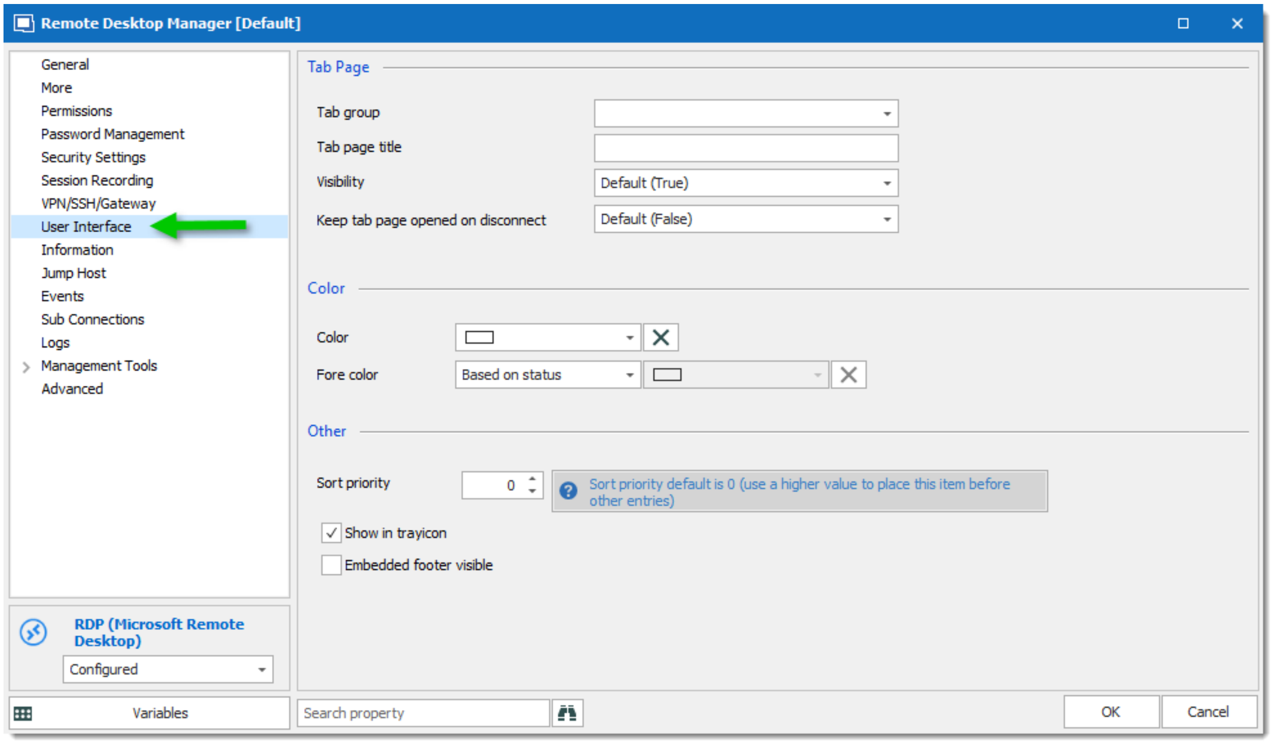
You can configure a **Phone book** with a **VPN** for a **RDP Entry**. This VPN entry can use the default Phone book, a specific Phone book, an embedded Phone book or a reference to a type of Phone book document.

> This is only supported by the Microsoft VPN.

6.1.7 User Interface

DESCRIPTION

This section controls how your entry is displayed and what information is contained in it.



Configured

Tab Page

Tab group

Tab page title

Visibility: Default (True)

Keep tab page opened on disconnect: Default (False)

Color

Color

Fore color: Based on status

Other

Sort priority: 0

Sort priority default is 0 (use a higher value to place this item before other entries)

☑ Show in trayicon

☐ Embedded footer visible

Entries properties – User Interface section

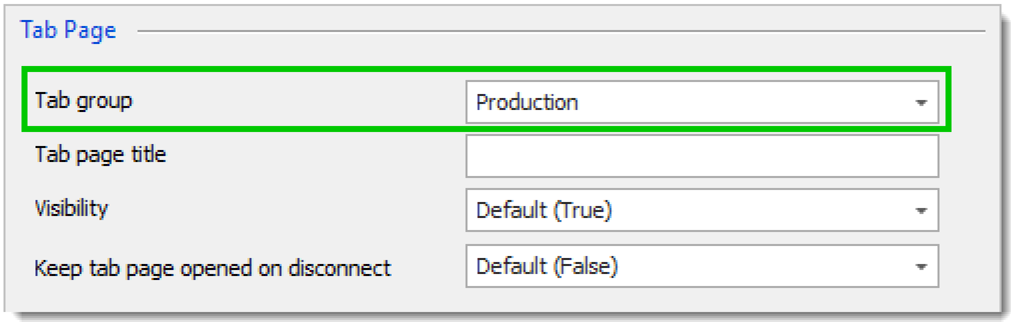
CONTENT

- Tab page
- Color
- Other

TAB PAGE

TAB GROUP

Tab group group tabs by user-defined categories.

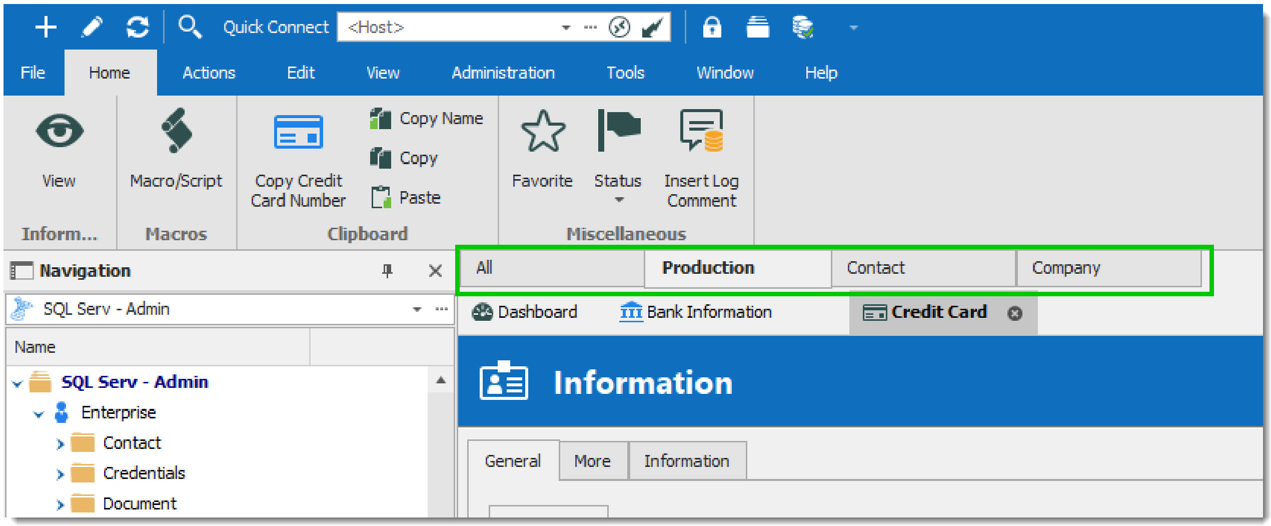


Tab Page

Tab group	Production
Tab page title	
Visibility	Default (True)
Keep tab page opened on disconnect	Default (False)

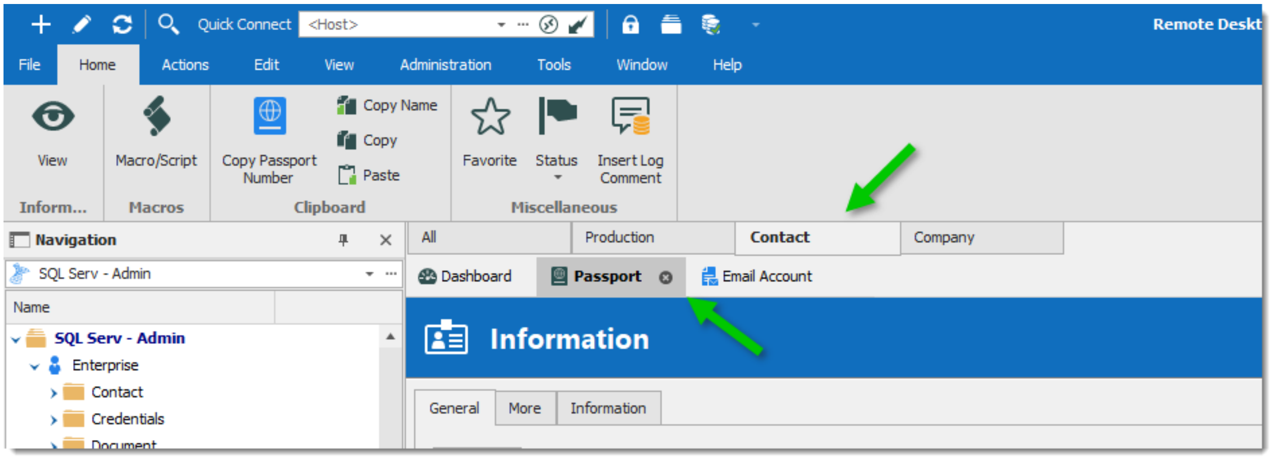
Tab Page Section

Tab groups are displayed above the sessions' tabs.



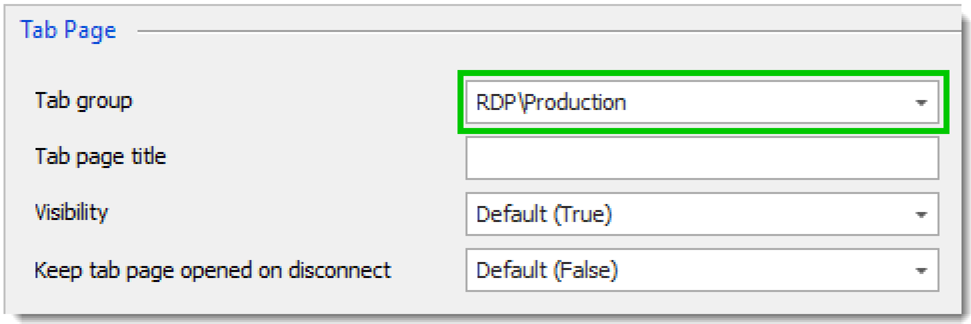
Tab group location

Click on a tab group to filter the opened sessions and display only sessions from that group.



Tab groups – Filter on the Contact category

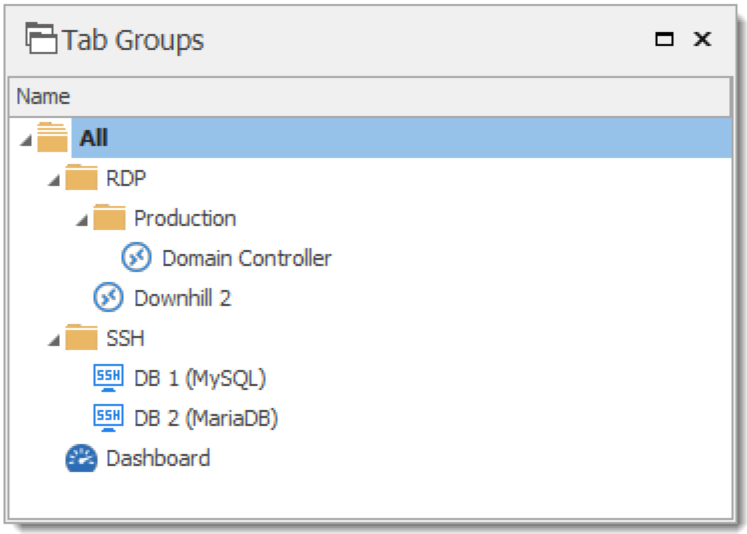
Much like the Folder feature, a hierarchical structure can be defined by entering a backslash to indicate a sub-level.


Tab Page

Tab group	RDP\Production
Tab page title	
Visibility	Default (True)
Keep tab page opened on disconnect	Default (False)

Tab group structure

You can also use left click to drag out the tap groups as a separate window.

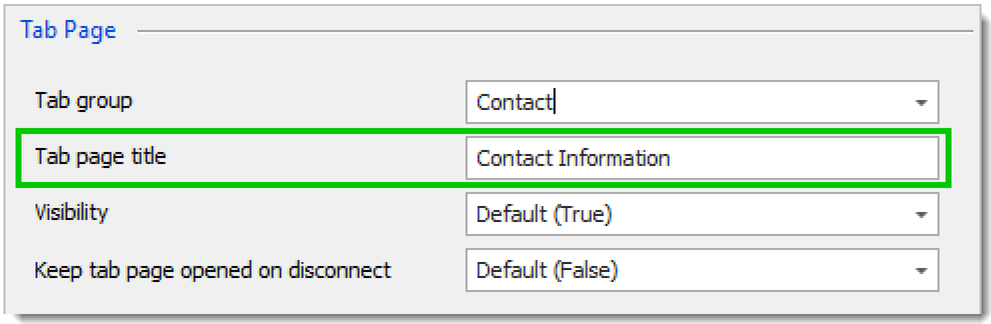

Tab Groups

Name

- All
  - RDP
    - Production
      - Domain Controller
    - Downhill 2
  - SSH
    - DB 1 (MySQL)
    - DB 2 (MariaDB)
  - Dashboard

Tab groups structure (View – Tab Groups)

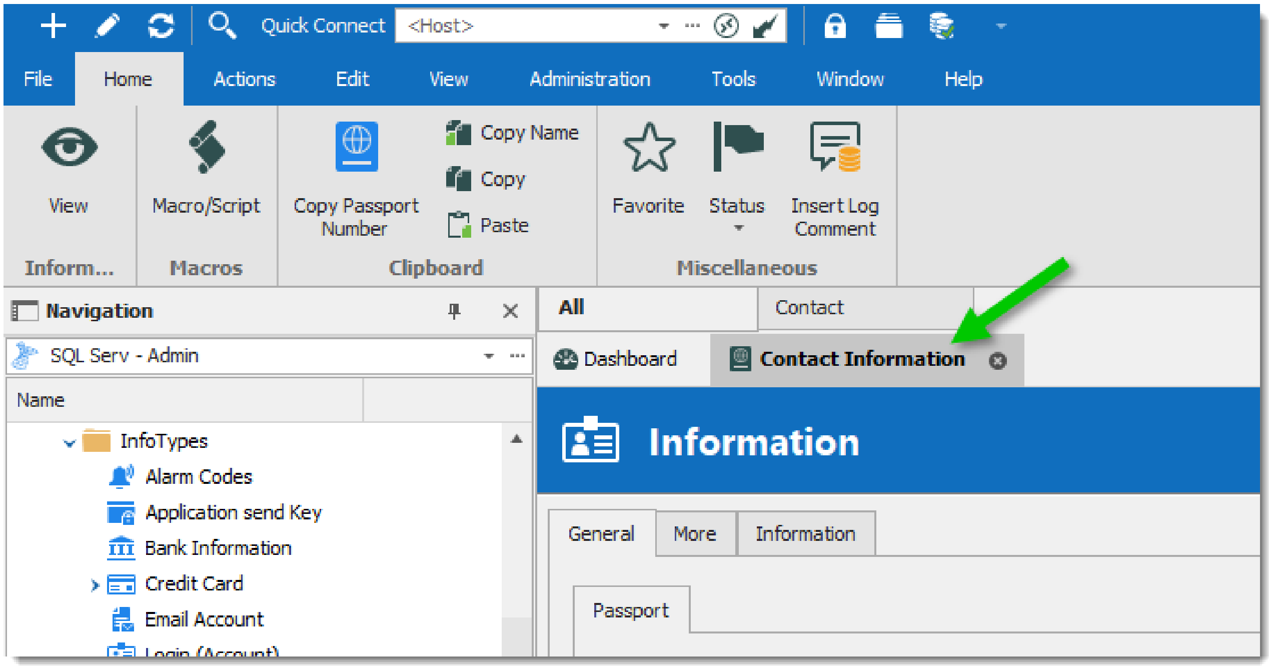
TAB PAGE TITLE


Tab Page

Tab group	Contact
Tab page title	Contact Information
Visibility	Default (True)
Keep tab page opened on disconnect	Default (False)

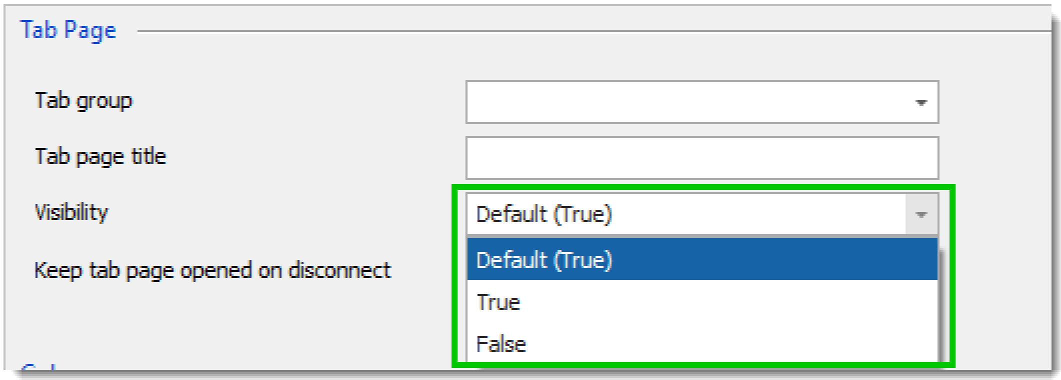
Tab page title

Indicate a tab title to display instead of the name of the session. You can use a variable to add a prefix or a suffix.



VISIBILITY

This setting is useful for VPN connections and entries that don't necessarily need interaction when opened. If the value is set to **False**, the session's tab is hidden when the session is opened.


Tab Page

Tab group

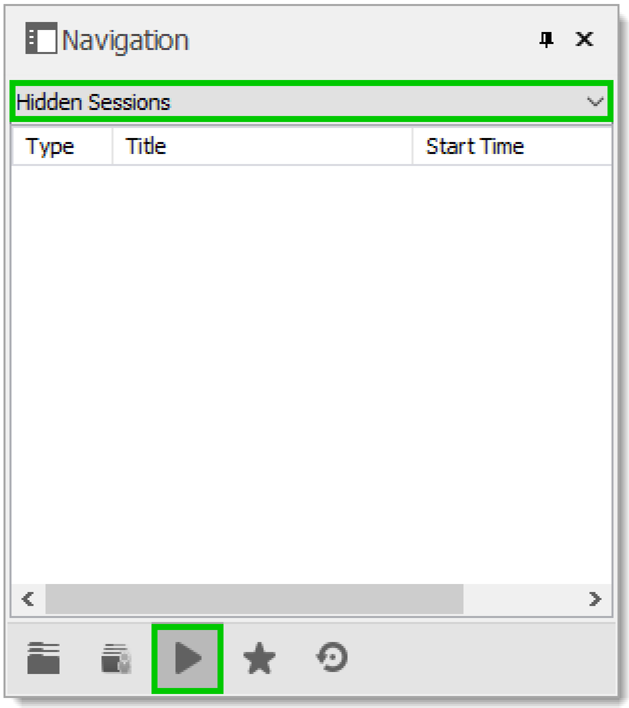
Tab page title

Visibility: Default (True)

Keep tab page opened on disconnect

Visibility

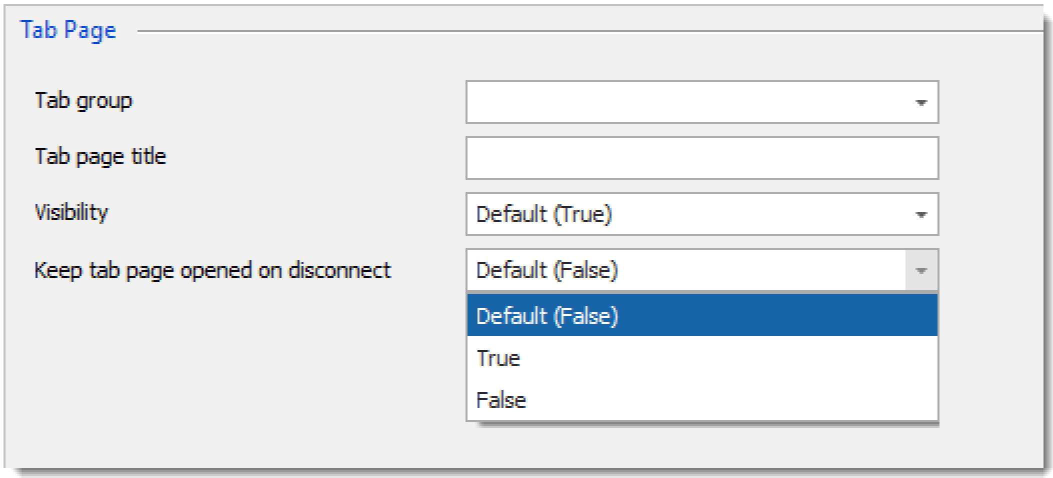
To view hidden sessions in the Navigation Pane, select the view **Opened Sessions** tab ▶ and then select **Hidden Sessions**.



Hidden Session

KEEP TAB PAGE OPENED ON DISCONNECT

Enable this setting to keep the tab page opened when the application detects a closed connection. For more information, please consult Keep Tabs Opened for more information.


Tab Page

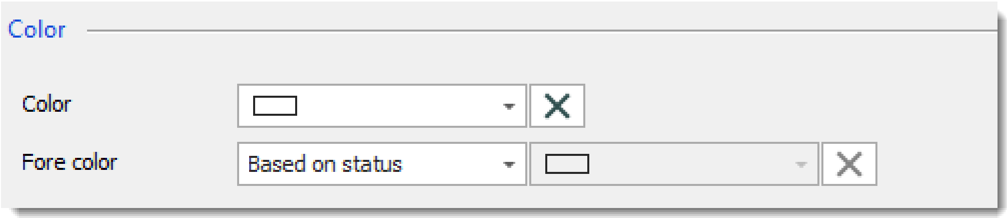
Tab group	
Tab page title	
Visibility	Default (True)
Keep tab page opened on disconnect	Default (False)

Keep Tab page opened on disconnect

This setting can be changed in multiple sessions at the same time using the Batch Edit feature.

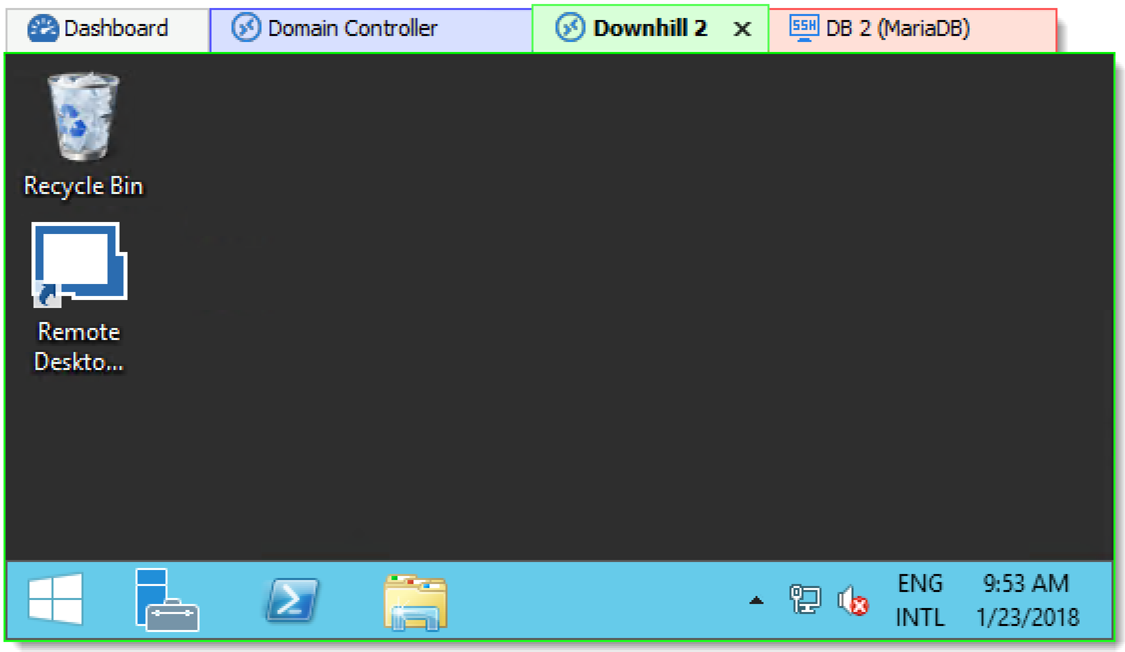
COLOR

It is possible to change the default color of the tab page to easily identify it.

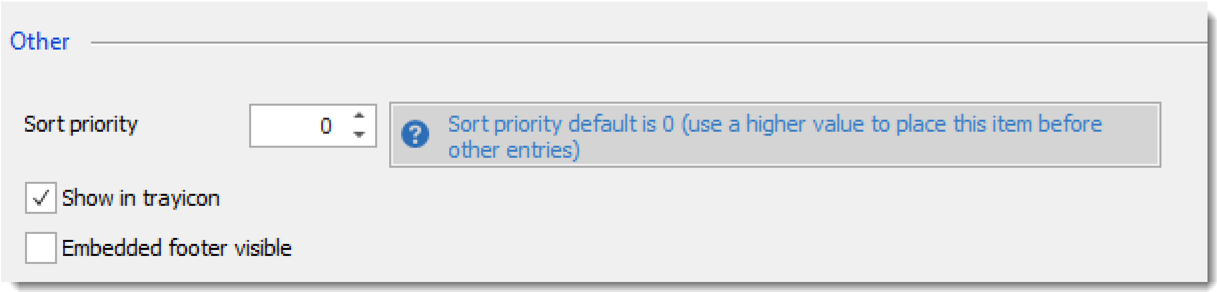


OPTION	DESCRIPTION
Color	Set the entry's tab page color.
Fore color	Set the foreground color of the name of the entry in the Navigation Pane.

The application colors the border of the embedded window along with the tab.



OTHER



Other

Sort priority 0

Sort priority default is 0 (use a higher value to place this item before other entries)

☑ Show in trayicon

□ Embedded footer visible

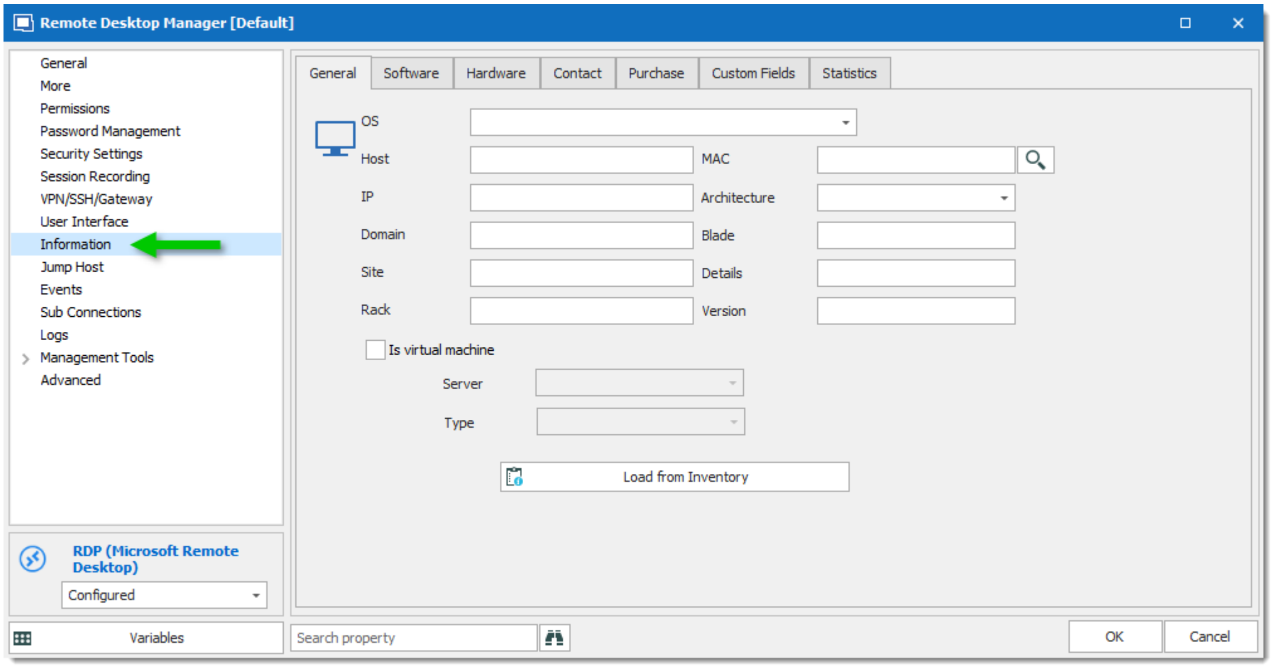
Other

OPTION	DESCRIPTION
Sort priority	Set the number to a higher number to increase the sorting priority in the Navigation Pane.
Show in trayicon	Allow access to the entry from the tray icon.
Embedded footer visible	Display a footer under the session.

6.1.8 Information

DESCRIPTION

The **Information** side menu contains general information regarding your computer, software, hardware, expiration warranty, etc...



Information side menu

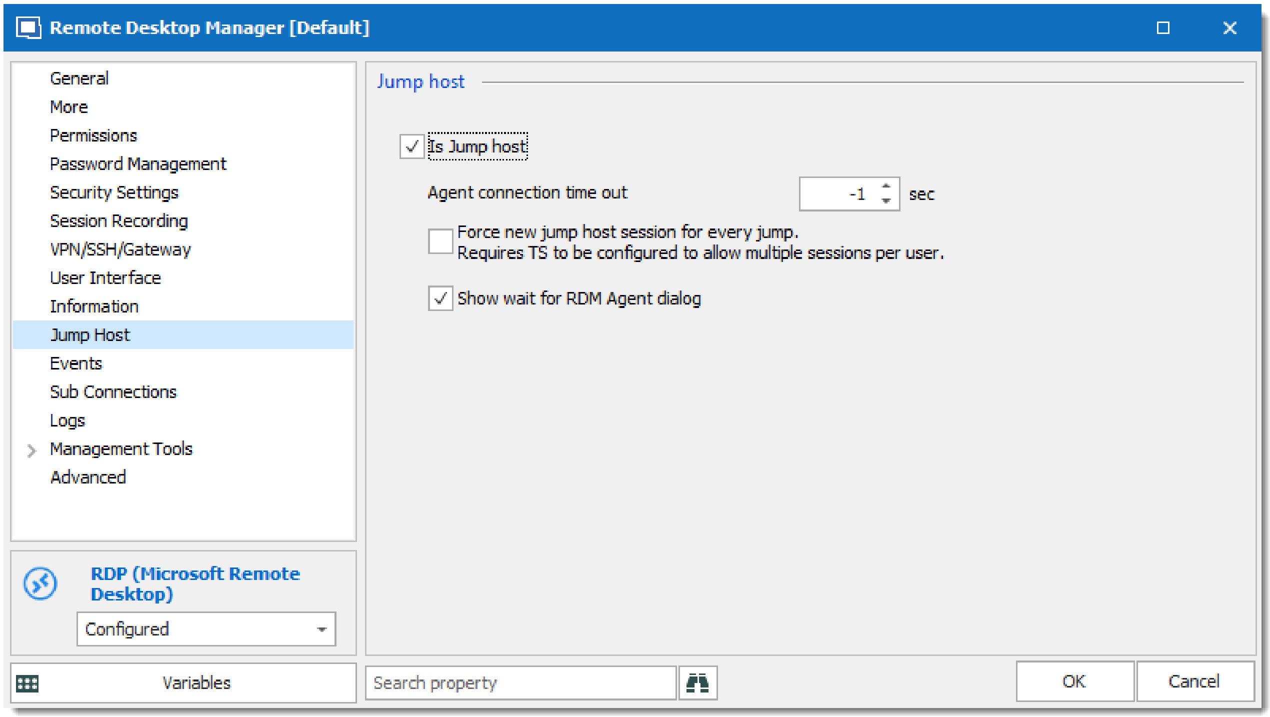
The various sections of this feature are mostly for you to input information regarding the entry's specifics (usually the target host). The sections are divided as follows:

- **General:** Enter specific information regarding the computer, such as operating system, MAC address and hardware description. This will also enable certain actions within the dashboard, for example the Wake-on-LAN.
- **Software**: Here you can input a list all software installed on the remote computer as well as indicate the server roles.
- **Hardware**: Specify the hardware information of the remote computer.
- **Contact:** Enter contact information or link to a contact entry. It can be useful when managing a third party server.
- **Purchase**: Enter information related to the invoice or the purchase of the equipment.
- **Custom Fields**: Define custom properties and values that can then be access via variables ($CUSTOM_FIELD1$, $CUSTOM_FIELD2$, etc.) in child connections or Macros/Scripts/Tools. You must be an administrator or have additional privileges to reveal password in order to view the protected values.
- **Statistics**: View who created or update the entry, as well as the date.

6.1.9 Jump Host

DESCRIPTION

Indicates if the entry is a Jump Host. Please consult our Jump Online Help for more details on Remote Desktop Manager Jump.



Jump host

☑ Is Jump host

Agent connection time out -1 sec

☐ Force new jump host session for every jump.
Requires TS to be configured to allow multiple sessions per user.

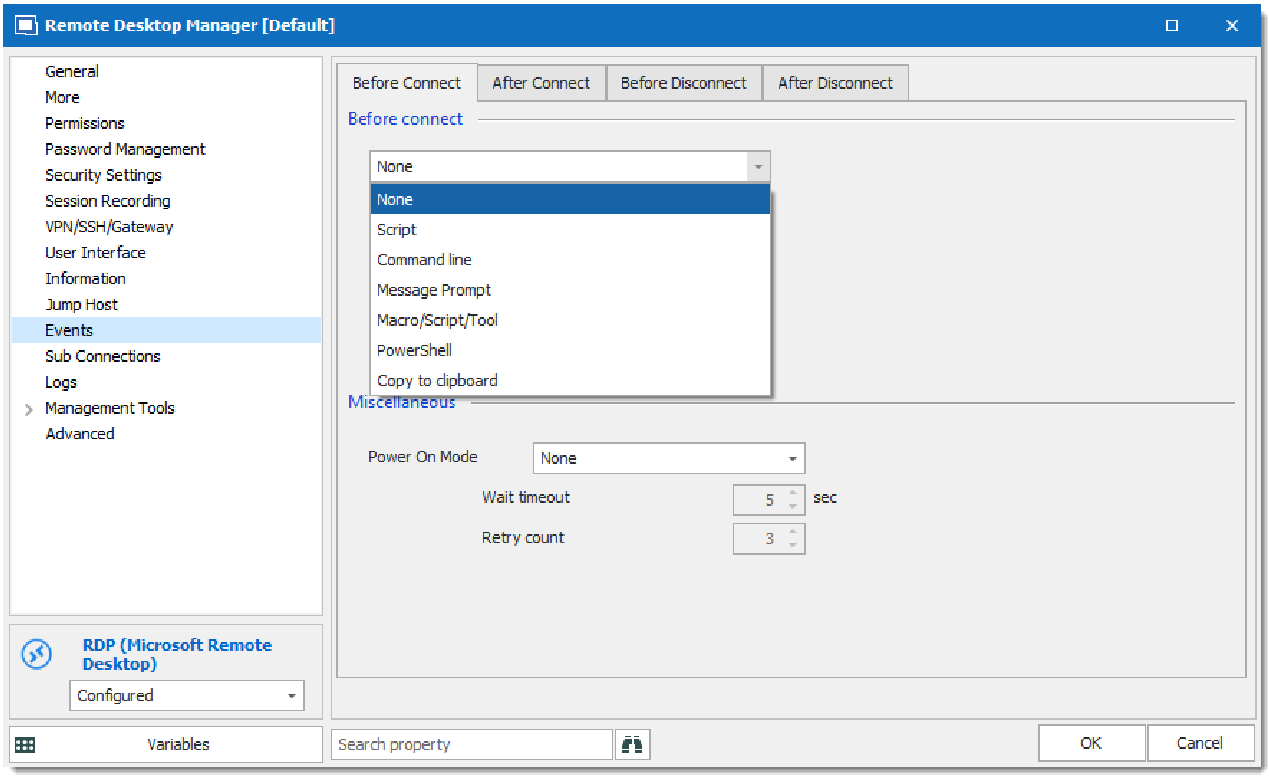
☑ Show wait for RDM Agent dialog

6.1.10 Events

DESCRIPTION

Remote Desktop Manager gives you the flexibility to automatically run operations before or after establishing a connection.

These operations are defined via the **Events** section of a session's properties. Define a script or a command line which executes at the appropriate time with the provided parameters, such as the session ID or username. For example, events can be used to execute an external batch file or application that prompts the user for more information, or to update a log on a remote server.



None

Configured

Power On Mode None

Wait timeout 5 sec

Retry count 3

Session properties – Events

SETTINGS

The **Events** section is composed of four tabs. All of them can execute the same events. but at specific times, such as before the connection is established or after its interruption.

OPTION	DESCRIPTION
None	No script, command line or message prompt is executed.
Script	Select a script file to execute The VBScript (***.vbs**) file is the only supported format.
Command Line	Enter a command line to execute.
Message Prompt	Enter a message to display.

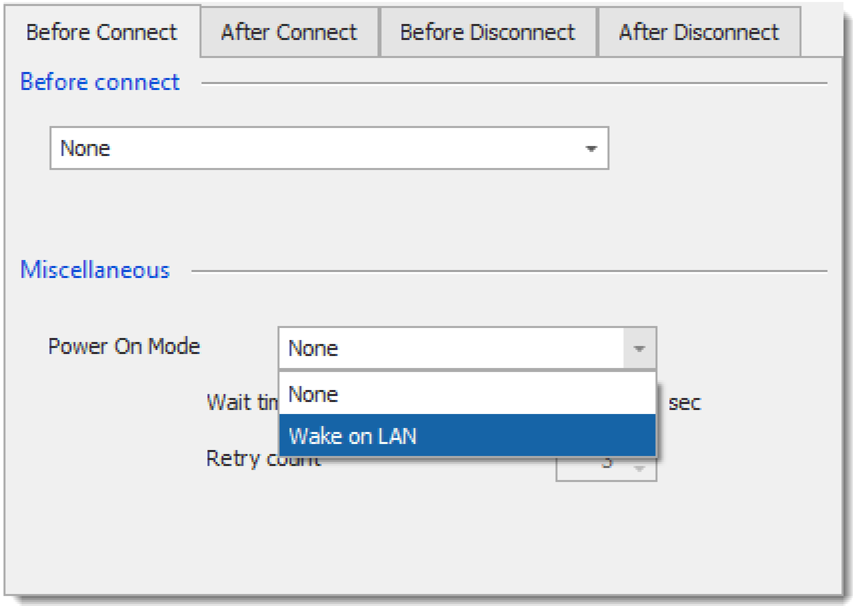
OPTION	DESCRIPTION
Macros/Scripts/Tools	Select a Macros/Scripts/Tools entry from the data source.
PowerShell	Select a PowerShell script from a local drive.
Copy to clipboard	Provide text to copy to the clipboard.

BEFORE CONNECT – MISCELLANEOUS

The **Miscellaneous** section of the **Before Connect** tab allows to power on the remote device before trying to establish the connection.

Please note that for the Wake-on-LAN feature to work:

- The remote device must support the Wake-on-LAN feature.
- The MAC address must be filled out in the **Information** section of the session properties.



Before connect: None

Power On Mode: None

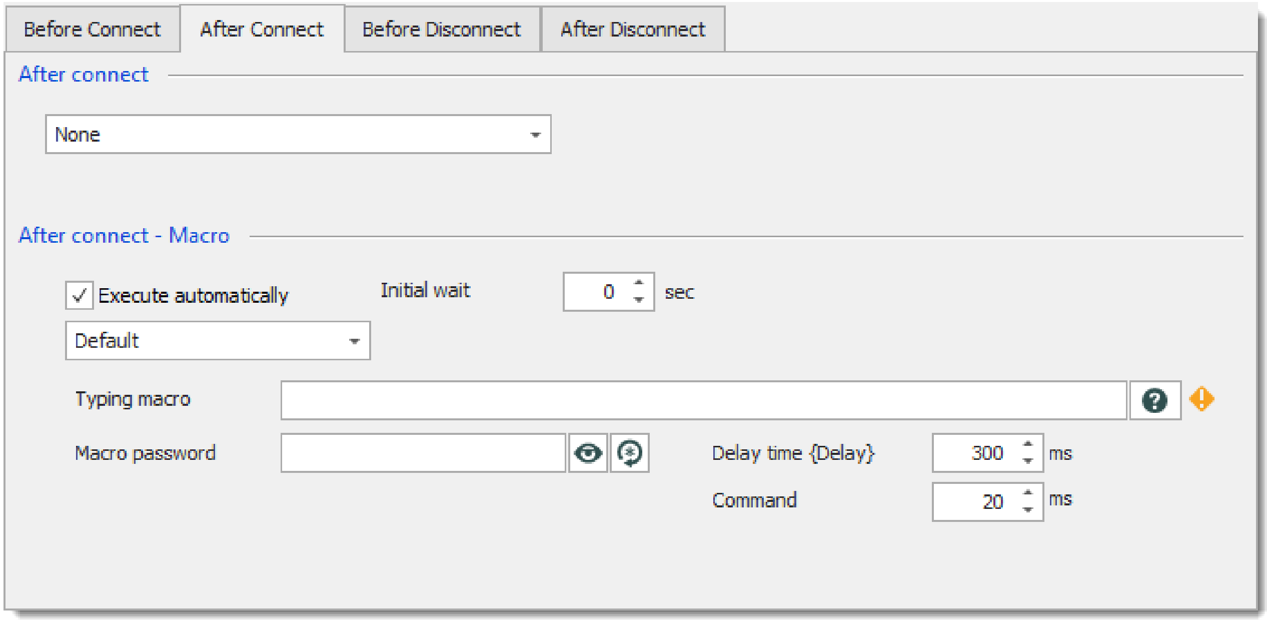
Wait tim sec

Retry count 3

Before Connect – Miscellaneous

OPTION	DESCRIPTION
Power On Mode	Enable the Wake-on-LAN.
Wait timeout	Enter the delay before retrying the to wake the remote device.
Retry count	Enter the number of time to try to wake the remote device.

AFTER CONNECT – MACRO



After connect

None

After connect - Macro

☑ Execute automatically

Initial wait 0 sec

Default

Typing macro

Macro password

Delay time {Delay} 300 ms

Command 20 ms

Event - After Connect

This feature simply uses a basic mechanism of sending keystrokes provided by the .NET framework, emulating someone using the keyboard. It sends the keystrokes to the operating system itself, and they are handled by **WHATEVER** application has the focus at that time. If the focus is switched to another window, the credentials will most likely be revealed by being typed in a text area.

Be advised that using this feature in an environment where passwords must be hidden from the user is highly discouraged.

OPTION	DESCRIPTION
Execute automatically	Execute the macro automatically when the session is opened.
Initial wait	Enter the delay before the macro is executed.
Type	Select how the macro is executed. Select between: • **Default**: enter a typing macro manually. • **Link**: select an existing Macros/Scripts/Tools from the data source.
Typing macro	Enter the typing macro to execute. For more information, please consult the Typing Macro topic.
Macro password	Enter a password to prompt for before executing the macro.
Delay time	Enter the delay time for the **{DELAY}** instruction.
Command	Enter the delay time between each command.

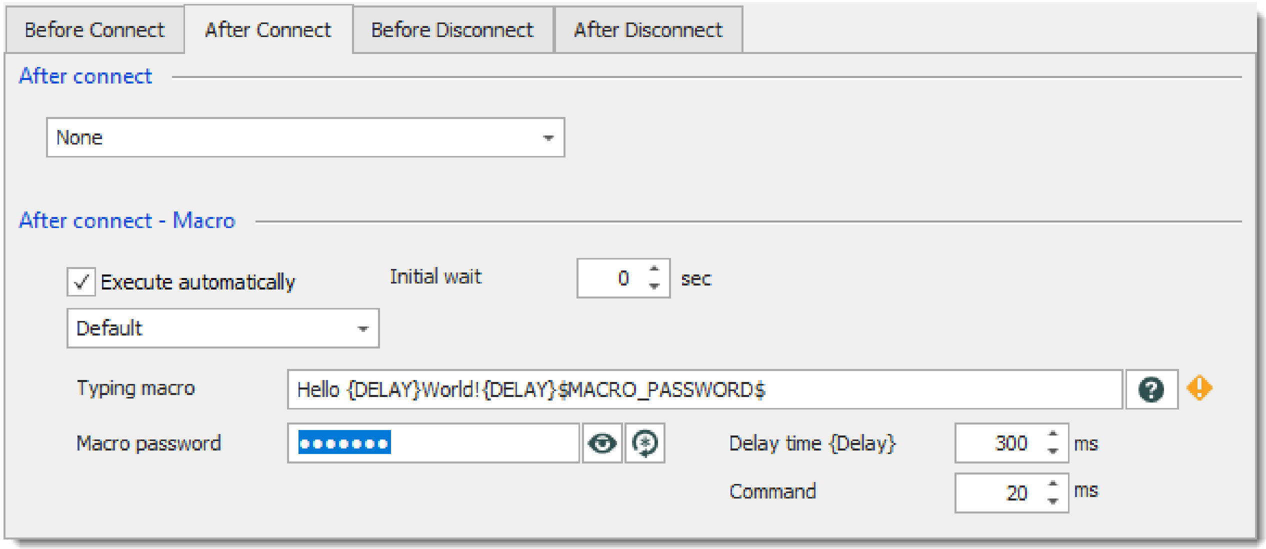
6.1.10.1 Typing Macro

DESCRIPTION

The **Typing Macro** automatically executes once a connection has been established.

This feature simply uses a basic mechanism of sending keystrokes provided by the .NET framework, emulating someone using the keyboard. It sends the keystrokes to the operating system itself, and they are handled by **WHATEVER** application has the focus at that time. If the focus is switched to another window, the credentials will most likely be revealed by being typed in a text area.

Be advised that using this feature in an environment where passwords must be hidden from the user is highly discouraged.



☑ Execute automatically

Initial wait 0 sec

Default

Typing macro: Hello {DELAY}World!{DELAY}$MACRO_PASSWORD$

Macro password: ●●●●●●●

Delay time {Delay}: 300 ms

Command: 20 ms

Auto typing macro

SETTINGS

TYPING MACRO

Keyboard keys are represented by predefined tags between braces. To specify a single keyboard character, use the character itself without braces. For example, represent the letter ***A*** by typing the "A" character in the typing macro. To represent more than one character, such as **Hello**, append each additional character to the preceding one: "Hello".

SPECIAL KEYS

To specify characters that aren't displayed when you press a key, such as ENTER or TAB, as well as the keys that represents actions rather than characters, refer to the codes in the following table.

KEY	CODE
BACKSPACE	`{BACKSPACE}, {BS}, or {BKSP}`
BREAK	`{BREAK}`
CAPS LOCK	`{CAPSLOCK}`

KEY	CODE
CTRL + ALT + DELETE`	{CTRL-ALT-DEL}
DEL or DELETE	{DELETE} or {DEL}
DOWN ARROW	{DOWN}
END	{END}
ENTER	{ENTER}
ESC	{ESC}
HELP	{HELP}
HOME	{HOME}
INS or INSERT	{INSERT} or {INS}
LEFT ARROW	{LEFT}
NUM LOCK	{NUMLOCK}
PAGE DOWN	{PGDN}
PAGE UP	{PGUP}
PRINT SCREEN	{PRTSC}
RIGHT ARROW	{RIGHT}
SCROLL LOCK	{SCROLLLOCK}
TAB	{TAB}

KEY	CODE
UP ARROW	{UP}
F1	{F1}
F2	{F2}
F3	{F3}
F4	{F4}
F5	{F5}
F6	{F6}
F7	{F7}
F8	{F8}
F9	{F9}
F10	{F10}
F11	{F11}
F12	{F12}
F13	{F13}
F14	{F14}
F15	{F15}
F16	{F16}

KEY	CODE
Keypad add	{ADD}
Keypad subtract	{SUBTRACT}
Keypad multiply	{MULTIPLY}
Keypad divide	{DIVIDE}

To specify keys combined with any combination of the SHIFT, CTRL, and ALT keys, precede the key code with one or more of the following signs.

KEY	CODE
SHIFT	+
CTRL	^
ALT	%

To specify that any combination of SHIFT, CTRL, and ALT should be held down while several other keys are pressed, enclose the code for those keys in parentheses. For example, to specify to hold down SHIFT while E and C are pressed use "+(EC)". To specify to hold down SHIFT while E is pressed, followed by C, without SHIFT, use "+EC".

SPECIAL COMMANDS

COMMANDS	DESCRIPTION
{DELAY}	This command introduces a delay of 300 ms (default value) before the next command.
{WINDOW:???}	This command focus a window containing the specified name after the semi colon.

COMMANDS	DESCRIPTION
{PREV-WINDOW}	Select the previous window before executing the remaining commands.

MACRO PASSWORD

You can define a password to be use within the typing macro exclusively. Use the variable **$MACRO_PASSWORD$** to access the password.

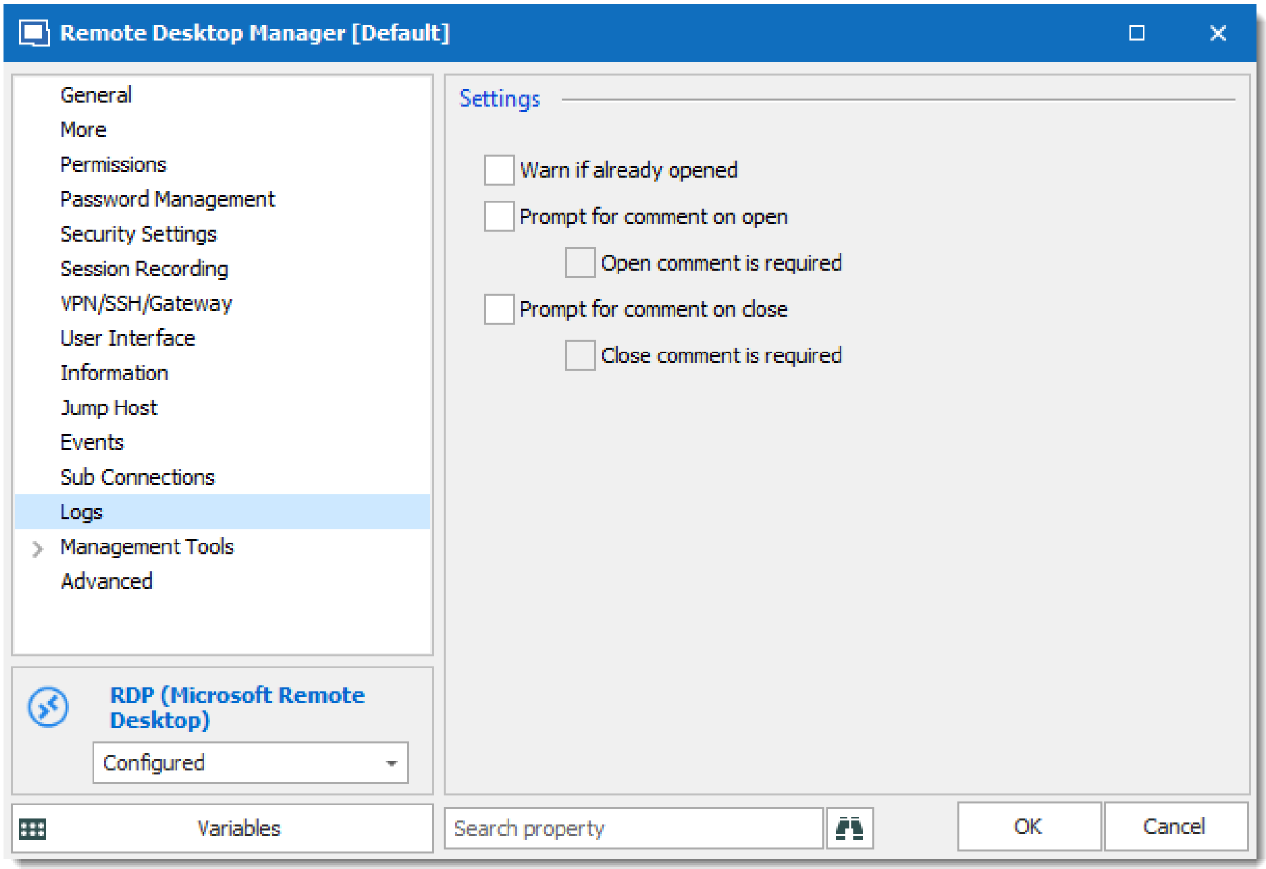
6.1.11 Logs

DESCRIPTION

ℹ This feature requires an Advanced Data Source.

ℹ When using a **Devolutions Online Database** data source, an Enterprise Subscription is required to have access to logging features.

The **Logs** section controls settings related to the logs of entries.



Settings

□ Warn if already opened

□ Prompt for comment on open

□ Open comment is required

□ Prompt for comment on close

□ Close comment is required

Entry's properties – Logs section

It also has a feature to warn you if you attempt to open a session, from the **same** data source, as another user. The application uses the logs to detect an open connection. Note that applications closed while being Offline will not register in the logs as closed, and must be manually closed with a right click.

There are also options to prompt for a comment, optional or required, when a session is opened or closed. **Prompt for comment on open** will also prompt for comments when a password is viewed or copied.

The **Warn if already opened** option is supported in Embedded (tabbed) display mode only.

Both prompt for comments are supported in embedded and external display mode.

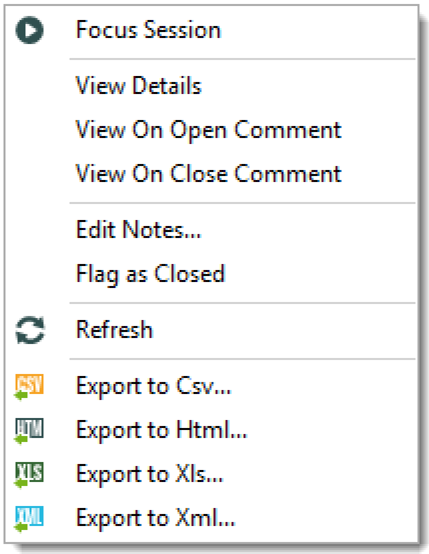
SETTINGS

SETTINGS

OPTION	DESCRIPTION
Warn if already opened	Monitors all users of the current data source to verify if the session is already opened. This prevents "stealing" sessions from other users.
Prompt for comment on open	Prompt the user for a comment when launching the session and when viewing or copying the password. These comments are logged in the entry's logs.
Open comment is required	Forces the user to enter an Open session comment.
Prompt for comment on close	Prompt the user for a comment when closing the session. Close comments are logged in the entry's logs.
Close comment is required	Force the user to enter a Close session comment.

Right click on the log entry to display the contextual menu to show the log details. You can export the log or view more information about users.

Right-click on a log entry to display the ***Log Details*** contextual menu.



Log details contextual menu

VIEW DETAILS WINDOW

The View Details window has three tabs: **General**, **Details** and **Comments**.

GENERAL TAB

The **General** tab displays session information to identify the entry and also displays the session running time. Notes can be entered using the contextual menu in the log entry grid.

DETAILS TAB

The **Details** tab display information on the user and computer from which the session was started and on the destination host. It also displays information if the session was forcibly closed using the Close menu.

COMMENTS TAB

The **Comments** tab displays the **On Open comment** and **On Close comment**.

6.1.12 Management Tools

DESCRIPTION

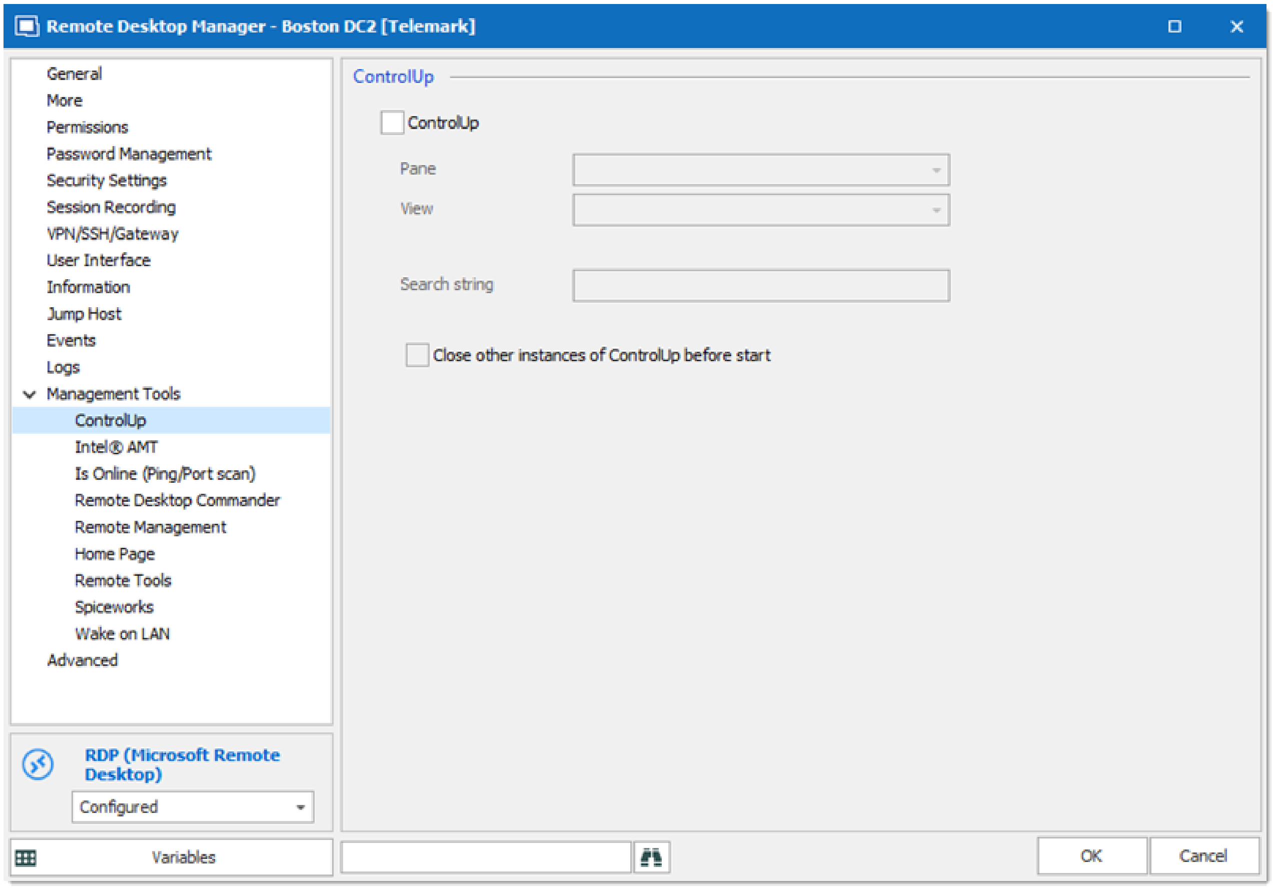
The **Management Tools** tab allows you to configure different settings used by the Macros/Scripts/Tools including credentials when the remote credentials are required. It contains all of the authentication settings related to the session tools (e.g. Services, Wake-on-LAN, Shutdown Remote Computer, etc.) available in the application. For example it is used to execute a remote WMI query or a remote PowerShell script.

The applications available are:

- **ControlUp**
- **IntelAMT**
- **Is Online (Ping/Port scan)**
- **Remote Desktop Commander**
- **Remote Management**
- **Home Page**
- **Remote Tools**
- **Spiceworks**
- **Wake-on-LAN**

SETTINGS

The settings depend on the tool selected.



ControlUp

□ ControlUp

Pane

View

Search string

□ Close other instances of ControlUp before start

Tools side menu

CREDENTIALS

OPTION	DESCRIPTION
Use default credentials	Use the default credentials. Please note that the application does not set anything and assume that the current Windows user has all the privileges required to execute the tool.
Use session credentials	Use the same credentials defined in the session directly or in the linked credential entry.
Custom credentials	Use a specific username, password and domain.

OPTION	DESCRIPTION
Credential repository	Uses a linked **Credential Entry** which can also be an external credential like KeePass. It is very useful for sharing or reusing credential among entries.
My personal credentials	Use one set of credentials to replace or emulate the ones from your Windows session. See My Personal Credentials topic.
Prompt for credentials	Specify the credentials every time.

SETTINGS

OPTION	DESCRIPTION
Open VPN before execution	Specifies that the session defined VPN should be activated prior to running the Macros/Scripts/Tools. The application will open it if it's not already opened.

6.1.12.1 Wake-on-LAN

DESCRIPTION

Wake-on-LAN is an Ethernet computer networking standard, which allows a computer to be turned on or woken up by a network message. This is an OS-agnostic feature that works by broadcasting a specially crafted “magic” packet at the data link layer. The target computer sits in a low-power state with only its network card switched on, and when it receives the magic packet, the network card “wakes up” the computer, powering it on and booting it up.

Wake-on-LAN is supported in the Enterprise edition of Remote Desktop Manager. Plus, the destination motherboard must support it, and it must be enabled. The computer must also be in the local area network (LAN) and not connected in a VPN.

An important thing to note is that Wake-on-LAN operates below the IP level. This means that the sending machine needs to be on the LAN, so we cannot send them over remote IP-based connections, such as over SSH or VPN. WOL broadcasts packets to the target computer over UDP. You can configure which port it uses, the default is 9. If you want to wake up a machine on a different subnet, your router must forward UDP port 9, or whatever you change the port assignment to. Most users do not have to configure their router or worry about this.

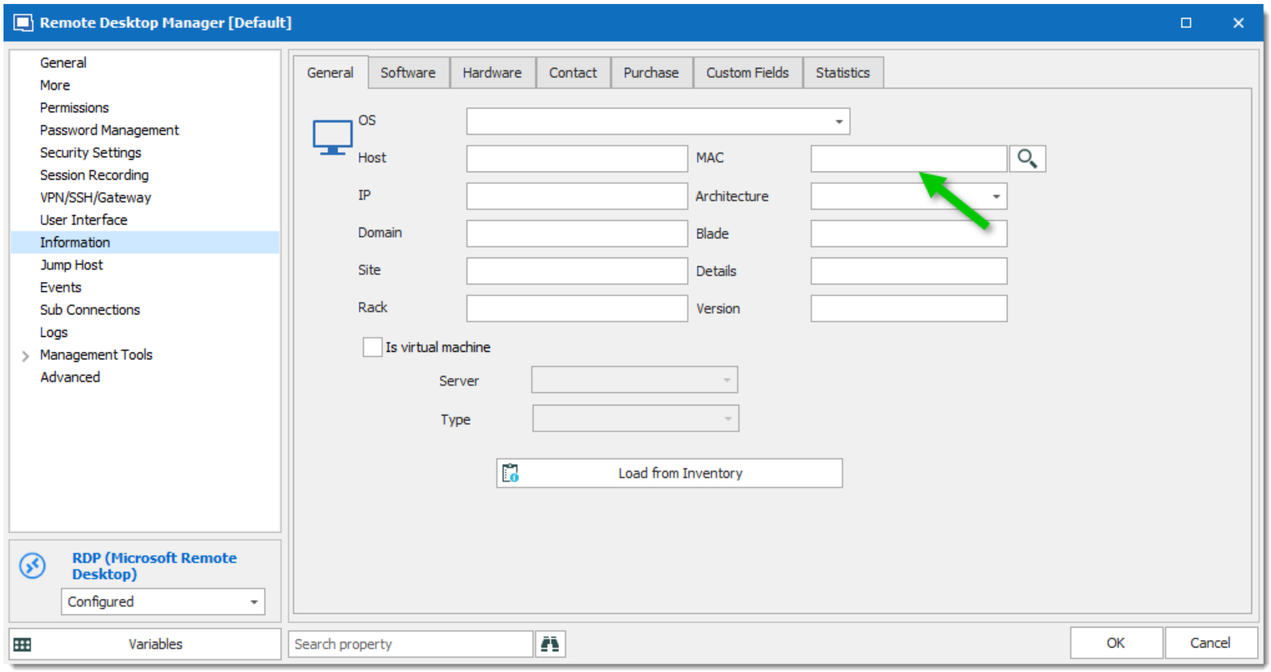
ENABLING WAKE-ON-LAN

The first step is to verify that your computer supports Wake-on-LAN. There’s a few things to look out for:

- Your network card must support Wake-on-LAN.
- Your power supply must support Wake-on-LAN.
- Wake-on-LAN must be enabled in BIOS.
- Your router must be configured to forward broadcast packets.
- Your OS must be configured to enable Wake-on-LAN.

CONFIGURE REMOTE DESKTOP MANAGER

You must add a valid MAC address (Media Access Control address) in the session's configuration. The input field can be found in the **Information** tab and in the **General** child tab. The field name is MAC.



Session configuration - Wake-on-LAN

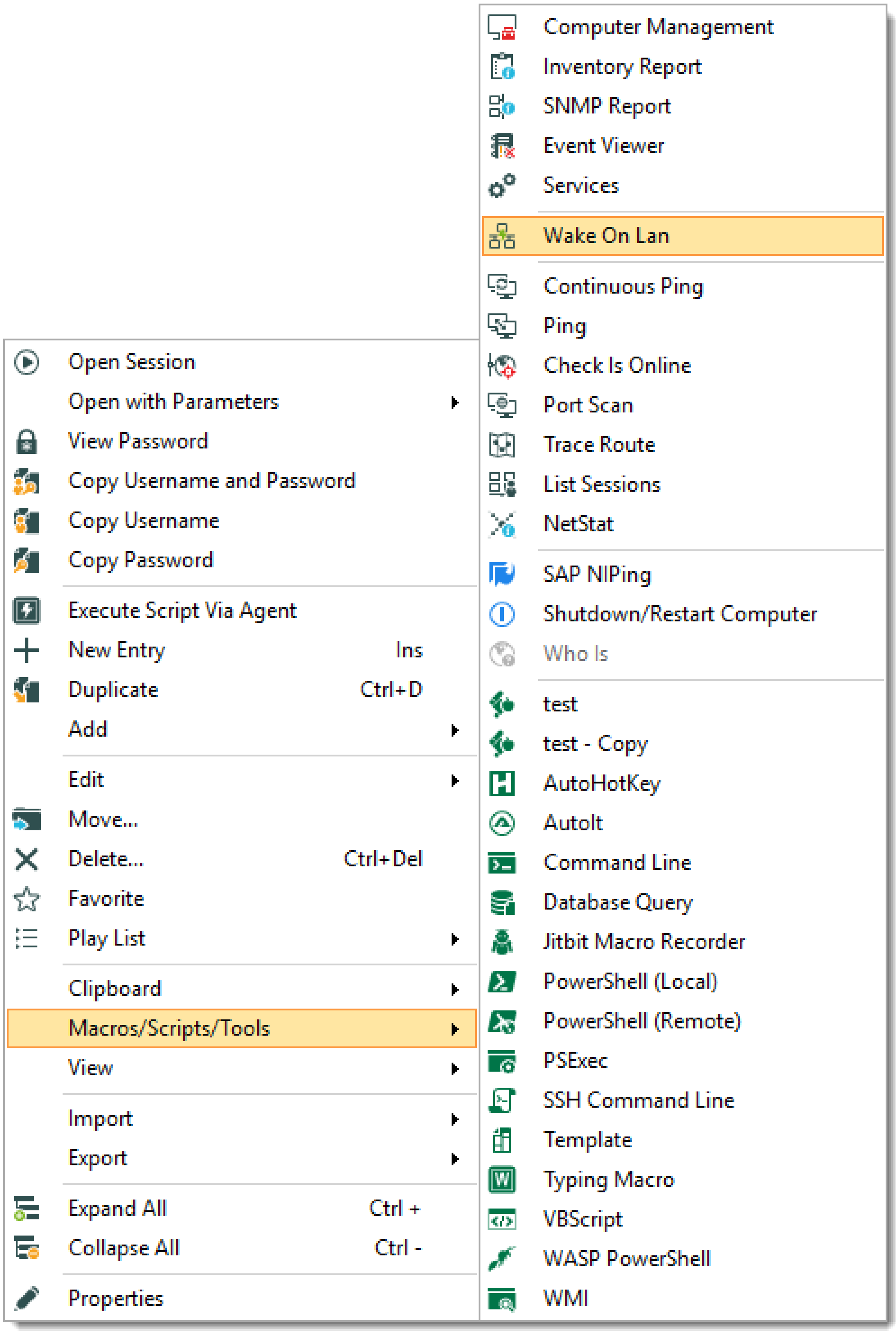
You can use the Ellipsis button to automatically determine the MAC address. If this is unsuccessful, you will need to enter it manually.

ABOUT THE MAC ADDRESS DISCOVERY

The discovery process will initially attempt to use the ARP protocol. This is fast and does not require authentication, but there are requirements on the network aspect that may not be met. If ARP was not successful, another attempt is made using WMI. This is slower and requires authentication. RDM will use the credentials as configured in the entry's properties or the credentials entered in the Management Tools tab.

USE WAKE-ON-LAN

If the settings are correctly configured, you can invoke the Wake-on-LAN from the session's context menu, which can be found in the **Macros/Scripts/Tools - Wake-on-LAN** menu.

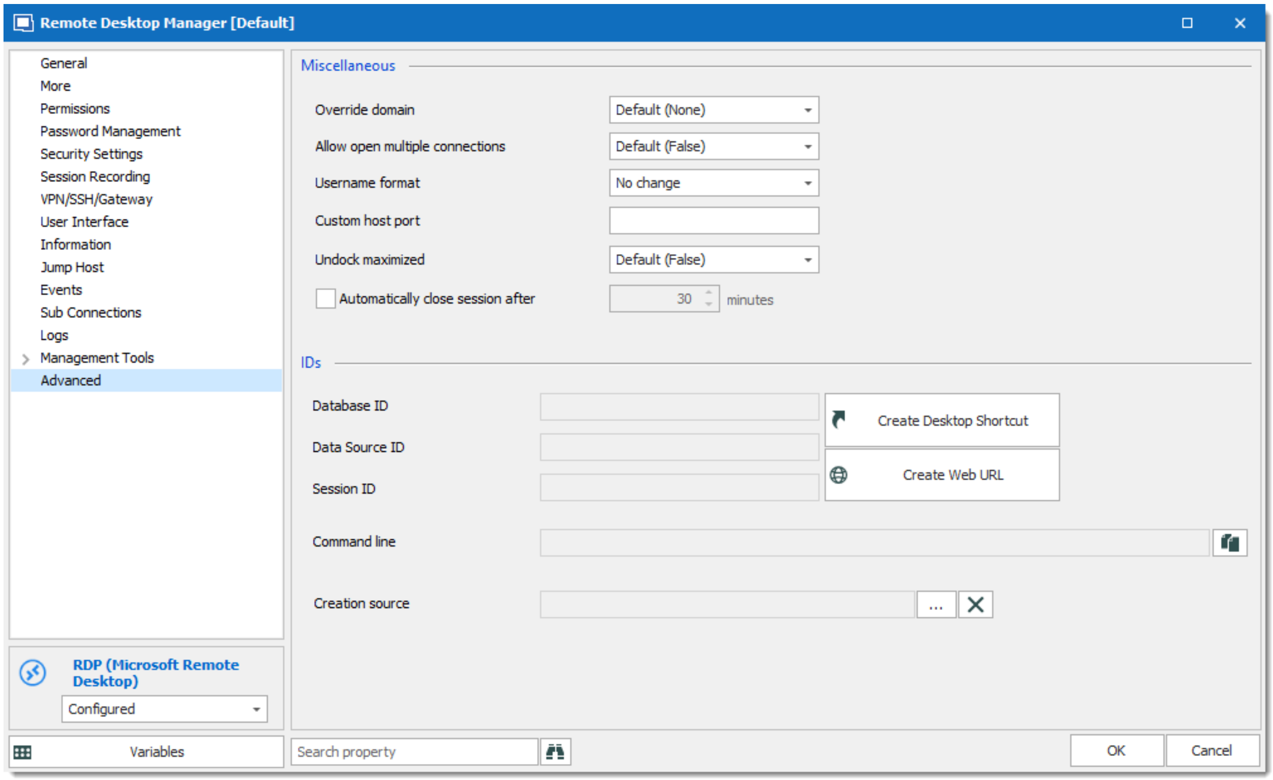


Session tools - Wake-on-LAN

6.1.13 Advanced

DESCRIPTION

The **Advanced** tab contains settings such as the internal data source ID and session ID. These values can be used to invoke Remote Desktop Manager from a command line or even a web protocol handler.



Override domain: Default (None)

Allow open multiple connections: Default (False)

Username format: No change

Custom host port:

Undock maximized: Default (False)

□ Automatically close session after 30 minutes

Database ID

Data Source ID

Session ID

Command line

Creation source

SETTINGS

MISCELLANEOUS

OPTION	DESCRIPTION
Override domain	Allow you to override the domain when the credential are sent to the remote session. Select between: **Default**: Use the domain from the domain field in the session.

OPTION	DESCRIPTION
	Use Host Name: Use the host name (computer name) as the domain. **Custom Domain**: Use the domain in the Domain field from the Information section (in entry overview). **Use Domain from UPN**: Use the UPN's domain.
Allow open multiple connections	When a connection is already open and you reopen it, create a new instance instead of focusing on the other session.
Username format	Determines the username's format. Useful when connecting to remote systems that have a single field for the username but where you still need to send the domain name in order to authenticate. The possible values are: • **No Change**: Does not change the username. • **{Domain}\{User}**: Formats the username by prefixing with the domain name. • **{User}@}Domain}**: Formats the username by appending the domain name. • **{User}**: Trims the domain to keep only the username.
Custom host port	With this you can input a customizable port for the host.
Undock maximized	Display mode undocked will be maximized when launched.
Automatically close session after	Check if you want your session to automatically close after a given number of minutes.

IDS (USED IN A COMMAND LINE OR IN POWERSHELL SCRIPTS)

OPTION	DESCRIPTION
Database ID	Internal RDM database ID. Used as a Command Line Arguments or when using RDM PowerShell module.
Data Source ID	Internal RDM data source ID. Used as a Command Line Arguments or when using RDM PowerShell module.
Session ID	Internal RDM session ID. Used as Command Line Arguments or when using RDM PowerShell module.
Command line	Fully defined command line to start this session via a command line. Hit the copy button to copy the entire command line.
Create Desktop Shortcut	Automatically create a Remote Desktop Manager shortcut on your desktop.
Create web URL	Automatically create a web URL. Requires that the protocol handler has been registered by our installer.
Creation source	The creation source is used when deleting and moving entries using the Synchronizer.

6.2 Sessions

DESCRIPTION

Remote Desktop Manager separates the connection types in four different categories:

- **General**
- **Remote connections**
- **Virtualization**
- **File Browser**

- **Other**

GENERAL

This category contains the more popular and frequently used sessions.

REMOTE CONNECTIONS

This category contains all of the remote connections types that are used to connect to remote systems, including computers, switches, VPNs, printers, etc.

VIRTUALIZATION

This category contains all of the virtualization connections, including the local virtual machines tools and server tools. Remote Desktop Manager supports tools from Microsoft, VMware, Oracle and more.

FILE BROWSER

This category contains all the cloud file browser integrated in Remote Desktop Manager.

OTHER

This category contains many useful session types that are not directly supported, or those that are neither a virtualization nor a remote connection. For example we find the Command Line (External Application), the Inventory Report and the Play List session types in this group.

6.2.1 Open a Remote Connection

There are two ways of establishing a connection. It is possible to either:

- Add entries in the connection list.
- Use the Quick Connect feature.

Depending on the method, Remote Desktop Manager can use a completely different application or library. For example, the external mode for Remote Desktop uses the Microsoft Remote Desktop's client (mstsc.exe), and the embedded mode uses the Remote Desktop ActiveX control.

CONFIGURED CONNECTION

There are many ways to open a session:

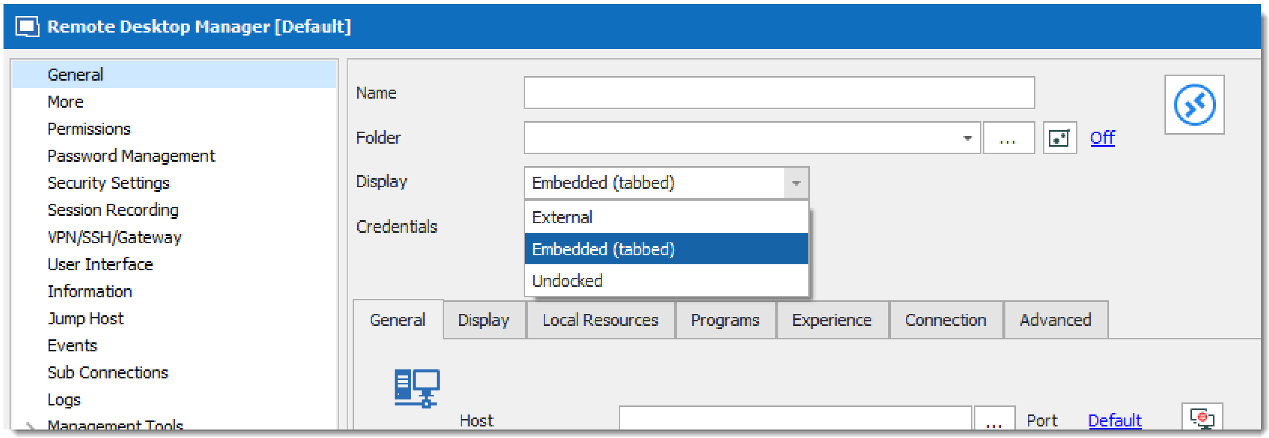
- Double-click the entry in the connection list.
- Press enter while the entry is selected.
- Use the context menu (right-click).
- Click **Open Session** on the Home tab (ribbon).
- Use the commands in the dashboard.

All entry types have a default action associated with them (e.g. Open, Navigate URL). These actions are executed when you use any means described above. The default action is often "Open", but you can modify it for certain entry types.

Remote Desktop Manager provides three display modes:

- **External**
- **Embedded (tabbed)**
- **Undocked**

Please note that **not** all sessions support the three modes. It depends on the integration and the availability of the third party application.



Display: Embedded (tabbed)

Display mode

EXTERNAL MODE

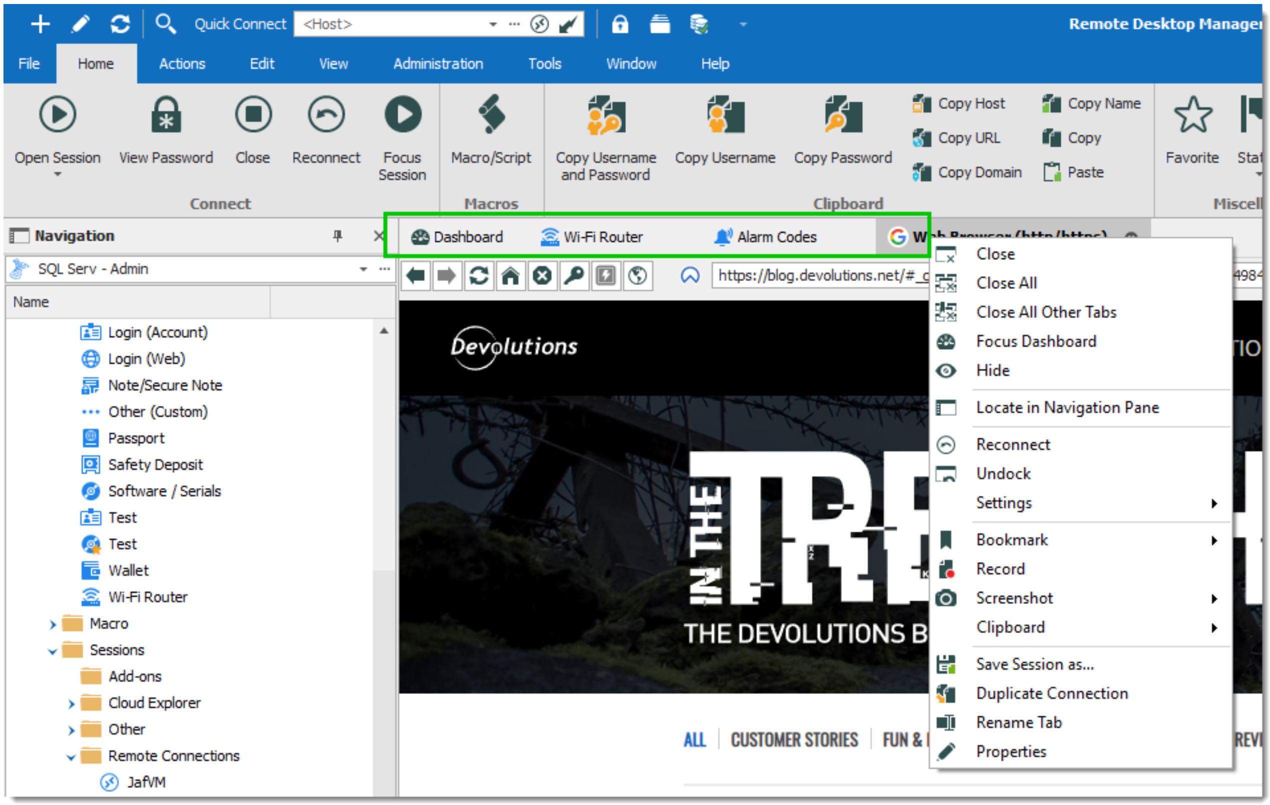
With the External mode, the session is opened as an external process with no direct link to Remote Desktop Manager.

This display mode usually launches the native application. For example the native application for RDP is mstsc.exe. The external mode will automatically run on the Primary monitor. Depending on the type of session, an external mode session view will be updated if Remote Desktop Manager can detect that its running.

EMBEDDED (TABBED) MODE

An embedded session runs within Remote Desktop Manager window and displays tabs at the top of the Dashboard. This mode centralizes the opened session in the application which makes it easy to switch from one to another.

There are several session-specific actions available by right clicking (Contextual Menu) on a tab title.

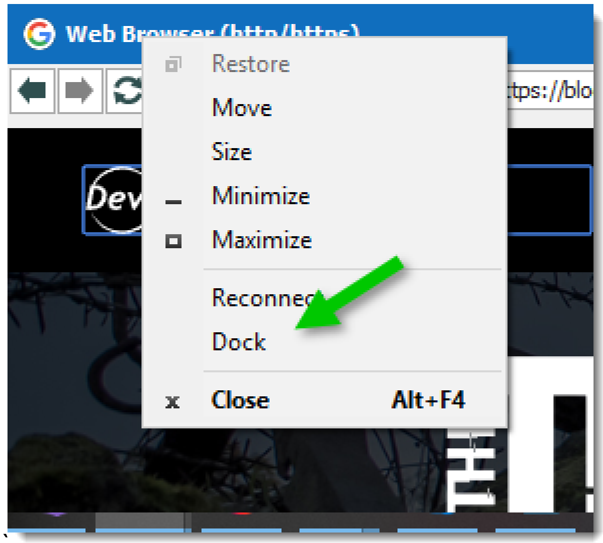


Web session opened in Embedded mode

UNDOCKED

While the embedded mode is useful in some cases, you may prefer to move the content in an external window. If so, this can be easily done using the contextual menu. Remote Desktop Manager will create a new window to contain the tabbed session allowing you to move it anywhere else (i.e. on another screen).

To dock the content back to its original place, use the context menu by right clicking on the window icon.



Undocked session window context menu

Undocked mode supports different configurations for multiple monitor setups.

OPEN WITH PARAMETERS

You may specify different connection options when opening an entry. Click the arrow below **Open Session** on the **Home** tab or use the right-click context menu.

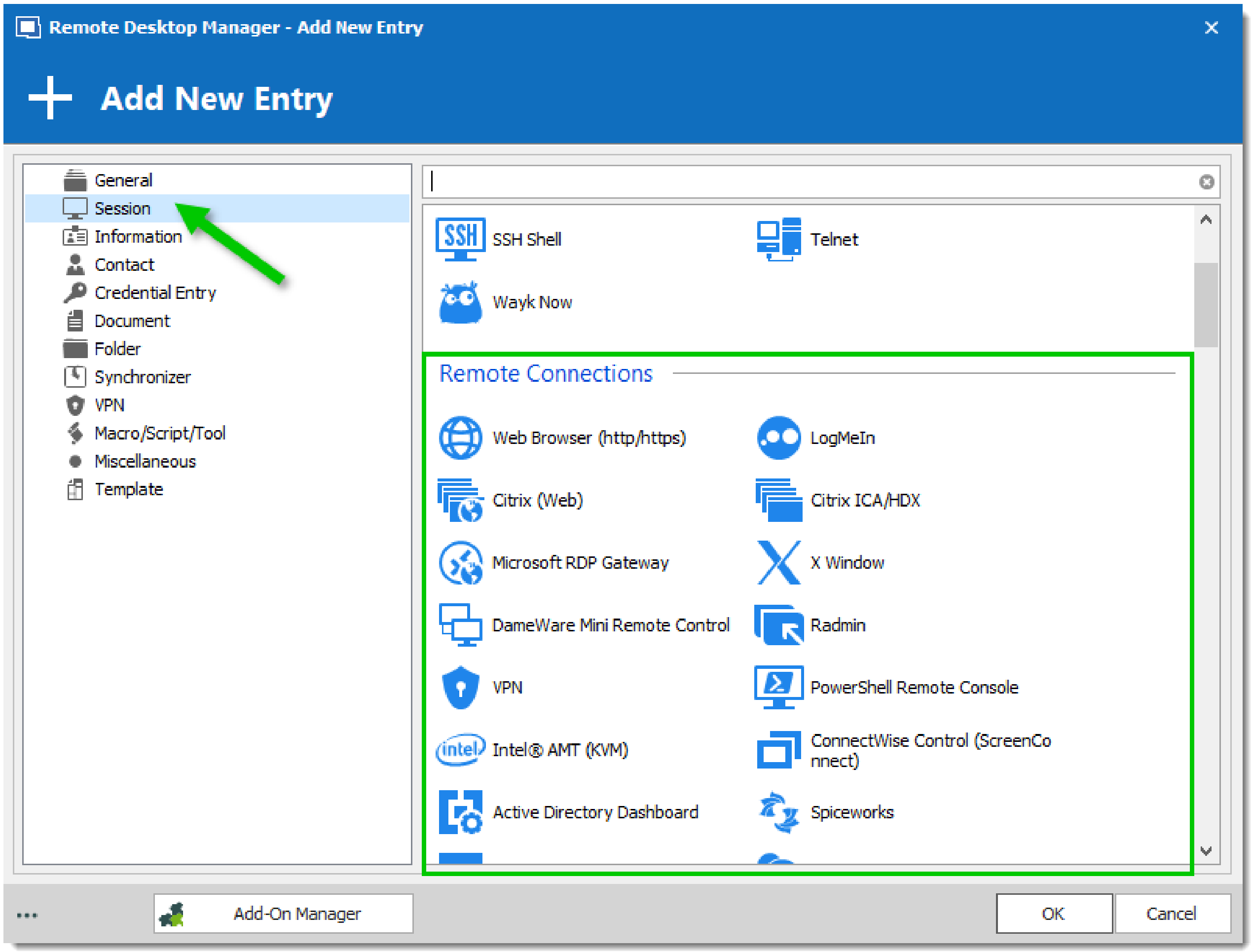
Examples of special actions:

- Open Full Screen.
- Embedded/External Display Mode.
- Console or admin mode with the RDP protocol.
- Force prompt for credentials.
- Open with or without the configured VPN.
- Open from a template.

6.2.2 Remote Connections

DESCRIPTION

This category contains all of the connection types that are used to connect to a remote system, including computers, switches, VPNs, printers, etc.



Session - Remote Connections

SUPPORTED REMOTE CONNECTIONS:

We support a very wide range of connections, ranging from Apple Remote Desktop, Web Browser (http/https), LogMeIn and much more. Explore to your heart's content!.

6.2.2.1 Apple Remote Desktop

DESCRIPTION

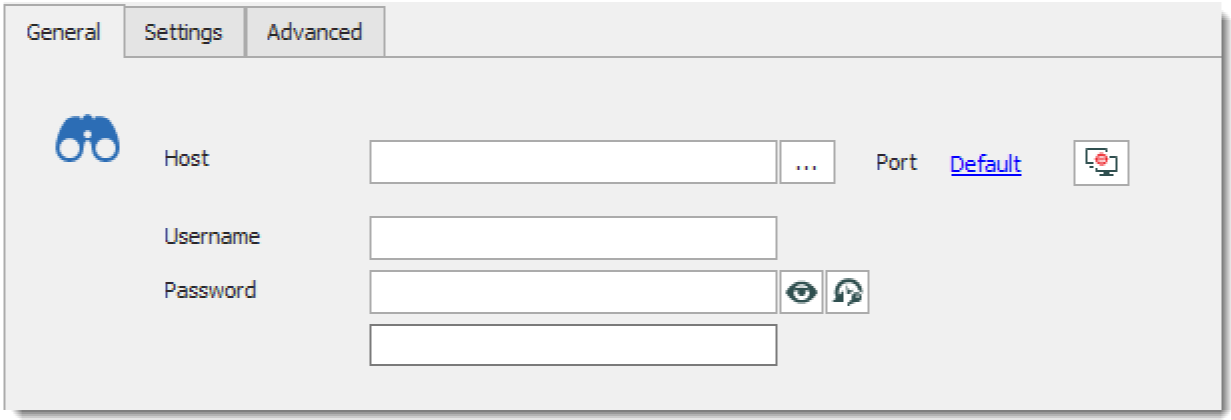
This entry is used to define and configure an **Apple Remote Desktop** session.

- Remote management of macOS devices
- Supports Credential repository
- Embedded Mode
- Show Opened Session
- Undocked Mode
- Supports Logging

Apple Remote Desktop is our integration of the remote connection protocol created by Apple. This session allows to remotely control or monitor macOS devices.

SETTINGS

GENERAL

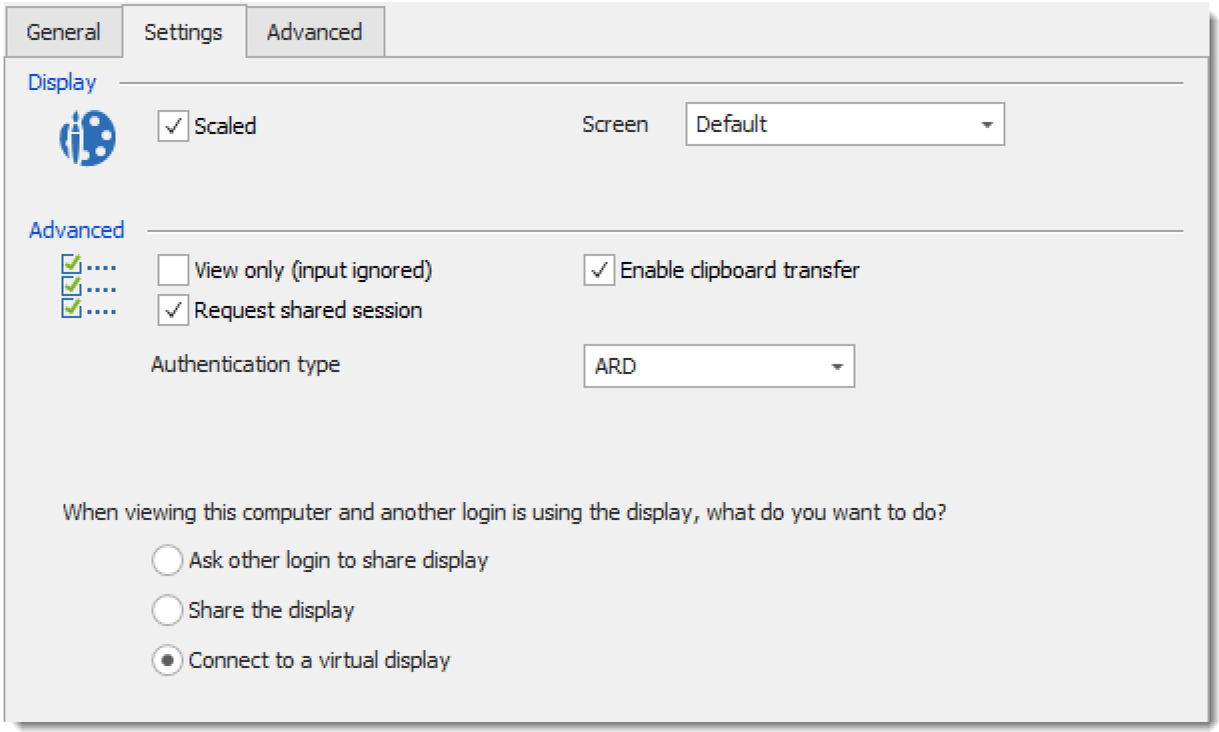


Apple Remote Desktop - General

OPTION	DESCRIPTION
Host	Enter the host name or IP address of the remote device.
Ellipsis button	Provides the list of computers discovered on your network. This can take a few moments to generate.

OPTION	DESCRIPTION
Port	Enter the port to access the remote computer. Set the value to 0 to use the default port.
Port generator	Click the icon to display the Port Generator.
Username	Enter the username to connect to the remote computer.
Password	Enter the password to connect to the remote computer.
View / Hide Password	Click the view icon to view your password. Click the hide icon to hide your password.
Password History	Click the icon to display the Password History.
Password Analyzer	Indicates the strength of the password.

SETTINGS



Display

☑ Scaled

Screen: Default

Advanced

□ View only (input ignored)

☑ Enable clipboard transfer

☑ Request shared session

Authentication type: ARD

When viewing this computer and another login is using the display, what do you want to do?

○ Ask other login to share display

○ Share the display

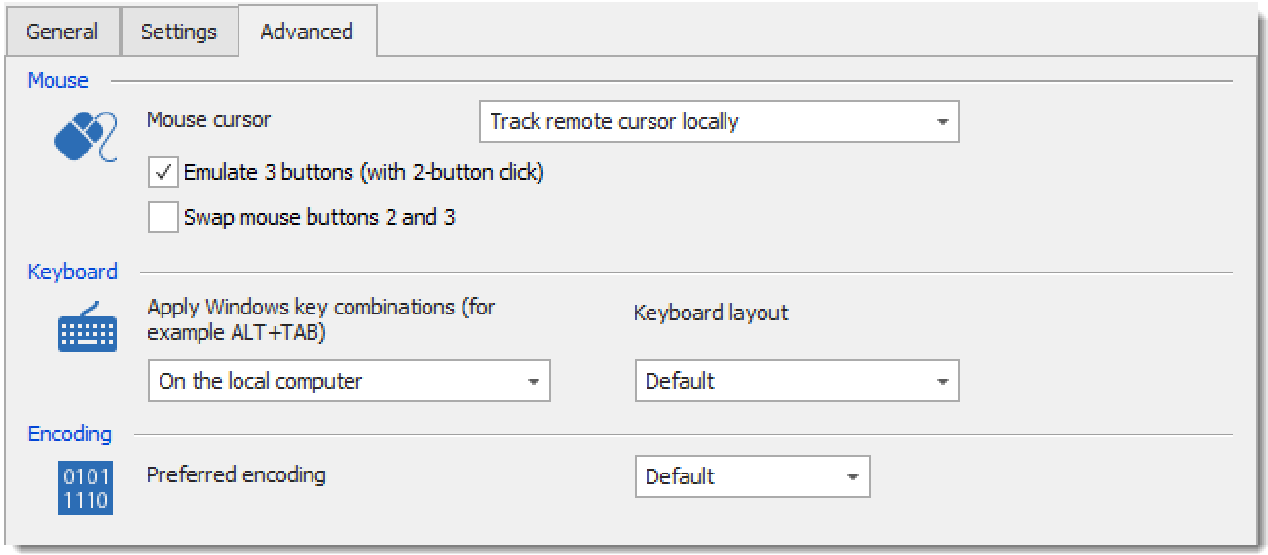
● Connect to a virtual display

Apple Remote Desktop - Settings

OPTION	DESCRIPTION
Scaled	Scale the remote display to fit the window.
Screen	Select the screen where you want to display the remote connection. Select between: • **Default:** Use the setting in ***File – Options – Types – Others – Apple Remote Desktop (ARD)***. • **Primary:** Display the primary screen. • **Custom:** Select which screen to display. • **Prompt:** Prompt at opening to select the remote display if there is more than one.
View only (input ignored)	Connect in view only mode. This option disables the keyboard and mouse while in session.

OPTION	DESCRIPTION
Request shared session	The remote user will be prompted with a request to share his session.
Disable clipboard transfer	Disable the clipboard sharing.
Authentication type	Select the authentication mode for the connection. Select between: • **ARD** • **ARD ask observe** • **ARD ask control**

ADVANCED



Mouse cursor: Track remote cursor locally

☑ Emulate 3 buttons (with 2-button click)

□ Swap mouse buttons 2 and 3

Apply Windows key combinations (for example ALT+TAB): On the local computer

Keyboard layout: Default

Preferred encoding: Default

Apple Remote Desktop - Advanced

OPTION	DESCRIPTION
Mouse cursor	Select the way the mouse cursor is handled. Select between:

OPTION	DESCRIPTION
	• **Track remote cursor locally** • **Let remote server deal with mouse cursor** • **Don't show remote cursor**
Emulate 3 buttons (with 2-button click)	Emulate mouse **button 3** when clicking on both **button 1** and **button 2**.
Swap mouse buttons 2 and 3	Invert mouse buttons 2 and 3.
Apply Windows key combinations	Select where the key combinations are sent. Select between: • **On the local computer** • **On the remote computer** • **In full screen mode only**
Keyboard layout	Select the keyboard layout. Select between: • **Azerty** • **Qwerty**
Preferred encoding	Change the encoding to use less bandwidth. From the least to the most bandwidth used, select between: • **Zlib 16 gray (black and white)** • **Zlib halftone (black and white)** • **Zlib thousands (in color)** • **Zlib (you can choose your custom compression level)** • **Default (color)**

OPTION	DESCRIPTION
Custom compression level	Available only with the **Preferred encoding - Zlib** encoding.

Find out more information about Apple Remote Desktop on https://support.apple.com/en-ca/remote-desktop.

6.2.2.2 BeyondTrust Password Safe Dashboard

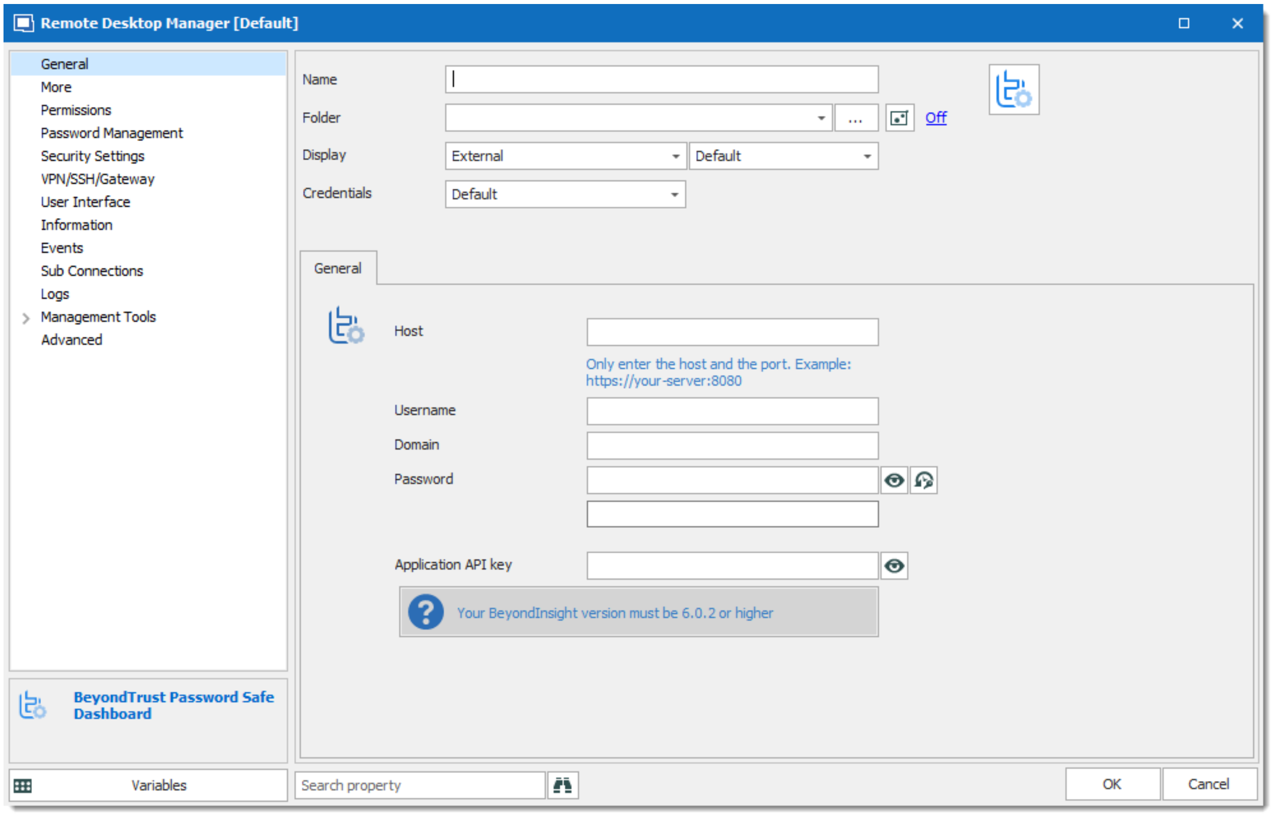
DESCRIPTION

BeyondTrust Password Safe Dashboard connects to your BeyondTrust Password Safe account. You need to include the BeyondTrust API key in the entry properties.

This entry is used to define and configure a **BeyondTrust Password Safe Console** session. It supports the following:

- Credential repository
- Copy Password
- Support Logging
- Support Host
- Show Opened Session

SETTINGS

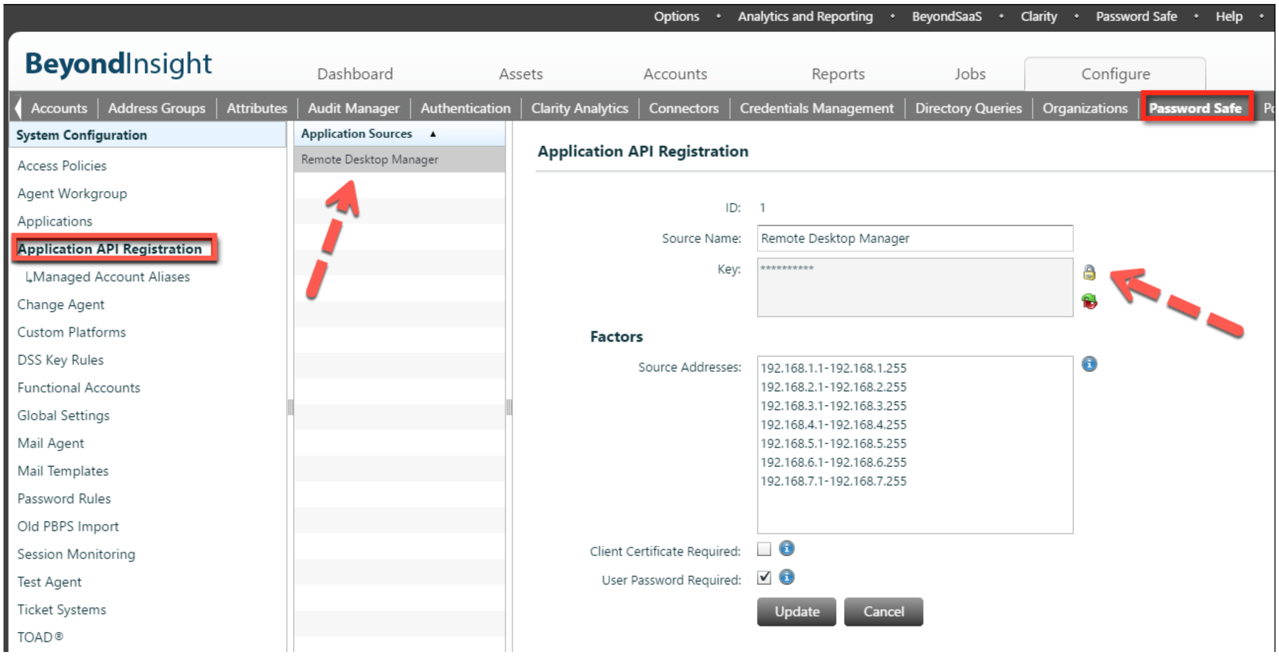


BeyondTrust Password Safe Dashboard

OPTION	DESCRIPTION
Host	Enter the server name and port (ex: https://yourserver:8080)
Username	Enter the username to connect on the server
Domain	Enter the domain to connect on the server
Password	Enter the password to connect on the server
Application API key	Enter the Application API key. Consult the section ***How to obtain the Application API key*** below to retrieve the Application Key.

HOW TO OBTAIN THE APPLICATION API KEY

Connect on BeyondInsight, go in the Password Safe section and then go in Application API Registration.



Application API Registration

ID: 1

Source Name: Remote Desktop Manager

Key: **********

Factors

Source Addresses:
192.168.1.1-192.168.1.255
192.168.2.1-192.168.2.255
192.168.3.1-192.168.3.255
192.168.4.1-192.168.4.255
192.168.5.1-192.168.5.255
192.168.6.1-192.168.6.255
192.168.7.1-192.168.7.255

Client Certificate Required: □

User Password Required: ☑

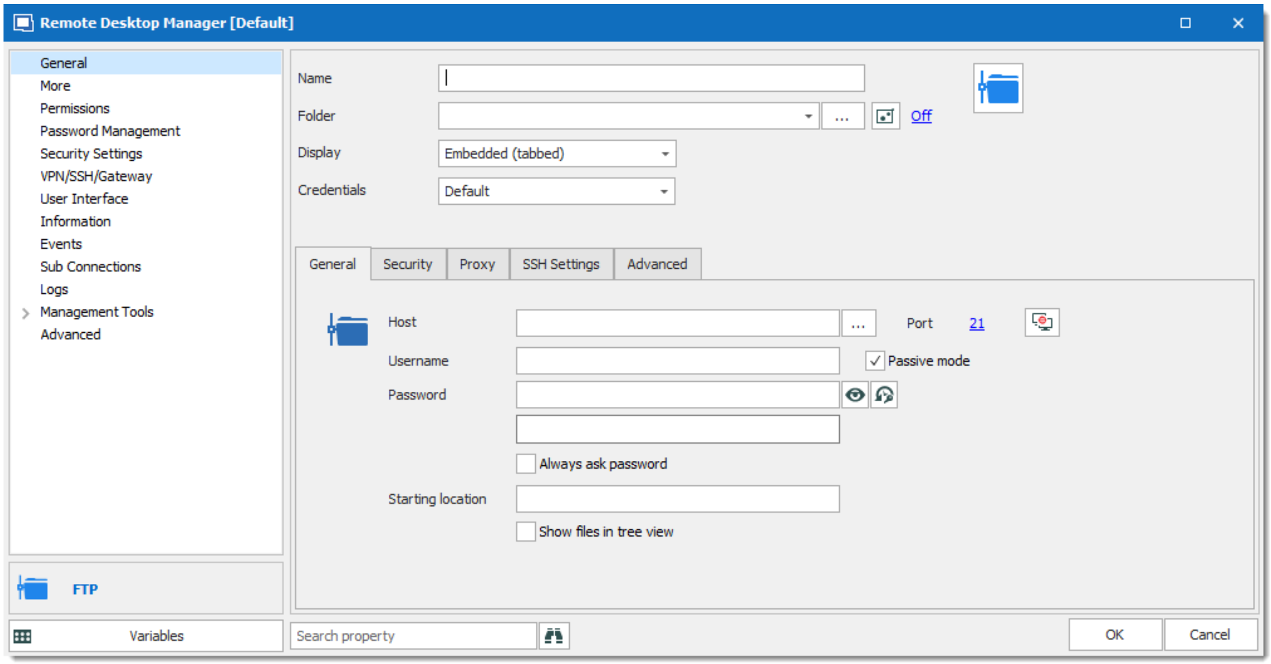
BeyondInsight

6.2.2.3 FTP

DESCRIPTION

Remote Desktop Manager includes built-in FTP and SFTP entries. We also support Filezilla and WinSCP.

To set the default application for **FTP (Third Party)**, go to ***File – Options – FTP***. The choices are **Windows Explorer, Filezilla** or **WinSCP**.



Display: Embedded (tabbed)

Credentials: Default

Port: 21

☑ Passive mode

□ Always ask password

□ Show files in tree view

FTP entry properties

6.2.2.4 Host

DESCRIPTION

This entry is used to define and configure a generic host session that could be used as the parent for others. You can define a subset of templates to apply at the execution.

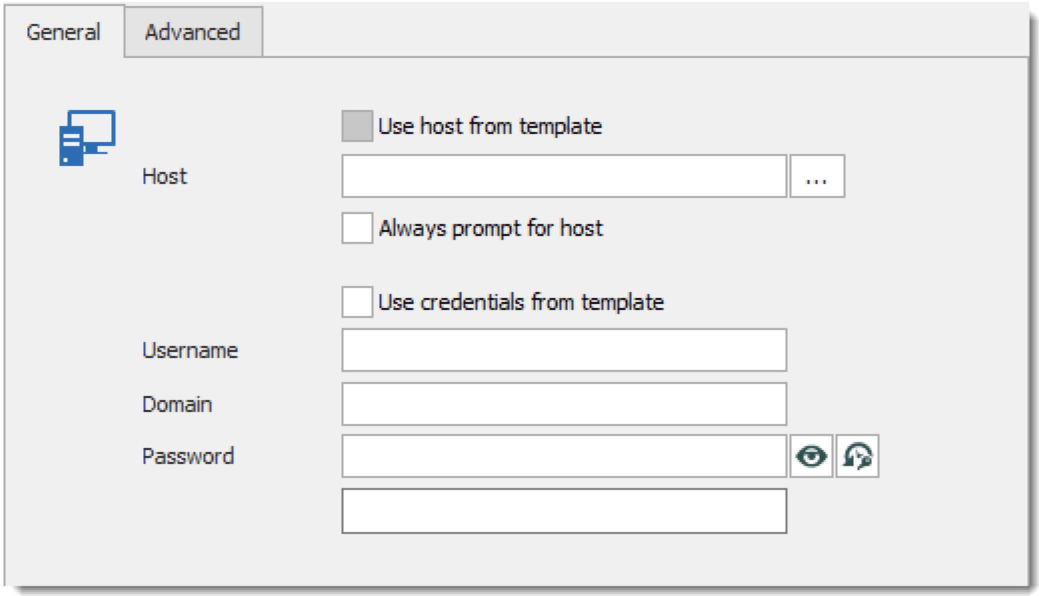
This entry is used to define and configure a **Host** session. It supports the following:

- Auto Login (embedded mode only)
- Copy Password
- Credential repository
- Embedded Mode
- External Mode
- Show Opened Session

Since no session can be established with simply a Host entry, this is mostly useful to either apply templates, or to serve as a parent for sub-connections. Please see Templates for more details.

SETTINGS

GENERAL



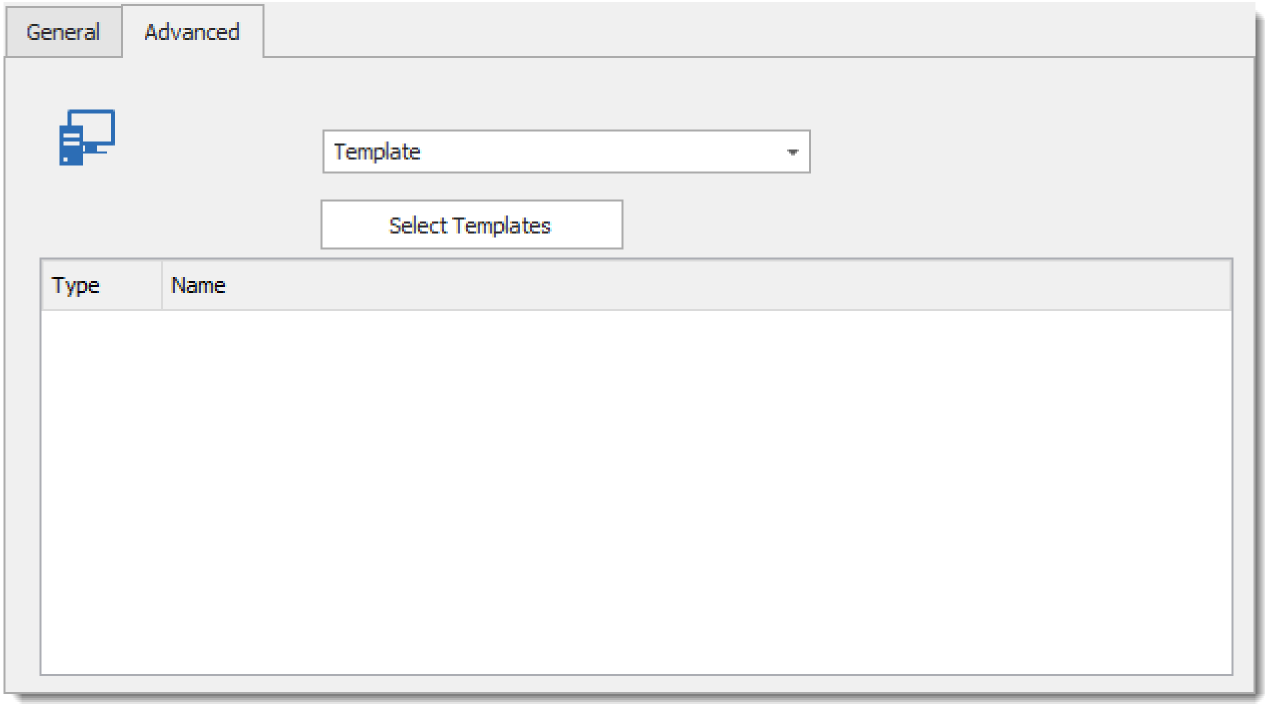
Host - General

OPTION	DESCRIPTION
Use host from template	Use the template host (if using a template).
Host	Enter the hostname or IP address of the remote device.
Elipsis button	Provides the list of computers discovered on your network. This can take a few moments to generate.
Always prompt for host	Prompt you every time for the hostname or IP address.
Use credentials from template	Use the template credentials (if using a template).
Username	Enter the username that applies to the host.
Domain	Enter the domain that applies to the host.

OPTION	DESCRIPTION
Password	Enter the password that applies to the Host.
View / Hide Password	Click on the view icon to view your password. Click on the hide icon to hide your password.
Password History	Click the icon to display the Password History.
Password Analyzer	Indicates the strength of the password.

ADVANCED

The template selected is the one executed when either pressing enter, double-clicking or by using the Open Session command.



Host - Advanced

OPTION	DESCRIPTION
Template	Will display a dialog allowing you to choose which template to apply.
Select templates	You can filter the list of templates by using this command. Using click and ctrl-click to make your selection.

6.2.2.5 LogMeIn

DESCRIPTION

LogMeIn remote access products use a proprietary remote desktop protocol that is transmitted via SSL. An SSL certificate is created for each remote desktop, and is used to cryptographically secure communications between the remote desktop and the accessing computer. You can find more information here.

This entry is used to define and configure a **LogMein** session. It supports the following:

- Auto Login
- Built in
- Copy Password
- Credential repository
- Embedded Mode
- External Mode
- Show Opened Session
- Support Logging
- Support Reconnect

Users access remote desktops using an Internet-based web portal and, optionally, the LogMeIn Ignition stand-alone application. The portal also provides status information for the remote computers and, optionally, remote computer management functions.

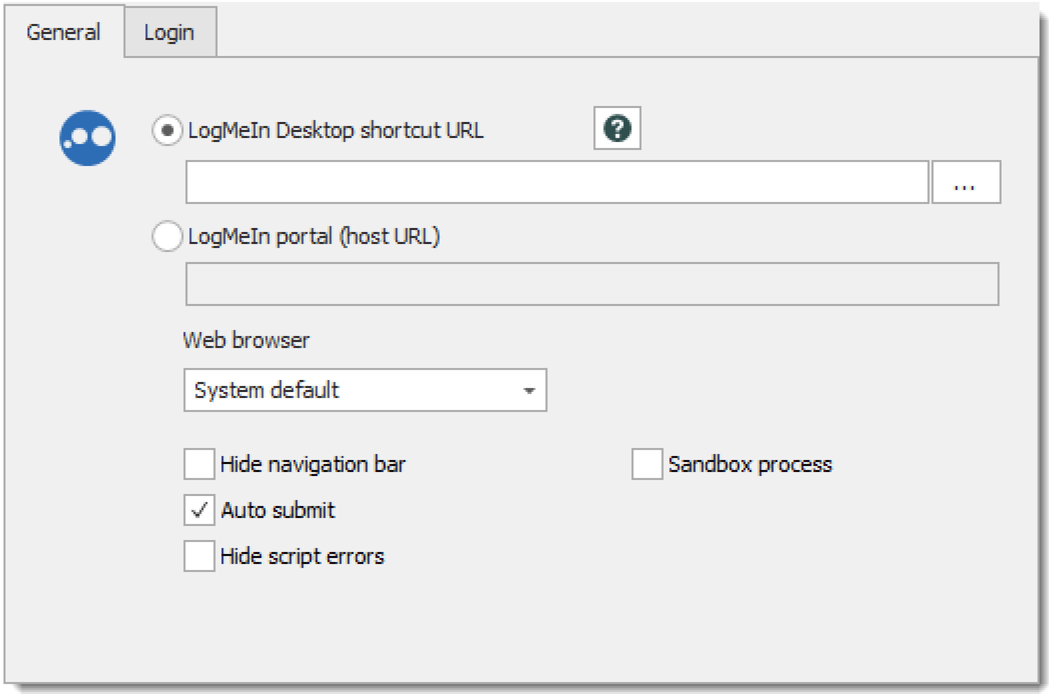
AUTOMATIC LOGIN

You have two modes available to achieve the Auto Login in embedded view.

- LogMeIn Desktop shortcut (LogMeIn Pro only)
- LogMeIn portal with auto login (works with any LogMeIn account)

SETTINGS

GENERAL



● LogMeIn Desktop shortcut URL

○ LogMeIn portal (host URL)

Web browser

System default

□ Hide navigation bar

☑ Auto submit

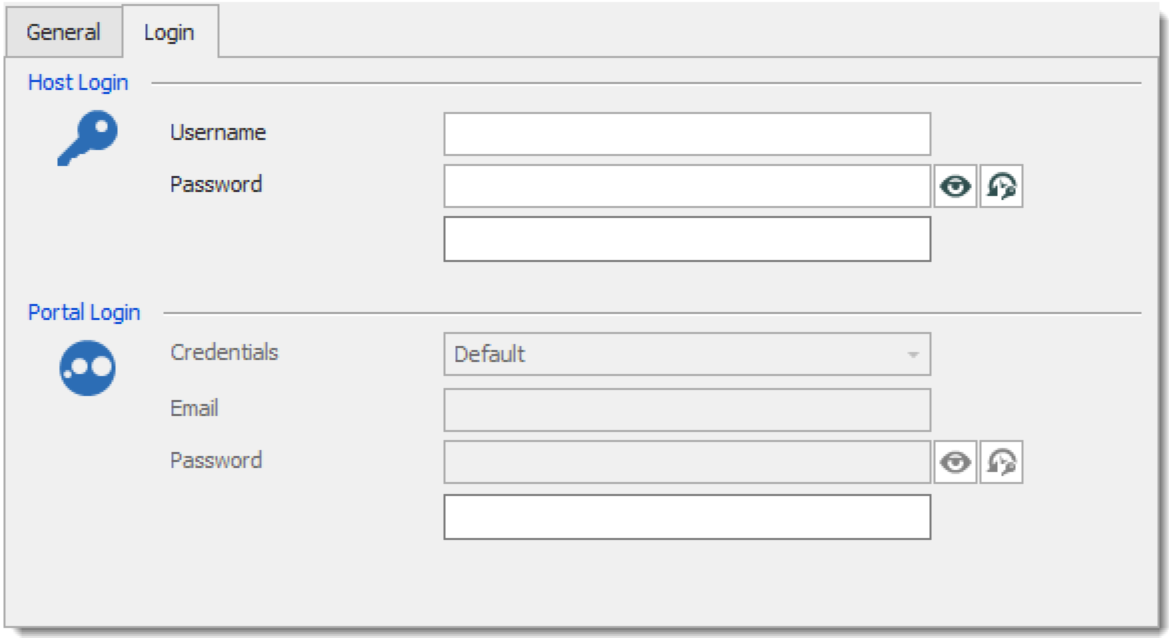
□ Hide script errors

□ Sandbox process

LogMeIn - General

OPTION	DESCRIPTION
Hide navigation bar	Hide LogMein navigation bar.
Sandbox process	Enable the use of sandbox (computer security) process.
Auto submit	Enable the Auto-submit of the credentials.
Hide script errors	Hide script errors that can be present in some websites.

LOGIN



Credentials: Default

LogMeIn - Login

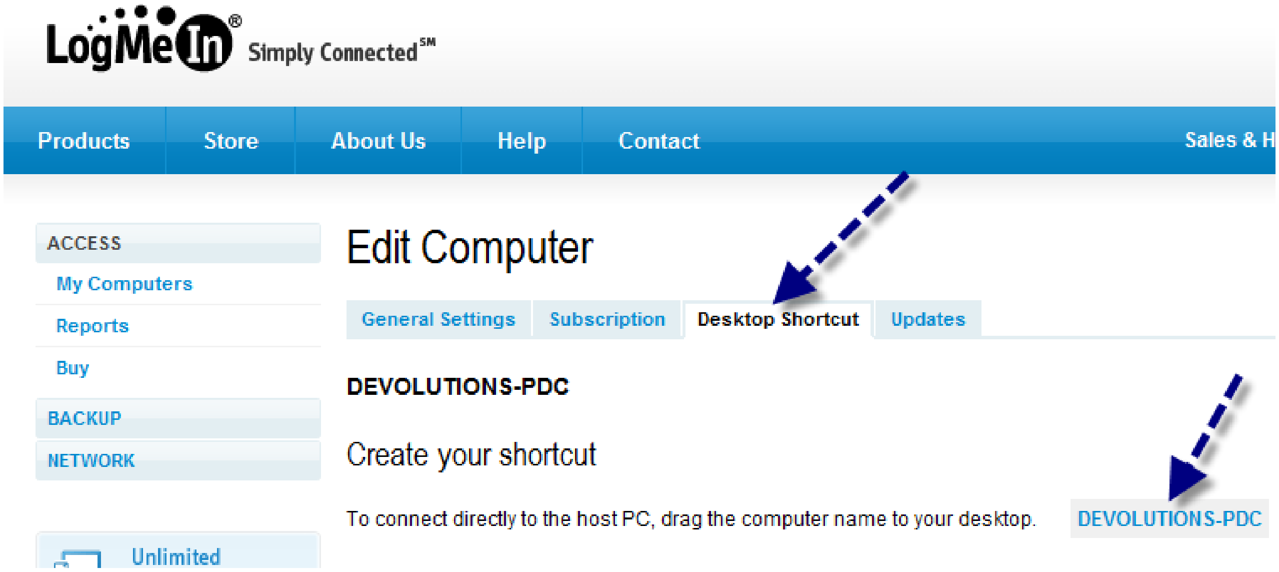
OPTION	DESCRIPTION
Host Login - Username	Enter your Host username.
Host Login - Password	Enter your Host password.
Portal Login - Credentials	Use the various credential features provided by RDM to set your credentials.
Portal Login - Email	Enter your LogMeIn account email address.
Password	Enter your LogMeIn account password.

6.2.2.5.1 Desktop Shortcut

DESCRIPTION

Note: as stated on the LogMeIn web site (LogMeIn) Desktop Shortcut is a Pro Edition feature.

1. Log in to the LogMeIn website.
2. Select the desired computer.
3. Select the option Settings.
4. Select the tab "Desktop Shortcut".
5. Drag and drop the computer icon in Remote Desktop Manager.



Edit Computer

DEVOLUTIONS-PDC

Create your shortcut

To connect directly to the host PC, drag the computer name to your desktop. DEVOLUTIONS-PDC

LogMeIn - Edit Computer

6.2.2.5.2 Portal (Host Url)

DESCRIPTION

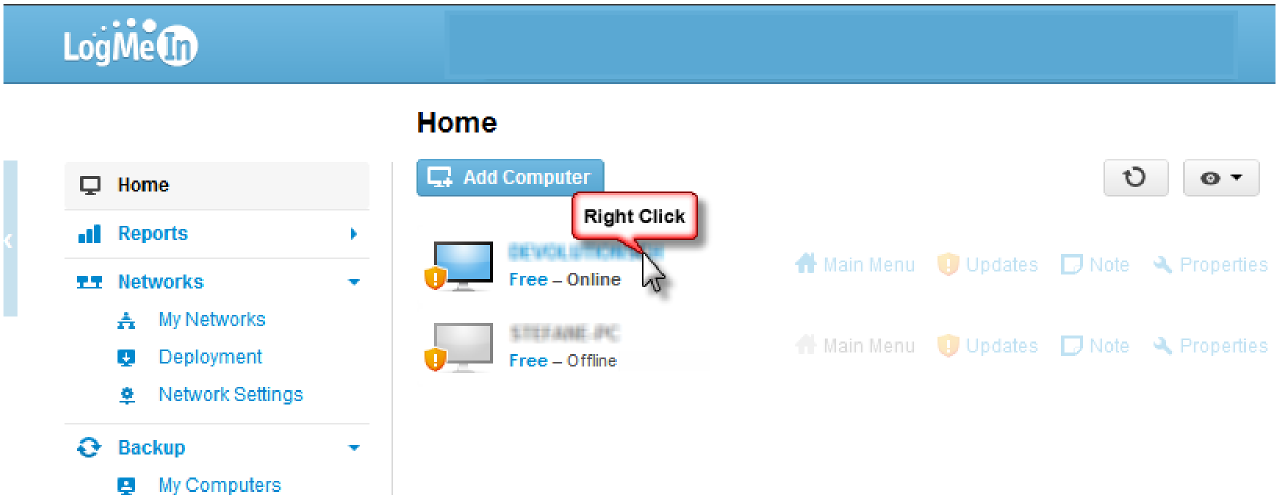
ℹ This connection method can be used with all versions of LogMeIn. This method requires the session to run **Embedded** and the use of Internet Explorer.

If you are using Internet Explorer 11, you need to change the IE emulation mode to Internet Explorer 10.

Please consult the LogMeIn troubleshooting topic for more information on how to proceed.

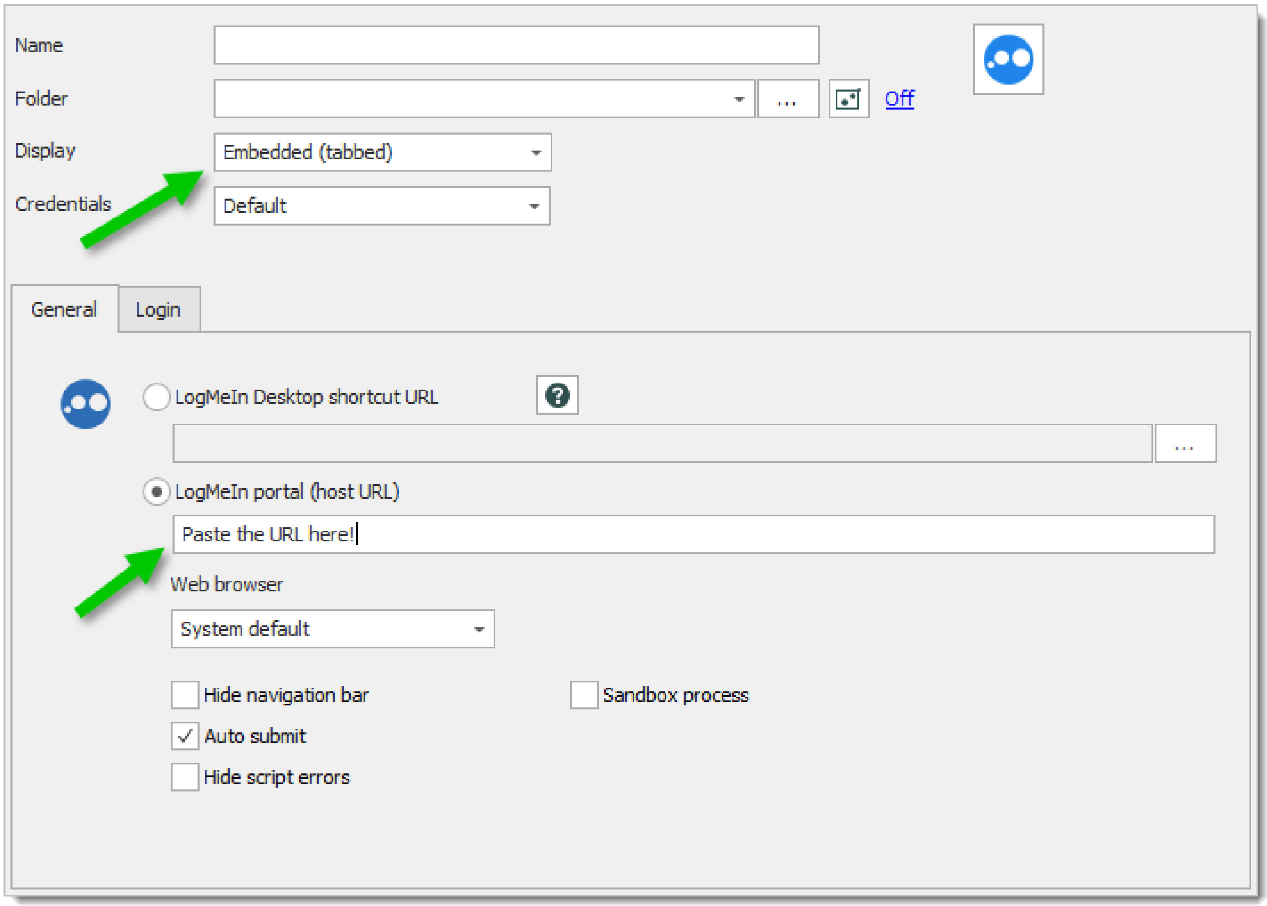
SETTINGS

1. Log in to the LogMeIn website.
2. Right-Click the URL shortcut of the computer and use the copy command.



LogMeIn - Home screen

3. Paste the information in the **LogMeIn portal (host URL)** field



Name

Folder ... Off

Display: Embedded (tabbed)

Credentials: Default

General | Login

○ LogMeIn Desktop shortcut URL

● LogMeIn portal (host URL)

Paste the URL here!

Web browser: System default

□ Hide navigation bar

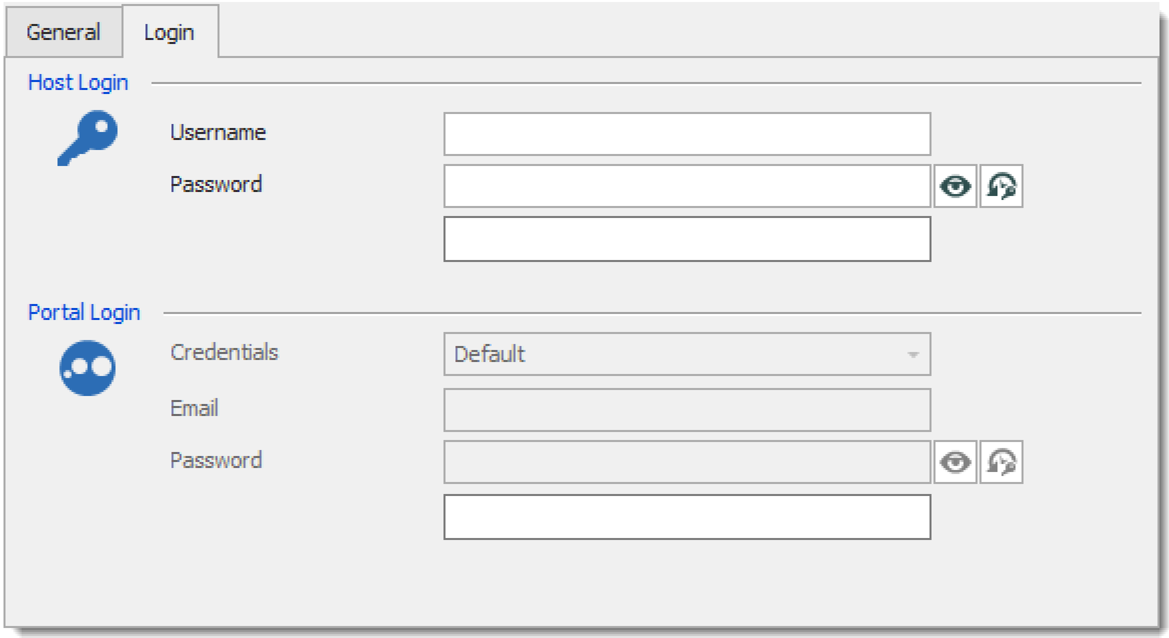
☑ Auto submit

□ Hide script errors

□ Sandbox process

LogMeIn Session - Settings

4. In the **Login** tab populate both **Portal Login** and **Host Login** information



General | Login

Host Login

Username

Password

Portal Login

Credentials: Default

Email

Password

LogMeIn Session - Login

6.2.2.6 Microsoft Remote Desktop (RDP)

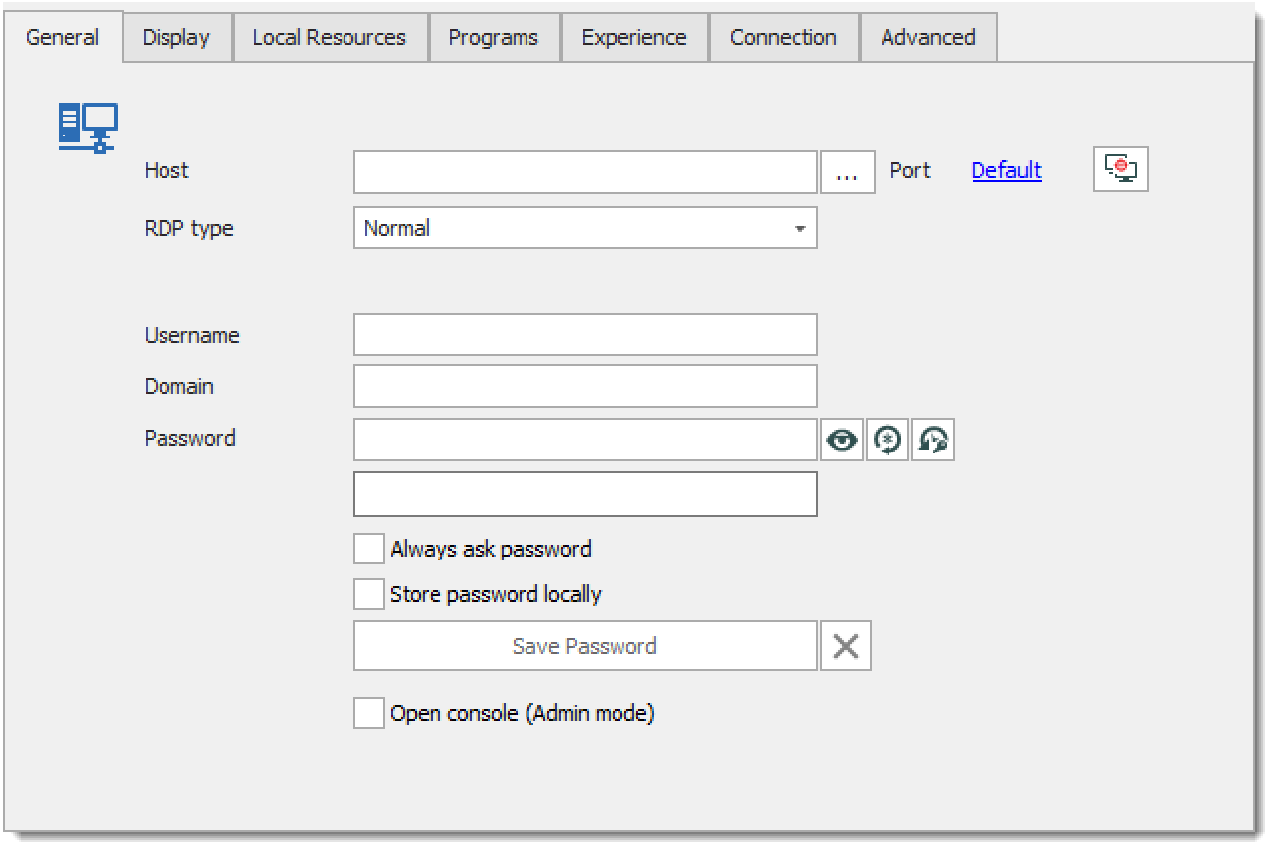
DESCRIPTION

This entry is used to define and configure a **Microsoft Remote Desktop (RDP)** session.

- Auto Login
- Built in
- Copy Password
- Credential repository
- Embedded Mode
- External Mode
- Full Screen
- Support Host
- Multi Monitor Support
- Show Opened Session
- Support BeforeDisconnectEvent
- Support Logging
- Support Reconnect
- Support AfterDisconnectEvent
- Batch Edit

SETTINGS

GENERAL

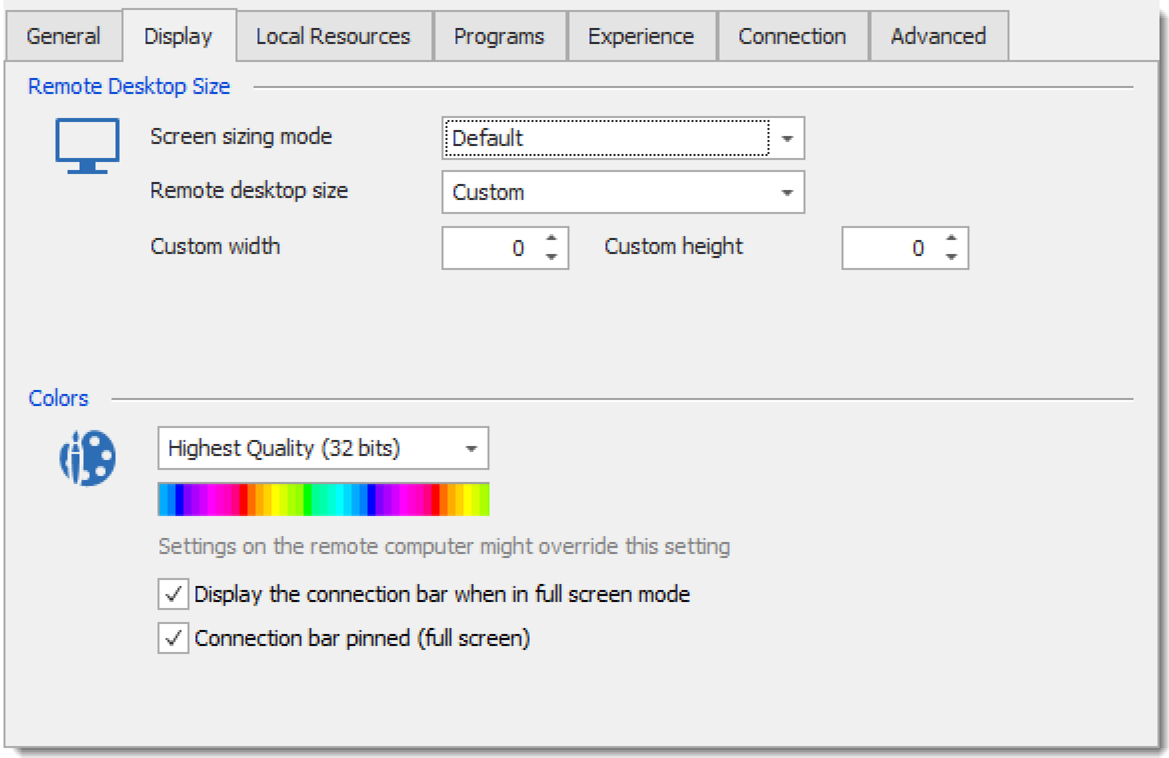


Microsoft Remote Desktop (RDP) - General

OPTION	DESCRIPTION
Host	Enter the host name or IP address of the remote computer.
Ellipsis button	Provides the list of computers discovered on your network. This can take a few moments to generate.
Port	Click on the link to modify the port number. Set the port to 0 to use the default port.
Port generator	Click on the icon to display the Port Generator.
RDP Type	Select the RDP session type. Select between: • **Normal** • **Azure**

OPTION	DESCRIPTION
	• **Hyper-V (embedded only)**
Username	Enter the username to connect to the remote computer.
Domain	Enter the domain to connect to the remote computer.
Password	Enter the password to connect to the remote computer.
Password Analyzer	Indicates the strength of the password.
View / Hide Password	Click on the view icon to view your password. Click on the hide icon to hide your password.
Password Generator	Click on the icon to display the Password Generator.
Password History	Click on the icon to display the Password History.
Always ask password	Always ask password when connecting to the remote computer.
Store password locally	Use the Windows Credential Manager to store passwords. It is not the best option because it has the following limitations: • The Credential Manager will hold only one entry per host, therefore if you have multiple sessions towards the same host, the last saved entry will overwrite whatever was stored. • The one host limitation ignores the port, therefore multiple sessions towards the same host, but with different ports, will conflict as well. Last saved entry overrides whatever was stored.
Open console (Admin mode)	Connect to the console session of a server using Remote Desktop for Administration. Normally required for TS Session Hosts only, please consult Note 1.

DISPLAY



Remote Desktop Size

Screen sizing mode: Default

Remote desktop size: Custom

Custom width: 0 Custom height: 0

Colors

Highest Quality (32 bits)

Settings on the remote computer might override this setting

☑ Display the connection bar when in full screen mode

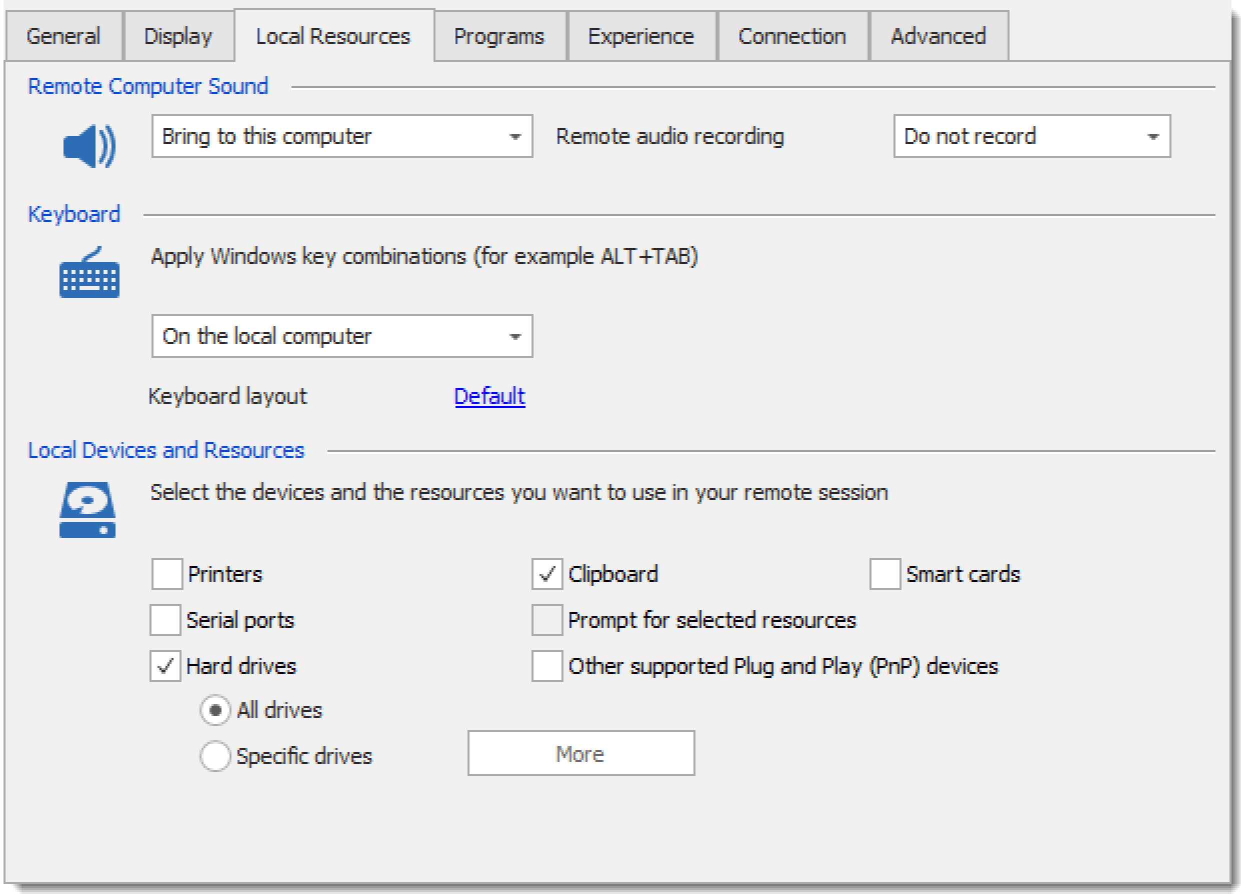
☑ Connection bar pinned (full screen)

Microsoft Remote Desktop (RDP) - Display

OPTION	DESCRIPTION
Screen sizing mode	Scale the client window display of the desktop when resizing between: • **Scrollbar.** • **Smart reconnect (reconnect the session when the window size changes).** • **Smart sizing (stretch the remote display to fit the window).**
Remote Desktop Size	Select the screen size for the remote computer.
Custom width	Specify a custom width number for the screen size.

OPTION	DESCRIPTION
Custom height	Specify a custom height number for the screen size.
Colors	Select the color quality when connected on the remote computer.
Display the connection bar when in full screen mode	Display the connection bar at the top of your screen in full screen size mode.
Connection bar pinned (full screen)	Fix the connection bar at the top of the screen.

LOCAL RESOURCES



Remote Computer Sound

Bring to this computer

Remote audio recording: Do not record

Keyboard

Apply Windows key combinations (for example ALT+TAB)

On the local computer

Keyboard layout: Default

Local Devices and Resources

Select the devices and the resources you want to use in your remote session

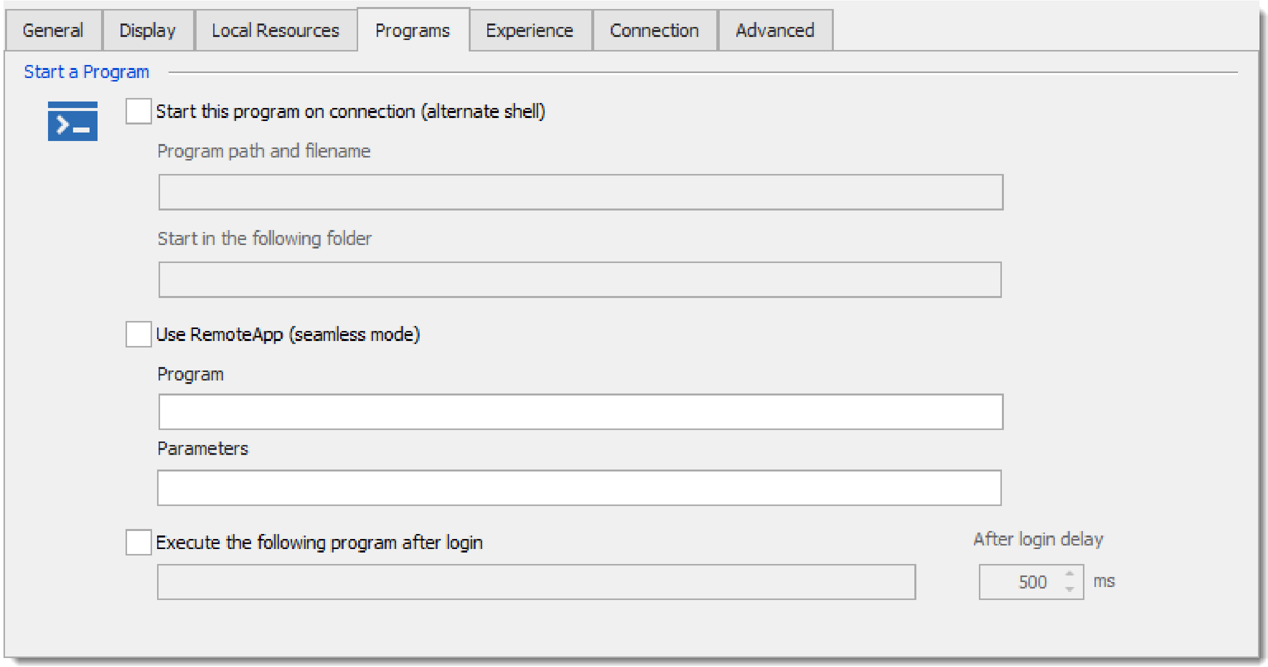
□ Printers
□ Serial ports
☑ Hard drives
● All drives
○ Specific drives
☑ Clipboard
□ Prompt for selected resources
□ Other supported Plug and Play (PnP) devices
□ Smart cards

Microsoft Remote Desktop (RDP) - Local Resources

OPTION	DESCRIPTION
Remote computer sound	Indicate what to do with the sound on the remote computer. Select between: • **Bring to this computer** • **Do not play** • **Leave at remote computer**
Remote audio recording	Indicate what to do with the audio recording on the remote computer. Select between: • **Do not record** • **Record from this computer**
Keyboard	Specify how key combination should be executed. Select between: • **On the local computer** • **On the remote computer** • **In full screen mode only**
Local devices and resources	Select the devices and resources that you wish to use on the remote computer. Select between: • **Printers** • **Serial Ports** • **Hard drives** • **Clipboard** • **Prompt for selected resources (Only available in external mode)** • **Other supported Plug and Play (PnP) devices**

OPTION	DESCRIPTION
	• **Smart cards**
All drives	Select this option if you want all of your drives to be present on the remote computer.
Specific drives	Select one or more specific drive that you want to be present on the remote computer.

PROGRAMS



Start a Program

□ Start this program on connection (alternate shell)

Program path and filename

Start in the following folder

□ Use RemoteApp (seamless mode)

Program

Parameters

□ Execute the following program after login

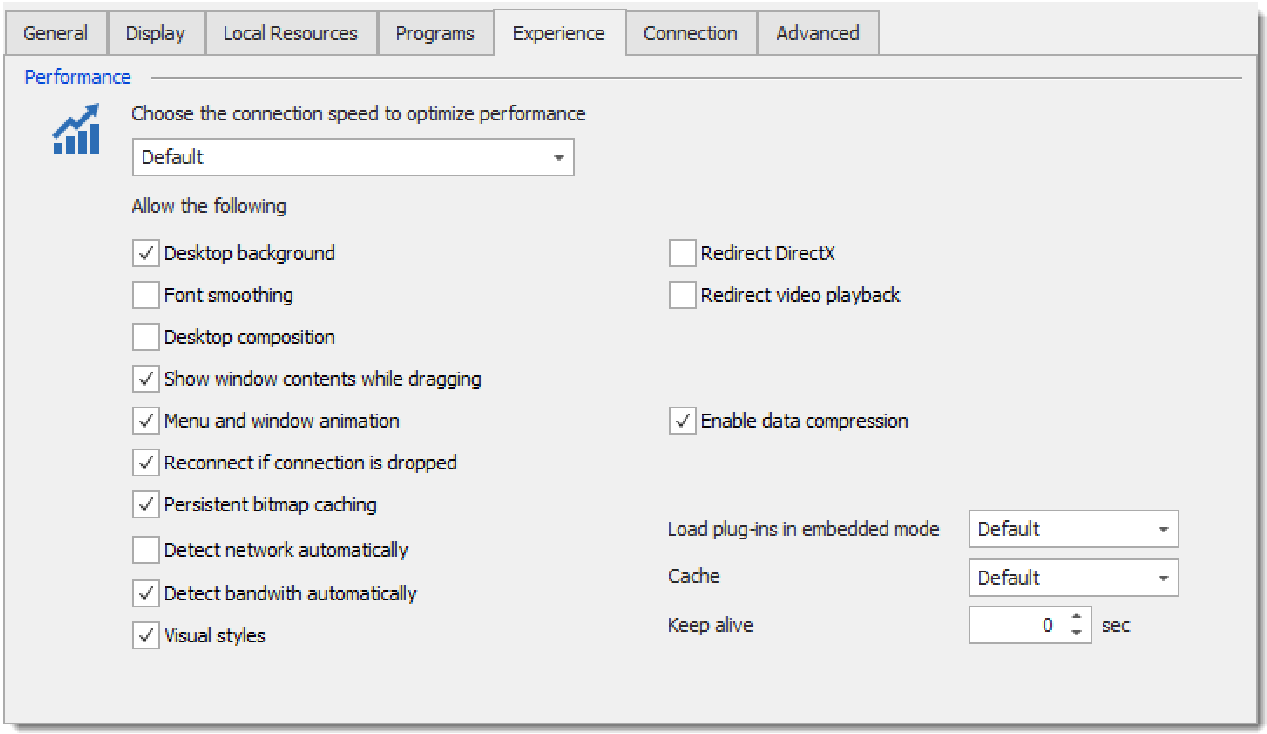
After login delay 500 ms

Microsoft Remote Desktop (RDP) - Programs

OPTION	DESCRIPTION
Start the following program on connection (alternate shell)	Enable to specify a program to launch on the remote computer when the connection is established.

OPTION	DESCRIPTION
Program path and filename	Specify the program path and filename to start when the connection is established.
Start in the following folder	Specify the working folder used by the program in the previous step.
Use RemoteApp (seamless mode)	Open an rdp connection, starts a specified program, maximizes the application window and runs without the windows desktop.
Program	Specify the program for the RemoteApp.
Parameters	Specify the parameters for the RemoteApp.
Execute the following program after login	Enable if you wish to automatically run a program immediately after login.

EXPERIENCE



Performance

Choose the connection speed to optimize performance

Default

Allow the following

☑ Desktop background

□ Font smoothing

□ Desktop composition

☑ Show window contents while dragging

☑ Menu and window animation

☑ Reconnect if connection is dropped

☑ Persistent bitmap caching

□ Detect network automatically

☑ Detect bandwith automatically

☑ Visual styles

□ Redirect DirectX

□ Redirect video playback

☑ Enable data compression

Load plug-ins in embedded mode: Default

Cache: Default

Keep alive: 0 sec

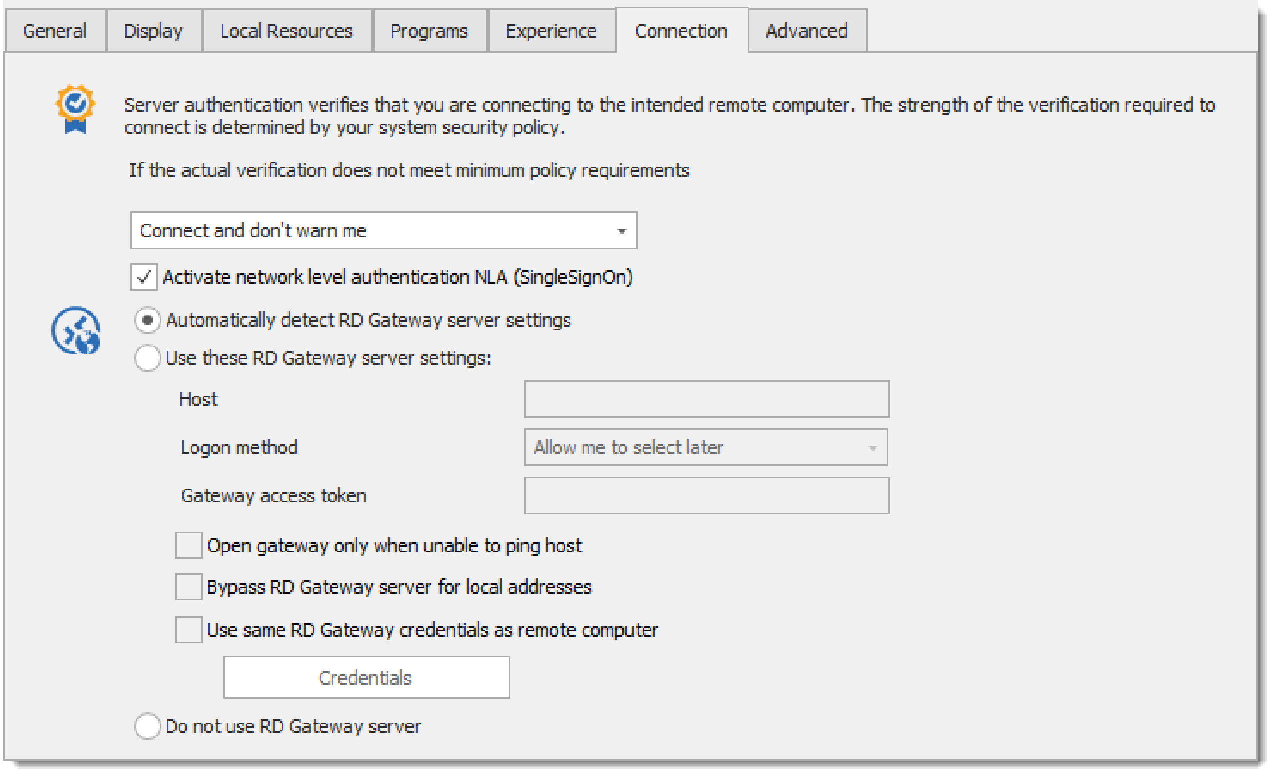
Microsoft Remote Desktop (RDP) - Experience

OPTION	DESCRIPTION
Choose the connection speed to optimize performance	Specify the connection speed to use to optimize the remote session performance. Select between: • **Default** • **Modem (56 kbps)** • **Low-speed broadcast (256 kbps - 2 Mbps)** • **Satellite (2-16 Mbps with high latency)** • **High-speed broadcast (2-10 Mbps)** • **WAN (>10 Mbps with high latency)** • **LAN (> 10 Mbps with low latency**)
Allow the following	Enable the following features on the remote computer:

OPTION	DESCRIPTION
	• **Desktop background** • **Font smoothing** • **Desktop composition** • **Show window contents while dragging** • **Menu and window animation** • **Visual styles** • **Persistent bitmap caching** • **Redirect DirectX** • **Redirect video playback** • **Load plug-ins in embedded mode** • **Enable data compression** • **Detect network automatically** • **Detect bandwith automatically** • **Reconnect if connection is dropped**
Cache	Select the type of cache that will be used for the remote session: • **Default:** Use the value set in ***File – Options – Type – RDP – Cache***. • **Full mode:** This protocol is full Windows 8 Remote Desktop protocol. • **Thin client:** This protocol is limited to using the Windows 7 with SP1 RemoteFX codec and a smaller cache. All other codecs are disabled. This protocol has the smallest memory footprint.

OPTION	DESCRIPTION
	- **Small cache:** This protocol is the same as **Full mode**, except it uses a smaller cache.
Keep alive	Data will be sent to the remote computer to keep the session alive. You can determinate the time between that and when the data is send. This option is only available in embedded mode.

CONNECTION



Server authentication verifies that you are connecting to the intended remote computer. The strength of the verification required to connect is determined by your system security policy.

If the actual verification does not meet minimum policy requirements

Connect and don't warn me

☑ Activate network level authentication NLA (SingleSignOn)

● Automatically detect RD Gateway server settings

○ Use these RD Gateway server settings:

Host

Logon method: Allow me to select later

Gateway access token

□ Open gateway only when unable to ping host

□ Bypass RD Gateway server for local addresses

□ Use same RD Gateway credentials as remote computer

○ Do not use RD Gateway server

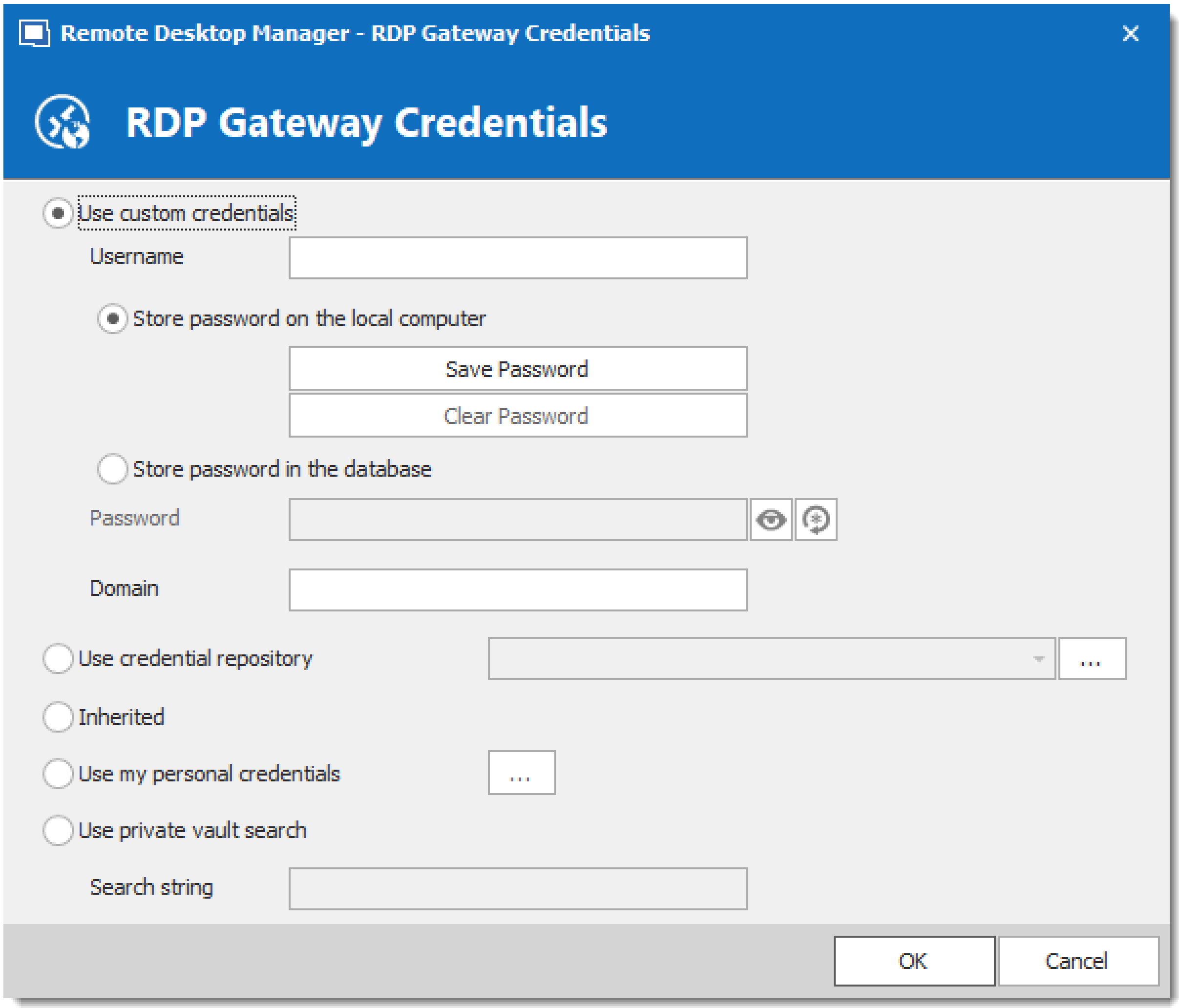
Microsoft Remote Desktop (RDP) - Connection

OPTION	DESCRIPTION
Server authentication verifies that you are connecting to the intended remote computer	If the actual verification does not meet minimum policy requirements, select what needs to be done by the remote computer between the following:

OPTION	DESCRIPTION
	- **Connect and don't warn me** - **Do not connect** - **Warn me**
Activate network level authentication (SingleSignOn)	Network Level Authentication completes user authentication before you establish a remote session and the logon screen appears. This is a more secure authentication method.
Automatically detect RD Gateway server settings	The RD Gateway server settings will be detected by the application automatically.
Use these RD Gateway server settings	Indicate the specific settings to connect on the RD Gateway server.
Host	Enter the RD Gateway server/host name.
Logon method	Select the logon method between: - **Ask for password (NTLM)** - **Smart card** - **Allow me to select later** - **Use a gateway access token**
Gateway access token	Provide the access token if the **Logon method** is set to **Use a gateway access token**.
Open gateway only when unable to ping host	Establish a connection with the RD Gateway server only when it is not possible to ping the remote computer.

OPTION	DESCRIPTION
Bypass RD Gateway server for local addresses	Bypass the RD Gateway server when connecting on a remote computer who has a local IP address.
Use same RD Gateway credentials as remote computer	Use your personal RD Gateway credentials to connect on the remote computer.
Credentials	See **RDP Gateway credentials** section below.
Do not use RD Gateway server	Don't use any RD Gateway server to connect on the remote computer.

RDP GATEWAY CREDENTIALS



Remote Desktop Manager - RDP Gateway Credentials

RDP Gateway Credentials

● Use custom credentials

Username

● Store password on the local computer

○ Store password in the database

Password

Domain

○ Use credential repository

○ Inherited

○ Use my personal credentials

○ Use private vault search

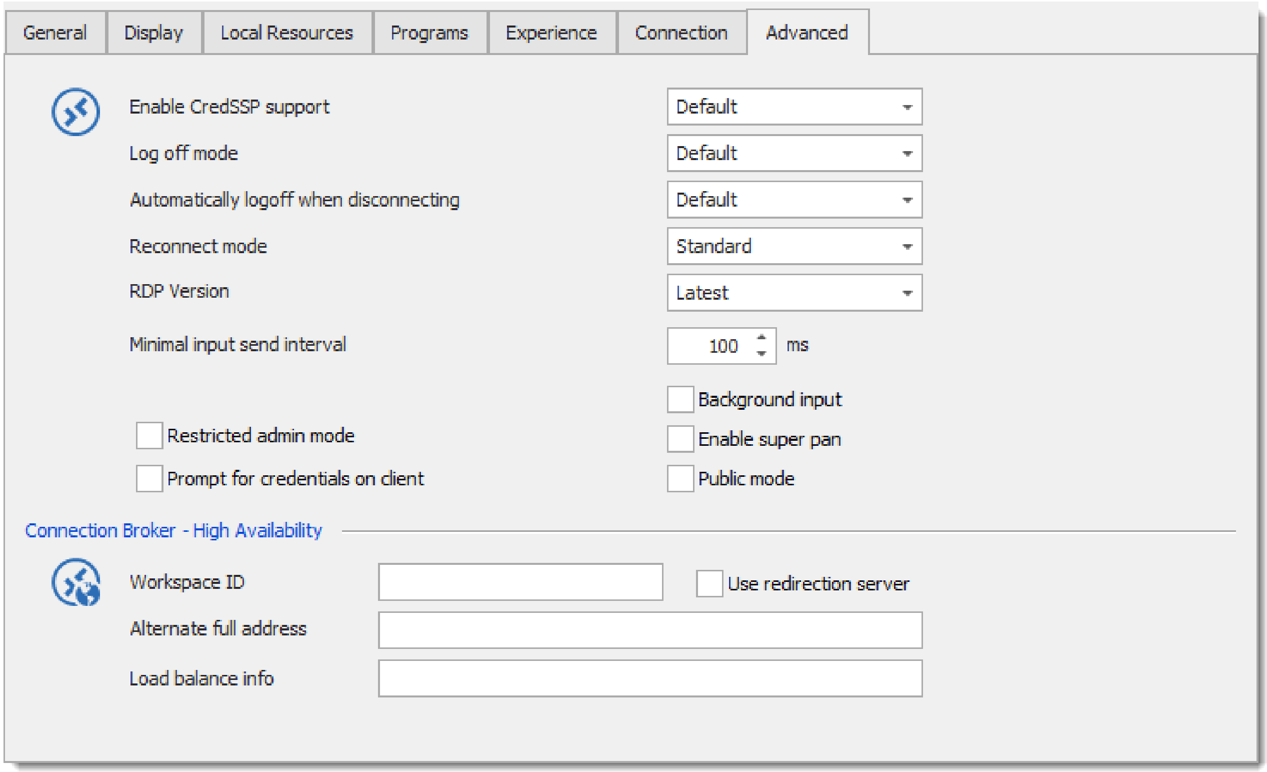
Search string

Microsoft Remote Desktop (RDP) - Gateway Credentials

OPTION	DESCRIPTION
Use custom credentials	Use a specific username, domain and store the password on the local computer or store the password in the database.
Store password on the local computer	This will use the Windows Credential Manager. It is not the best option because it has the following limitations: • The Credential Manager will hold only one entry per host, therefore if you have multiple sessions towards the same host, the last saved entry will overwrite whatever was stored. • The one host limitation ignores the port, therefore multiple sessions towards the same host, but with different ports, will

OPTION	DESCRIPTION
	conflict as well. Last saved entry overrides whatever was stored.
Store password in the database	The password will be store in the database.
Domain	Set the domain name.
Use Credential repository	Use a linked credential entry.
Inherited	Use inherited credentials.
Use my personal credentials	Use the credentials stored in My Personal Credentials.
Use Private Vault search	Use the Search string to search for credential entries in the Private Vault.

ADVANCED



Enable CredSSP support: Default

Log off mode: Default

Automatically logoff when disconnecting: Default

Reconnect mode: Standard

RDP Version: Latest

Minimal input send interval: 100 ms

□ Background input

□ Restricted admin mode

□ Enable super pan

□ Prompt for credentials on client

□ Public mode

Connection Broker - High Availability

Workspace ID:

□ Use redirection server

Alternate full address:

Load balance info:

Microsoft Remote Desktop - (RDP) - Advanced

OPTION	DESCRIPTION
Enable CredSSP support	RDP will use the Credential Security Support Provider (CredSSP) for the authentication on the remote computer. Select between:
Log off mode	Select the log off method between: • **Default** • **Automatic** • **RDM Agent** • **Remote Desktop Services API** • **Macro**
Automatically logoff when disconnecting	Automatically log off your RDP session when disconnecting.

OPTION	DESCRIPTION
Reconnect mode	Select the reconnect behavior. Select between: - **Default** - **Full** - **Smart reconnect** - **Legacy**
RDP Version	Select the Remote Desktop Protocol version.
Minimal input send interval	Set the minimum time in milliseconds between the input is send to the remote computer.
Background input	The remote computer can accept input even when the focus is not on the session.
Restriced admin mode	This enables the restricted admin mode.
Enable super pan	Enabling super pan will take the entirety of your screen for the RDM session.
Prompt for credentials on client	Always prompt for credentials when launching client.
Public mode	Public mode is a security feature that limits the security information stored on the remote station. It also limits the amount of time this information can be stored.
Workspace ID	Enter the Workspace ID that contain the setting associate to the RemoteApp and Desktop ID.
Use redirection server	Redirect a remote computer to the RDP session host.

OPTION	DESCRIPTION
Alternate full address	Indicate an alternate name of the remote computer that you want to connect on.
Load balance info	Indicate the load balance info when the load balancing feature is enable on the RD Connection Broker.

NOTE 1

As per knowledge base article 947723, since rdp 6.1 (Windows 2008), using the admin mode is not necessary except when the server itself is a RD Session Host.

6.2.2.6.1 Azure RDP

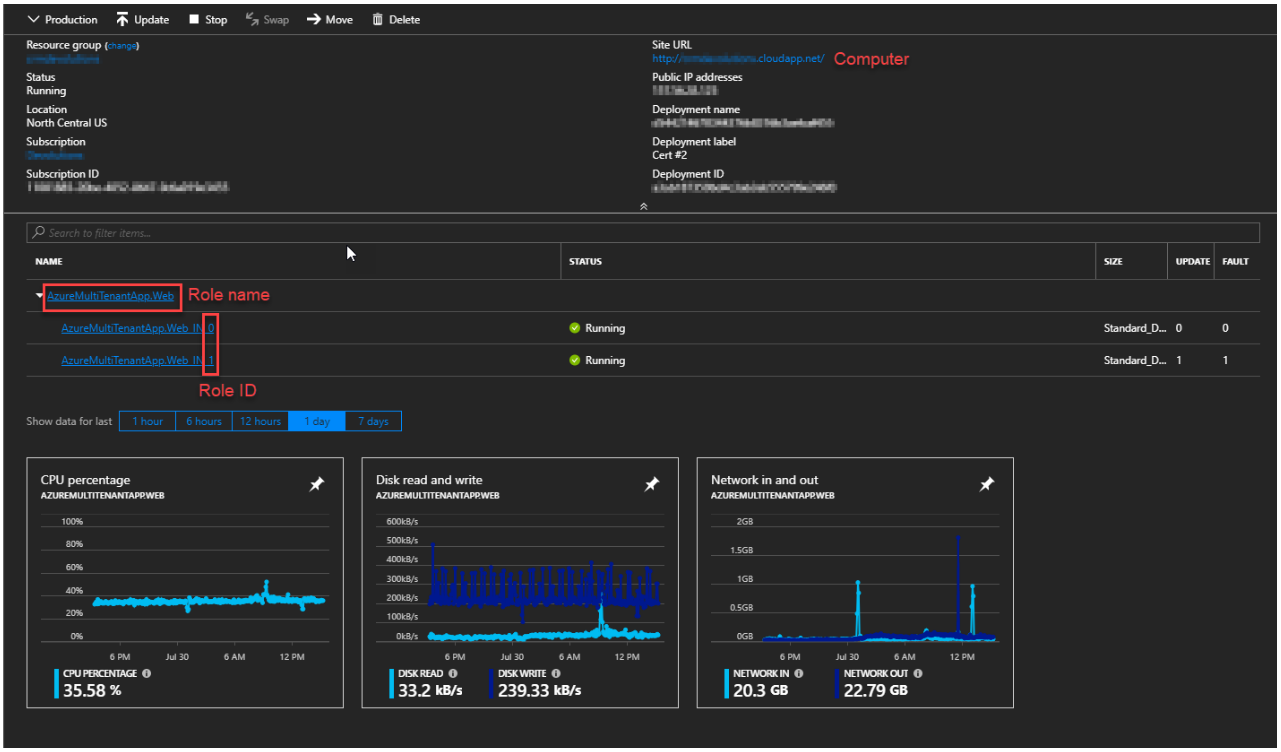
OVERVIEW

Azure RDP is a Windows Remote Desktop session directly into an Azure role instance without having to use the Azure Management Console (https://azure.microsoft.com/en-us/).

SETTINGS

1. Enable Azure RDP access by following these instructions:

2. Open the Azure Portal (https://portal.azure.com) and select the deployment you would like to connect to. You'll need the DNS name (Computer), Role Name & Role IDs.



Resource group (change)
[redacted]

Status
Running

Location
North Central US

Subscription
[redacted]

Subscription ID
[redacted]

Site URL
http://[redacted].cloudapp.net/ Computer

Public IP addresses
[redacted]

Deployment name
[redacted]

Deployment label
Cert #2

Deployment ID
[redacted]

Search to filter items...

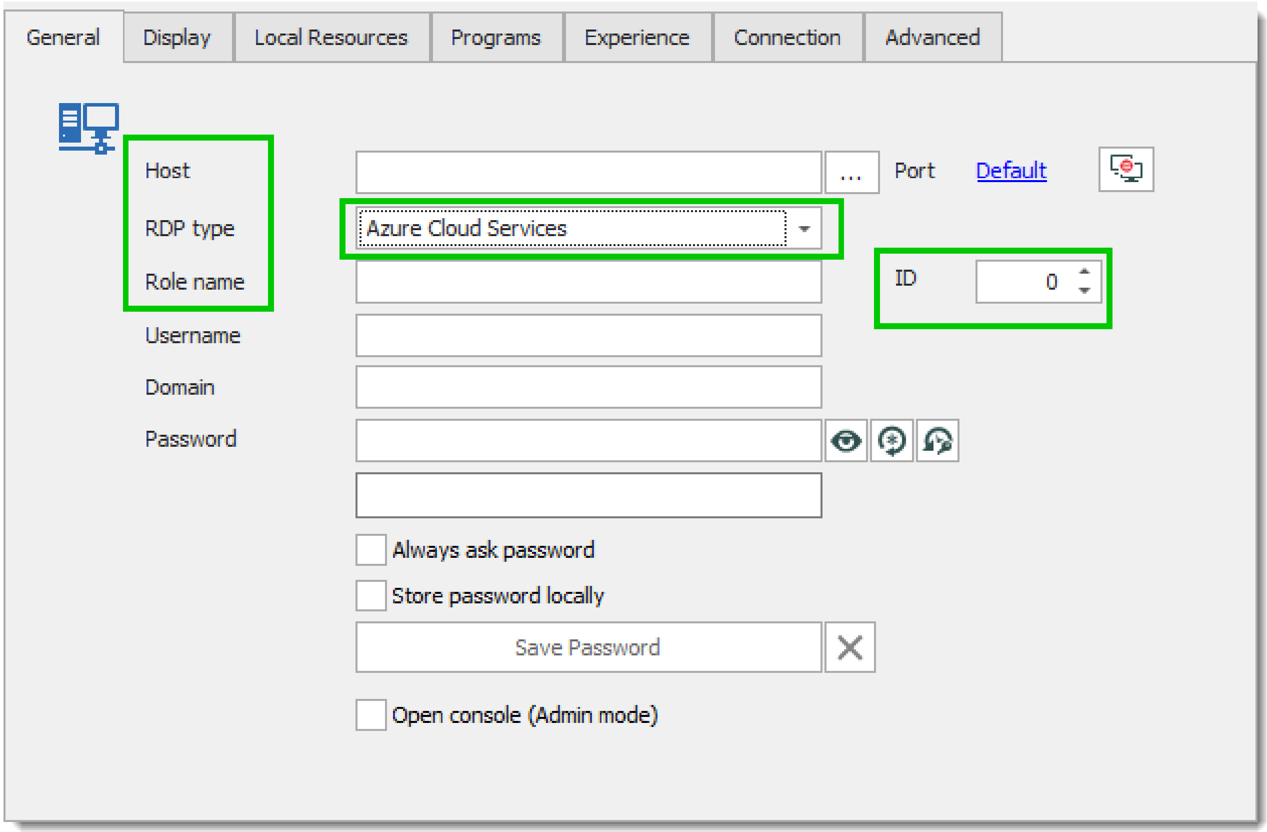
NAME	STATUS	SIZE	UPDATE	FAULT
AzureMultiTenantApp.Web Role name				
AzureMultiTenantApp.Web_IN_0	Running	Standard_D...	0	0
AzureMultiTenantApp.Web_IN_1	Running	Standard_D...	1	1

Role ID

Show data for last: 1 hour | 6 hours | 12 hours | 1 day | 7 days

Azure Portal

3. Create a new RDP session with the following values:
Host: Azure DNS
Role Name: Azure role name
ID: The azure role ID (if you have 8 instances running, then 0 - 7 are the IDs)



RDP type: Azure Cloud Services

Role name

ID: 0

□ Always ask password

□ Store password locally

□ Open console (Admin mode)

RDP Azure

6.2.2.6.2 Hyper-V RDP

DESCRIPTION

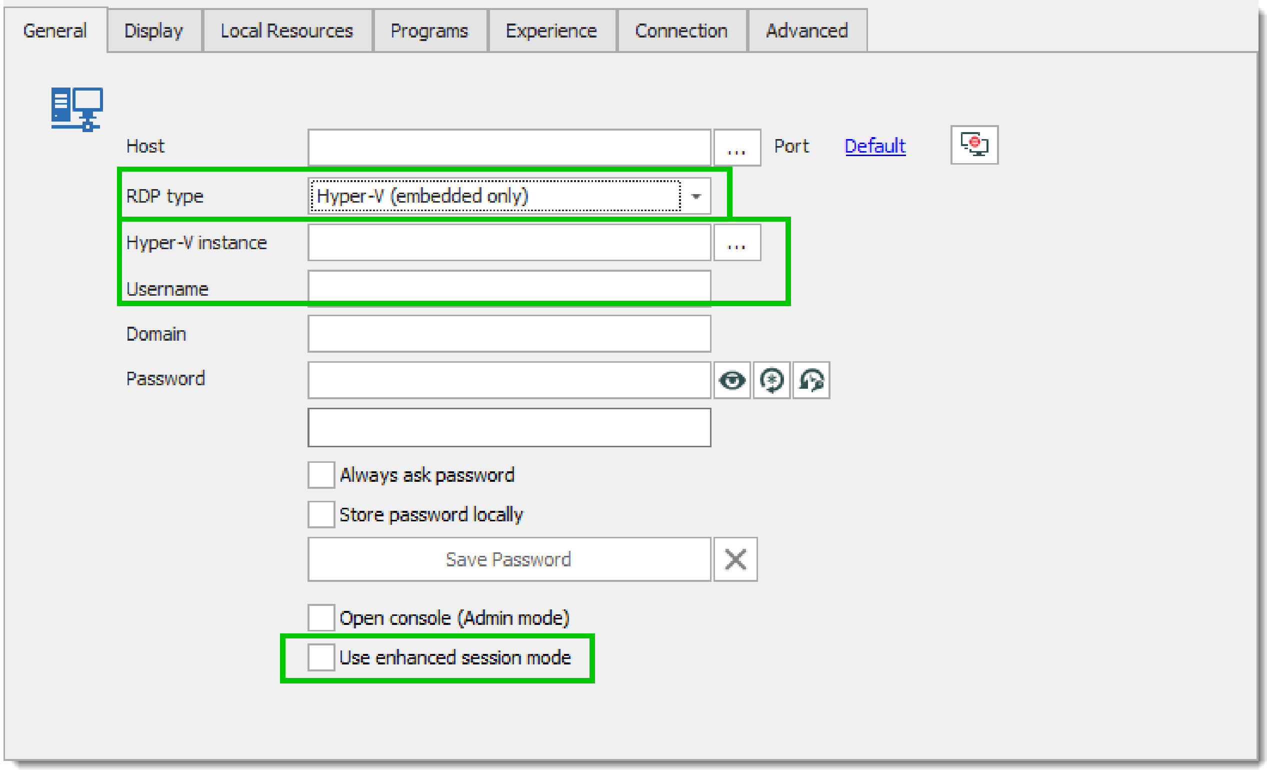
You can connect to a **Hyper-V** instance using RDP through the Hyper-V server. There is no need to enable RDP on the Hyper-V instance, because Remote Desktop Manager features two levels of authentication.

> Auto login to the Hyper-V instance is not supported.

> The credentials provided are for the Hyper-V server (not the instance).

SETTINGS

To use Hyper-V Remote Desktop Manager needs to be run as an administrator.



Host

RDP type: Hyper-V (embedded only)

Hyper-V instance

Username

Domain

Password

□ Always ask password

□ Store password locally

□ Open console (Admin mode)

□ Use enhanced session mode

Hyper-V RDP session

Create a new RDP session on the Hyper-V server. Input your login credentials prior to selecting the Hyper-V instance.

The Hyper-V enhanced sessions mode is supported in Remote Desktop Manager.

The Hyper-V session support the Hyper-V v2 with a Windows Server 2012 R2 destination.

ENHANCED SESSION MODE

Enhanced session mode allows redirection of local devices and resources from computers running Virtual Machine Connection.

Enhanced session mode provides the following capabilities:

- Display Configuration
- Audio redirection
- Printer redirection
- Full clipboard support (improved over limited prior-generation clipboard support)
- Smart Card support
- USB Device redirection
- Drive redirection
- Redirection for supported Plug and Play devices

You don’t need a network connection to the Virtual Machine session like you would with RDP.

TROUBLESHOOTING

Try using Hyper-V Tools for Remote Administration: https://technet.microsoft.com/en-us/library/cc794756.aspx

6.2.2.7 PowerShell Remote Console

DESCRIPTION

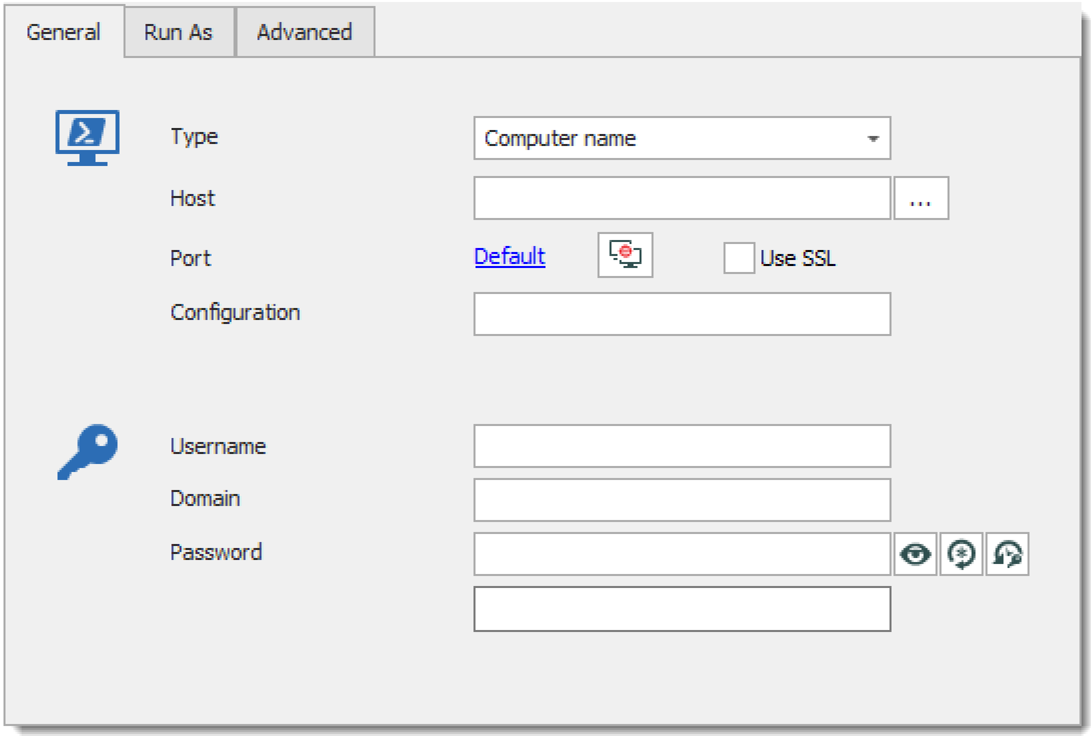
This entry is used to define and configure a **PowerShell Remote Console** session.

The **PowerShell Remote Console** performs PowerShell operations on a remote device.

SETTINGS

The remote system must be configured to allow remote commands. Please consult Enable and Use Remote Commands in Windows PowerShell.

GENERAL

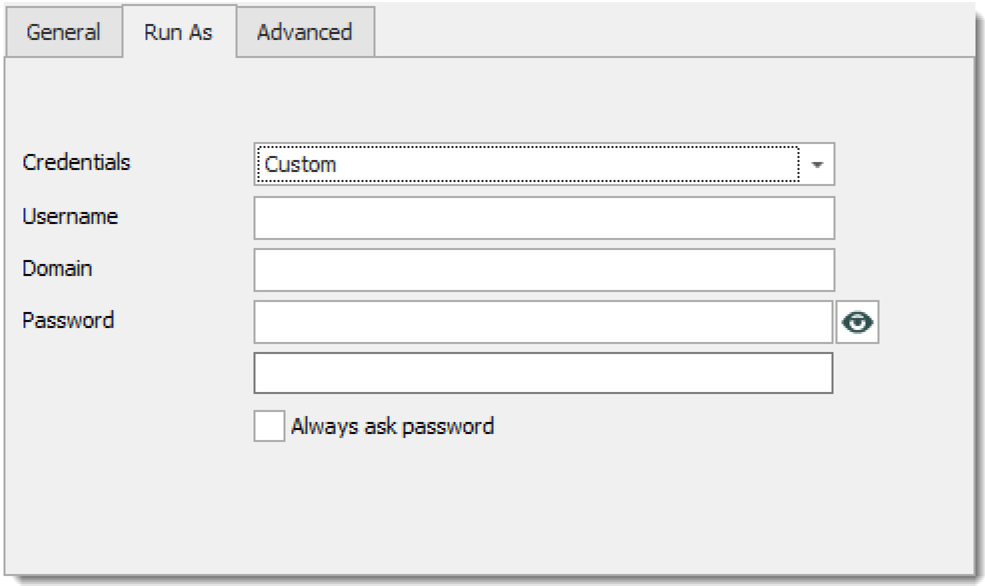


PowerShell Remote Console - General

OPTION	DESCRIPTION
Type	Select the type of connection. Select between: • **Computer name** • **Connection uri** • **VM name** • **VM Id**
Host	Enter the host name or IP address of the remote device.
Ellipsis button	Provides the list of computers discovered on your network. This can take a few moments to generate.

OPTION	DESCRIPTION
Port	Enter the port to access the remote computer. Set the port to 0 to use the default port.
Port generator	Clicking on the icon to display the Port Generator.
Use SSL	Secure the connection with SSL encryption (https).
Configuration	Enter the PowerShell session configuration name.
Username	Enter the username of the remote device.
Domain	Enter the domain of the remote device.
Password	Enter the password of the remote device.
View / Hide Password	Click on the view icon to view your password. Click on the hide icon to hide your password.
Password Generator	Click on the icon to display the Password Generator.
Password History	Click on the icon to display the Password History.
Password Analyzer	Indicates the strength of the password.

RUN AS



Credentials: Custom

Username

Domain

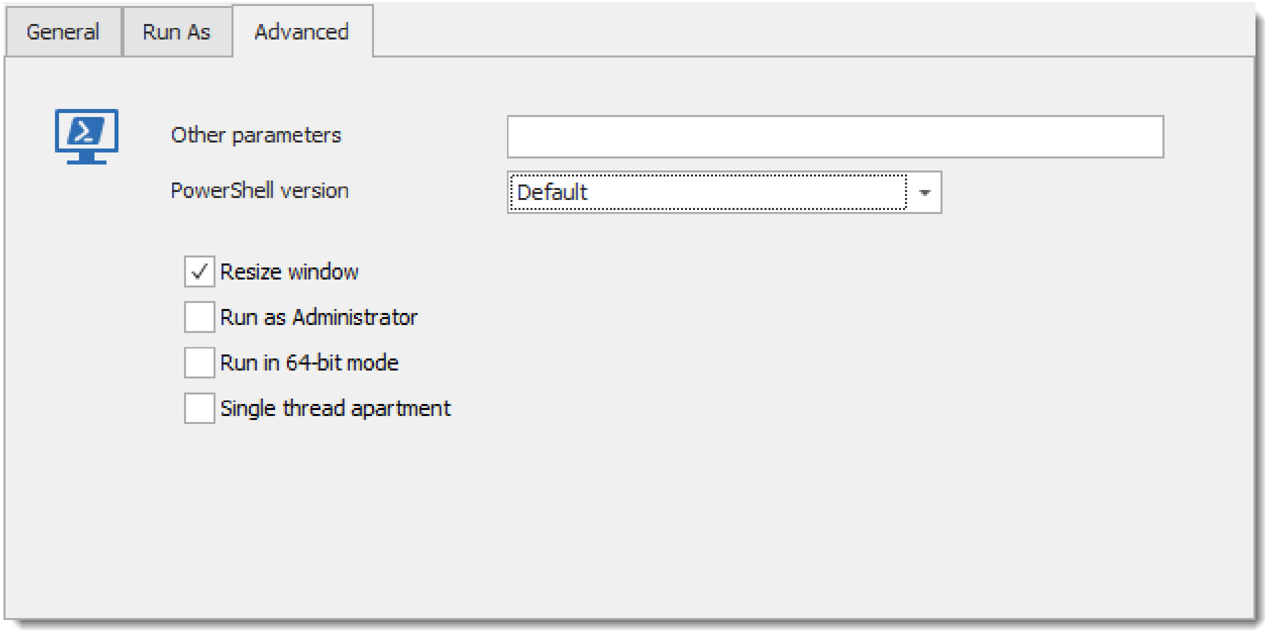
Password

□ Always ask password

PowerShell Remote Console - Run As

OPTION	DESCRIPTION
None	Turns off the Run As function.
Current session	Use the credential provided under the **General** tab.
Custom	Use custom Username, Password and Domain.
Credential repository	Select an existing credential entry with the combo box or the ellipsis button.
My personal credentials	Retrieve the credentials from My Personal Credentials. Click on the ellipsis button to edit your personal credentials.

ADVANCED



Other parameters

PowerShell version: Default

☑ Resize window

□ Run as Administrator

□ Run in 64-bit mode

□ Single thread apartment

PowerShell Remote Console - Advanced

OPTION	DESCRIPTION
Other parameters	Enter additional parameters you wish to use.
PowerShell version	Select the PowerShell version to use. Select between: • **Default (Current Version)** • **Version 2**
Resize window	Force window resize (buffer & window).
Run as Administrator	Run PowerShell command as a administrator.
Run in 64-bit mode	Run RDM CmdLet in 64 bits version.
Single thread apartment	Starts Windows PowerShell using a single-threaded apartment.

6.2.2.8 ScreenConnect

DESCRIPTION

ScreenConnect offers lightning-fast remote support and remote access to connect and solve problems faster.

This entry is used to define and configure a **ScreenConnect** session.

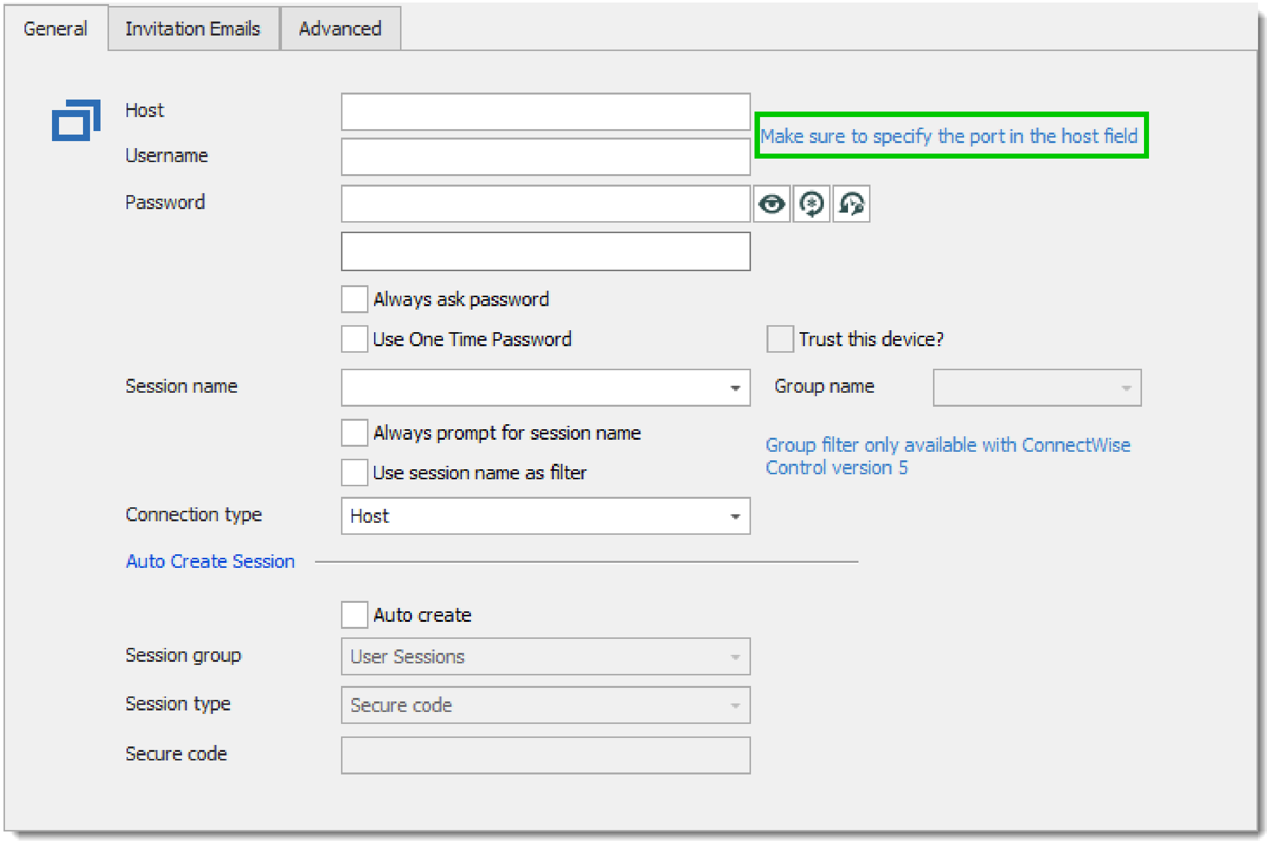
- Auto Login
- External Mode
- Copy Password
- Show Opened Session
- Show Opened Session
- Support Logging

Consult the How-to Configure ScreenConnect 5 in Remote Desktop Manager topic if you want to configure a ScreenConnect 5 session.

To use version 2.3 of the ScreenConnect extension, you must have Remote Desktop Manager version 13.5.5.0 or above.

SETTINGS

GENERAL



Host

Username

Password

Make sure to specify the port in the host field

□ Always ask password

□ Use One Time Password

□ Trust this device?

Session name

Group name

□ Always prompt for session name

□ Use session name as filter

Group filter only available with ConnectWise Control version 5

Connection type: Host

□ Auto create

Session group: User Sessions

Session type: Secure code

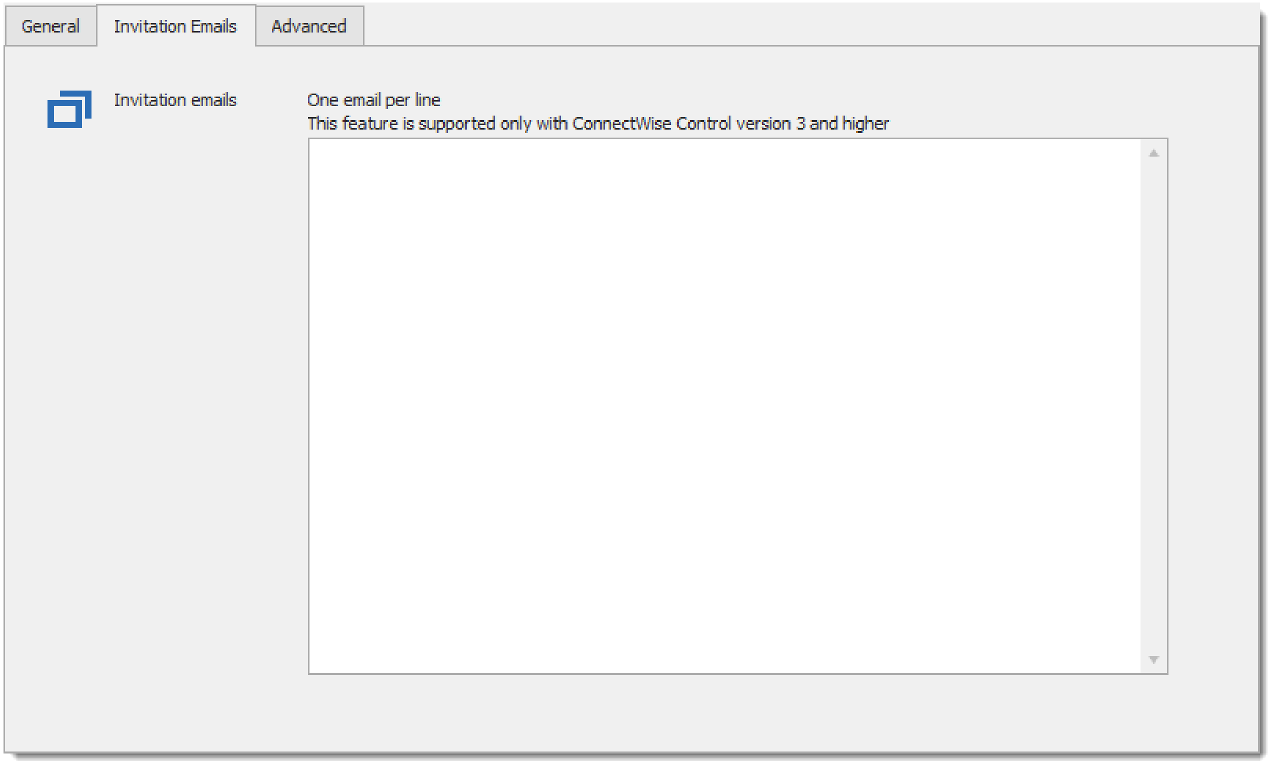
Secure code

Screenconnect - General

OPTION	DESCRIPTION
Host	Enter the name or IP address of the ScreenConnect server. You also need to specify the port.
Username	Enter the username of the ScreenConnect server.
Password	Enter the password of the ScreenConnect server.
Password Analyzer	Indicates the strength of the password.
Always ask password	Always ask password when connecting to ScreenConnect server.
Use One Time Password	Uses the OTP setting.

OPTION	DESCRIPTION
Session name	Select or enter the machine name or session name to connect.
Always prompt for session name	With this option the system will ask you which session you wish to start each time you open the session.
Use session name as filter	Use the session name as a filter to reduce choices.
Connection type	Specify the connection type. Select between: • **Guest** • **Host**
Auto create	If the sessions doesn't exist it will be created with these settings.
Session group	Specify the session group. Select between: • **User Sessions** • **Meetings**
Session type	Specify the session type. Select between: • **Published** • **Secure Code** • **On invitation only**
Secure code	Specify the secure code to use. Only available when the Session Code session type is selected.

INVITATION EMAILS



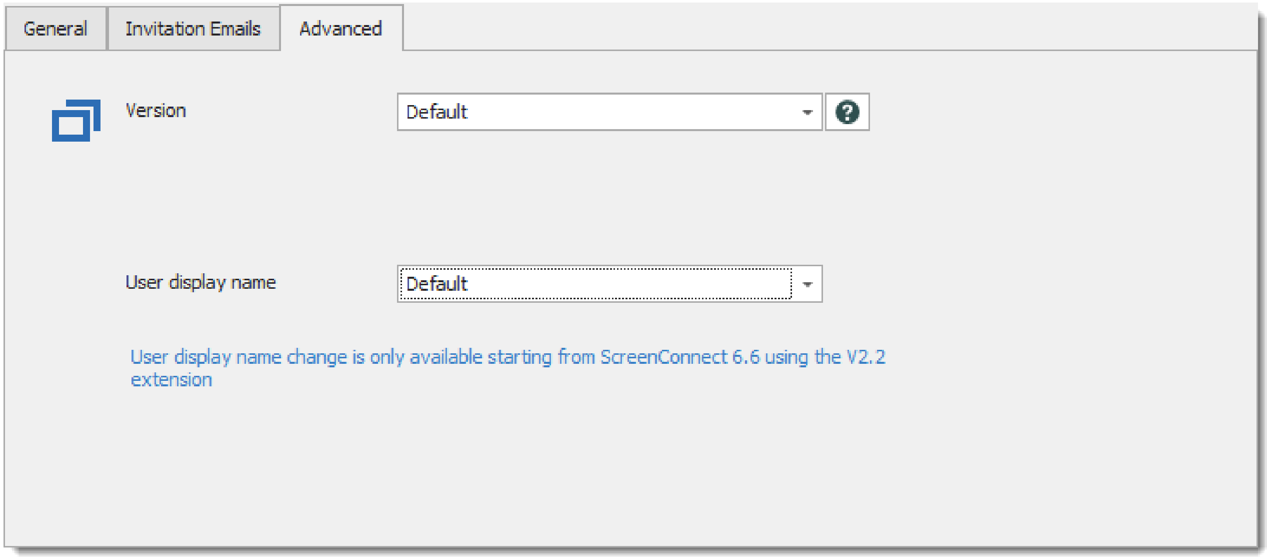
Invitation emails

One email per line
This feature is supported only with ConnectWise Control version 3 and higher

Screenconnect - Invitation emails

OPTION	DESCRIPTION
Invitation Emails	An invitation email will be sent at the session opening for each email in the list. One email per line needs to be enter.

ADVANCED



Version: Default

User display name: Default

User display name change is only available starting from ScreenConnect 6.6 using the V2.2 extension

Screenconnect - Advanced

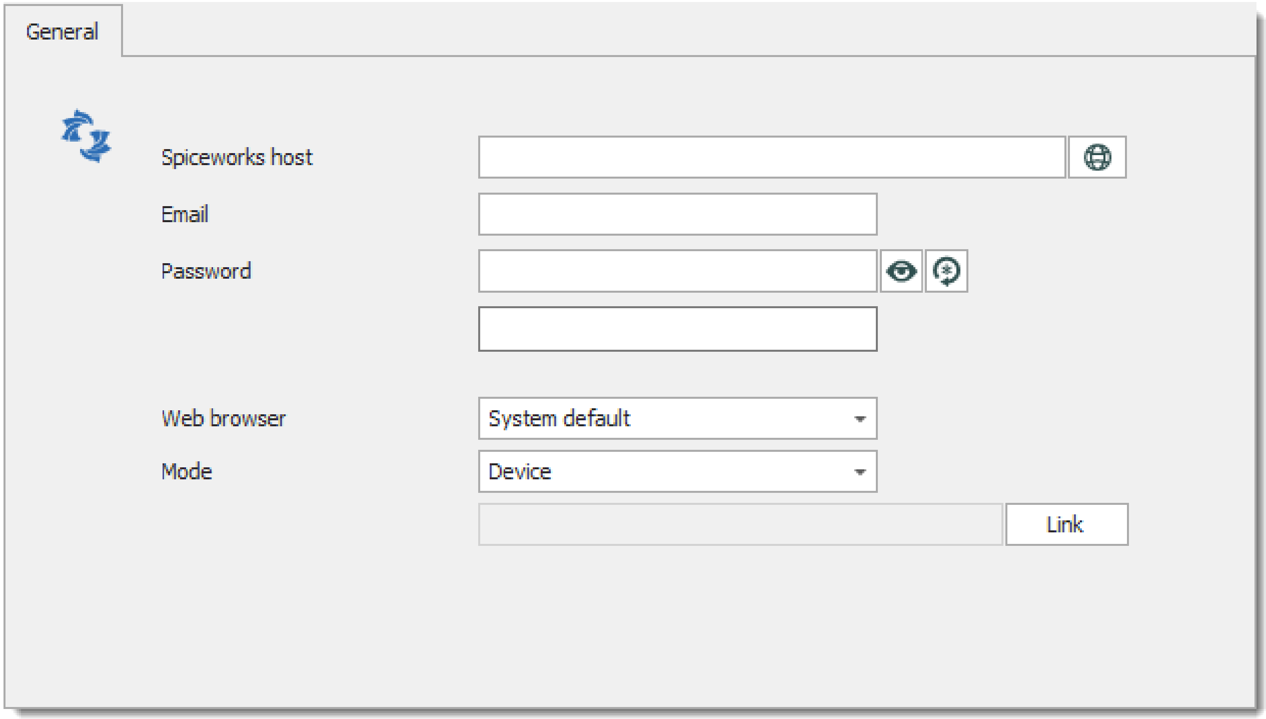
OPTION	DESCRIPTION
Version	Select the version of ScreenConnect that you want to use in the application. • **Default:** Use the default version of ScreenConnect that you have set in **File - Options- Types - ScreenConnect.** • **Version 4.x and lower:** Use the version 4 and lower of ScreenConnect. • **Extension (Version 5 or higher):** You need to install the extension from the ScreenConnect browser extension to use this version of ScreenConnect.
User display name	With this setting you can decide whether you want to display your windows username or data source username.

6.2.2.9 Spiceworks

DESCRIPTION

This entry is used to define and configure a **Spiceworks** session. At this time, it is simply a wrapper to open the dashboard, submit your credentials, and optionally focus to a group or a device.

SETTINGS



Spiceworks host	
Email	
Password	
Web browser	System default
Mode	Device

Spiceworks - General Tab

OPTION	DESCRIPTION
Spiceworks host	Enter the URL of the Spiceworks server. Ensure that the protocol and port are specified. i.e. http://spiceworks:9675
Email	Email address used as account identifier on Spiceworks services.
Password	Enter the password to access the Spicework Host.
Web browser	Select the web browser to use.

OPTION	DESCRIPTION
Mode	Select between the following modes: • **Dashboard** • **Group** • **Help Desk**

USAGE

Specify the server URL and enter valid credentials. By default, the dashboard view will be shown after the credentials have been submitted and accepted.

You can elect to show directly a specific group by choosing the **group** option, then using the ellipsis to select the specific group to display.

> You must have the required permissions to view groups to use the **group** link feature.

You can alternatively elect to display a specific device by choosing the **device** option, then using the ellipsis to select the specific device to display.

> You must have the required permissions to view the devices to use the **device** link feature.

6.2.2.10 Telnet

DESCRIPTION

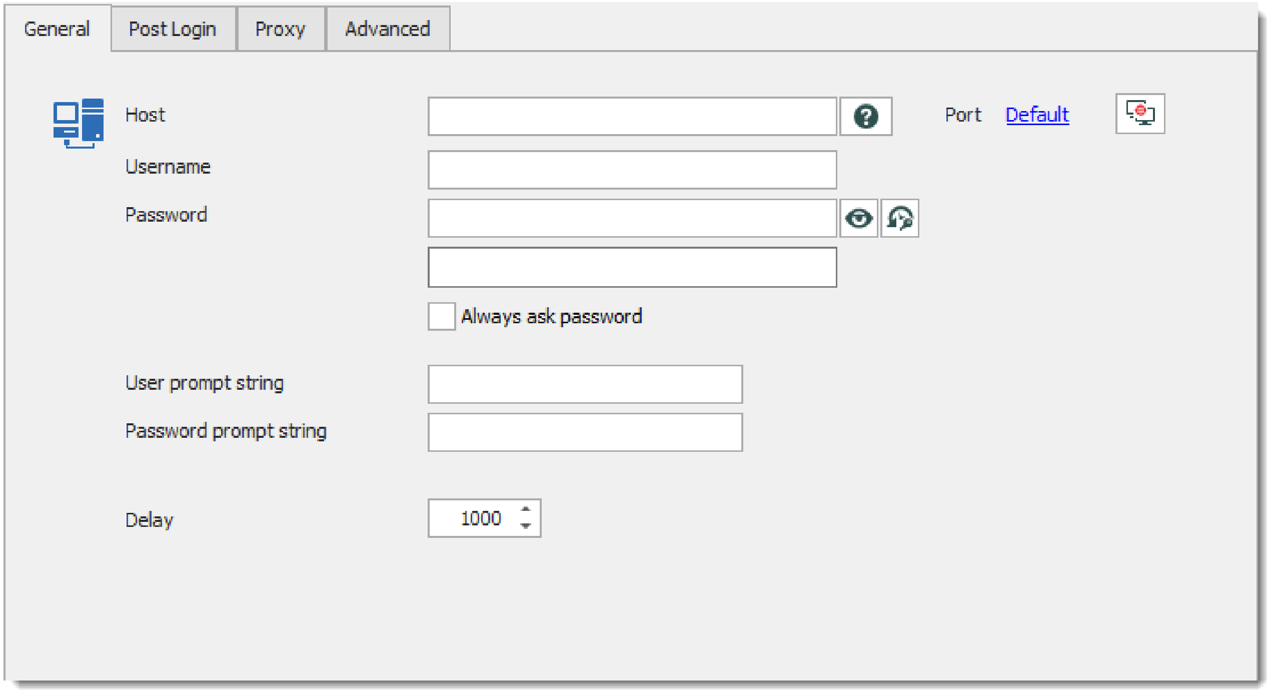
Telnet is a network protocol used to provide a bidirectional interactive text-oriented communication facility using a virtual terminal connection.

This entry is used to define and configure a ***Telnet*** session.

- Embedded Mode
- External Mode
- Show Opened Session
- Credential repository
- Support Logging

SETTINGS

GENERAL



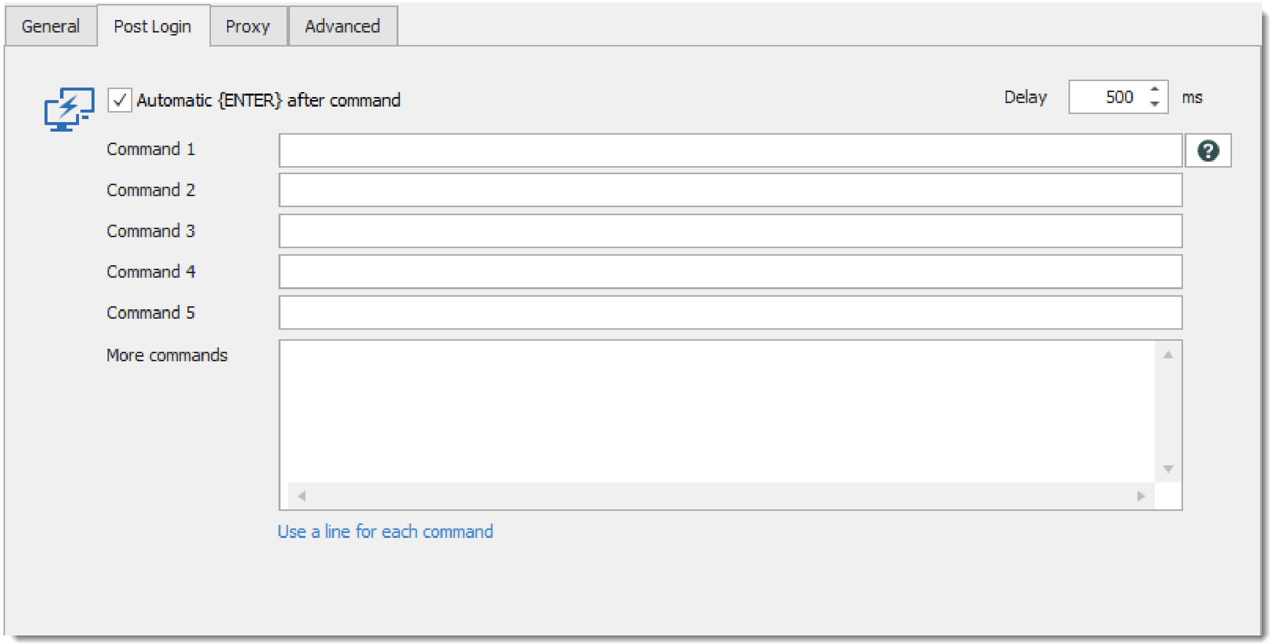
Delay: 1000

Telnet - General

OPTION	DESCRIPTION
Host	Enter your Telnet remote host name to connect.
Port	Enter the port to connect to the remote host.

OPTION	DESCRIPTION
Username	Enter your account username.
Password	Enter your account password.
Always ask password	Always ask password when connecting to the session.
User prompt string	Type down a string for user prompt.
Password prompt string	Type down a string for password prompt.
Delay	Set active delay between actions on connection.

POST LOGIN



☑ Automatic {ENTER} after command

Delay 500 ms

Command 1

Command 2

Command 3

Command 4

Command 5

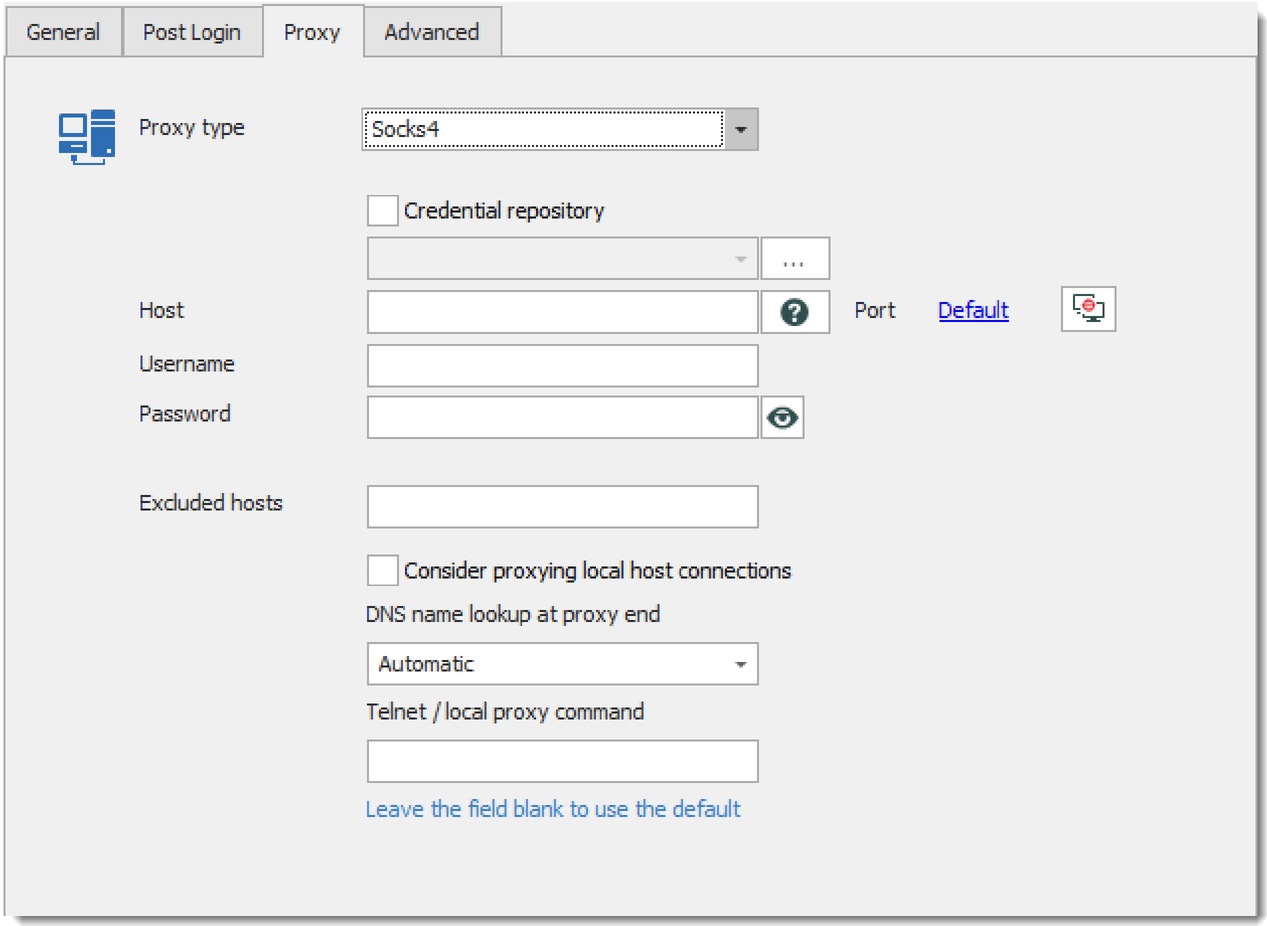
More commands

Use a line for each command

Telnet - Post Login

OPTION	DESCRIPTION
Automatic {ENTER} after command	Emulates the keystroke {ENTER} automatically between commands, use with delay for best result.
Delay	Delay between commands.
Commands	Set up commands to send.

PROXY



Proxy type: Socks4

□ Credential repository

Host

Port

Username

Password

Excluded hosts

□ Consider proxying local host connections

DNS name lookup at proxy end: Automatic

Telnet / local proxy command

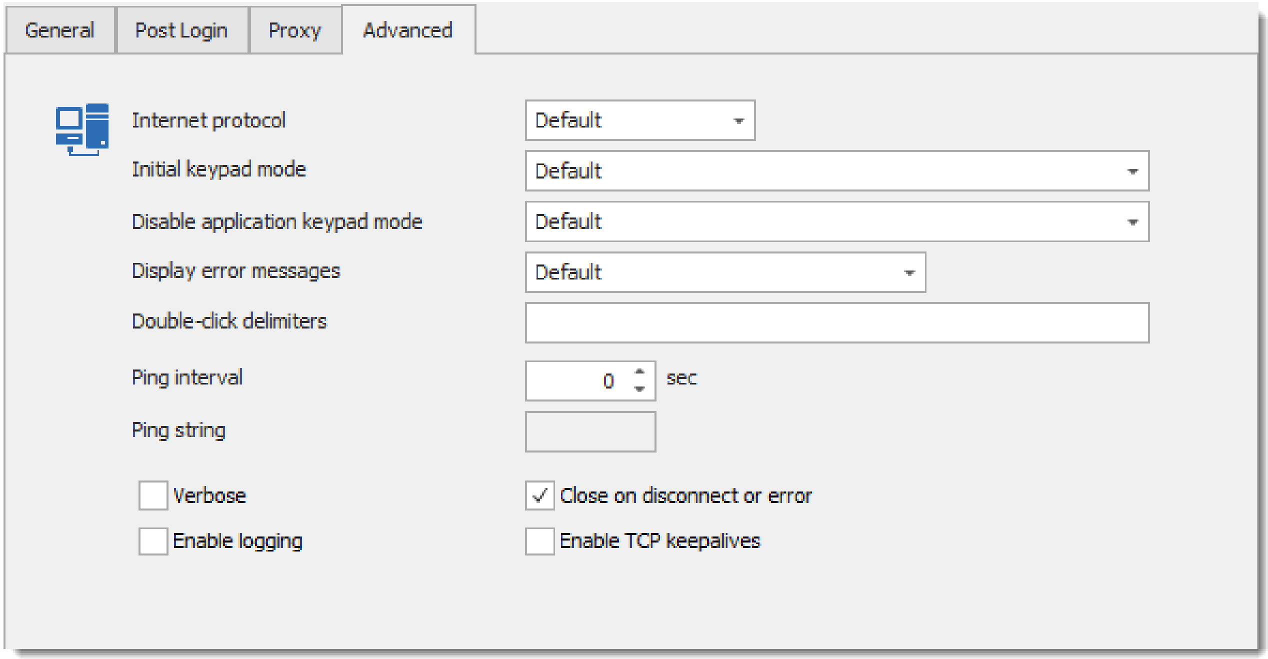
Leave the field blank to use the default

Telnet - Proxy

OPTION	DESCRIPTION
Proxy type	Select your Proxy type between: • **None** • **Socks4** • **Socks5** • **HTTP** • **Telnet** • **Local**
Credential repository	Use the Credential repository of RDM for your proxy connection.
Host	Enter the proxy host address.
Port	Enter the proxy port.
Username	Enter the username of the proxy host.
Password	Enter the password of the proxy host.
Excluded hosts	The Excluded hosts box may contain more than one exclusion range, separated by commas. Enter hosts that would automatically be excluded.
Consider proxying local host connections	Connections to the local host are never proxied, even if the proxy exclude list does not explicitly contain them. It is very unlikely that this behaviour would ever cause problems, but if it does you can change it by enabling this option **Consider proxying local host connections**.
DNS name lookup at proxy end	If you are using a proxy to access a private network, it can make a difference whether DNS name resolution is performed by WinSCP

OPTION	DESCRIPTION
	itself (on the client machine) or performed by the proxy. The **Do DNS name lookup at proxy end** configuration option allows you to control this, select between: • **Automatic:** WinSCP will do something it considers appropriate for each type of proxy. Telnet, HTTP and SOCKS5 proxies will have host names passed straight to them; SOCKS4 proxies will not. • **No:** WinSCP will always do its own DNS, and will always pass an IP address to the proxy. • **Yes:** WinSCP will always pass host names straight to the proxy without trying to look them up first.
Telnet/local proxy command	If you are using the Telnet proxy type, the usual command required by the firewall's Telnet server is connect, followed by a host name and a port number. If your proxy needs a different command, you can enter an alternative here.

ADVANCED



Internet protocol: Default
Initial keypad mode: Default
Disable application keypad mode: Default
Display error messages: Default
Double-click delimiters:
Ping interval: 0 sec
Ping string:
□ Verbose
☑ Close on disconnect or error
□ Enable logging
□ Enable TCP keepalives

Telnet - Advanced

OPTION	DESCRIPTION
Internet protocol	This option allows the user to select between the old and new Internet protocols and addressing schemes, choose between: • **Default (WinSCP)** • **IPv4** • **IPv6**
Initial keypad mode	This option sets the initial status of the keypad • **Default** • **Application** • **Normal**
Close on disconnect or error	Close the session when disconnecting or when an error occur.

6.2.2.11 VNC

DESCRIPTION

This entry is used to define and configure a **VNC** session.

- Auto Login
- Built in
- Copy Password
- Credential repository
- Embedded Mode
- External Mode
- Full Screen
- Support Host
- Multi Monitor Support
- Show Opened Session
- Support AfterDisconnectEvent
- Support Logging

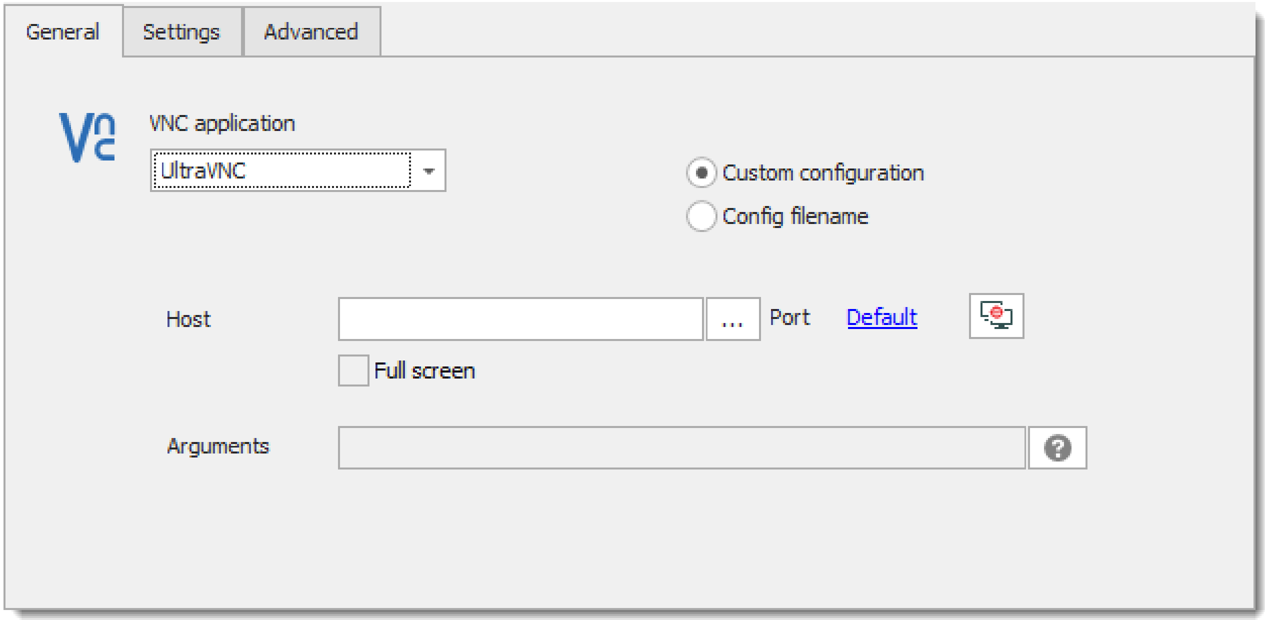
Only Ultra VNC and our Default VNC is supported in Embedded mode. All other VNC applications supported by Remote Desktop Manager are available only in External mode.

Providing the password in external mode is only supported by UltraVNC.

SETTINGS

Embedded UltraVNC is the recommended mode for maximum compatibility. It also supports chats and files transfer while connected.

GENERAL

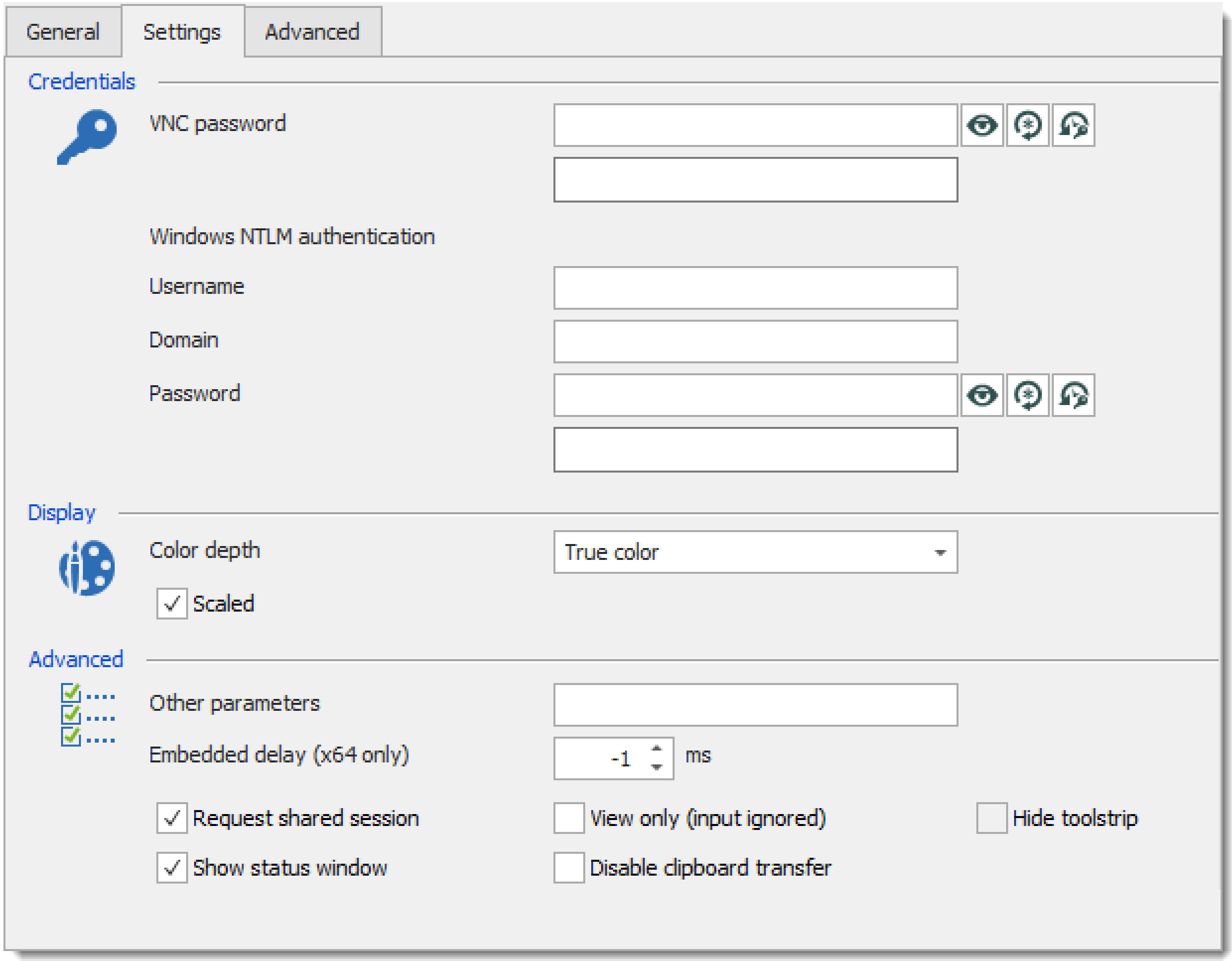


VNC - General

OPTION	DESCRIPTION
VNC application	Select your VNC application. The drop-down menu will have different option depending if you wish to run your session in Embedded or External mode. **Embedded mode:** • **Default** • **VNC** **External mode:** • **RealVNC** • **TightVNC** • **UltraVNC** • **VNC Viewer plus**
Custom configuration	By selecting ***Custom configuration*** you will have to enter all required information regarding the remote computer in the ***Settings*** and ***Advanced*** tabs. The screen size, color depth and the encryption level

OPTION	DESCRIPTION
	can only be customized when selecting the Custom configuration option.
Config filename	Enter the path of your configuration file.
Host	The host supports a distinct syntax to specify the port and display number. They must be set as the server requires. This syntax has been proven to work: {HOSTNAME}::{PORT}:{DISPLAY}. i.e. $HOST$::5902:2
Port	Enter the port number if not using the default port.
Arguments	Fully define a command line argument to start the session with.

SETTINGS



VNC password

Windows NTLM authentication

Username

Domain

Password

Color depth: True color

☑ Scaled

Other parameters

Embedded delay (x64 only): -1 ms

☑ Request shared session

□ View only (input ignored)

□ Hide toolstrip

☑ Show status window

□ Disable clipboard transfer

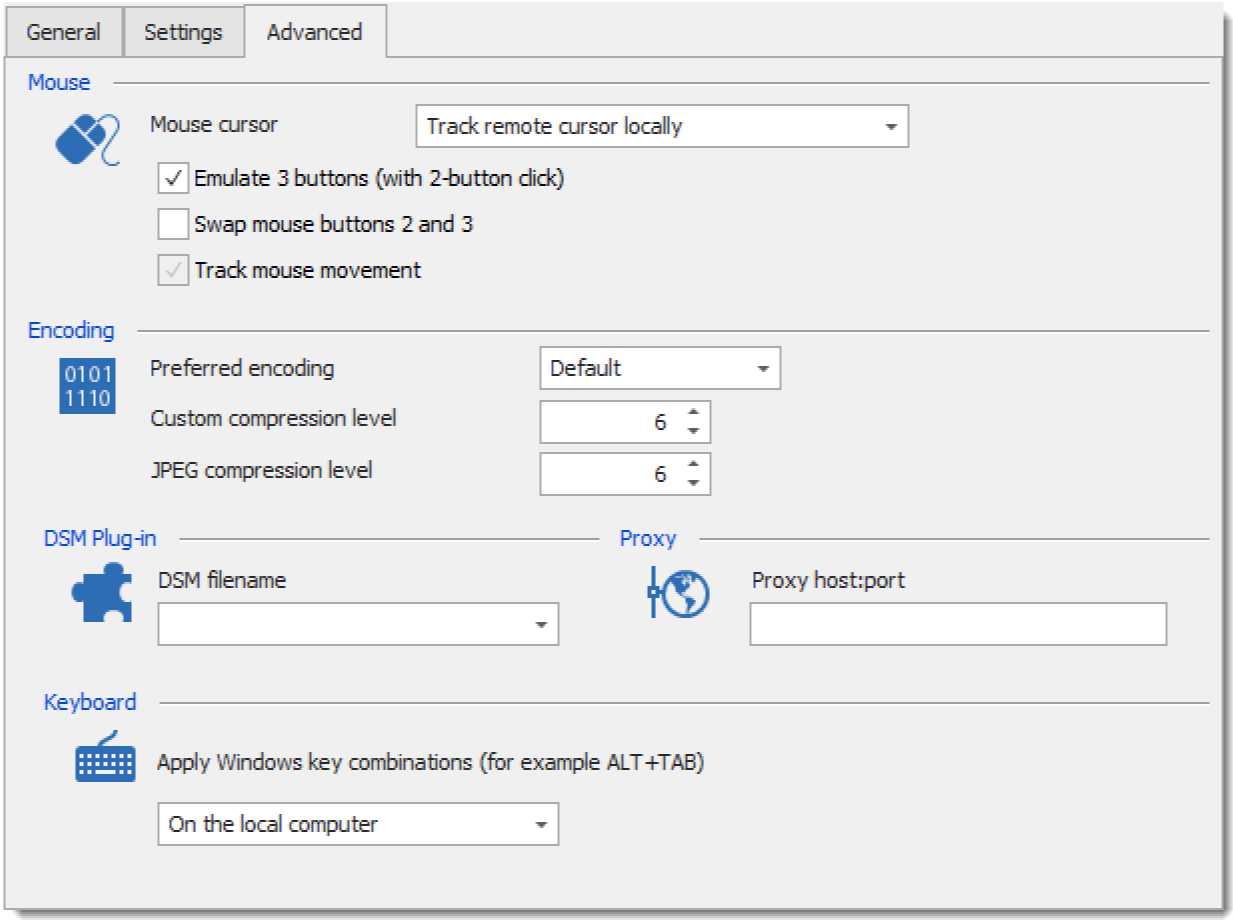
VNC - Settings

OPTION	DESCRIPTION
VNC Password	Enter the password for the VNC server
Windows NTLM authentication	Enter your NTLM credentials (username, password and domain) to be authenticated.
View / Hide Password	Click on the view icon to view your password. Click on the hide icon to hide your password.
Password Generator	Click on the icon to display the Password Generator.

OPTION	DESCRIPTION
Password History	Click on the icon to display the Password History.
Password Analyzer	Indicates the strength of the password.
Color depth	Select the display color depth for the remote computer between: • **True color** • **256 colors** • **64 colors** • **8 colors** • **8 bit color** • **8 grey color (32 bits color screen resolution)** • **4 grey color (32 bits color screen resolution)** • **2 grey color (32 bits color screen resolution)**
Scaled	The remote display is automatically scaled to fit the size of the window.
Other parameters	Enter any other parameters you wish to use.
Embedded delay (x64 only)	Adjust this value if more initialization time is required.
Request shared session	Allows several clients to share the same VNC session. If this option isn't set, only one client can be connected to the same Server. If a new "non-shared" client is connected, existing clients are disconnected, or new connection is dropped, depending on the server's configuration.

OPTION	DESCRIPTION
View only (input ignored)	Disable the session's input. No keyboard or mouse events are sent from the viewer to the server.
Hide toolstrip	Hide the toolstrip.
Show status window	Enables you to view the status window.
Disable clipboard transfer	Disable the clipboard synchronization (used for the copy-paste).

ADVANCED



Mouse cursor: Track remote cursor locally

☑ Emulate 3 buttons (with 2-button click)

☐ Swap mouse buttons 2 and 3

☑ Track mouse movement

Preferred encoding: Default

Custom compression level: 6

JPEG compression level: 6

DSM filename:

Proxy host:port:

Apply Windows key combinations (for example ALT+TAB): On the local computer

VNC - Advanced

OPTION	DESCRIPTION
Mouse cursor	Select the mouse cursor behavior. Select between: • **Track remote cursor locally** • **Let remote server deal with mouse cursor** • **Don't show remote cursor**
Emulate 3 buttons (with 2-button click)	Emulate mouse button 3 when clicking on both button 1 and button 2.
Swap mouse buttons 2 and 3	Switch your mouse buttons 2 and 3.
Track mouse movement	Track the mouse movement in real-time.
Preferred encoding	Change the encoding to use less bandwidth. From the least to the most bandwidth, select between: • **Default** • **Auto** • **CoRRE** • **Hextile** • **Raw** • **RRE** • **Tight** • **Ultra** • **Zlib** • **ZlibHEX**

OPTION	DESCRIPTION
	• **ZRLE**
Custom compression level	Option available only when choosing the Preferred encoding Zlib.
JPEG compression level	For information value only.
DSM filename	If you choose to use a DSM plug-in for your connection, you can choose between: • **MSRC4 plugin** • **SecureVNCPlugin** • **SecureVNCPluginARC4**
Proxy	If using a proxy server enter the host and port to connect.

6.2.2.12 Wayk Now

This entry is used to define and configure a **Wayk Now** session.

- Embedded Mode
- External Mode
- Full Screen
- Support Host
- Show Opened Session

Wayk Now allows to take control of a remote computer to offer assistance. For more information about this product, please consult the Wayk Now Online Help.

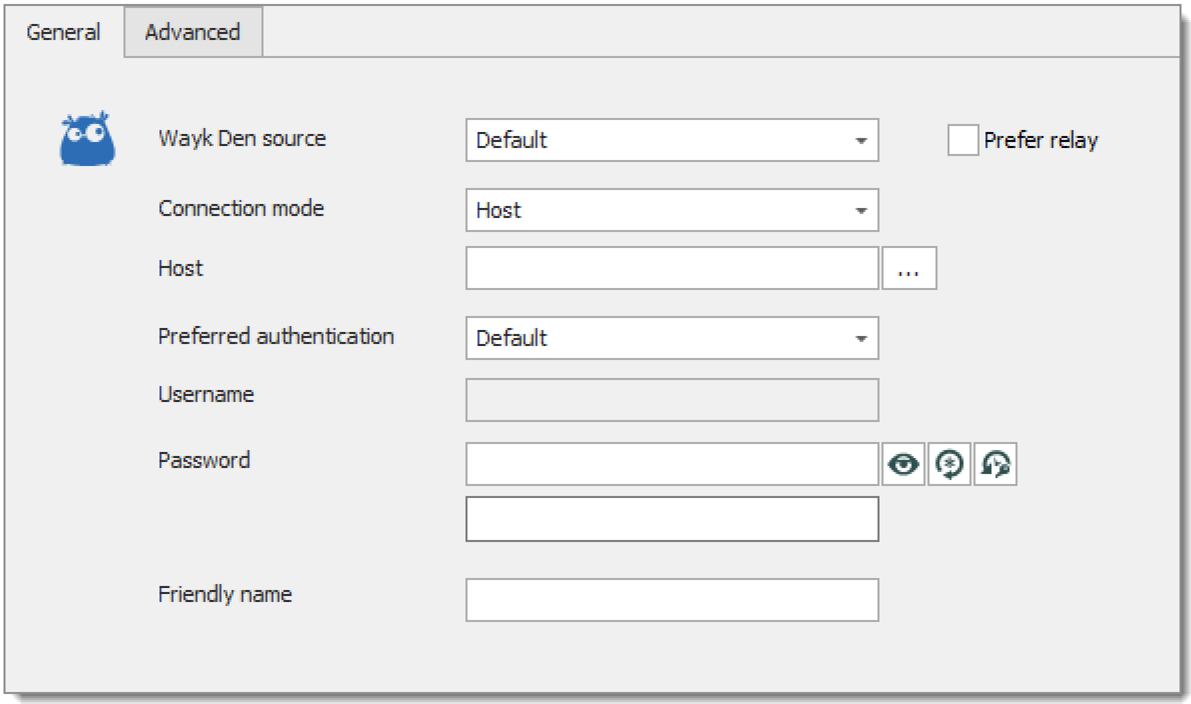
HOW TO USE WAYK NOW

A brief demonstration of how to use Devolutions remote access protocol, Wayk Now.

To use Wayk Now from Remote Desktop Manager, Wayk Now must be installed on the remote computer.

SETTINGS

GENERAL



Wayk Den source: Default

□ Prefer relay

Connection mode: Host

Host

Preferred authentication: Default

Username

Password

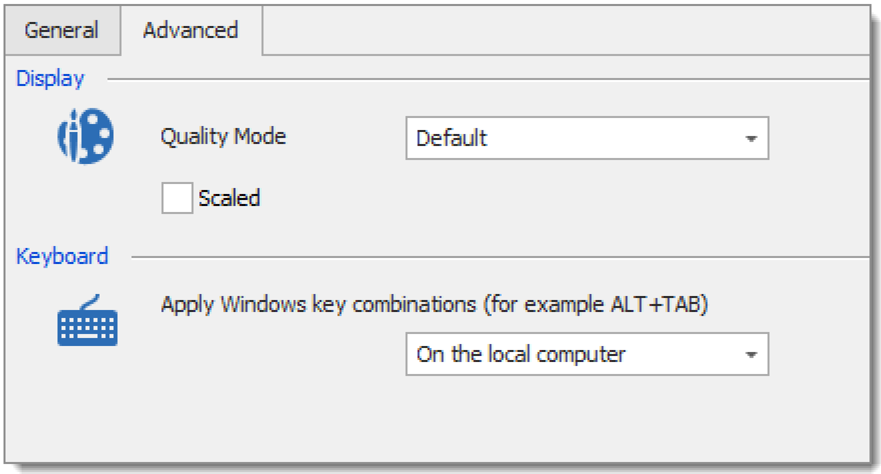
Friendly name

Wayk Now - General

OPTION	DESCRIPTION
Wayk Den source	Select between the Wayk Den source: • **Default (Cloud)** • **Cloud** • **Local**
Connection mode	Connect with the host or a unique ID.

OPTION	DESCRIPTION
Host	Enter the remote computer's **Source ID** (6-digit identification number) or IP address.
Preferred authentication	Select between the authentication mode to use: • **Default** • **Prompt For Permission** • **Secure Remote Password** • **Secure Remote Delegation**
Username	Enter the username of the remote computer. Only when using the secure remote delegation authentication mode.
Password	Enter the password of the remote computer.
View / Hide password	Click on the icon to view or hide the password.
Password generator	Click on the icon to display the Password Generator.
Password history	Click on the icon to display the password history for this session.
Password Analyzer	Indicates the strength of the password.
Friendly name	Enter a custom name for the remote user to recognize you in the chat window.

ADVANCED



General | Advanced

Display

Quality Mode: Default

□ Scaled

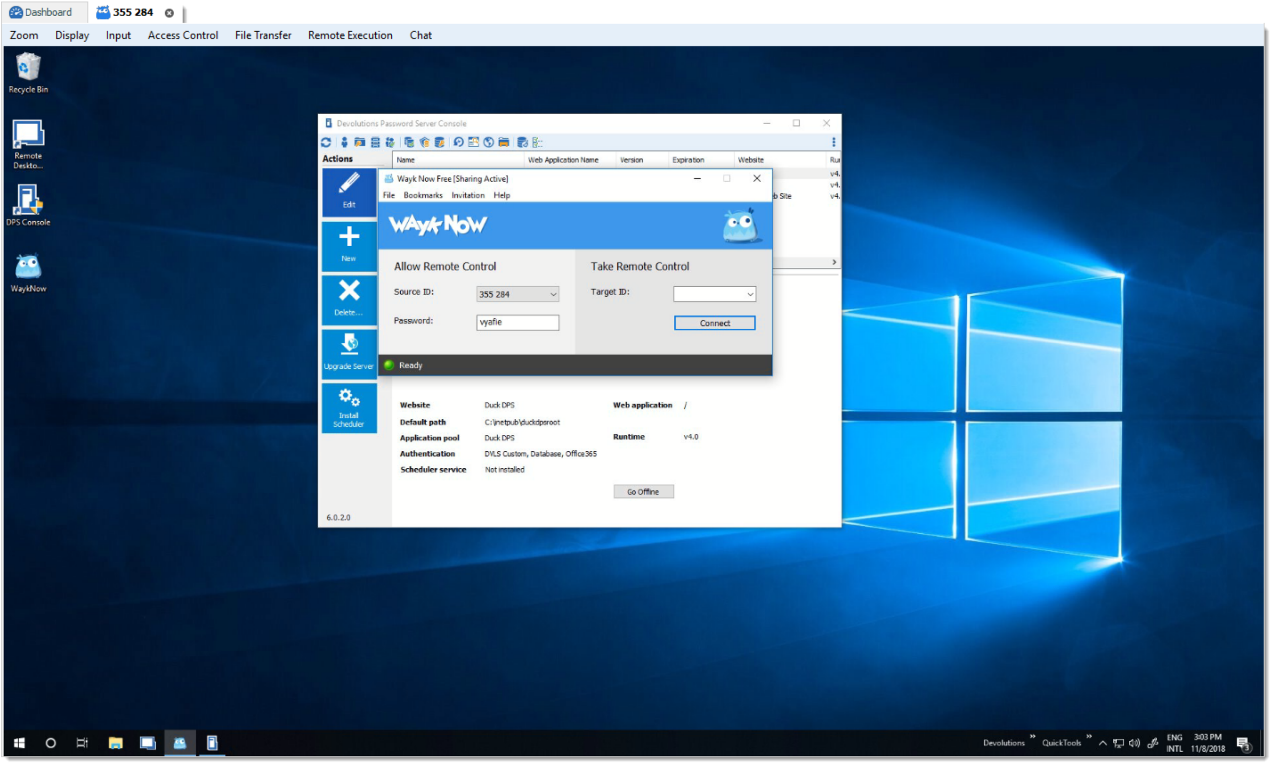
Keyboard

Apply Windows key combinations (for example ALT+TAB): On the local computer

Wayk Now - Advanced

OPTION	DESCRIPTION
Quality Mode	Choose the quality of the remote session: • **Default** • **Low** • **Medium** • **High**
Scaled	Automatically scale the remote session to fit the window.
Apply Windows key combinations	Select where the Windows key combinations are applied: • **On the local computer** • **On the remote computer** • **In full screen mode only**

WAYK NOW SESSION IN REMOTE DESKTOP MANAGER



Allow Remote Control

Source ID: 355 284

Password: vyafie

Take Remote Control

Target ID:

Website	Duck DPS	Web application	/
Default path	C:\inetpub\duckdpsroot		
Application pool	Duck DPS	Runtime	v4.0
Authentication	DVLS Custom, Database, Office365		
Scheduler service	Not installed		

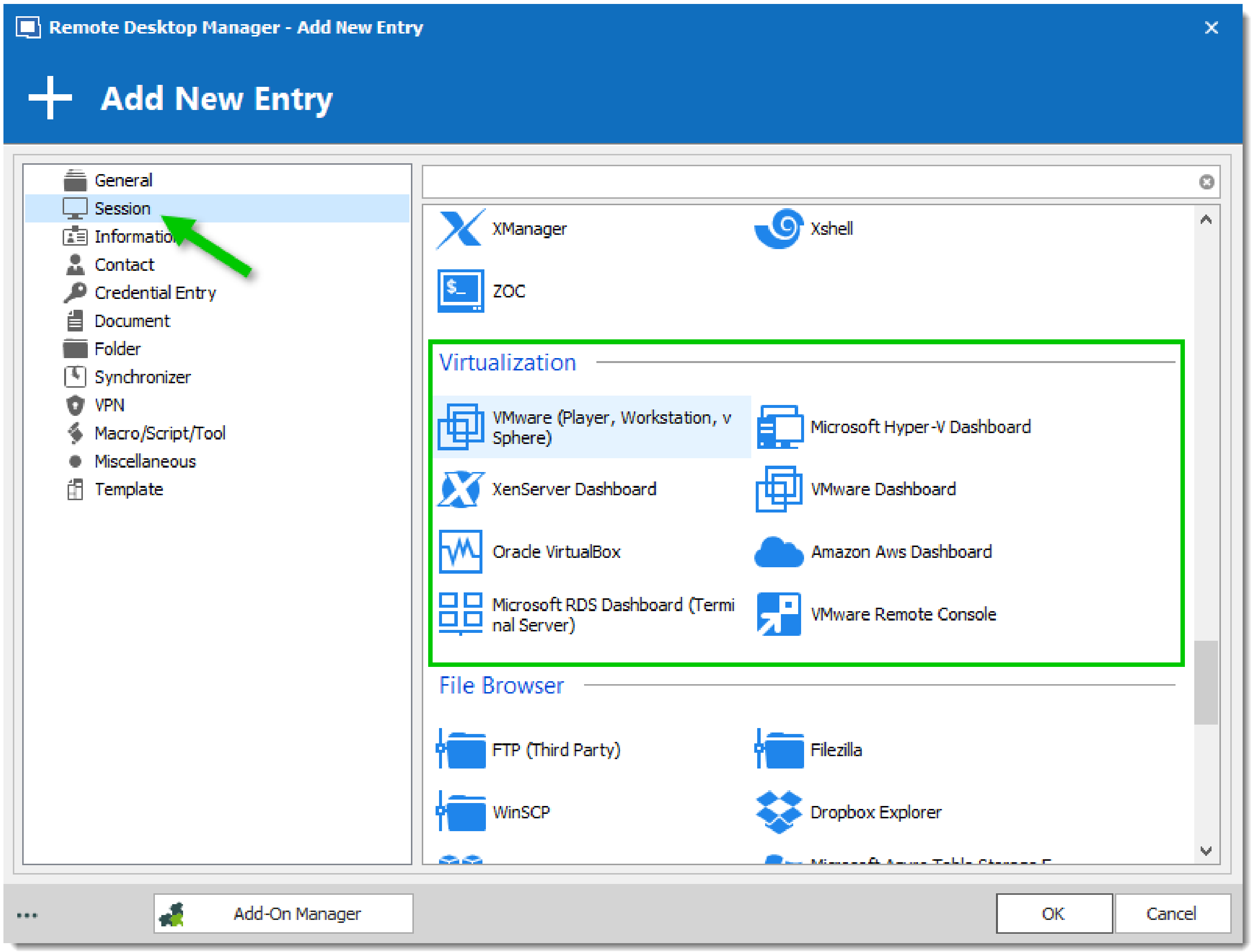
Example of Wayk Now Session in Remote Desktop Manager

For more information about available settings during an active session, please see the Wayk Now online help.

6.2.3 Virtualization

DESCRIPTION

This category contains all of the virtualization session types that are used to connect to a virtual remote system.



Virtualization Entries

Here is a list of our Virtualization remote session:

- **VMware (Player, Workstation, vSphere)**
- **Microsoft Hyper-V Dashboard**
- **XenServer Dashboard**
- **VMWare Dashboard**
- **Oracle VirtualBox**
- **Amazon Aws Dashboard**
- **Microsoft RDS Dashboard (Terminal Server)**
- **VMware Remote Console**

6.2.3.1 Amazon Aws Dashboard

DESCRIPTION

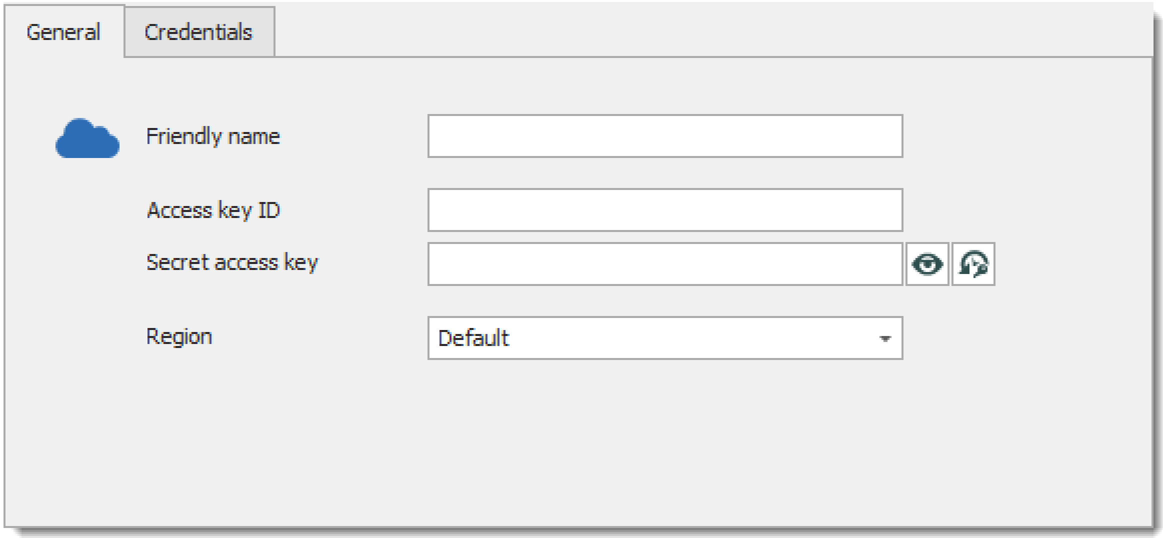
The **Amazon Web Services (AWS) Dashboard** allows you to perform operations against the different AWS services.

PREREQUISITES

Existing AWS account for the services supported by the console and currently valid access keys.

WORKFLOW

GENERAL



Amazon Aws Dashboard - General

OPTION	DESCRIPTION
Friendly name (Deprecated)	Note: Field will be deprecated in RDM version 2020.2
Access key ID	This is the User used to authenticate the access to AWS.

OPTION	DESCRIPTION
Secret access key	This is the Password used to authenticate the access to AWS.
View 👁 / Hide 🔒 Password	Click the view icon to view your password. Click the hide icon to hide your password.
Password History	Click on the icon to display the Password History.
Region	Select the appropriate region for best results.

CREDENTIALS

This tab supports a variety of RDM's credential feature to best suit your needs.

6.2.3.2 Microsoft Hyper-V Dashboard

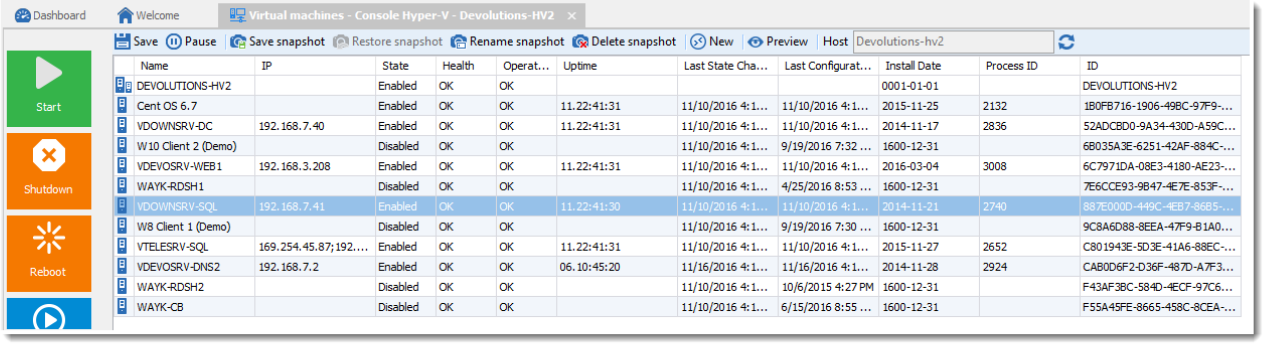
DESCRIPTION

This entry is used to define and configure a **Hyper-V** session.

SETTINGS

> ! To use Hyper-V Remote Desktop Manager needs to be run as an administrator.

The Microsoft Hyper-V Dashboard is illustrated below, and provides a platform to configure your Hyper-V session.



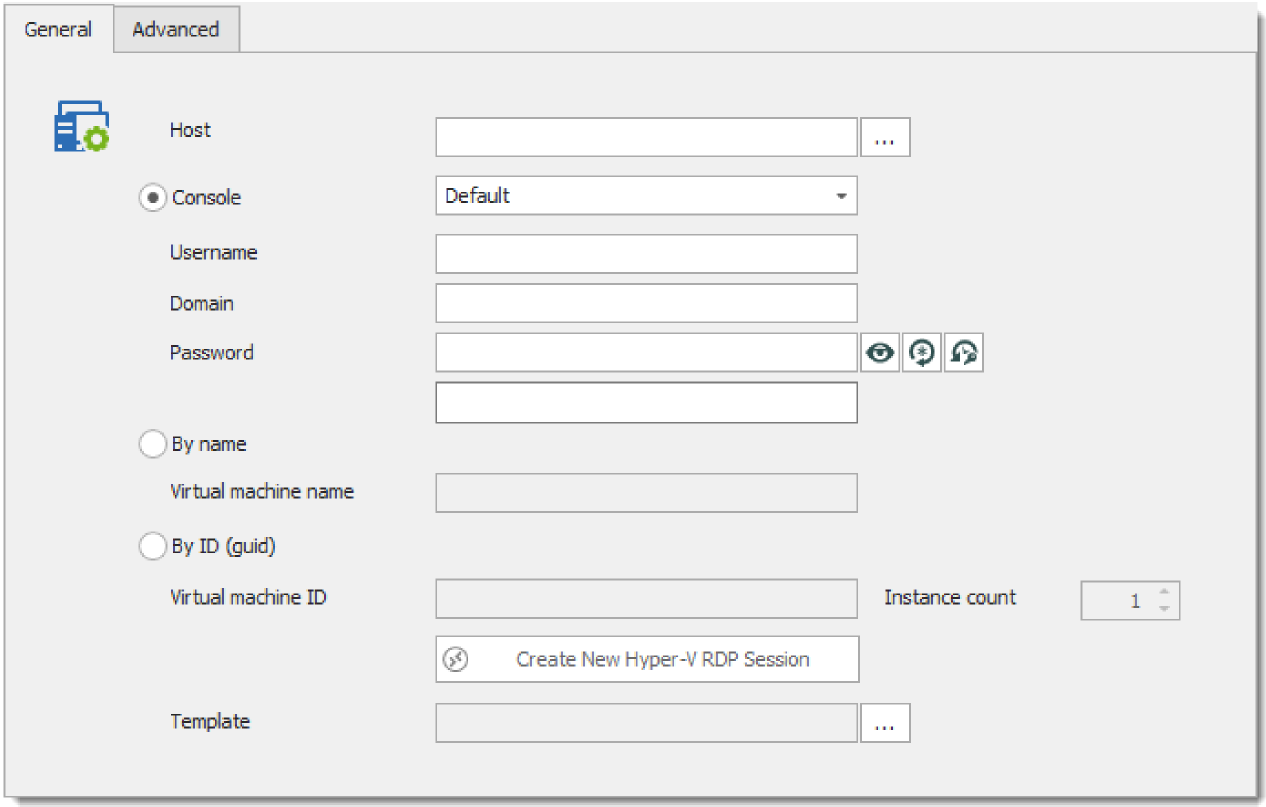
Host Devolutions-hv2

Name	IP	State	Health	Operat...	Uptime	Last State Cha...	Last Configurat...	Install Date	Process ID	ID
DEVOLUTIONS-HV2		Enabled	OK	OK				0001-01-01		DEVOLUTIONS-HV2
Cent OS 6.7		Enabled	OK	OK	11.22:41:31	11/10/2016 4:1...	11/10/2016 4:1...	2015-11-25	2132	1B0FB716-1906-49BC-97F9-...
VDOWNSRV-DC	192.168.7.40	Enabled	OK	OK	11.22:41:31	11/10/2016 4:1...	11/10/2016 4:1...	2014-11-17	2836	52ADCBD0-9A34-430D-A59C...
W10 Client 2 (Demo)		Disabled	OK	OK		11/10/2016 4:1...	9/19/2016 7:32 ...	1600-12-31		6B035A3E-6251-42AF-884C-...
VDEVOSRV-WEB1	192.168.3.208	Enabled	OK	OK	11.22:41:31	11/10/2016 4:1...	11/10/2016 4:1...	2016-03-04	3008	6C7971DA-08E3-4180-AE23-...
WAYK-RDSH1		Disabled	OK	OK		11/10/2016 4:1...	4/25/2016 8:53 ...	1600-12-31		7E6CCE93-9B47-4E7E-853F-...
VDOWNSRV-SQL	192.168.7.41	Enabled	OK	OK	11.22:41:30	11/10/2016 4:1...	11/10/2016 4:1...	2014-11-21	2740	887E000D-449C-4EB7-86B5-...
W8 Client 1 (Demo)		Disabled	OK	OK		11/10/2016 4:1...	9/19/2016 7:30 ...	1600-12-31		9C8A6D88-8EEA-47F9-B1A0...
VTELESRV-SQL	169.254.45.87;192....	Enabled	OK	OK	11.22:41:31	11/10/2016 4:1...	11/10/2016 4:1...	2015-11-27	2652	C801943E-5D3E-41A6-88EC-...
VDEVOSRV-DNS2	192.168.7.2	Enabled	OK	OK	06.10:45:20	11/16/2016 4:1...	11/16/2016 4:1...	2014-11-28	2924	CAB0D6F2-D36F-487D-A7F3...
WAYK-RDSH2		Disabled	OK	OK		11/10/2016 4:1...	10/6/2015 4:27 PM	1600-12-31		F43AF3BC-584D-4ECF-97C6...
WAYK-CB		Disabled	OK	OK		11/10/2016 4:1...	6/15/2016 8:55 ...	1600-12-31		F55A45FE-8665-458C-8CEA-...

Hyper-V Console

GENERAL

The following connection type uses vmconnect.exe. Please refer to Hyper-V RDP for further details.



Host

● Console: Default

Username

Domain

Password

○ By name

Virtual machine name

○ By ID (guid)

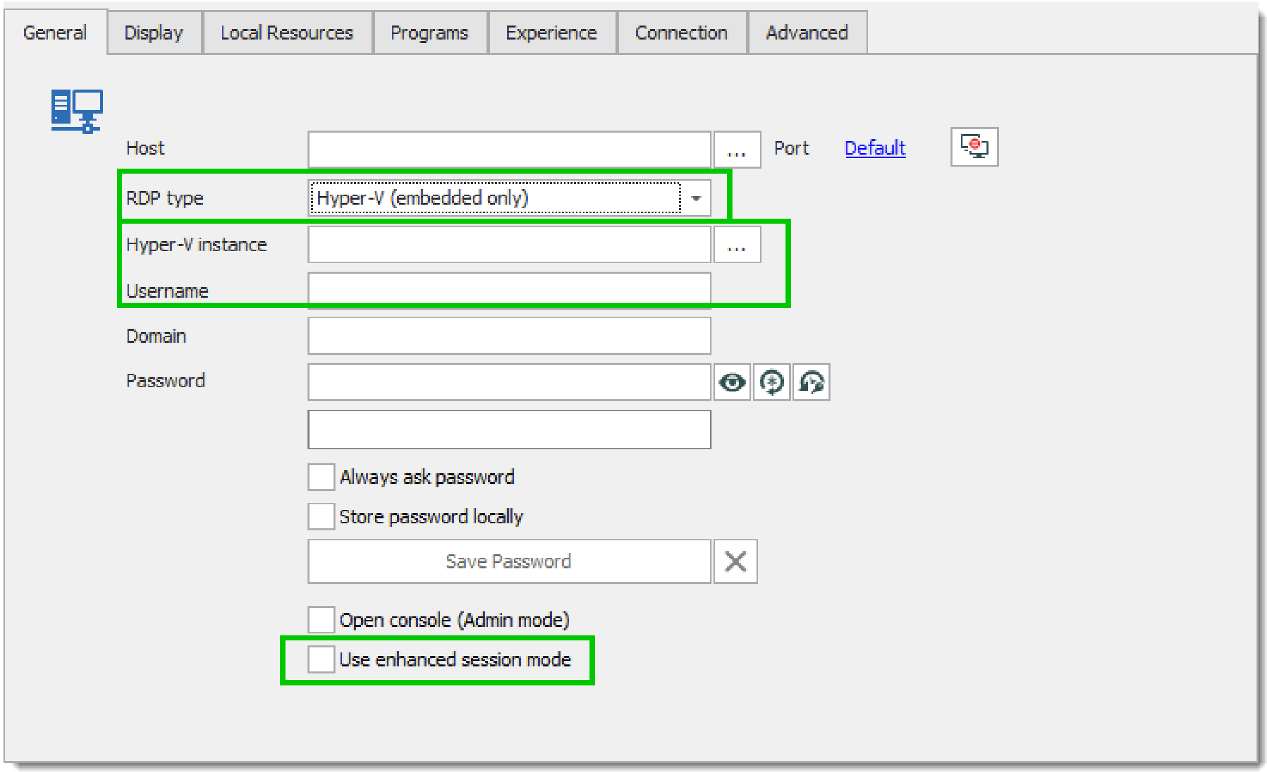
Virtual machine ID

Instance count: 1

Template

Hyper-V - General Tab

We recommend using a Hyper-V RDP for a built-in and embedded view support.



Host

RDP type: Hyper-V (embedded only)

Hyper-V instance

Username

Domain

Password

□ Always ask password

□ Store password locally

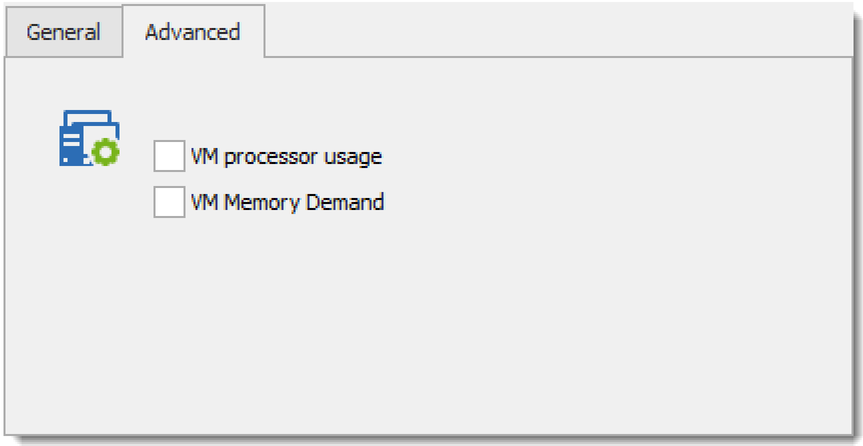
□ Open console (Admin mode)

□ Use enhanced session mode

Hyper-V (embedded only)

ADVANCED

The ***Resources monitoring*** tab is only available in the console mode. The costly columns will appear only when the corresponding option is selected.



□ VM processor usage

□ VM Memory Demand

Hyper-V - Advanced Tab

OPTION	DESCRIPTION
VM processor usage	Monitor the processor usage of the virtual machine
VM Memory Demand	Monitor the memory demand of the virtual machine.

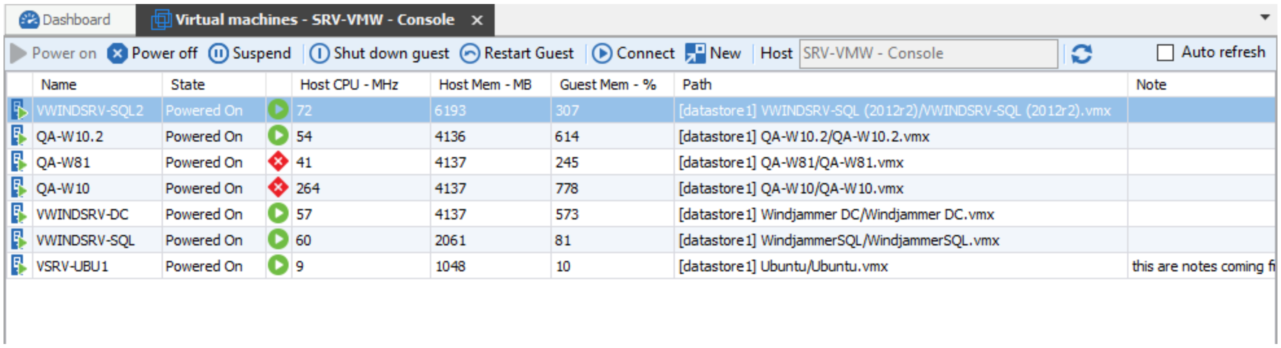
6.2.3.3 VMware Dashboard

DESCRIPTION

This entry is used to define and configure a **VMware Dashboard** session. The VMWare Console allows for basic administrative tasks of a VMWare host.

There are multiple steps to properly configure the PowerCLI on client workstations. Please follow the instructions thoroughly.

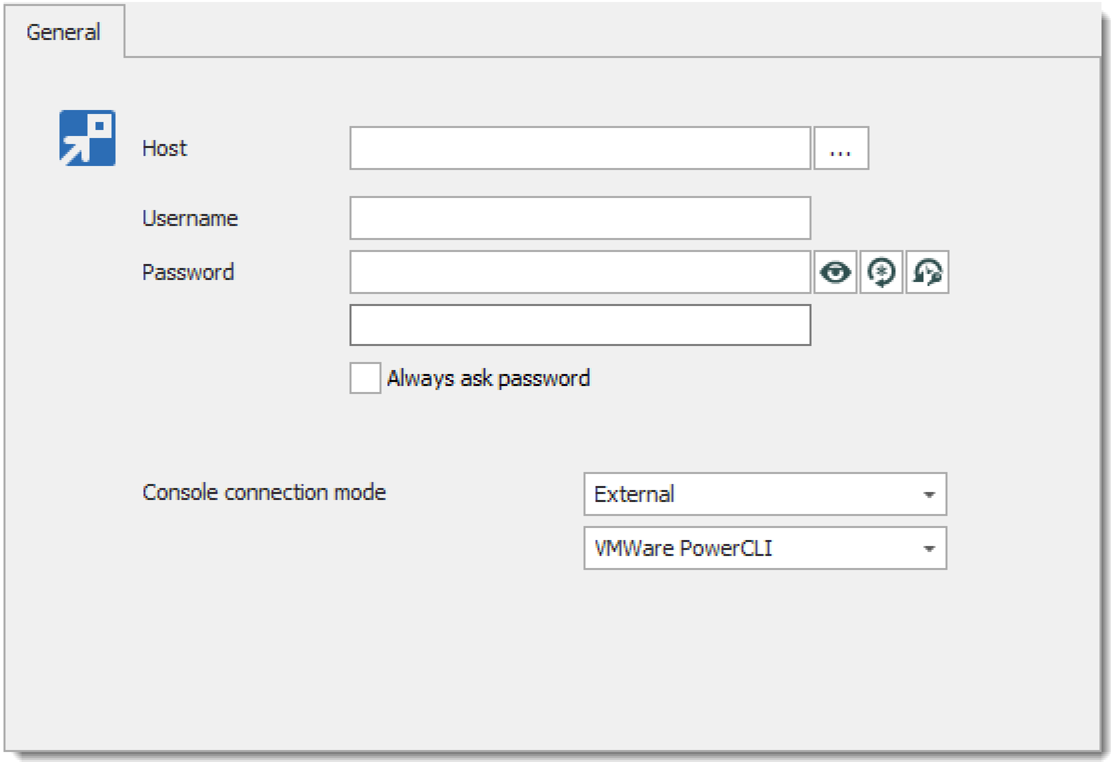
Some operations are not allowed on the Free edition of VMware Esxi.



Name	State		Host CPU - MHz	Host Mem - MB	Guest Mem - %	Path	Note
VWINDSRV-SQL2	Powered On	▶	72	6193	307	[datastore1] VWINDSRV-SQL (2012r2)/VWINDSRV-SQL (2012r2).vmx	
QA-W10.2	Powered On	▶	54	4136	614	[datastore1] QA-W10.2/QA-W10.2.vmx	
QA-W81	Powered On	✖	41	4137	245	[datastore1] QA-W81/QA-W81.vmx	
QA-W10	Powered On	✖	264	4137	778	[datastore1] QA-W10/QA-W10.vmx	
VWINDSRV-DC	Powered On	▶	57	4137	573	[datastore1] Windjammer DC/Windjammer DC.vmx	
VWINDSRV-SQL	Powered On	▶	60	2061	81	[datastore1] WindjammerSQL/WindjammerSQL.vmx	
VSRV-UBU1	Powered On	▶	9	1048	10	[datastore1] Ubuntu/Ubuntu.vmx	this are notes coming fi

SETTINGS

Simply enter the host name or IP, the username and the password of a user with administrative rights on the host.



VMware Dashboard - General Tab

SETTING	DESCRIPTION
Host	Host name of the vSphere server.
Ellipsis button	Performs network discovery to offer a list of servers.
Username	Username used to connect to the server.
Password	Password used to connect to the server.
Hide/Reveal password	Shows or hides the clear text password. Available for: • Administrators. • Users that have the **Allow Reveal Password** privilege.

SETTING	DESCRIPTION
	- For entries that have the **Allow password for everybody** setting.
Generate password	Displays the Password Generator.
Always ask password	Select to force entry of the password upon every use. Disables the Password entry control.
Console connection mode	Choose between: **Default**: Uses the VMware remote console. **VMware Player**: Uses the VMware player. **VMware remote console**: Uses the VMware remote console.

ACTIONS

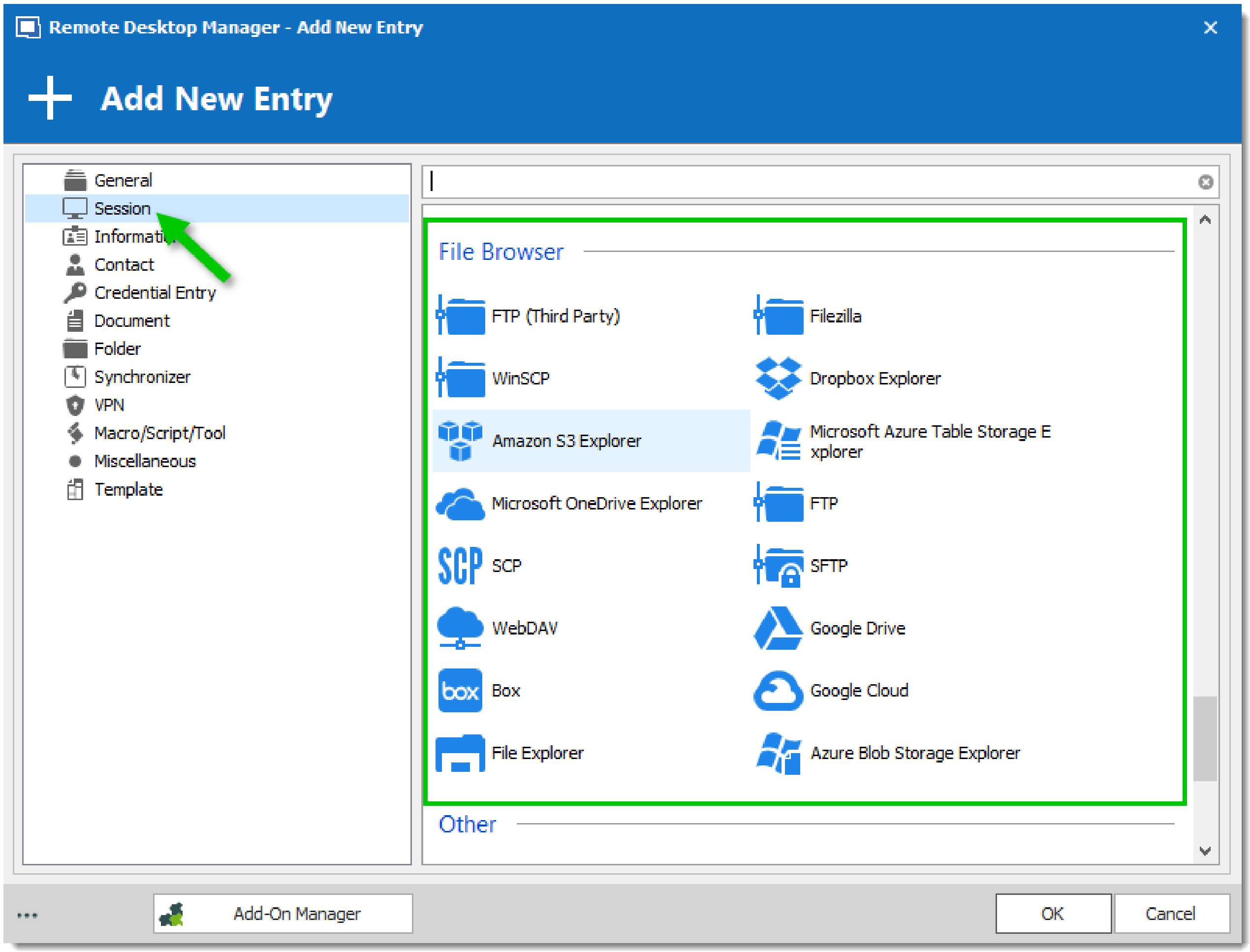
ACTION	DESCRIPTION
Power on	Powers on the virtual machine
Power off	Powers off the virtual machine
Suspend	Suspends the virtual machine
Shut down guest	Shuts down the virtual machine. Only available when the VMware guest tools are running.
Restart guest	Restarts the virtual machine. Only available when the VMware guest tools are running.

ACTION	DESCRIPTION
Connect	Connect with the technology specified in the ***Console Connection mode*** setting of the console
New	Creates a persistent entry for the selected virtual machine.
Host	Name of the VMware Dashboard entry
Refresh	Refreshes the list of virtual machines
Auto refresh	Select to enable automatic refreshing of the content at a regular interval.

6.2.4 File Browser

DESCRIPTION

This category contains all of the File Browser session types that are used to connect to cloud remote system.



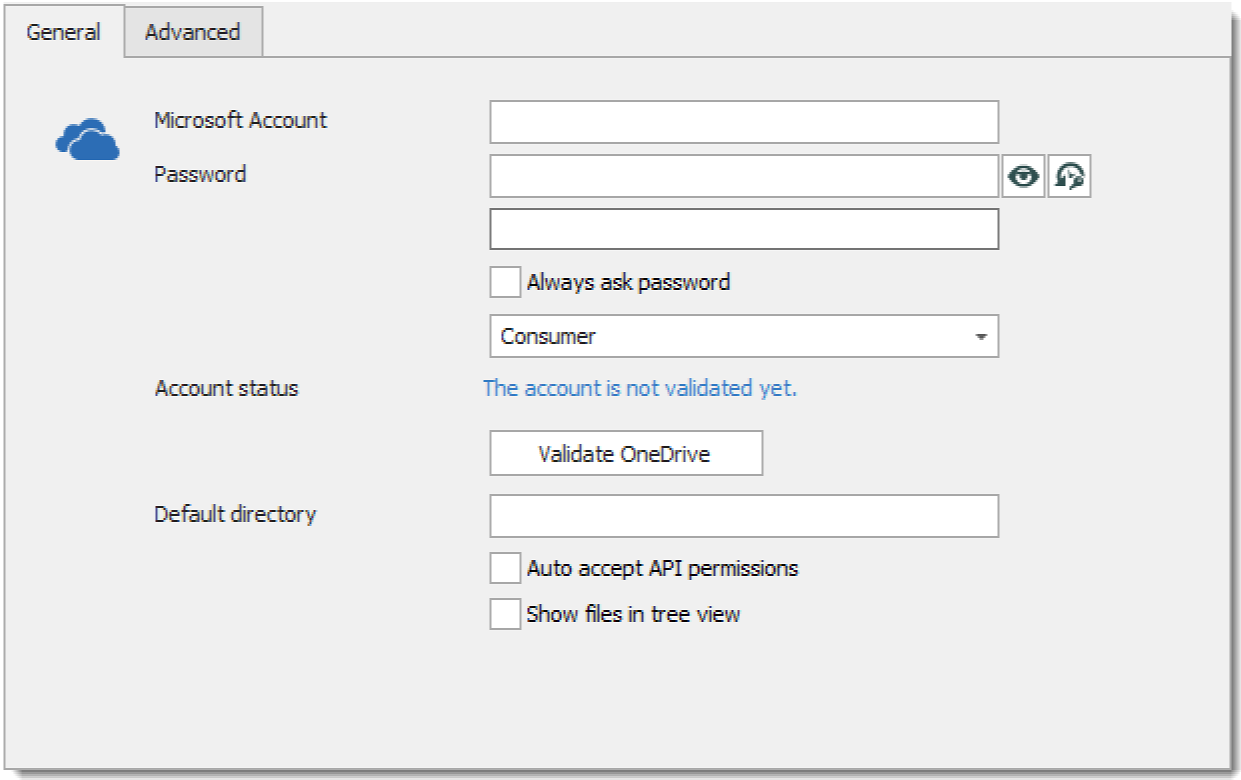
6.2.4.1 Microsoft OneDrive Explorer

SETTINGS

This entry is used to define and configure a **Microsoft OneDrive Explorer** session. Microsoft OneDrive Explorer allows to perform everyday operations with documents stored in Microsoft OneDrive using the Windows Explorer, as if the files were on the local computer.

To configure an OneDrive for Business session, please consult the OneDrive for Business topic.

SETTINGS



Microsoft Account

Password

□ Always ask password

Consumer

Account status: The account is not validated yet.

Default directory

□ Auto accept API permissions

□ Show files in tree view

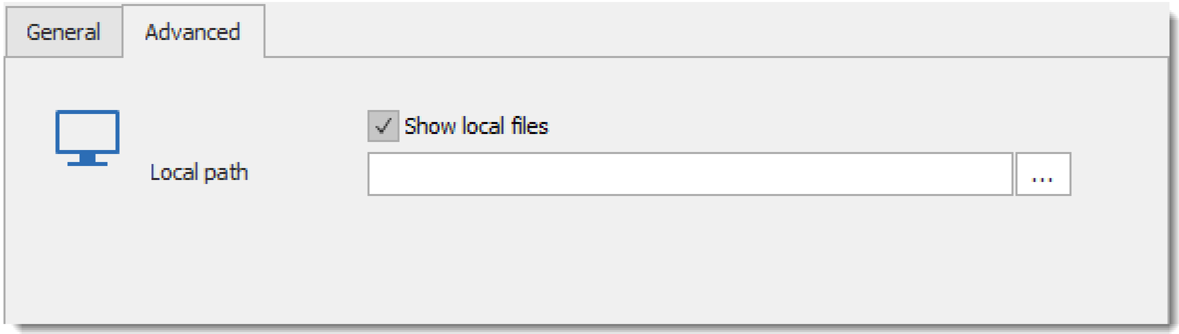
OneDrive Explorer - General Tab

GENERAL

OPTION	DESCRIPTION
Microsoft Account	Enter the email of the Microsoft Account used to access OneDrive.
Password	Enter the password of the Microsoft account used to access OneDrive.
Password Analyzer	Indicates the strength of the password.
Always ask password	Always prompt for the password when the session is launched.

OPTION	DESCRIPTION
OneDrive type	Select your OneDrive type. Select between: - **Consumer** - **Business**
Account Status	This label will tell you whether or not the entry is validated and ready for use.
Validate OneDrive	You can use this toggle on and off the validation of the entry.
Default Directory	Enter the default directory to access OneDrive.
Auto accept API permissions	Automatically accept the API permission. If not enabled you will have to accept the API permission manually when asked to.
Show files in tree view	Display the storage files in the session tree view (display using hierarchy).

ADVANCED



☑ Show local files

Local path

OneDrive Explorer - Advanced Tab

OPTION	DESCRIPTION
Show local files	Show local files in the left pane of the session.

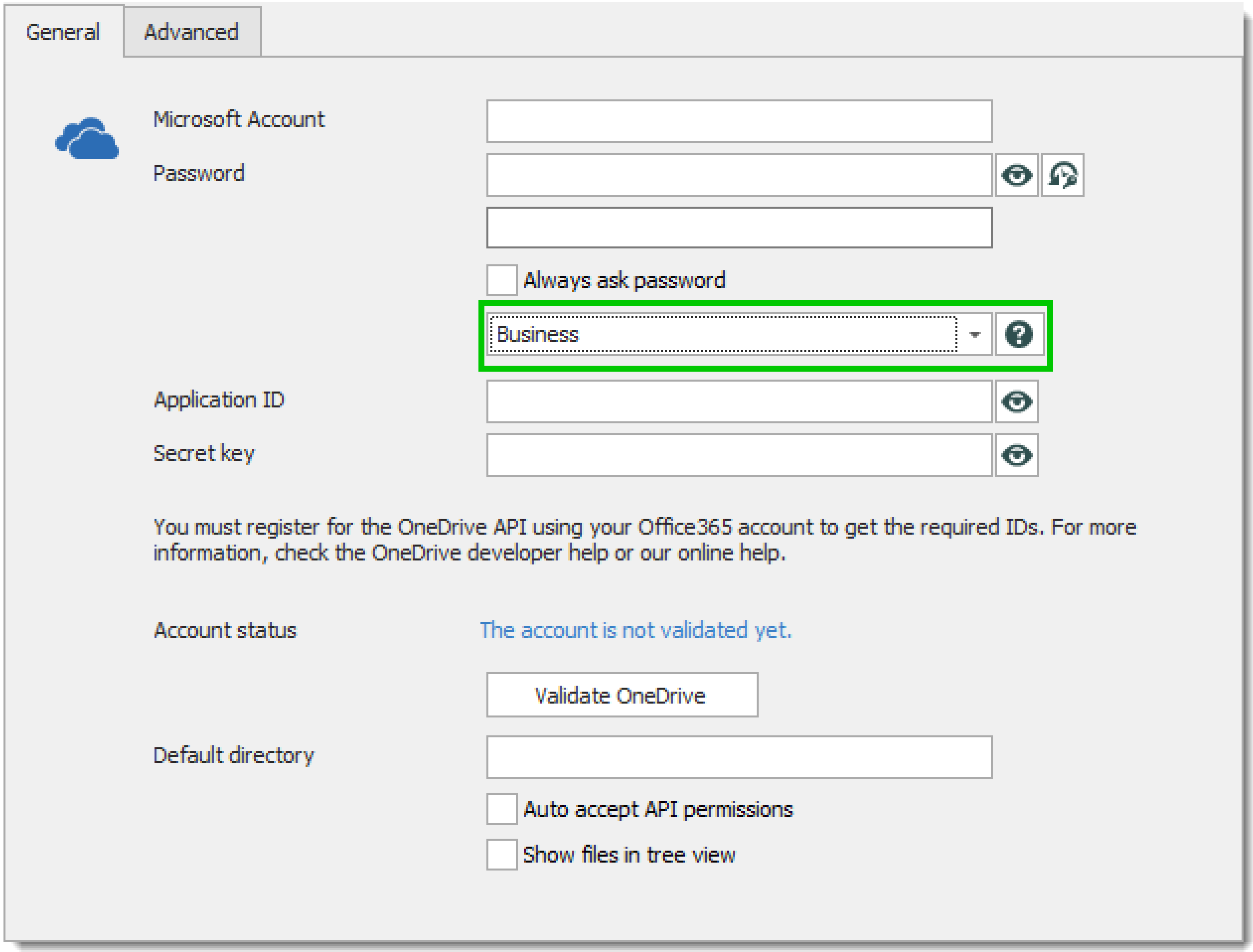
OPTION	DESCRIPTION
Local path	Enter the default local file path to open in the local file pane.

6.2.4.1.1 OneDrive for Business

DESCRIPTION

An **Office 365 subscription** and an **Azure subscription** are required to get started. Remote Desktop Manager must be registered in **Azure Active Directory** and then **request permissions** for OneDrive for Business.

In the properties of a OneDrive Explorer session, select Business as the OneDrive type.



You must register for the OneDrive API using your Office365 account to get the required IDs. For more information, check the OneDrive developer help or our online help.

The account is not validated yet.

OneDrive for Business - General Tab

GENERAL

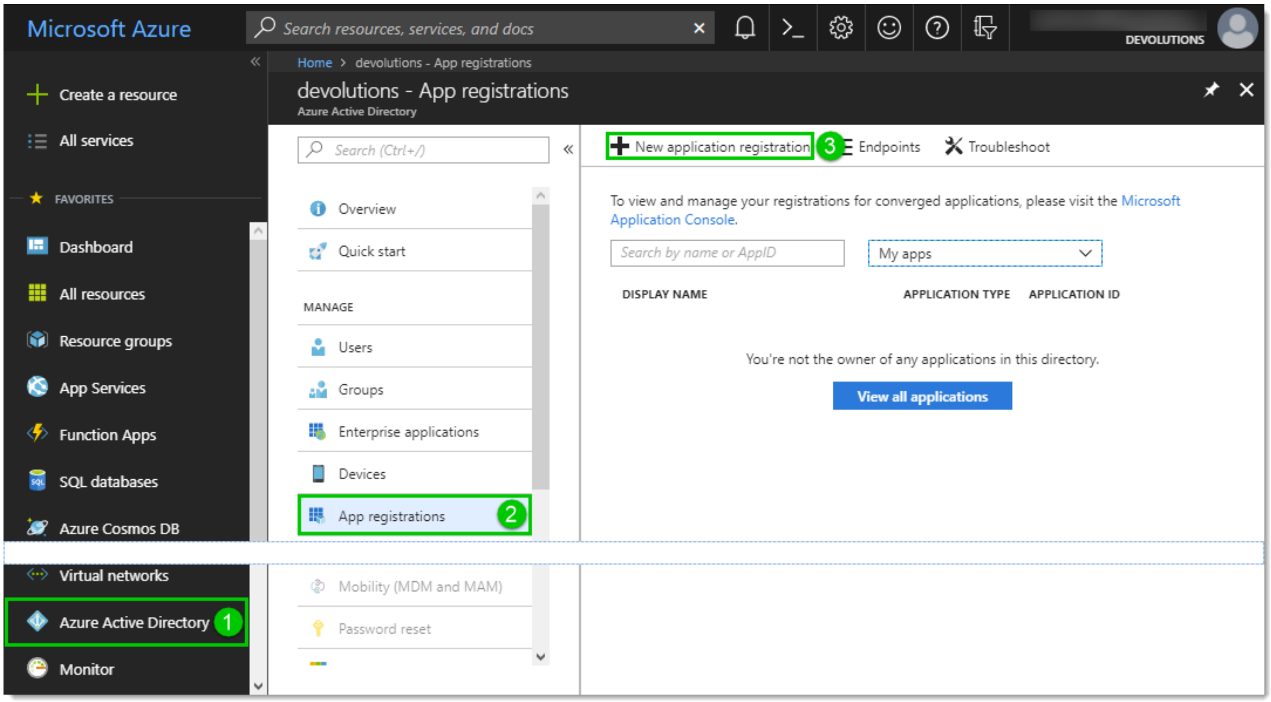
OPTION	DESCRIPTION
Application ID	To obtain your Client ID follow Microsoft OneDrive for Business instructions.
Secret key	To obtain your Secret ID follow Microsoft OneDrive for Business instructions.

REGISTER REMOTE DESKTOP MANAGER WITH THE AZURE MANAGEMENT PORTAL

To authenticate with OneDrive in Remote Desktop Manager, the application must be registered with the **Microsoft Azure Management Portal**.

> For step-by-step information on how to register your application with OneDrive Business and how to specify the Office 365 permissions please follow this link.

1. In the **Azure Active Directory** section, select **App registrations**, then click on **New application registration**.

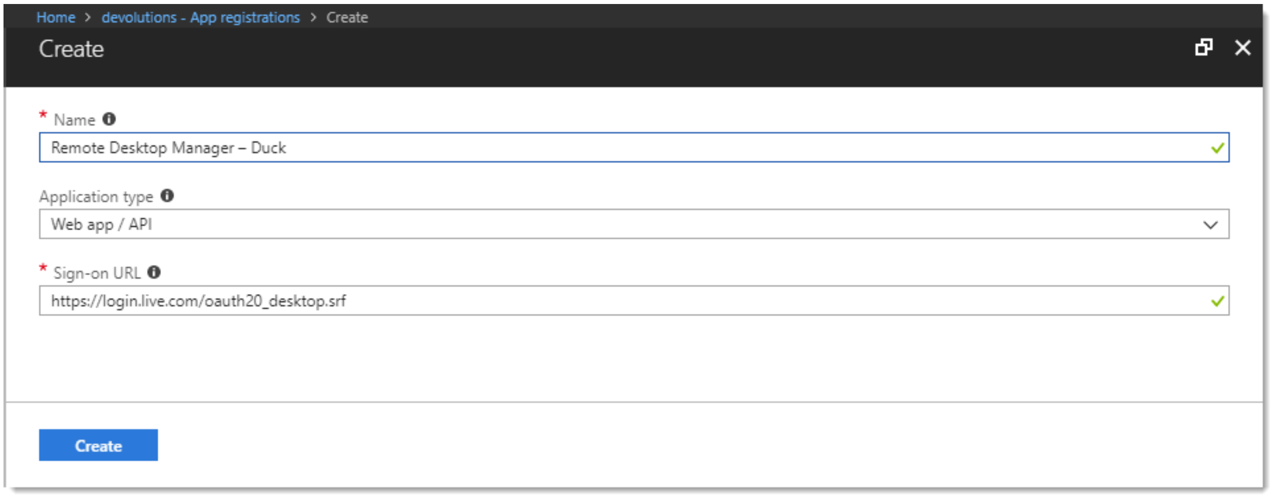


To view and manage your registrations for converged applications, please visit the Microsoft Application Console.

You're not the owner of any applications in this directory.

Microsoft Azure Management - Active Directory

2. Name the application, specify that it is a **Web application**, and also enter https://login.live.com/oauth20_desktop.srf as the **Sign-on URL (Reply URL)** as below.



* Name: Remote Desktop Manager – Duck

Application type: Web app / API

* Sign-on URL: https://login.live.com/oauth20_desktop.srf

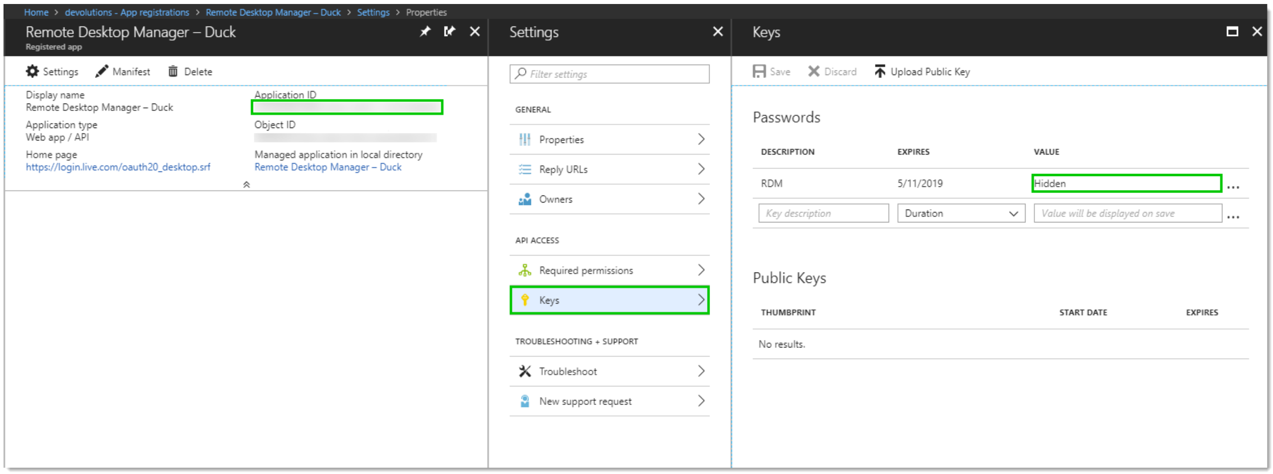
Microsoft Azure Management - Single Sign-on

The only important URL is the **Sign-on URL**. Other URLs will not be used by Remote Desktop Manager.

3. Two alphanumeric keys must be retrieved from the Azure Portal to authenticate Remote Desktop Manager.

3.1. The **Application ID**. Find it in the properties of the registered application.

3.2. The **Secret key**. Find it in the **Keys** blade of the registered application settings. Note that this key is visible only at the time it is generated. Leaving the blade will hide the key indefinitely.



Home > devolutions - App registrations > Remote Desktop Manager – Duck > Settings > Properties

Remote Desktop Manager – Duck
Registered app

Display name: Remote Desktop Manager – Duck
Application ID: [redacted]
Application type: Web app / API
Object ID: [redacted]
Home page: https://login.live.com/oauth20_desktop.srf
Managed application in local directory: Remote Desktop Manager – Duck

Keys – Passwords

DESCRIPTION	EXPIRES	VALUE
RDM	5/11/2019	Hidden
Key description	Duration	Value will be displayed on save

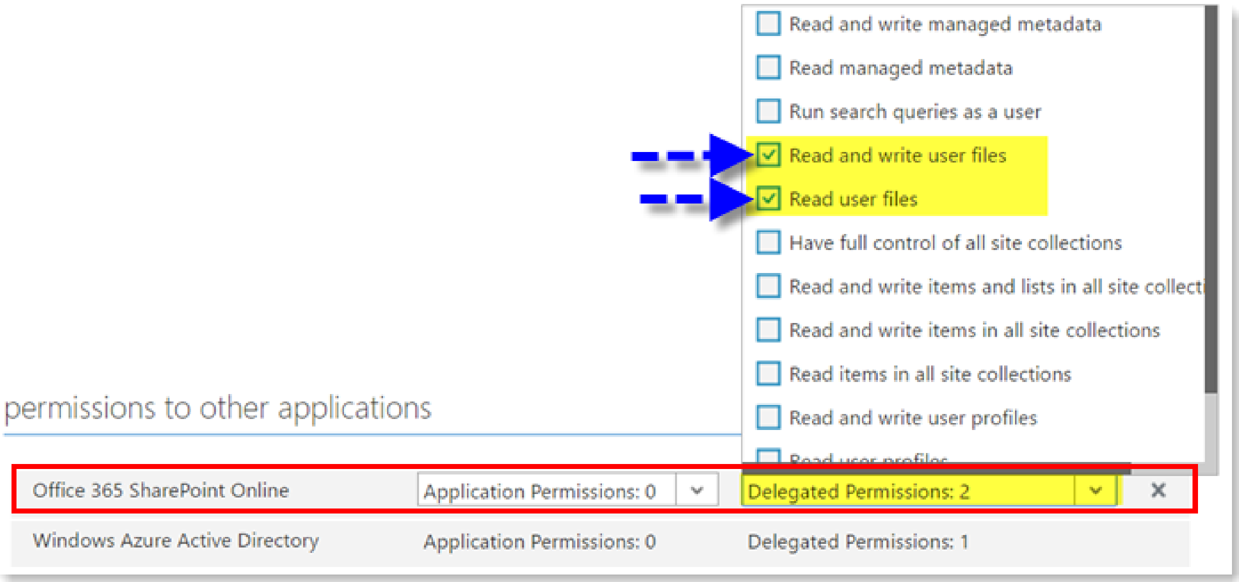
Public Keys

THUMBPRINT	START DATE	EXPIRES
No results.		

Application ID and Secret key

OFFICE 365 API PERMISSIONS

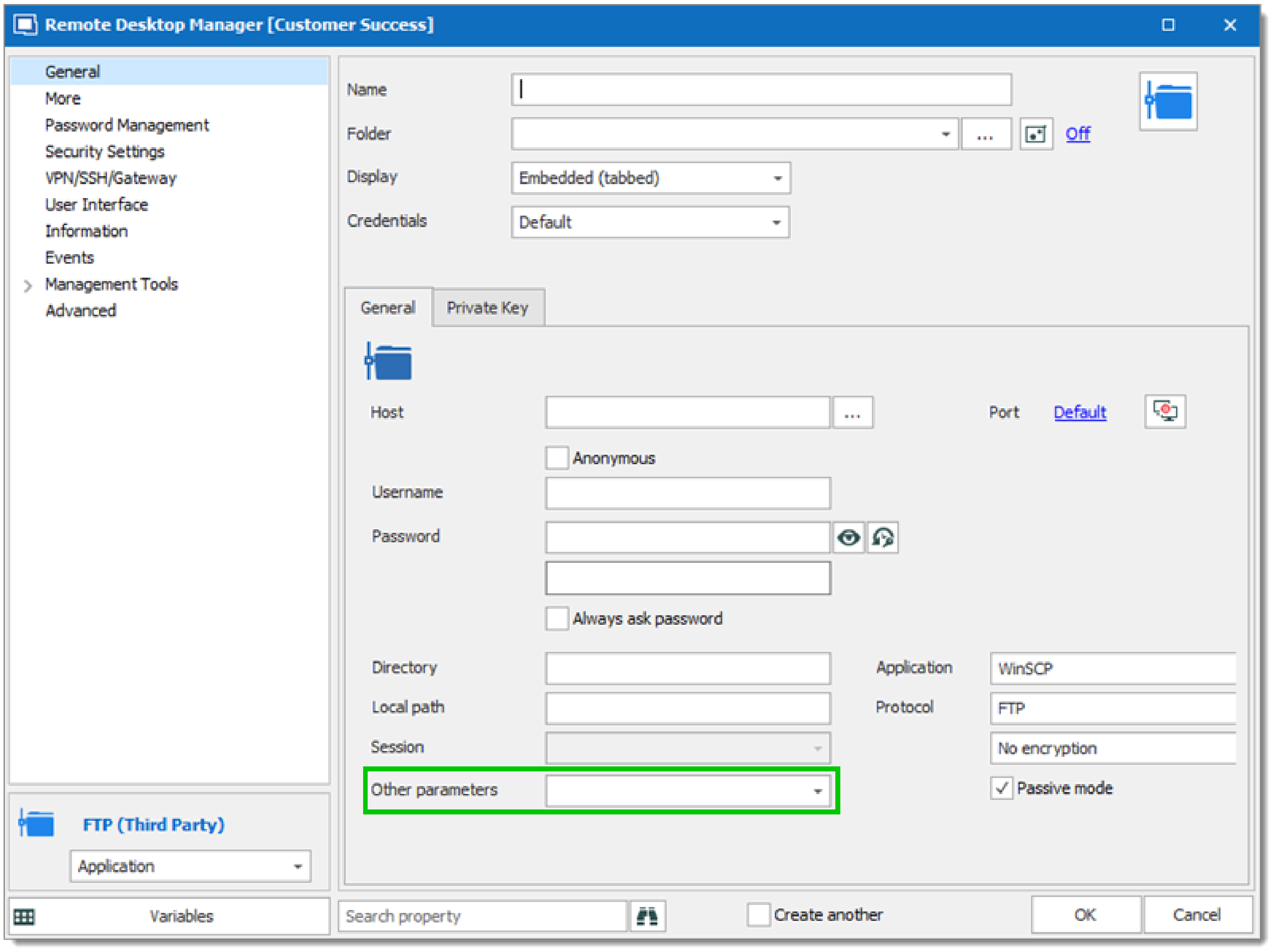
You will need to specify permissions for **Office 365 SharePoint Online** that Remote Desktop Manager requires. In your **permissions to other applications** select the **Delegated Permission** drop down list of your **Office 365 SharePoint Online** and add the **Read and write user files** and **Read user files**.


☐ Read and write managed metadata
☐ Read managed metadata
☐ Run search queries as a user
☑ Read and write user files
☑ Read user files
☐ Have full control of all site collections
☐ Read and write items and lists in all site collecti
☐ Read and write items in all site collections
☐ Read items in all site collections
☐ Read and write user profiles
☐ Read user profiles
permissions to other applications
Office 365 SharePoint Online
Application Permissions: 0
Delegated Permissions: 2
Windows Azure Active Directory
Application Permissions: 0
Delegated Permissions: 1

Office 365 SharePoint Online Permission

6.2.4.2 WinSCP

WinSCP is an open source free SSH client for Windows with the focus on secure file transfer.



Remote Desktop Manager [Customer Success]

Name

Folder

Display: Embedded (tabbed)

Credentials: Default

Host

Port: Default

□ Anonymous

Username

Password

□ Always ask password

Directory

Local path

Session

Other parameters

Application: WinSCP

Protocol: FTP

No encryption

☑ Passive mode

FTP (Third Party)

Application

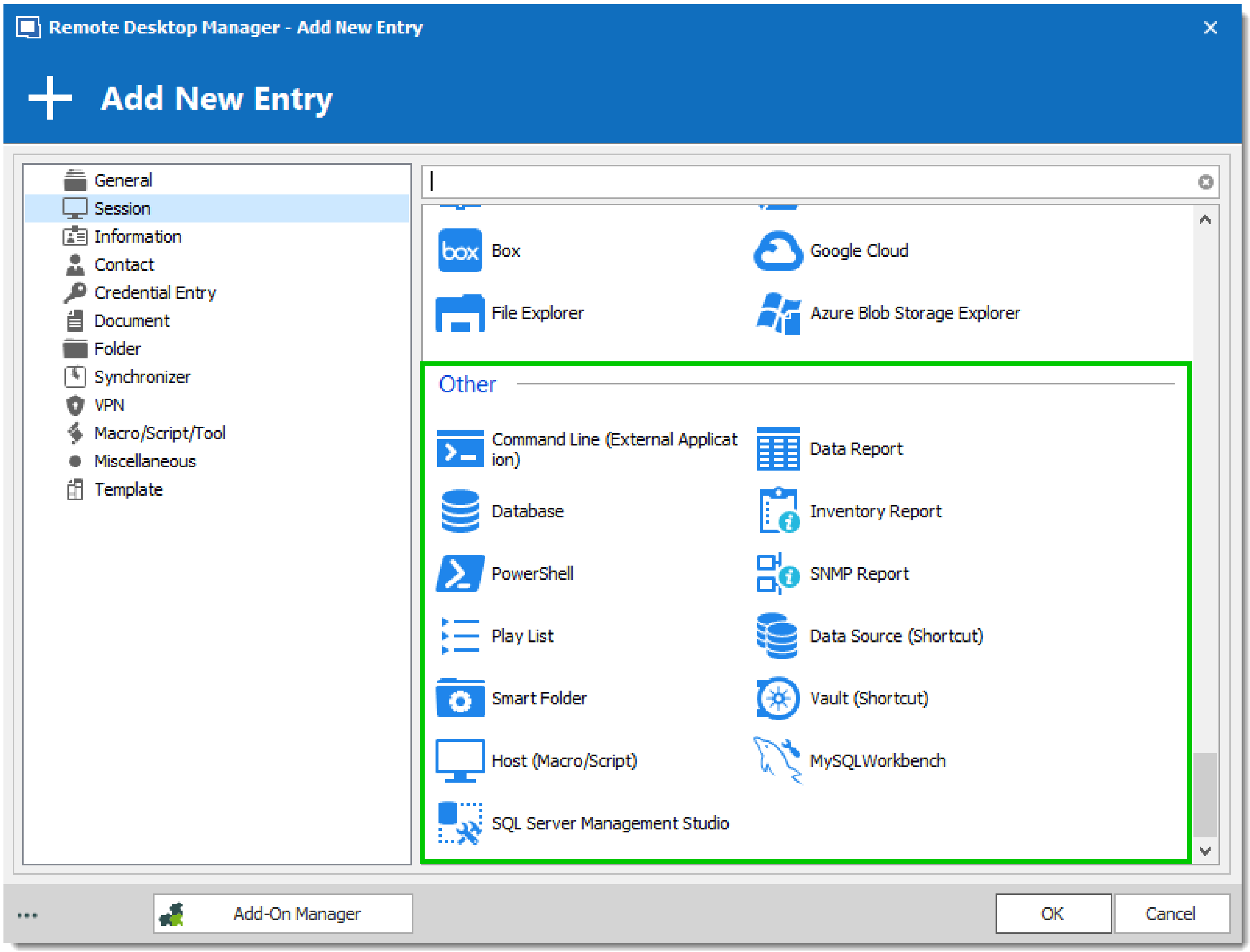
WinSCP Other Parameters

Change the default shell with the **Other parameters** settings in the general tab.

6.2.5 Others

DESCRIPTION

This category contains other kind of session types that can be used.



6.2.5.1 Data Report

DESCRIPTION

This entry is used to define and configure a **Data Report** session. A Data Report is composed of a database connection string and a database query to be executed. The result is displayed in a read only grid with export capabilities. It is useful to quickly integrate data into the application.

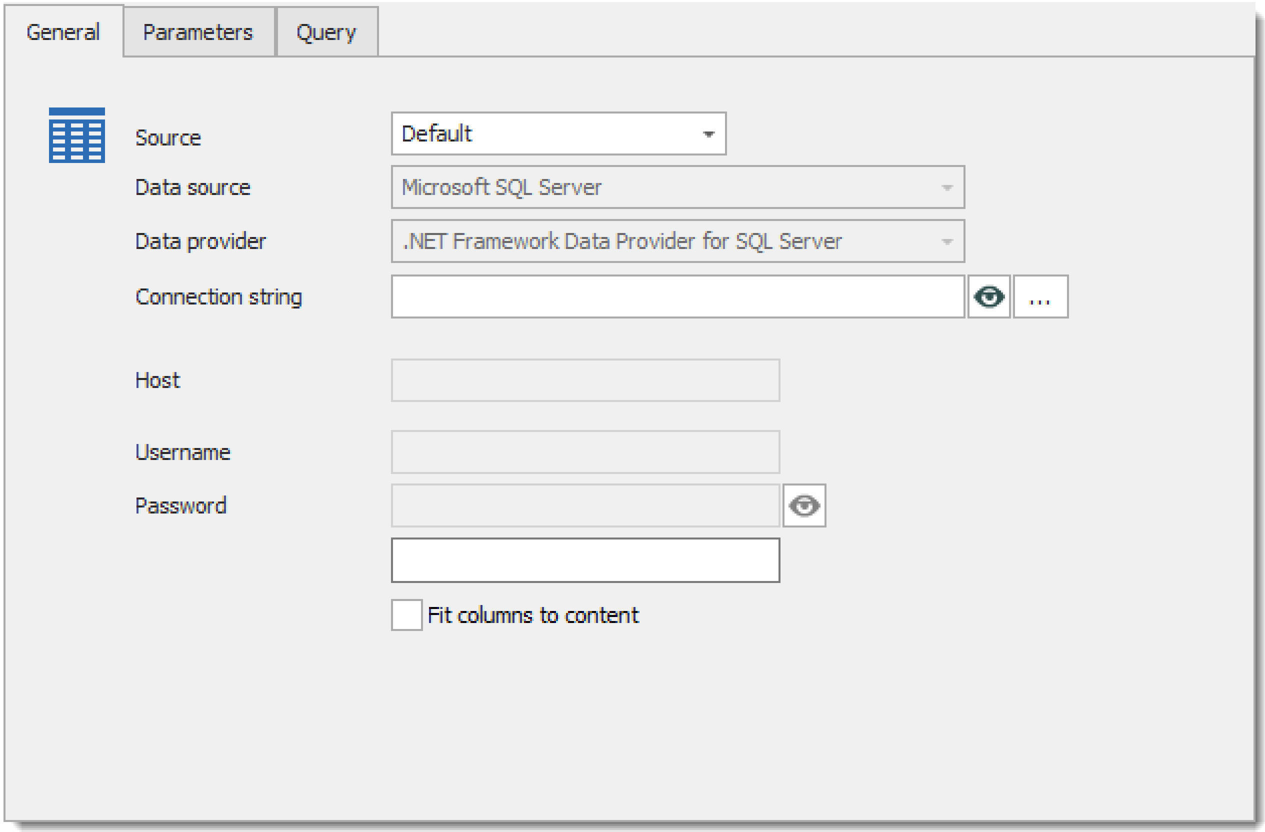
- Auto Login
- Copy Password
- Credential repository
- Embedded Mode
- Show Opened Session
- Support Logging

WORKFLOW

You must configure your connection string and your SQL query. You will also need to know how to write an SQL statement as this is database dependent.

SETTINGS

GENERAL



Source: Default

Data source: Microsoft SQL Server

Data provider: .NET Framework Data Provider for SQL Server

Connection string

Host

Username

Password

□ Fit columns to content

Data Report - General Tab

OPTION	DESCRIPTION
Source	Select your source between: • **Default:** The connection string is defined directly within the session.

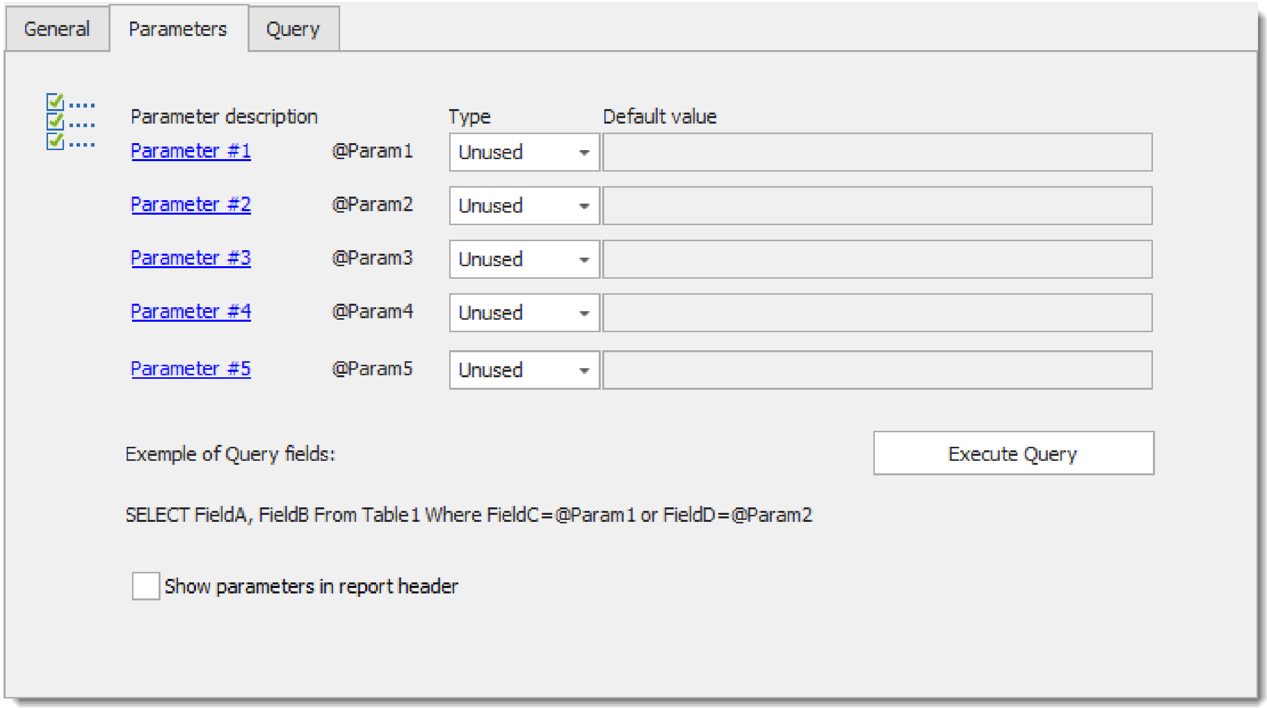
OPTION	DESCRIPTION
	• **Credential repository:** Use a linked Connection String credential entry as the connection string. • **Inherited:** Navigate down the inheritance graph of the object to find the connection string. • **Prompt:** At open connection time, the system will prompt the user to select the desired Connection String from credential entry list.
Data source	Contains the data source type like ODBC, OLEDB or native. This value is read only and is automatically extracted from the connection string.
Data provider	Specify the provider used for the database access. This value is read only and is automatically extracted from the connection string.
Connection string	This value contains the database connection string and can be hidden/encrypted for a better security.
Host	Contains the connection server name. This value is read only and is automatically extracted from the connection string.
Username	Contains the username used to access the database. This value is read only and is automatically extracted from the connection string. If using Windows Authentication the field will be empty.
Password	Contains the username used to access the database. This value is read only and is automatically extracted from the connection string. If using Windows Authentication the field will be empty.

When the source is set to Prompt you will see a dialog box prior to opening the connection.

Only the Connection String credential entries from your data source are listed. Select the entry to use and the report will be executed.

PARAMETERS

Using parameters is quite simple. Write your query with parameter place holders (@Param1 or ? depending of the data provider you use). On the **Parameters** tab define the parameter type and default value. When opening the session, you will be prompted for the parameter values.



Parameter description		Type	Default value
Parameter #1	@Param1	Unused	
Parameter #2	@Param2	Unused	
Parameter #3	@Param3	Unused	
Parameter #4	@Param4	Unused	
Parameter #5	@Param5	Unused	

Exemple of Query fields:

SELECT FieldA, FieldB From Table1 Where FieldC=@Param1 or FieldD=@Param2

□ Show parameters in report header

Data Report - Parameters Tab

Parameter placeholders syntax depends on the chosen data provider:

.NET Framework Data Provider for SQL Server: Uses named parameters in the format @parametername

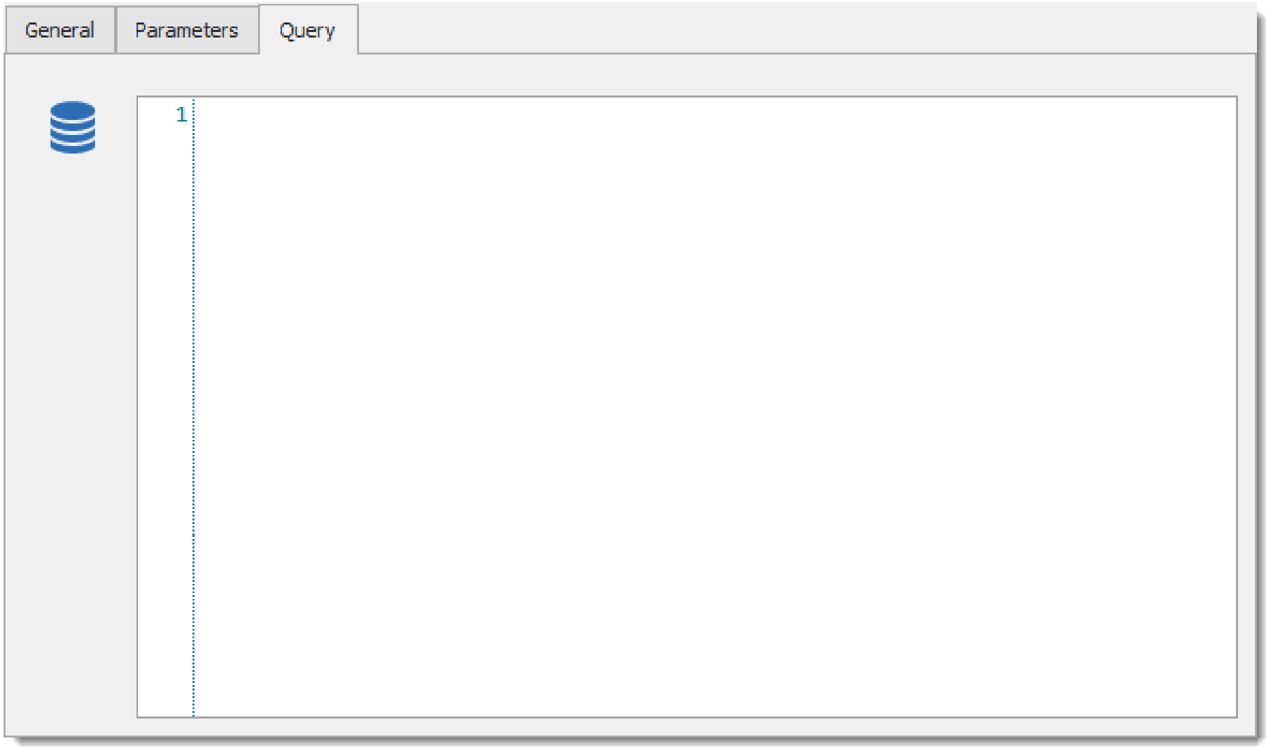
.NET Framework Data Provider for OLE DB: Uses positional parameter markers indicated by a question mark (?).

.NET Framework Data Provider for ODBC: Uses positional parameter markers indicated by a question mark (?)

.NET Framework Data Provider for Oracle: Uses named parameters in the format: parmname

OPTION	DESCRIPTION
Type	Select between 3 types: • **Unused** • **Text** • **Secured** • **Integer** • **Numeric** • **Date** • **DateTime** • **GUID**
Default value	Enter the default value.
Exec Query	Once your have set the default value of your parameter you can execute your query fields.
Show parameters in report header	Show the parameter name in the report header. You can change the parameter name by clicking on Parameter.

QUERY



Data Report - Query Tab

Enter the query in the **Query** tab, which features an SQL syntax-highlighted text box with line numbers which must be compatible with the data provider.

> This supports multiple queries in the statement and will display the results in different tab pages. Most native drivers support it. For ODBC, you must locate an advanced setting named *MultipleActiveResultSets* or *MARS_Connection* and turn it on. If you do not see such a property, then it is not supported by your driver.

TROUBLESHOOTING

While setting up the connection use the **Test Connection** button of the **Connection Properties Window** to ensure the connection is configured properly.

Use the **Exec Query** button on the **Parameters** tab to preview the query result.

More information is available in the Tips and Tricks Data Report topic.

6.2.5.2 PowerShell

DESCRIPTION

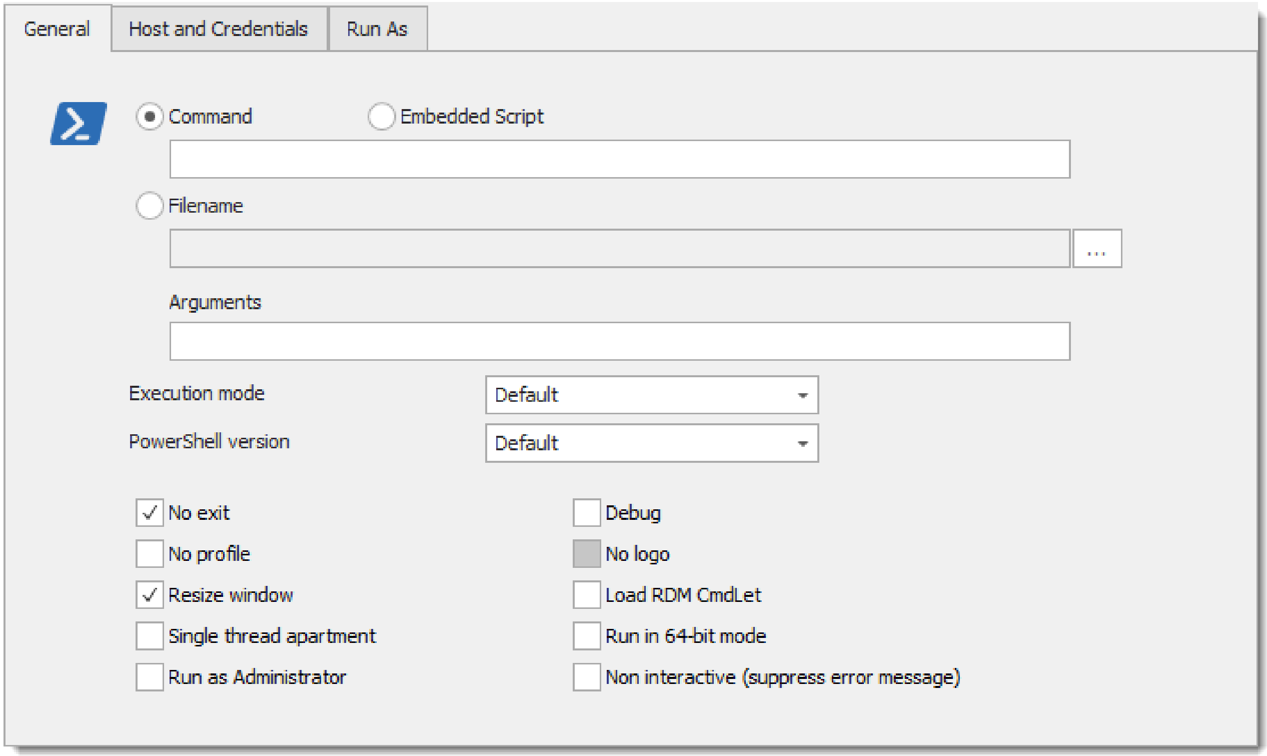
This entry is used to define and configure a **PowerShell** session.

- Auto Login
- Built in
- Copy Password
- Credential repository
- Embedded Mode
- External Mode
- Multi Monitor Support
- Show Opened Session
- Support Logging

SETTINGS

The remote system must be configured to allow remote commands. Please consult Enable and Use Remote Commands in Windows PowerShell.

GENERAL



● Command ○ Embedded Script

○ Filename

Arguments

Execution mode: Default

PowerShell version: Default

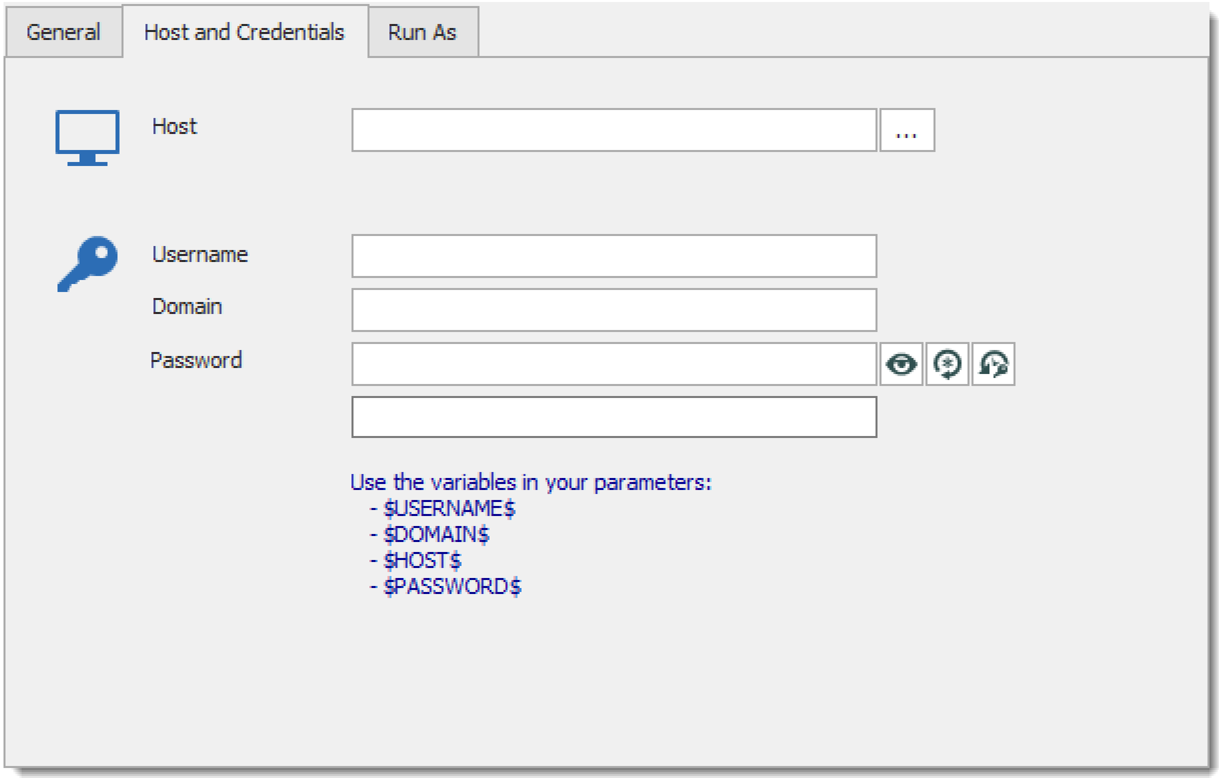
☑ No exit
☐ Debug
☐ No profile
☐ No logo
☑ Resize window
☐ Load RDM CmdLet
☐ Single thread apartment
☐ Run in 64-bit mode
☐ Run as Administrator
☐ Non interactive (suppress error message)

PowerShell - General Tab

OPTION	DESCRIPTION
Command	Enter the PowerShell command.
Filename	Select a PowerShell file on the network or on the computer.
Arguments	Arguments that are appended to the Command.
Execution mode	Select your execution mode between: • **Default** • **Command** • **Encoded command**
PowerShell version	Select your PowerShell version between: • **Default (current version)**

OPTION	DESCRIPTION
	• **Version 2**
No exit	Does not exit after running startup commands
No profile	Does not load the Windows PowerShell profile.
Resize window	Force window resize (buffer & window).
Single thread apartment	Starts Windows PowerShell using a single-threaded apartment
Run as administrator	Run PowerShell command as a administrator.
Debug	Show debug
No Logo	Hides the copyright banner at startup.
Load RDM CmdLet	Load RDM CmdLet Snap-in in the PowerShell session.
Run in 64-bit mode	Run RDM CmdLet in 64 bits version.
Non interactive (suppress error message)	Does not present an interactive prompt to the user.

HOST AND CREDENTIALS

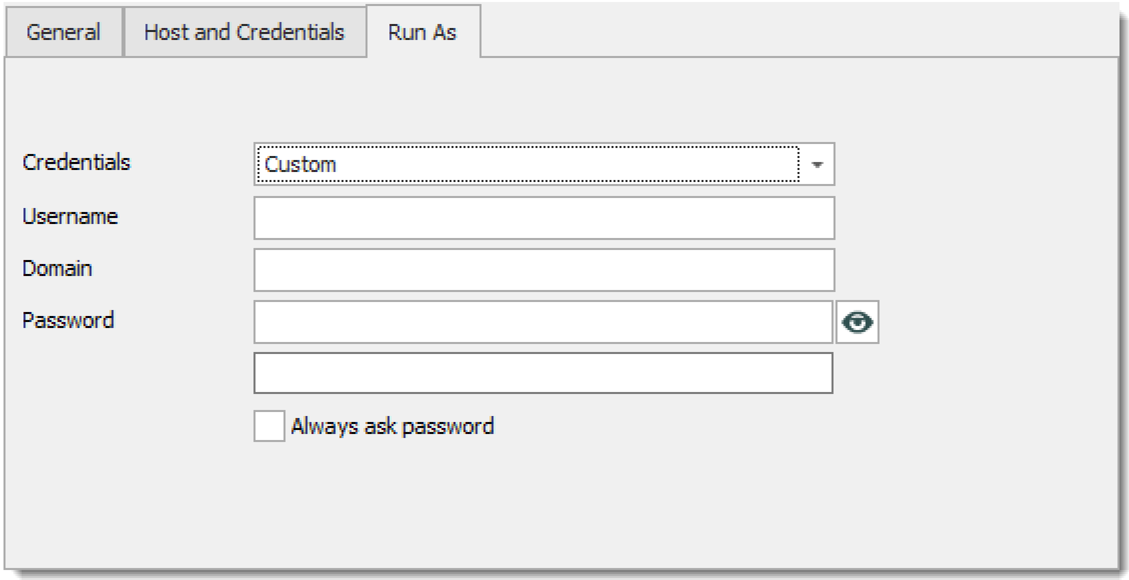


Use the variables in your parameters:
- $USERNAME$
- $DOMAIN$
- $HOST$
- $PASSWORD$

PowerShell - Host and Credentials Tab

OPTION	DESCRIPTION
Host	Select the host computer to execute the Powershell command.
Username	Enter the username to access the host computer.
Domain	Enter the domain to access the host computer.
Password	Enter the password to access the host computer.

RUN AS



Credentials: Custom

Username:

Domain:

Password:

□ Always ask password

PowerShell - Run As Tab

OPTION	DESCRIPTION
None	Will not be running the session as a different user.
Current session	Use the same credentials as defined in the session.
Custom	Use specified custom credentials.
Credential repository	Use a linked **Credentials Entry** in Remote Desktop Manager, which can can be external credentials like KeePass for example. Very useful for sharing or reusing credentials among entries.
My personal credentials	Please consult My Personal Credentials for more information.

6.2.5.3 SNMP Report

DESCRIPTION

This entry is used to define and configure a **SNMP Report** session. SNMP Reports will provide you information from devices on your network such as routers, switches, servers, workstations, printers and more.

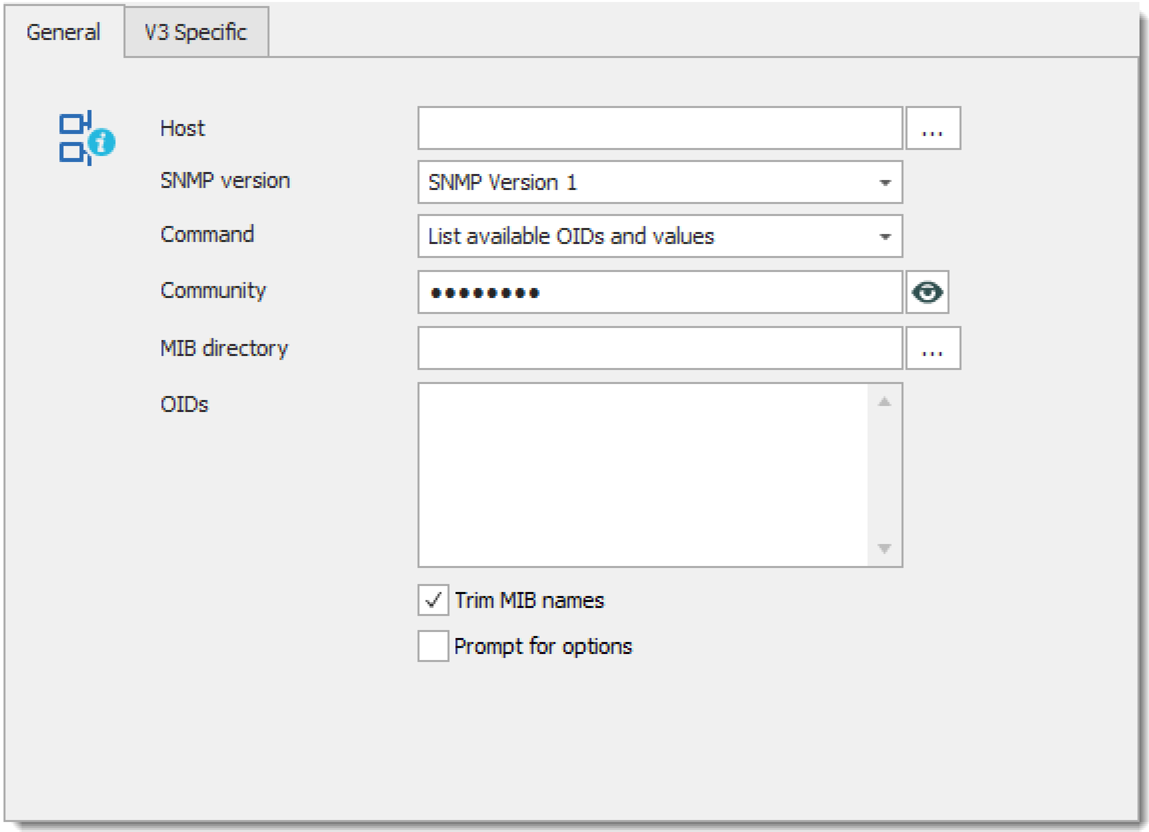
> Remote Desktop Manager uses a specific tool (NET-SNMP) for the SNMP Report. You will be prompted to download the tool if it wasn't already installed on your computer.

You can use the following SNMP versions to run your SNMP reports entries

- SNMP Version 1
- SNMP Version 2c
- SNMP Version 3

SETTINGS

GENERAL



Host

SNMP version: SNMP Version 1

Command: List available OIDs and values

Community: ●●●●●●●●

MIB directory

OIDs

☑ Trim MIB names

□ Prompt for options

SNMP Report - General Tab

OPTION	DESCRIPTION
Host	Host name / IP address of host.
SNMP version	Select your SNMP version between: • **SNMP Version 1** • **SNMP Version 2c** • **SNMP Version 3**
Command	Determine the content of the report between: • **List available OIDs and values** • **Get specific OIDs values** • **Status of the host**

OPTION	DESCRIPTION
Community	Community equal to the password. By default, the password is the word public.
MIB Directory	Location of the MIB database.
OIDs	Object identifier for an object in the MIB. This help you reduce the items in the report.
Trim MIB names	Remove MIB names.
Prompt for options	Options to change the command or to specify an OIDs before the report execution.

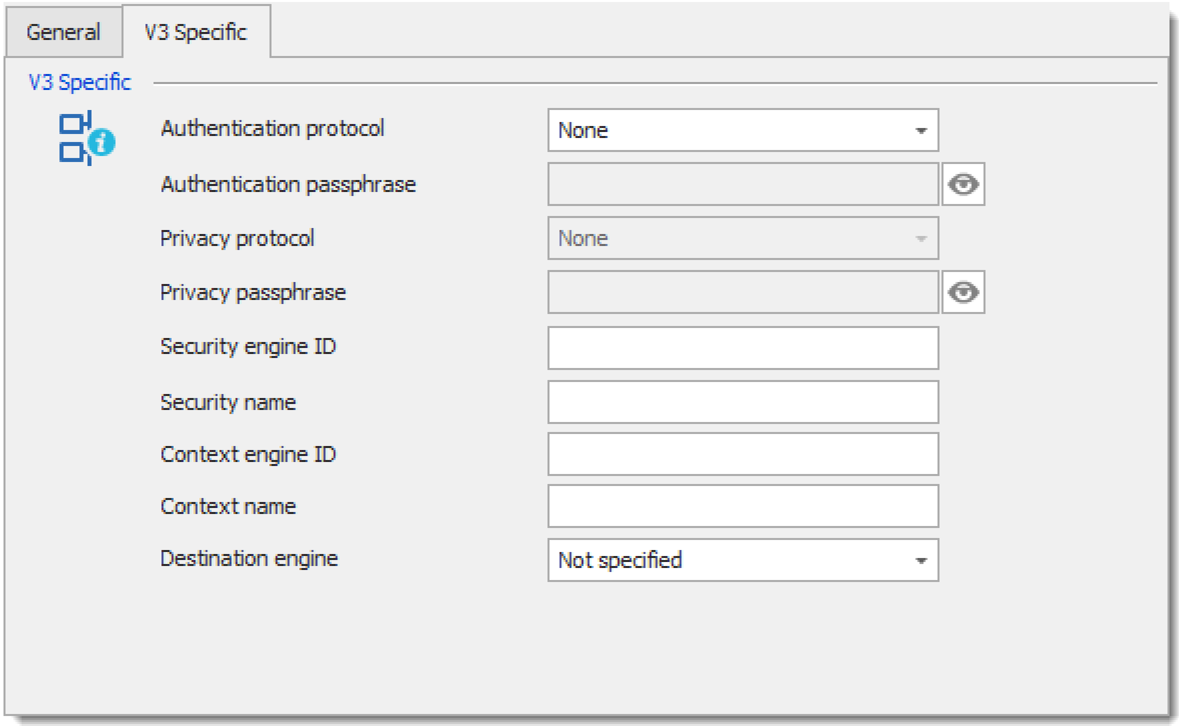
More commands can be added to Remote Desktop Manager upon request, please post a feature request on our forum.

OIDS EXAMPLES

- sysDescr.0
- sysObjectID.0
- sysUpTimeInstance
- sysContact.0
- sysName.0

V3 SPECIFIC

If your network uses the SNMP V3, you will also need to enter information in the V3 Specific tab.



Authentication protocol	None
Authentication passphrase	
Privacy protocol	None
Privacy passphrase	
Security engine ID	
Security name	
Context engine ID	
Context name	
Destination engine	Not specified

SNMP Report - V3 Specific Tab

OPTION	DESCRIPTION
Authentication protocol	Select your authentication protocol between: • **None** • **MD5** • **SHA**
Authentication passphrase	Enter your authentication protocol password.
Privacy protocal	Choose between None or DES
Privacy passphrase	Enter your privacy protocol password.
Security engine ID	Enter your security engine ID which is part of the target host configuration

OPTION	DESCRIPTION
Security name	Enter your security name which is part of the target host configuration
Context engine ID	Scanning engine to retrieve context-sensitive information from the target host.
Context name	Scanning engine to retrieve context-sensitive information from the target host.
Destination engine	Select your destination engine between: • **Not specified** • **Boots** • **Time**

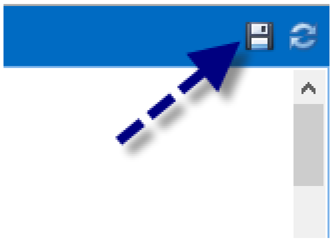
FUNCTIONS

EXECUTION LOGS

When a SNMP Report is open, at any time you can look at the bottom in the execution log window to see if the report has encountered a problem.

SAVE

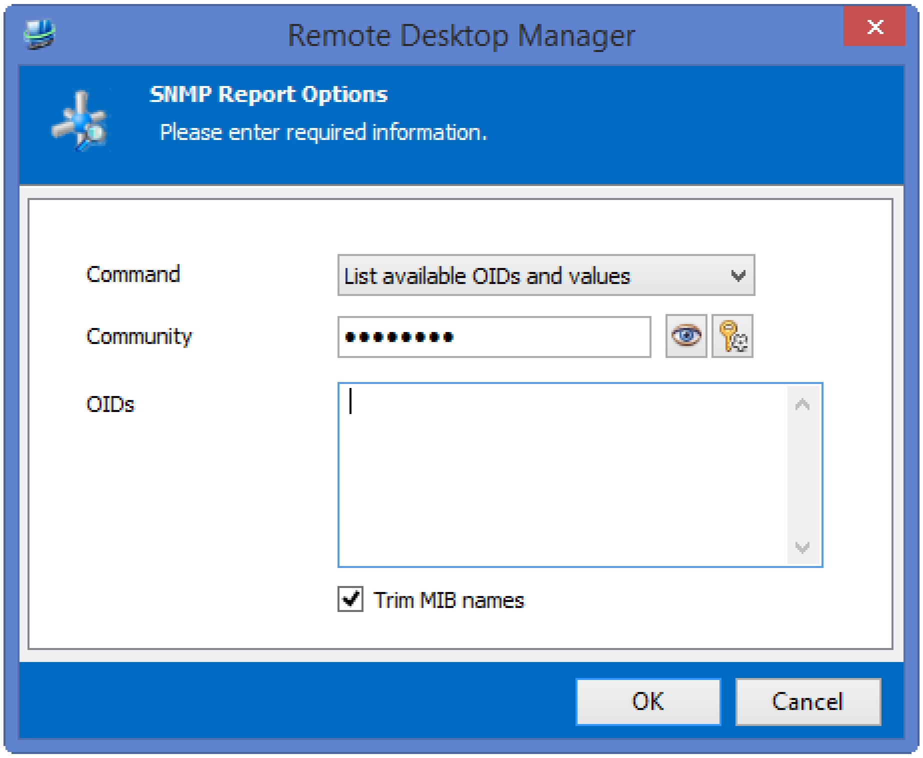
You can save the report or the execution log in a Text document to keep your information or to print it.



Save button

REFRESH

The refresh button 🔄 can be used to refresh your report or to generate a different report from the current one. You can change the Command and/or specify some OIDs.



Command: List available OIDs and values

Community: ●●●●●●●●●

OIDs:

☑ Trim MIB names

Refresh window

6.2.5.4 SQL Server Management Studio

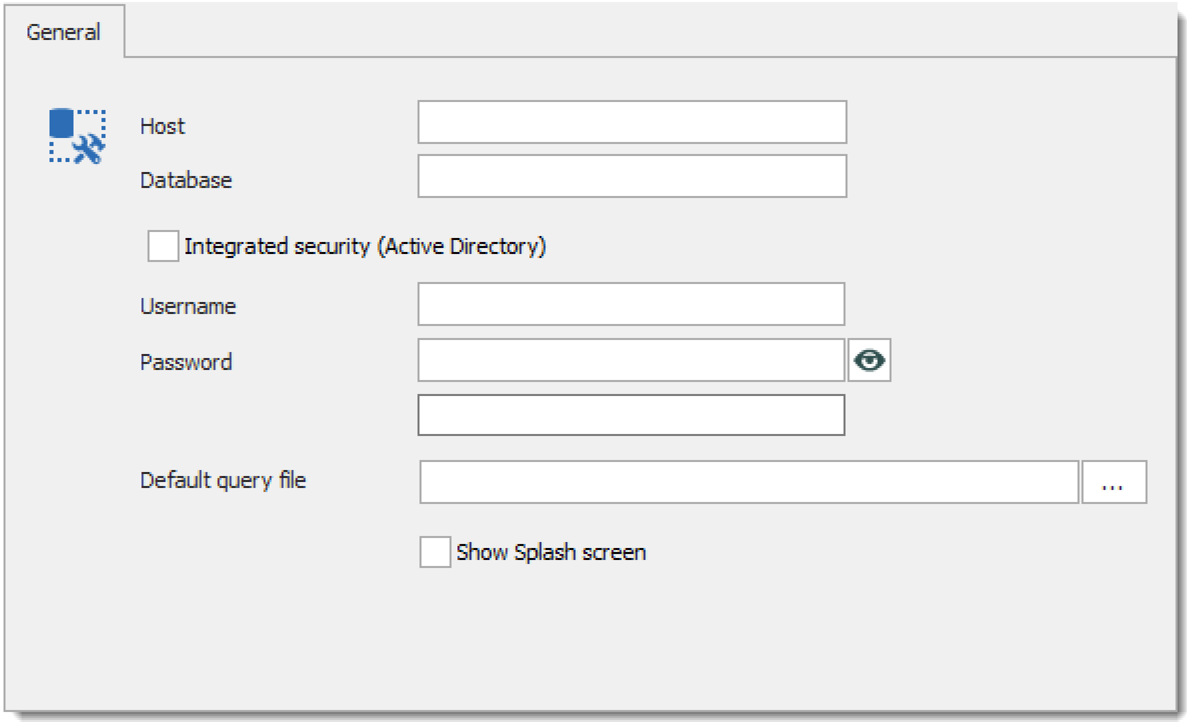
DESCRIPTION

This entry is used to define and configure a ***SQL Server Management Studio*** session.

- Auto Login
- Built in
- Copy Password
- Credential repository
- Embedded Mode
- Show Opened Session
- Support Logging

If you are sending a command line from a computer that is not on the domain to a computer that is on the domain, check **Net Only** when using **Run As different user**.]

SETTINGS



General

Host

Database

□ Integrated security (Active Directory)

Username

Password

Default query file

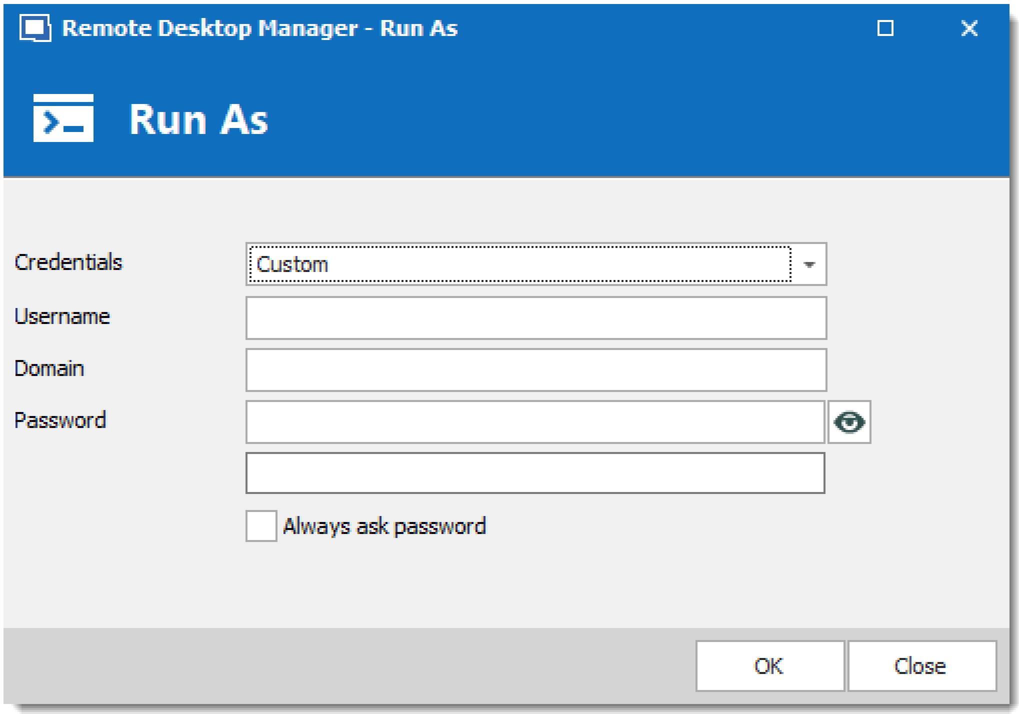
□ Show Splash screen

SQL Server Management Studio - General Tab

OPTION	DESCRIPTION
Host	Enter the full Host name. If a default instance has been used, you could just enter the server name.
Database	Enter the SQL database you wish to connect upon login (optional).
Integrated security (Active Directory)	Enable this option if you wish to use Active Directory.

OPTION	DESCRIPTION
Run as different user (Active Directory only)	If using Integrated security you have the option of running your session as a different user.
Net Only (Active Directory only)	If you are sending a command line from a computer that is not on the domain to a computer that is on the domain, enable the **Net Only** setting for credentials of the **Running As**.
Username	Enter the username for the SQL Server Authentication.
Password	Enter the password for the SQL Server Authentication.
Default query file	Specify the file to be opened in the editor. Please see Add-On documentation for more information.
Show splash screen	Enable SQL Server Management Studio to display its splash screen.

If choosing **Run as different user** you will have to specify which credentials to use when starting with Run As.



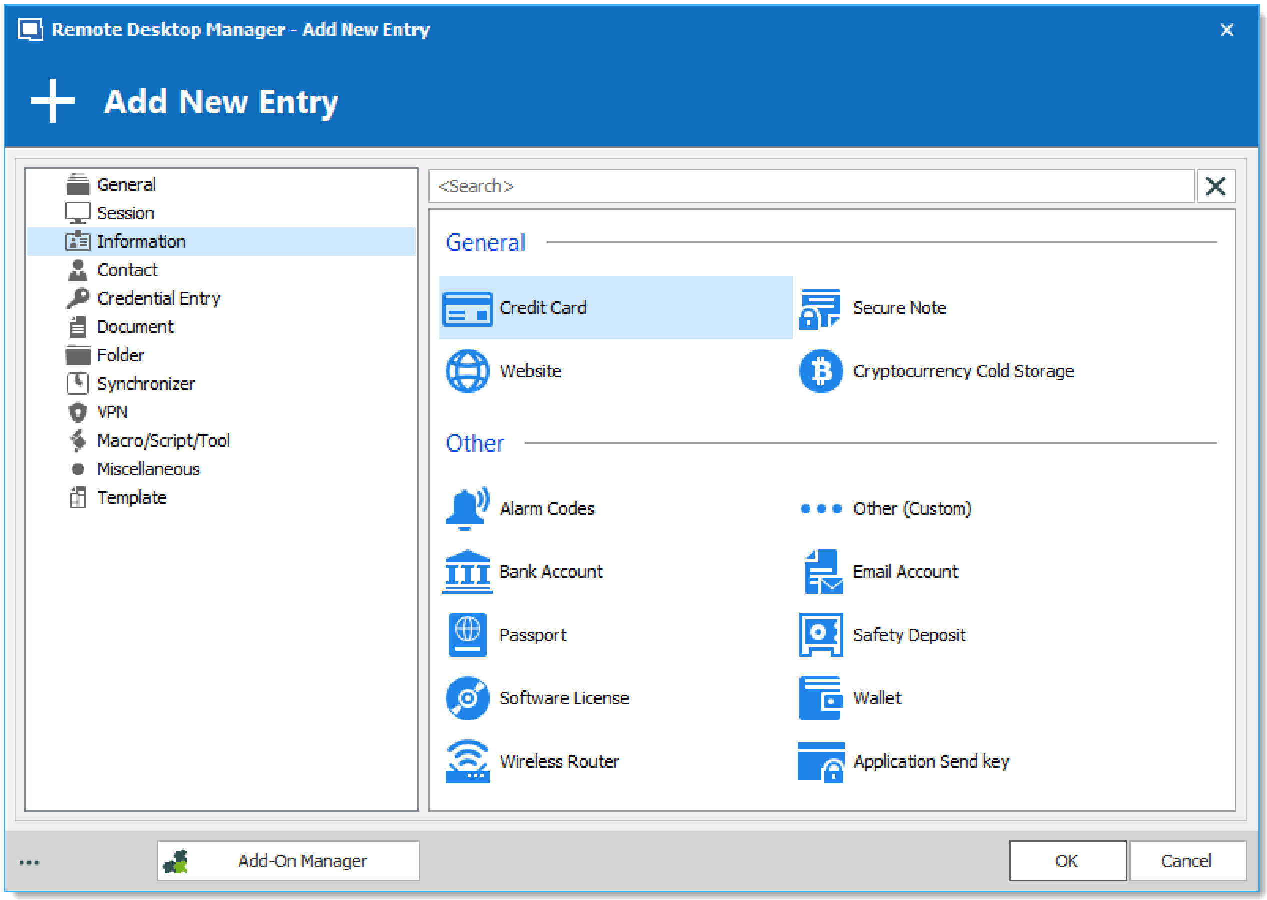
Credentials: Custom
Username
Domain
Password
□ Always ask password

Run as options

OPTION	DESCRIPTION
None	Will not be able to run your session as a different user.
Current session	Use the same credentials as the ones defined in the session
Custom	Use specified custom credentials to be defined in the username, password and domain fields.
Credential repository	Use a link to an already existing credential entry.
My personal credentials	Use a link to your private credentials entry.

6.3 Information

Information entries are used to store information that is meant to be shared with other users of the data source, such as websites, alarm codes, serial numbers, etc.

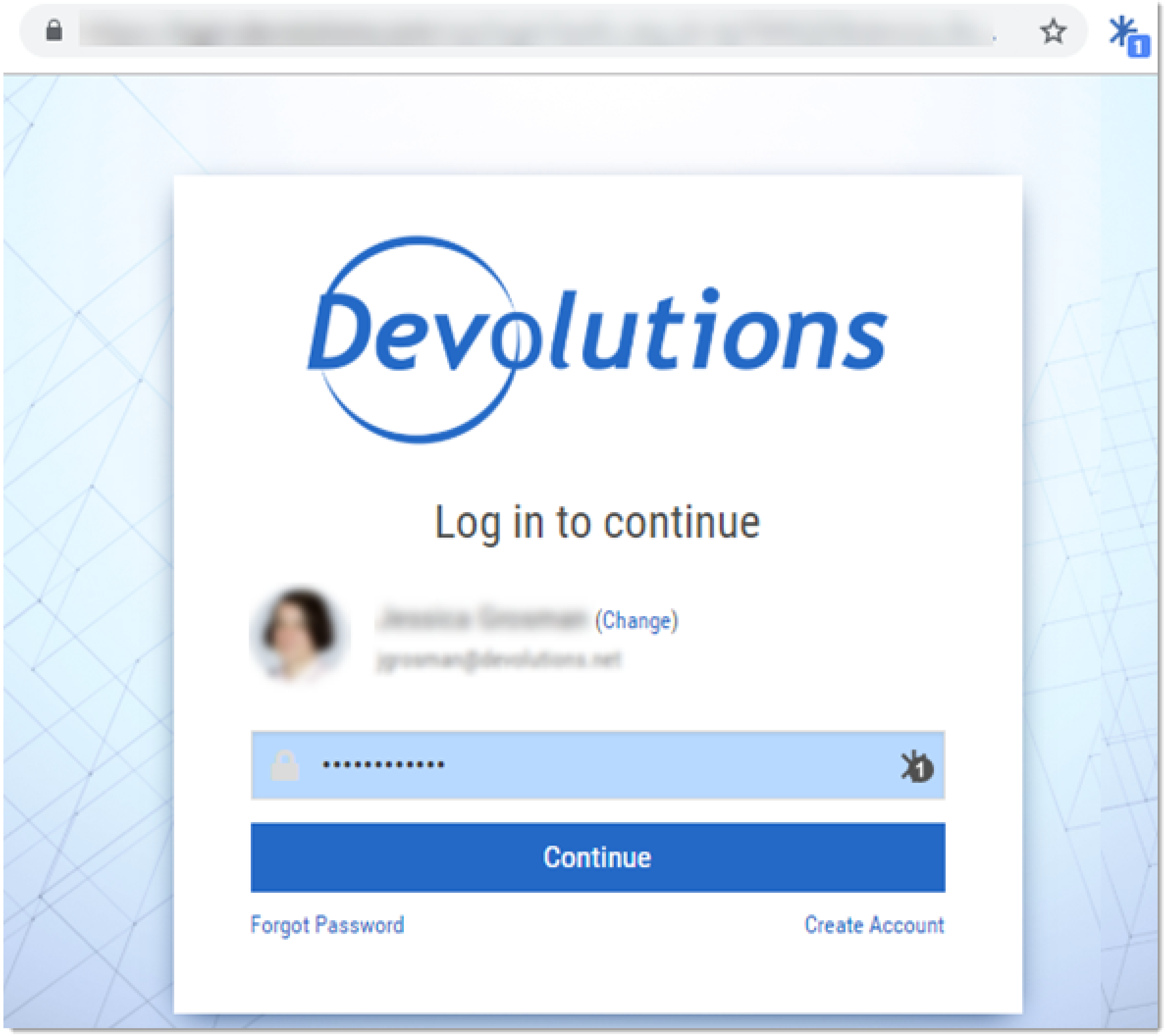


Add a new Information Entry

WEBSITES

The **Website** entry is for online accounts. It can store a website url address and a set of credentials. The website can be opened in Remote Desktop Manager or externally.

The entry can be linked with our Devolutions Web Login browser extension. When opening a website externally our browser extension Devolutions Web Login fills the username and password for you.



Example of Devolutions Web Login injecting a password for an online log-in form

6.4 Contact

DESCRIPTION

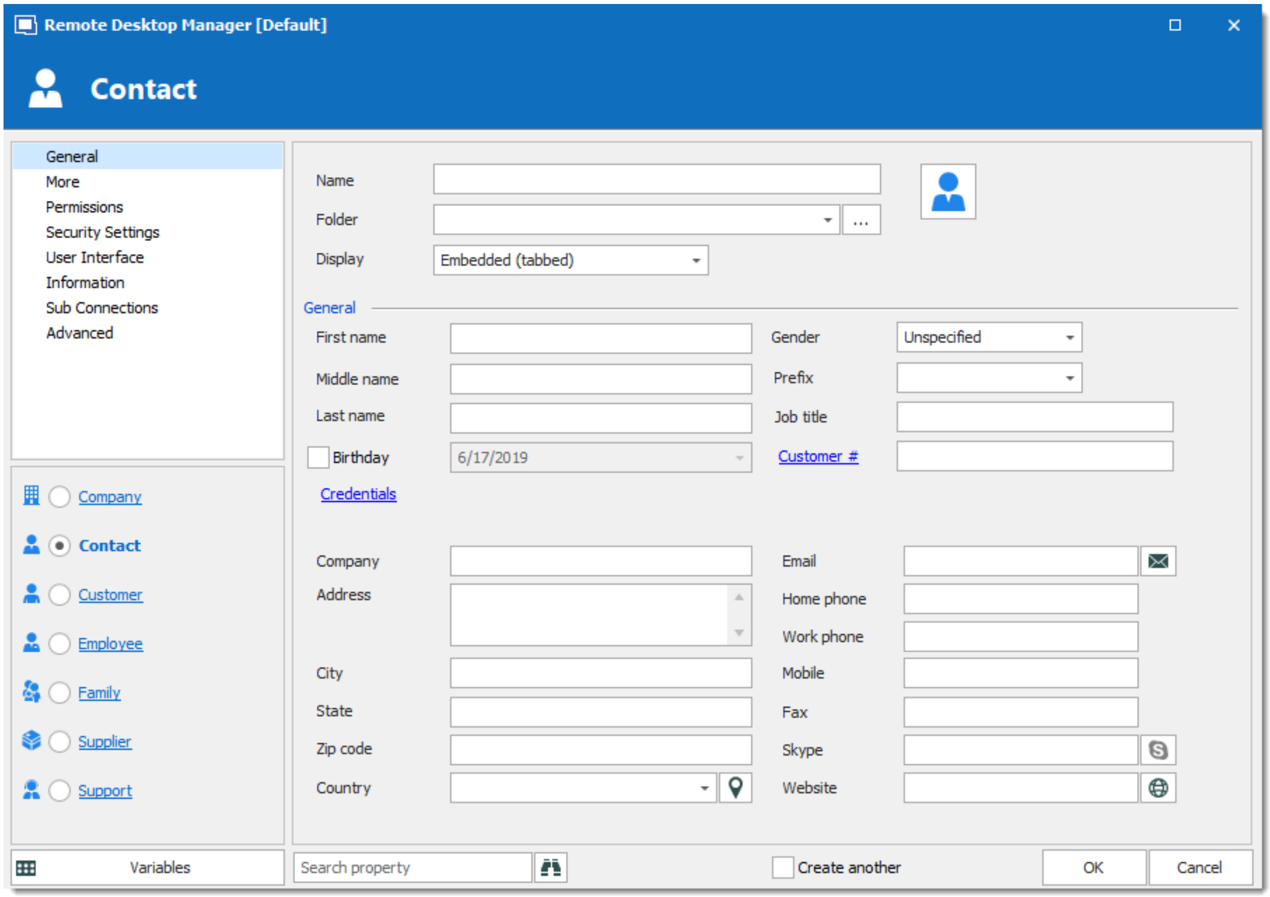
Contact entry types are used to manage your contacts in Remote Desktop Manager.

SETTINGS

You can choose between 7 different types of contacts:

CONTACT TYPE		DESCRIPTION
Company	🏢	Used to define and configure a "Company" contact.
Customer	👤	Used to define and configure a "Customer" contact.
Default	👤	Used to define and configure a contact with no defined type. Use this type of entry if your contact does not fit in any other category.
Employee	👤	Used to define and configure a "Employee" contact.
Family	👪	Used to define and configure a "Family" contact.
Supplier	🎁	Used to define and configure a "Supplier" contact.
Support	🎧	Used to define and configure a "Support" contact.

Enter all the information related to a contact to create your entry.



Display: Embedded (tabbed)

Gender: Unspecified

Birthday: 6/17/2019

Contact Entry

GENERAL

Use this subsection to enter basic information about the contact, such as their name, gender and job title.

The **Credentials** link allows to embed a set of credentials in the entry.

Click on the **Customer #** link to change the name of the field.

ADDRESS

Use the middle-left subsection to enter information about the contact's company and address.

Use the **View Map** 📍 button to open Google Maps with your default web browser.

COMMUNICATION

Use the middle-right subsection to enter the contact's communication information, such as their email address or phone number.

Click on the **Email Contact** ✉ button to send an email to the specified email address with your default email application.

Click on the **Call (Skype)** Ⓢ button to call the specified number with Skype. A Skype username can also be specified in the Skype field.

Click on the **Open Website** 🌐 button to navigate to the specified website with your default web browser.

6.5 Credentials

DESCRIPTION

Credential entries store account information, such as usernames, passwords, domains, etc. Credentials entries are grouped in a Credential repository, a collection of all the credentials stored in the data source.

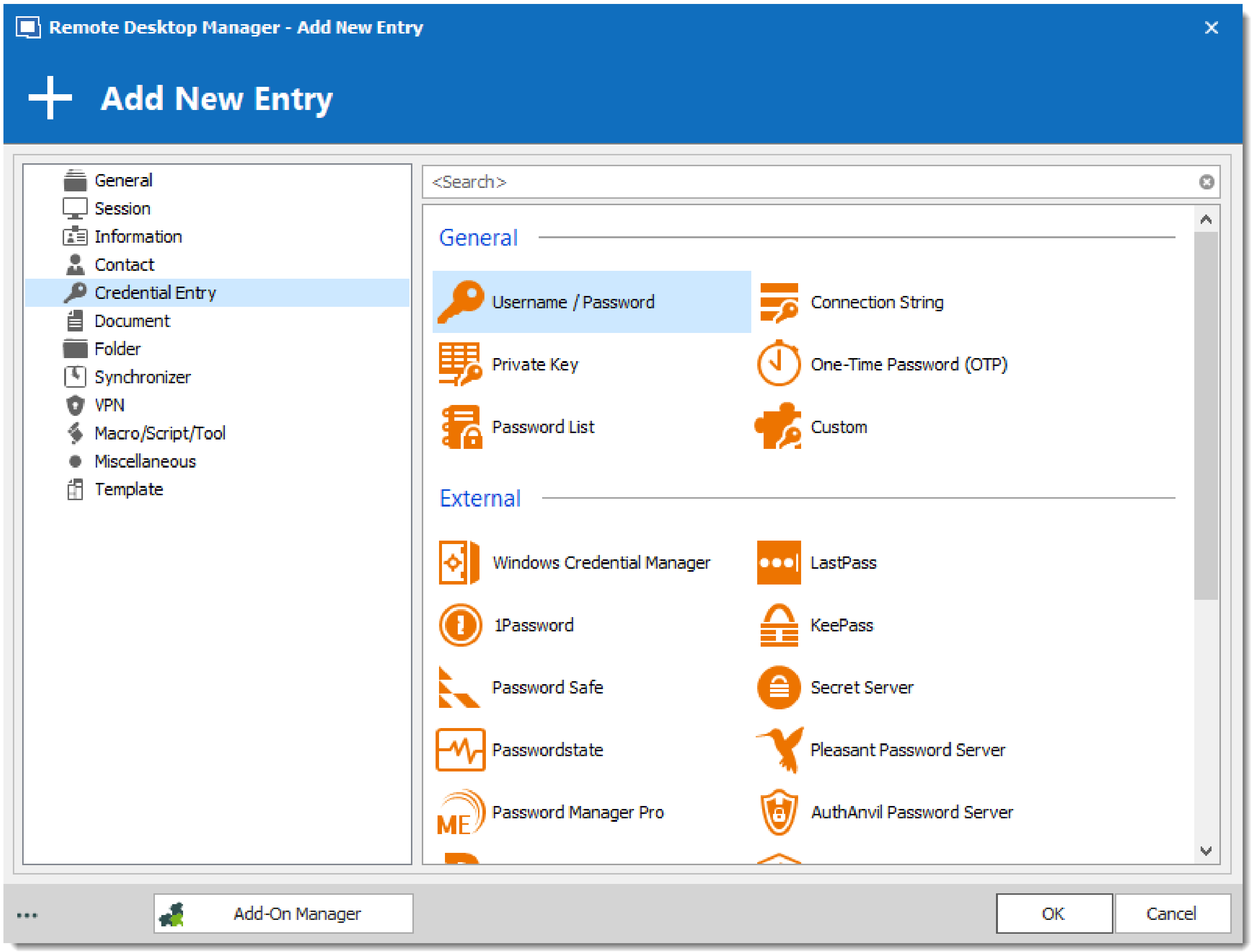
Credential entries offer flexibility in ***Remote Desktop Manager***.

- Set multiple sessions to use a specific credential entry in the data source. Choose **Credential repository** from the **Credentials** list in the entry properties. One benefit is you only need to change information in one entry, when required. See **Credential repository** below.

- Use Dynamic Credential Linking and Credential Redirection with third-party password managers.

- Configure User Specific Settings or a Private Vault Search in entry properties to link credentials stored in a Private Vault with entries in shared Vaults.

To create a credential entry, use the **New Entry** ✚ button and select the **Credentials** section.

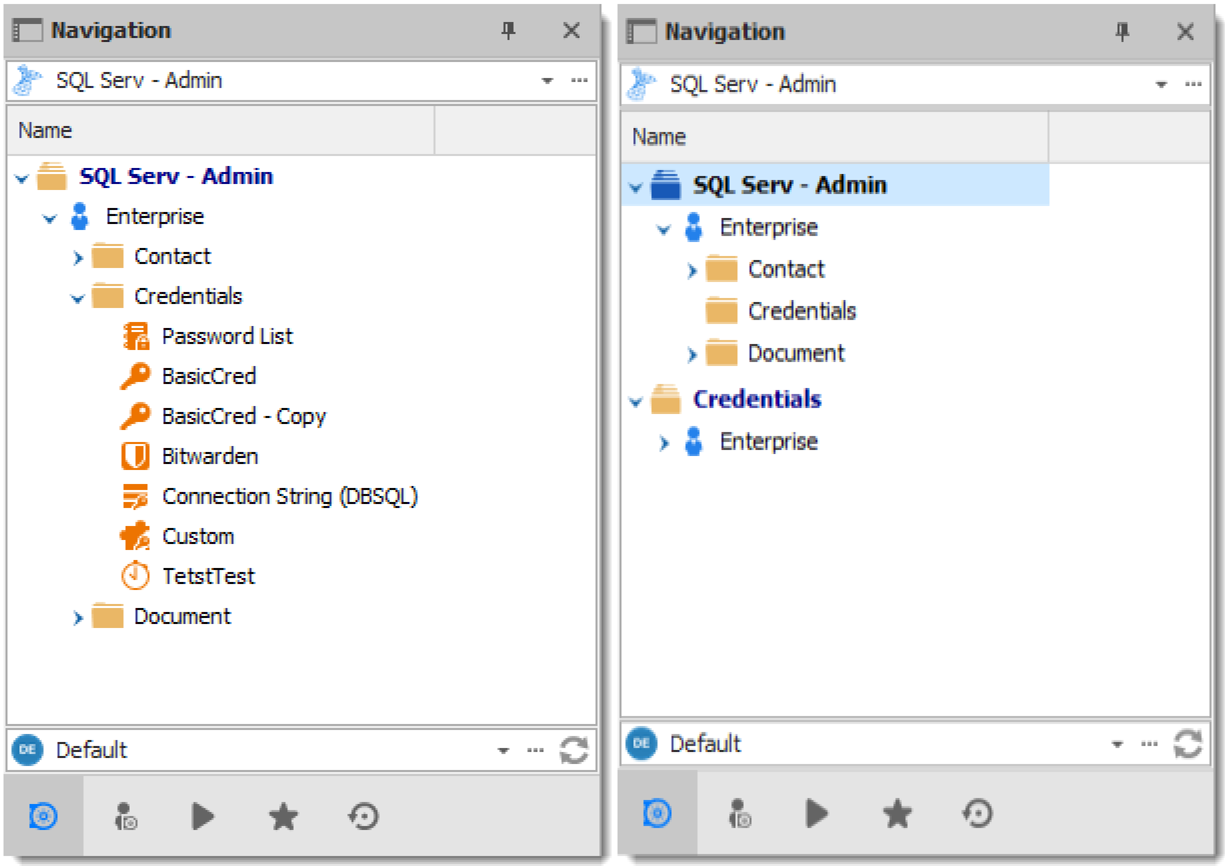


Credential entries

THE CREDENTIAL BRANCH

By default, credentials are stored in the same list as other entries are. This behavior can be changed so credentials are stored in a separated list.

To separate credentials from other entries, navigate to ***File – Options – User Interface – Tree View***. Under **UI Options**, disable the **Merge credential list with sessions** option. You must also disable this option in the ***Data Source Settings (System Settings) – Applications – Type Settings***.



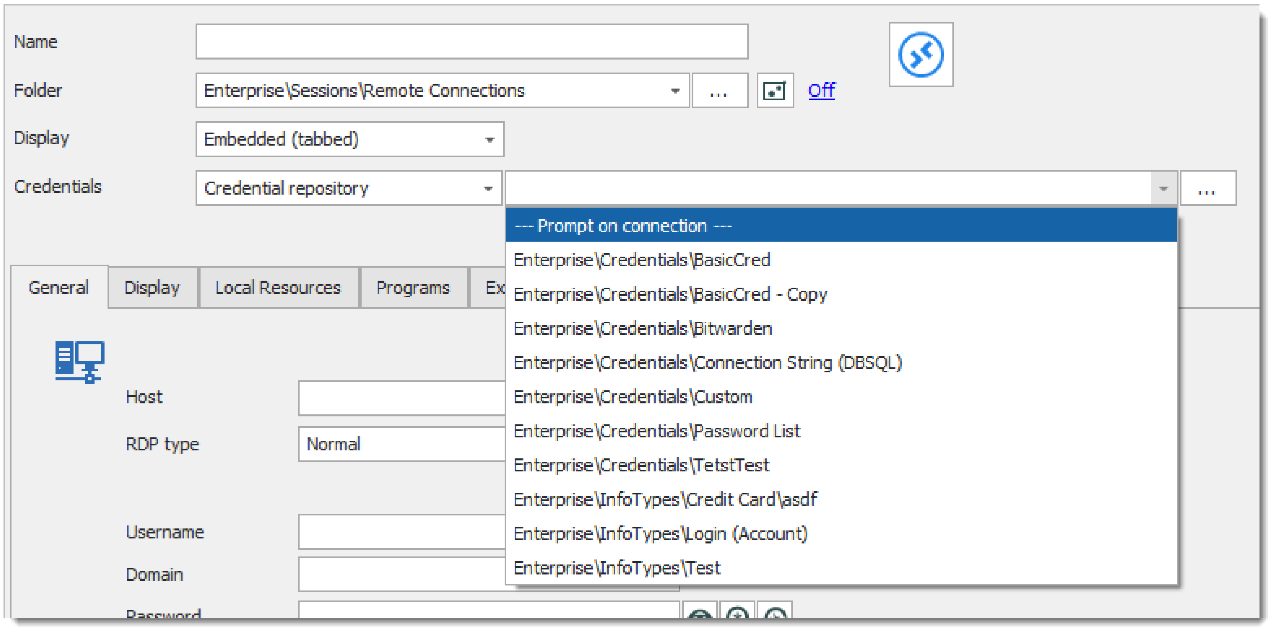
Credentials node from the tree view

THE CREDENTIAL REPOSITORY

The Credential repository is the collection of all the credentials stored in the data source. The Credential repository allows you to use the same credential entry for multiple session.

The Credential repository is available almost anywhere in RDM, including **Folders**, **Sessions**, **Synchronizers**, **VPN** and **Website** entry types.

When configuring a session select **Credential repository** from the **Credential** drop down list, then select the desired credential entry from the credentials list.



Name

Folder: Enterprise\Sessions\Remote Connections

Display: Embedded (tabbed)

Credentials: Credential repository

- --- Prompt on connection ---
- Enterprise\Credentials\BasicCred
- Enterprise\Credentials\BasicCred - Copy
- Enterprise\Credentials\Bitwarden
- Enterprise\Credentials\Connection String (DBSQL)
- Enterprise\Credentials\Custom
- Enterprise\Credentials\Password List
- Enterprise\Credentials\TetstTest
- Enterprise\InfoTypes\Credit Card\asdf
- Enterprise\InfoTypes\Login (Account)
- Enterprise\InfoTypes\Test

Host

RDP type: Normal

Username

Domain

Password

Select a credential entry

To configure the Credential repository to prompt you to select a set of credentials, which allows for using multiple credentials for the same host, select **Prompt on connection** from the credential list.

AVAILABLE CREDENTIAL ENTRIES

We support a multitude of credential entry types, both integrated and external! Explore to your heart's content.

6.5.1 Credential Redirection

DESCRIPTION

Some tools do not provide an Application Programming Interface (API) or support command line parameters to interact with them. 1Password, Firefox Password Manager, Google Password Manager and LastPass are such tools.

In order to leave the credentials in the external tool, and be able to use these credentials with Remote Desktop Manager, we have implemented a mechanism to request the credentials from the tool, then redirect them to a chosen resource.

This is achieved by running a local-access only applicative web server, then displaying a page that will allow you to store the credentials in your Credential repository. Remote Desktop Manager redirects the credentials from your chosen repository to the remote resource.

PRE-REQUISITES

- The tool must be installed on your computer or used with a web browser as an extension.
- The browser extension for your Credential repository must be installed and enabled. Follow your repository documentation for details (see below for the URLs that are currently valid.

PROCEDURE

There are three steps:

1. Create the credential entry.
2. Use a link to these credentials in a Remote Desktop Manager entry.
3. Open the session and use your provider to fill in the credentials.

We will use LastPass in our example, but the steps are the same for 1Password.

> Your chosen tool may require to be unlocked once or multiple times depending on your configuration. These steps are not covered by this guide as it may change for each installation.

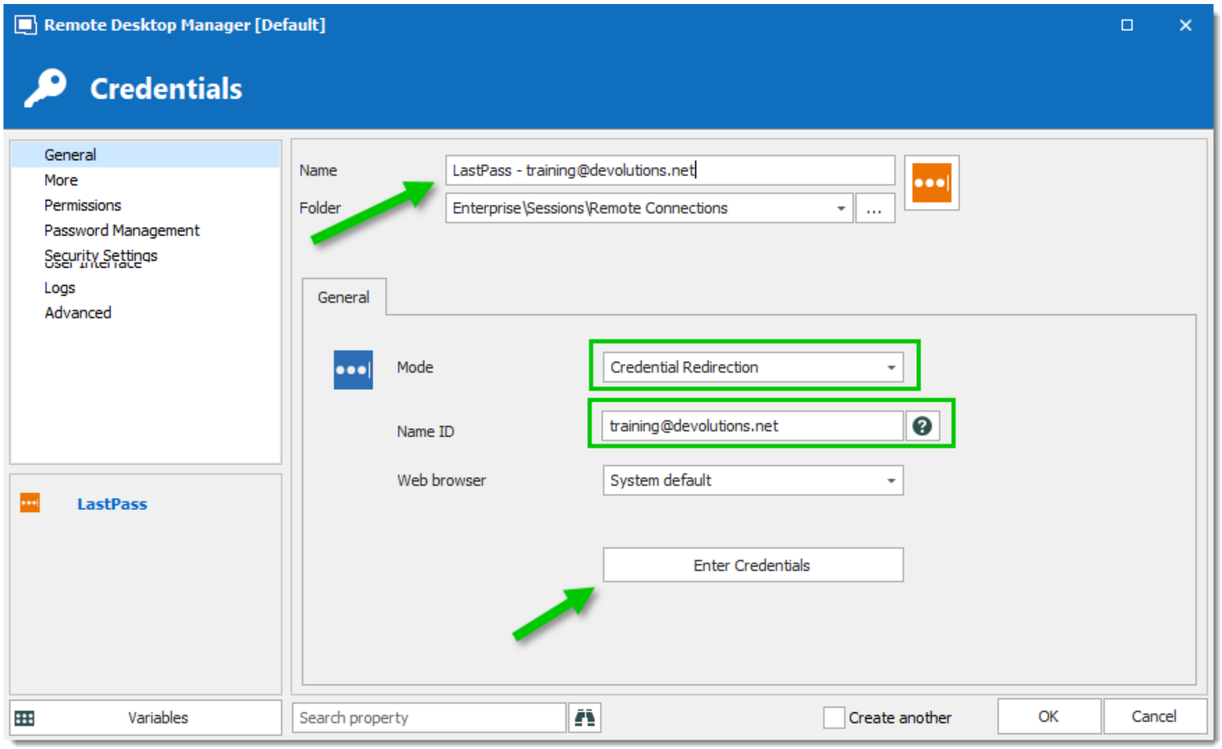
CREATING THE CREDENTIAL ENTRY

1. Create a new **LastPass** entry.

2. Enter a name for your LastPass entry.

3. Select the option Credential redirection.

4. Enter a **Name ID** (case sensitive). This must be unique within your LastPass repository. It will be used to identify the credentials and will be exposed as a subdirectory of the URL used to intercept the credentials.



Name: LastPass - training@devolutions.net

Folder: Enterprise\Sessions\Remote Connections

Mode: Credential Redirection

Name ID: training@devolutions.net

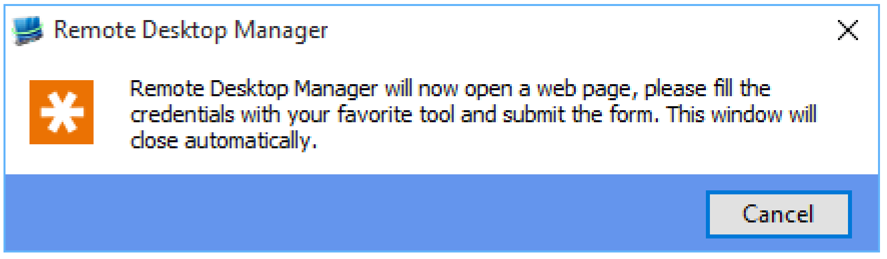
Web browser: System default

LastPass credential

5. Optionally select a specific browser, or use the default one.

6. Press the Enter Credentials button. This will launch the following sequence of events.

7. Remote Desktop Manager displays the following dialog.

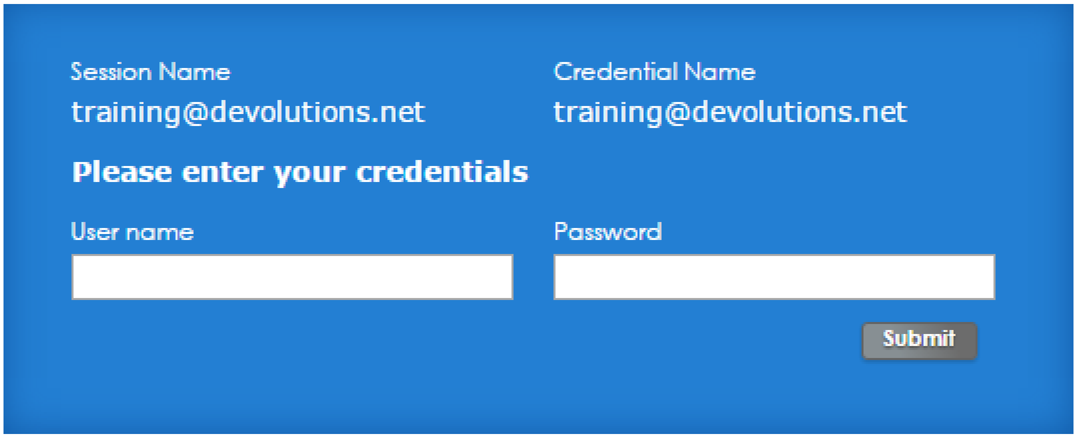


Remote Desktop Manager will now open a web page, please fill the credentials with your favorite tool and submit the form. This window will close automatically.

RDM - LastPass

8. The chosen browser is launched for a URL that looks like http://127.0.0.1:8000/training@devolutions.net/login.aspx. Notice the middle part is the **Name ID** entered previously.

9. Enter your credentials to save in the browser



Session Name
training@devolutions.net

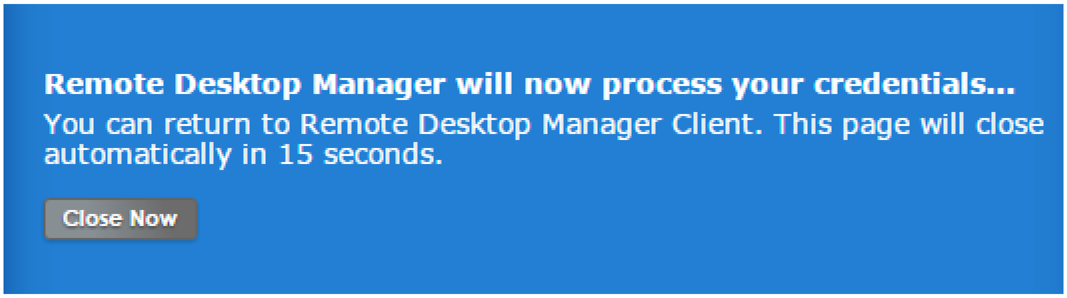
Credential Name
training@devolutions.net

Please enter your credentials

User name

Password

10. Depending on the configuration of your provider, you have to press a keyboard combination, or press on a button for the tool to save the credentials. Please refer to the documentation of your tool for more information.



Remote Desktop Manager will now process your credentials...
You can return to Remote Desktop Manager Client. This page will close automatically in 15 seconds.

11. In Remote Desktop Manager, save your credential entry.

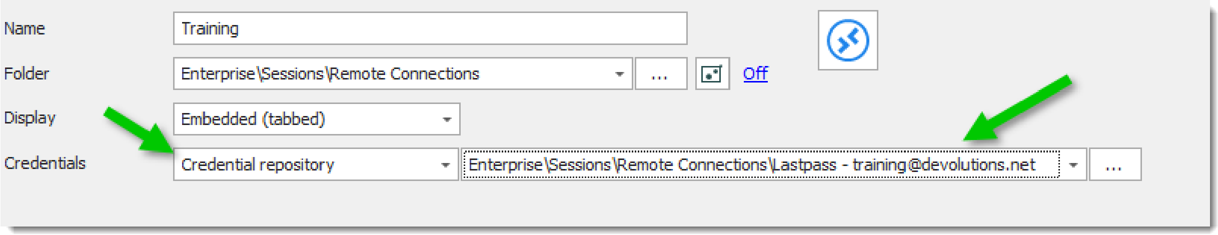
12. Using your password provider, confirm that the credentials are saved.

CREATING A SESSION USING THE CREDENTIAL ENTRY

1. Create a new entry, we will use an RDP session for the example.

2. Enter a name for your RDP session.

3. For **Credentials** select **Credential repository** and then your newly created credential entry



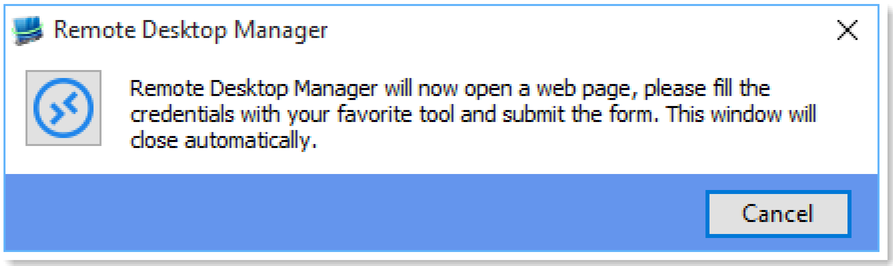
Name: Training
Folder: Enterprise\Sessions\Remote Connections
Display: Embedded (tabbed)
Credentials: Credential repository — Enterprise\Sessions\Remote Connections\Lastpass - training@devolutions.net

Credential repository

USING THE SESSION

Select your session then launch it. This will initiate the following sequence of events:

1. Remote Desktop Manager will display this informative dialog

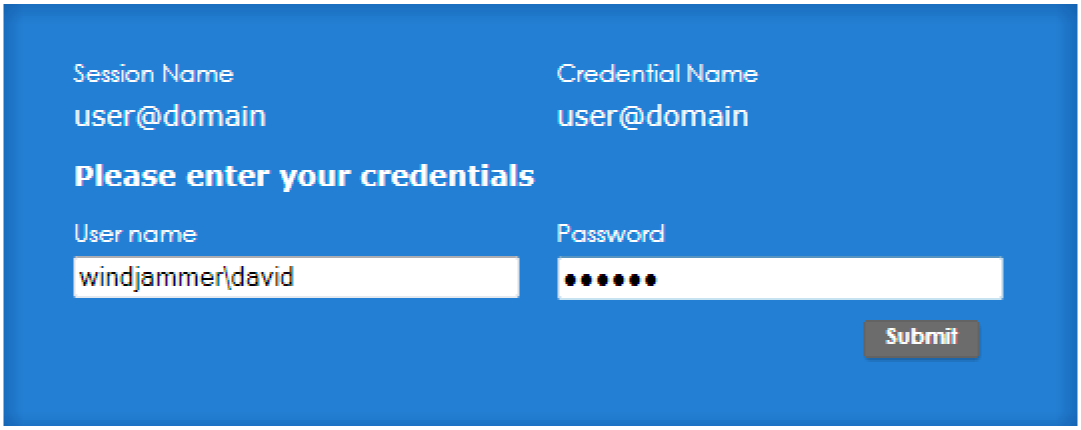


Remote Desktop Manager

Remote Desktop Manager will now open a web page, please fill the credentials with your favorite tool and submit the form. This window will close automatically.

2. The chosen browser is launched with the URL associated to the session

3. Depending on your configuration, the credentials are entered automatically, or you have to press a key combination to initiate your tool. Please refer to the documentation of your tool for more information.



Session Name
user@domain

Credential Name
user@domain

Please enter your credentials

User name: windjammer\david

Password: ••••••

4. In the web browser, press submit. The page will be closed after a delay

5. The RDP session is launched and authentication is successful

SEE ALSO

Lastpass downloads:https://lastpass.com/misc_download2.php

1Password instructions: https://support.1password.com/browser-extension/

6.5.2 Dynamic Credential Linking

DESCRIPTION

Dynamic credential linking creates a single credential entry for a supported credential manager and use this credential with any entry type that supports the Credential repository.

SUPPORTED CREDENTIAL MANAGERS

Here is the list of all implemented credential managers that support dynamic credential linking:

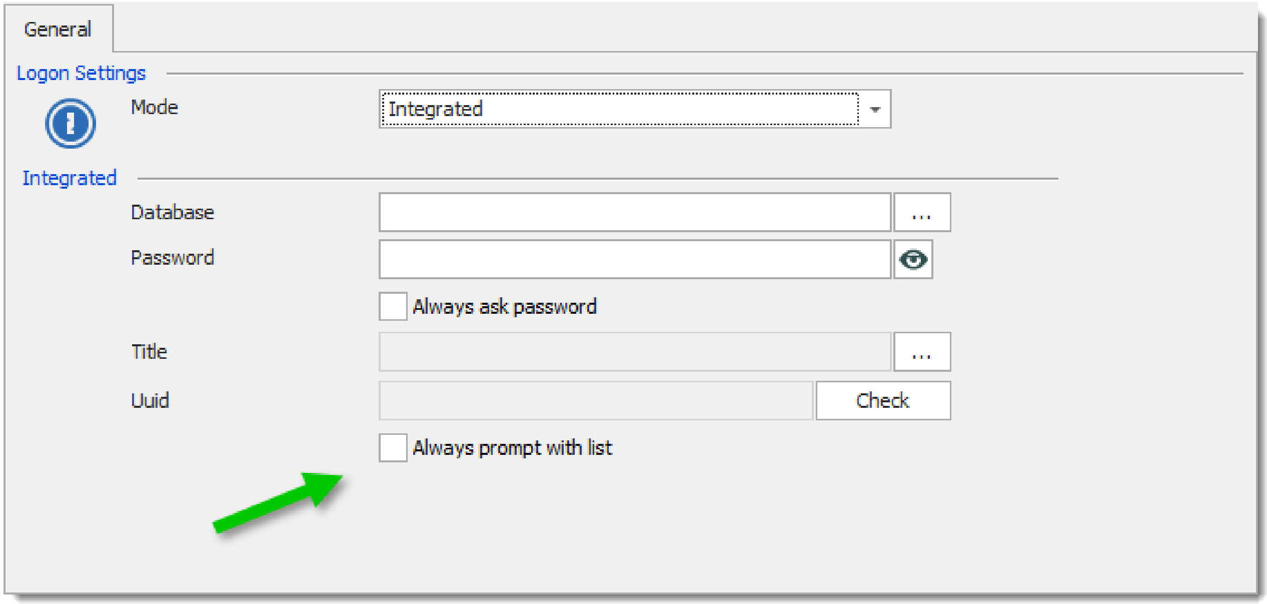
- **1Password**
- **AuthAnvil Password Server**
- **Bitwarden**
- **Dashlane**
- **Devolutions Password Hub**
- **Devolutions Password Server**
- **KeePass**
- **Keeper**
- **LastPass**
- **Mateso Password Safe**
- **PassPortal**
- **Password List**
- **Password Manager Pro**
- **Password Safe**
- **PasswordState**
- **Password Vault Manager**
- **Pleasant Password Server**

- **RoboForm**
- **Secret Server**
- **Sticky Password**
- **TeamPass**
- **True Key**
- **Zoho Vault**

> A dynamic credential link can also be applied to a Folder or a VPN entry type if desired.

SETTINGS

1. Create a credential entry and check **Always prompt with list**.



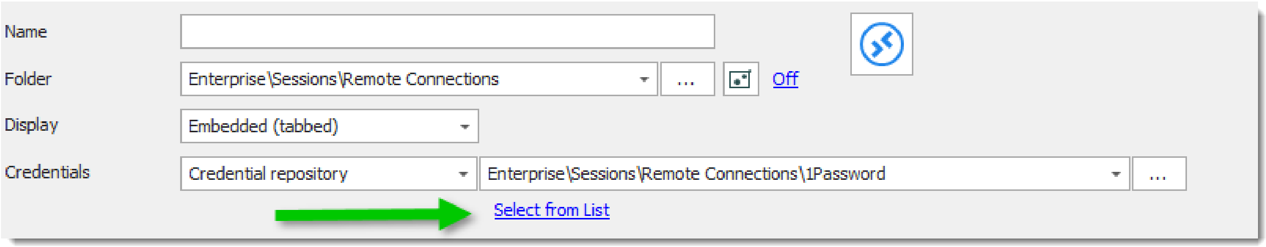
Mode: Integrated

□ Always ask password

□ Always prompt with list

1Password Settings

2. When creating a entry, select **Credential repository** from the **Credentials** drop down list, then select the credential entry created in the previous step. Notice that a new action appears just below the credential selection drop down list.



Name

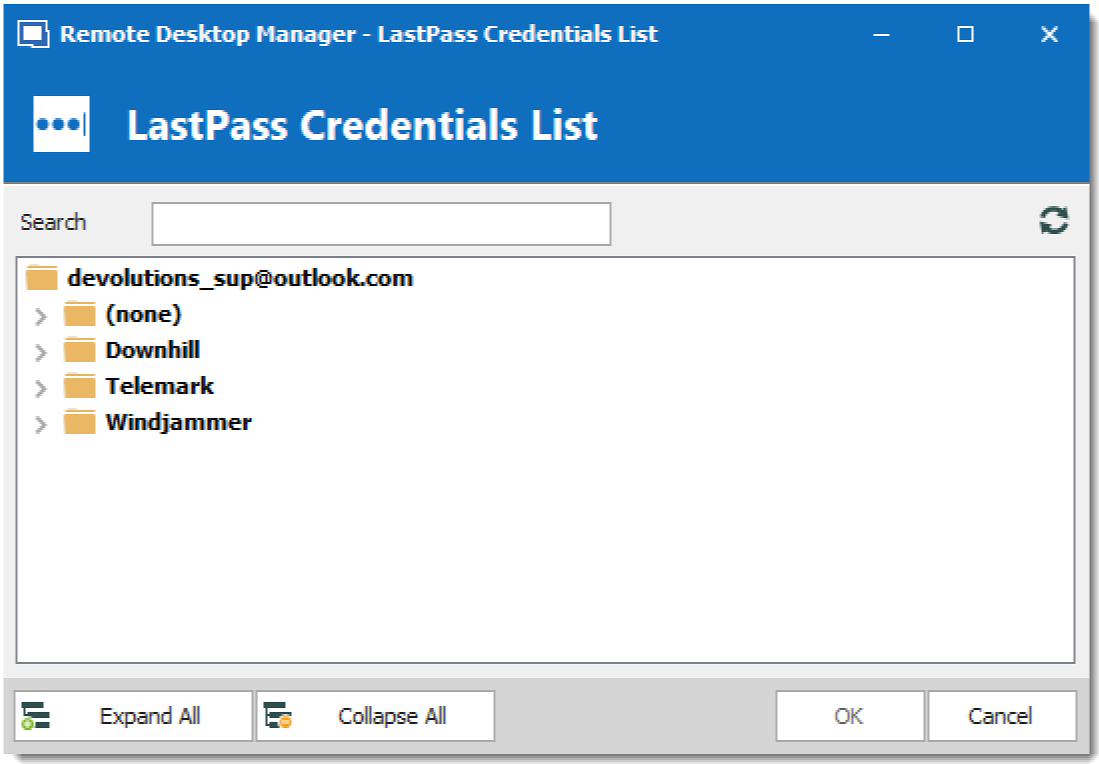
Folder: Enterprise\Sessions\Remote Connections

Display: Embedded (tabbed)

Credentials: Credential repository | Enterprise\Sessions\Remote Connections\1Password

Select from List

3. Select a credential from the list.



Remote Desktop Manager - LastPass Credentials List

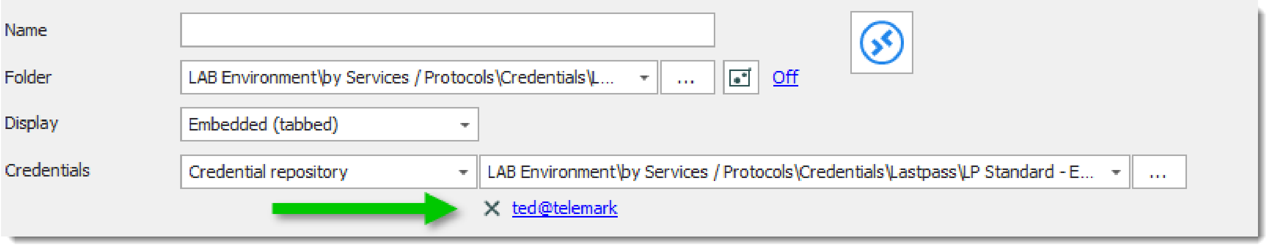
LastPass Credentials List

Search

- devolutions_sup@outlook.com
  - (none)
  - Downhill
  - Telemark
  - Windjammer

LastPass Credentials list

4. The link changes to the name of the credential. To remove linked credential and bring back automatic list prompt, simply click on the "X".



Name

Folder: LAB Environment\by Services / Protocols\Credentials\L...

Display: Embedded (tabbed)

Credentials: Credential repository | LAB Environment\by Services / Protocols\Credentials\Lastpass\LP Standard - E...

✕ ted@telemark

Name of the credential

6.5.3 Types

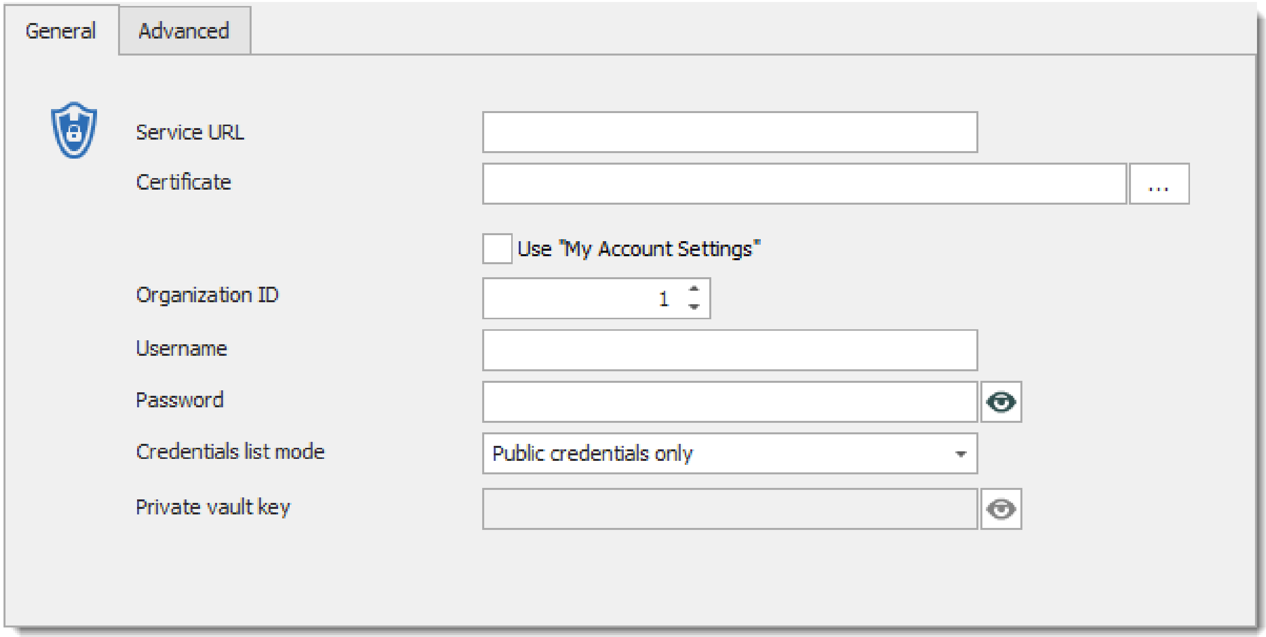
6.5.3.1 AuthAnvil Password Server

DESCRIPTION

This entry is used to define and configure a **AuthAnvil Password Server** credential entry.

SETTINGS

GENERAL



Service URL

Certificate

□ Use "My Account Settings"

Organization ID: 1

Username

Password

Credentials list mode: Public credentials only

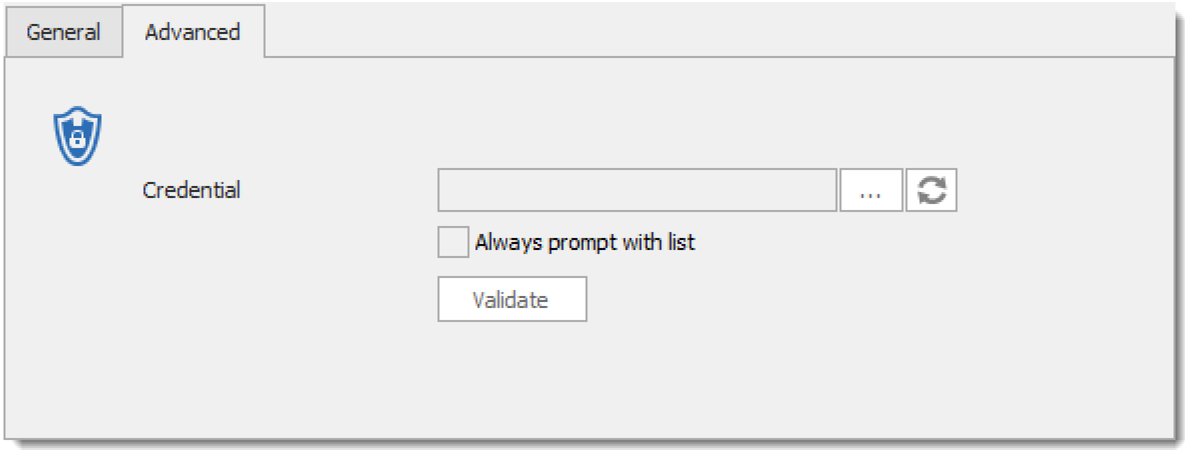
Private vault key

AuthAnvil Password Server – General

OPTION	DESCRIPTION
Service URL	Enter the AuthAnvil Password Server URL to connect. **Example: https://<ServerHostname>/AAPS/AAPS.svc**

OPTION	DESCRIPTION
Certificate	Select a specific certificate to connect to your AuthAnvil Password Server. For more information, please consult the Certificate section below.
Use "My Account Settings"	Use the information configured in My Account Settings to connect.
Organization ID	Indicate your password Vault Organization ID.
Username	Enter the username to connect to your AuthAnvil Password Server.
Password	Enter the password to connect to your AuthAnvil Password Server.
Credentials list mode	Indicate the credential list that you want to display. Select between: • **All credentials** • **Public credentials only** • **Private credentials only**
Private Vault key	Indicate the Private Vault key.

ADVANCED

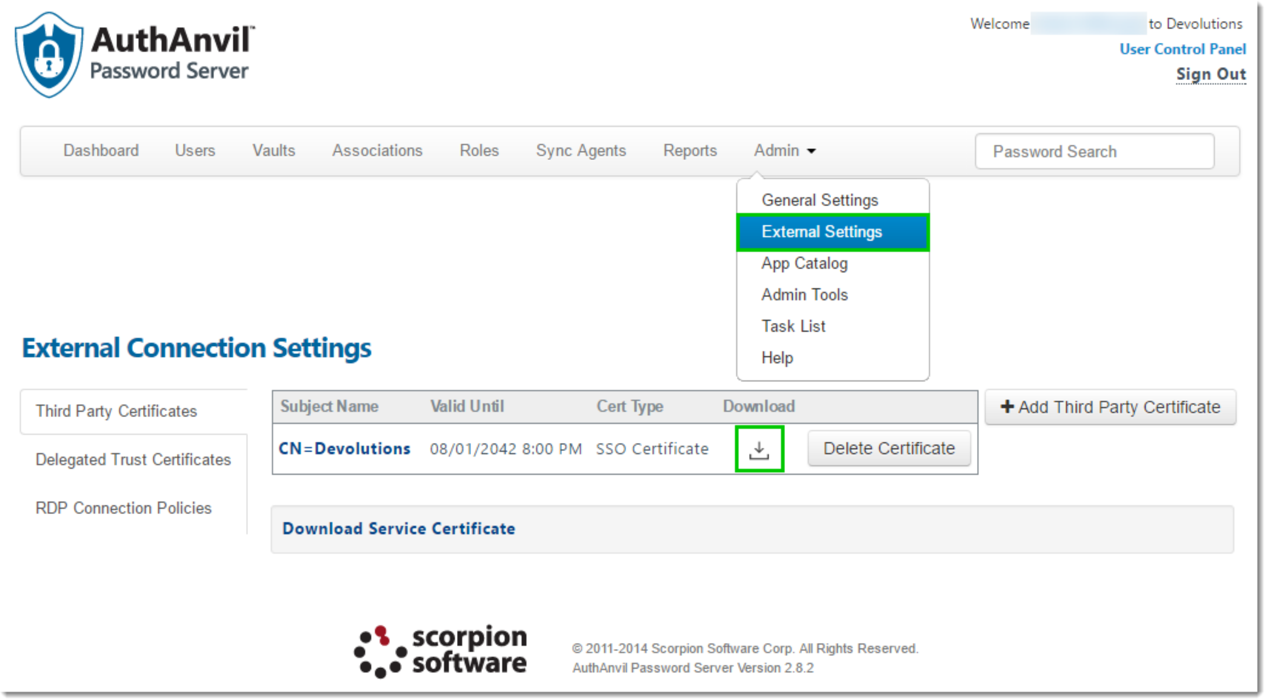


AuthAnvil Password Server – Advanced Tab

OPTION	DESCRIPTION
Always prompt with list	Always prompt with the list of credentials when connecting.
Credentials	Select a specific credential on your AuthAnvil Password Server.
Validate	Validate the connection to the server to confirm that the credentials are working.

CERTIFICATE

The certificate for the AuthAnvil entry can be downloaded from the AuthAnvil server web interface. Navigate to ***Admin – External Settings – Third Party Certificates***, and download the **SSO certificate**.



External Connection Settings

Subject Name	Valid Until	Cert Type	Download
CN=Devolutions	08/01/2042 8:00 PM	SSO Certificate	

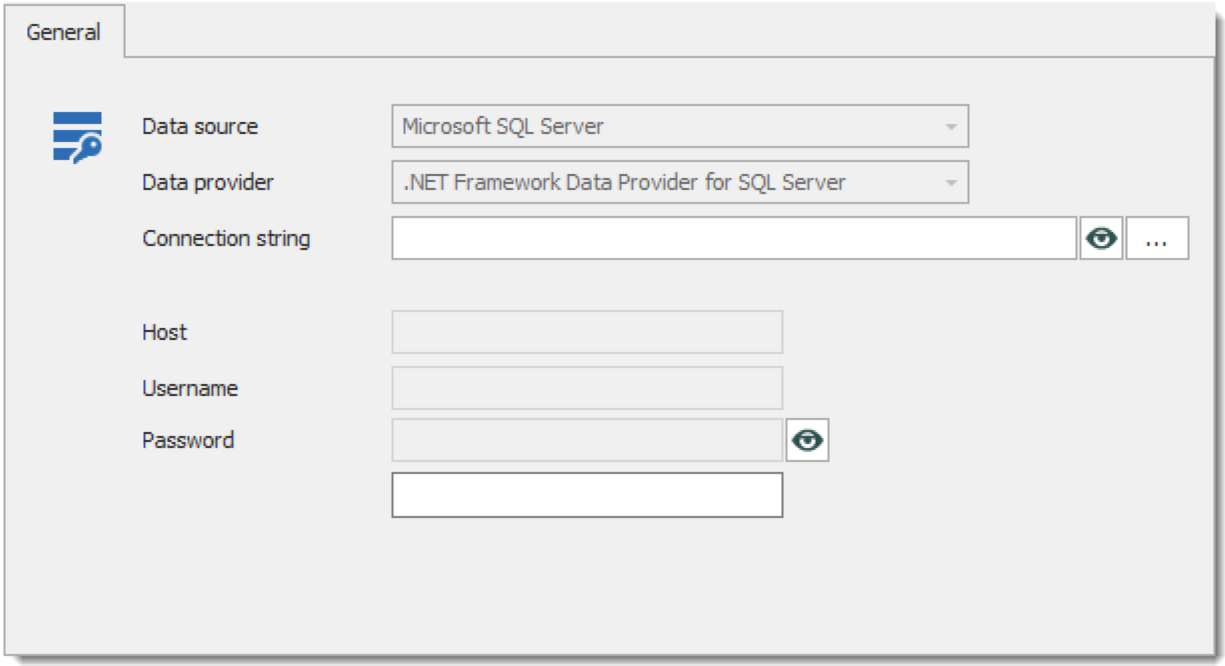
© 2011-2014 Scorpion Software Corp. All Rights Reserved.
AuthAnvil Password Server Version 2.8.2

6.5.3.2 Connection String

DESCRIPTION

This entry is used to define and configure a **Connection String** credential entry. Connection string credential entries are exactly the same as a Database Folder with the exception that they are not limited by the inheritance hierarchy of folders and sessions.

SETTINGS



Data source: Microsoft SQL Server

Data provider: .NET Framework Data Provider for SQL Server

Connection String

GENERAL

OPTION	DESCRIPTION
Data source	Contains data source types like ODBC, OLEDB or native. This value is read only and is extracted from the connection string.
Data provider	Specify the provider used for the database access. This value is read only and is extracted from the connection string.
Connection string	This value contains the database connection string and it can be hidden/encrypted for higher security.
Eye/Lock button	Revels or hides the connection string
Ellipsis button	Displays the standard Windows Connection string builder dialog.
Host	Connection server name.

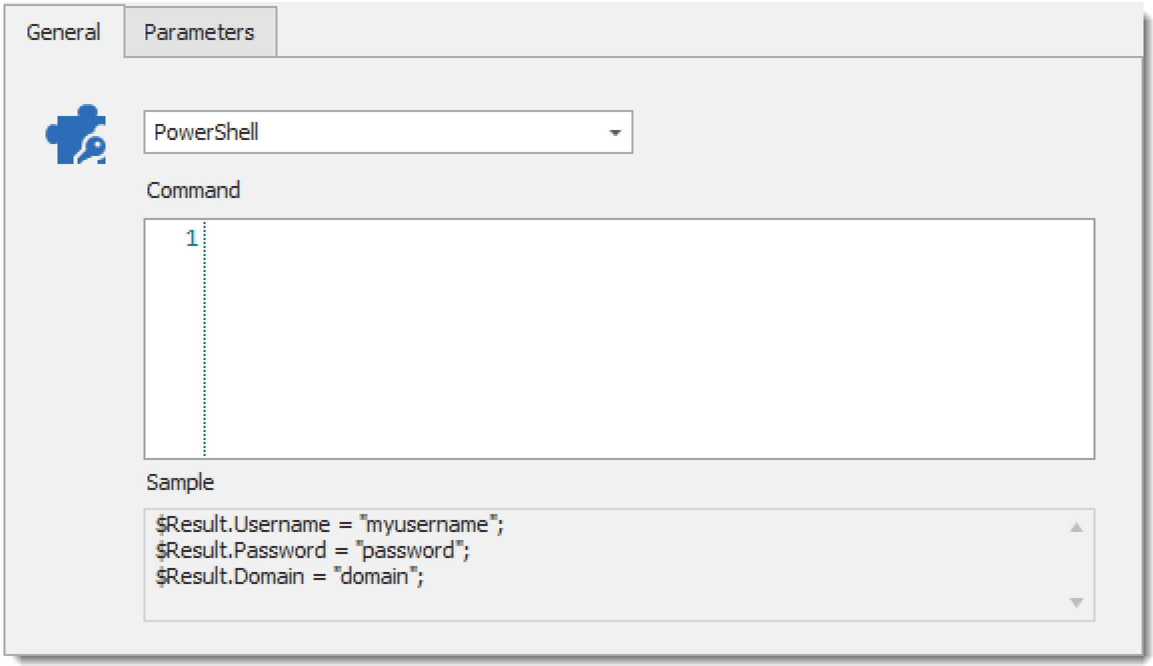
OPTION	DESCRIPTION
Username	Username to connect on the server.
Password	Password to connect on the server.

6.5.3.3 Custom

This entry is used to define and configure a **Custom** credential entry.

SETTINGS

GENERAL

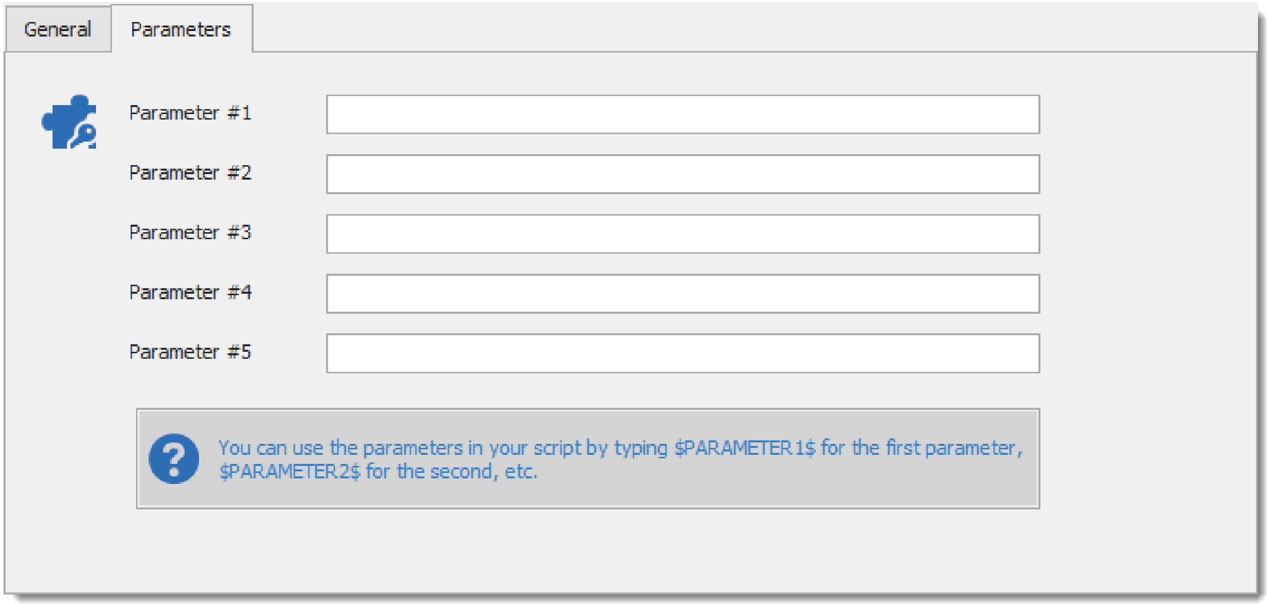


```
$Result.Username = "myusername";
$Result.Password = "password";
$Result.Domain = "domain";
```

Custom - General Tab

OPTION	DESCRIPTION
Powershell	Select between: • **PowerShell**:Type your PowerShell command in the Command field • **Linked PowerShell**: Link your credential entry to a pre-existing PowerShell command
Command	• Create links of HyperText in a PowerShell message using this syntax: <href=UrlOfYourSite>Text</href>

PARAMETERS



You can use the parameters in your script by typing $PARAMETER1$ for the first parameter, $PARAMETER2$ for the second, etc.

Custom - Parameters Tab

You can use parameters in your PowerShell script, just type $PARAMETER1$ for the first parameter, $PARAMETER2$ for the second parameter, etc...

6.5.3.4 CyberArk

DESCRIPTION

This entry is used to define and configure a **CyberArk** credential entry. Retrieve credentials directly from a CyberArk Vault using their REST APIs.

A Remote Desktop Manager Site License is necessary to use the CyberArk integration.

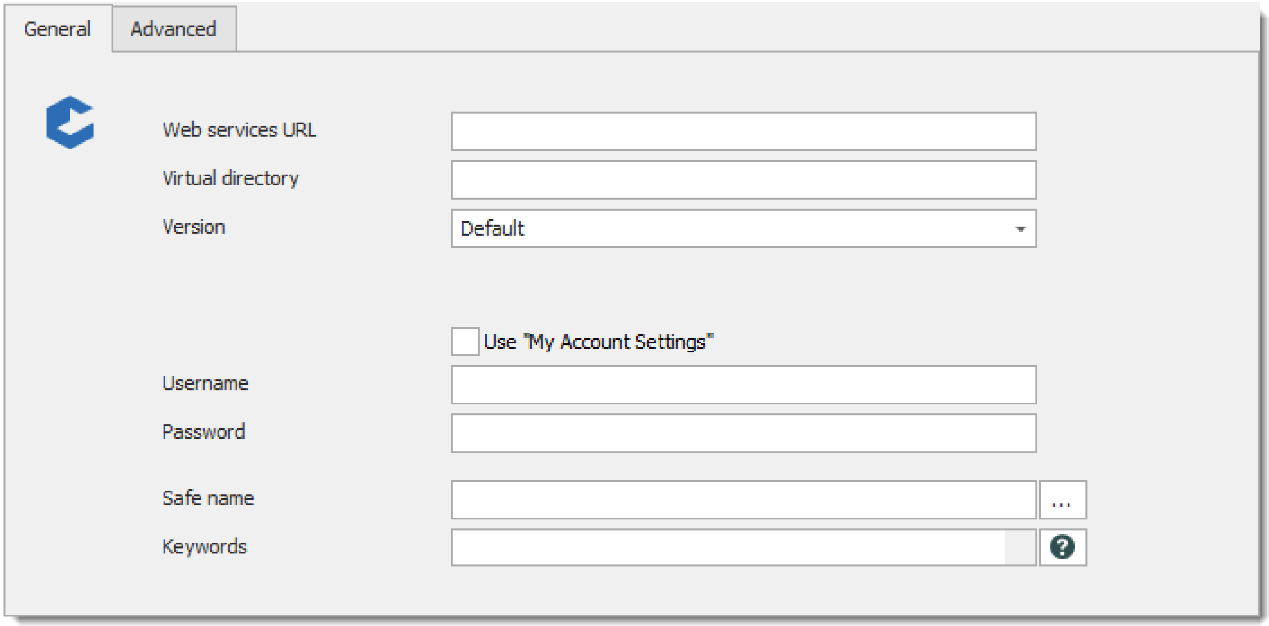
As per this initial implementation, you must create a credential entry **FOR EACH** credential that you want to access from Remote Desktop Manager. A feature to list accounts is being implemented at this time. You can alternatively use the **PACLI** to generate a CSV file that can be paired with a **CSV Synchronizer** to have entries generated automatically at a regular frequency.

SETTINGS

To retrieve the information easily, match the numbers from the credential entry picture below in Remote Desktop Manager with the same numbers from the CyberArk portal.

The images from the CyberArk portal are below as well.

GENERAL

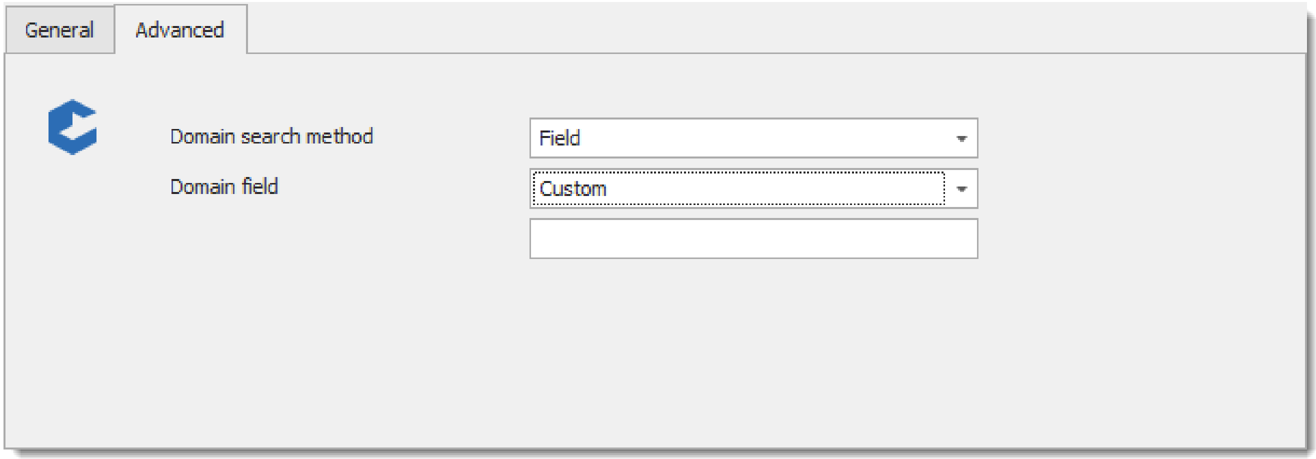


CyberArk - General Tab

OPTION	DESCRIPTION
Web services URL	Enter the **Privileged Account Security** (PAS) URL. (It typically is ends by *PasswordVault* although just the root is need in this field.) e.g. if accessing the PAS using https://server.domain.com/PasswordVault, you would simply specify https://server.domain.com in this field.
Virtual Directory	Used to specify when the PAS solution is not deployed at the root of a web site. It would be the case when there is an extra folder between the root of the address (.com) and the *PasswordVault* string
Version	Select which version you wish to use.
Use "My Account Settings"	Use the username/password combination stored in ***File – My Account Settings – CyberArk***.
Username	Enter the username to connect on Cyberark's PAS solution.

OPTION	DESCRIPTION
Password	Enter the password to connect on Cyberark's PAS solution.
Safe name	Enter the name of the safe where the entries are stored.
Folder	Enter the folder name where the entries have been stored. Provided by your CyberArk administrator. The default value is "***root***"
Keywords	Enter the keywords that will help locate the entry.Their API will perform a partial match in their ***Name*** field. Note that if the keywords match with multiple results, an error will be displayed.

ADVANCED



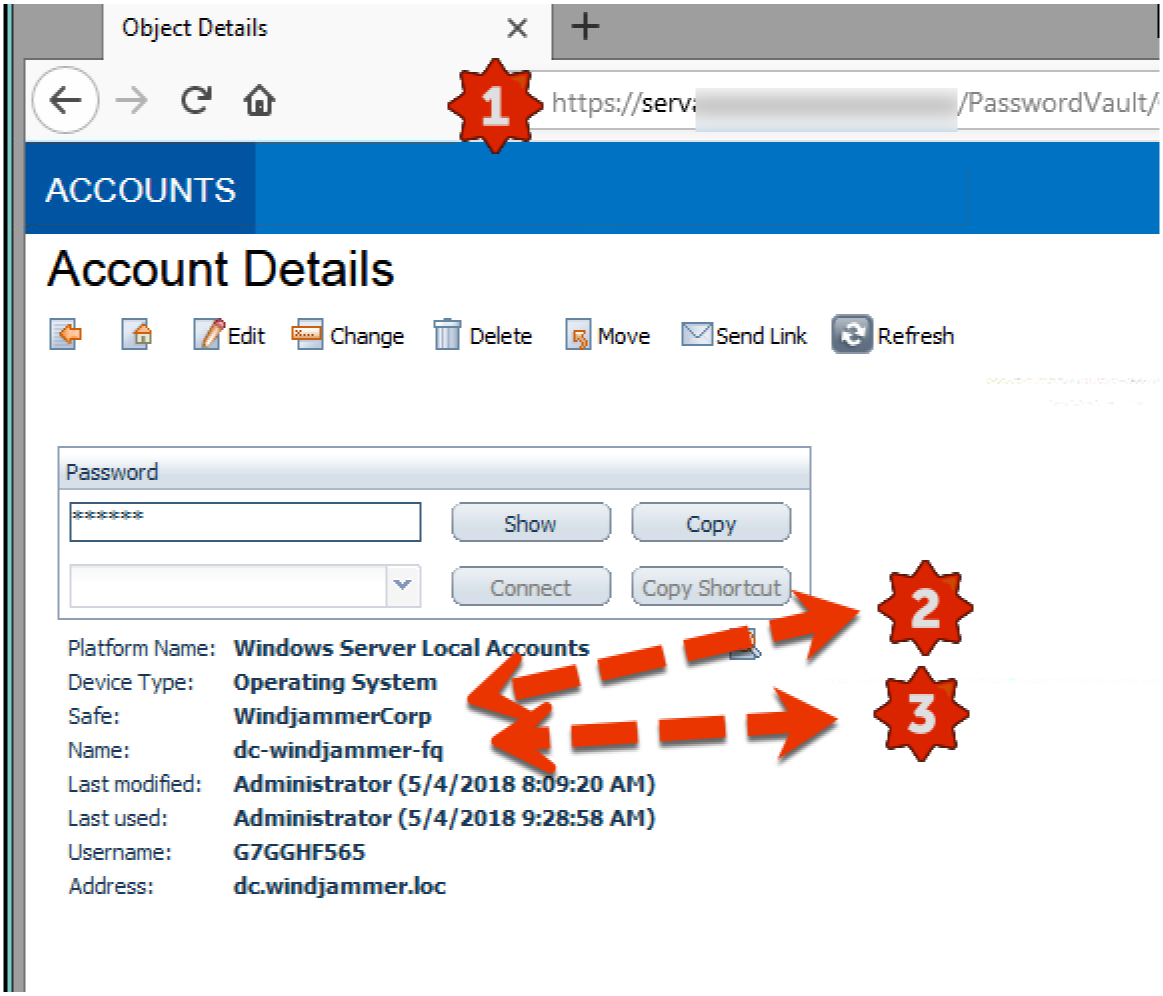
Domain search method: Field

Domain field: Custom

CyberArk - Advanced Tab

OPTION	DESCRIPTION
Domain search method	Specify how you wish to search for the Domain.
Domain field	Specify the field (and possibly content) of the Domain field.

CYBERARK PAS SCREEN



Password: *******

Platform Name: Windows Server Local Accounts
Device Type: Operating System
Safe: WindjammerCorp
Name: dc-windjammer-fq
Last modified: Administrator (5/4/2018 8:09:20 AM)
Last used: Administrator (5/4/2018 9:28:58 AM)
Username: G7GGHF565
Address: dc.windjammer.loc

6.5.3.5 CyberArk AAM

DESCRIPTION

This entry is used to define and configure a **CyberArk AAM** credential entry. Retrieve credentials from CyberArk AAM server and improve credentials security.

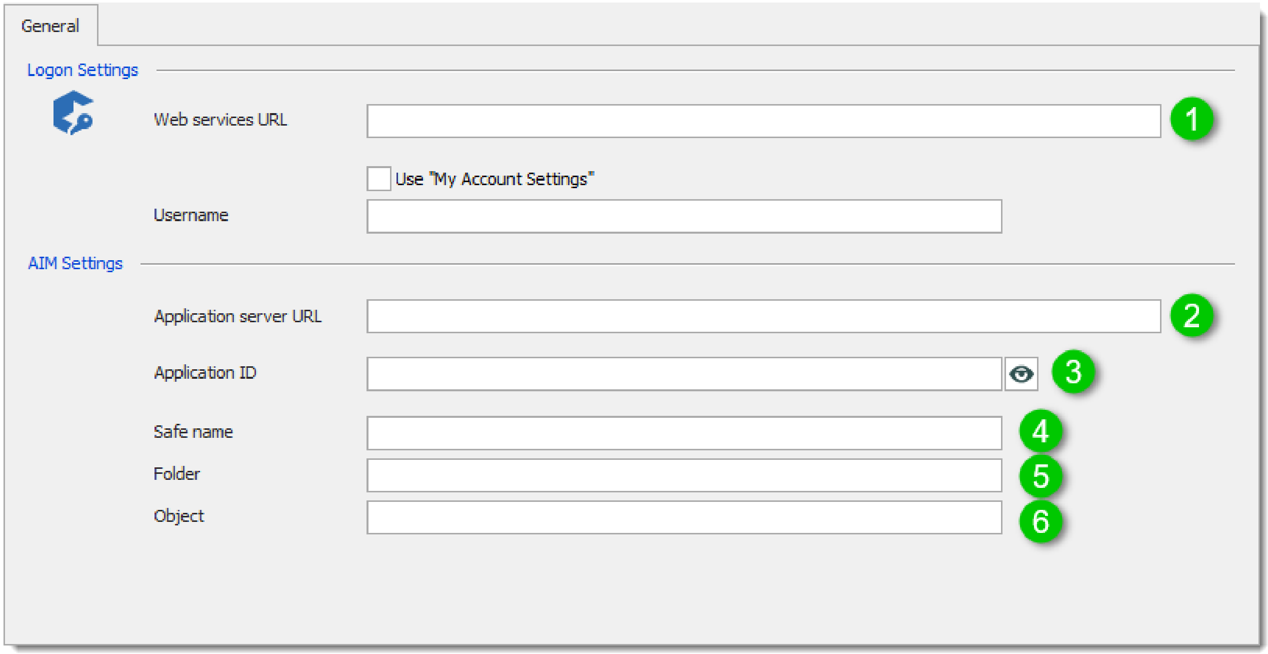
> A Remote Desktop Manager Site License is necessary to use the CyberArk AAM entry.

> As per this initial implementation, you must create a credential entry **FOR EACH** credential that you want to access from Remote Desktop Manager. A second phase is planned where the REST API will be used rather then AAM.

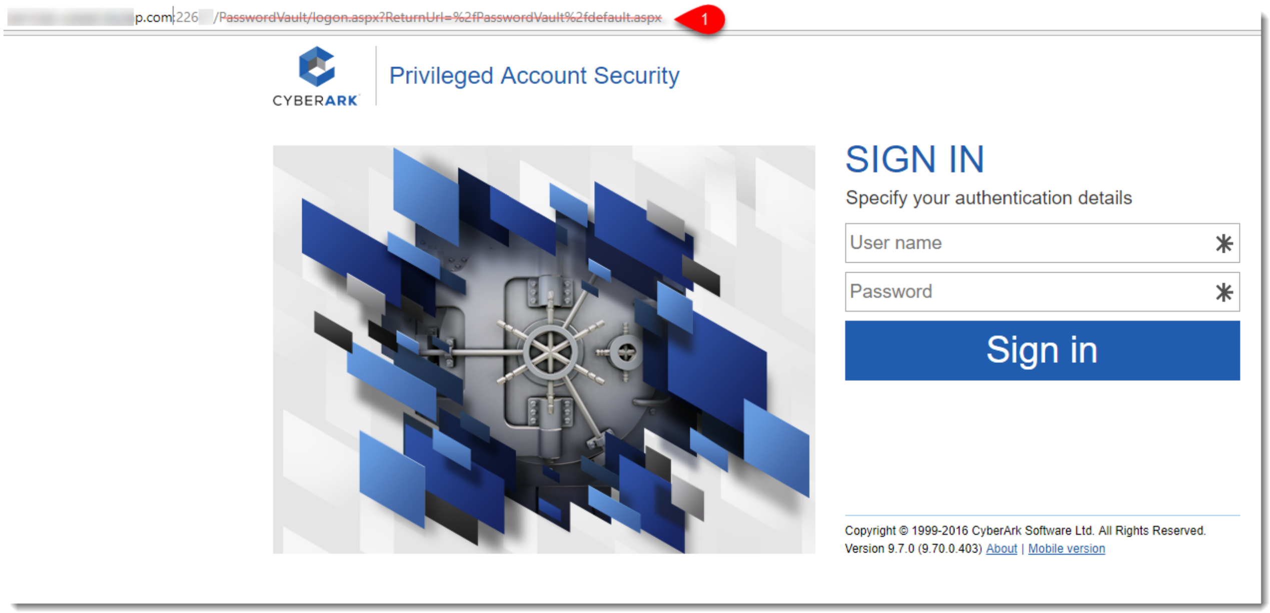
SETTINGS

All the needed information's to create a CyberArk credential entry in Remote Desktop Manager is provided below. To retrieve the information easily, match the numbers from the credential entry picture below in Remote Desktop Manager with the same numbers from the CyberArk portal.

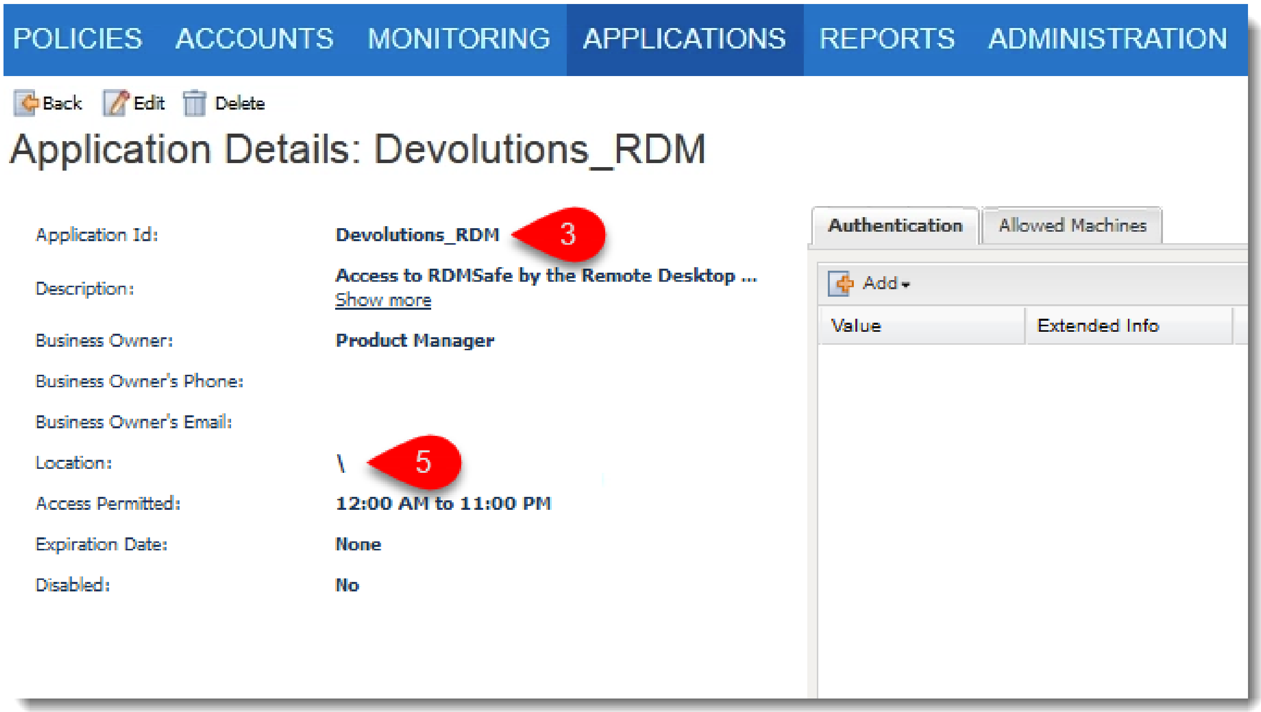
The images from the CyberArk portal are below as well.



CyberArk AIM Credential Entry


[redacted]p.com:226[redacted]/PasswordVault/logon.aspx?ReturnUrl=%2fPasswordVault%2fdefault.aspx
1
CYBERARK
Privileged Account Security
SIGN IN
Specify your authentication details
User name
Password
Sign in
Copyright © 1999-2016 CyberArk Software Ltd. All Rights Reserved.
Version 9.7.0 (9.70.0.403) About | Mobile version

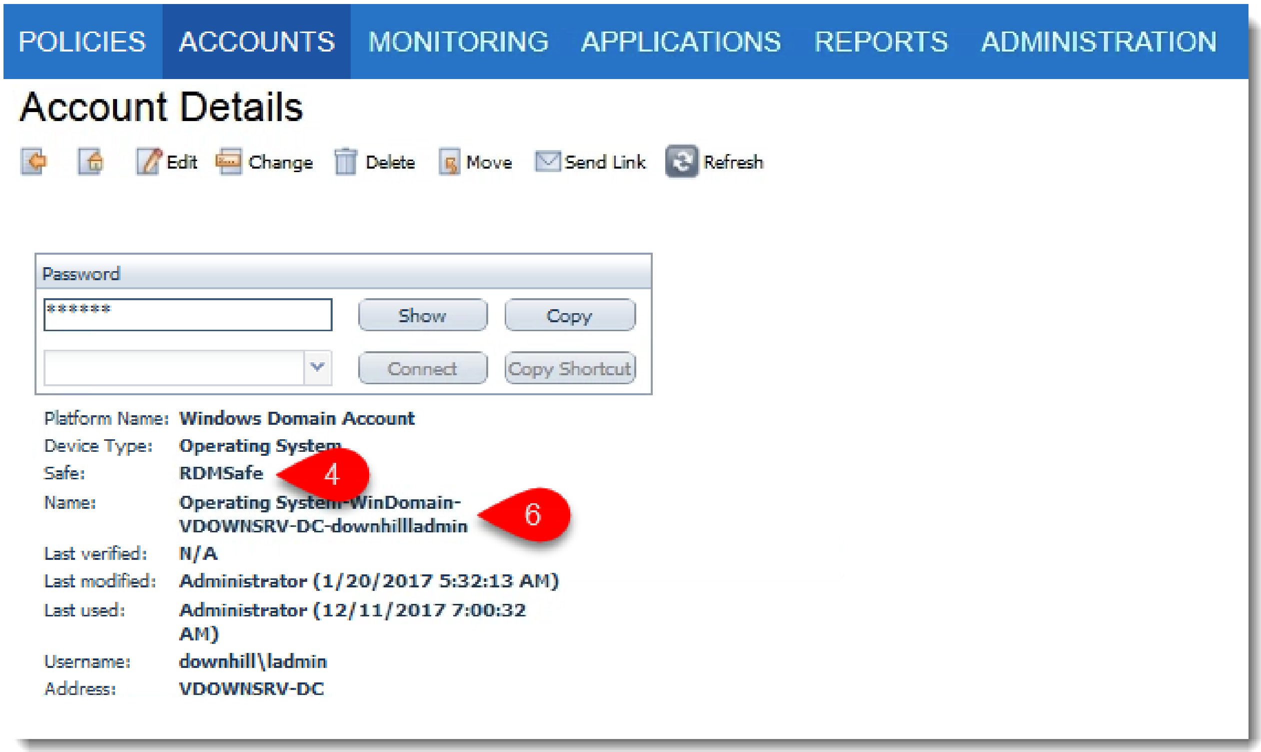
Privileged Account Security Portal



Application Details: Devolutions_RDM

Application Id:	Devolutions_RDM
Description:	Access to RDMSafe by the Remote Desktop ... Show more
Business Owner:	Product Manager
Business Owner's Phone:	
Business Owner's Email:	
Location:	\
Access Permitted:	12:00 AM to 11:00 PM
Expiration Date:	None
Disabled:	No

CyberArk Applications Tab



Account Details

Password: ******

Platform Name:	Windows Domain Account
Device Type:	Operating System
Safe:	RDMSafe
Name:	Operating System-WinDomain-VDOWNSRV-DC-downhillladmin
Last verified:	N/A
Last modified:	Administrator (1/20/2017 5:32:13 AM)
Last used:	Administrator (12/11/2017 7:00:32 AM)
Username:	downhill\ladmin
Address:	VDOWNSRV-DC

CyberArk Accounts Tab

OPTION	DESCRIPTION
Web services URL	Enter the Privileged Account Security URL.
Use "My Account Settings"	Use the username stored in ***File – My Account Settings – CyberArk AAM***.
Username	Enter the username to connect on Cyberark.
Application server URL	Enter the URL to the CyberArk AAM web server. ***Example:*** https://<host.domain>/AAMWebService/v1.1/AAM.asmx
Application ID	Enter the name of the name of the application ID for the CyberArk Central Credential Provider web services. This information will be provided by your CyberArk administrator.
Show 👁 / Hide 🔒 Application ID	Click 👁 to view the Application ID. Click 🔒 to hide the Application ID.
Safe name	Enter the name of the safe where the entries are created.
Folder	Enter the folder name where the entries have been created. Provided by your CyberArk administrator. The default value is "***root***"
Object	Enter the object name of the entry.

6.5.3.6 KeePass

DESCRIPTION

This entry is used to define and configure a **KeePass** credential entry. Use a KeePass plugin to send the credential to Remote Desktop Manager. The KeePass application must be running and the database must be opened.

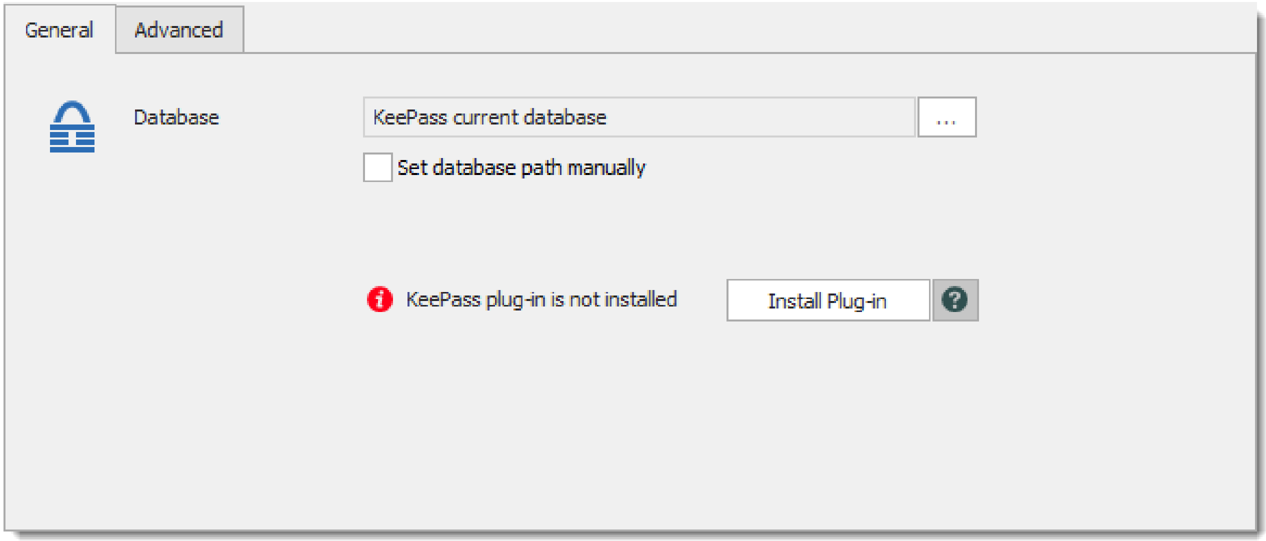
KeePass 1.X is not supported.

Download the KeePass plugin

This type has recently been improved to support linking to multiple KeePass databases simultaneously. Simply add all the paths separated by semi-colons in the **Database** control.

SETTINGS

GENERAL



Database: KeePass current database

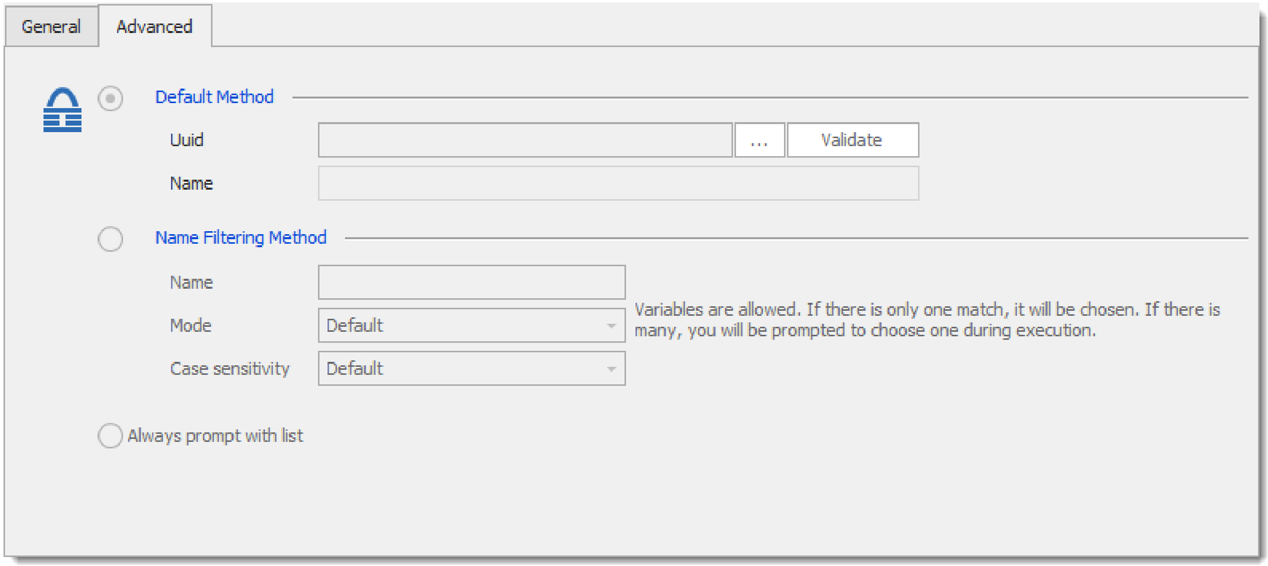
□ Set database path manually

KeePass plug-in is not installed

KeePass - General Tab

OPTION	DESCRIPTION
Database	The default KeePass database is selected by Remote Desktop Manager.
Set database path manually	This option needs to be checked if you wish to manually indicate the location of your database. If you wish to use multiple databases at once, simply list their respective paths separated by semi-colons.
Install Plug-in	Install the KeePass Plug-In on your computer.
More information (installation and required settings)	Provide information on the KeePass Plug-In.

ADVANCED



● Default Method

Uuid: … Validate

Name:

○ Name Filtering Method

Name:

Mode: Default

Case sensitivity: Default

Variables are allowed. If there is only one match, it will be chosen. If there is many, you will be prompted to choose one during execution.

○ Always prompt with list

KeePass - Advanced Tab

OPTION	DESCRIPTION
Uuid	Universal Unique Identifier of the entry in the database.

OPTION	DESCRIPTION
Name	Name of the entry in the database.
Always prompt with list	Always prompt with the list of credentials when connecting.
Allow view credentials action	Enables the View credentials command.

See Dynamic Credential topic for more information on Dynamic Credential Linking.

6.5.3.7 LastPass

DESCRIPTION

This entry is used to define and configure a **LastPass** credential entry.

LastPass offers different features per subscription plans. Remote Desktop Manager supports certain features of each plan:

Standard: 2-Factor Authentication (Google Authenticator) and Secure Notes. The ones that contain both a Username and Password are displayed in Remote Desktop Manager (Server, Email account, Database, Instant Messenger).

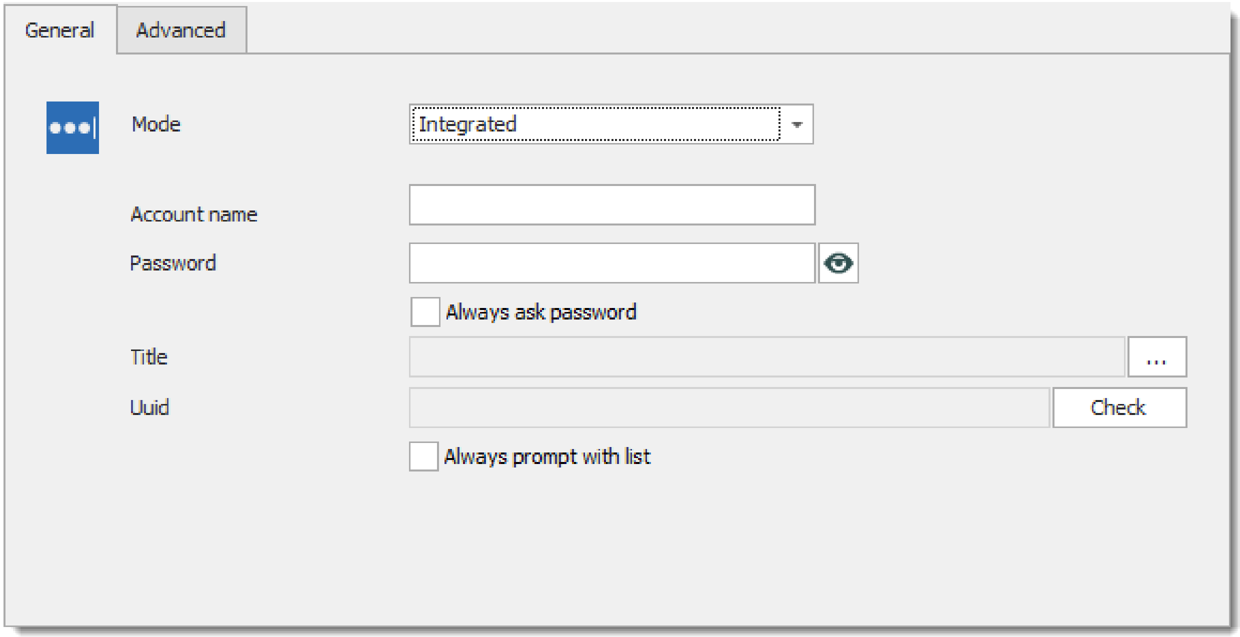
Premium: 2-Factor Authentication (YubiKey), please see LastPass, Yubikey and mobile access section below.

Enterprise: Shared Folders.

SETTINGS

Watch Video

GENERAL



Mode: Integrated

Account name

Password

□ Always ask password

Title

Uuid

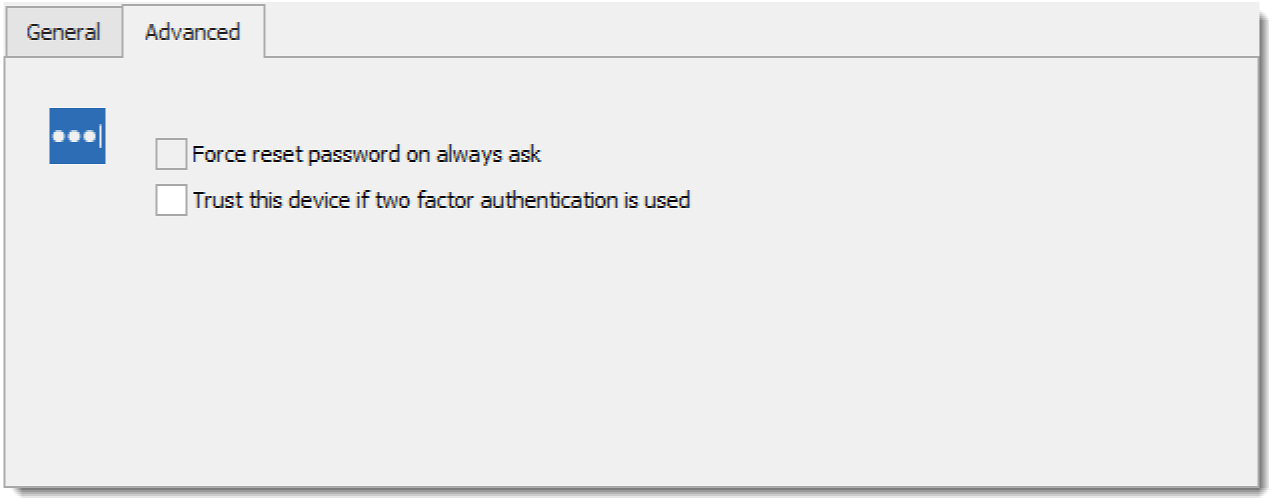
□ Always prompt with list

LastPass - General Tab

OPTION	DESCRIPTION
Mode	Select between: • **Credential Redirection** • **Integrated**
Account name	LastPass account name (Email address).
Password	Password to access the LastPass account.
Always ask password	Always ask password when connecting to LastPass.
Title	Use the ellipsis to select the credential in your LastPass database, its title will be displayed when there is a selection.

OPTION	DESCRIPTION
Uuid	Universal Unique Identifier of the entry in the database.
Always prompt with list	Always prompt with the list of credentials accessible from LastPass.

ADVANCED



□ Force reset password on always ask
□ Trust this device if two factor authentication is used

LastPass - Advanced Tab

CREDENTIAL REDIRECTION MODE

Please refer to Credential Redirection for full instructions.

DYNAMIC CREDENTIAL LINKING

Please refer to Dynamic Credential for more information.

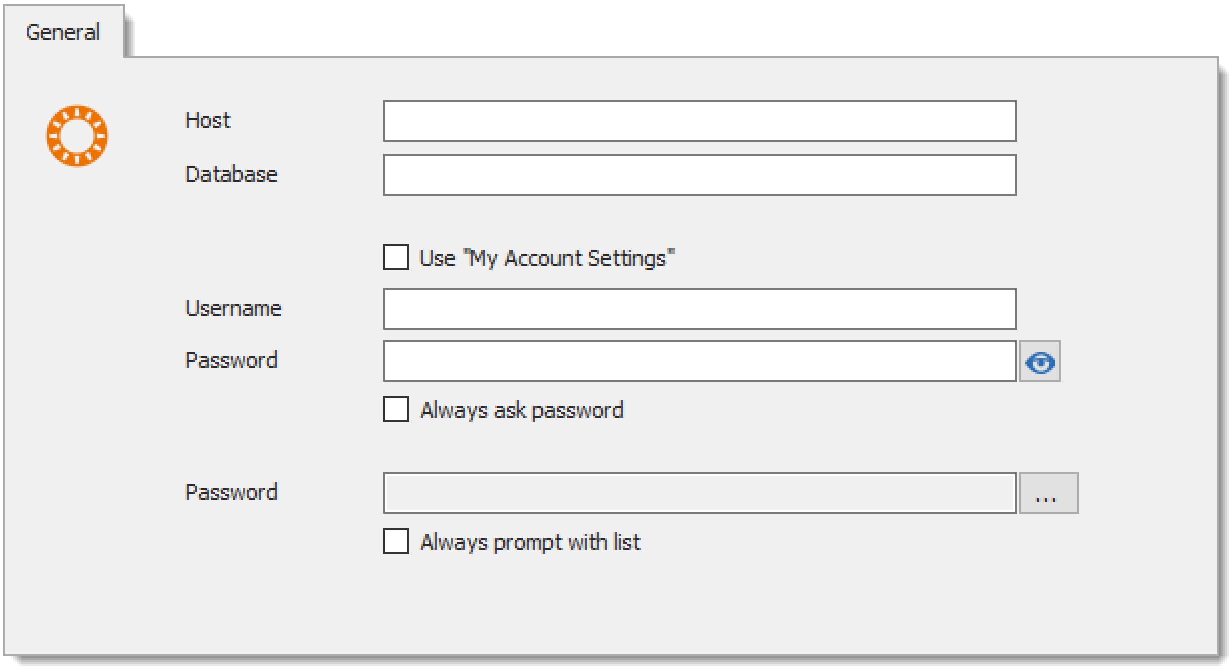
6.5.3.8 Mateso Password Safe

DESCRIPTION

This entry is used to define and configure a **Mateso Password Safe** credential entry. The integration with Mateso Password Safe requires a Mateso Enterprise Plus subscription.

Make sure web services is installed on the **Mateso Password Safe** server. You also need a certificate from a trusted Certification Authority installed in the Trusted Root Certification Authorities.

SETTINGS



General

Host

Database

□ Use "My Account Settings"

Username

Password

□ Always ask password

Password

□ Always prompt with list

OPTION	DESCRIPTION
Host	Enter the Mateso Password Safe server address.

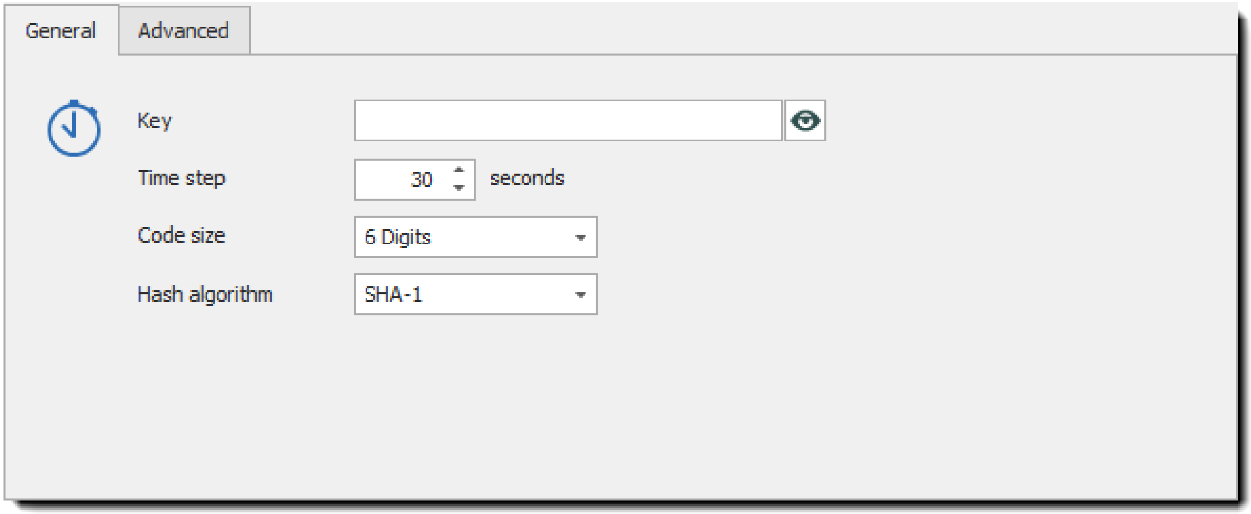
OPTION	DESCRIPTION
	Example: mateso.yourcorporatedomain.com
Database	Select the database which the passwords are retrieved from.
Username	Enter a Mateso account username.
Password (1)	Enter a Mateso account password.
Password (2)	Use the ellipsis button to select a password from the Mateso database.
Always prompt with list	Always prompt with a list of available credentials in the Mateso database when using the entry. Useful to create a Credential repository to link with other entries in Remote Desktop Manager.

6.5.3.9 One Time Password

DESCRIPTION

This entry is used to define and configure a **One Time Password** credential entry.

The **One Time Password** credential type is used as a second authentication factor that allows a user to secure its account with a generated verification code changing over time.



Key

Time step 30 seconds

Code size 6 Digits

Hash algorithm SHA-1

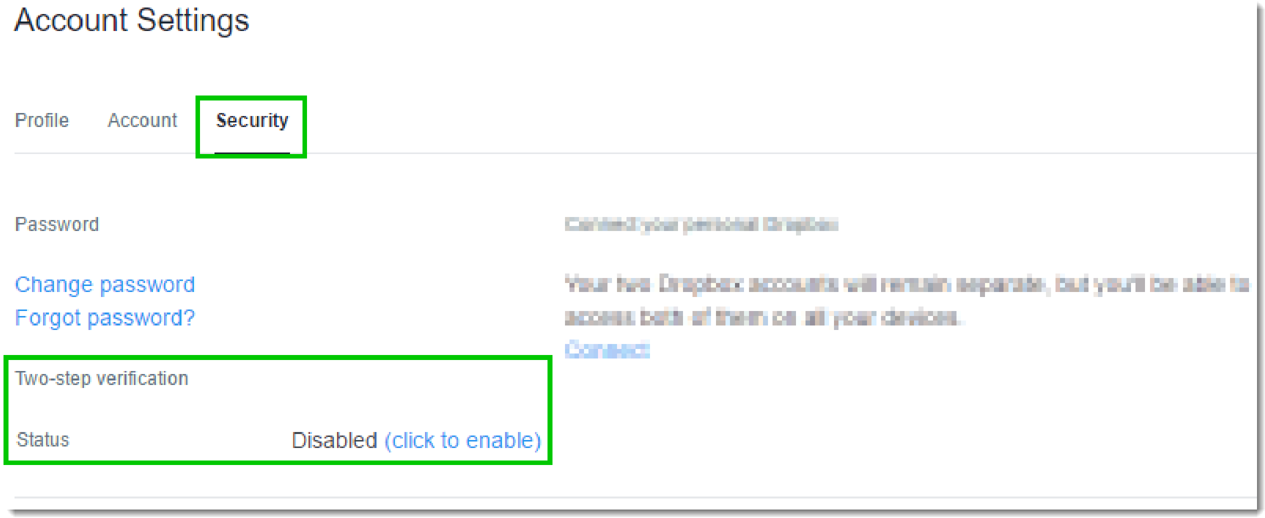
One Time Password - General Tab

OPTION	DESCRIPTION
Key	Enter the secret key given by the website or the application.
Time step	Enter the amount of time for which the generated verification code is valid.
Code size	Select the amount of digits the generated verification code contains. Select between: • **6 Digits** • **8 Digits**
Hash algorithm	Select the secure hash algorithm used to generate the verification code. Select between: • **SHA-1** • **SHA-256** • **SHA-512**

ENABLING MULTIFACTOR AUTHENTICATION

To use the multifactor authentication, this feature must be enabled from the user's account of a service or website that supports multifator authentication. Usually, you can find the multifactor authentication settings in the security preferences of a user's account. The name of the feature should be similar to **two-factor authentication**, **two-step verification**, or **multifactor authentication**.

> When enabling multifactor authentication, a list of recovery codes might be generated as well by the website or application. Carefully store these in a safe place. These recovery codes will be useful if the user happens to lose the **One Time Password** entry.



Account Settings

Password

Change password
Forgot password?

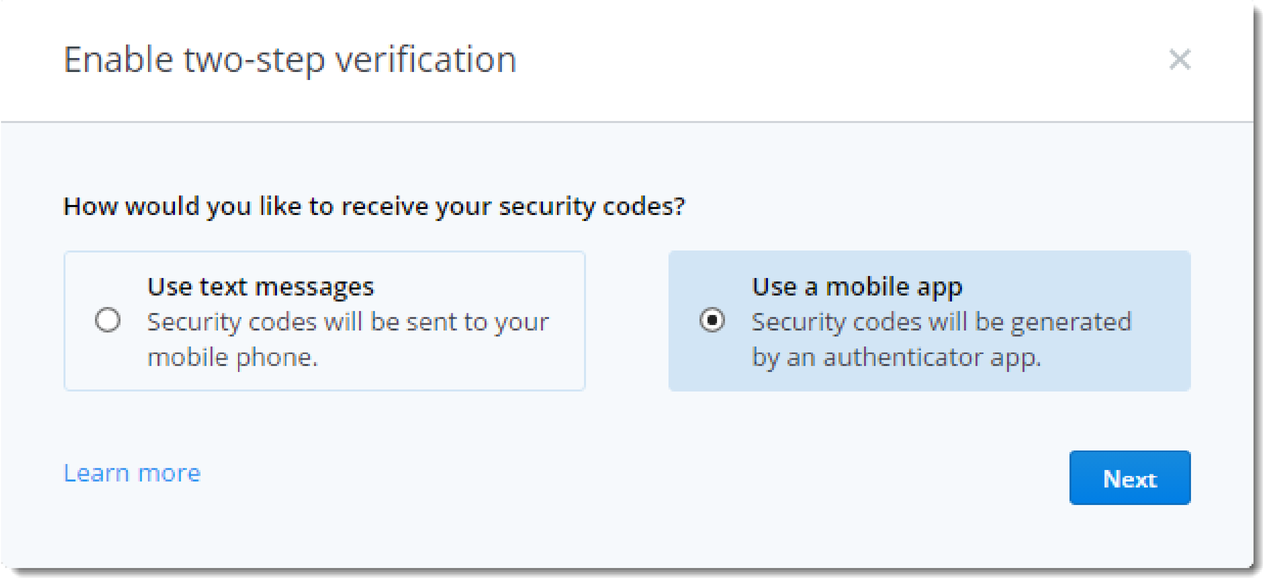
Two-step verification

Status Disabled (click to enable)

[redacted]

Website security preferences - Two-step verification

The website or application could ask if you want to receive verification codes by text messages or generate them by an application. Choose to generate the codes by an application. This will generate a secret key to enter in Remote Desktop Manager.



Enable two-step verification

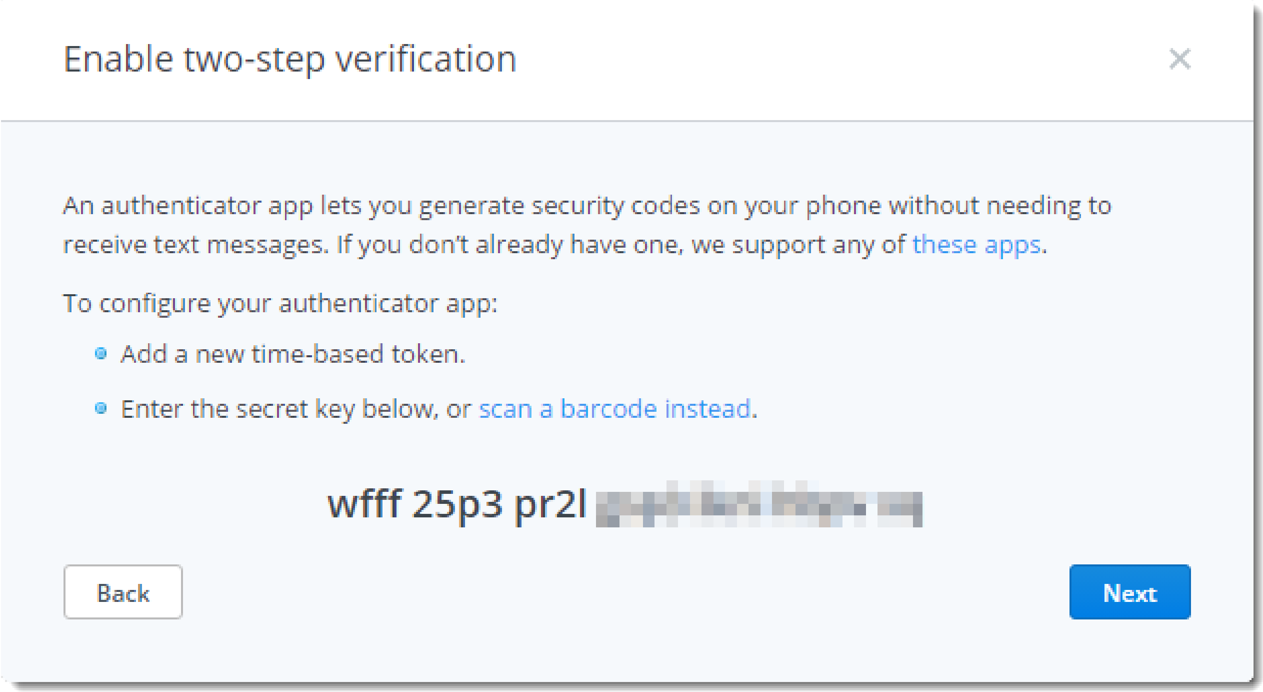
How would you like to receive your security codes?

○ Use text messages
Security codes will be sent to your mobile phone.

● Use a mobile app
Security codes will be generated by an authenticator app.

Choose to receive verification codes by an authenticator application

Copy the key to the clipboard and paste its content in the **Key** field of the **One Time Password** entry. If there are spaces in the key, remove them.



Enable two-step verification

An authenticator app lets you generate security codes on your phone without needing to receive text messages. If you don't already have one, we support any of these apps.

To configure your authenticator app:

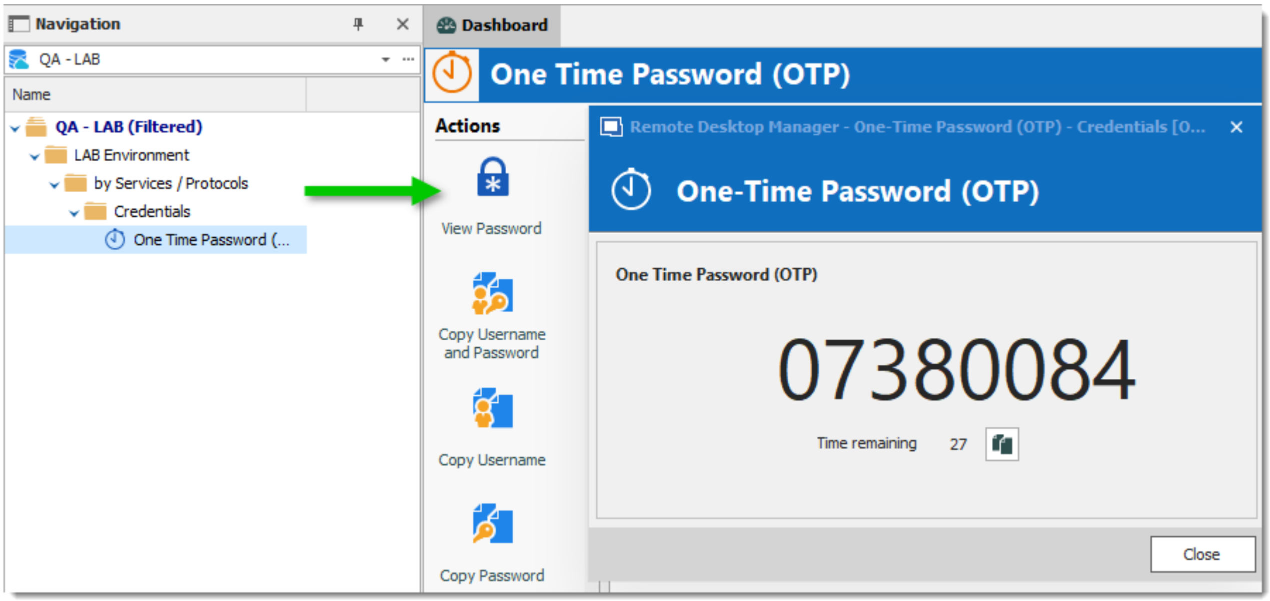
- Add a new time-based token.
- Enter the secret key below, or scan a barcode instead.

wfff 25p3 pr2l [redacted]

Two-step verification secret key

Accept the changes in the website or application, and in Remote Desktop Manager.

When connecting to the account, click on the **View Password** button to display the generated verification code. Enter the verification code when prompted by the website or application.



One Time Password (OTP)

07380084

Time remaining 27

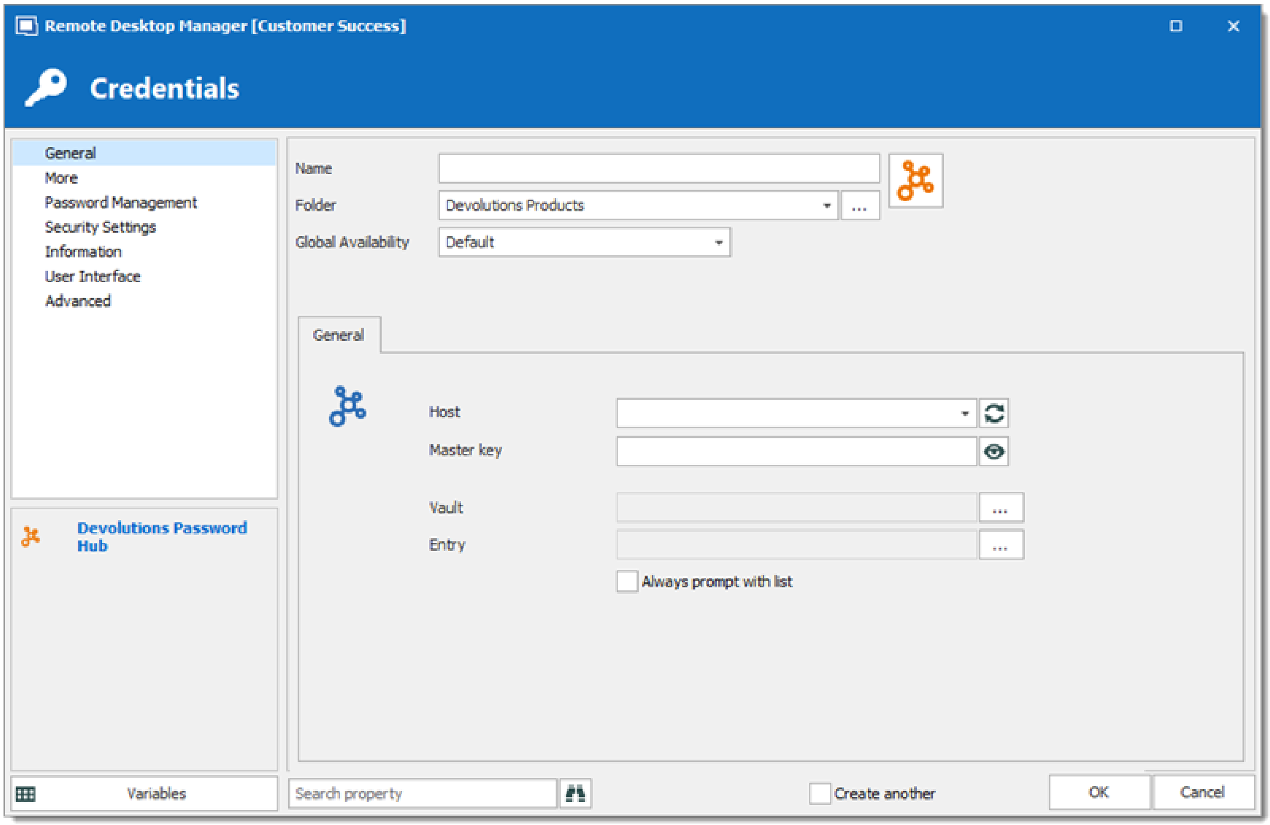
One Time Password Entry - View Password

6.5.3.10 Password Hub

This entry is used to define and configure a **Devolutions Password Hub** credential entry.

SETTINGS

GENERAL



Name:

Folder: Devolutions Products

Global Availability: Default

Devolutions Password Hub Credentials in Remote Desktop Manager

OPTION	DESCRIPTION
Name	Name the credential entry.
Folder	Choose the folder where then entry will be stored in Remote Desktop Manager.
Global Availability	Accessibility option used when the credentials are from a private vault. By default they are unavailable and won't show in the prompt list.
Host	Click on the refresh button to connect to a Devolutions account. In the drop-down menu, choose your Devolutions Password Hub.
Master key	Enter the Devolutions Password Hub master key.
Vault	Choose the vault where the credential is stored.

OPTION	DESCRIPTION
Entry	Choose the credential entry.
Always prompt with list	Check the option to always prompt with the list of credentials when connecting.

6.5.3.11 Password List

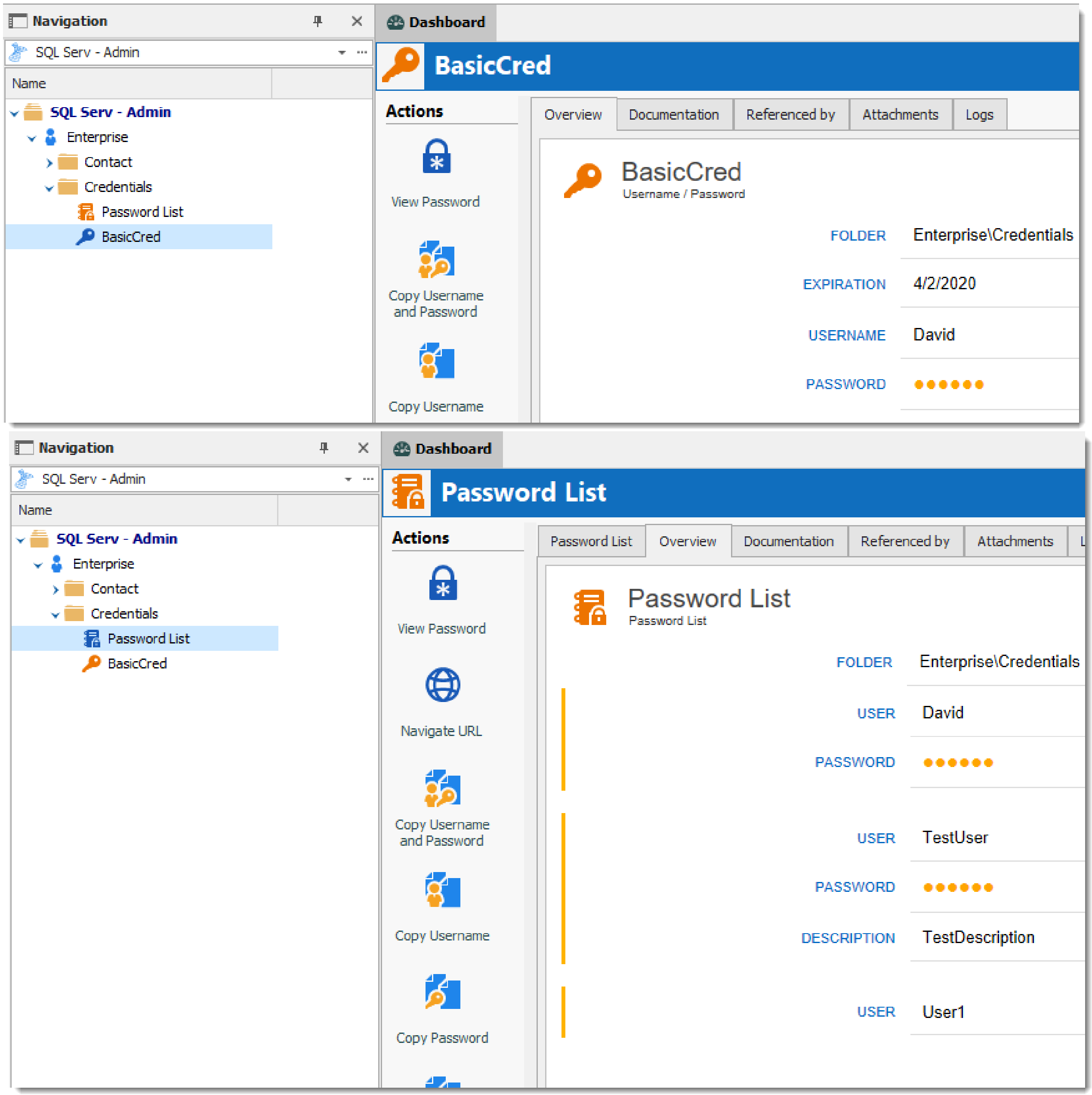
DESCRIPTION

This entry is used to define and configure a **Password List** credential entry.

The Password List credential type allows for storing multiple credentials in one entry. These credentials can then be used in sessions. Each entry within the password list entry contains a usename, a domain, a password, and a description. An expiration date can also be set on each credential entry in the password list.

Watch Video

A great advantage of the password list is that it contains multiple credentials in a single entry.



BasicCred

BasicCred
Username / Password

FOLDER Enterprise\Credentials

EXPIRATION 4/2/2020

USERNAME David

PASSWORD ●●●●●●

Password List

Password List
Password List

FOLDER Enterprise\Credentials

USER David

PASSWORD ●●●●●●

USER TestUser

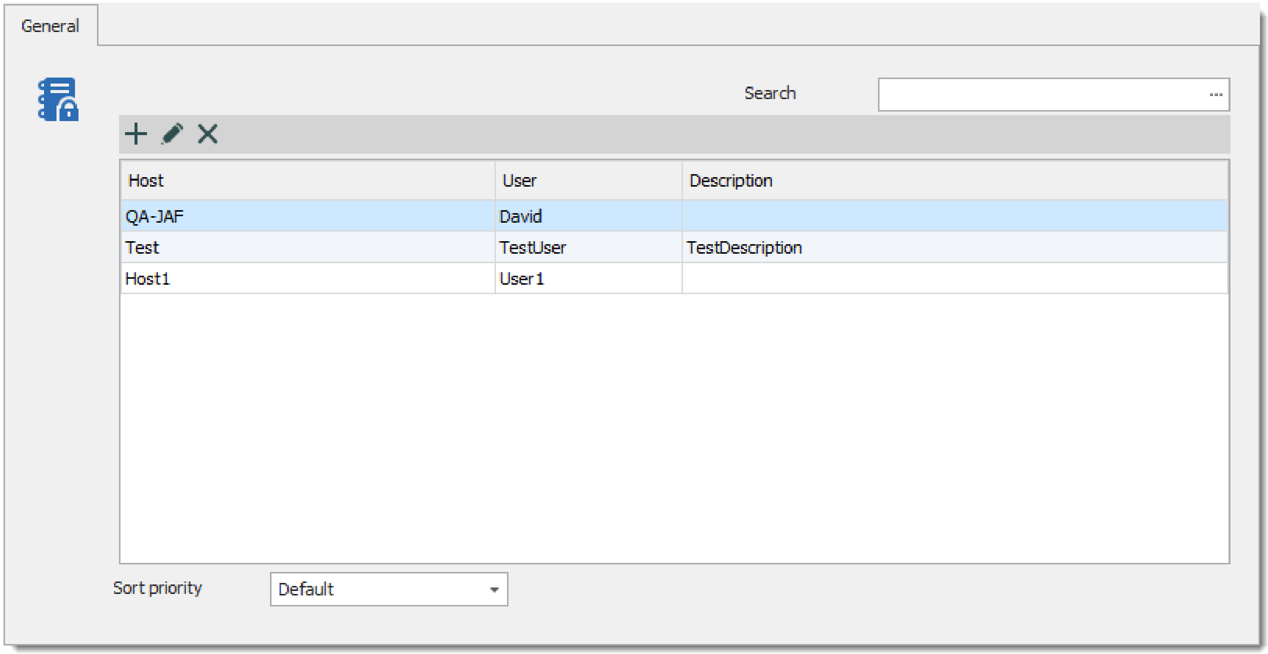
PASSWORD ●●●●●●

DESCRIPTION TestDescription

USER User1

Credentials vs. Password List

SETTINGS



Host	User	Description
QA-JAF	David	
Test	TestUser	TestDescription
Host1	User1	

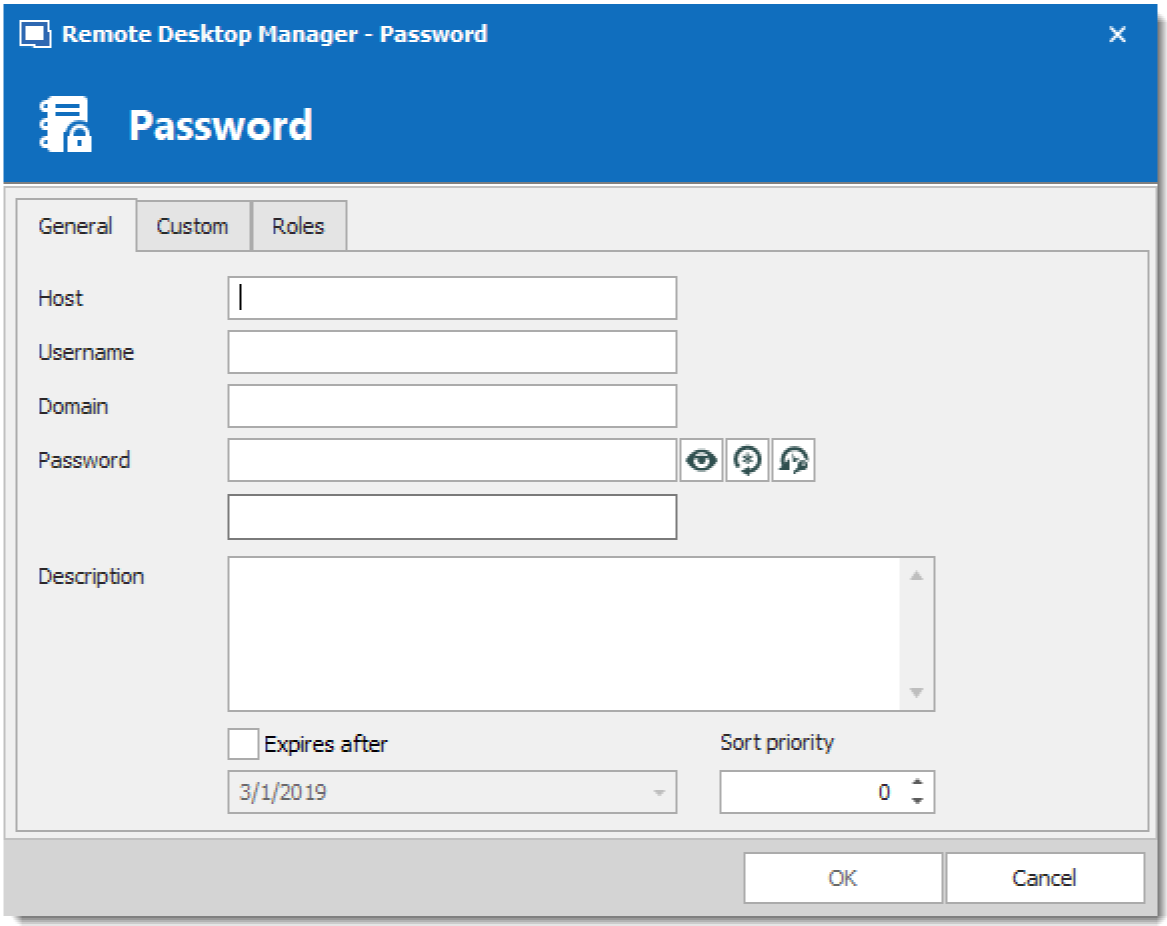
Sort priority: Default

Password List - General Tab

ACTION	DESCRIPTION
Add +	Add credentials to the list.
Edit ✎	Edit the selected credentials.
Delete ✕	Delete the selected credentials.

ADD CREDENTIALS

From the password list entry properties, click on Add +.



□ Expires after: 3/1/2019

Sort priority: 0

Password List - Add Password

OPTION	DESCRIPTION
User	Enter the username to which the password is associated.
Domain	Enter the domain of the user.
Password	Enter the password of the user.
View 👁 / Hide 🔒 password	Click on the view icon to view the password. Click on the hide icon to hide the password.
Password generator	Click on the icon to display the Password Generator.

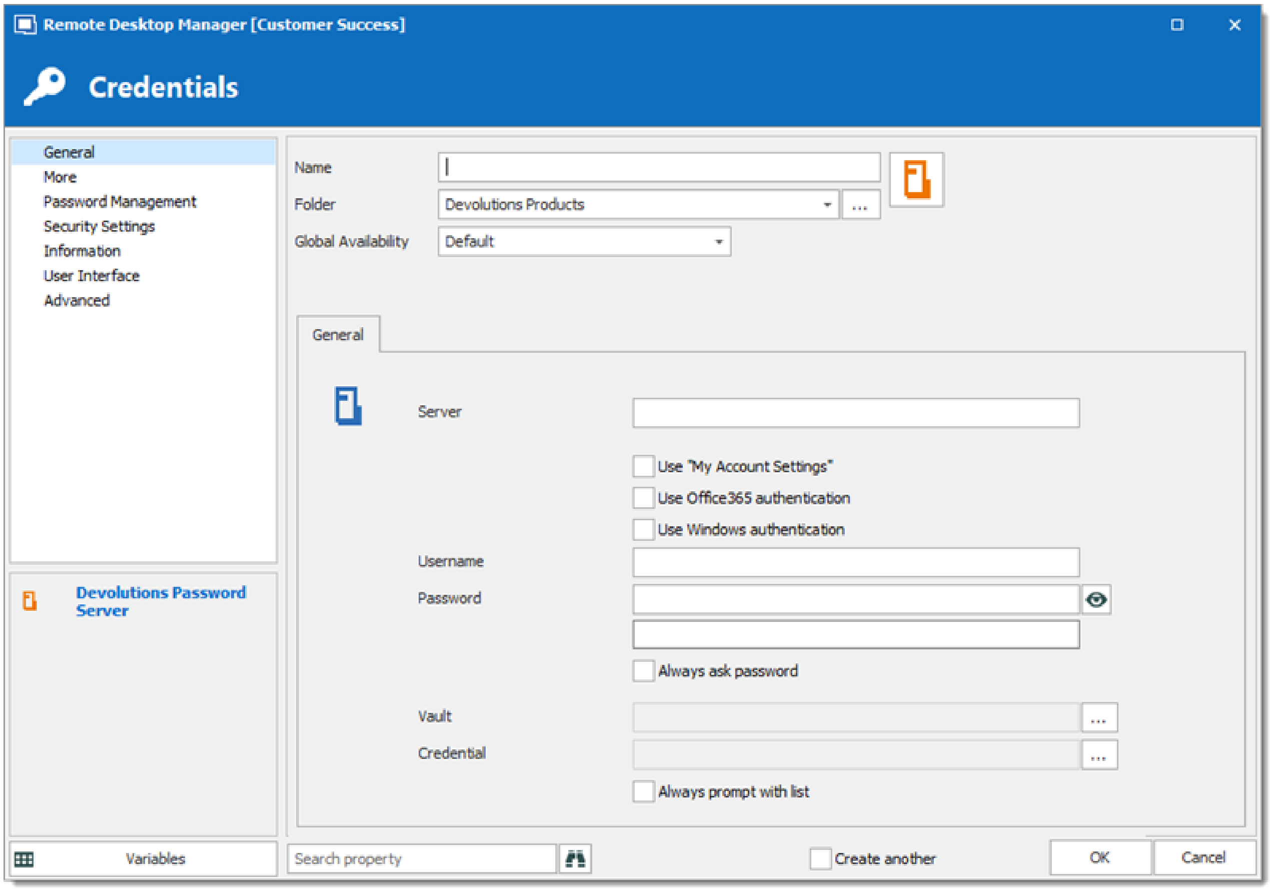
OPTION	DESCRIPTION
Expiration	Set an expiration date for the password.
Custom Tab	Here you can add custom information to your Password lists.
Roles Tab	You can Assign roles or Users directly to your credentials.

6.5.3.12 Password Server

This entry is used to define and configure a **Devolutions Password Server** credential entry.

SETTINGS

GENERAL



Name:

Folder: Devolutions Products

Global Availability: Default

Server:

☐ Use "My Account Settings"

☐ Use Office365 authentication

☐ Use Windows authentication

Username:

Password:

☐ Always ask password

Vault:

Credential:

☐ Always prompt with list

☐ Create another

Devolutions Password Server Credentials in Remote Desktop Manager

OPTION	DESCRIPTION
Name	Name the credential entry.
Folder	Choose the folder name where the entry will be stored in Remote Desktop Manager.
Global Availability	Accessibility option used when the credentials are from a private vault. By default they are unavailable and won't show in the prompt list.
Server	Enter the Devolutions Password Server address.
Authentication	Choose one of the authentication options provided to connect to the server. Manual entry of the credentials is possible in the username and password fields below.

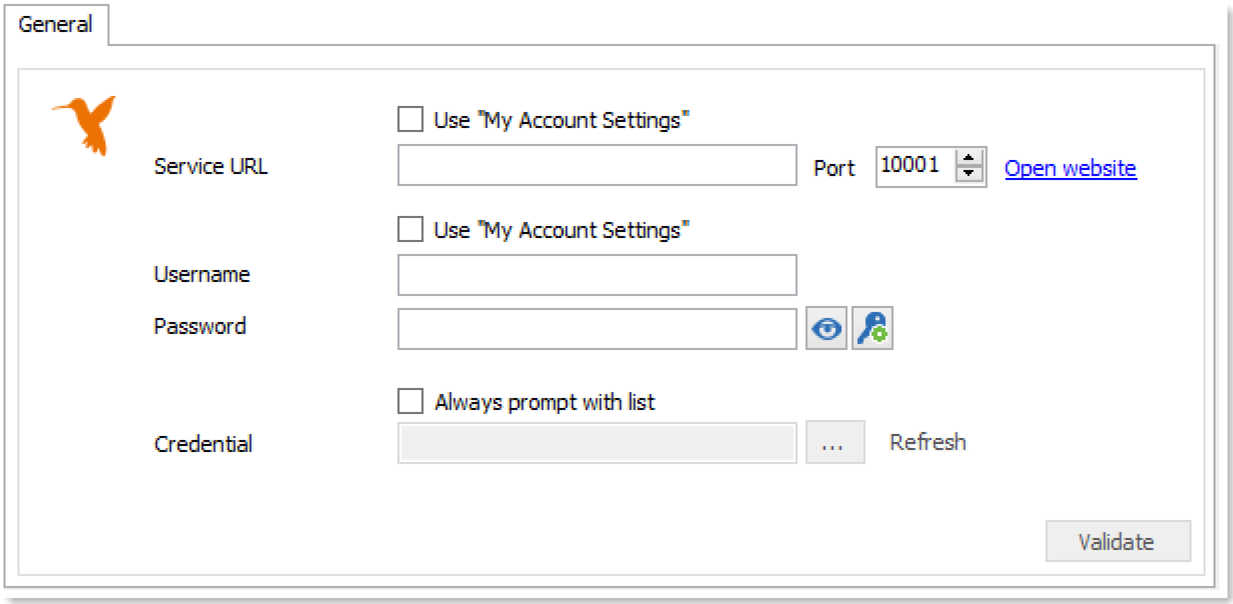
OPTION	DESCRIPTION
Username	Enter a username.
Password	Enter a password.
Vault	Choose the vault where the credential is stored.
Credential	Choose the credential entry.
Always prompt with list	Check the option to always prompt with the list of credentials when connecting.

6.5.3.13 Pleasant Password Server

DESCRIPTION

This entry is used to define and configure a ***Pleasant Password Server*** credential entry.

SETTINGS



□ Use "My Account Settings"

Port 10001

□ Use "My Account Settings"

□ Always prompt with list

Pleasant Password Server

OPTION	DESCRIPTION
Use "My Account Settings"	Use the username and password configured in My Account Settings to connect.
Service URL	Enter the URL to connect on Pleasant Password Server.
Port	Enter the port to connect to Pleasant Password. The default port is 10 001.
Open website	Click ***Open website*** if you wish to test the connection to Pleasant Password.
Username	Enter the username to connect to your Pleasant Password Server.
Password	Enter the password to connect to your Pleasant Password Server.
Always prompt with list	Always prompt with the list of credentials when connecting.
Credential	Select the credential in the database.

6.5.3.14 Secret Server

DESCRIPTION

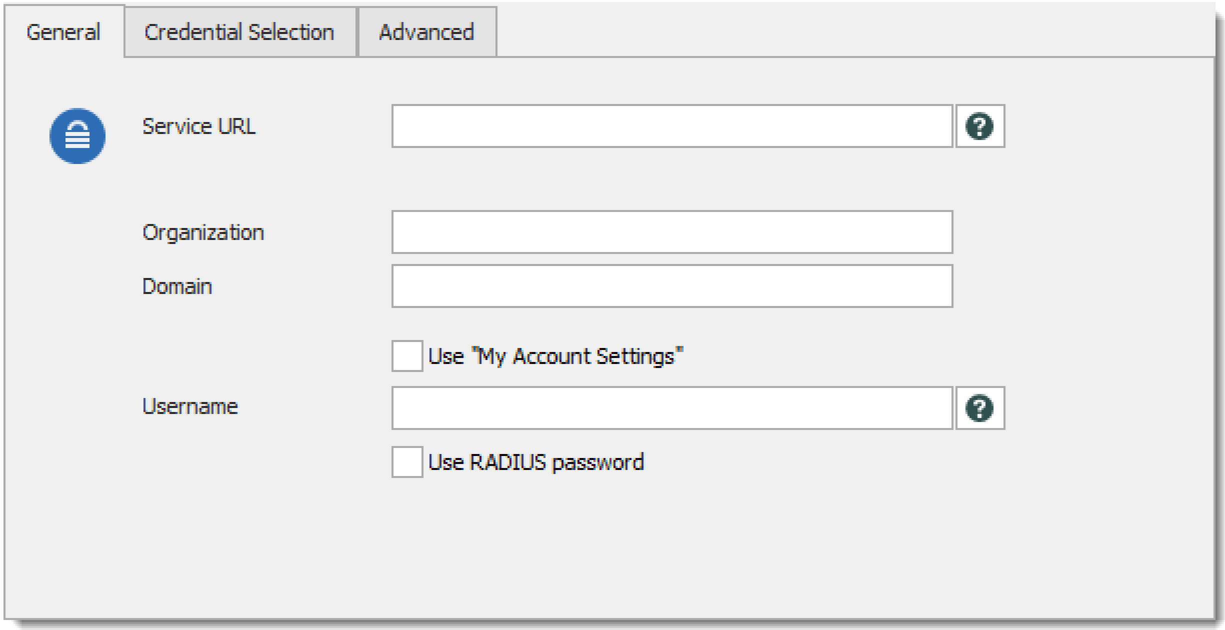
This entry is used to define and configure a ***Secret Server*** credential entry.

The Secret Server integration requires its Web Services feature to be enabled. For more information, please refer to the Secret Server documentation.

Currently, the Remote Desktop Manager integration of Secret Server supports ***Radius*** and ***Duo Pin*** as a second authentication factor. ***Duo Push*** is not supported.

SETTINGS

GENERAL



Service URL

Organization

Domain

□ Use "My Account Settings"

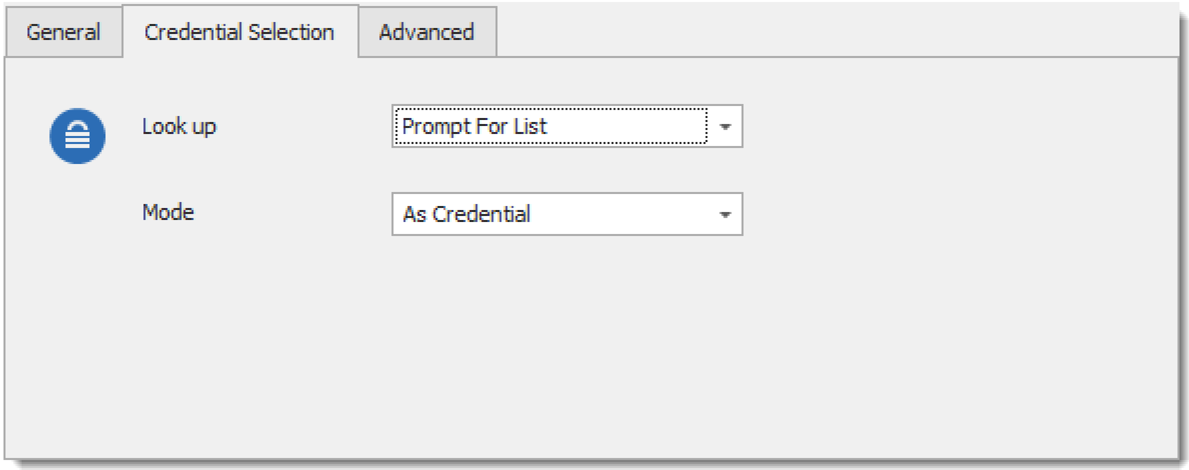
Username

□ Use RADIUS password

Secret Server – General Tab

OPTION	DESCRIPTION
Service URL	Enter the URL of the Secret Server web services endpoint. Please see note below.
Organization	Enter the Organization Code. Required by Secret Server when using the online edition.
Domain	Enter the Domain. Required when Secret Server is configured with domain authentication.
Use "My Account Settings"	Use the credentials configured in My Account Settings to connect.
Username	Enter a Secret Server username. The password is prompted upon validating the settings or when selecting a secret.

CREDENTIAL SELECTION



Look up: Prompt For List

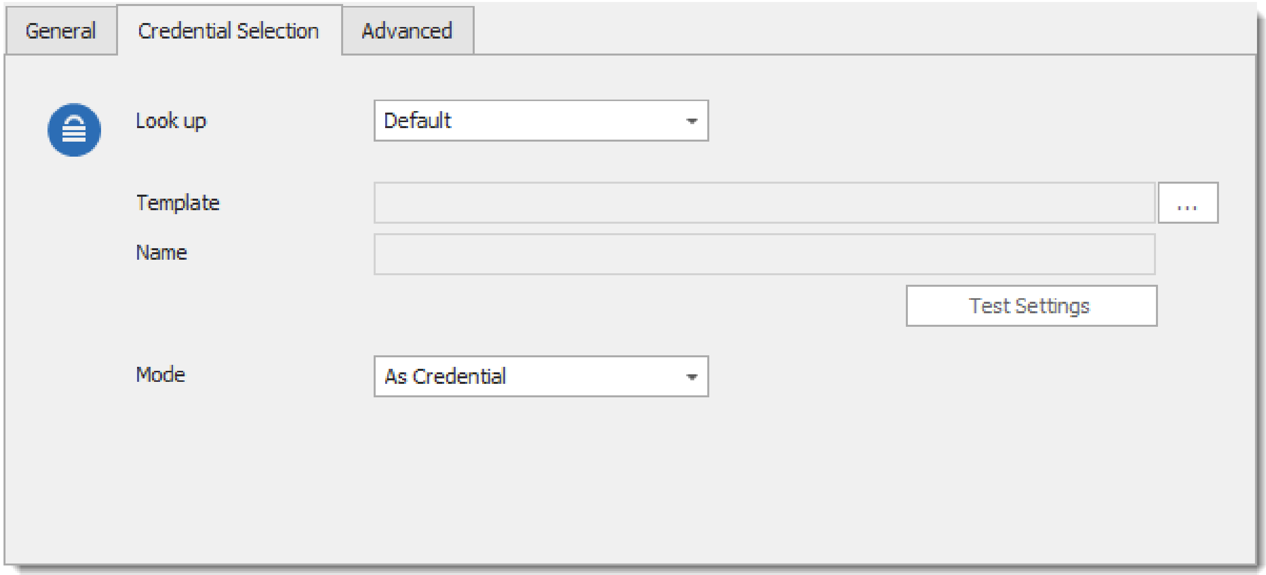
Mode: As Credential

Secret Server – Credential Selection Tab

OPTION	DESCRIPTION
Look up	Select how the secret is retrieve from Secret Server. Select between: • **Default:** select from the available secrets.

OPTION	DESCRIPTION
	- **By Name:** provide a name that matches a secret. - **Prompt For List**
Mode	Select the secret mode. Select between: - **As Credential** - **As Private Key**

Default



Look up: Default

Template:

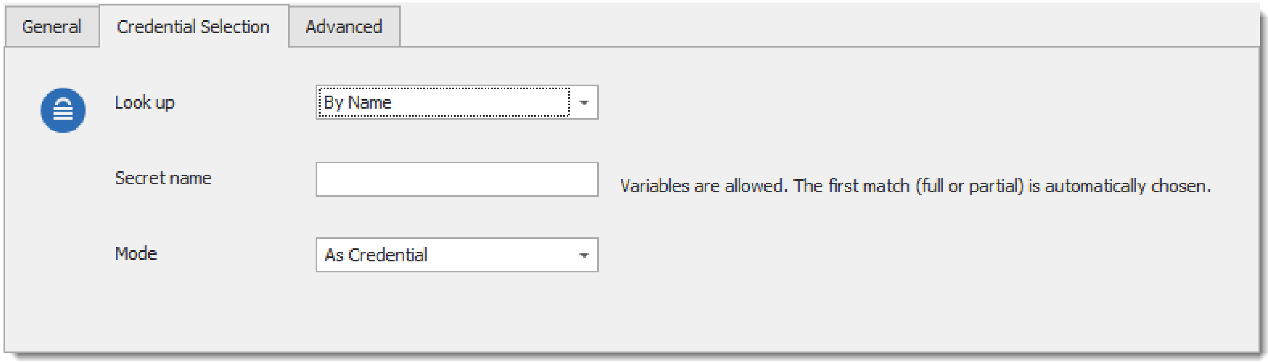
Name:

Mode: As Credential

Secret Server – Credential Selection – Default

OPTION	DESCRIPTION
Template	Click on the ellipsis button to display a list of available secrets. This control displays the name of the template for the selected secret.
Name	Displays the name of the selected secret.
Test Settings	Click to be prompted for the password and validate the credentials.

Name



Look up: By Name

Secret name:

Variables are allowed. The first match (full or partial) is automatically chosen.

Mode: As Credential

Secret Server – Credential Selection – By Name

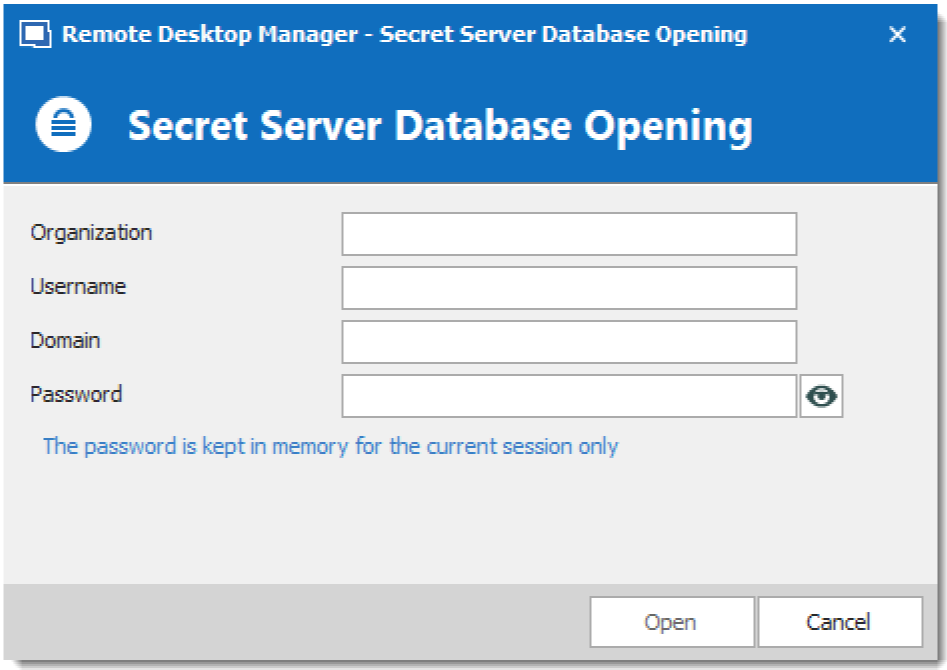
OPTION	DESCRIPTION
Secret name	Enter the partial or full name of the secret to use. Variables can be used, which means you could set up a naming structure for your secrets that would match the structure you are using for your sessions.

Prompt For List

OPTION	DESCRIPTION
Always prompt with list	Select the secret from a list upon every use.

AUTHENTICATION

There is no field to hold the Secret Server password in the entry's properties. When it is required to connect to Secret Server, the following dialog is prompted.


Remote Desktop Manager - Secret Server Database Opening

Secret Server Database Opening

Organization

Username

Domain

Password

The password is kept in memory for the current session only

Secret Server Database Opening

The password is cached in memory for the current session only.

NOTES

SECRET SERVER SERVICE URL

Secret server supports Windows Authentication depending on the version being used and the web server that hosts the application. The Service URL in that case would use the following form: `<Secret Server URL>/winauthwebservices/sswinauthwebservice.asmx`. Please refer to the Secret Server documentation to see if it is supported for your edition, and for how to enable it. As soon as we detect that the endpoint being used is for Windows Authentication, it will be used seamlessly

Follow this procedure to obtain the proper service URL:

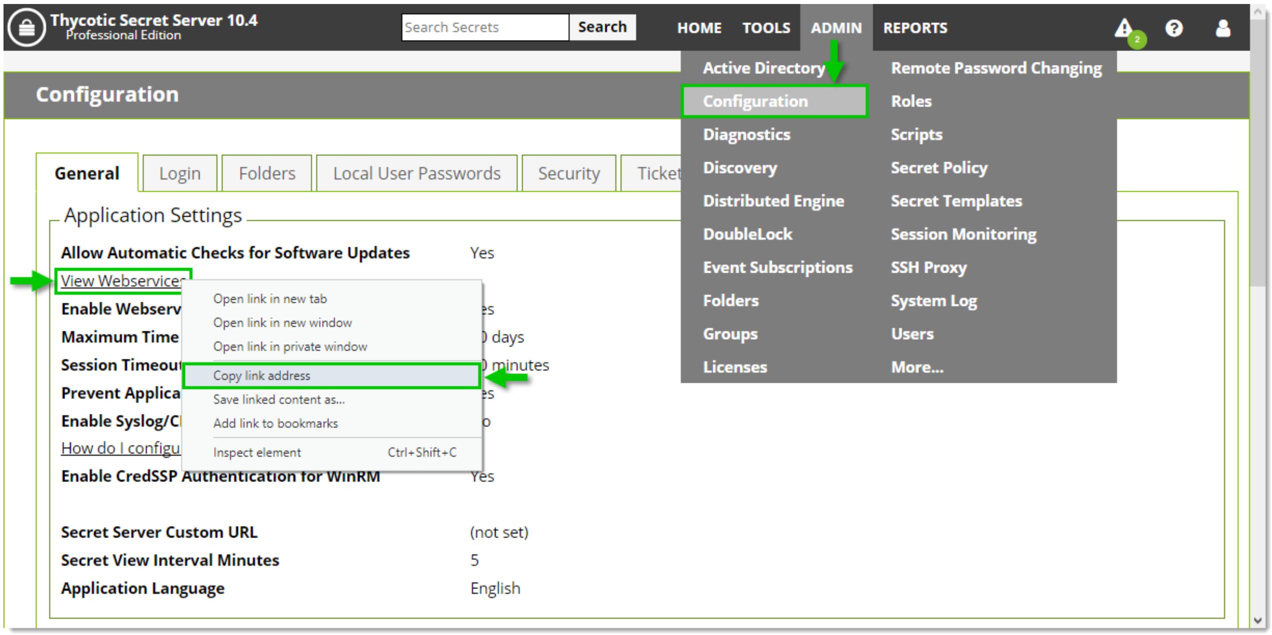
1. Log in to the Secret Server web application.

2. Go in the administration - Configuration section.

3. Locate the View Webservices hyperlink.

4. Right-click and copy the hyperlink.

5. Paste the value in the Service URL field.



Allow Automatic Checks for Software Updates	Yes
View Webservices	
Enable Webserv	es
Maximum Time	0 days
Session Timeout	0 minutes
Prevent Applica	es
Enable Syslog/C	o
How do I configu	
Enable CredSSP Authentication for WinRM	Yes
Secret Server Custom URL	(not set)
Secret View Interval Minutes	5
Application Language	English

Secret Server – Admin – Configuration – Web Services

USERNAME

Variables are supported in the username field. If the names are similar across your domain and Secret Server, you could do one of the following:

- **%username%@%userdomain%**, this uses windows environment variables that hold your identity.
- **%username%@somedomain.com**, mix of environment and plain text.

DYNAMIC CREDENTIAL LINKING

Please refer to Dynamic Credential for more information.

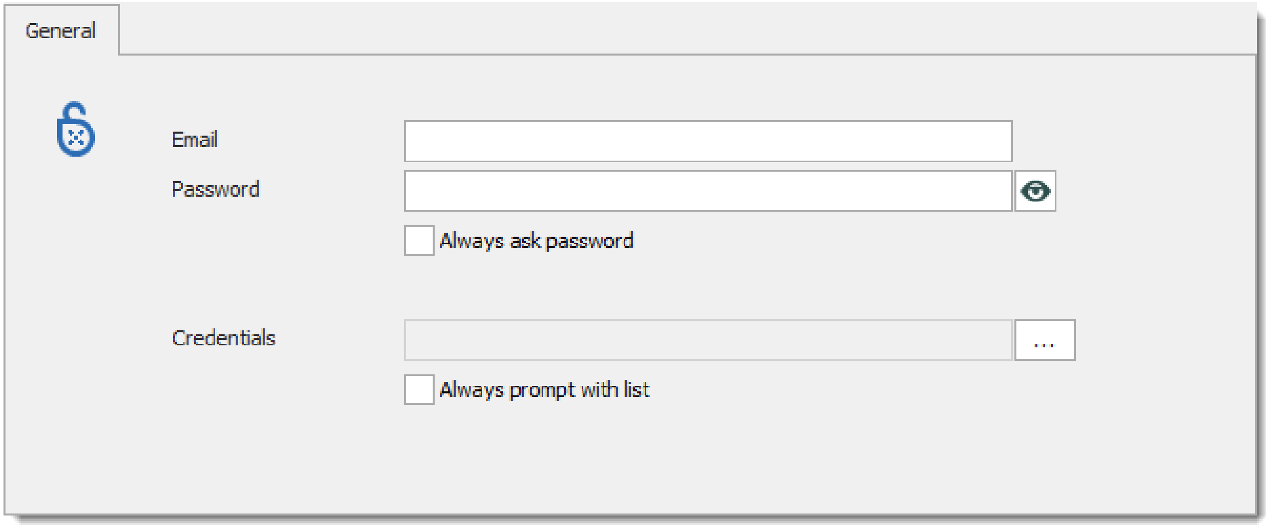
6.5.3.15 Sticky Password

DESCRIPTION

This entry is used to define and configure a **Sticky Password** credential entry.

SETTINGS

GENERAL



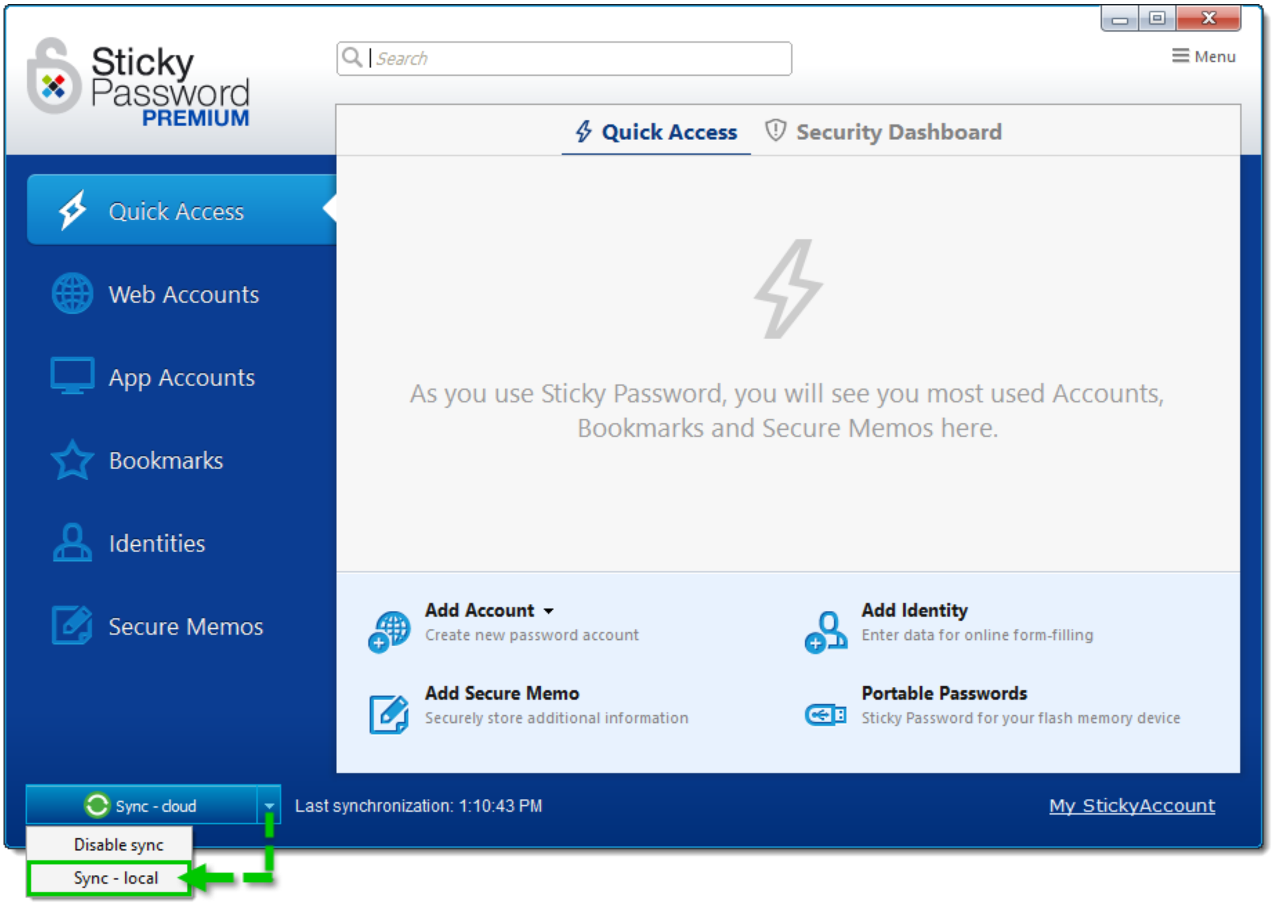
Sticky Password - General Tab

OPTION	DESCRIPTION
Email	Enter the Sticky Password account's email.
Password	Enter the Sticky Password account's password.

OPTION	DESCRIPTION
Always ask password	Check this option to be prompted for the password upon every usage of this entry. It also has the effect of preventing the password from being specified.
Credentials	Displays the currently selected credentials. Select the credential with the ellipsis button.
Always prompt with list	Displays a list of the available credentials when the Sticky Password entry is used.

CLOUD SYNC

To use Sticky Password in Remote Desktop Manager, the Cloud Sync option must be activated in Sticky Password. Note that this feature is available only with Sticky Password Premium.

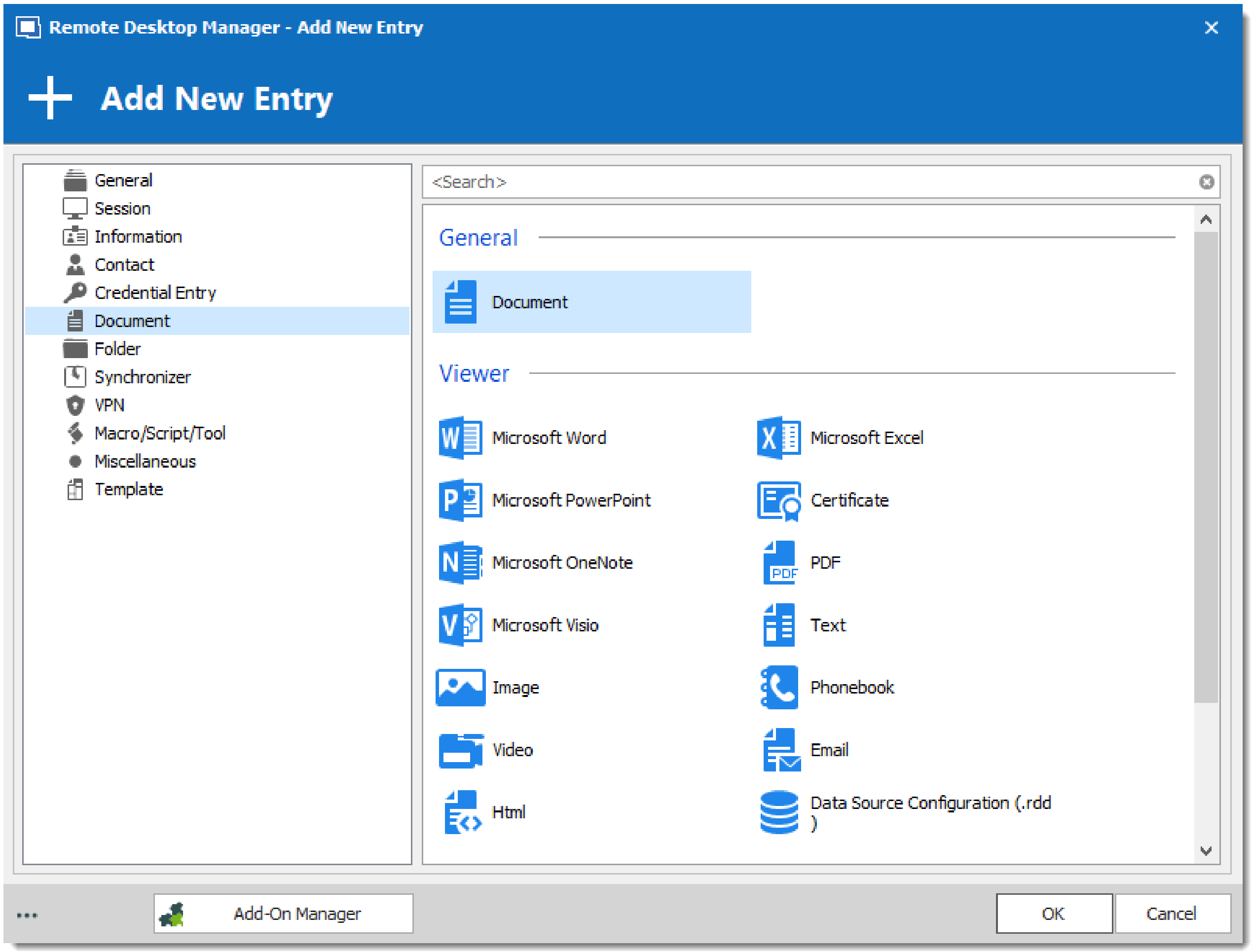

Sticky Password PREMIUM
Search
Menu
Quick Access
Security Dashboard
Quick Access
Web Accounts
App Accounts
Bookmarks
Identities
Secure Memos
As you use Sticky Password, you will see you most used Accounts, Bookmarks and Secure Memos here.
Add Account
Create new password account
Add Identity
Enter data for online form-filling
Add Secure Memo
Securely store additional information
Portable Passwords
Sticky Password for your flash memory device
Sync - cloud
Last synchronization: 1:10:43 PM
My StickyAccount
Disable sync
Sync - local

6.6 Documents

DESCRIPTION

Document entry types are used to store any type of document directly in the data source.

For architectural reasons, the documents stored in our Advanced Data Sources are **NOT** protected from deletions. Once they are deleted, **they cannot be restored**. Please keep a safe copy of all documents in another storage device. Support for this feature will be added in a coming update to our products.



Entry - Document

DOCUMENT TYPES

In most cases, updating a document saves the new file name. Exceptions are: Email and HTML.

The different document types include settings to access the document:

OPTION	DESCRIPTION
Link to file	Enter the path to a file located on your PC or on your network.
Url	Open a file using a URL. You can also use your default Windows Credentials to open the file.
Stored in database	Select a file that will be stored in the database. Some data sources do not support this mode.

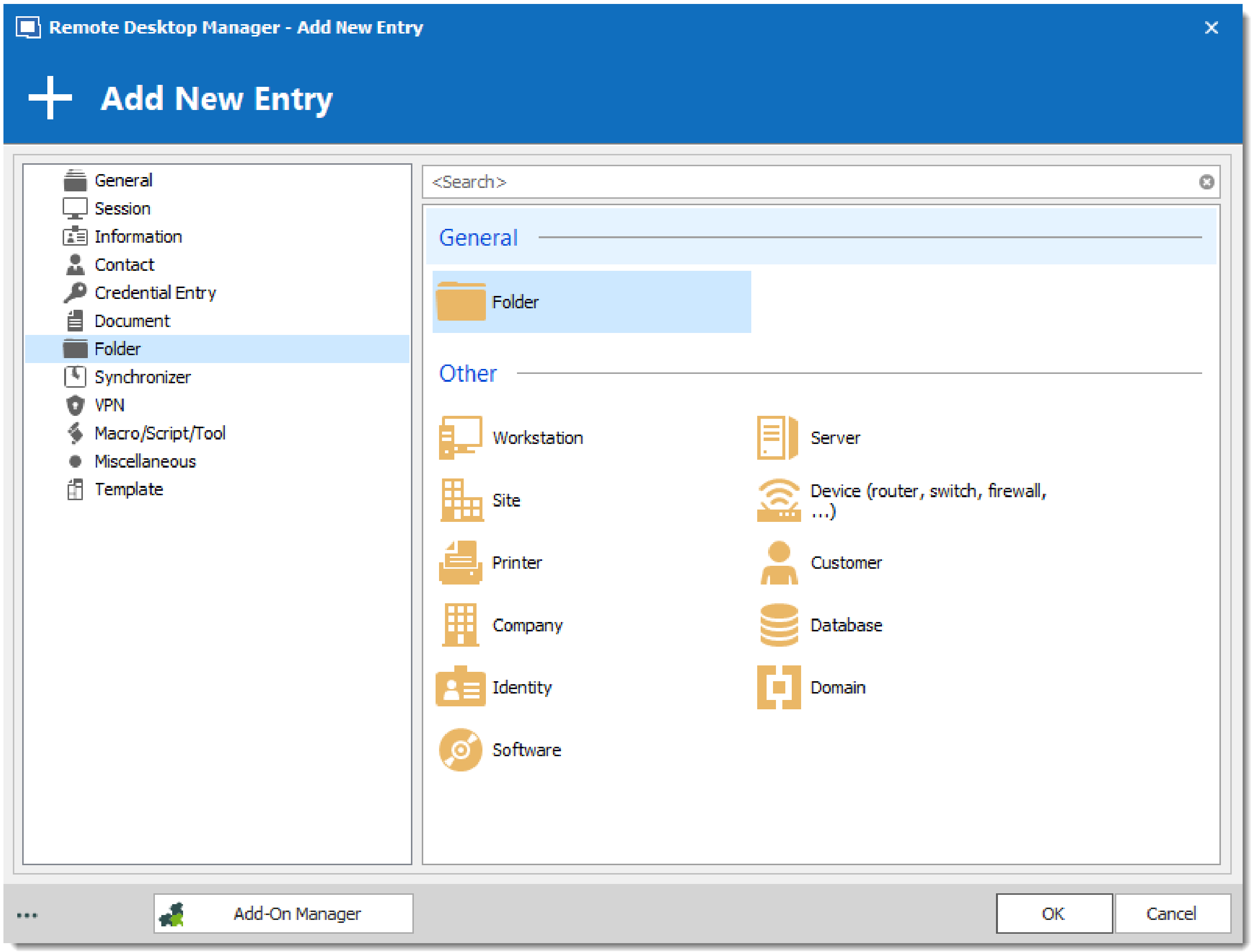
6.7 Folder

DESCRIPTION

Folders are used to organize your entries. You can set permission on folders to limit who can access the folder and what those users can do.

You can also set properties (e.g. Session Recording or Checkout mode) on the folder and then set child entries to inherit folder settings.

You can assign a folder type (e.g. Server) or use variables as a folder name (for more information, please consult the Variables topic).



Entry - Folder

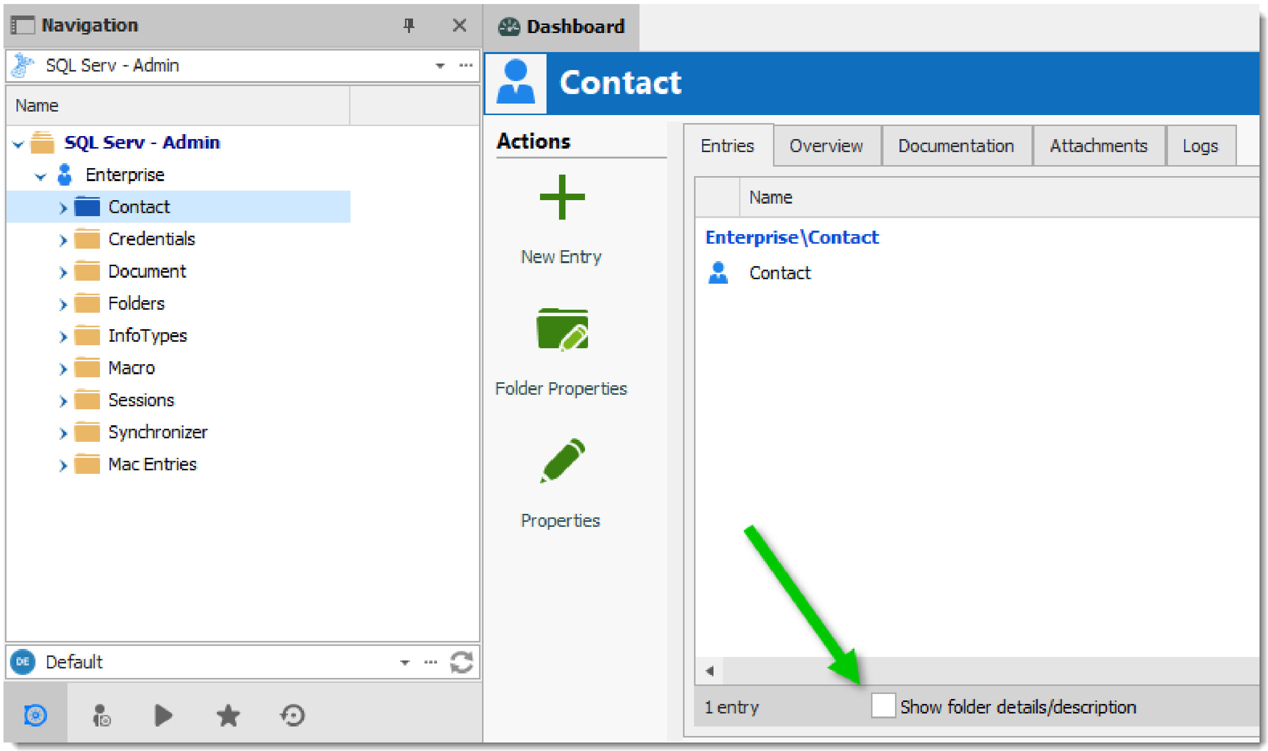
FOLDER PROPERTIES

To decide how to access folder settings through properties or a specific folder properties button, the **Show folder details/description** option is available in the dashboard when a folder is selected.

1. Disable **Show folder details/description**: Use **Folder Properties** to edit folder settings and **Properties** to modify a selected entry.

2. Enable **Show folder details/description**: Use **Properties** to edit folder settings (The **Folder Properties** button is unavailable).

If the option **Show folder details/description** is unchecked (default setting), click **Folder Properties** to edit or view folder settings. Click **Properties** to edit the selected entry settings.

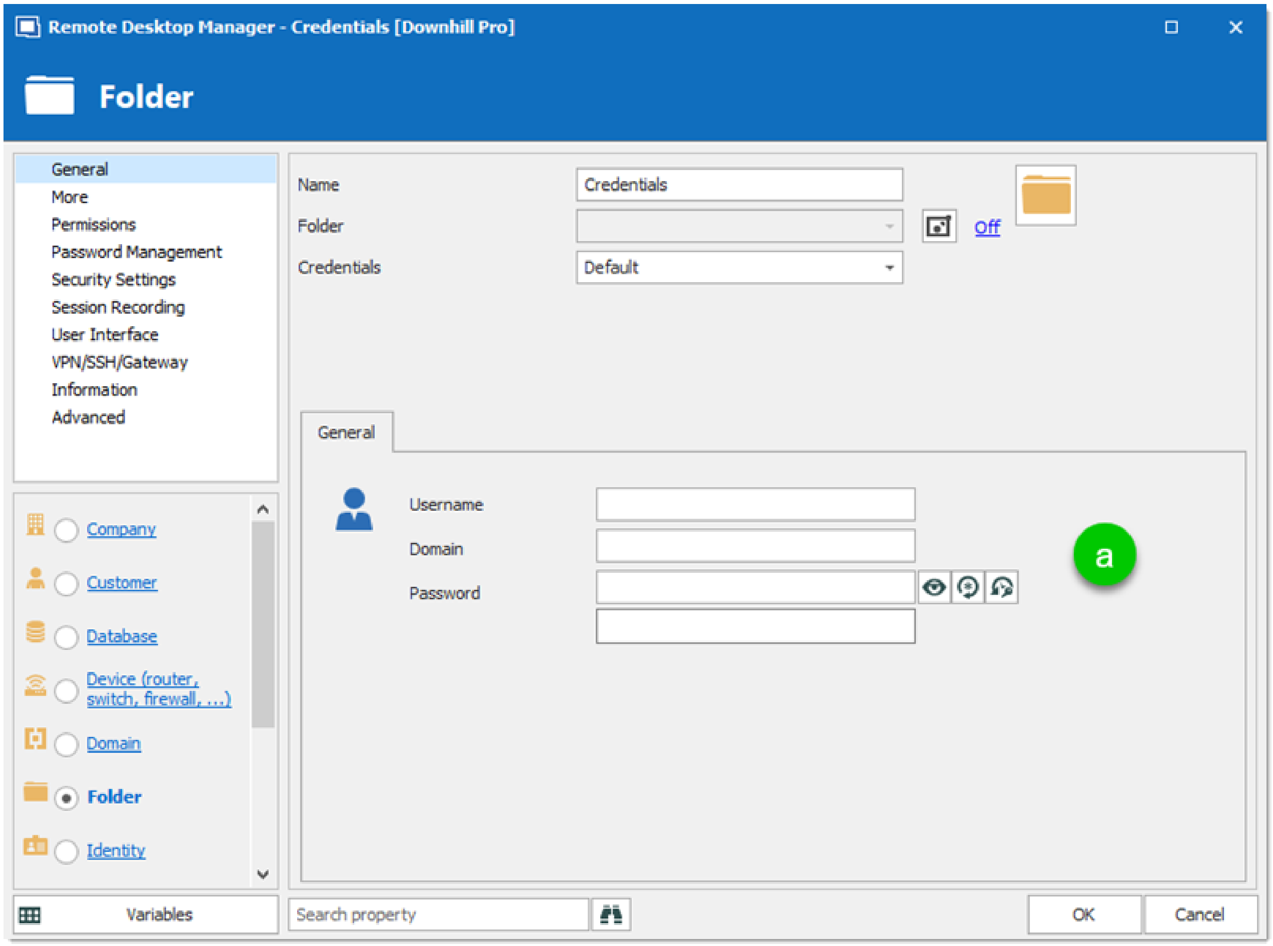


Dashboard for a selected folder - Show folder details/description disabled

When the option **Show folder details/description** is checked, the **Folder Properties** button is unavailable. Click **Properties** to edit the selected folder instead of the entry.

FOLDER SETTINGS

Much of the information in folder properties is optional. Only include **Credentials**, **Username** or **Password** on the folder if you want to protect it. In most cases, leave the information blank (a).



Name: Credentials
Folder:
Off
Credentials: Default

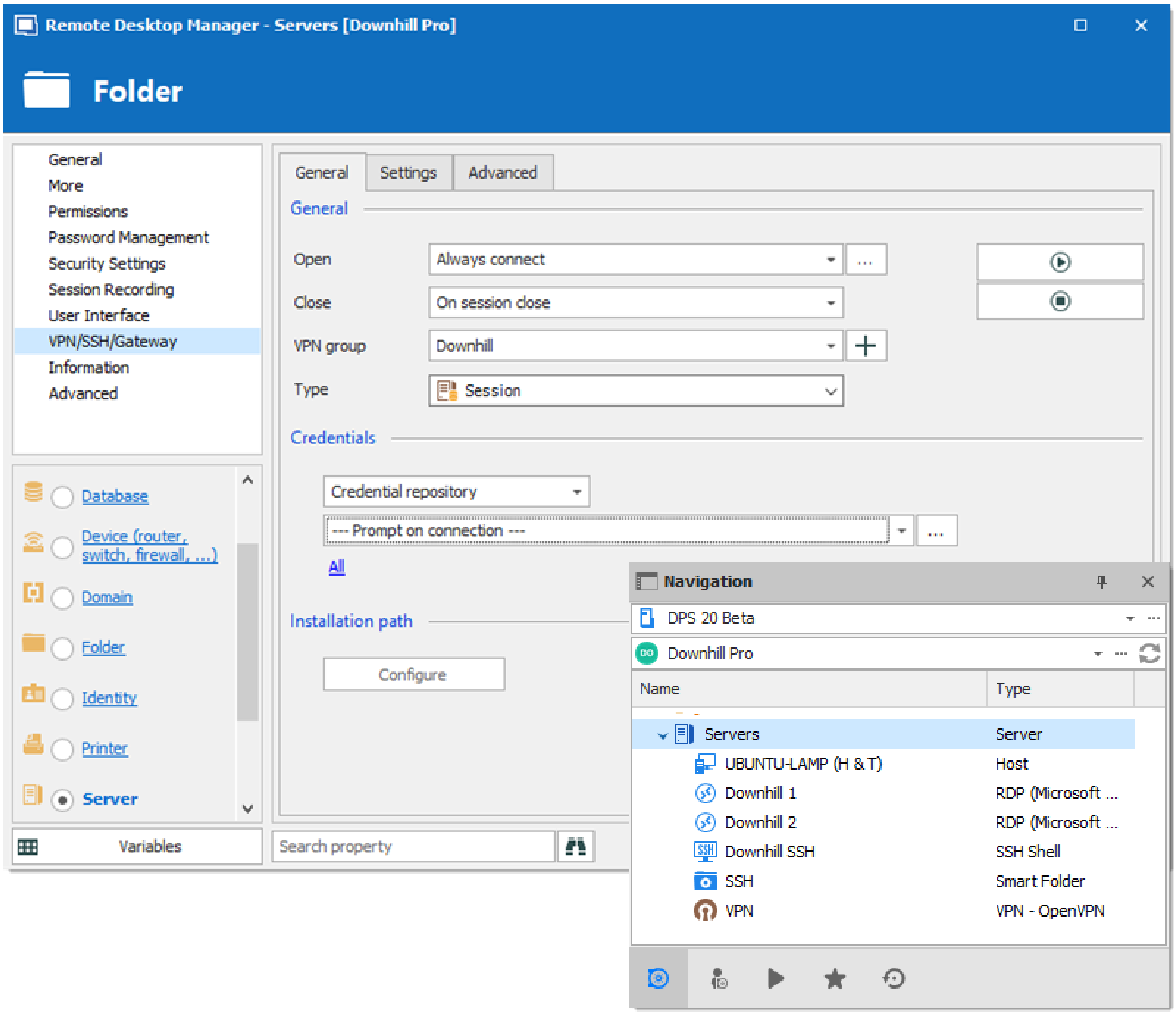
General

Username:
Domain:
Password:

Folder Properties

You can set other settings on the folder. After set the entries within the folder to **inherit** the permissions.

Below is an example of a folder where the VPN is set at the folder level. All session entries within the folder inherit the VPN settings. The folder is also a **Server** type.



Open: Always connect

Close: On session close

VPN group: Downhill

Type: Session

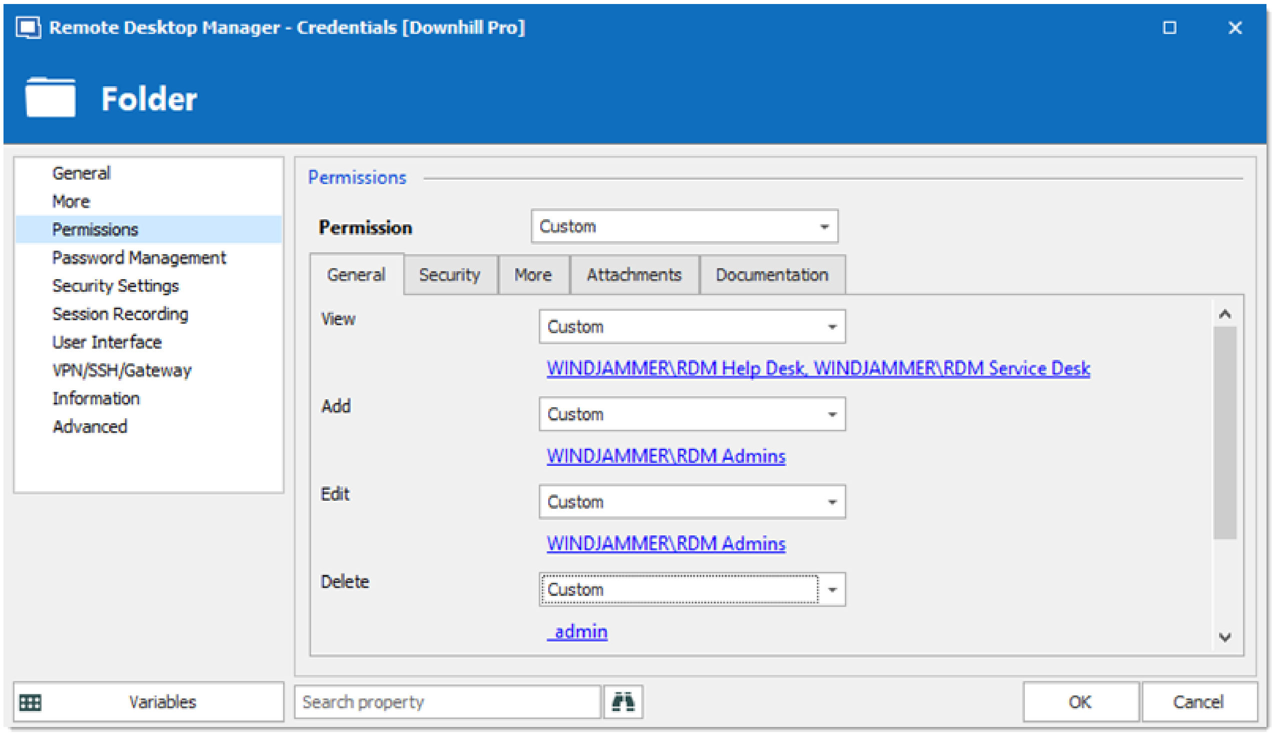
Credential repository

--- Prompt on connection ---

Name	Type
Servers	Server
UBUNTU-LAMP (H & T)	Host
Downhill 1	RDP (Microsoft ...
Downhill 2	RDP (Microsoft ...
Downhill SSH	SSH Shell
SSH	Smart Folder
VPN	VPN - OpenVPN

Example of VPN settings in Folder properties and an excerpt of the Navigation Pane to show the folder structure

Another example is setting **Permissions** at the folder level to restrict access to sensitive information.


Remote Desktop Manager - Credentials [Downhill Pro]

Folder

Permissions

Permission: Custom

View: Custom
WINDJAMMER\RDM Help Desk, WINDJAMMER\RDM Service Desk

Add: Custom
WINDJAMMER\RDM Admins

Edit: Custom
WINDJAMMER\RDM Admins

Delete: Custom
_admin

Permissions - Folder Properties

FOLDER TYPES

Multiple folder types are available. They have special icons to represent the type. You can access information from special entry types through variables: $FOLDERTYPE_variables$. For example, $COMPANY_variables$.

- **Company**
- **Customer**
- **Database**
- **Device (router, switch firewall)**
- **Domain**
- **Folder**
- **Identity**
- **Printer**
- **Server**
- **Site**
- **Software**
- **Workstation**

DATABASE FOLDER

The Database folder provides a some of the functionality of the Database session. In properties, press the ellipsis button to select the data source and data provider. This will generate the connection string with the information you enter in the dialog.

6.8 Synchronizer

DESCRIPTION

The Synchronizer family is a category of entries that can maintain Remote Desktop Manager in sync with an external data source. It will create sessions from information obtained from the source.

> ! You should use security to prevent non-privileged users from using them.
>
> Our recommendations are;
>
> 1. Disable the "**Synchronize automatically**" setting. If enabled, it runs after every data source refresh.
> 2. Use our "command line" feature and schedule a task to run it at the frequency of your choice. You can get the proper command line in the advanced properties of the synchronizer itself.
> 3. If the synchronizer changes a lot of sessions, it may be best to use a "RDM service account", meaning an account not used by one of your users. It will help clear our historical data from our logs.

Remote Desktop Manager has the following synchronizers:

- **Active Directory:** Creates session entries for each computer in Active Directory.
- **Comma Separated Values (CSV):** Create entries for devices. See Import Strategies and File Format for more information about using the wizard and entry templates.
- **Spiceworks**
- **ConnectWise Control (ScreenConnect)**
- **Hyper-V:** Creates sessions for virtual machines on a Hyper-V server.
- **Device (router, switch firewall)**
- **VMWare**
- **Entries (.RDM, .PVM):** Synchronize entries from a Remote Desktop Manager file.
- **Amazon EC2:** Create session entries for virtual machines on the web service.
- **KeePass Xml Synchronizer:** Create credential or website entries.

DUPLICATE ENTRIES

If running the synchronizer results in duplicate entries or other things you did not expect with entries, configure **Action on entry mismatch.** The option is on the **Advanced tab** in the Synchronizer entry properties.

OPTION	DESCRIPTION
Action on entry mismatch	Choose the action to be executed when there is a mismatch between the entries: • **None:** No action will be taken on the mismatch entry. • **Delete:** The mismatch entry will be deleted. • **Move to:** Move the mismatch entry to a designated folder. • **Make expired:** The mismatch entry won't be deleted, but will be expired and unusable. It can only be reactivated by an administrator.

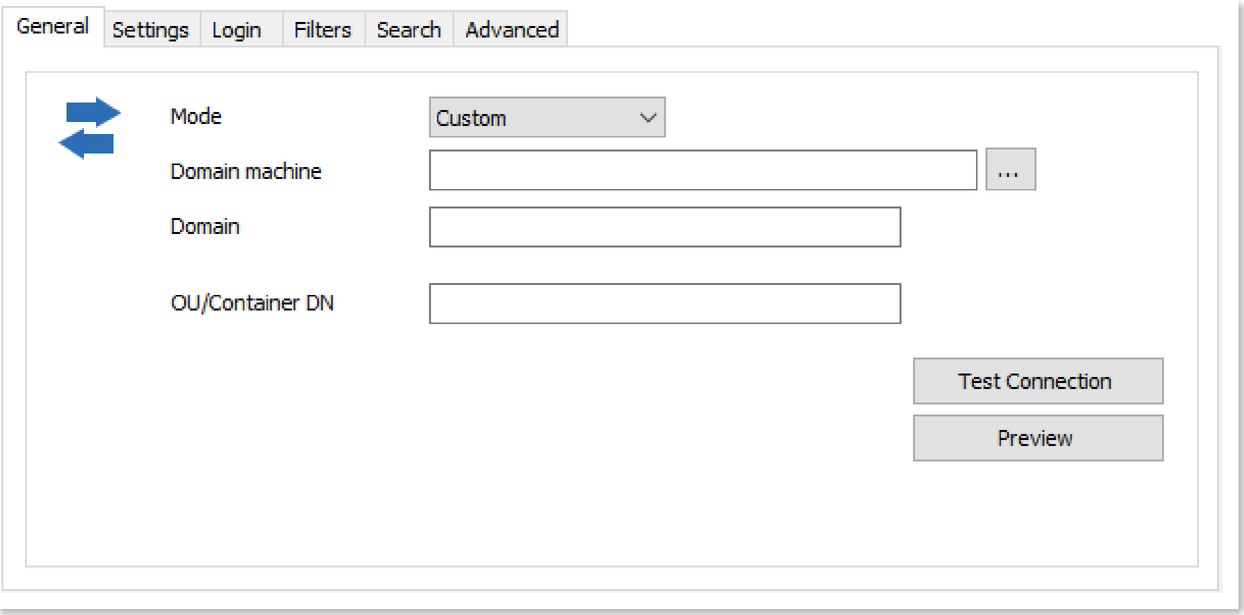
6.8.1 Active Directory

DESCRIPTION

The ***Active Directory Synchronizer*** creates sessions for computers located in your Active Directory structure.

SETTINGS

GENERAL



Mode: Custom

Domain machine

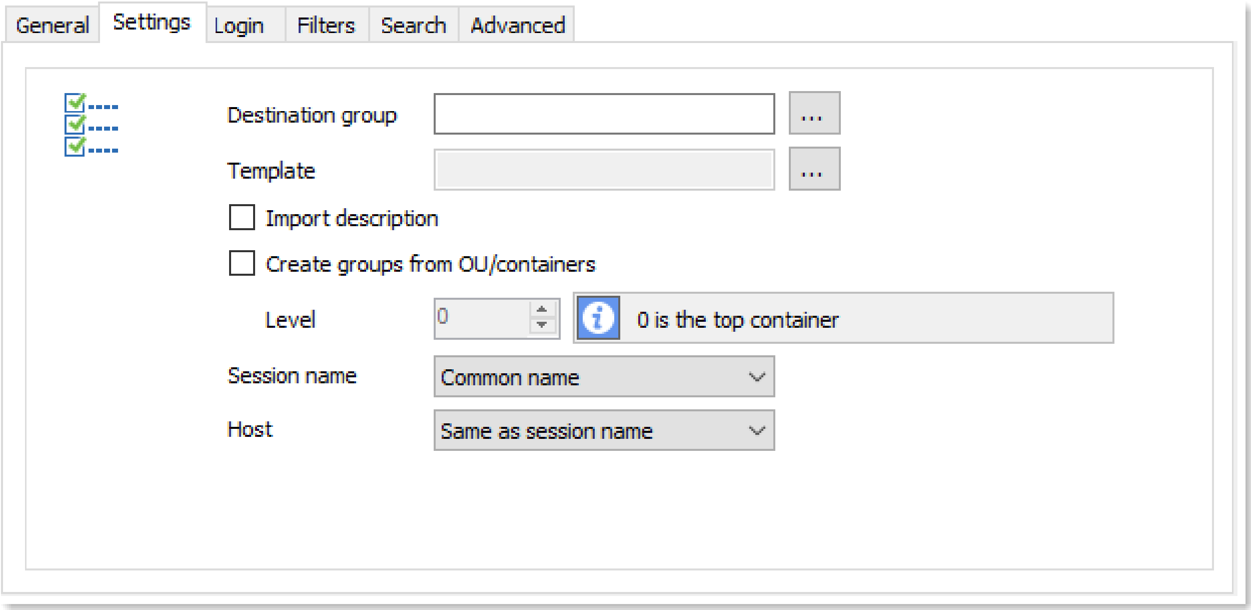
Domain

OU/Container DN

Active Directory - General Tab

OPTION	DESCRIPTION
Mode	Select the mode that the synchronizer will be use. Choose between: • ***Custom*** • ***LDAP*** • ***My Domain***
Domain machine	Enter the domain machine name to perform the sync.
Domain	Enter the domain on which the sync need to be done.
OU/Container DN	Enter the specific OU/Container if only one OU/Container need to be sync.

SETTINGS



Destination group

Template

□ Import description

□ Create groups from OU/containers

Level 0 — 0 is the top container

Session name: Common name

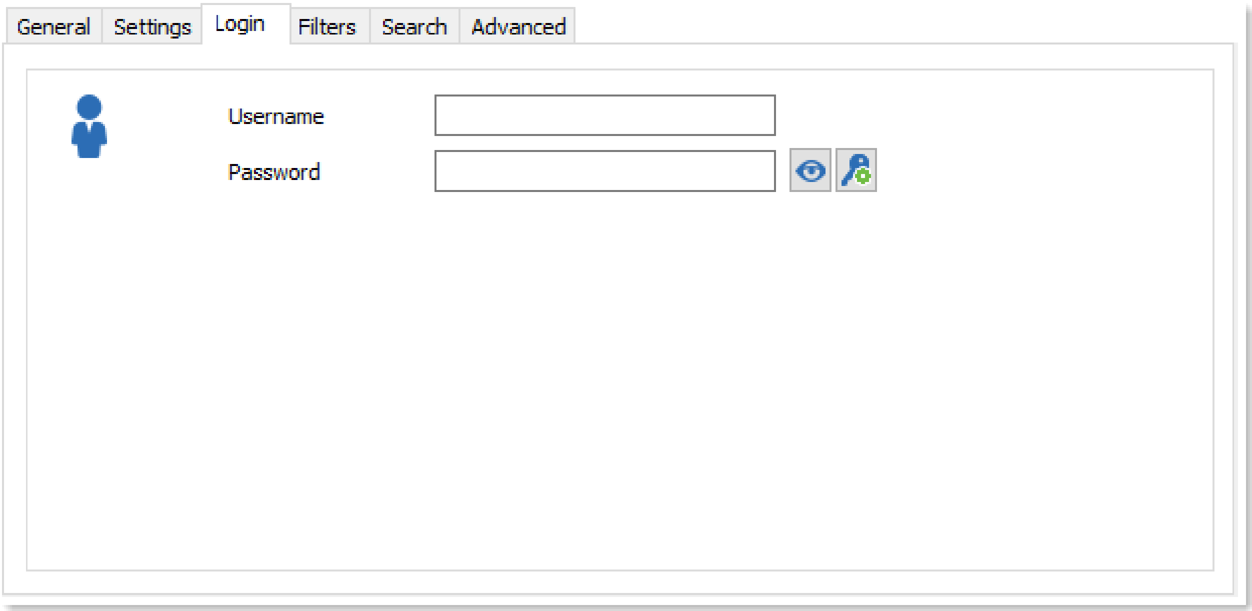
Host: Same as session name

Active Directory - Settings Tab

OPTION	DESCRIPTION
Destination Group	Select the folder where the sessions will be import in Remote Desktop Manager.
Template	Select a template to create your sessions.
Import description	Import the computer description from Active Directory.
Create groups from OU/Containers	Create the sub-folders from the OU/Containers.
Level	Select the level where the creation of the sub-folders will start.
Session name	Select how the session name will be display in Remote Desktop Manager after the sync. Choose between: • ***Common name*** • ***DNS Host name (FQDN)***
Host	Select how the Host field will be populate. Choose between:

OPTION	DESCRIPTION
	- ***Same as session name*** - ***Common name*** - ***DNS Host name (FQDN)***

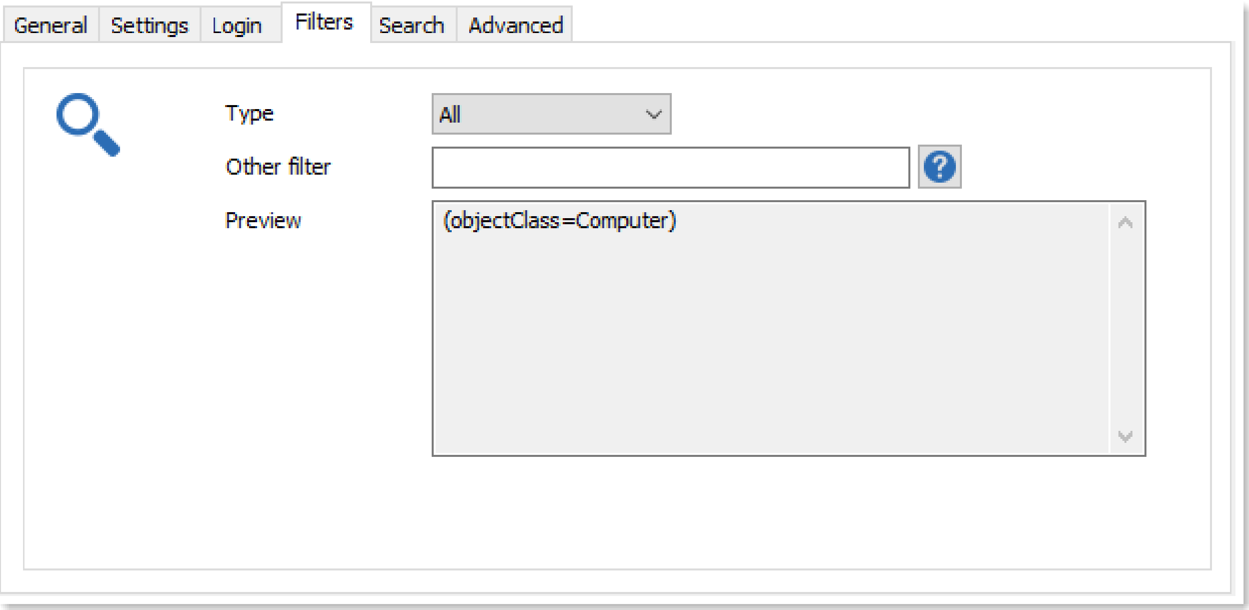
LOGIN



Active Directory - Login Tab

OPTION	DESCRIPTION
Username	Enter the username who has access to perform the sync.
Password	Enter the password of the username.

FILTERS



Type: All

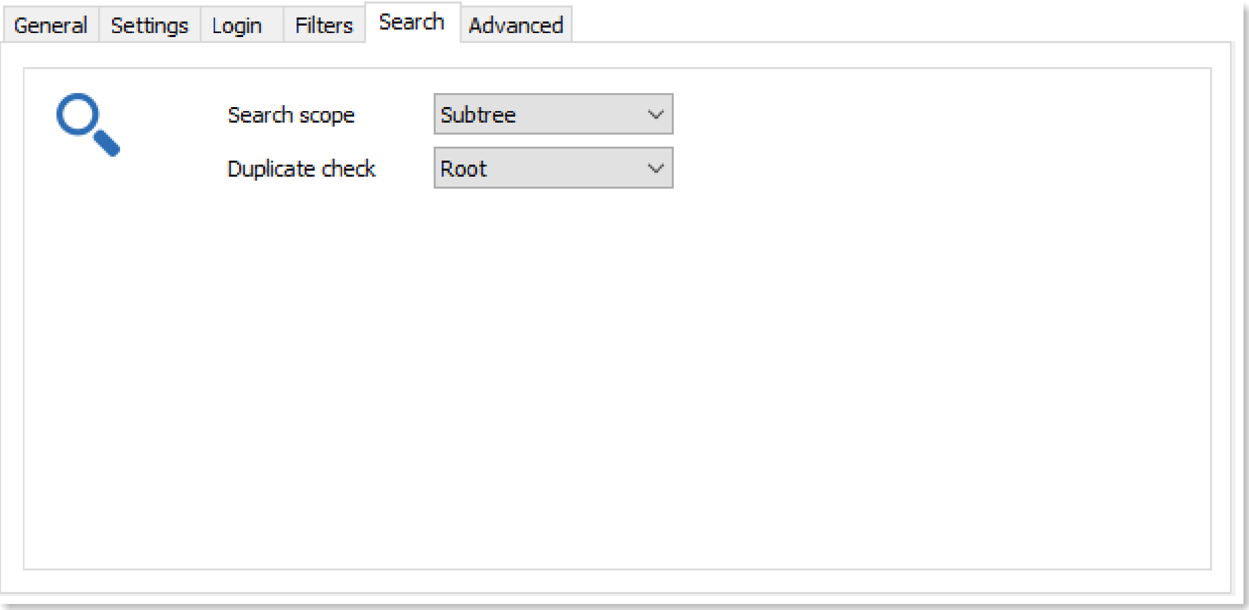
Other filter:

Preview: (objectClass=Computer)

Active Directory - Filters Tab

OPTION	DESCRIPTION
Type	Select if all the servers and workstations will be sync or only the servers. Choose between: • ***All*** • ***Server***
Other filter	Indicate the LDAP query that needed to be use for the filter.
Preview	Preview of the LDAP query that would be execute.

SEARCH



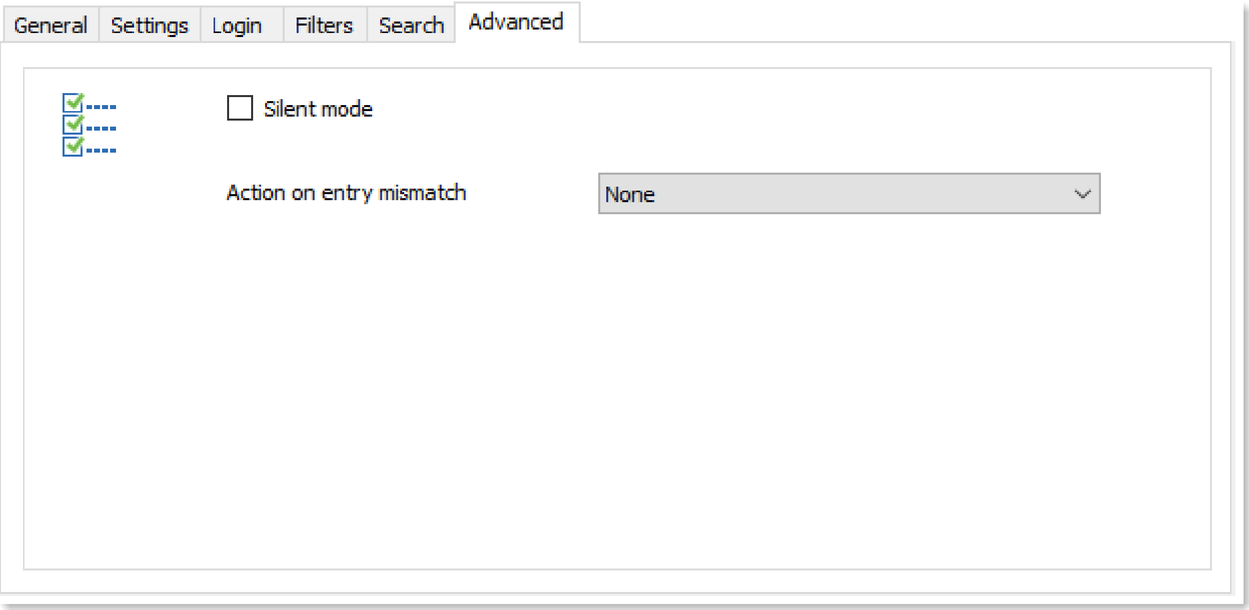
Search scope: Subtree

Duplicate check: Root

Active Directory - Search Tab

OPTION	DESCRIPTION
Search scope	Select where the search scope will be done. Choose between: • ***Subtree*** • ***One-level***
Duplicate check	Select when the duplicate check needs to be done. Choose between: • ***Root*** • ***Destination group***

ADVANCED



□ Silent mode

Action on entry mismatch: None

Active Directory - Advanced Tab

OPTION	DESCRIPTION
Silent mode	When the sync is completed, a sync result window appear to illustrate the result of the sync and that the sync is now completed. Enable this option and the confirmation window will not appear.
Action on entry mismatch	Choose the action to be executed when there is a mismatch between the entries: • ***None:*** no action will be taken on the mismatch entry • ***Delete:*** the mismatch entry will be deleted • ***Move to:*** move the mismatch entry to a designated folder

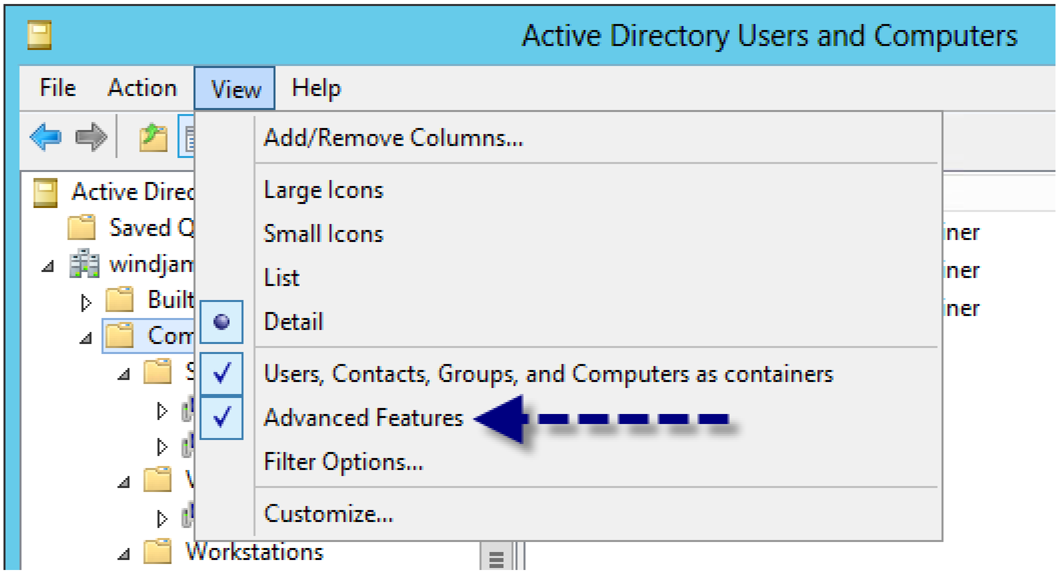
6.8.1.1 Active Directory Sample Structure

DESCRIPTION

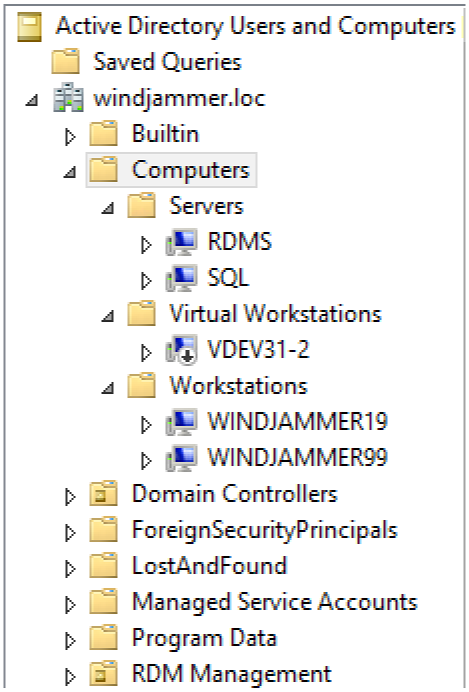
Here is the sample structure used in the Active Directory topic.

To create OU containers, you may have to change a policy, search on Microsoft's site for information applicable to the operating system of your domain controller.

Some AD structures use Advanced features of the mmc snapin, you must enable the ***Advanced Features*** toggle in the View menu.



SAMPLE STRUCTURE



- Active Directory Users and Computers
  - Saved Queries
  - windjammer.loc
    - Builtin
    - Computers
      - Servers
        - RDMS
        - SQL
      - Virtual Workstations
        - VDEV31-2
      - Workstations
        - WINDJAMMER19
        - WINDJAMMER99
    - Domain Controllers
    - ForeignSecurityPrincipals
    - LostAndFound
    - Managed Service Accounts
    - Program Data
    - RDM Management

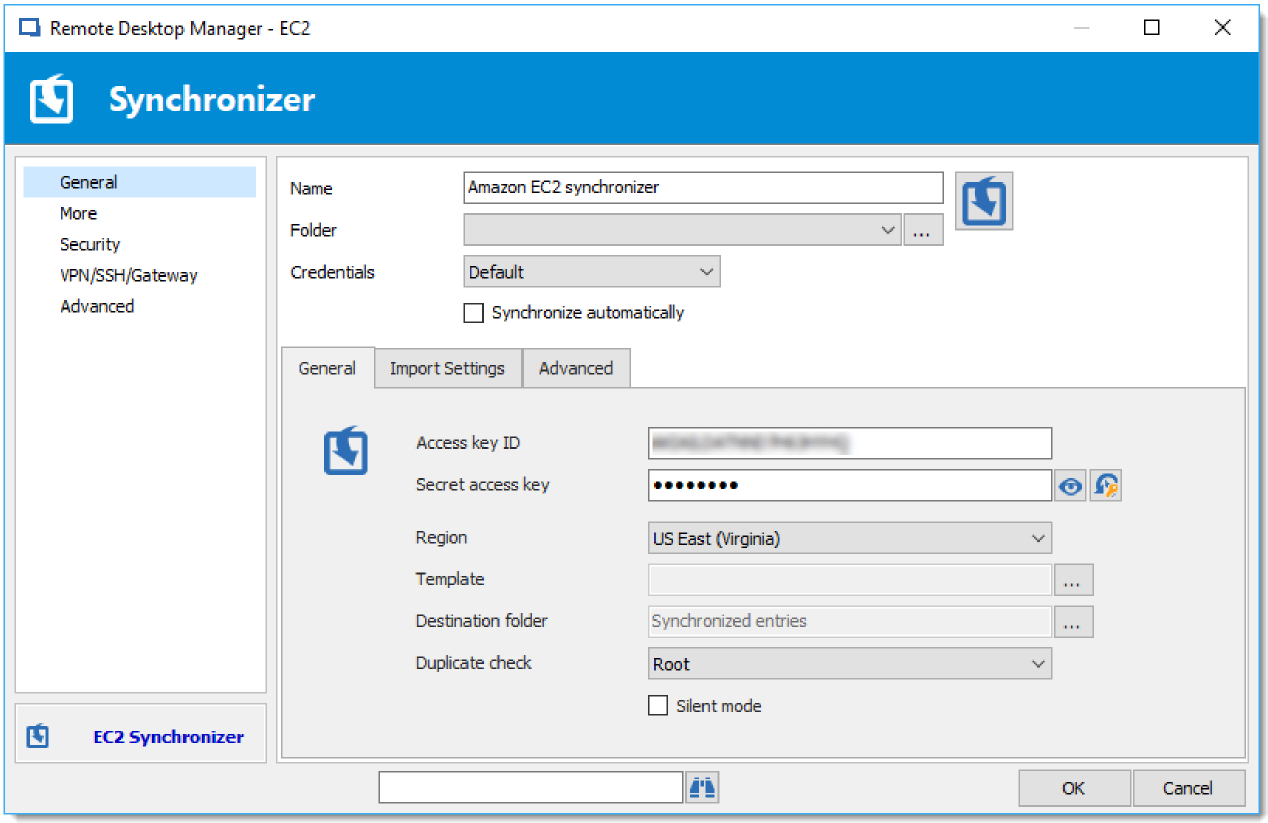
6.8.2 Amazon EC2

DESCRIPTION

The ***Amazon EC2 Synchronizer*** allows to synchronize virtual machines from the Amazon EC2 web service. The synchronizer creates sessions for each virtual machine instance from EC2.

SETTINGS

GENERAL



Remote Desktop Manager - EC2

Synchronizer

Name: Amazon EC2 synchronizer

Folder:

Credentials: Default

□ Synchronize automatically

Access key ID: [redacted]

Secret access key: ••••••••

Region: US East (Virginia)

Template:

Destination folder: Synchronized entries

Duplicate check: Root

□ Silent mode

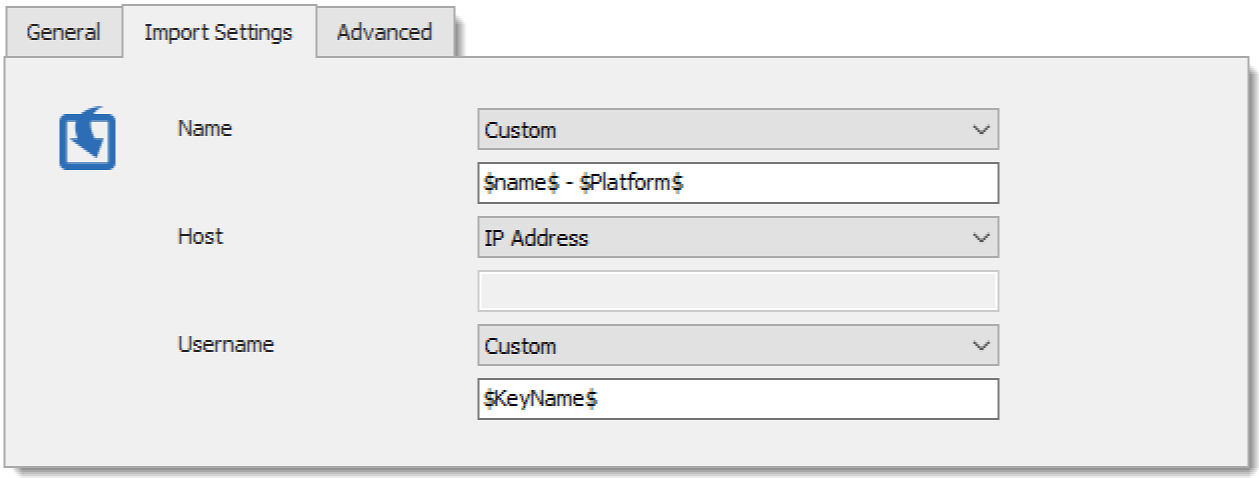
Amazon EC2 Synchronizer

OPTION	DESCRIPTION
Access key ID	Enter the AWS Access Key ID.
Secret access key	Enter the AWS Secret Acess Key.
View 👁/ Hide 🔒 key	Click on the view icon to view your password. Click on the hide icon to hide your password.
Password History	Click this icon to display the password (Secret access key) history of the entry.
Region	Select the region in which the EC2 service hosts the virtual machines.

OPTION	DESCRIPTION
Destination group	Select the destination folder of the created entries.
Duplicate check	Check for already created entries. Select one of the following location: • ***Root***: Check all entries • ***Destination folder***: Check entries in the destination folder only.
Silent mode	Enable to suppress the Sync Result output.
Create virtual groups	Create entries in virtual groups/folders.

IMPORT SETTINGS

The Import Settings section replaces the values of the synchronized entries. The Custom option allows to use variables.

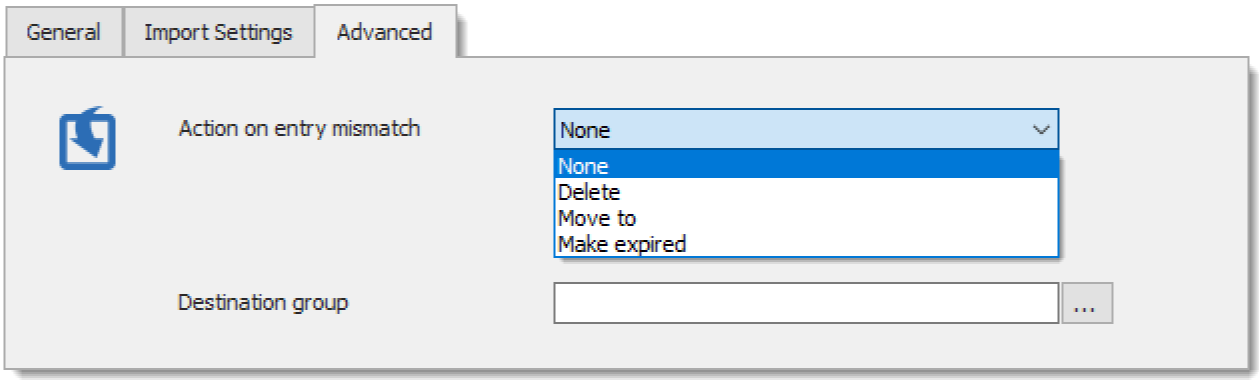


Name: Custom
$name$ - $Platform$
Host: IP Address
Username: Custom
$KeyName$

EC2 Synchronizer – Import Settings

PROPERTY	VARIABLE
Instance name	`$Name$`
Instance Id	`$InstanceId$`
Platform	`$Platform$`
Type	`$InstanceType$`
State	`$StateName$`
Group Id	`$GroupId$`
Key name	`$KeyName$`
Public DNS	`$PublicDnsName$`
Private DNS	`$PrivateDnsName$`
Public IP address DNS	`$IpAddress$`
Private IP address	`$PrivateIpAddress$`

ADVANCED



Action on entry mismatch: None

- None
- Delete
- Move to
- Make expired

Destination group

Amazon EC2 Synchronizer - Advanced

OPTION	DESCRIPTION
Action on entry mismatch	Select the action to perform when an entry configuration has changed. Select between: • ***None*** • ***Delete*** • ***Move to*** • ***Make expired***
Destination group	Enter the destination folder of entries that have changed configuration. Only with ***Move to*** as the ***Action on entry mismatch***.

6.9 VPN

DESCRIPTION

VPN Entry is used to configure a VPN. One VPN entry can be linked to multiple sessions. See **Configuring a VPN for multiple sessions** to see the step-by-step guide.

VPNS AND ACCESS TO YOUR DATA SOURCE

✓ Many organizations configure their devices to channel ALL traffic through the VPN. This may break the connection to your data source. When you are subject to this constraint, it is best to enable the Offline Mode in **Data Source Settings (System Settings)**, then configure the VPN options to automatically **Go offline on connection**.

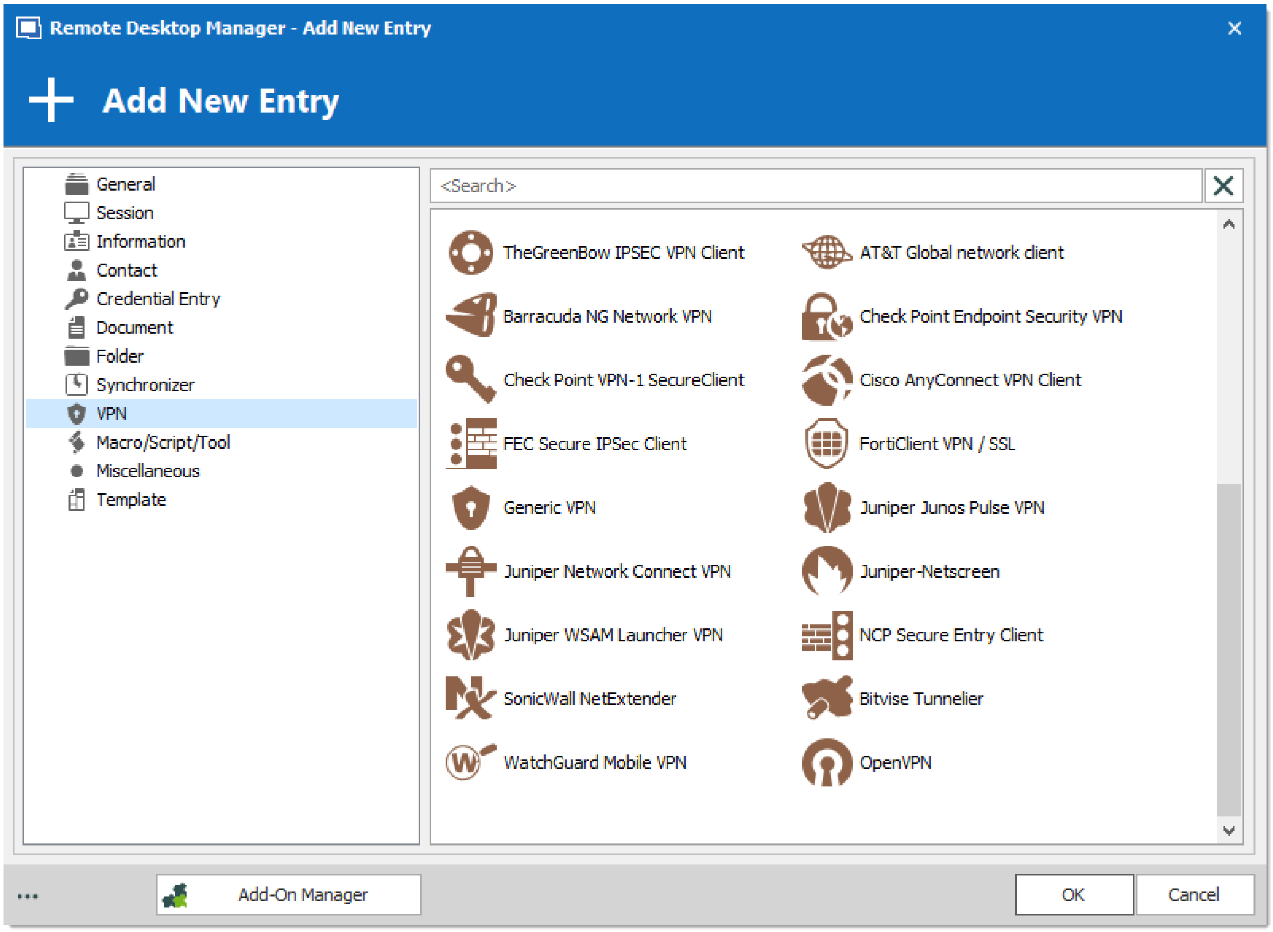
For more information on how to manage VPN, please consult VPN Management topic.

SUPPORTED VPNS

There are multiple VPN entries already included in Remote Desktop Manager and many more are available through add-ons. Please consult VPN Add-ons for more information.

Supported VPNs include:

- **Apple VPN**
- **CISCO VPN**
- **Microsoft VPN**
- **Sonicwall VPN**
- **OpenVPN**
- And more!



Entry - VPN

OPTIONS

GO OFFLINE ON CONNECTION AND GO ONLINE ON DISCONNECT

The **Go Offline on connection** and **Go Online on disconnect** options are essential when all traffic is tunneled through the VPN and you lose connection to the data source. The data source must be configured to allow for Offline availability.

OPTION	DESCRIPTION
Go Offline on connection	The session goes offline once connected to the VPN.
Go Online on disconnect	The session goes back online once disconnected from the VPN.
Use adapter to detect connection	Use the adapter to detect the VPN connection.
Close connection after	Close the VPN connection after the number of minutes indicated.
Detect reachable host in wait	Automatically close the VPN wait dialog when the host is reachable.

AFTER EXECUTE WAIT

You can adjust the time Remote Desktop Manager waits for the VPN to open.

In the **sec** box, enter the a time in seconds.

-1 sec is the default time (5 seconds). Change the default time for all VPN entries in ***File – Options – Types – VPN – VPN default pause***

COMMANDS

In ***VPN properties – Advanced Tab***, you can add commands. With custom commands you can execute any command after the VPN connects and/or before VPN disconnect.

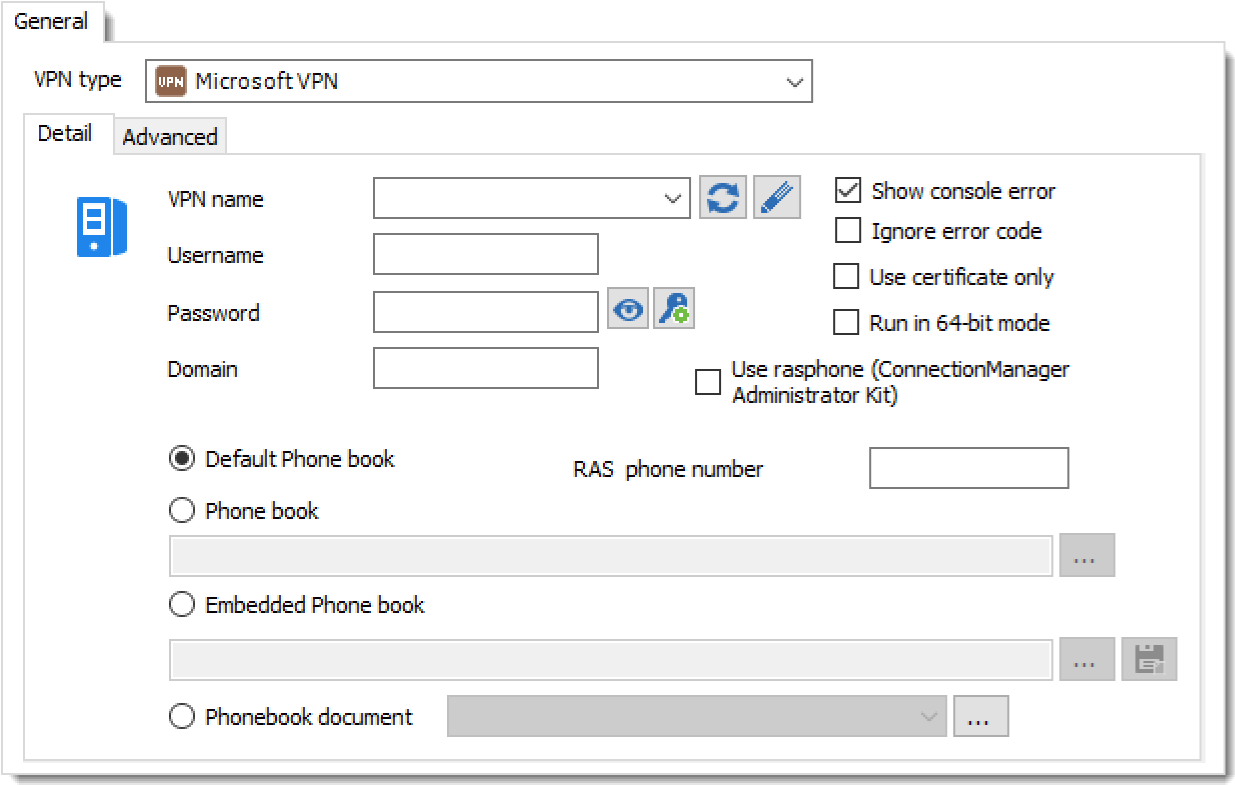
6.9.1 Microsoft VPN

DESCRIPTION

This entry is used to define and configure a ***Microsoft VPN*** session. It integrates rasdial.exe and rasphone.exe

SETTINGS

GENERAL – DETAIL



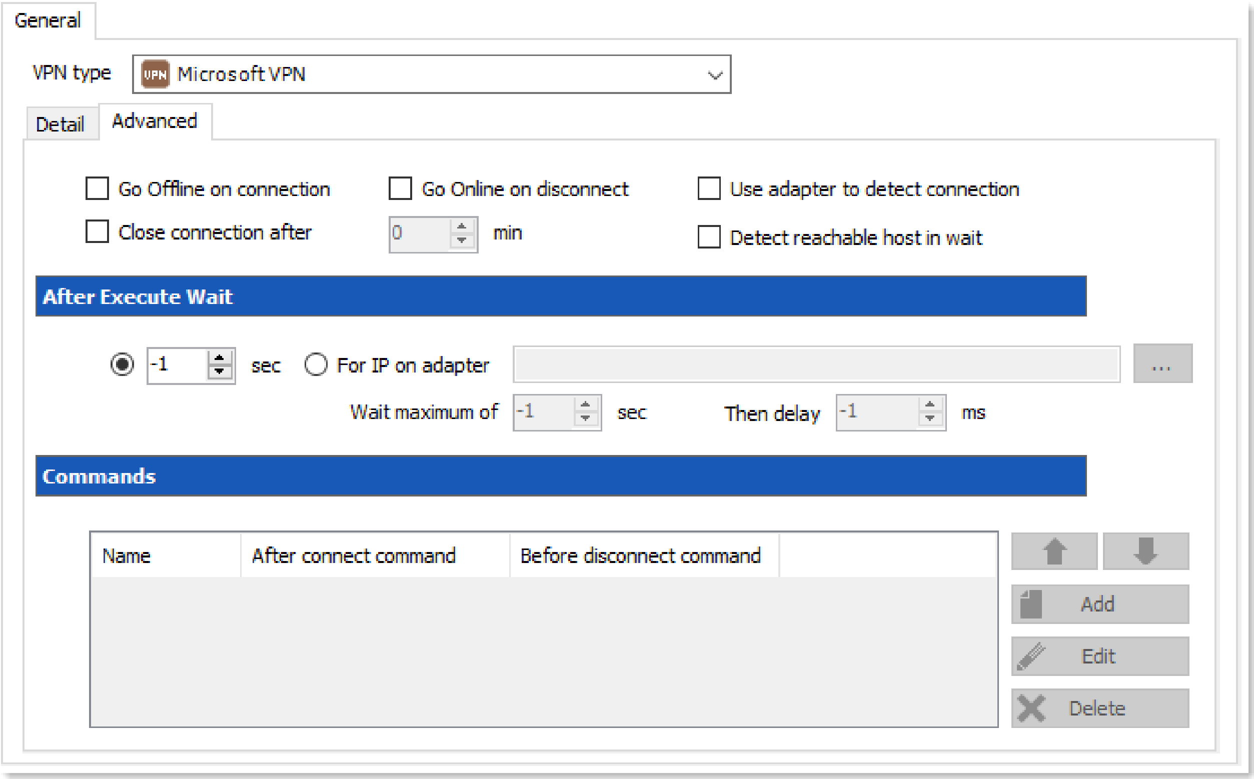
Microsoft VPN - General Tab - Detail

OPTION	DESCRIPTION
VPN name	Name of the VPN.
Username	Username to connect on the Microsoft VPN.
Password	Password to connect on the Microsoft VPN.

OPTION	DESCRIPTION
Domain	Domain to connect on the Microsoft VPN.
Show console error	Display the console errors or messages during the connection. Use this setting to diagnose if any connection problem appears. The application will capture the command line trace and it will display the result.
Ignore error code	This will ignore the error code and allow you to continue. It will flag the VPN connection as failed.
Use certificate only	Only the certificate (VPN name) will be used for authentication, the username, password or domain will not be requested.
Run in 64-bit mode	Specify to use the processor architecture in 64-bit.
Use rasphone (Connection Manager Administration Kit)	Used to open a VPN created with the Connection Manager Administration Kit or when you need to force the rasphone usage.
Default Phonebook	Use the default Phonebook on the computer usually located in % userprofile% \AppData\Roaming\Microsoft\Network\Connections\Pbk\rasphone.pbk
RAS phone number	Enter the remote access service phone number
Phone book	Select a phone book file to use for the connection. Specify a local file or network file to share it.
Embedded Phone book	Embed the phonebook directly in the session to make it more portable. Please note that if you use the same phonebook for multiple VPN it's better to create a Phone Book Document to reduce the size of the database.

OPTION	DESCRIPTION
Phonebook document	Select a Phone Book Document entry from the list populated by the application.

GENERAL - ADVANCED



General

VPN type: Microsoft VPN

Detail | Advanced

☐ Go Offline on connection ☐ Go Online on disconnect ☐ Use adapter to detect connection

☐ Close connection after 0 min ☐ Detect reachable host in wait

After Execute Wait

● -1 sec ○ For IP on adapter

Wait maximum of -1 sec Then delay -1 ms

Commands

Name	After connect command	Before disconnect command

Microsoft VPN - General Tab - Advanced

For more information on the Advanced settings, please consult the VPN Management topic.

6.9.1.1 Microsoft VPN Phone-book Management

DESCRIPTION

The Microsoft VPN needs a phone-book file (*.pbk) to be able to establish a connection. This file contains one or more definitions of "network connections".

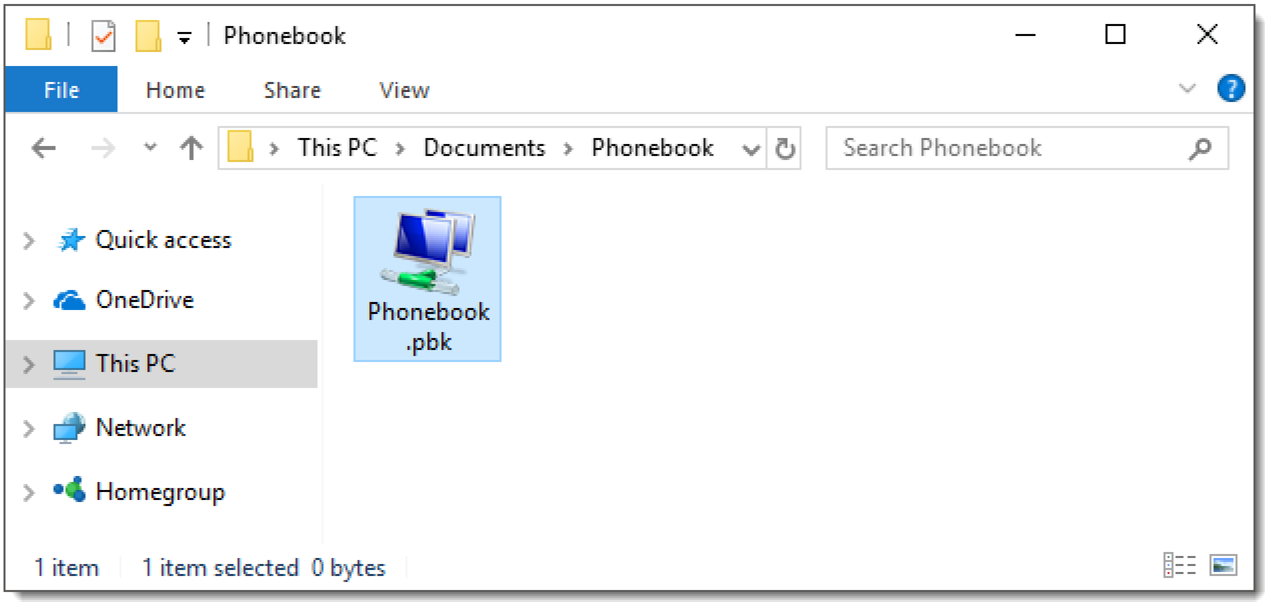
When a "pre-shared" key is required by the server, it is not stored in the *.pbk file, but rather encrypted and managed by Windows. The first connection to the server will need to be handled **manually** and the pre-shared key typed in once per client workstation.

SETTINGS

CREATING A NEW PHONE-BOOK FILE

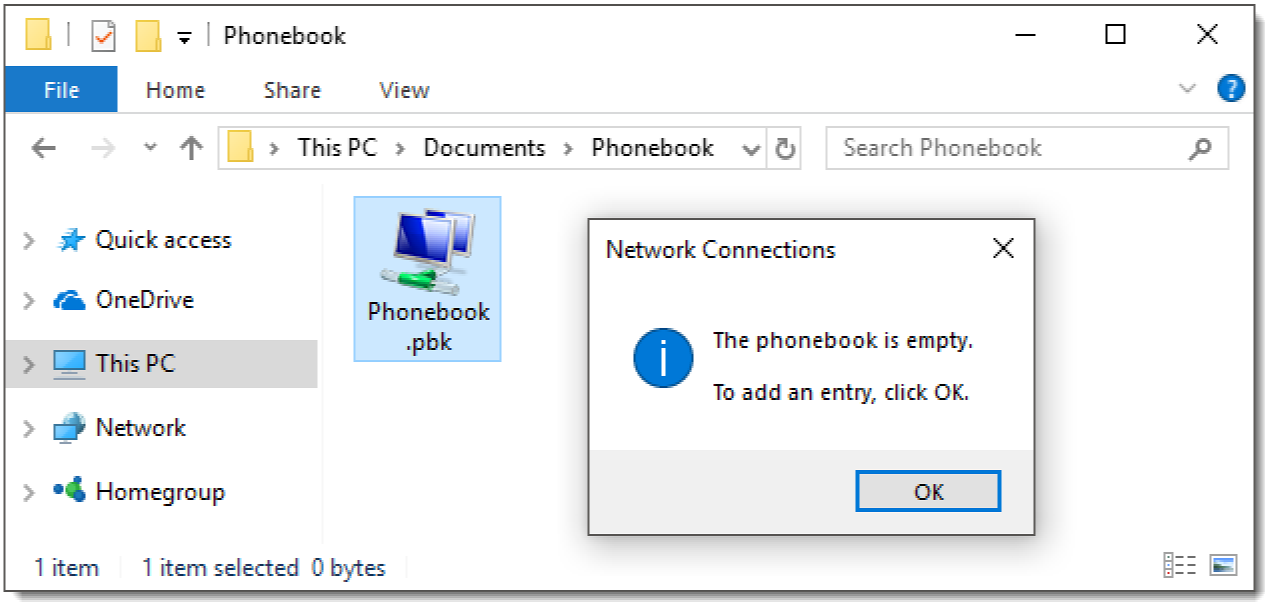
1. In a working folder on your computer, create a new text file and name it ***.pbk*** (make sure to change the extension. By default file extensions are not displayed, and the .txt extension will simply be appended to the new name you type).

To display file extensions, in the ***View*** tab of the ***Windows File Explorer***, enable the ***File name extensions*** option.



Phone-book folder

2. Double-click on the new phone-book file to start the configuration, an information dialog is displayed. click ***OK***



Network Connections

The phonebook is empty.

To add an entry, click OK.

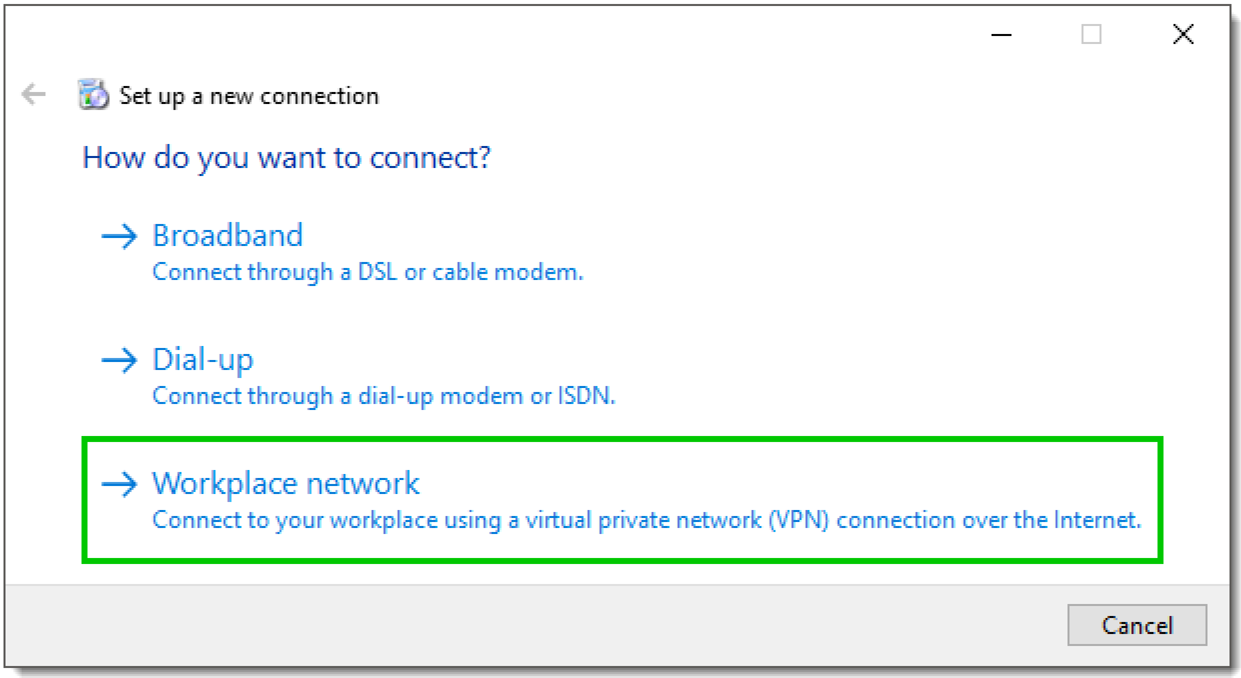
Empty phone-book

EDITING AN EXISTING PHONEBOOK FILE

Simply ***double-click*** the file or use ***right-click – Open*** on it. If the phone-book is stored in Remote Desktop Manager, use the ***Save Document As*** feature to save it on the computer drive during the modifications.

CREATING A NEW VPN CONNECTION

1. Select ***Workplace network*** to connect using a VPN.



Set up a new connection

How do you want to connect?

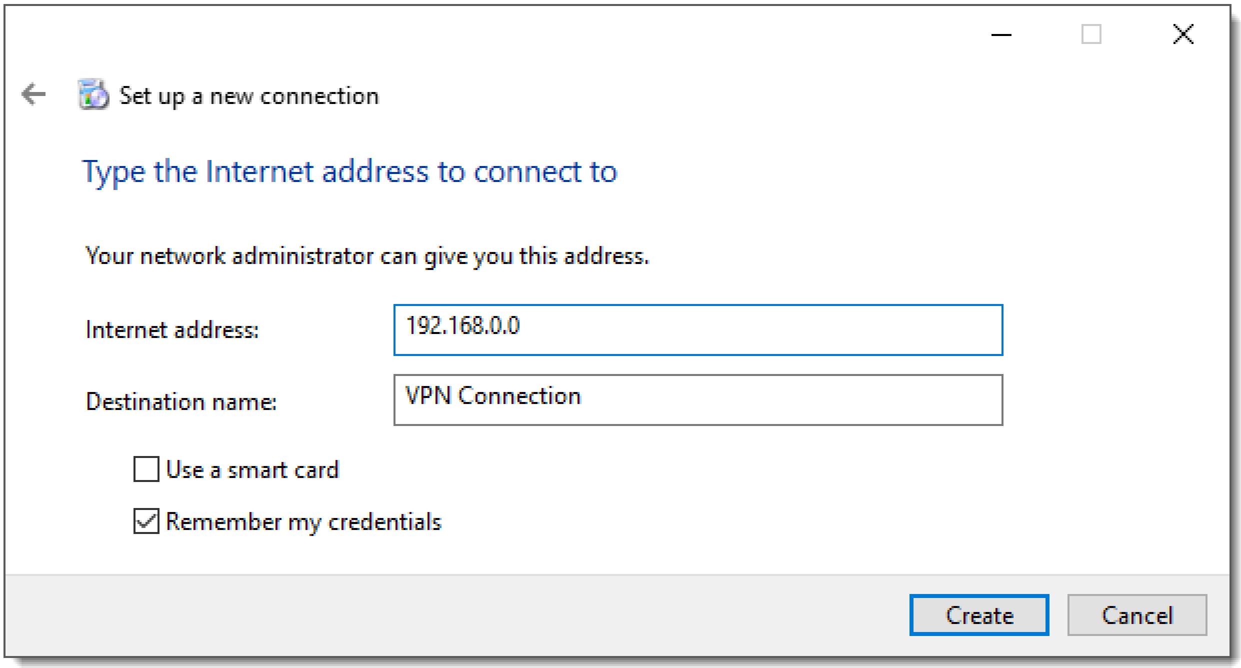
→ Broadband
Connect through a DSL or cable modem.

→ Dial-up
Connect through a dial-up modem or ISDN.

→ Workplace network
Connect to your workplace using a virtual private network (VPN) connection over the Internet.

Set up a new connection - Workplace network

2. Specify the host name or IP address and click on ***Create***.



Set up a new connection

Type the Internet address to connect to

Your network administrator can give you this address.

Internet address: 192.168.0.0

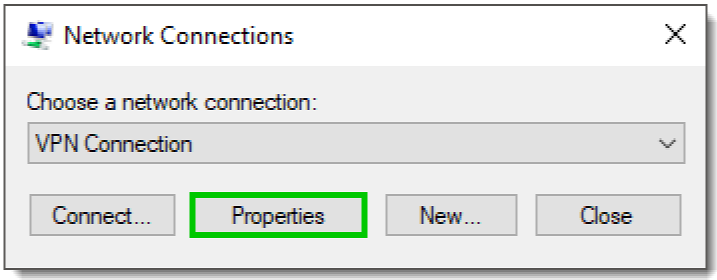
Destination name: VPN Connection

□ Use a smart card

☑ Remember my credentials

Address to connect

3. The new phone-book is now created. Use the ***Properties*** button to adjust the required settings, such as the type of VPN or security settings.

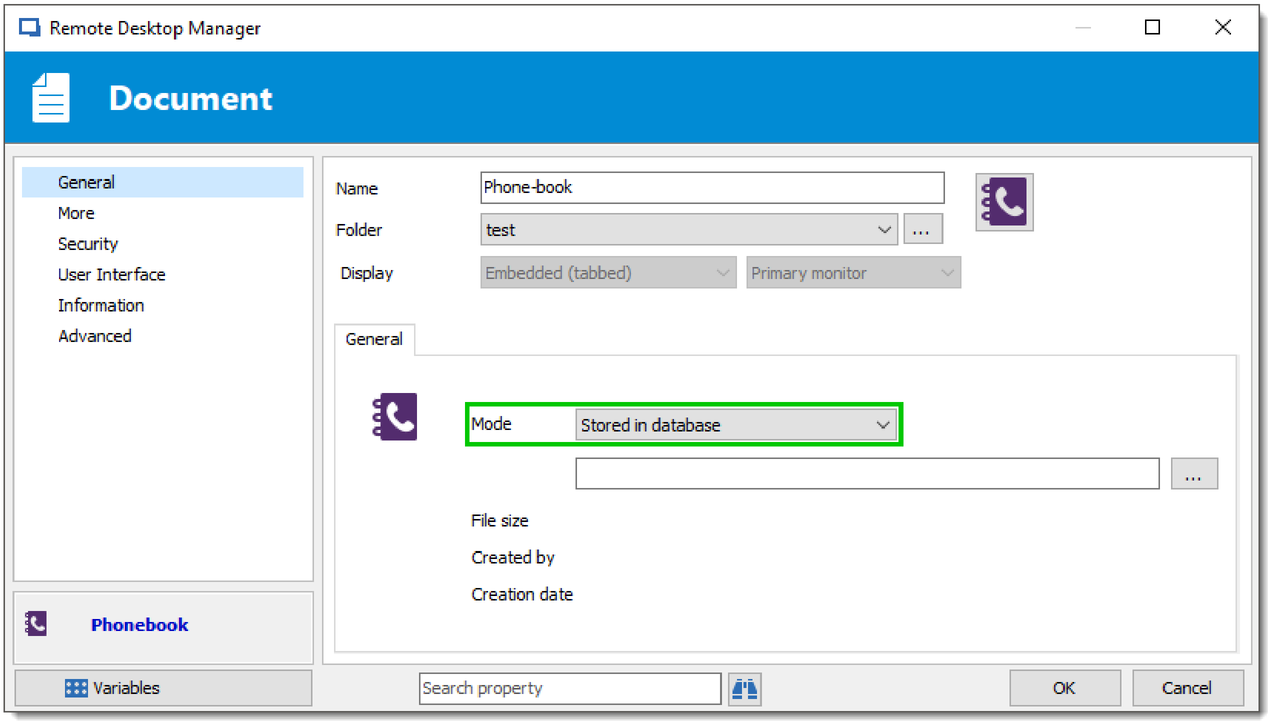


Phone Creation completed

ADDING THE PHONE-BOOK TO REMOTE DESKTOP MANAGER

> The documents are stored in Remote Desktop Manager and are not protected by versioning. Please ensure you keep a copy in a safe place outside of Remote Desktop Manager.

1. In Remote Desktop Manager, create a ***Phonebook*** document. you can choose to simply create a link to the file, or even better upload it to the data source. Save your document when done.



Name: Phone-book

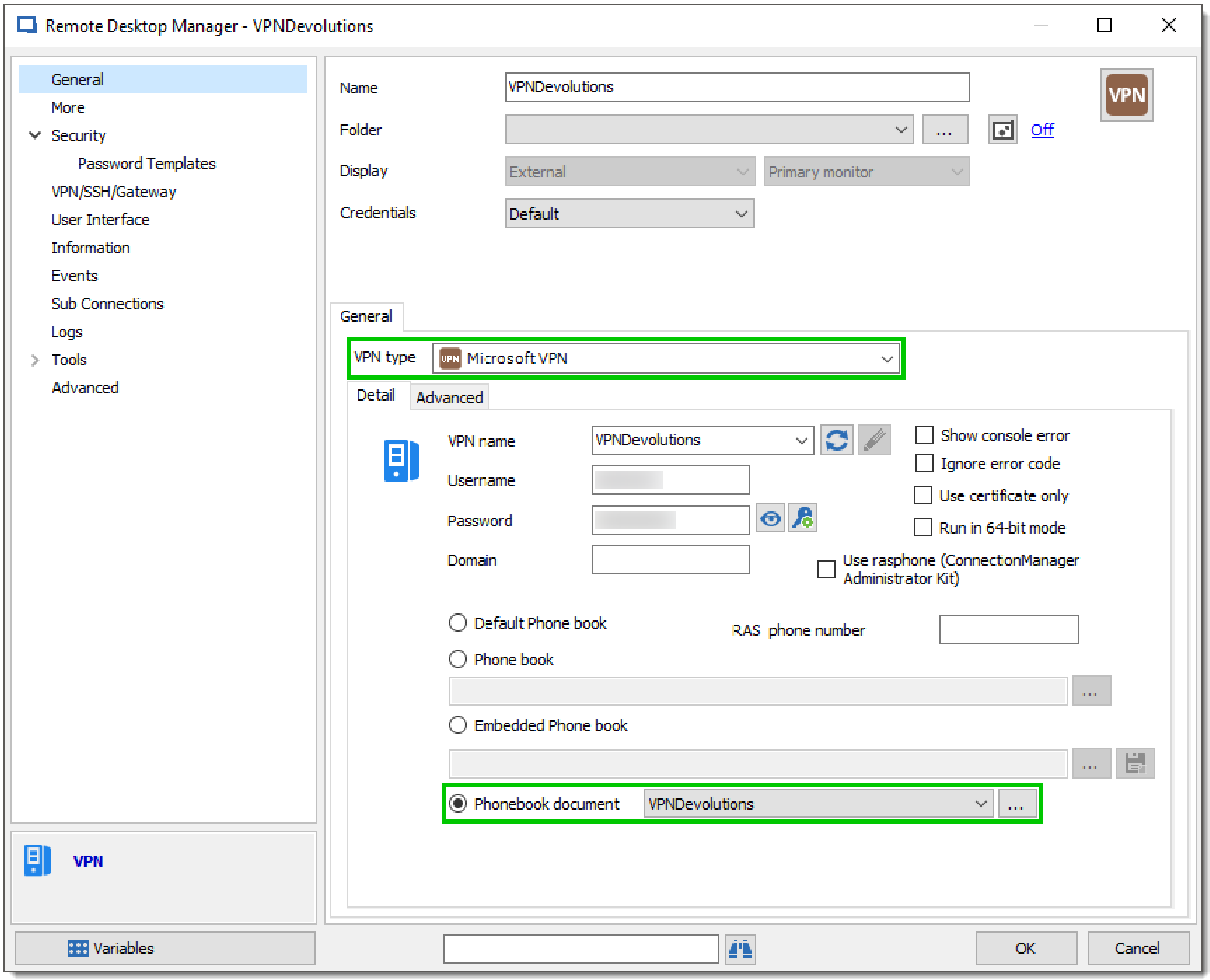
Folder: test

Display: Embedded (tabbed) | Primary monitor

Mode: Stored in database

Phonebook Document Entry

2. Create a new ***VPN entry*** type ***Microsoft VPN***, and select the document from the previous step in the phone-book document setting



Name: VPNDevolutions

Folder:

Display: External | Primary monitor

Credentials: Default

VPN type: Microsoft VPN

VPN name: VPNDevolutions

Username:

Password:

Domain:

□ Show console error

□ Ignore error code

□ Use certificate only

□ Run in 64-bit mode

□ Use rasphone (ConnectionManager Administrator Kit)

○ Default Phone book

RAS phone number:

○ Phone book

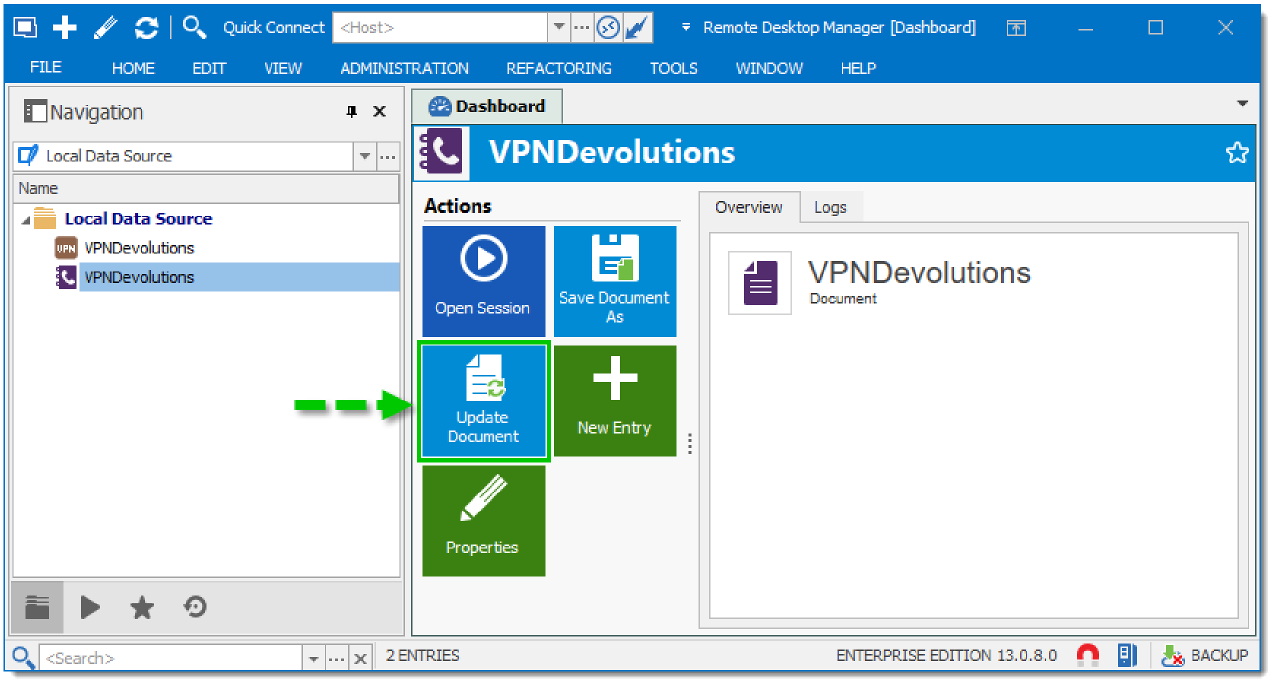
○ Embedded Phone book

● Phonebook document: VPNDevolutions

Microsoft VPN Entry

UPDATE A PHONE-BOOK THAT IS STORED IN REMOTE DESKTOP MANAGER

If the phone-book was already in Remote Desktop Manager, use the ***Update Document*** action in the ***Dashboard*** to update to this new version.



Update Document Dashboard Action

6.10 Macros/Scripts/Tools

DESCRIPTION

The session script tools can be either a script, a command line, or a helper applicable to a selected session. Each can be configured and shared in the data source.

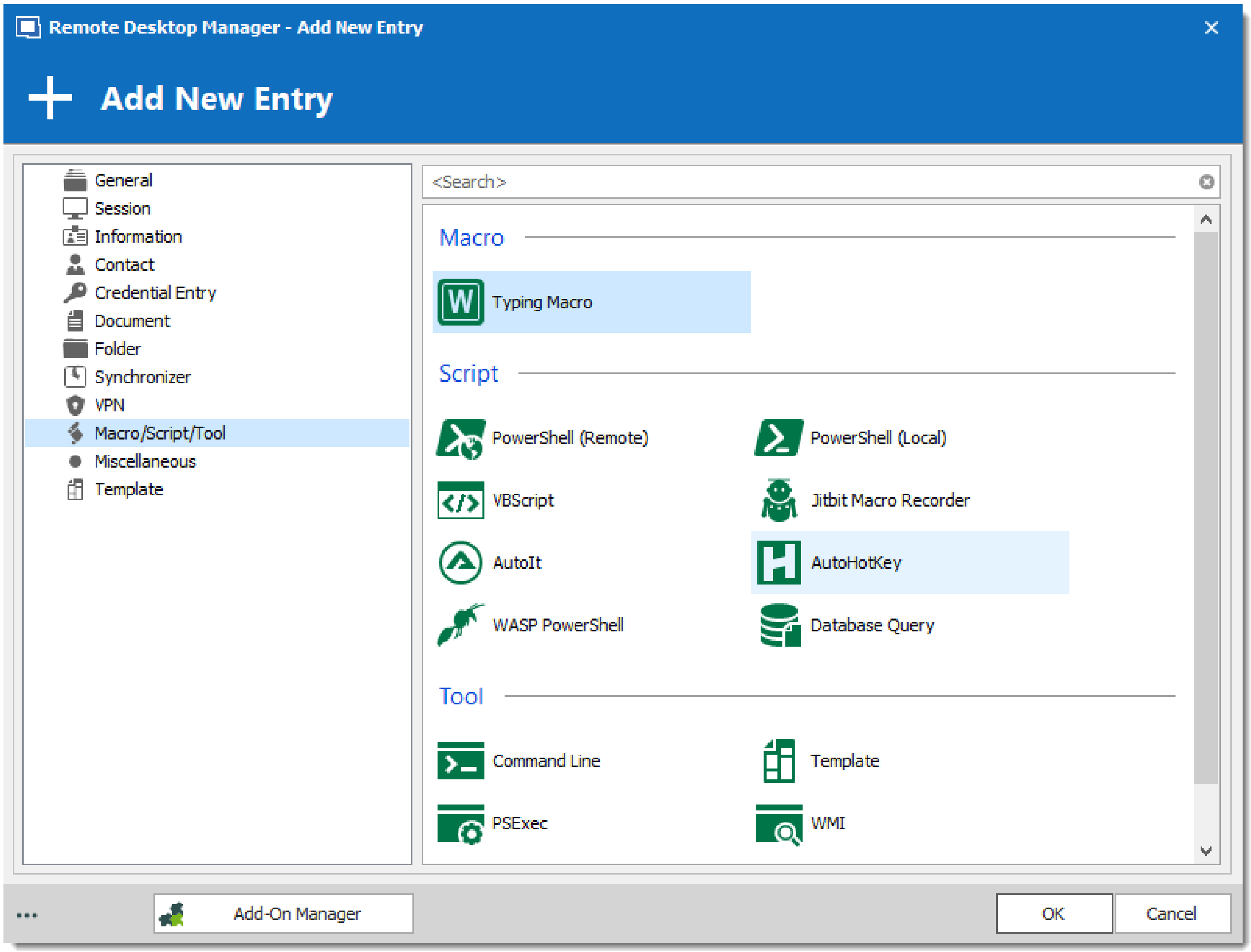
They are listed in the dashboard under the **Macros/Scripts/Tools** section or in the context menu under **Macros/Scripts/Tools**.

Session tools are commonly used to retrieve information, perform an action, change an item, or change a configuration on the session host. It can also be used to share properties between groups of sessions using PowerShell, PSExec or keyboard macros.

Macros/Scripts/Tools can be used to run against a host as well as run your macro through the RDM Agent.

> Session Variables can be used as parameters for the Macros/Scripts/Tools.

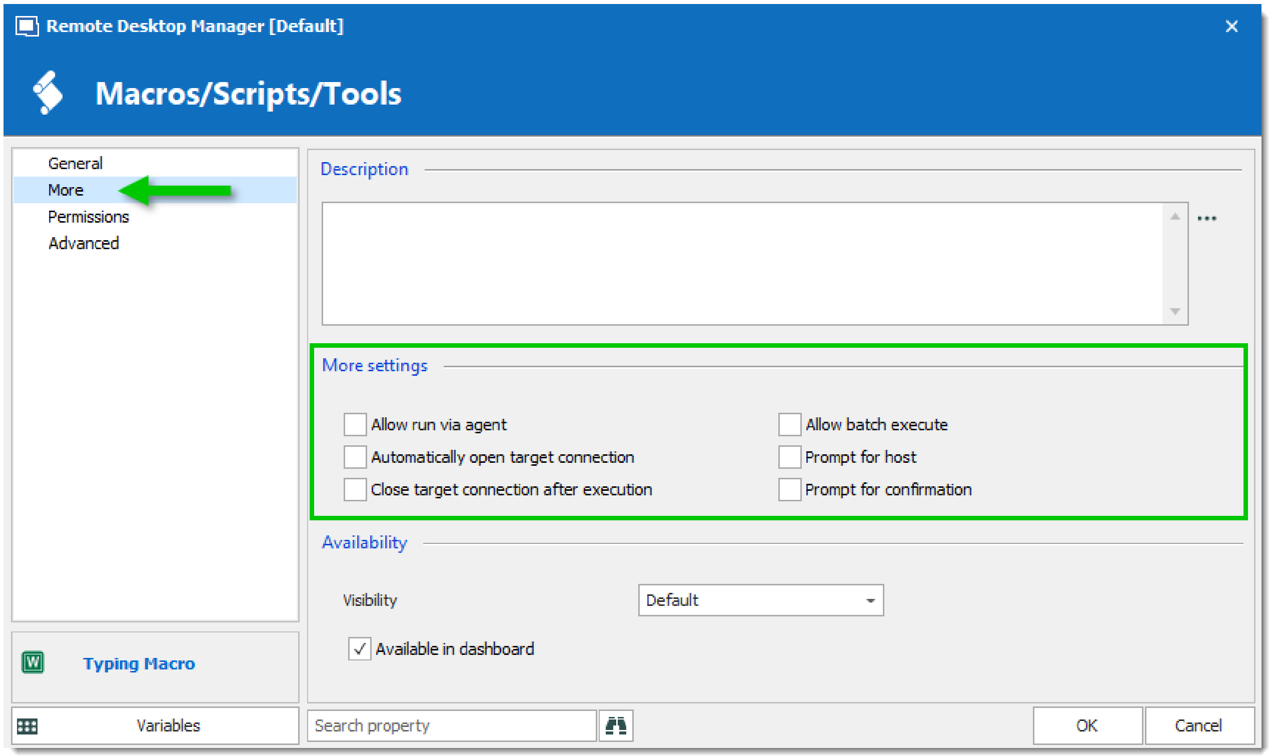
MACROS/SCRIPTS/TOOLS MANAGER



Entry - Macros/Scripts/Tools

GENERAL SETTINGS

Those settings will be identical for every Macro/Scrip/Tools entry.



Description

More settings

□ Allow run via agent
□ Automatically open target connection
□ Close target connection after execution
□ Allow batch execute
□ Prompt for host
□ Prompt for confirmation

Availability

Visibility: Default

☑ Available in dashboard

Macros/Scripts/Tools - More Settings

OPTION	DESCRIPTION
Allow run via agent	Allows you to launch a script through an Agent.
Automatically open target connection	Force the opening of a connection before executing the Macros/Scripts/Tools.
Close target connection after connection	Automatically close the connection after executing the Macros/Scripts/Tools.
Allow batch execute	Allows you to execute the macro on multiple machines at the same time.
Prompt for host	Automatically prompt for the host on every use.
Prompt for confirmation	Always prompts for a confirmation on use.

6.10.1 PowerShell (Local)

DESCRIPTION

This entry is used to integrate a **PowerShell (Local)** session/script/tool.

We suggest to use either relative paths or in general paths **without spaces** or use the PowerShell Session to execute a script with parameters. Here some examples:

- Macro that can use Session Variables:

.\Data\ConnectAfterReboot.ps1 -strHost $HOST$ -OpenRDMSession

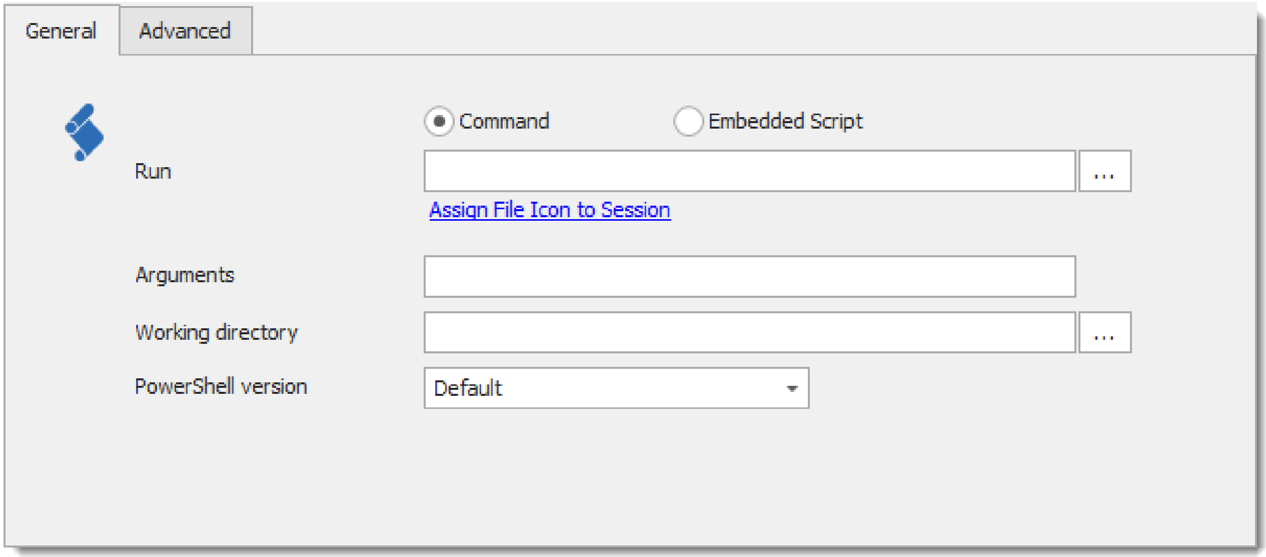
- Session that can specify a filename and arguments:

.\data\New-RDM-Data.ps1

-AddNewOnly

SETTINGS

GENERAL

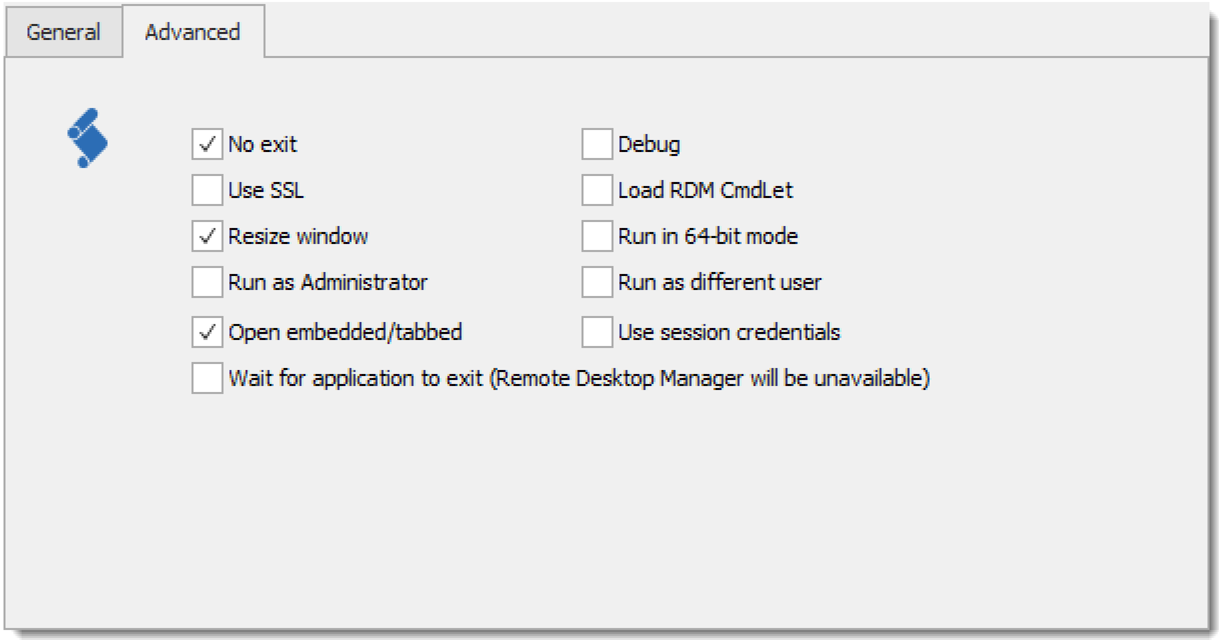


PowerShell (Local) - General Tab

OPTION	DESCRIPTION
Command	Enter the PowerShell command.
Assign file icon to session	Assign the file icon in the address bar of the session.
Arguments	Enter your command line argument. For more information please see Command Line Arguments.
Working directory	Working directory to set for the script execution.
PowerShell version	Select your PowerShell version between: • **Default** • **Version 2**
Wait for application to exit (Remote Desktop Manager will be unavailable)	Executes the script while the application waits for completion. Is it a synchronous operation therefore it will be unresponsive while the script runs.

OPTION	DESCRIPTION
Open embedded/tabbed	Open the PowerShell macro embedded.
Run as administrator	Run PowerShell macro as a administrator.
Resize window	Force window resize (buffer & window).
Run in 64-bits mode	Run CmdLet in 64 bits version.
Run as different user	Run the PowerShell macro as a different user.
Load RDM CmdLet	Load CmdLet Snap-in in the PowerShell session.
No exit	Leaves the PowerShell window open after the script has completed.
Debug	Show debug

ADVANCED



☑ No exit
☐ Use SSL
☑ Resize window
☐ Run as Administrator
☑ Open embedded/tabbed
☐ Wait for application to exit (Remote Desktop Manager will be unavailable)
☐ Debug
☐ Load RDM CmdLet
☐ Run in 64-bit mode
☐ Run as different user
☐ Use session credentials

PowerShell (Local) - Advanced Tab

OPTION	DESCRIPTION
No exit	Leaves the PowerShell window open after the script has completed.
Use SSL	Use the SSL setting.
Resize window	Force window resize (buffer & window).
Run as Administrator	Run PowerShell macro as a administrator.
Open embedded/tabbed	Open the PowerShell macro embedded.
Debug	Show debug

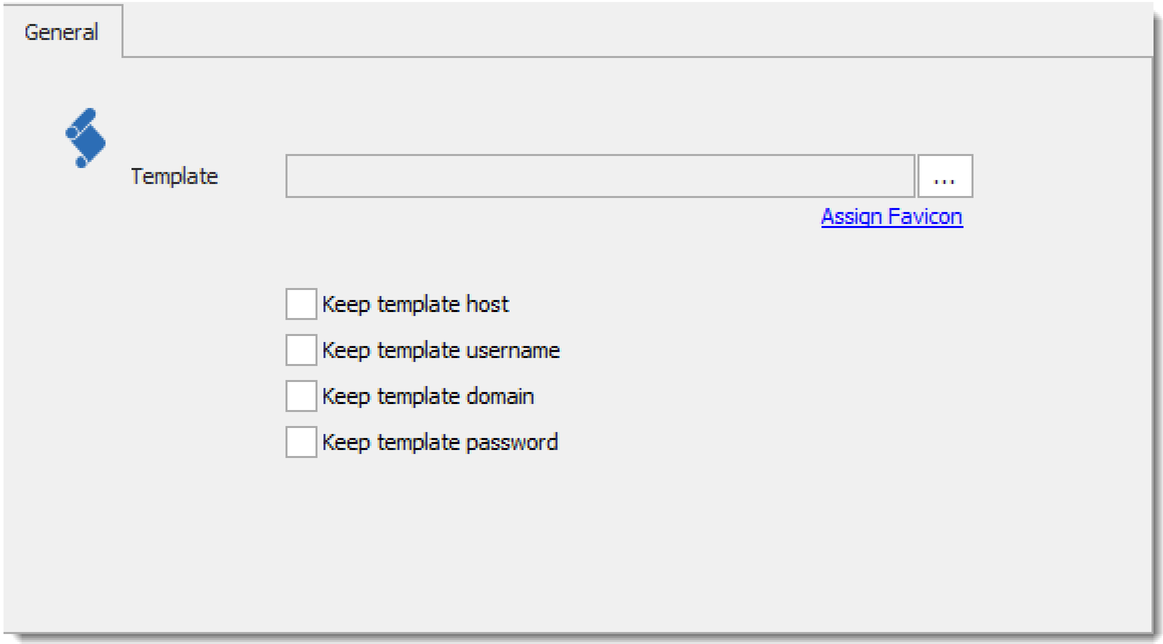
OPTION	DESCRIPTION
Load RDM CmdLet	Load CmdLet Snap-in in the PowerShell session.
Run in 64-bit mode	Run CmdLet in 64 bits version.
Run as different user	Run the PowerShell macro as a different user.
Use session credentials	Use the current session credentials.
Wait for application to exit (Remote Desktop Manager will be unavailable)	Executes the script while the application waits for completion. Is it a synchronous operation therefore it will be unresponsive while the script runs.

6.10.2 Template

DESCRIPTION

This entry is used to apply an existing **Template** to an entry. By configuring a specific template, it's possible to open a session with a completely different connection type. The original parameters will be merged with the one from the specified template.

SETTINGS



□ Keep template host
□ Keep template username
□ Keep template domain
□ Keep template password

Template - General Tab

For more information regarding using a template with an existing connection, please consult the link below:

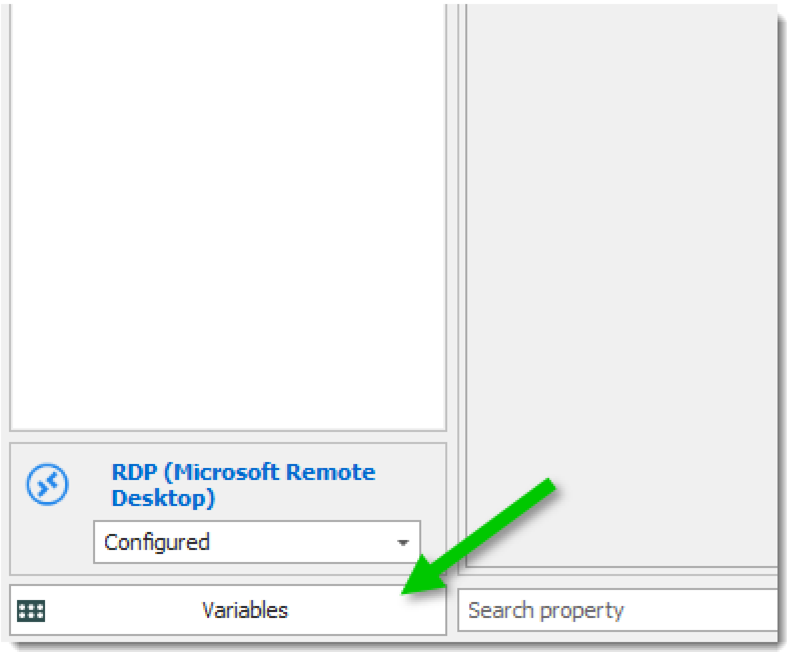
https://help.remotedesktopmanager.com/tipsandtricks_typesconnections.htm

6.11 Variables

DESCRIPTION

Variables can be used in any entry's configuration or with any templates. The variables will be replaced by their corresponding values just prior to establishing a connection.

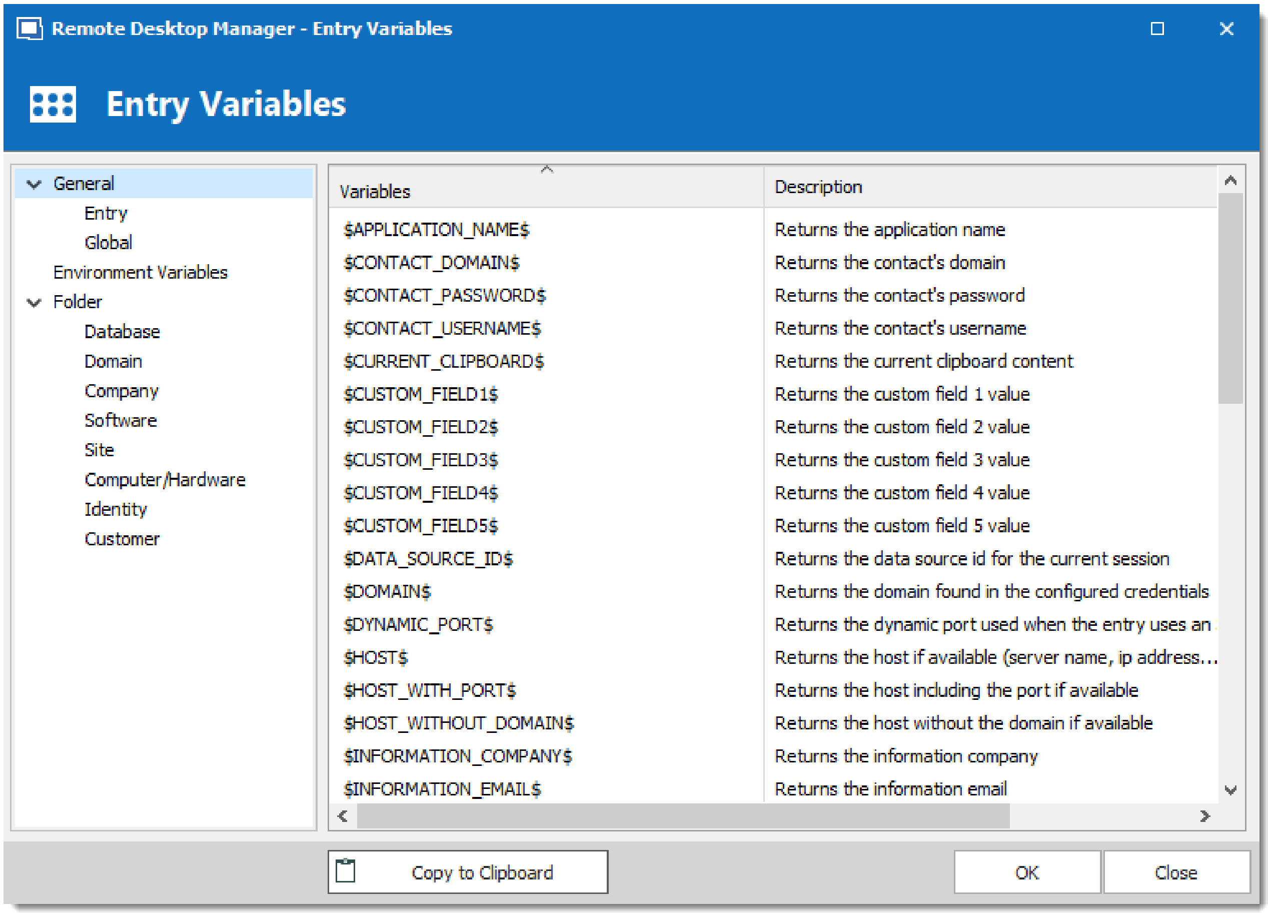
You can select a variable by double clicking on it directly in the dialog. For ease of use there is a button at the bottom of the edition screen that allows you to select a variable to insert in the currently focused field.



Variables

Variables are case-sensitive and must be typed in UPPERCASE.

SETTINGS



Variables	Description
$APPLICATION_NAME$	Returns the application name
$CONTACT_DOMAIN$	Returns the contact's domain
$CONTACT_PASSWORD$	Returns the contact's password
$CONTACT_USERNAME$	Returns the contact's username
$CURRENT_CLIPBOARD$	Returns the current clipboard content
$CUSTOM_FIELD1$	Returns the custom field 1 value
$CUSTOM_FIELD2$	Returns the custom field 2 value
$CUSTOM_FIELD3$	Returns the custom field 3 value
$CUSTOM_FIELD4$	Returns the custom field 4 value
$CUSTOM_FIELD5$	Returns the custom field 5 value
$DATA_SOURCE_ID$	Returns the data source id for the current session
$DOMAIN$	Returns the domain found in the configured credentials
$DYNAMIC_PORT$	Returns the dynamic port used when the entry uses an
$HOST$	Returns the host if available (server name, ip address...
$HOST_WITH_PORT$	Returns the host including the port if available
$HOST_WITHOUT_DOMAIN$	Returns the host without the domain if available
$INFORMATION_COMPANY$	Returns the information company
$INFORMATION_EMAIL$	Returns the information email

Entry variables

The variables are classify under multiple tabs. Not all contexts are available depending on the entry being edited, for example the Parent tab is present only when editing a sub connection.

GENERAL

$PASSWORD$: For security reason, this is only available with the command line session type and some specific types. You must enable it in the Security Settings of the entry with "**Allow password in variable**" option.

For an Advanced Data Source, the administrator can disable usage of this variable for the whole data source in Data Source Settings (System Settings), at the bottom of the **Password Management** tab.

ENTRY VARIABLES

OPTION	DESCRIPTION
$APPLICATION_NAME$	Returns the application name.
$CONTACT_DOMAIN$	Returns the contact's domain.
$CONTACT_PASSWORD$	Returns the contact's password.
$CONTACT_USERNAME$	Returns the contact's username.
$CURRENT_CLIPBOARD$	Returns the current clipboard content.
$CUSTOM_FIELD1$	Returns the custom field field 1 value.
$CUSTOM_FIELD2$	Returns the custom field field 2 value.
$CUSTOM_FIELD3$	Returns the custom field field 3 value.
$CUSTOM_FIELD4$	Returns the custom field field 4 value.
$CUSTOM_FIELD5$	Returns the custom field field 5 value.
$DATA_SOURCE_ID$	Returns the data source id for the current session.
$DOMAIN$	Returns the domain found in the configured credentials.
$DYNAMIC_PORT$	Returns the dynamic port used when the entry uses an SSH VPN with a dynamic port set up.
$HOST$	Returns the host name if it's available (server name or IP addess...).

OPTION	DESCRIPTION
$HOST_WITH_PORT$	Returns the host including the port if it is available.
$HOST_WITHOUT_DOMAIN$	Returns the host name without the domain if it is available.
$INFORMATION_COMPANY$	Returns the company specified in information.
$INFORMATION_EMAIL$	Returns the email specified in information.
$INFORMATION_IP$	Returns the information IP.
$INFORMATION_MACHINE_NAME$	Returns the machine name specified in information.
IP	Returns the IP specified in information.
$KEYWORDS$	Returns the keywords/tags.
MAC	Returns the MAC address specified in information.
$MACHINE_DOMAIN$	Returns the machine domain specified in information.
$MACRO_PASSWORD$	Returns the typing macro password.
$NAME$	Returns the entry name.
$ONE_TIME_PASSWORD$	Returns a timed one time password.
$PASSWORD$	This variable is replaced by the password. It's only available when enabled in the advanced options.

OPTION	DESCRIPTION
$PORT$	Returns the host port if it's available and when it's not the default.
$QUICK_CONNECT$	This variable is replaced by the quick connect value (Note). Use this variable when you create a template used specifically for the quick connect.
$REMOTE_MANAGEMENT_SERVER$	Returns the Remote Management Server url (if configured).
$REMOTE_MANAGEMENT_SERVER_HOST$	Returns the host part of the Remote Management Server url (if configured).
$SERIAL$	Returns the serial number from invoice tab.
$SERVICE_TAG$	Returns the service tag field specified in information.
$SESSION_ID$	Returns the current session id (guid).
$TAGS$	Returns the tags.
$TOOL_DOMAIN$	Returns the tool domain.
$TOOL_PASSWORD$	Returns the tool password.
$TOOLS_USERNAME$	Returns the tool username.
$USERNAME$	Returns the username found in the configured credentials.
$VIRTUAL_MACHINE_ID$	Returns the virtual machine ID specified in information.
$VIRTUAL_MACHINE_TYPE$	Returns the virtual machine's type.

OPTION	DESCRIPTION
$VPN_DOMAIN$	Returns the VPN's domain.
$VPN_HOST$	Returns the VPN's host.
$VPN_PASSWORD$	Returns the VPN's password.
$VPN_USERNAME$	Returns the VPN's username.

GLOBAL VARIABLES

OPTION	DESCRIPTION
$APPLICATION_PATH$	Returns the application path.
$APPLICATION_USER$	Returns the current data source logged user.
$DATE$	Returns the current date.
$DATE_TEXT$	Returns the current date in a text format to use in a file name. Ex: January 30th 2013 - 20130130.
$DATE_TEXT_ISO$	Returns the current date in a basic ISO 8601 format. EX: January 30th 2013 - 20130130.
$FULLSCREEN_HEIGHT$	Returns the screen full screen height.
$FULLSCREEN_WIDTH$	Returns the screen full screen width.

OPTION	DESCRIPTION
$LOCAL_IP$	Returns the local IP v4 address.
$MY_MACHINE_NAME$	Returns the current machine name.
$PUBLIC_IP$	Returns the public IP exposed on the internet.
$TIME$	Returns the current time.
$TIME_TEXT$	Returns the current time in a text format to use in a file name. EX: 8h15 30 - 081530
$TIME_TEXT_ISO$	Returns the text of the current time in the basic ISO 8601 format. EX: 8h15 30 - 081530
$WORKAREA_HEIGHT$	Returns the screen work area height.
$WORKAREA_WIDTH$	Returns the screen work area width.

GLOBAL - DATA SOURCE VARIABLES

OPTION	DESCRIPTION
$DATA_SOURCE_DOMAIN$	Returns the current data source domain.
$DATA_SOURCE_NAME$	Returns the current data source name.
$DATA_SOURCE_PASSWORD$	Returns the current data source password.

OPTION	DESCRIPTION
$DATA_SOURCE_USERNAME$	Returns the current data source username.
$DATA_SOURCE_USERPROFILE_EMAIL$	Returns the current data source user's email.
$DATA_SOURCE_USERPROFILE_FIRSTNAME$	Returns the current data source user's firstname.
$DATA_SOURCE_USERPROFILE_LASTNAME$	Returns the current data source user's lastname.
$DATA_SOURCE_USERPROFILE_PHONE$	Returns the current data source user's phone number.

ENVIRONMENT VARIABLES

This context allows you to access **ANY** environment variable defined in your system. The ones available in the form are the standard ones, but any value enclosed by the percent sign will be expanded using the Windows environment. You could use this to set a custom security token in your user profile and use it from within Remote Desktop Manager.

OPTION	DESCRIPTION
%ALLUSERSPROFILE%	C:\ProgramData
%APPDATA%	C:\Users\{username}\AppData\Roaming
%COMMONPROGRAMFILES%	C:\Program Files\Common Files

OPTION	DESCRIPTION
%COMMONPROGRAMFILES(x86)%	C:\Program Files (x86)\Common Files
%COMPUTERNAME%	{computername}
%COMSPEC%	C:\Windows\System32\cmd.exe
%HOMEDRIVE%	C:
%HOMEPATH%	\Users\{username}
%LOCALAPPDATA%	C:\Users\{username}\AppData\Local
%LOGONSERVER%	\\{domain_logon_server}
%PATH%	C:\Windows\system32;C:\Windows;C:\Windows\System32\Wbem;{plus program paths}
%PATHEXT%	.com;.exe;.bat;.cmd;.vbs;.vbe;.js;.jse;.wsf;.wsh;.msc
%PROGRAMDATA%	%SystemDrive%\ProgramData
%PROGRAMFILES%	%SystemDrive%\Program Files
%PROGRAMFILES(X86)%	%SystemDrive%\Program Files (x86) (only in 64-bit version)
%PROMPT%	Code for current command prompt format. Code is usually PG {Drive}:
%PSModulePath%	%SystemRoot%\system32\WindowsPowerShell\v1.0\Modules\

OPTION	DESCRIPTION
%PUBLIC%	%SystemDrive%\Users\Public
%SystemDrive%	C:
%SystemRoot%	%SystemDrive%\Windows
%TEMP%	%SystemDrive%\Users\{username}\AppData\Local\Temp
%TMP%	%SystemDrive%\Users\{username}\AppData\Local\Temp
%USERDOMAIN%	{userdomain}
%USERNAME%	{username}
%USERPROFILE%	%SystemDrive%\Users\{username}
%WINDIR%	C:\Windows

GROUP

PARENT

This context exists only when in a sub-connection. It returns the corresponding value taken from the parent entry.

$**PARENT_PASSWORD**$: For security reason, this is only available for use in the keyboard macro. If you must use the credentials stored in the parent to connect, you must choose Parent in the credentials drop down list of the general tab.

OPTION	DESCRIPTION
$PARENT_APPLICATION_NAME$	Returns the application name.
$PARENT_CURRENT_CLIPBOARD$	Returns the current clipboard content.
$PARENT_CUSTOM_FIELD1$	Returns the parent custom field field 1 value.
$PARENT_CUSTOM_FIELD2$	Returns the parent custom field field 2 value.
$PARENT_CUSTOM_FIELD3$	Returns the parent custom field field 3 value.
$PARENT_CUSTOM_FIELD4$	Returns the parent custom field field 4 value.
$PARENT_CUSTOM_FIELD5$	Returns the parent custom field field 5 value.
$PARENT_DOMAIN$	Returns the parent domain found in the parent configured credentials.
$PARENT_HOST$	Returns the parent host name if it's available (server name or IP address...).
$PARENT_HOST_WITH_PORT$	Returns the parent host including the port if it's specified.
$PARENT_HOST_WITHOUT_DOMAIN$	Returns the host name without the domain if it's available.
$PARENT_INFORMATION_COMPANY$	Returns the company specified in the parent information.

OPTION	DESCRIPTION
$PARENT_INFORMATION_EMAIL$	Returns the email specified in information.
$PARENT_INFORMATION_MACHINE_NAME$	Returns the machine name specified in information.
$PARENT_IP$	Returns the IP address specified in parent information.
$PARENT_MAC$	Returns the MAC address defined.
$PARENT_MACHINE_DOMAIN$	Returns the domain field specified in parent information.
$PARENT_MACRO_PASSWORD$	Returns the typing macro password.
$PARENT_NAME$	Returns the session name.
$PARENT_PASSWORD$	Returns the password from the parent configured credentials. It's only available when enabled in the parent advanced options.
$PARENT_PORT$	Returns the host port if it's available (server name, IP address...).
$PARENT_SERIAL$	Returns the serial number in the invoice tab.
$PARENT_SERVICE_TAGS$	Returns the service tag field located in the information tab.
$PARENT_SESSION_ID$	Returns the parent session id (guid).
$PARENT_TOOL_DOMAIN$	Returns the tool domain.

OPTION	DESCRIPTION
$PARENT_TOOL_PASSWORD$	Returns the tool password.
$PARENT_TOOL_USERNAME$	Returns the tool username.
$PARENT_USERNAME$	Returns the username from the parent configured credentials.
$PARENT_VIRTUAL_MACHINE_ID$	Returns the virtual machine ID specified in information.

DATABASE

The following context will find any Folder Database entry type as long as it is in the hierarchy above you current entry. If there is multiple matches it will take the entry closest in the hierarchy to the current entry.

OPTION	DESCRIPTION
$DB_APPLICATION_NAME$	Returns the application name.
$DB_CURRENT_CLIPBOARD$	Returns the current clipboard content.
$DB_CUSTOM_FIELD1$	Returns the database custom field field 1 value.
$DB_CUSTOM_FIELD2$	Returns the database custom field field 2 value.
$DB_CUSTOM_FIELD3$	Returns the database custom field field 3 value.
$DB_CUSTOM_FIELD4$	Returns the database custom field field 4 value.
$DB_CUSTOM_FIELD5$	Returns the database custom field field 5 value.

OPTION	DESCRIPTION
$DB_DOMAIN$	Returns the domain found in the configured credentials.
$DB_INFORMATION_COMPANY$	Returns the company specified in the database information.
$DB_INFORMATION_EMAIL$	Returns the information email.
$DB_INFORMATION_MACHINE_NAME$	Returns the information machine name.
$DB_NAME$	Returns the session name.
$DB_SERIAL$	Returns the serial number in the invoice tab.
$DB_SERVICE_TAG$	Returns the service tag field located in the information tab.
$DB_VIRTUAL_MACHINE_ID$	Returns the virtual machine ID.

DOMAIN

The following context will find any Folder Domain entry type as long as it is in the hierarchy above you current entry. If there is multiple matches it will take the entry closest in the hierarchy to the current entry.

OPTION	DESCRIPTION
$DOMAIN_APPLICATION_NAME$	Returns the application name.
$DOMAIN_CURRENT_CLIPBOARD$	Returns the current clipboard content.

OPTION	DESCRIPTION
$DOMAIN_CUSTOM_FIELD1$	Returns the domain custom field field 1 value.
$DOMAIN_CUSTOM_FIELD2$	Returns the domain custom field field 2 value.
$DOMAIN_CUSTOM_FIELD3$	Returns the domain custom field field 3 value.
$DOMAIN_CUSTOM_FIELD4$	Returns the domain custom field field 4 value.
$DOMAIN_CUSTOM_FIELD5$	Returns the domain custom field field 5 value.
$DOMAIN_DOMAIN$	Returns the domain found in the configured credentials.
$DOMAIN_INFORMATION_COMPANY$	Returns the company specified in the domain information.
$DOMAIN_INFORMATION_EMAIL$	Returns the information email.
$DOMAIN_INFORMATION_MACHINE_NAME$	Returns the information machine name.
$DOMAIN_NAME$	Returns the session name.
$DOMAIN_SERIAL$	Returns the serial number in the invoice tab.
$DOMAIN_SERVICE_TAG$	Returns the service tag field located in the information tab.
$DOMAIN_VIRTUAL_MACHINE_ID$	Returns the virtual machine ID.

COMPANY

The following context will find any Folder Company entry type as long as it is in the hierarchy above you current entry. If there is multiple matches it will take the entry closest in the hierarchy to the current entry.

OPTION	DESCRIPTION
$COMPANY_APPLICATION_NAME$	Returns the application name.
$COMPANY_CURRENT_CLIPBOARD$	Returns the current clipboard content.
$COMPANY_CUSTOM_FIELD1$	Returns the company custom field field 1 value.
$COMPANY_CUSTOM_FIELD2$	Returns the company custom field field 2 value.
$COMPANY_CUSTOM_FIELD3$	Returns the company custom field field 3 value.
$COMPANY_CUSTOM_FIELD4$	Returns the company custom field field 4 value.
$COMPANY_CUSTOM_FIELD5$	Returns the company custom field field 5 value.
$COMPANY_DOMAIN$	Returns the domain found in the configured credentials.
$COMPANY_INFORMATION_COMPANY$	Returns the company specified in the company information.
$COMPANY_INFORMATION_EMAIL$	Returns the information email.
$COMPANY_INFORMATION_MACHINE_NAME$	Returns the information machine name.
$COMPANY_NAME$	Returns the session name.
$COMPANY_SERIAL$	Returns the serial number in the invoice tab.

OPTION	DESCRIPTION
$COMPANY_SERVICE_TAG$	Returns the service tag field located in the information tab.
$COMPANY_VIRTUAL_MACHINE_ID$	Returns the virtual machine ID.

SOFTWARE

The following context will find any Folder Software entry type as long as it is in the hierarchy above you current entry. If there is multiple matches it will take the entry closest in the hierarchy to the current entry.

OPTION	DESCRIPTION
$SOFTWARE_APPLICATION_NAME$	Returns the application name.
$SOFTWARE_CURRENT_CLIPBOARD$	Returns the current clipboard content.
$SOFTWARE_CUSTOM_FIELD1$	Returns the custom field field 1 value.
$SOFTWARE_CUSTOM_FIELD2$	Returns the custom field field 2 value.
$SOFTWARE_CUSTOM_FIELD3$	Returns the custom field field 3 value.
$SOFTWARE_CUSTOM_FIELD4$	Returns the custom field field 4 value.
$SOFTWARE_CUSTOM_FIELD5$	Returns the custom field field 5 value.

OPTION	DESCRIPTION
$SOFTWARE_DOMAIN$	Returns the domain found in the configured credentials.
$SOFTWARE_INFORMATION_COMPANY$	Returns the information Company.
$SOFTWARE_INFORMATION_EMAIL$	Returns the information email.
$SOFTWARE_INFORMATION_MACHINE_NAME$	Returns the information machine name.
$SOFTWARE_NAME$	Returns the session name.
$SOFTWARE_SERIAL$	Returns the serial number in the invoice tab.
$SOFTWARE_SERVICE_TAG$	Returns the service tag field located in the information tab.
$SOFTWARE_VIRTUAL_MACHINE_ID$	Returns the virtual machine ID.

SITE

The following context will find any Folder Site entry type as long as it is in the hierarchy above you current entry. If there is multiple matches it will take the entry closest in the hierarchy to the current entry.

OPTION	DESCRIPTION
$SITE_APPLICATION_NAME$	Returns the application name.

OPTION	DESCRIPTION
$SITE_CURRENT_CLIPBOARD$	Returns the current clipboard content.
$SITE_CUSTOM_FIELD1$	Returns the site custom field field 1 value.
$SITE_CUSTOM_FIELD2$	Returns the site custom field field 2 value.
$SITE_CUSTOM_FIELD3$	Returns the site custom field field 3 value.
$SITE_CUSTOM_FIELD4$	Returns the site custom field field 4 value.
$SITE_CUSTOM_FIELD5$	Returns the site custom field field 5 value.
$SITE_DOMAIN$	Returns the domain found in the configured credentials.
$SITE_INFORMATION_COMPANY$	Returns the company specified in the site information.
$SITE_INFORMATION_EMAIL$	Returns the information email.
$SITE_INFORMATION_MACHINE_NAME$	Returns the information machine name.
$SITE_NAME$	Returns the session name.
$SITE_SERIAL$	Returns the serial number in the invoice tab.
$SITE_SERVICE_TAG$	Returns the service tag field located in the information tab.
$SITE_VIRTUAL_MACHINE_ID$	Returns the virtual machine ID.

COMPUTER/HARDWARE

The following context will find any Folder Device, Printer and Workstation entry type as long as it is in the hierarchy above your current entry. If there is multiple matches it will take the entry closest in the hierarchy to the current entry.

OPTION	DESCRIPTION
$COMPUTER_APPLICATION_NAME$	Returns the application name.
$COMPUTER_CURRENT_CLIPBOARD$	Returns the current clipboard content.
$COMPUTER_CUSTOM_FIELD1$	Returns the computer custom field field 1 value.
$COMPUTER_CUSTOM_FIELD2$	Returns the computer custom field field 2 value.
$COMPUTER_CUSTOM_FIELD3$	Returns the computer custom field field 3 value.
$COMPUTER_CUSTOM_FIELD4$	Returns the computer custom field field 4 value.
$COMPUTER_CUSTOM_FIELD5$	Returns the computer custom field field 5 value.
$COMPUTER_DOMAIN$	Returns the computer domain found in the configured credentials.
$COMPUTER_HOST$	Returns the host name if it's available (server name, IP address...).
$COMPUTER_HOST_WITHOUT_DOMAIN$	Returns the host name without the domain if it's available.

OPTION	DESCRIPTION
$COMPUTER_INFORMATION_COMPANY$	Returns the company specified in the computer information.
$COMPUTER_INFORMATION_EMAIL$	Returns the information email.
$COMPUTER_INFORMATION_MACHINE_NAME$	Returns the information machine name.
$COMPUTER_IP$	Returns the IP Address.
$COMPUTER_MAC$	Returns the MAC address defined.
$COMPUTER_NAME$	Returns the session name.
$COMPUTER_SERIAL$	Returns the serial number in the invoice tab.
$COMPUTER_SERVICE_TAG$	Returns the service tag field located in the information tab.
$COMPUTER_VIRTUAL_MACHINE_ID$	Returns the virtual machine ID.

IDENTITY

The following context will find any Folder Identity entry type as long as it is in the hierarchy above you current entry. If there is multiple matches it will take the entry closest in the hierarchy to the current entry.

OPTION	DESCRIPTION
$IDENTITY_APPLICATION_NAME$	Returns the application name.

OPTION	DESCRIPTION
$IDENTITY_CURRENT_CLIPBOARD$	Returns the current clipboard content.
$IDENTITY_CUSTOM_FIELD1$	Returns the identity custom field field 1 value.
$IDENTITY_CUSTOM_FIELD2$	Returns the identity custom field field 2 value.
$IDENTITY_CUSTOM_FIELD3$	Returns the identity custom field field 3 value.
$IDENTITY_CUSTOM_FIELD4$	Returns the identity custom field field 4 value.
$IDENTITY_CUSTOM_FIELD5$	Returns the identity custom field field 5 value.
$IDENTITY_DOMAIN$	Returns the domain found in the configured credentials.
$IDENTITY_INFORMATION_COMPANY$	Returns the company specified in the identity information.
$IDENTITY_INFORMATION_EMAIL$	Returns the information email.
$IDENTITY_INFORMATION_MACHINE_NAME$	Returns the information machine name.
$IDENTITY_NAME$	Returns the session name.
$IDENTITY_SERIAL$	Returns the serial number in the invoice tab.
$IDENTITY_SERVICE_TAG$	Returns the service tag field located in the information tab.
$IDENTITY_VIRTUAL_MACHINE_ID$	Returns the virtual machine ID.

CUSTOMER

The following context will find any Folder Customer entry type as long as it is in the hierarchy above you current entry. If there IS multiple matches it will take the entry closest in the hierarchy to the current entry.

OPTION	DESCRIPTION
$CUSTOMER_APPLICATION_NAME$	Returns the application name.
$CUSTOMER_CURRENT_CLIPBOARD$	Returns the current clipboard content.
$CUSTOMER_CUSTOM_FIELD1$	Returns the customer custom field field 1 value.
$CUSTOMER_CUSTOM_FIELD2$	Returns the customer custom field field 2 value.
$CUSTOMER_CUSTOM_FIELD3$	Returns the customer custom field field 3 value.
$CUSTOMER_CUSTOM_FIELD4$	Returns the customer custom field field 4 value.
$CUSTOMER_CUSTOM_FIELD5$	Returns the customer custom field field 5 value.
$CUSTOMER_DOMAIN$	Returns the domain found in the configured credentials.
$CUSTOMER_INFORMATION_COMPANY$	Returns the company specified in the customer information.
$CUSTOMER_INFORMATION_EMAIL$	Returns the information email.

OPTION	DESCRIPTION
$CUSTOMER_INFORMATION_MACHINE_NAME$	Returns the information machine name.
$CUSTOMER_NAME$	Returns the session name.
$CUSTOMER_SERIAL$	Returns the serial number in the invoice tab.
$CUSTOMER_SERVICE_TAG$	Returns the service tag field located in the information tab.
$CUSTOMER_VIRTUAL_MACHINE_ID$	Returns the virtual machine ID.

CUSTOM FIELDS

Custom fields can contain any required data and can be accessed using the *_CUSTOM_FIELD* variables. To access custom fields, select an entry, then click Information in the entry overview in the dashboard. Finally, choose the Custom Fields tab.

QUICK CONNECT

The **$QUICK_CONNECT$** variable will be replaced by the value in the Quick Connect control as described in Quick Connect. It is only useful when a template connection is selected.

Commands

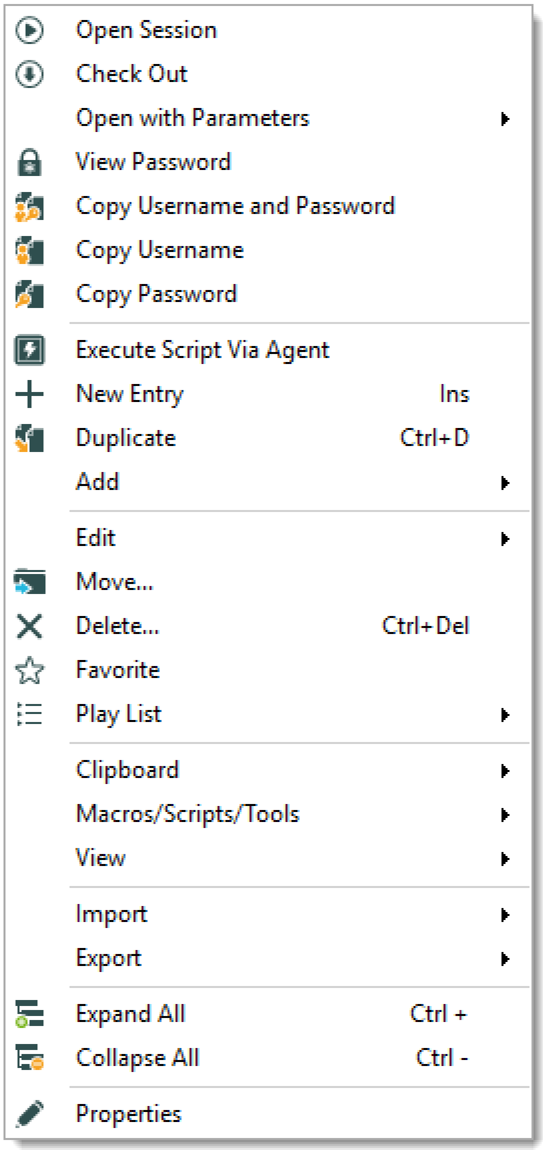
Part VII

7 Commands

7.1 Context Menu

DESCRIPTION

The **Context Menu** contains several entry-specific actions. The available actions depend on which type of entry is selected. Right click on an entry to display the context menu.

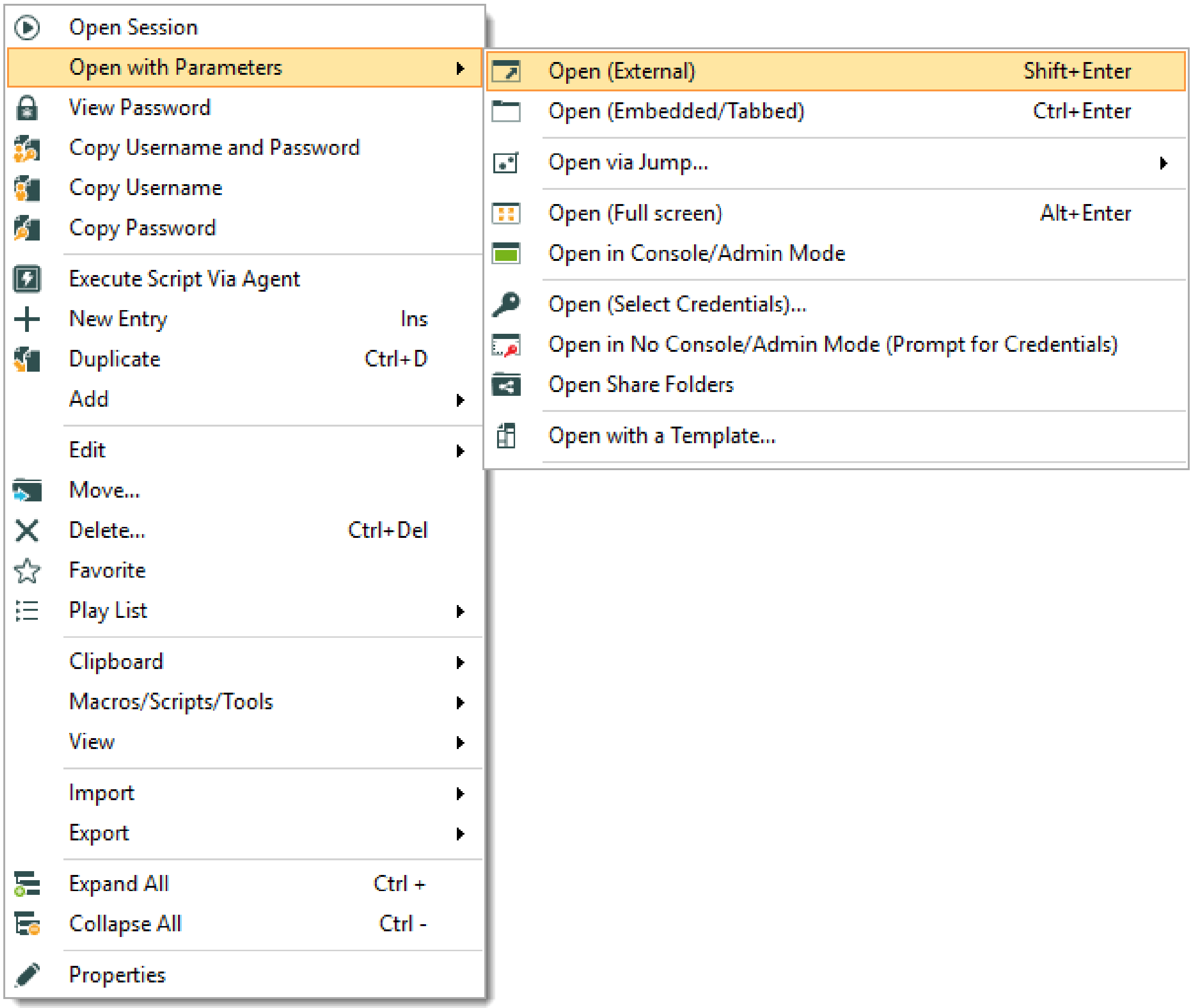


Context Menu

7.1.1 Open with Parameters

DESCRIPTION

The **Open with Parameters** menu all options available to open a session.



Open with Parameters

OPTION	DESCRIPTION
Open (External)	Open a session as an external process, with no direct link to Remote Desktop Manager.

OPTION	DESCRIPTION
Open (Embedded/Tabbed)	Open the session within the confines of the Remote Desktop Manager dashboard and display tabs at the top of the window.
Open via Jump...	Open the session through a Jump host.
Open (Full Screen)	Open the session with the full screen display mode.
Open in Console/Admin Mode	Connect to the console session of a server using Remote Desktop for Administration.
Open (Select Credentials)...	Prompts you with the list of the credentials link to your Data Source to allow you to chose the one needed to open your session.
Open in No Console/Admin Mode **(Prompt for Credentials)**	Open your session normally and prompt your for your credentials to connect.
Open Share Folders	Open the shared folders of the remote computer.
Open with a Template...	Open from a template that you have already created.
VPN	Select between: • **Open (Without VPN).** • **Open VPN Only.** • **Close VPN Only.**

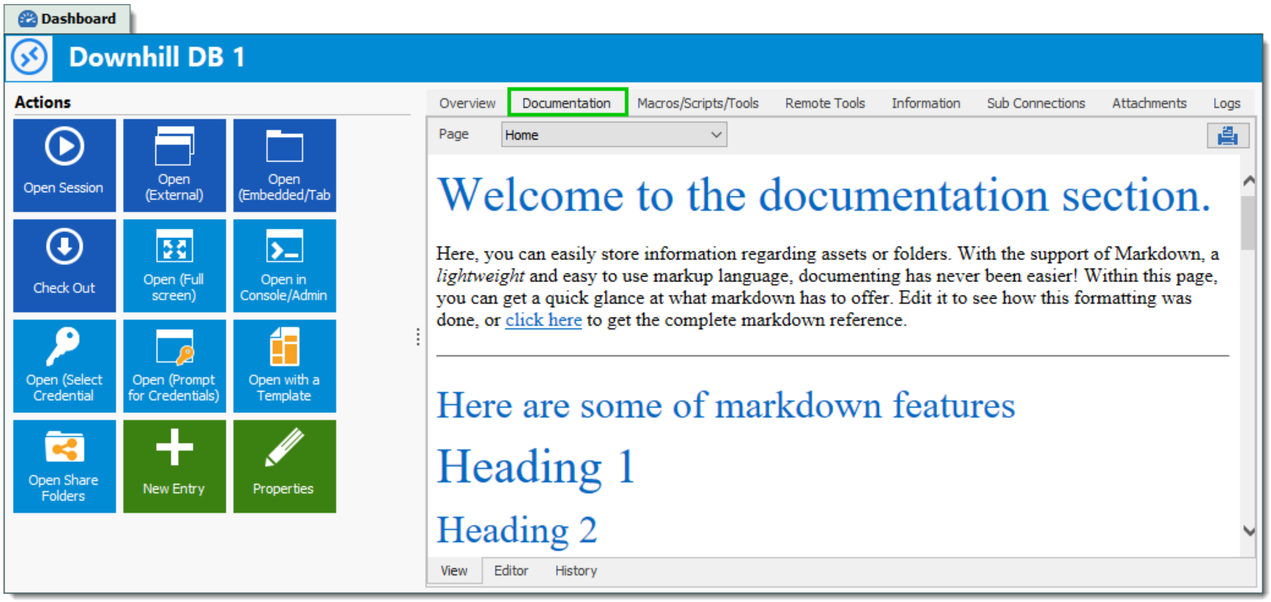
7.1.2 Documentation

DESCRIPTION

The ***Documentation*** feature allows for storing information about resources in the data source. To access an entry's documentation, select an entry in the Navigation Pane, then select the ***Documentation*** tab in the dashboard. Alternatively, right-click an entry in the Navigation Pane, then select ***View – Documentation***.

The documentation is written using Markdown, a plain text formatting syntax.

> This feature is available with Devolutions Password Server, MariaDB, MySQL and SQL Server data sources.



Welcome to the documentation section.

Here, you can easily store information regarding assets or folders. With the support of Markdown, a *lightweight* and easy to use markup language, documenting has never been easier! Within this page, you can get a quick glance at what markdown has to offer. Edit it to see how this formatting was done, or click here to get the complete markdown reference.

Here are some of markdown features

Heading 1

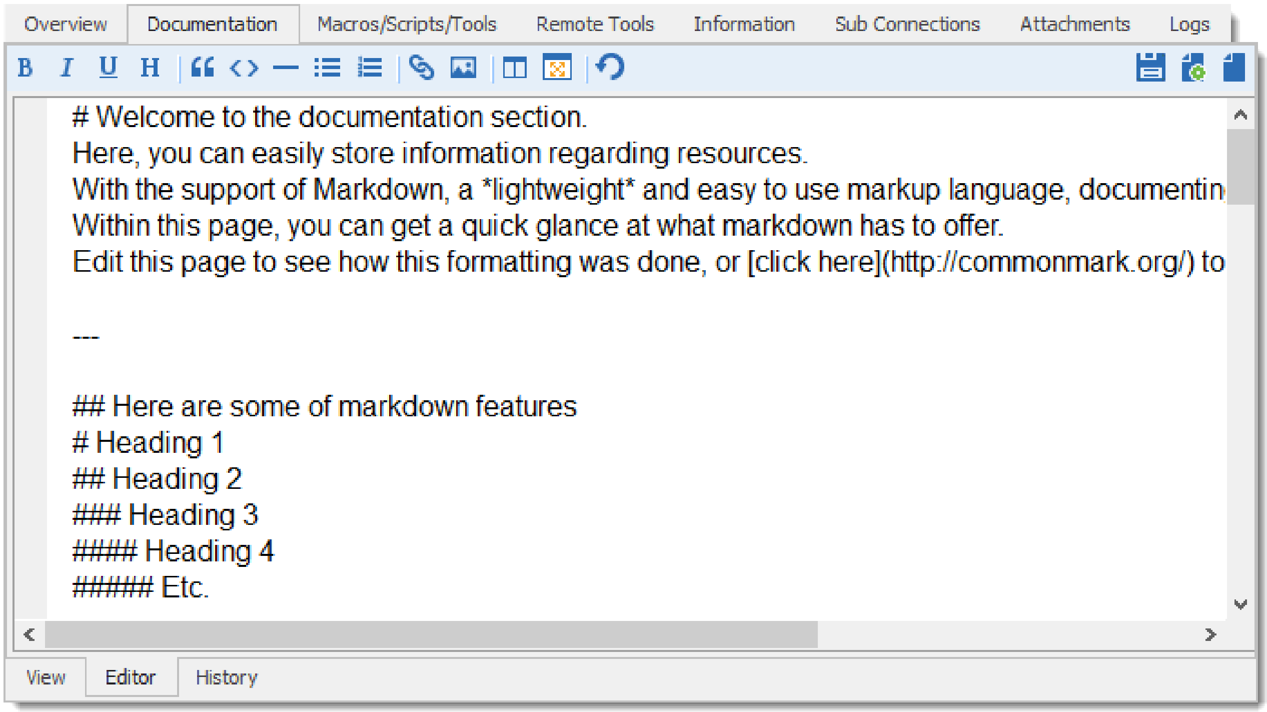
Heading 2

Documentation of an entry

7.1.2.1 Editor

DESCRIPTION

The documentation editor is a simple plain text editor. The text is formatted using the Markdown text formatting syntax. Markdown is a markup language designed to be as easy-to-read and easy-to-write as possible.



```
# Welcome to the documentation section.
Here, you can easily store information regarding resources.
With the support of Markdown, a *lightweight* and easy to use markup language, documentin
Within this page, you can get a quick glance at what markdown has to offer.
Edit this page to see how this formatting was done, or [click here](http://commonmark.org/) to

---

## Here are some of markdown features
# Heading 1
## Heading 2
### Heading 3
#### Heading 4
###### Etc.
```

Documentation editor

MARKDOWN FORMATTING TAGS

- Paragraphs
- Emphasis
- Headers
- Lists
- Horizontal rulers
- Links
- Images
- Blockquotes
- Code examples

PARAGRAPHS

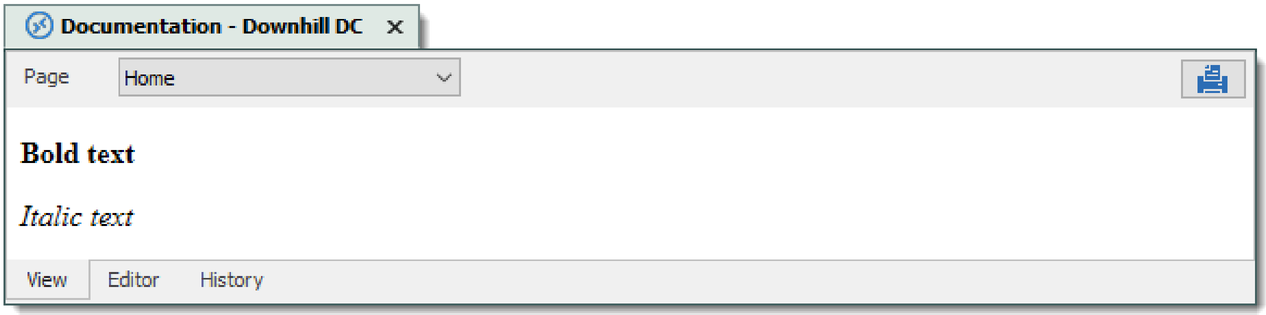
A paragraph is one or more consecutive lines. Normal paragraphs should not be indented with spaces or tabs.

EMPHASIS

Two methods of text emphasis are available:

```
**Bold text**

*Italic text*
```

Output:



Bold text

Italic text

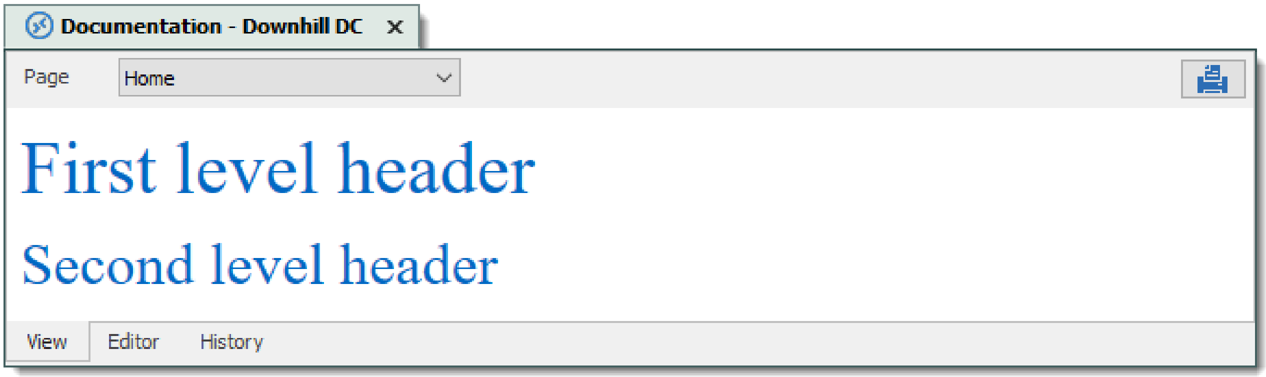
HEADERS

There are two ways of creating headers with Markdown.

First and second level can be created by "underlining" the text with equal signs (=) and hyhens (-).

```
First level header
==================

Second level header
-------------------
```

Output:



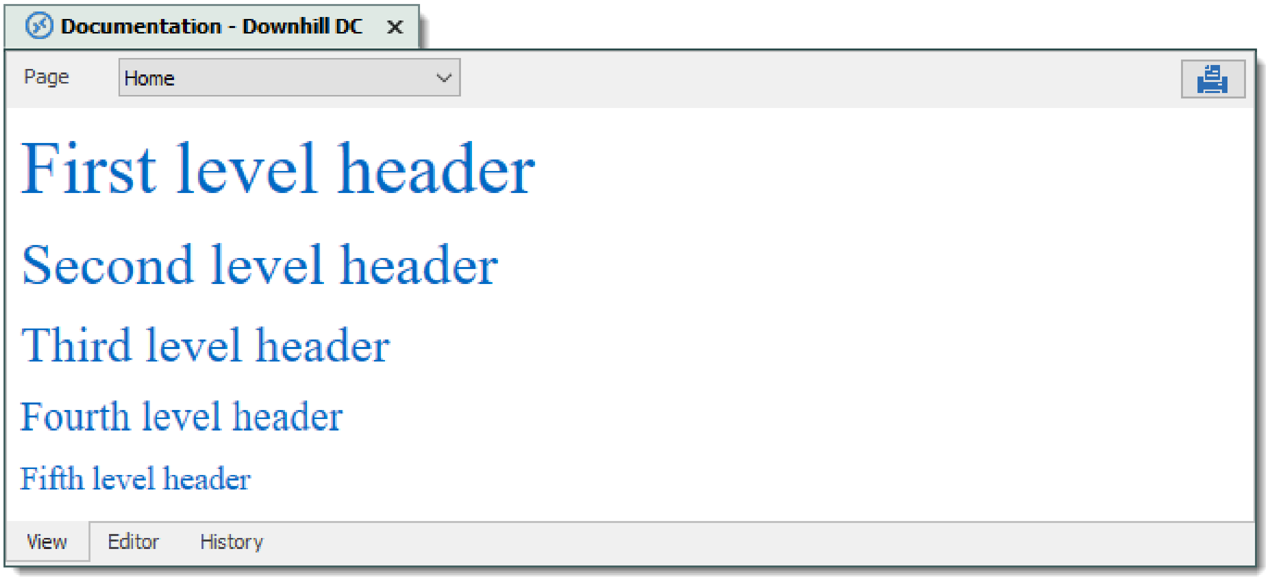
First level header

Second level header

More levels of headers can be created by using one to five hash symbol (#) at the beginning of the line.

```
# First level header

## Second level header

### Third level header

#### Fourth level header

##### Fifth level header
```

Output:



First level header

Second level header

Third level header

Fourth level header

Fifth level header

LISTS

Use asterisks, pluses, and hyphens to create an unordered bulleted list. These three markers are interchangable.

```
* Item 1
* Item 2
* Item 3
```

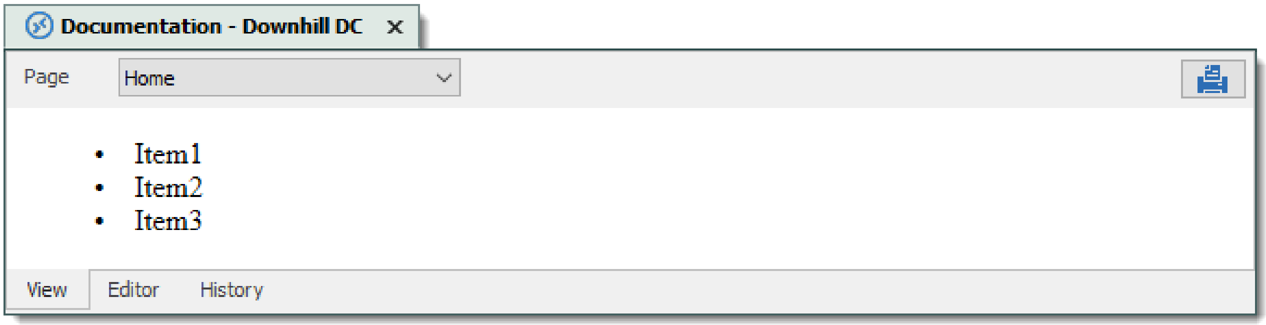
or

```
+ Item 1
+ Item 2
+ Item 3
```

or

```
- Item 1
- Item 2
- Item 3
```

Output:

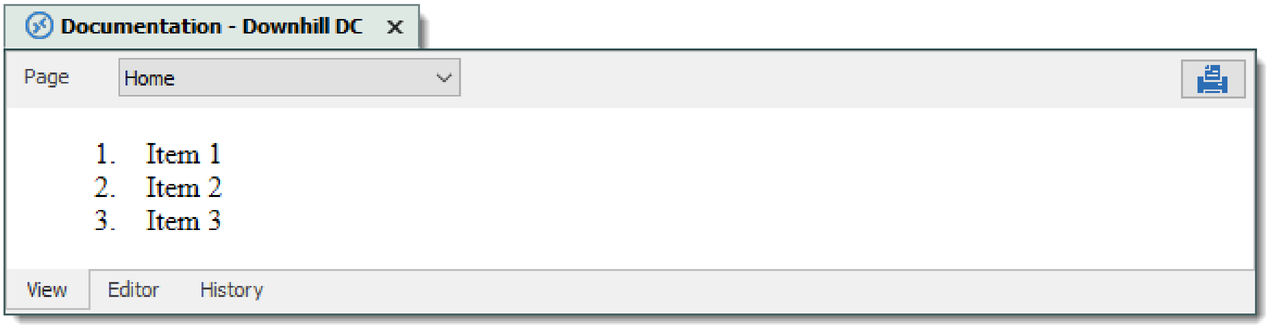


- Item1
- Item2
- Item3

Use regular numbers, followed by periods, to create an ordered bulleted list.

```
1. Item 1
2. Item 2
3. Item 3
```

Output:



1. Item 1
2. Item 2
3. Item 3

HORIZONTAL RULERS

Use three undersocres, asterisks, or hyphens to create a horizontal ruler.

```
___
```

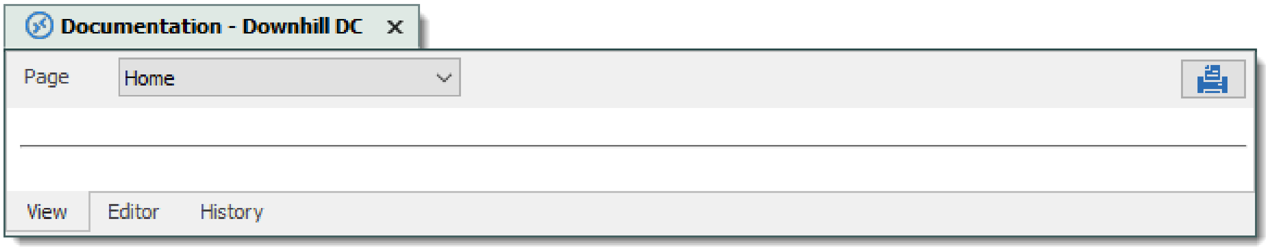
or

```
***
```

or

```
---
```

Output:



LINKS

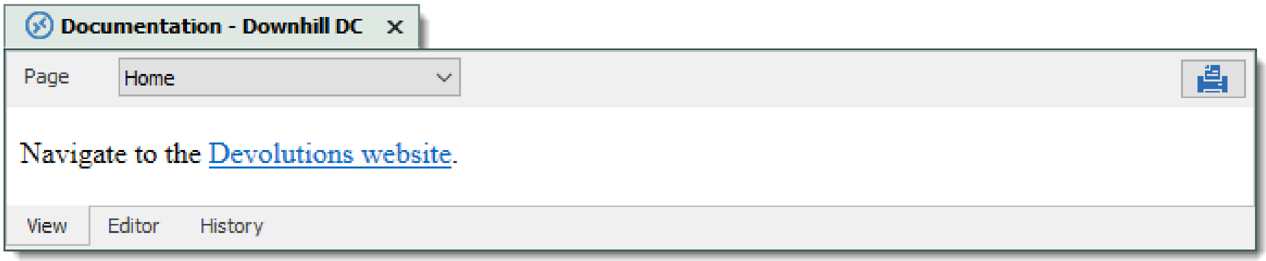
Use square brackets to delimit the text you want to turn into a link.

There are two ways of creating links: inline and reference.

Use parentheses immediately after the link text for inline-style links:

```
Navigate to the [Devolutions website](https://devolutions.net).
```

Output:

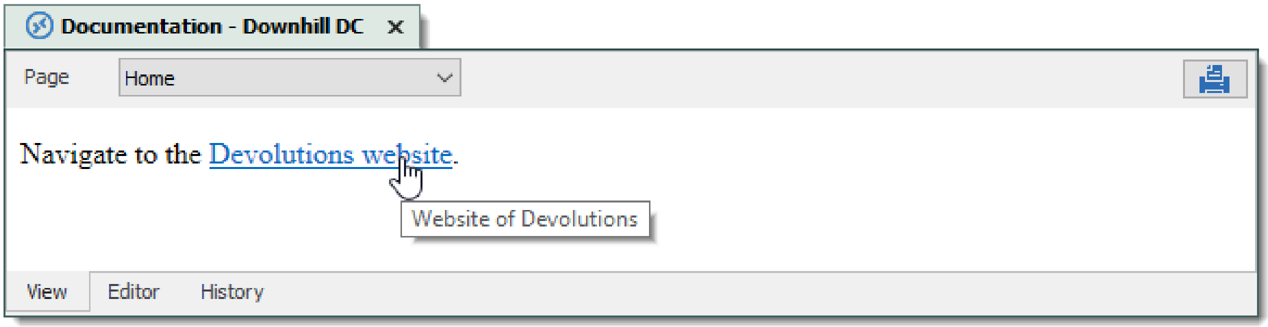


Navigate to the Devolutions website.

Optionally a title attribute may be included in the parentheses.

```
Navigate to the [Devolutions website](https://devolutions.net "Website of Devolutions").
```

Output:

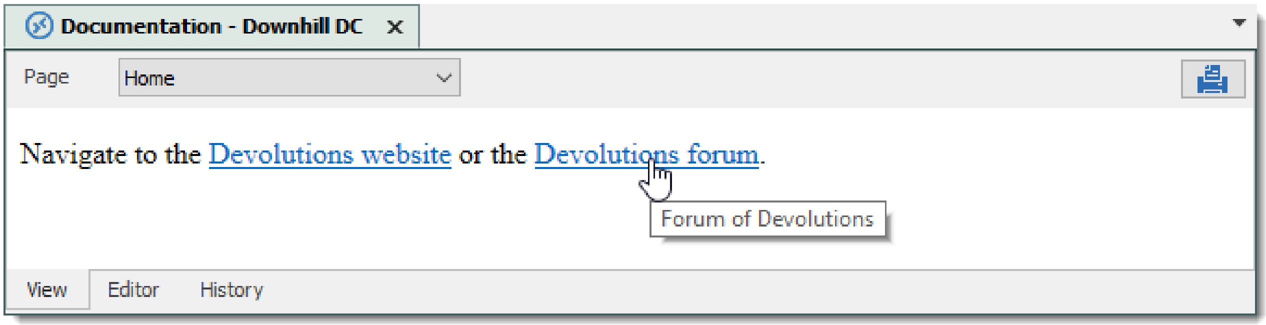


Navigate to the Devolutions website.

For reference-style links, define the links elsewhere in the document, then refer to a link by its name in another set of square brackets.

```
Navigate to the [Devolutions website][mainwebsite] or the [Devolutions forum][forumwebsit

[mainwebsite]: https://devolutions.net/ "Website of Devolutions"
[forumwebsite]: https://forum.devolutions.net/ "Forum of Devolutions"
```

Output:



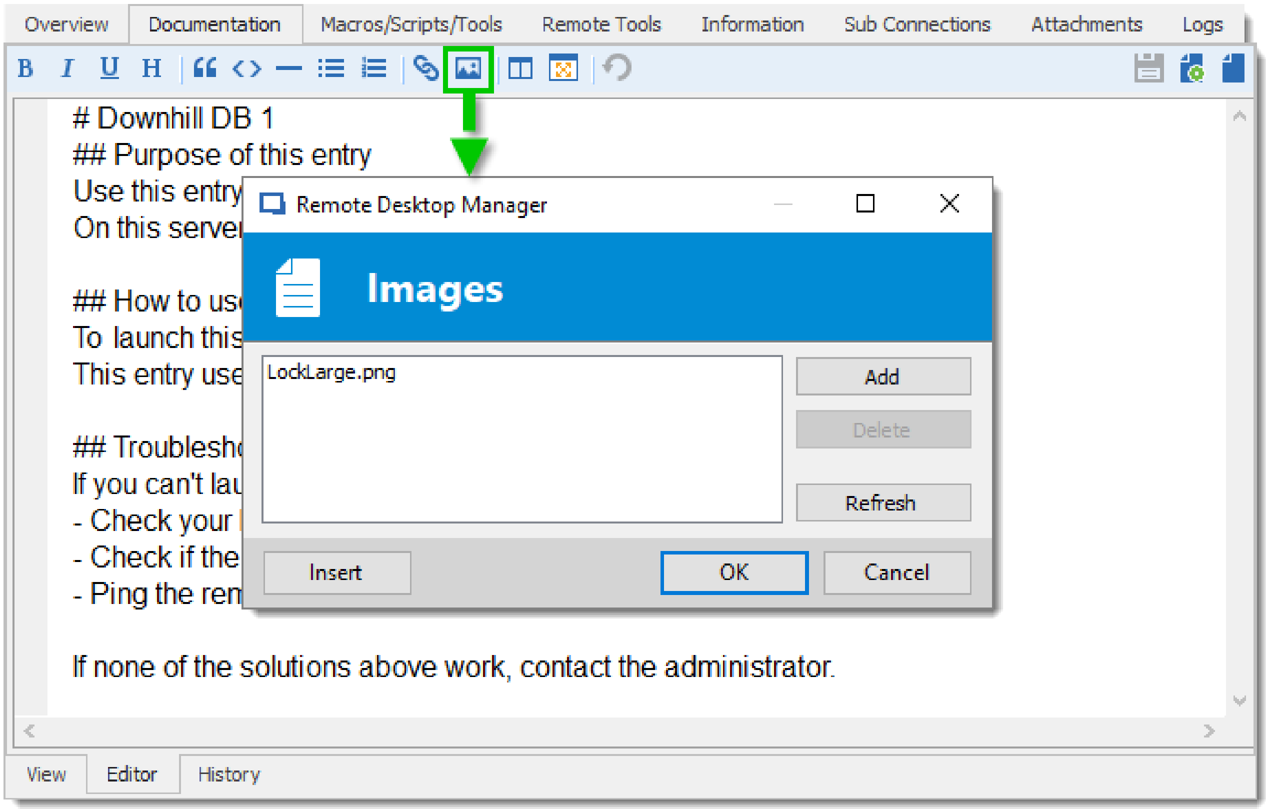
Navigate to the Devolutions website or the Devolutions forum.

The title attribute is optional again. Link names may contain letters, numbers and spaces, but are not case sensitive.

IMAGES

Image syntax is very similar to link syntax. Images must be added in the image manager before referencing them.

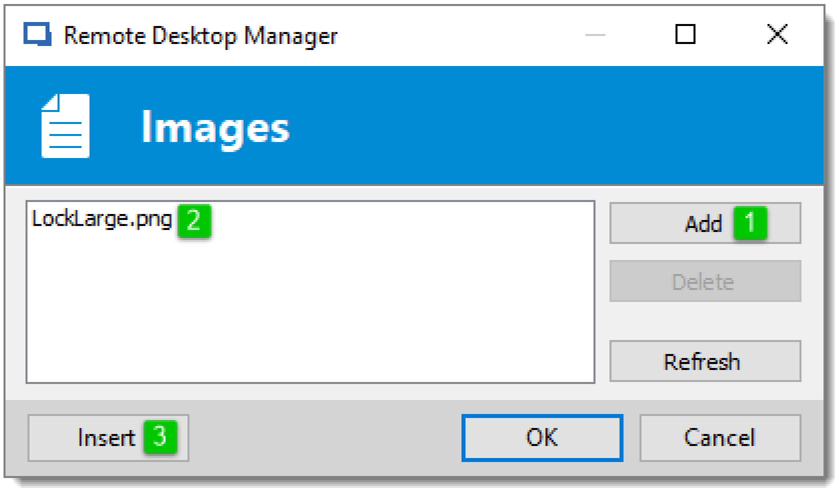
To add images in the image manager, click the ***Manage images*** button.



Downhill DB 1
Purpose of this entry
Use this entry
On this serve
How to us
To launch this
This entry use
Troublesh
If you can't lau
- Check your
- Check if the
- Ping the rem
If none of the solutions above work, contact the administrator.

Documentation editor – Image manager

Click ***Add*** to select an image from the computer. Select the image in the list, and click ***Insert*** to place the image in the text.



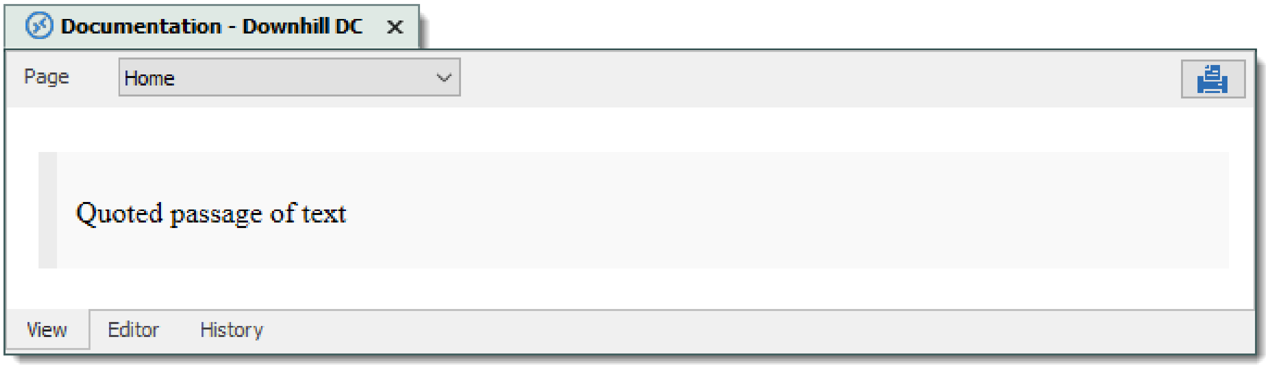
Documentation editor - Add an image

BLOCKQUOTES

Quote a passage of text by inputting a greater-than (>) symbol at the beginning of the line of text.

```
> Quoted passage of text
```

Output:

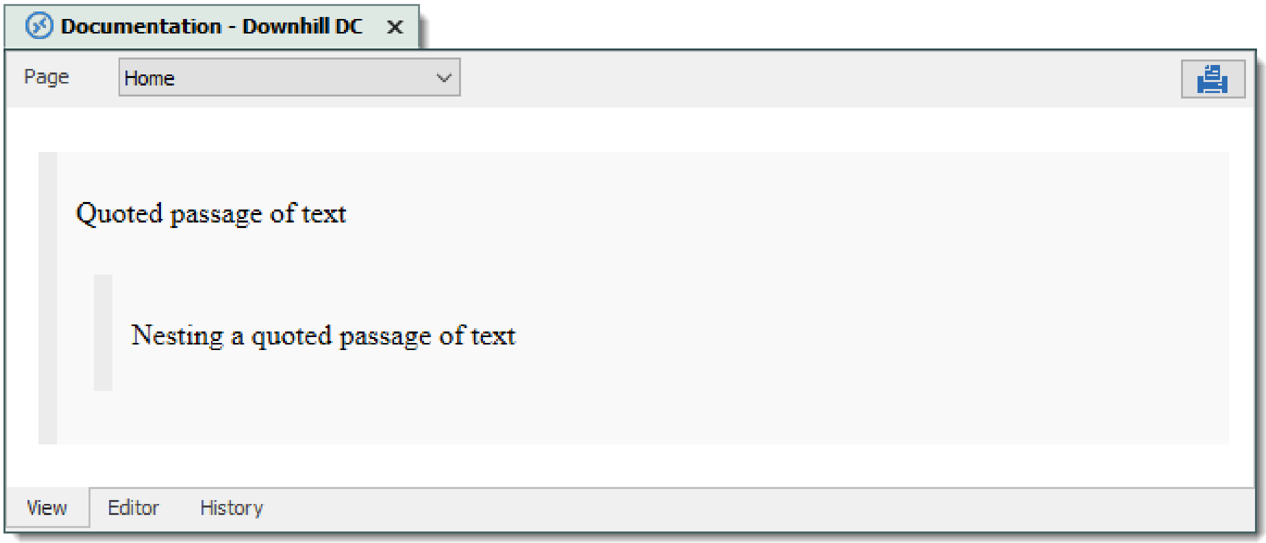


Quoted passage of text

Blockquotes can easily be nested.

```
> Quoted passage of text
>> Nesting a quoted passage of text
```

Output:



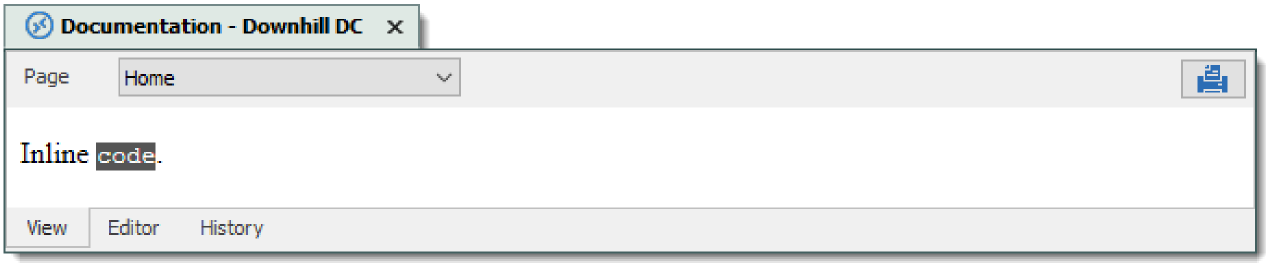
> Quoted passage of text
>
> > Nesting a quoted passage of text

CODE EXAMPLES

Inline code is created by enclosing the text in backthicks (`).

```
Inline `code`.
```

Output:

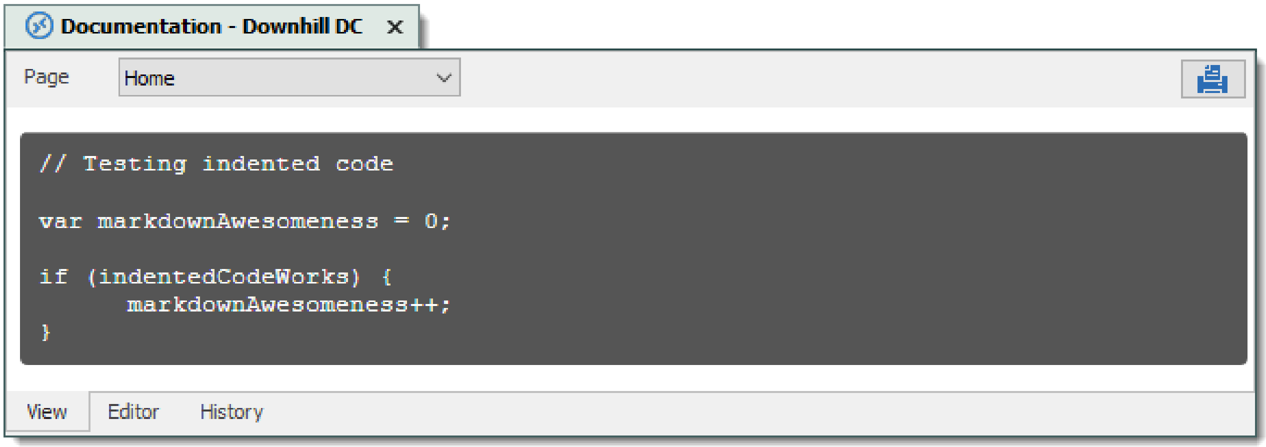


Inline `code`.

Code blocks are created be indenting the text with four spaces at the beginning of each lines There must have an empty line before.

```
    // Testing indented code

    var markdownAwesomeness = 0;

    if (indentedCodeWorks) {
            markdownAwesomeness++;
    }
```

Output:

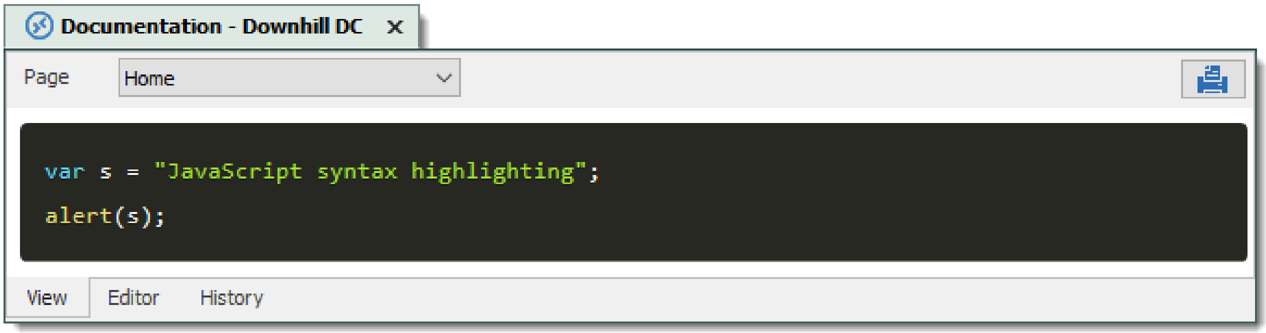


```
// Testing indented code

var markdownAwesomeness = 0;

if (indentedCodeWorks) {
       markdownAwesomeness++;
}
```

A specific syntax highlighting can be specified as well.

~~~
```javascript
var s = "JavaScript syntax highlighting";
alert(s);
```
~~~

Output:



```
var s = "JavaScript syntax highlighting";
alert(s);
```

7.1.3 Entry History

DESCRIPTION

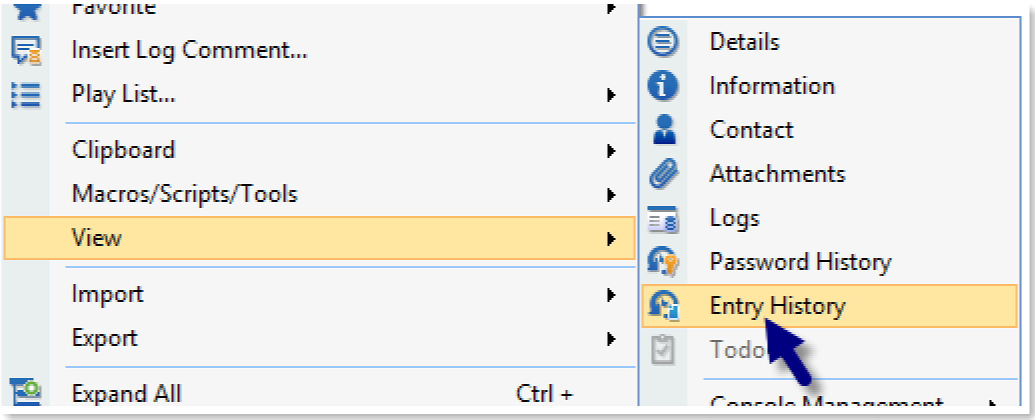
Entry History feature allows you to view details regarding different version of your sessions and also gives you the option of performing compares between different versions.

This feature requires an Advanced Data Source.

For architectural reasons, the documents stored in our Advanced Data Sources are **NOT** protected from modifications. Once they are modified, the previous version **cannot be restored**. Please keep a safe copy of all documents in another storage device. Support for this feature will be added in a coming update to our products.

You must be an administrator of the data source to perform this action.

SETTINGS



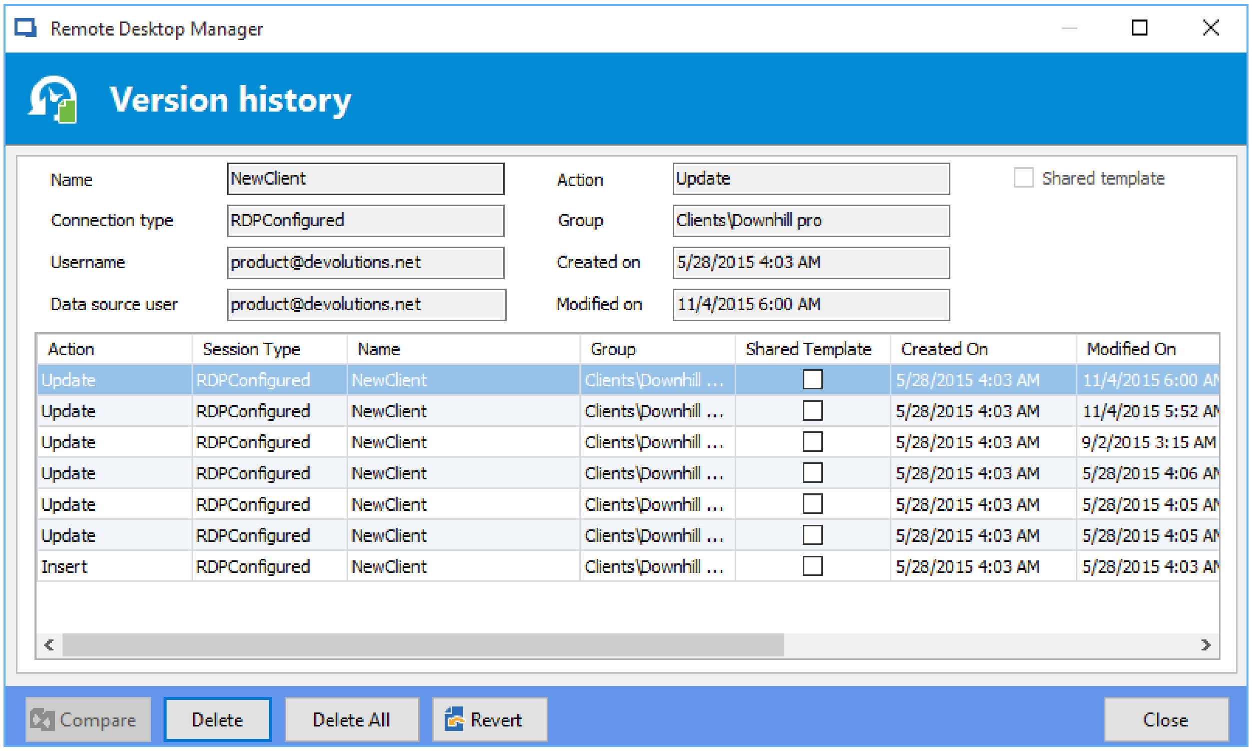
Home - Entry History

Session History

To display the entry history, ***right-click*** on an entry and select ***View - Entry History***.

ENTRY HISTORY VIEW

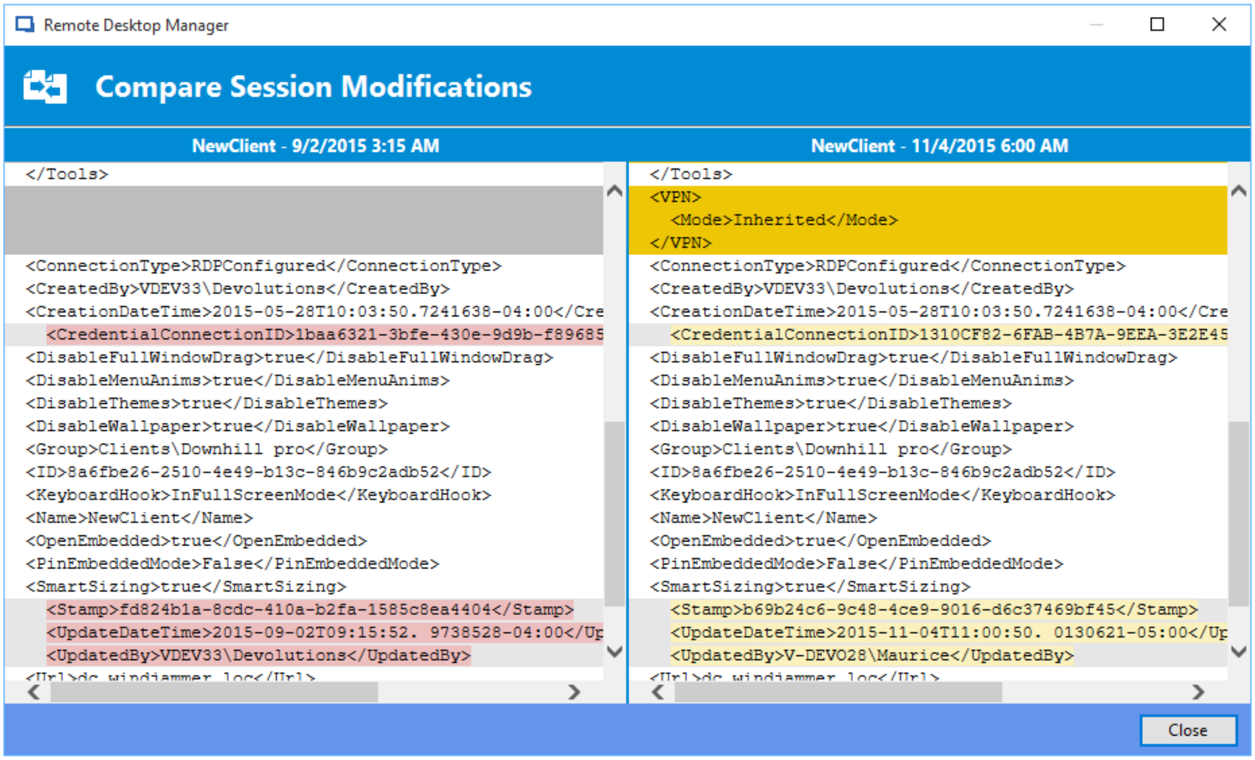
The entry history view dialog allows you to compare two entries and manage history revisions. To compare simply select any two entries then use the ***Compare*** button. You can delete any history revision or the entire history using the ***Delete*** and ***Delete All*** buttons.



Name	NewClient	Action	Update	□ Shared template
Connection type	RDPConfigured	Group	Clients\Downhill pro	
Username	product@devolutions.net	Created on	5/28/2015 4:03 AM	
Data source user	product@devolutions.net	Modified on	11/4/2015 6:00 AM	

Action	Session Type	Name	Group	Shared Template	Created On	Modified On
Update	RDPConfigured	NewClient	Clients\Downhill ...	□	5/28/2015 4:03 AM	11/4/2015 6:00 AM
Update	RDPConfigured	NewClient	Clients\Downhill ...	□	5/28/2015 4:03 AM	11/4/2015 5:52 AM
Update	RDPConfigured	NewClient	Clients\Downhill ...	□	5/28/2015 4:03 AM	9/2/2015 3:15 AM
Update	RDPConfigured	NewClient	Clients\Downhill ...	□	5/28/2015 4:03 AM	5/28/2015 4:06 AM
Update	RDPConfigured	NewClient	Clients\Downhill ...	□	5/28/2015 4:03 AM	5/28/2015 4:05 AM
Update	RDPConfigured	NewClient	Clients\Downhill ...	□	5/28/2015 4:03 AM	5/28/2015 4:05 AM
Insert	RDPConfigured	NewClient	Clients\Downhill ...	□	5/28/2015 4:03 AM	5/28/2015 4:03 AM

Entry history view



NewClient - 9/2/2015 3:15 AM

```
</Tools>



<ConnectionType>RDPConfigured</ConnectionType>
<CreatedBy>VDEV33\Devolutions</CreatedBy>
<CreationDateTime>2015-05-28T10:03:50.7241638-04:00</Cre
  <CredentialConnectionID>1baa6321-3bfe-430e-9d9b-f89685
<DisableFullWindowDrag>true</DisableFullWindowDrag>
<DisableMenuAnims>true</DisableMenuAnims>
<DisableThemes>true</DisableThemes>
<DisableWallpaper>true</DisableWallpaper>
<Group>Clients\Downhill pro</Group>
<ID>8a6fbe26-2510-4e49-b13c-846b9c2adb52</ID>
<KeyboardHook>InFullScreenMode</KeyboardHook>
<Name>NewClient</Name>
<OpenEmbedded>true</OpenEmbedded>
<PinEmbeddedMode>False</PinEmbeddedMode>
<SmartSizing>true</SmartSizing>
  <Stamp>fd824b1a-8cdc-410a-b2fa-1585c8ea4404</Stamp>
  <UpdateDateTime>2015-09-02T09:15:52. 9738528-04:00</Up
  <UpdatedBy>VDEV33\Devolutions</UpdatedBy>
<Url>dc windjammer loc</Url>
```

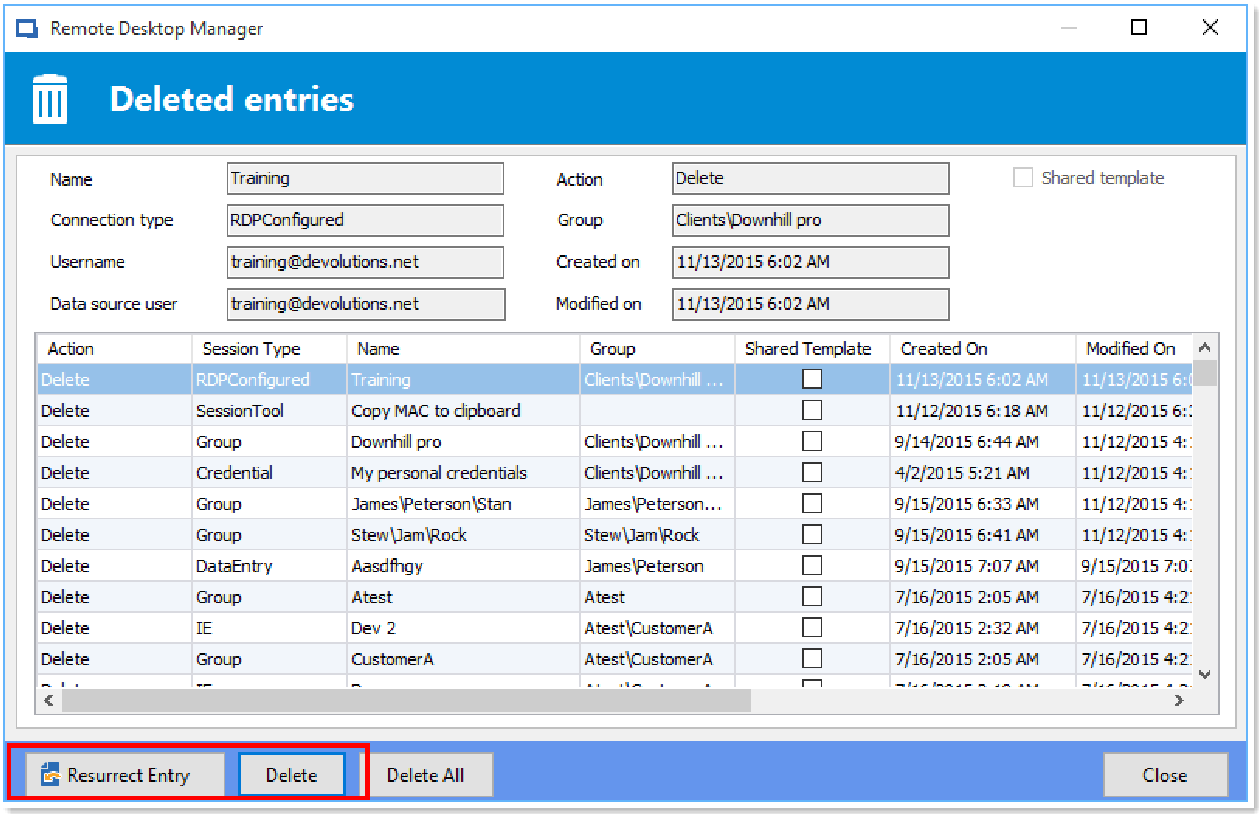
NewClient - 11/4/2015 6:00 AM

```
</Tools>
<VPN>
  <Mode>Inherited</Mode>
</VPN>
<ConnectionType>RDPConfigured</ConnectionType>
<CreatedBy>VDEV33\Devolutions</CreatedBy>
<CreationDateTime>2015-05-28T10:03:50.7241638-04:00</Cre
  <CredentialConnectionID>1310CF82-6FAB-4B7A-9EEA-3E2E45
<DisableFullWindowDrag>true</DisableFullWindowDrag>
<DisableMenuAnims>true</DisableMenuAnims>
<DisableThemes>true</DisableThemes>
<DisableWallpaper>true</DisableWallpaper>
<Group>Clients\Downhill pro</Group>
<ID>8a6fbe26-2510-4e49-b13c-846b9c2adb52</ID>
<KeyboardHook>InFullScreenMode</KeyboardHook>
<Name>NewClient</Name>
<OpenEmbedded>true</OpenEmbedded>
<PinEmbeddedMode>False</PinEmbeddedMode>
<SmartSizing>true</SmartSizing>
  <Stamp>b69b24c6-9c48-4ce9-9016-d6c37469bf45</Stamp>
  <UpdateDateTime>2015-11-04T11:00:50. 0130621-05:00</Up
  <UpdatedBy>V-DEV028\Maurice</UpdatedBy>
<Url>dc windjammer loc</Url>
```

Compare session modifications

VIEW DELETED ENTRIES

Use the ***Administration* - *View Deleted*** to manage and resurrect deleted entries.



Name	Training	Action	Delete	☐ Shared template
Connection type	RDPConfigured	Group	Clients\Downhill pro	
Username	training@devolutions.net	Created on	11/13/2015 6:02 AM	
Data source user	training@devolutions.net	Modified on	11/13/2015 6:02 AM	

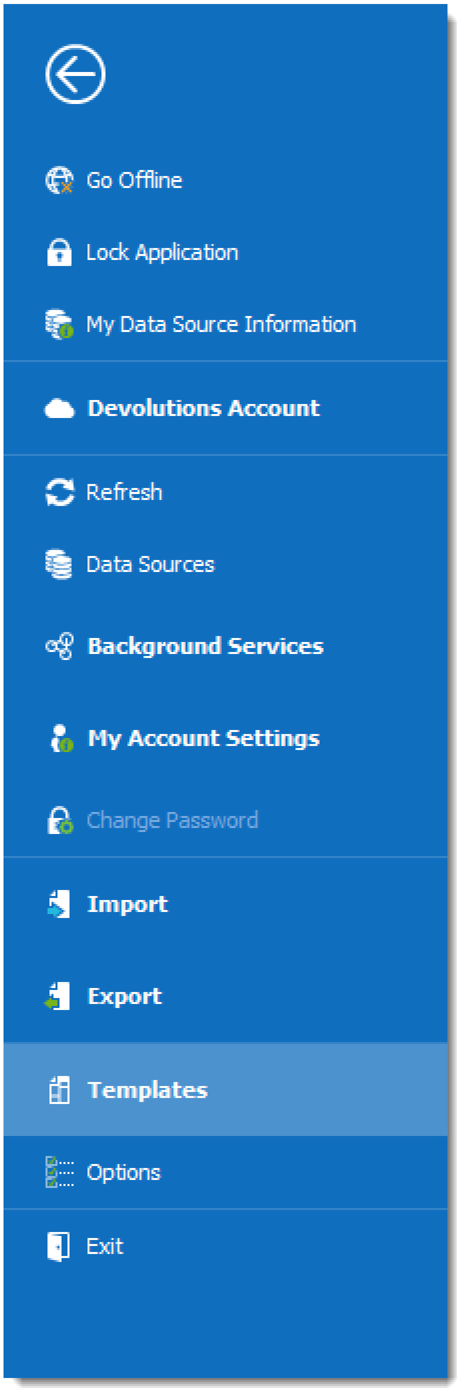
Action	Session Type	Name	Group	Shared Template	Created On	Modified On
Delete	RDPConfigured	Training	Clients\Downhill ...	☐	11/13/2015 6:02 AM	11/13/2015 6:0
Delete	SessionTool	Copy MAC to clipboard		☐	11/12/2015 6:18 AM	11/12/2015 6:
Delete	Group	Downhill pro	Clients\Downhill ...	☐	9/14/2015 6:44 AM	11/12/2015 4:
Delete	Credential	My personal credentials	Clients\Downhill ...	☐	4/2/2015 5:21 AM	11/12/2015 4:
Delete	Group	James\Peterson\Stan	James\Peterson...	☐	9/15/2015 6:33 AM	11/12/2015 4:
Delete	Group	Stew\Jam\Rock	Stew\Jam\Rock	☐	9/15/2015 6:41 AM	11/12/2015 4:
Delete	DataEntry	Aasdfhgy	James\Peterson	☐	9/15/2015 7:07 AM	9/15/2015 7:0
Delete	Group	Atest	Atest	☐	7/16/2015 2:05 AM	7/16/2015 4:2
Delete	IE	Dev 2	Atest\CustomerA	☐	7/16/2015 2:32 AM	7/16/2015 4:2
Delete	Group	CustomerA	Atest\CustomerA	☐	7/16/2015 2:05 AM	7/16/2015 4:2

Deleted Entries

7.2 File

DESCRIPTION

The **File** menu contains many actions regarding the application and the data source. This menu is contextual and depends on the connected data source.



File

GO OFFLINE/ONLINE

Toggle the data source offline mode.

For more information, please consult the Offline mode topic.

LOCK APPLICATION

Lock and minimize the application.

The user is prompted for the data source password when the application is restored (if required by the configuration).

MY DATA SOURCE INFORMATION

Display configuration information relative to the current data source.

For more information, please consult the My Data Source Information topic.

DEVOLUTIONS ACCOUNT

Connect to a Devolutions Account, create custom installer for Remote Desktop Manager, manage license serials, and more.

For more information, please consult the Devolutions Account topic.

REFRESH

Refresh the data source and retrieve the most recent data.

For more information, please consult the Refresh topic.

DATA SOURCES

Open the data source configuration screen.

For more information, please consult the Data Sources topic.

BACKGROUND SERVICES

View and execute synchronizers.

For more information, please consult the Background Services topics.

MY ACCOUNT SETTINGS

View information about the current user and edit personal credentials.

For more information, please consult the My Account Settings topic.

CHANGE MASTER KEY

Prompts to change the current Master Key

For more information, please consult the Change Master Key topic.

IMPORT

Import entries in the data source.

For more information, please consult the Import topic.

EXPORT

Export entries from the data source.

For more information, please consult the Export topic.

OPTIONS

Edit the application options.

For more information, please consult the Options topic.

TEMPLATES

Edit templates and default settings for entries.

For more information, please consult the Templates topic.

7.2.1 Go Offline/Online

DESCRIPTION

Toggle the data source Offline Mode.

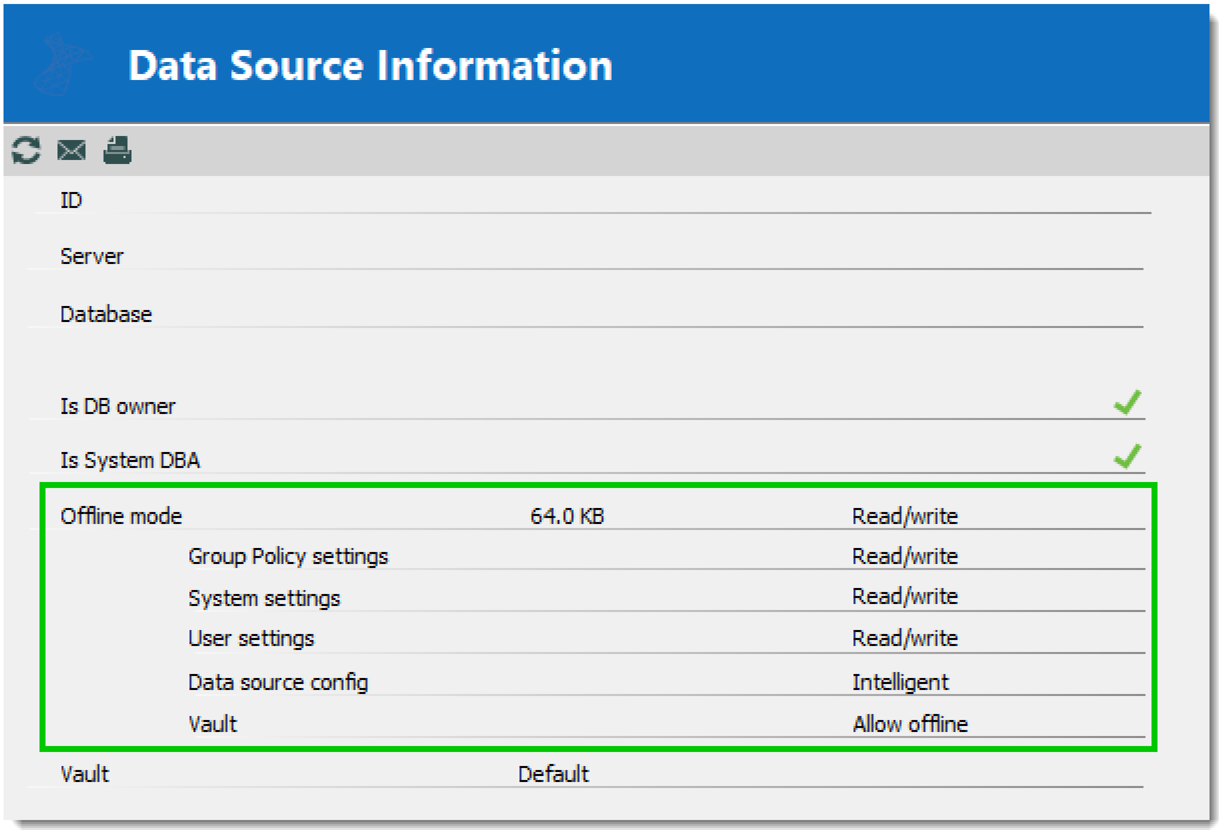
Use the offline mode to connect to a local copy of the data source when the remote database is unavailable. This is useful when working from a remote location and the network is unreachable or if there is any kind of connectivity issue.

> There are security considerations to take into account when enabling the offline mode.

The offline mode availability relies on several settings, refer to the Offline Mode topic.

The lowest setting (in terms of security) prevails over the others, which may prevent you from using the offline mode. If the **Go Offline** button is not available, please consult your administrator.

The **Data Source Information** displays the size of the offline cache file along with the effective modes (disabled, read-only or read/write).



Data Source Information

ID			
Server			
Database			
Is DB owner			✓
Is System DBA			✓
Offline mode		64.0 KB	Read/write
	Group Policy settings		Read/write
	System settings		Read/write
	User settings		Read/write
	Data source config		Intelligent
	Vault		Allow offline
Vault		Default	

Data Source Information - Offline mode

Several features are not available in offline mode, such as:

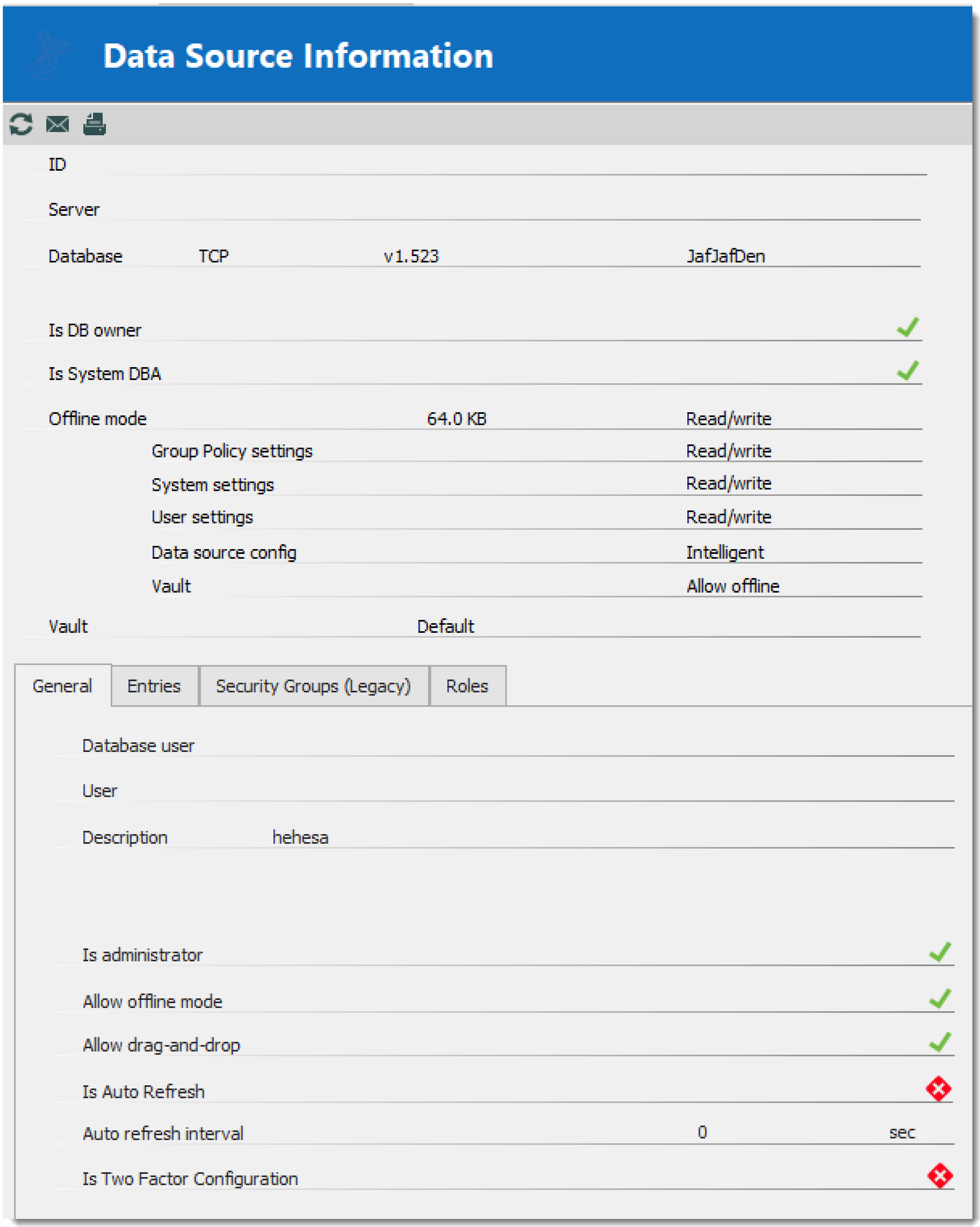
- Attachments and logs.
- User management (Add/Edit/Delete users).

7.2.2 My Data Source Information

DESCRIPTION

The **Data Source Information** displays various information related to the current data source, such as the current user and security access.

> The **My Data Source Information** view can be different depending on the Data Source Type. This topic uses an SQL Server data source.



Data Source Information

ID			
Server			
Database	TCP	v1.523	JafJafDen
Is DB owner			✓
Is System DBA			✓
Offline mode		64.0 KB	Read/write
	Group Policy settings		Read/write
	System settings		Read/write
	User settings		Read/write
	Data source config		Intelligent
	Vault		Allow offline
Vault		Default	

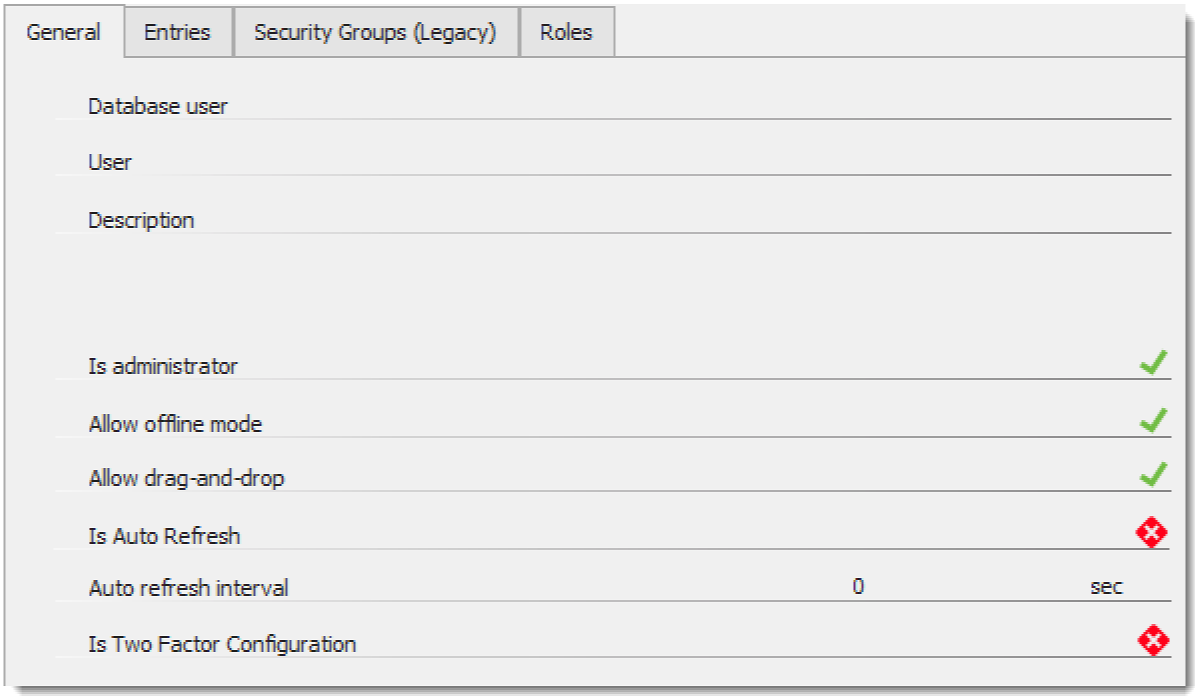
Database user		
User		
Description	hehesa	
Is administrator		✓
Allow offline mode		✓
Allow drag-and-drop		✓
Is Auto Refresh		✗
Auto refresh interval	0	sec
Is Two Factor Configuration		✗

File – My Data Source Information

USER AND SECURITY

GENERAL

The General tab displays information about the current user and data source configuration.



General | Entries | Security Groups (Legacy) | Roles

Database user

User

Description

Is administrator ✓

Allow offline mode ✓

Allow drag-and-drop ✓

Is Auto Refresh ✗

Auto refresh interval 0 sec

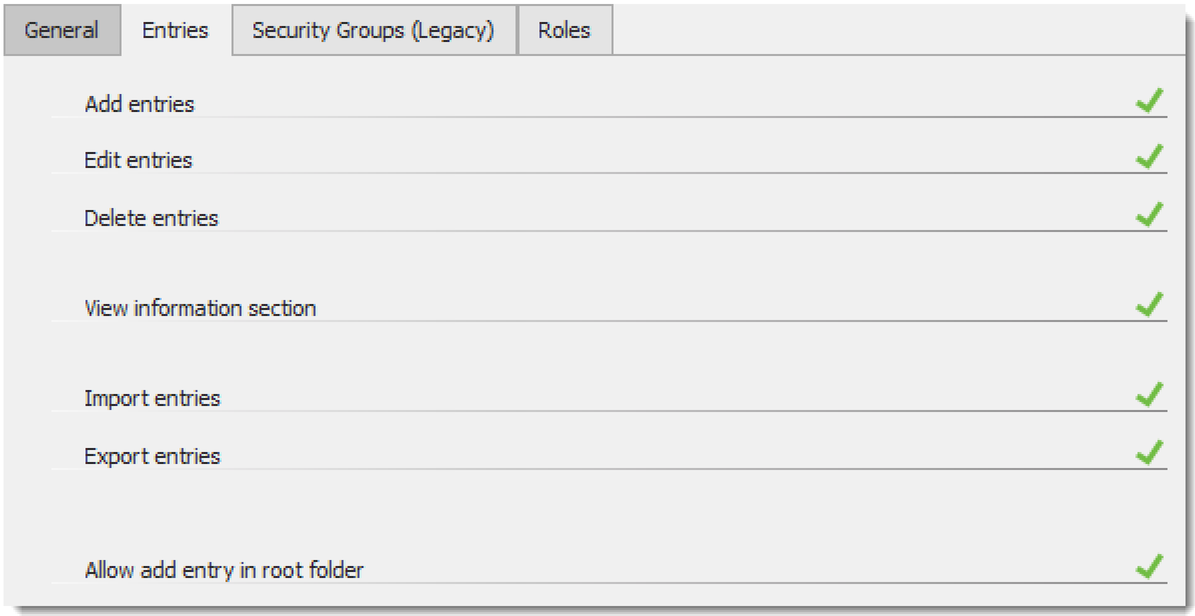
Is Two Factor Configuration ✗

My Data Source Information - General

OPTION	DESCRIPTION
Database user	The name of the user currently logged to the database.
User	The actual windows user.
Description	Display the description of the user connected to the data source.
Is administrator	Indicates if the user is an administrator.
Allow offline mode	Indicates if the user can use the data source in offline mode.
Allow drag-and-drop	Indicates if the user can drag-and-drop entries in the data source.

OPTION	DESCRIPTION
Is Auto Refresh	Indicates if the data source auto refreshes.
Auto refresh interval	Indicates the delay for the auto refresh to occur.
Is Two Factor Configuration	Indicates if the data source is configured with a second factor of authentication.

ENTRIES



Add entries ✓

Edit entries ✓

Delete entries ✓

View information section ✓

Import entries ✓

Export entries ✓

Allow add entry in root folder ✓

My Data Source Information – Entries

OPTION	DESCRIPTION
Add, Edit and Delete entries	Indicates if the user has the right to add, edit, or delete entries.
View information section	Indicates if the user can view the information section of entries.

OPTION	DESCRIPTION
Import and Export entries	Indicates if the user has the privilege to import or export entries.
Allow add entry in vault root folder	Indicates if the user can add entries in the vault root of the data source.

SECURITY GROUPS

The **Security Groups** are now a Legacy setting. We strongly recommend using roles instead.

ROLES

The **Roles** tab displays the roles that the user is a member of and the rights related to those roles.

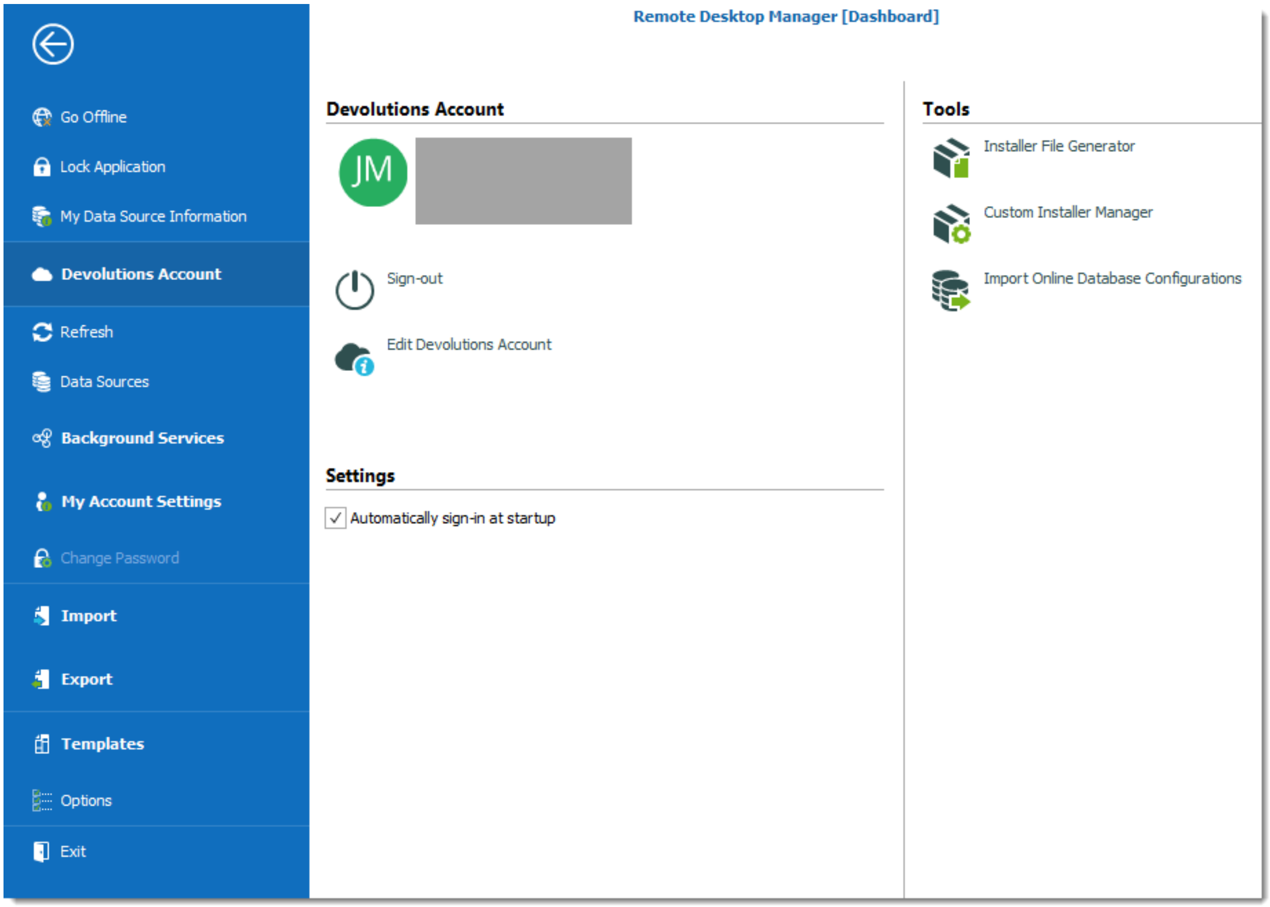
This feature is only available with an SQL Server/SQL Azure and a Devolutions Password Server (DPS) data source.

7.2.3 Devolutions Account

DESCRIPTION

Use ***File – Devolutions Account*** to create/connect Remote Desktop Manager to your Devolutions Online Database account. The Devolutions Online Database is free for customers and includes access to the custom installer manager.

SETTINGS



[redacted]

☑ Automatically sign-in at startup

Devolutions Account

DEVOLUTIONS ACCOUNT

OPTION	DESCRIPTION
Sign-in or Sign-out	Sign-in with your Devolutions Online Database (DODB) account that has already been created. Sign-out of your Devolutions Online Database (DODB) account.
Create a New Devolutions Account	Create a new Devolutions Online Database (DODB) account.
Edit Devolutions Account	Edit your Devolutions Online Database (DODB) account.

SETTINGS

OPTION	DESCRIPTION
Automatically sign-in at startup	Automatically sign-in to your Devolutions Online Database (DODB) account at the startup of the application. This feature is of particular importance if you are using a Devolutions Online Database data source or our Online Backup service.

TOOLS

OPTION	DESCRIPTION
Installer File Generator	Create a Remote Desktop Manager Installer File (.rdi). Consult topic Installer File Generator.
Custom Installer Manager	Consult topic Custom Installer Manager.
Import Online Database Configurations	Import Online database configuration in the application.

7.2.4 Backup

DESCRIPTION

Please consult topic Online Backup for information on this service.

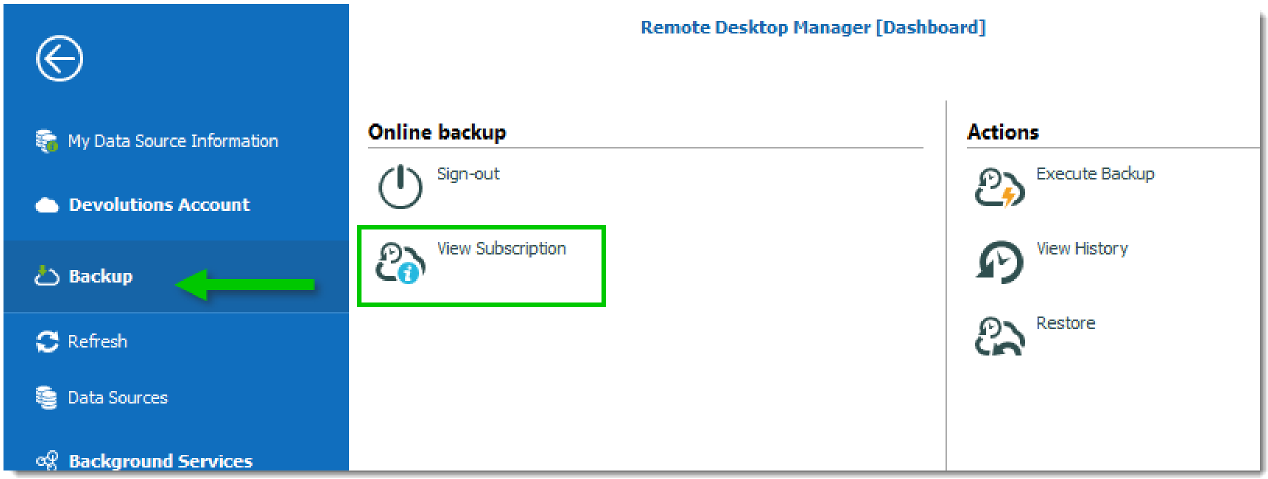
7.2.4.1 Settings

DESCRIPTION

The Online Backup allows you to backup your Devolutions Online Drive, SQLite, XML or Microsoft Access data sources in a safe online storage. The backup option is available through ***File – Backup*** menu.

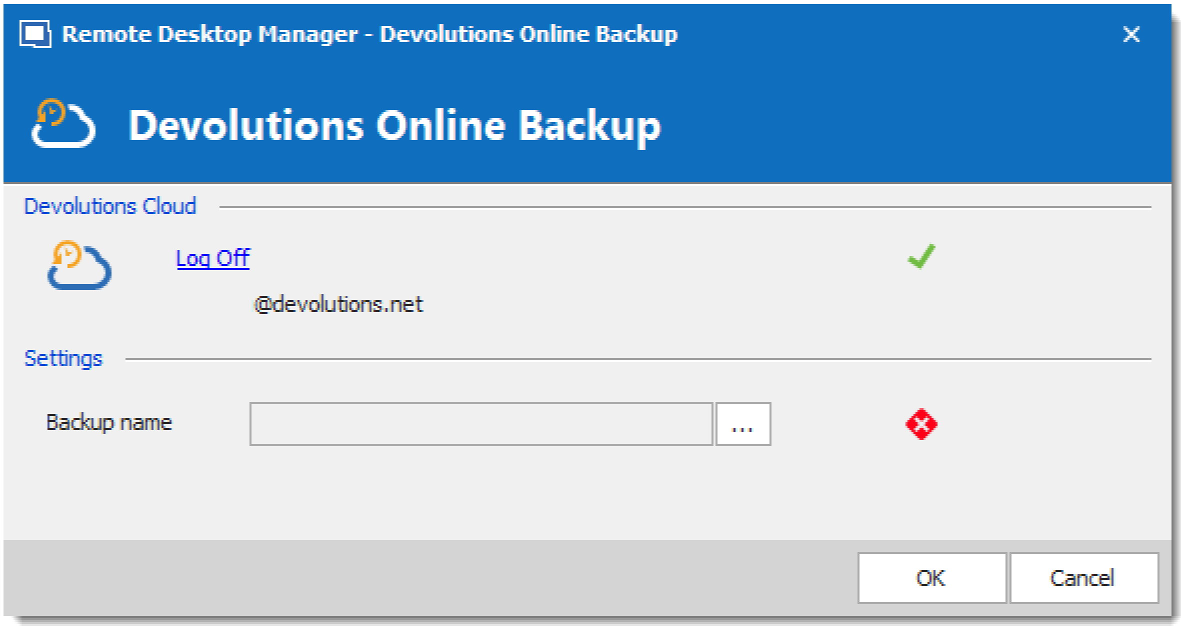
SETTINGS

1. Click on ***File – Backup*** to Sign-in with your Devolutions Account.
2. Click on **View Subscription**.



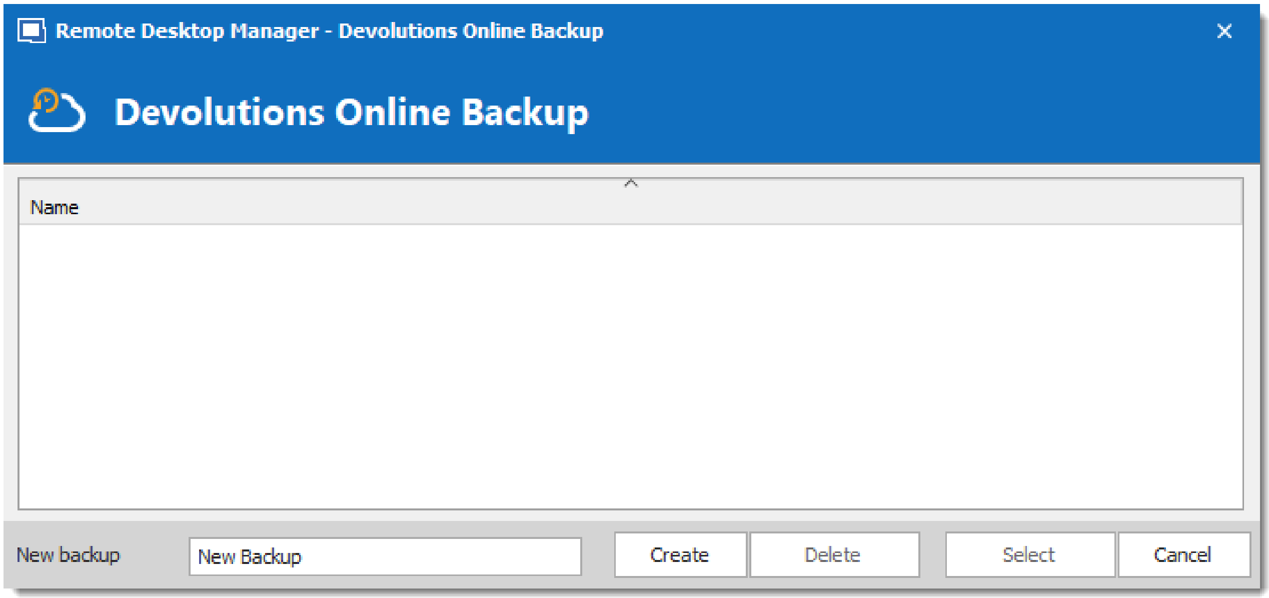
Online Backup - View Subscription

3. Click on the ellipsis to enter your **Backup name**.


Remote Desktop Manager - Devolutions Online Backup
Devolutions Online Backup
Devolutions Cloud
Log Off
@devolutions.net
Settings
Backup name
...
OK
Cancel

Backup Name

4. You will need to specify a unique backup name in the field **New backup** for each of your data source which will then be used to backup and restore the data source. Click on **Create** to automatically create your Online Backup.

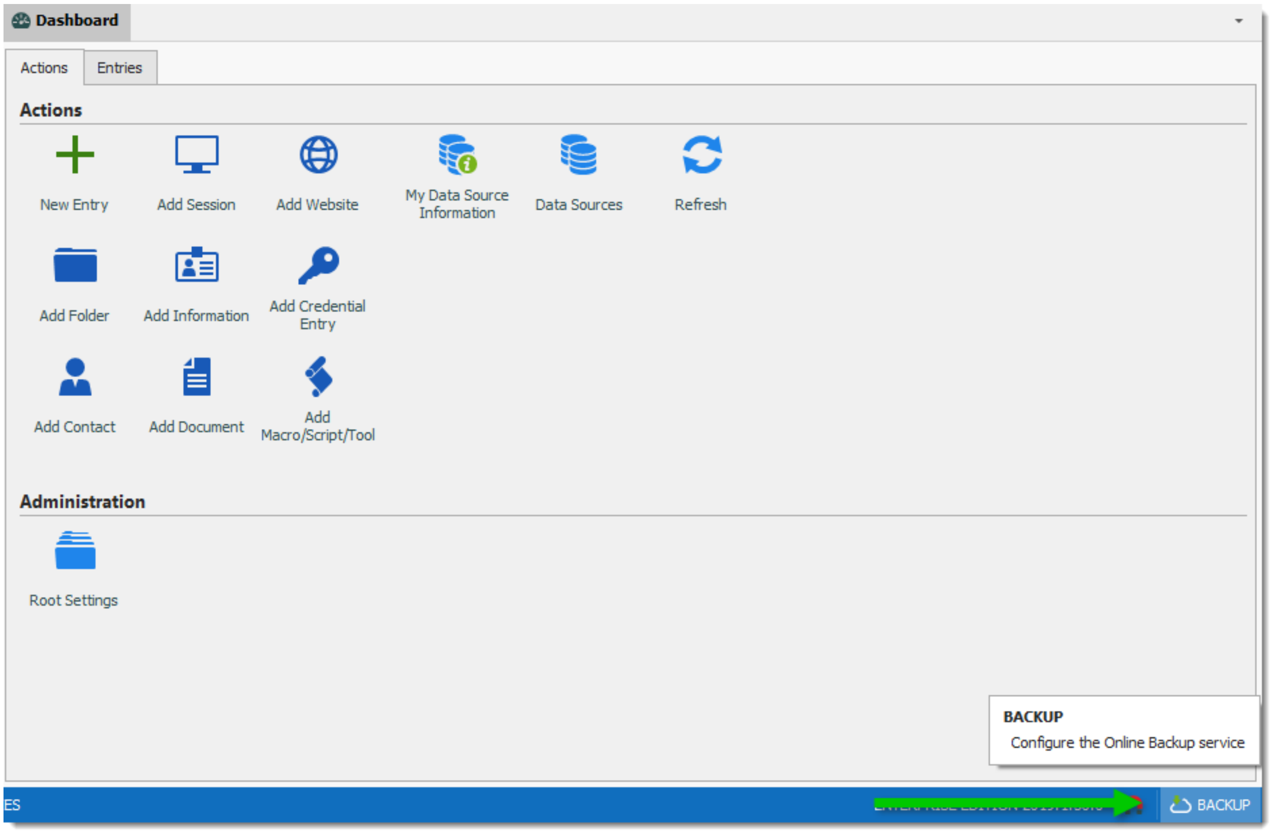

Remote Desktop Manager - Devolutions Online Backup
Devolutions Online Backup
Name
Create
Delete
Select
Cancel

New backup: New Backup

Create Backup

5. Once you've completed all the steps, perform a change in the data source to properly activate the Online Backup.

6.The backup logo will display a green arrow meaning your backup is now enabled.



Online Backup Activated

You must perform this for all your Devolutions Online Drive, SQLite, XML or Microsoft Access data sources in order to be fully protected!

The automatic backup is executed in the background 30 seconds after any modification is made to the data source content.

7.2.4.2 Restore

DESCRIPTION

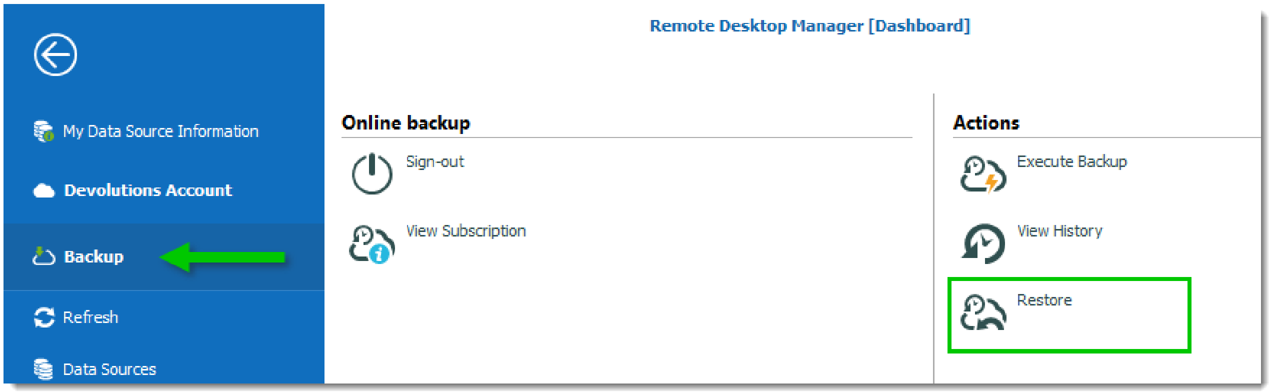
Before being able to restore a backup, you **MUST** create an empty data source and define the backup name before being able to use it. You need to create a new SQLite, XML, Online Drive or Microsoft Access data source in ***File – Data Sources***.

At some point, you may need to restore a backup of your Devolutions Online Drive, SQLite, XML or Microsoft Access data sources. The restore option is accessible from the menu ***File – Backup – Restore***.

SETTINGS

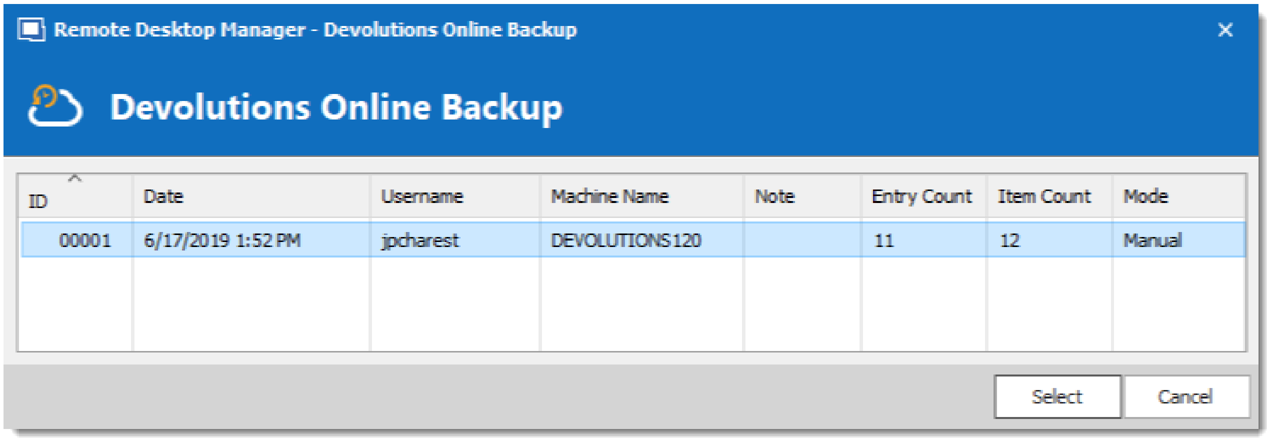
1. To restore a data source from a backup, select it as the current data source.

2. Click on ***File – Backup – Restore.***



Backup Restore

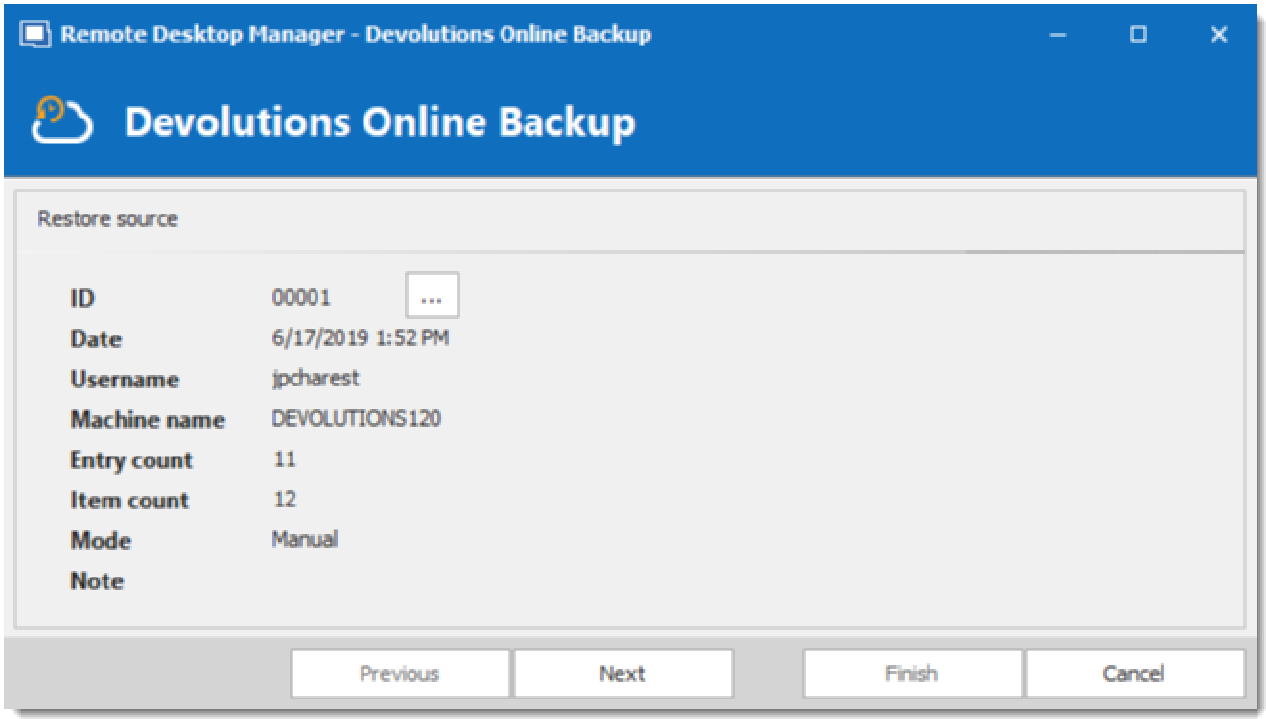
3. Select the backup that you wish to restore from the list and click on **Select.**


Remote Desktop Manager - Devolutions Online Backup
Devolutions Online Backup
Select
Cancel

ID	Date	Username	Machine Name	Note	Entry Count	Item Count	Mode
00001	6/17/2019 1:52 PM	jpcharest	DEVOLUTIONS120		11	12	Manual

Select your Backup

4. The Online Backup wizard will display a brief description of the backup. Click on **Next.**

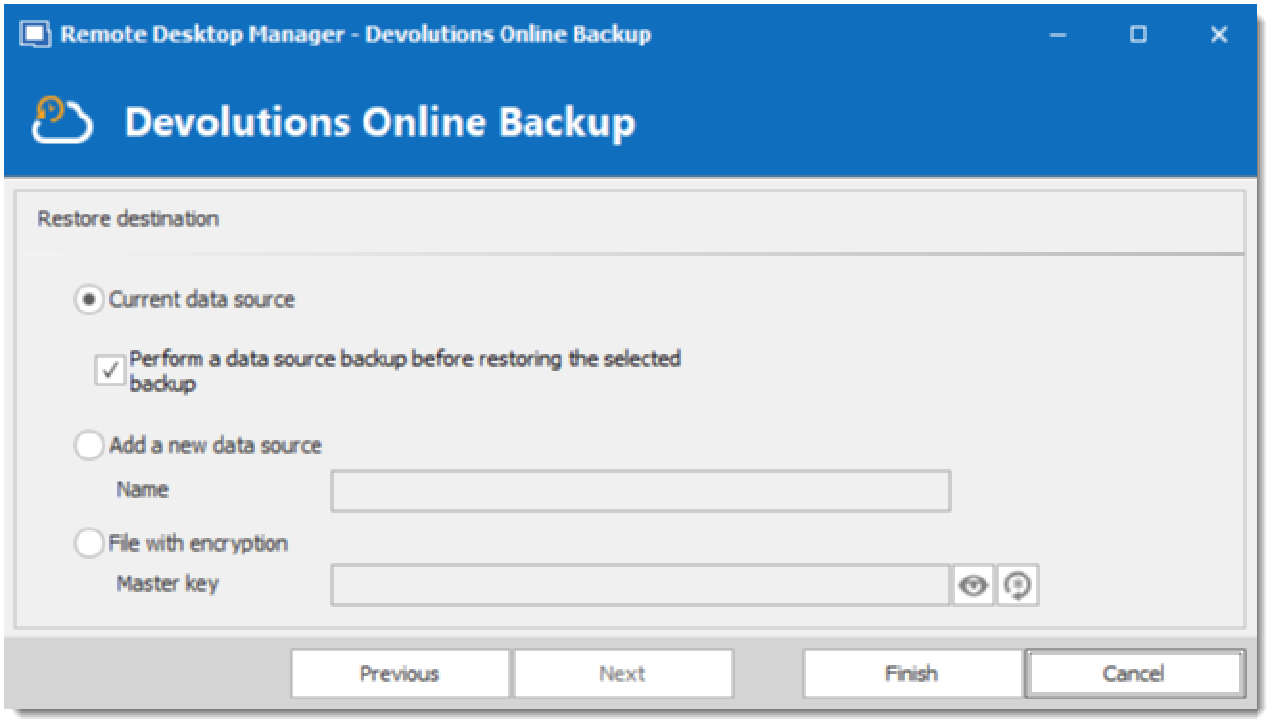

Remote Desktop Manager - Devolutions Online Backup
Devolutions Online Backup
Previous
Next
Finish
Cancel

Restore source

ID	00001 ...
Date	6/17/2019 1:52 PM
Username	jpcharest
Machine name	DEVOLUTIONS120
Entry count	11
Item count	12
Mode	Manual
Note	

Backup Wizard

5. Select the restore destination. It is not necessary to select the option **Perform a backup data source before restoring the selected backup** since it is empty.


Remote Desktop Manager - Devolutions Online Backup
Devolutions Online Backup
Previous
Next
Finish
Cancel

Restore destination

● Current data source

☑ Perform a data source backup before restoring the selected backup

○ Add a new data source

Name

○ File with encryption

Master key

Restore Destination

6. Click on **Finish** to perform your backup restore.

7.2.5 Refresh

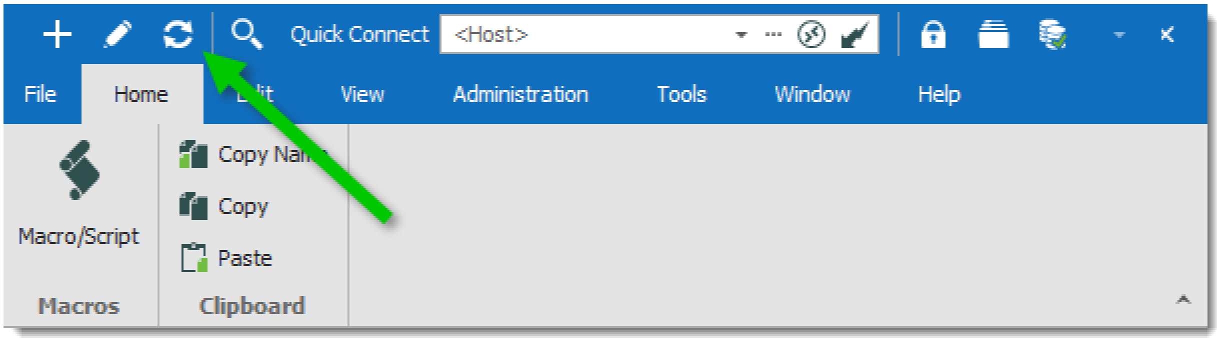
DESCRIPTION

Refreshing the data source allows for updating its content. Data sources are usually refreshed automatically after a set period of time.

To refresh the data source, use ***File – Refresh***. Do a refresh to make sure that the data source is up to date.

SIMPLE REFRESH

A simple refresh updates the data source to retrieve only the modified content. Use the above-mentioned ***File – Refresh*** or the refresh ⟳ button in the Quick Access Toolbar.



Refresh the Data Source

LOCAL CACHE REFRESH

A refresh of the local cache resets the local cache of the data source. All the content is retrieved from the database and the local cache file is recreated. Click the refresh ⟳ button while holding the **Ctrl key** or use the **Ctrl+F5** key combination. A local cache refresh may also help when experiencing Cache issues.

7.2.6 Change Master Key

DESCRIPTION

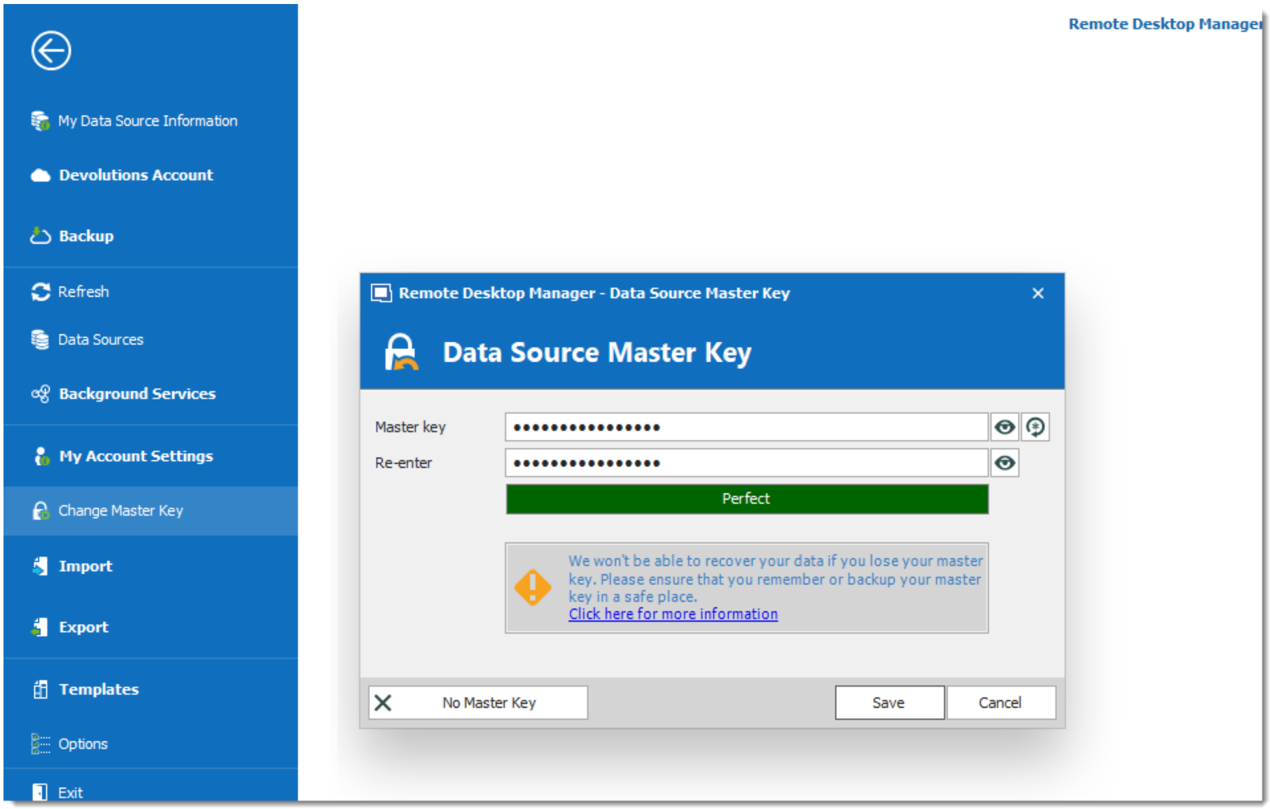
Use ***File – Change Master Key*** to encrypt the data source.

The master key prevents unauthorized users to access the data source without knowing the master key. It is highly recommended to apply a master key to the data source if you're using Remote Desktop Manager in a portable environment (i.e. USB Flash Drive, USB Hard Drive).

A master key can be used with the following data sources:

- Devolutions Online Drive
- Dropbox
- FTP
- Google Drive
- WebDAV
- XML

Since version 14.0.4.0, the user is automatically prompted to add a master key when connecting to one of the above mentioned data sources for the first time. The master key is completely optional (yet highly recommended).



Master key ••••••••••••••••

Re-enter ••••••••••••••••

Perfect

We won't be able to recover your data if you lose your master key. Please ensure that you remember or backup your master key in a safe place.
Click here for more information

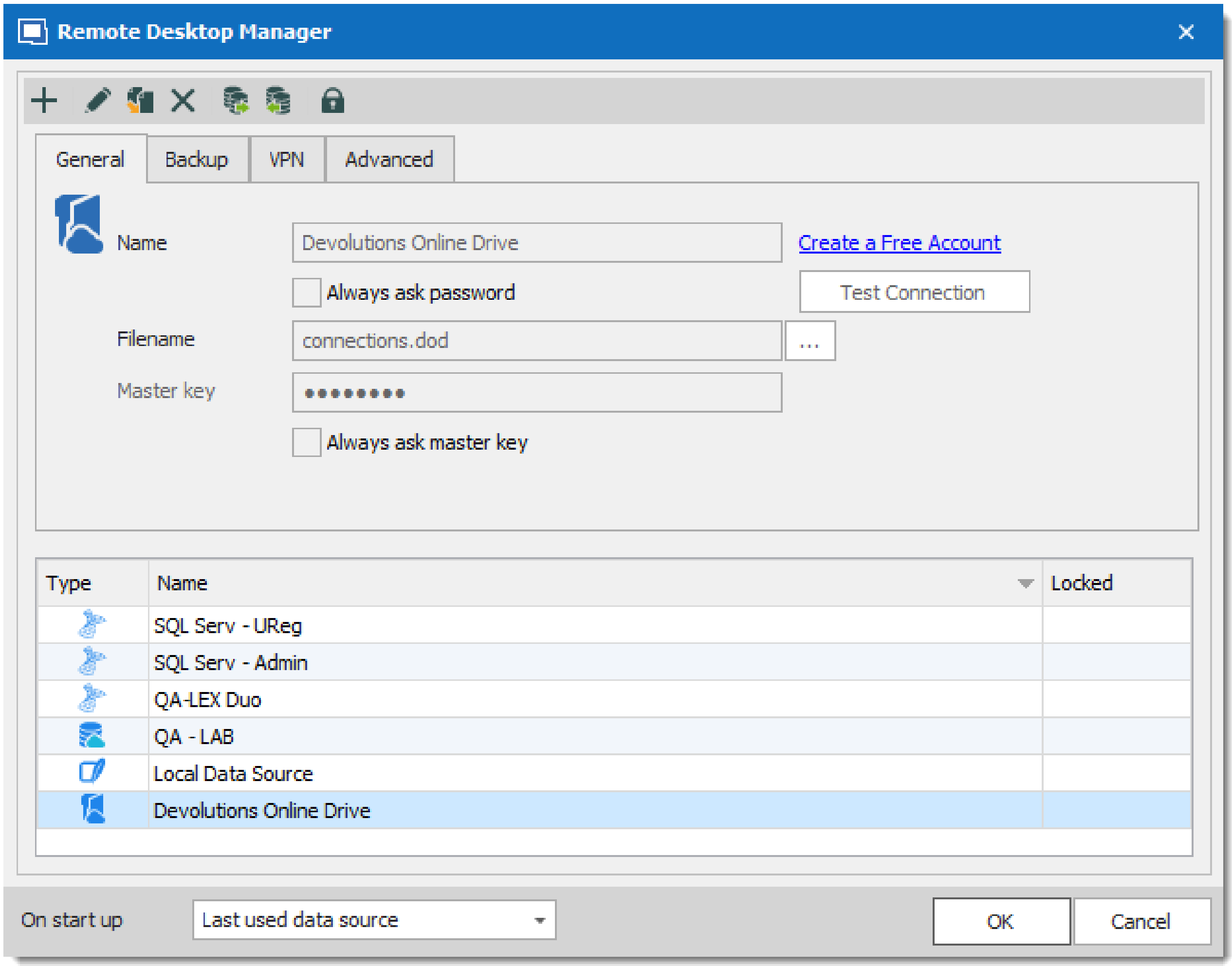
Change Master Key

7.2.7 Data Sources

DESCRIPTION

Use ***File – Data Sources*** to manage data sources. Remote Desktop Manager supports multiple types of data source. Most are available only with an Enterprise Edition of Remote Desktop Manager.

Please refer to the Data Source Types topic for more information on all supported types of data sources.



Remote Desktop Manager

Name: Devolutions Online Drive

□ Always ask password

Filename: connections.dod

Master key: ●●●●●●●●●

□ Always ask master key

Type	Name	Locked
	SQL Serv - UReg	
	SQL Serv - Admin	
	QA-LEX Duo	
	QA - LAB	
	Local Data Source	
	Devolutions Online Drive	

On start up: Last used data source

Data Sources

SETTINGS

ADD A NEW DATA SOURCE

Use the **Add** button + to create a data source configuration.

EDIT/DUPLICATE/DELETE DATA SOURCE

Use the ✎ – ⧉ – ✖ buttons to respectively edit, duplicate or delete the selected data source configuration.

> Only the configuration will be deleted but the actual file or database will still be available.

IMPORT/EXPORT DATA SOURCE CONFIGURATION

Use the ⇥ – ⇤ buttons to respectively import or export the selected data source configuration. The configuration is exported as a **.RDD** file.

LOCK DATA SOURCE

Use the **lock** button 🔒 to lock the data source with a password to prevent any modification to a data source configuration. This is useful when having sensitive credentials that you wish to protect from other users.

UNLOCK DATA SOURCE

Use the **unlock** button 🔓 to unlock a data source locked with a password.

ON START UP

Choose which data source to connect to when the application starts.

OPTION	DESCRIPTION
Use default data source	Set the data source that you always want to open at start up.

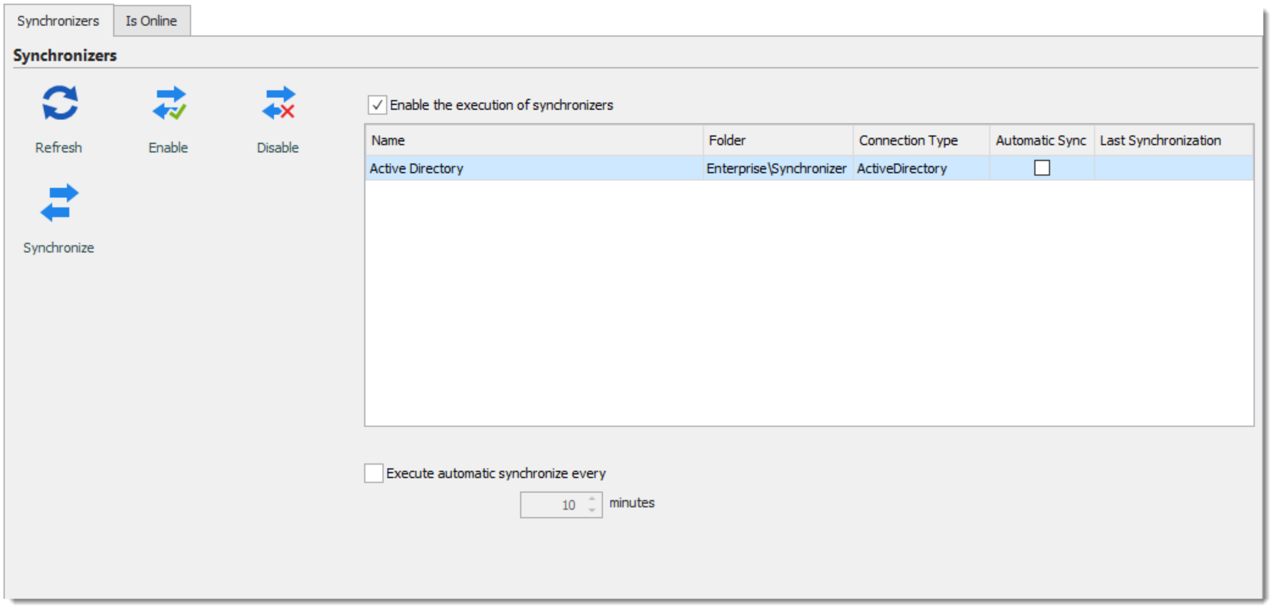
OPTION	DESCRIPTION
Last used data source	Open with the last used data source.
Prompt for data source	A message box will open on startup for the data source selection.

7.2.8 Background Services

SYNCHRONIZERS

Synchronizers centralizes all your synchronizers entry in one place.

When experiencing a performance degradation with Remote Desktop Manager you will be able to verify if a synchronizer is running in the background causing the system to slow down.



☑ Enable the execution of synchronizers

Name	Folder	Connection Type	Automatic Sync	Last Synchronization
Active Directory	Enterprise\Synchronizer	ActiveDirectory	☐	

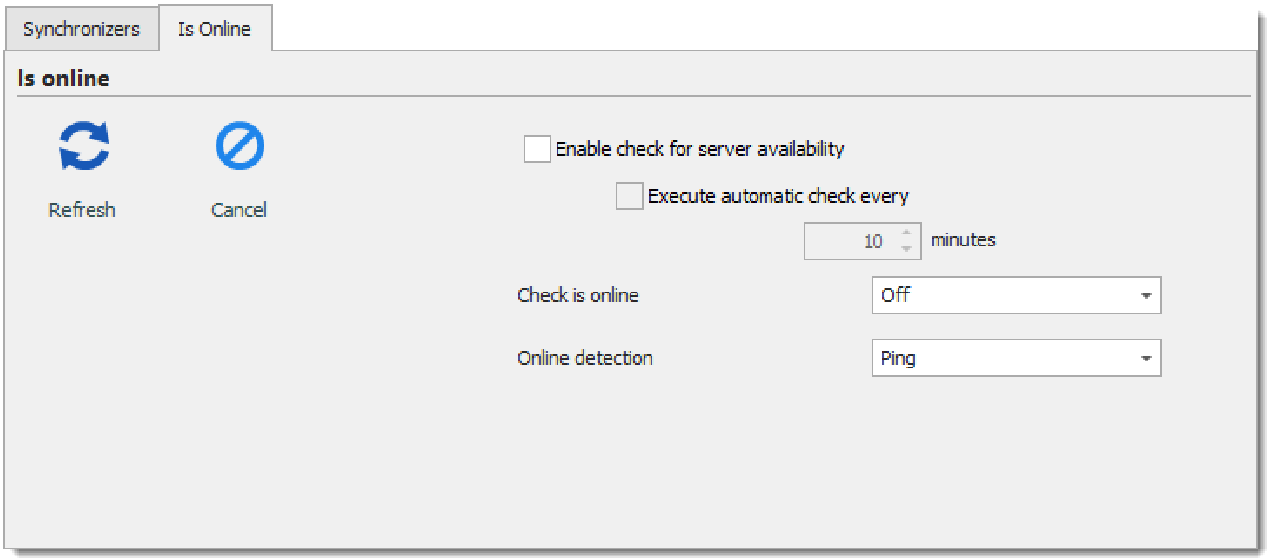
☐ Execute automatic synchronize every

10 minutes

Synchronizers

IS ONLINE

Is Online allows you to verify and change the settings of your server's online availability.



Synchronizers | Is Online

Is online

Refresh | Cancel

□ Enable check for server availability

□ Execute automatic check every 10 minutes

Check is online: Off

Online detection: Ping

Is Online

OPTION	DESCRIPTION
Enable check for server availability	Server is ping to determine if they are available. Server will be displayed in "red" in the tree view if not available.
Execute automatic check every	Execute the online check automatically each determined amount of minutes.
Check is online	If the option is **On** the application will verify if the server is online.
Online detection	If **Check is online** option is enable, select the detection method between: • **Ping** • **Port scan**

7.2.9 Import

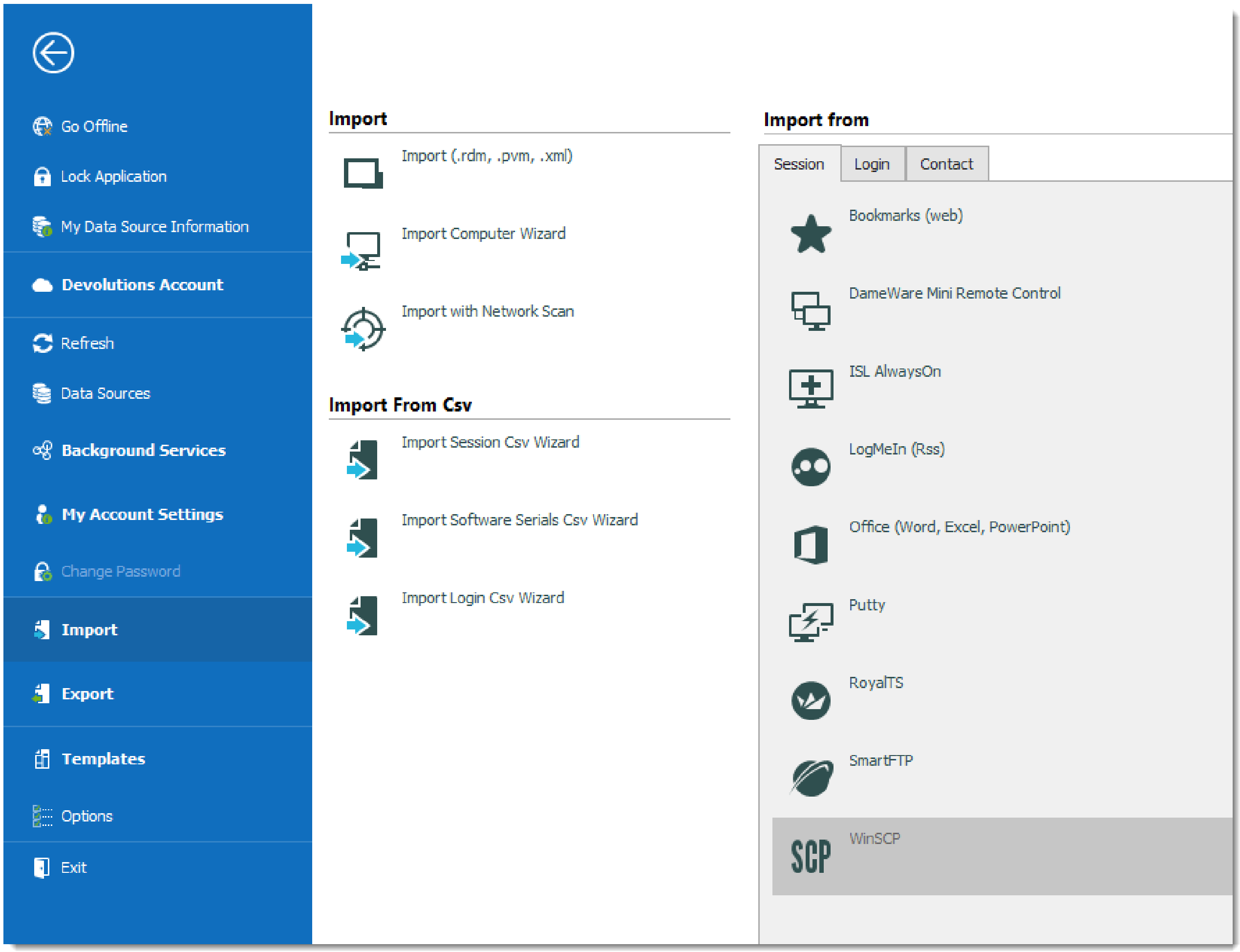
DESCRIPTION

Use the ***File – Import*** to import entries in Remote Desktop Manager. You can import entry types from multiple sources.

We support native import formats from many popular tools on the market. In case we don't support the native format, or don't support the third party, we have wizards to import from a csv file.

The import feature is only active if the import Permission has been enabled inside the user account.

SETTINGS



File - Import

IMPORT ENTRIES

Import Entries is used to import sessions stored in files, such as:

- .rdm (Remote Desktop Manager native export format)
- .pvm (Password Vault Manager native export format)
- .xml (it must be a specific format compatible with the application)

IMPORT COMPUTER WIZARD

> The Import Computer Wizard is only available in the Enterprise edition.

You can import computers from different sources. These sources includes:

- Network neighborhood
- Your current domain or another domain on your network
- List of computers from a file

Please refer to Import Computer Wizard for more information.

IMPORT WITH NETWORK SCAN

Consult Import with Network Scan to learn more about this option.

IMPORTING FROM CSV FILES

Three wizards are available to import content from csv files:

- Import Session
- Import Software Serials
- Import Login

Each wizard specifies the list of supported columns and identifies which are mandatory.

IMPORT FROM

Consult topics below to import sessions, logins and contact from many tools:

- Import Sessions
- Import Logins
- Import Contacts

7.2.9.1 Import Computer Wizard

DESCRIPTION

This feature is only available when using an Advanced Data Source.

The **Import Computer Wizard** allows you to create sessions for computers using one of the following sources:

- Network neighborhood
- Active directory: your current domain or another domain on your network
- Host list: List of computers from a file

OVERVIEW

The wizard has a few major-steps:

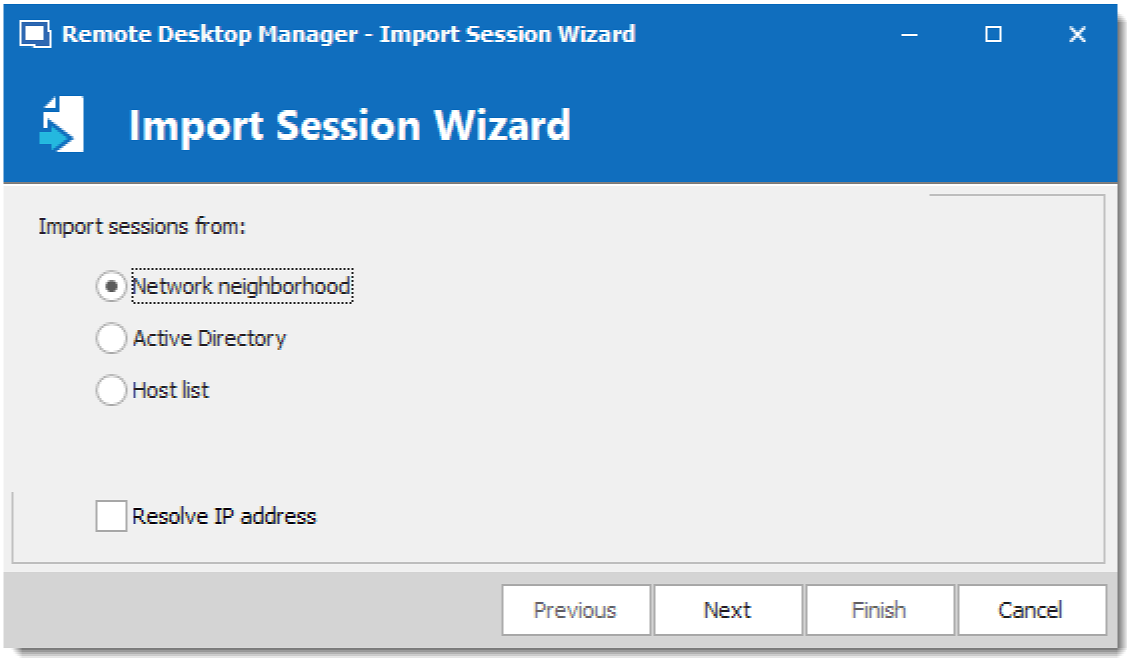
1. select computers by using one of the three sources;
2. optionally apply a template from which to base new sessions on; and
3. optionally edit each newly created session prior to them being saved.

The template selection should not be overlooked, in fact it is probably the most important step to ensure your newly created sessions are usable right after being created. You should divide the sessions in batches based on which template you need to apply and import one batch at a time.

WORKFLOW

Upon launching the wizard, you are prompted for the source to use.

The **Resolve IP address** option must be checked if you want to use the IP address in the host field of your sessions instead of the host name.



Import sessions from:

● Network neighborhood

○ Active Directory

○ Host list

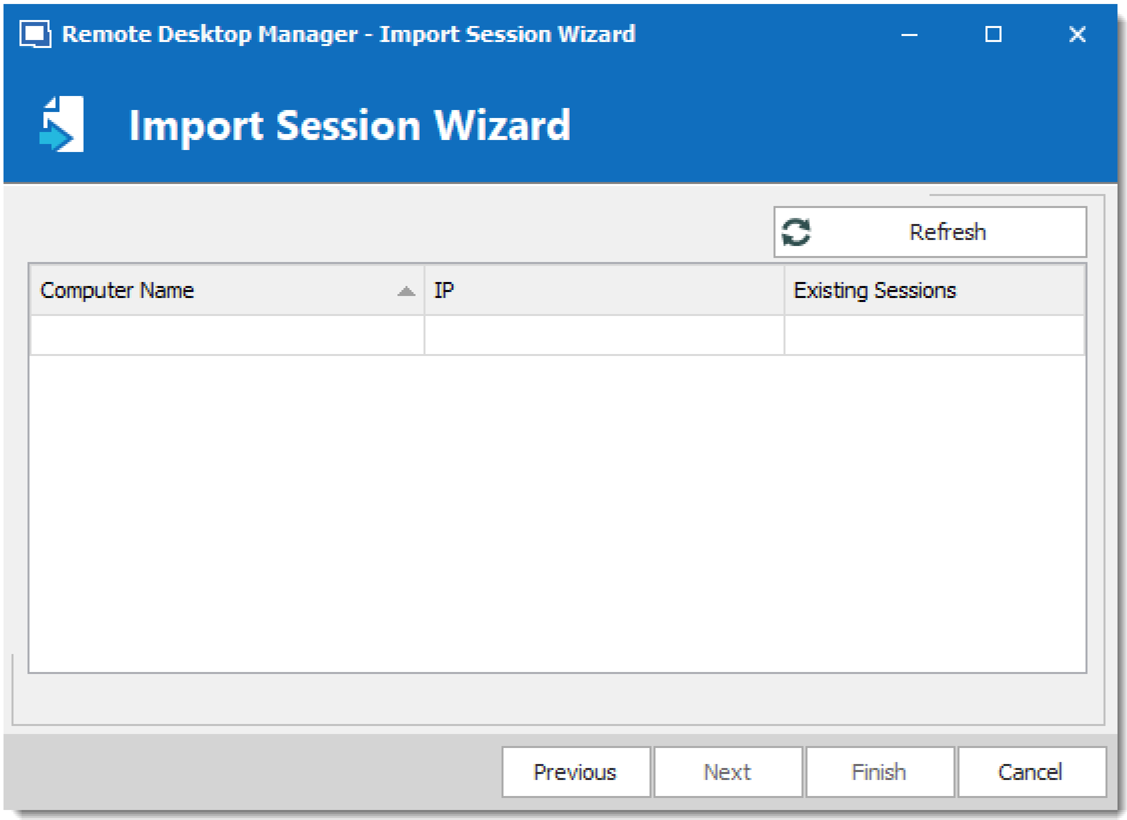
□ Resolve IP address

Import Session Wizard

Refer to the sections below depending on the chosen source.

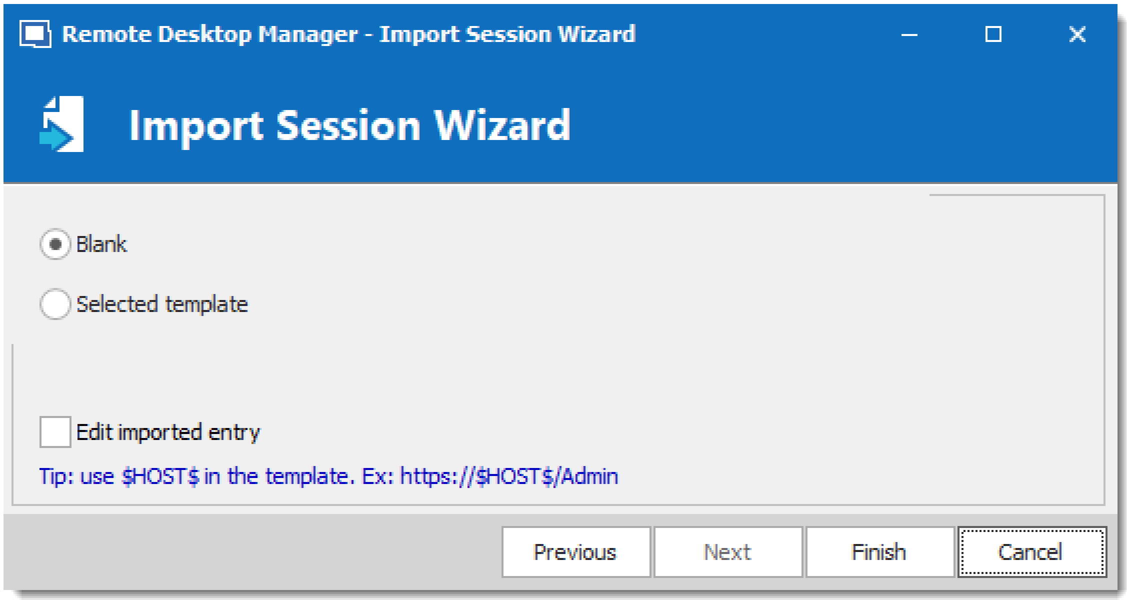
NETWORK NEIGHBORHOOD

The next screen will immediately be populated with the result of the network discovery.



Import Session Wizard - Netwok Neighborhood

If you prefer your sessions to use the IP address instead of the Host name to connect to the devices, check the "**select by IP address**" option. This requires that the "Resolve by IP address" was selected in the first screen of the wizard. Select the computers for which you want to create session and proceed to **Template Selection** below. Multi-select is allowed by using CTRL-click and SHIFT-click.



● Blank

○ Selected template

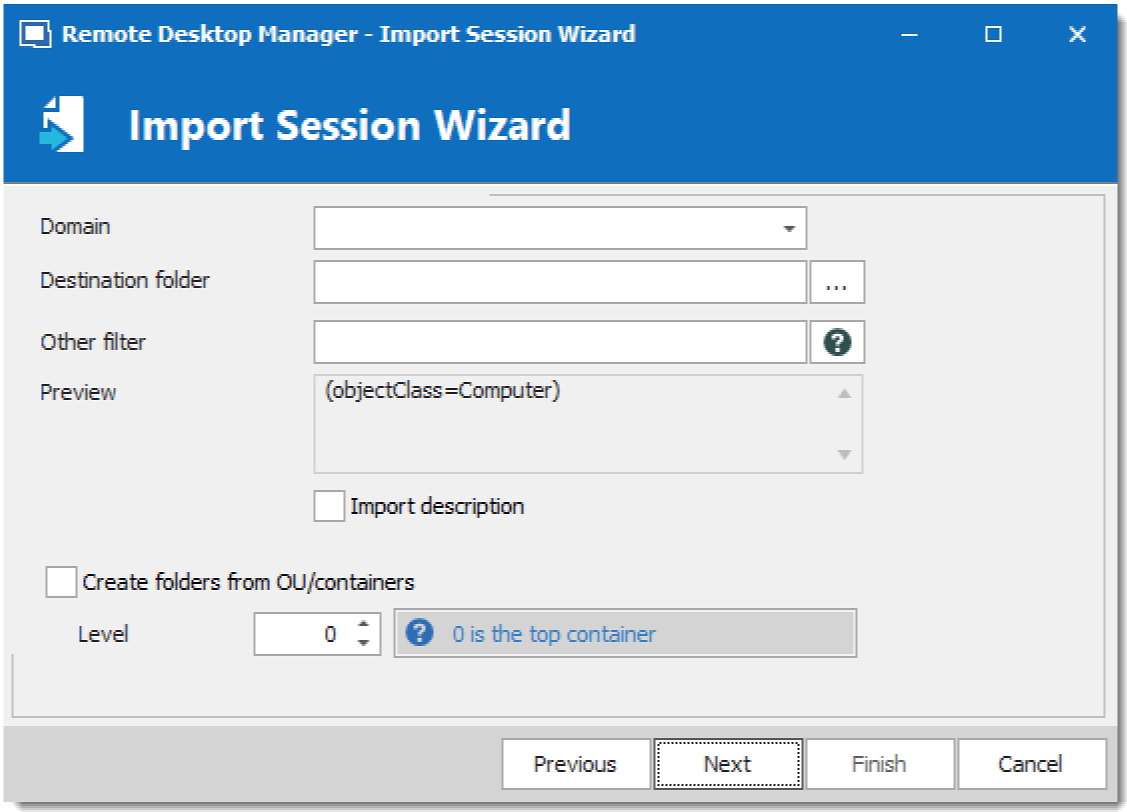
□ Edit imported entry

Tip: use $HOST$ in the template. Ex: https://$HOST$/Admin

Import Session Wizard - Template

ACTIVE DIRECTORY

The following screen allows you to select the domain to interrogate after which you must press refresh to load the list of computers that are available.



Domain

Destination folder

Other filter

Preview (objectClass=Computer)

□ Import description

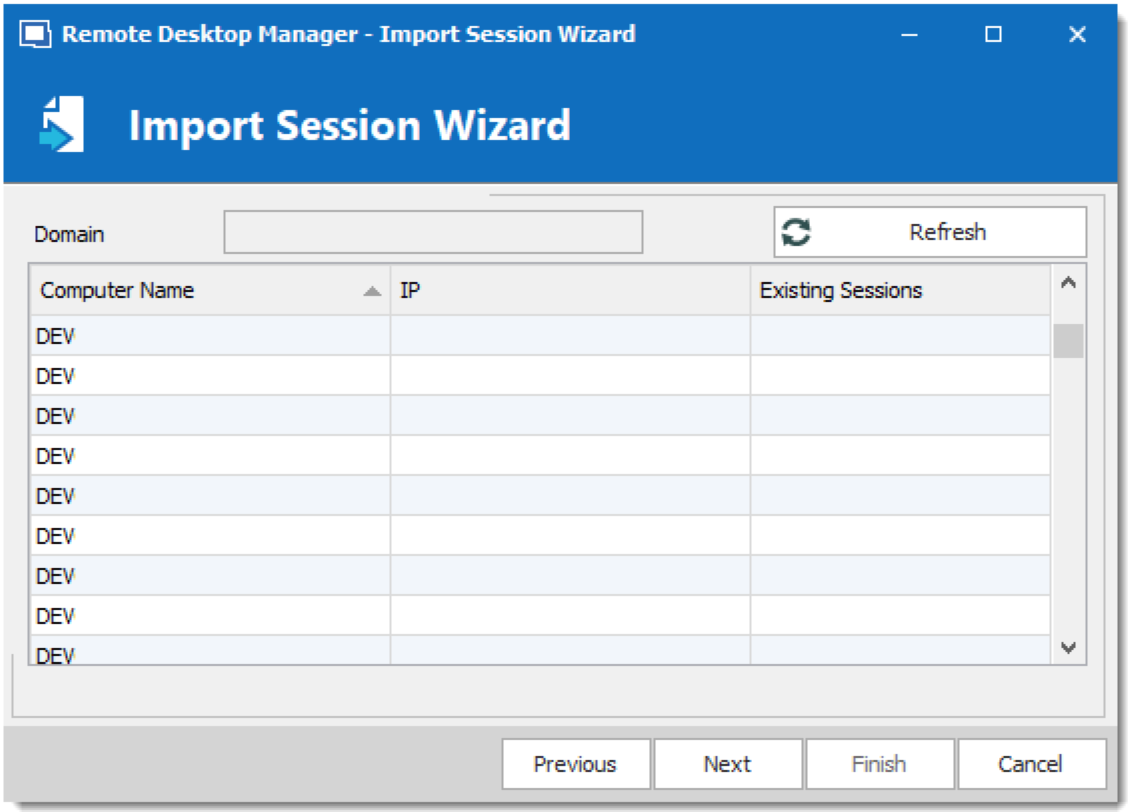
□ Create folders from OU/containers

Level 0

0 is the top container

Import Session Wizard - Active Directory

After the query is executed the results are displayed in the grid.



Domain

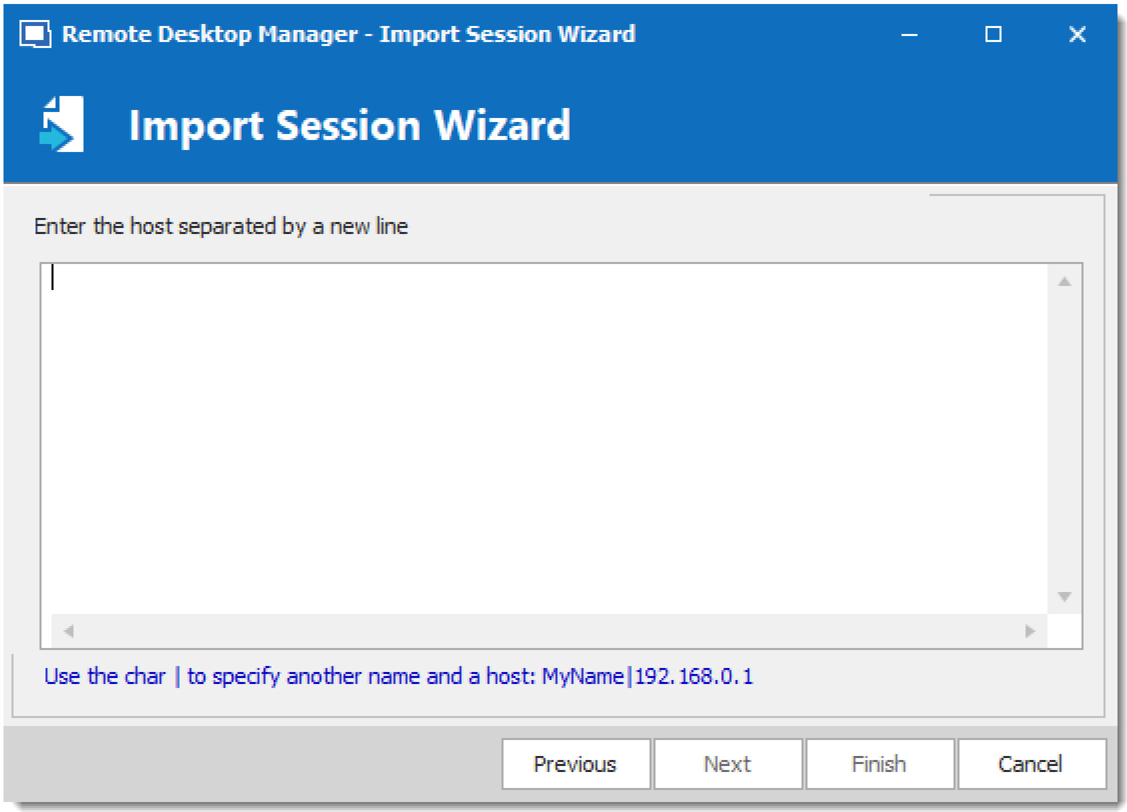
Computer Name	IP	Existing Sessions
DEV		
DEV		
DEV		
DEV		
DEV		
DEV		
DEV		
DEV		
DEV		

Import Session Wizard - Domain list

If you prefer your sessions to use the IP address instead of the Host name to connect to the devices, check the "select by IP address" option. This requires that the "Resolve by IP address" was selected in the first screen of the wizard. Select the computers for which you want to create session and proceed to Template Selection below. Multi-select is allowed by using CTRL-click and SHIFT-click.

HOST LIST

The following screen allows you to enter a list of hosts in an Edit control. If you prefer that your sessions use the IP address to connect to the hosts, you must enter the host name, a pipe, then the IP address.



Enter the host separated by a new line

Use the char | to specify another name and a host: MyName|192.168.0.1

Import Session Wizard - Host List

Proceed to Template Selection below.

TEMPLATE SELECTION

The template selection is an optional step, but its the only way that you have to choose a protocol type other then RDP. It also allows you to set your preferences and have them used by all the created sessions. In fact we recommend you to import in batches for each of the session type that you need to import.

If you intend to modify each of your imported sessions as they are created, check the **Edit imported entry** option. Note that each session will be displayed sequentially so you can perform your modification and save. A Batch Edit is probably preferable if you have more then a few sessions to import.

7.2.9.2 Import Session CSV Wizard

DESCRIPTION

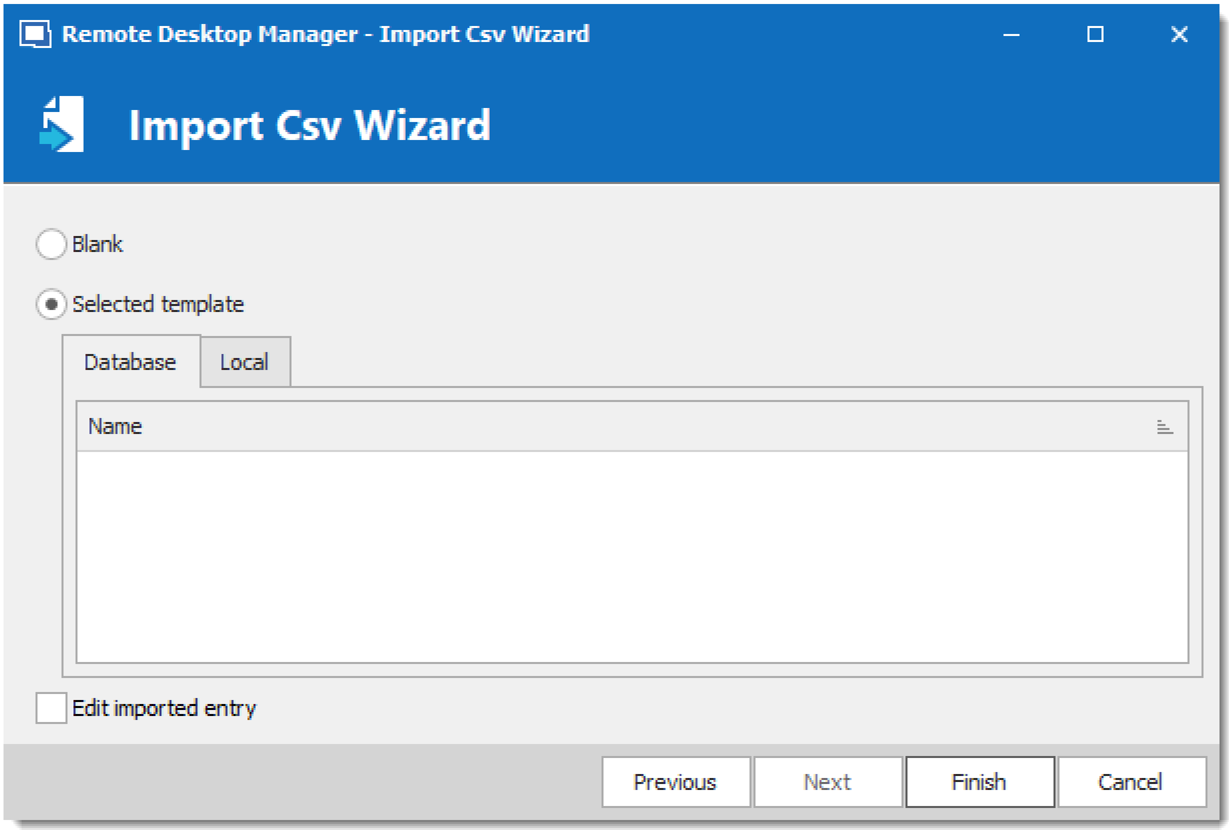
This version of the wizard has been greatly enhanced to support not only all entries general fields but also sub-fields. This gives you access to all properties, even for types provided by add-ons, therefore unknown by Remote Desktop Manager.

For a discussion on the CSV file format, and the impact of decisions made in this entry, please consult Import Strategies and file format

SETTINGS

Once you've selected the CSV file to process you will be presented with the template selection screen.

If you have selected a template as suggested, you will see a list of templates available to your system.


Remote Desktop Manager - Import Csv Wizard

Import Csv Wizard

○ Blank

● Selected template

Database | Local

Name

□ Edit imported entry

Import Csv Wizard

If you wish to review each and every session as they are imported you can check the **Edit imported entry**, but it is not really recommended for a large number of sessions.

Press finish and the import will proceed using your chosen settings.

7.2.9.2.1 Import Strategies and file format

DESCRIPTION

The most important decision is about **if** and **how** to apply a template as part of the process.

Both methods of importing from CSV allows you to choose a template for newly created entries. If you do choose a template as part of the process, it will be apply to **ALL** entries created from that batch. Sometimes, it may be a good strategy to split the entries in different CSV files by grouping them by type of entries you wish to create.

If you need finer control, you can specify the template to use in a **Template** column of the CSV file. But since you're able to specify the entry type from within the CSV file it may not be necessary. Please consult CSV Samples below.

COLUMNS

Some validations on entry settings are not in the business layer but rather in the property dialogs. This means that using the import process can result in invalid entries that trigger errors. Please validate the resulting entries carefully.

In the CSV file, only the **Host** field is mandatory. If no template is specified, the RDP type will be used as a fallback type.

We cannot provide the list of all supported fields for all entry types because Remote Desktop Manager uses an open architecture and therefore is not even aware of all the fields of entry types that are provided by our Add-On system. A good method of finding out the field structure is to create an entry of the desired type and to use **Clipboard – Copy**, then paste the content in your favorite editor. You will see the structure and the field names.

Default values for fields are **NOT** serialized. This means that they are simply left out of the serialized structure.

Implementing support for all fields comes at a cost. The import process is time consuming because of all the dynamic field access that takes place. A massive initial import of entries should be separated in batches of manageable size. Please perform trials and tune the number of entries to achieve acceptable performance.

All of our entries share a basic set of fields, the rest are tied to the specific technology being interfaced with (RDP, SSH, etc). Some fields are grouped in structures like the Information Tab for instance. This means that those fields are accessible only when providing the structure name as a prefix, for example: "**MetaInformation\OS**" or "**MetaInformation\PurchaseDate**"

Note that the content of the CSV file can contain our variables and they will be resolved upon saving. For instance you could use the **$HOST$** variable in fields like **Description**, **URL**, **Putty\CustomSessionName**, etc. It will be replaced by the corresponding value.

Here is a list of some relevant fields.

OPTION	DESCRIPTION
Host	Host name of the device, **this is the only mandatory field**.
Name	Name of the entry
ConnectionType	Token representing the connection type. It is best to use the **Clipboard-Copy** method to obtain the acceptable values.
Group	Destination folder. Note that if the import process itself had a Destination Folder defined as well, the folder listed here would be created below the one from the process.
Description	Description of the entry.
Open (Embedded)	Boolean value (**true** or **false**) that indicates to open the session embedded. The default value is false, meaning that the native client will be used depending on the technology. MSTSC.EXE for instance.
Username	Username used to open a session to the device.
Domain	Domain used to open a session to the device.
Password	Password used to open a session to the device. Please note that this field is encrypted and stored into another field upon being

OPTION	DESCRIPTION
	imported.
MetaInformation\SerialNumber	Serial Number of the device.
MetaInformation\ServiceTag	Service Tag of the device
MetaInformation\PurchaseDate	Purchase date in a ISO8601 format, i.e. yyyy-mm-dd

CSV SAMPLES

WITH SPECIFIED SESSION TYPES

```
Host,Name,Template,ConnectionType,ConnectionSubType,SubMode,Group,Username,Domain,Passwor
192.168.10.001,one,,Microsoft Remote Desktop (RDP),,,QA Lab,,,,Description001,
http://online.remotedesktopmanager.com,two,,Web Browser (http/https),,,QA Lab,,,,Descript
192.168.10.003,three,,LogMeIn,,,QA Lab,,,,Description003,
192.168.10.004,four,,"Telnet, SSH, RAW, rLogin",,0,QA Lab,,,,"This is the Putty sub-type"
192.168.10.005,five,,"Telnet, SSH, RAW, rLogin",,1,QA Lab,,,,"This is the Telnex (Rebex)
192.168.10.006,six,,"Telnet, SSH, RAW, rLogin",,2,QA Lab,,,,"This is the SSH Shell (Rebex
192.168.10.007,seven,,"Telnet, SSH, RAW, rLogin",,3,QA Lab,,,,"This is the SSH (Rebex) su
192.168.10.008,eight,,VNC,,,QA Lab,,,,Description008,
192.168.10.009,nine,,Citrix,,,QA Lab,,,,Description009,
```

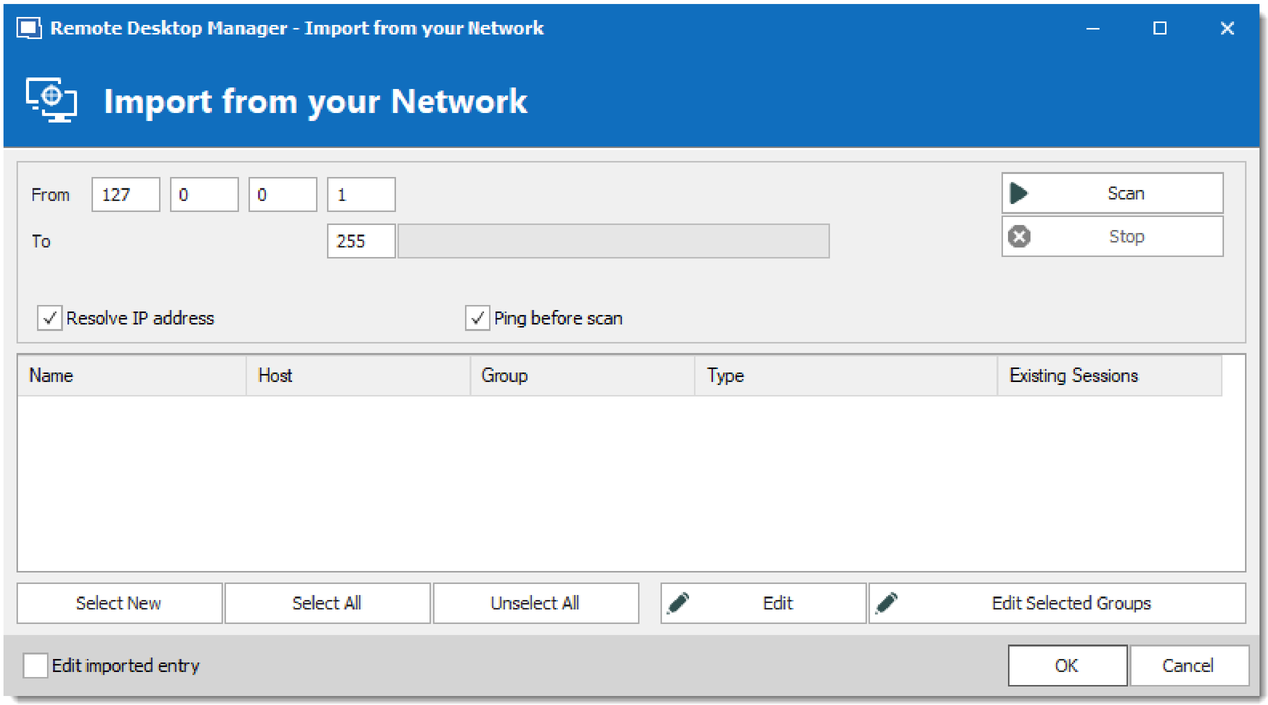
7.2.9.3 Import Network Scan

DESCRIPTION

The **Import from Network** allows you to perform a network scan based on a predefine range of IP address to find sessions to import.

Once the scan is completed select the sessions you wish to import (by default every session will be selected) and click on **OK** to import those sessions in your data source.

If you wish to review each and every session as they are imported you can check the **Edit imported entry**, however we do not recommend this for large number of sessions.



Import from your Network

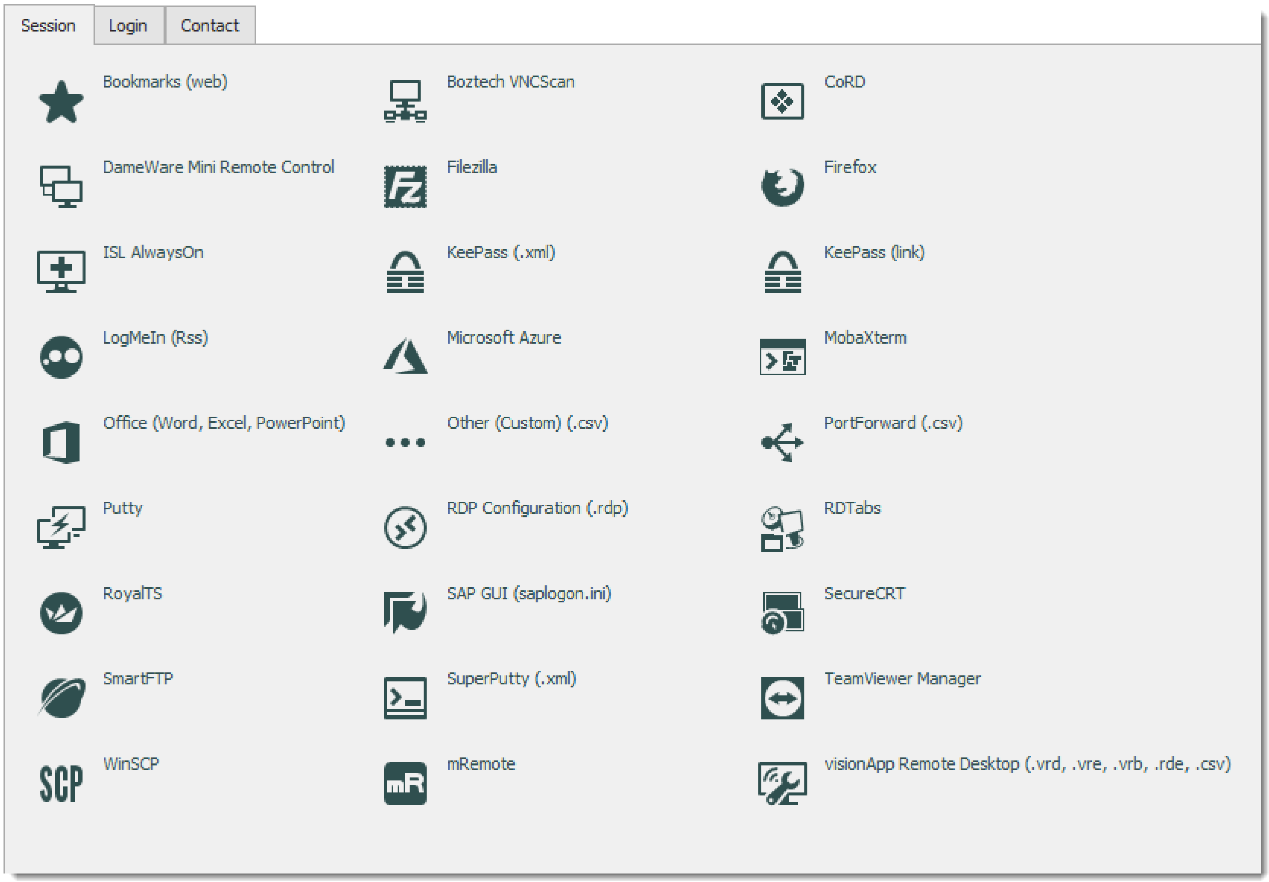
7.2.9.4 Import Sessions

DESCRIPTION

Use the ***File – Import – Import from – Session*** to import sessions from other software into Remote Desktop Manager.

> The import feature is only active if the import Permission has been enable inside the user account.

SETTINGS



Bookmarks (web)
Boztech VNCScan
CoRD
DameWare Mini Remote Control
Filezilla
Firefox
ISL AlwaysOn
KeePass (.xml)
KeePass (link)
LogMeIn (Rss)
Microsoft Azure
MobaXterm
Office (Word, Excel, PowerPoint)
Other (Custom) (.csv)
PortForward (.csv)
Putty
RDP Configuration (.rdp)
RDTabs
RoyalTS
SAP GUI (saplogon.ini)
SecureCRT
SmartFTP
SuperPutty (.xml)
TeamViewer Manager
WinSCP
mRemote
visionApp Remote Desktop (.vrd, .vre, .vrb, .rde, .csv)

Import from Session

IMPORT FROM SESSION

You can import your sessions from an existing application or an existing file format. Some application encrypt the data but it must be in plain text to allow the application to parse the content. Please note that all entries will be imported in the current folder. For some applications it's not possible to extract the password.

We support a Multitude of Sessions, explore to your heart's content!

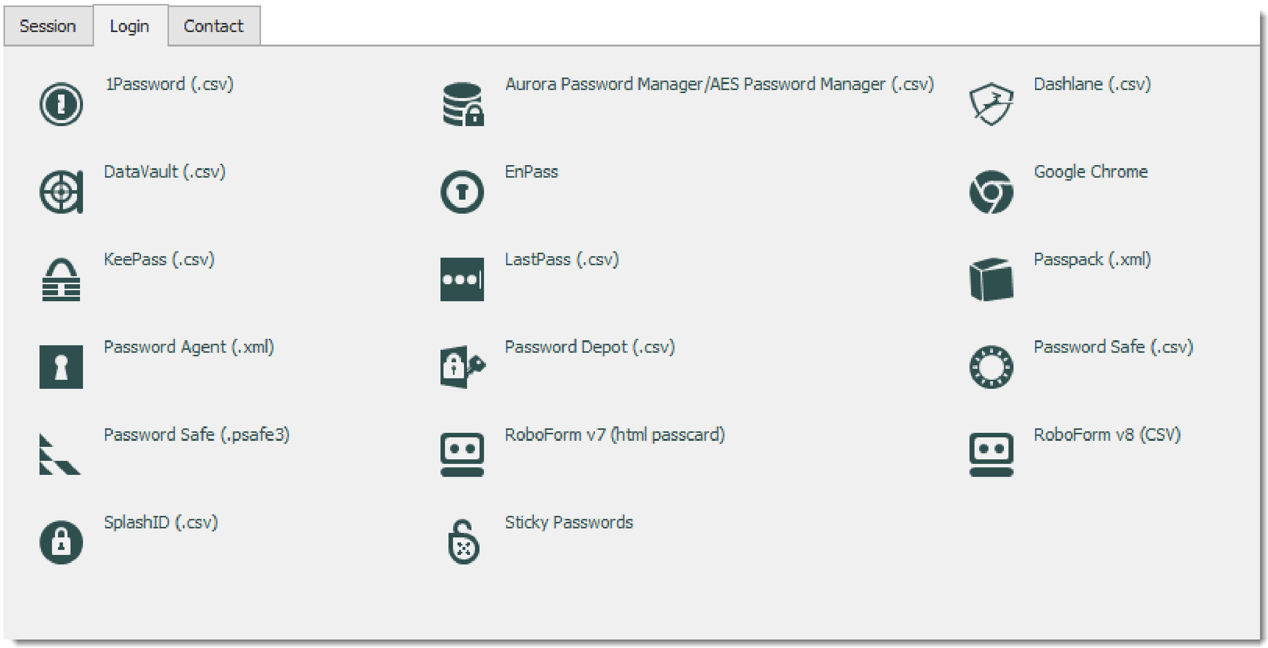
7.2.9.5 Import Logins

DESCRIPTION

Use the ***File – Import – Import from – Login*** to import different logins or credentials from other software into Remote Desktop Manager.

The import feature is only active if the import Permission has been enable inside the user account.

SETTINGS



Import from Login

IMPORT FROM LOGIN

You can import the credentials from a wide array of formats exported by various password management solutions. The export content must not be encrypted in order to parse the content. Please note that all the entries will be imported in the current folder. We support a multitude of Login imports, explore to your heart's content!

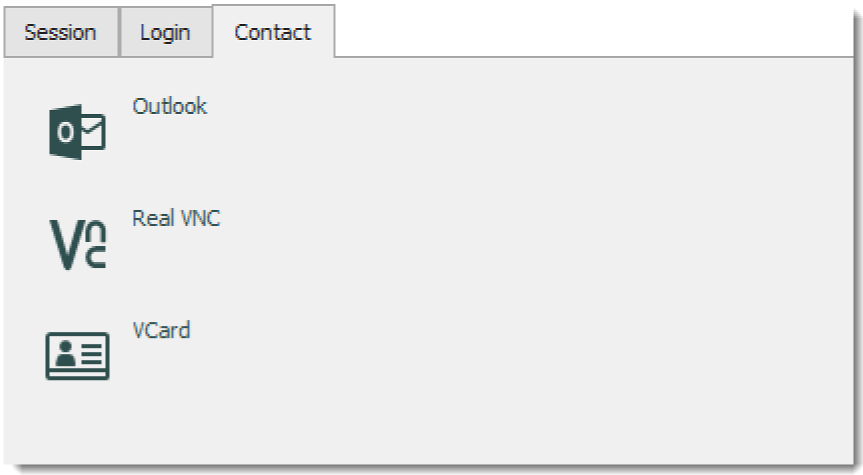
7.2.9.6 Import Contacts

DESCRIPTION

Use the ***File – Import – Import from – Contact*** to import contacts from other software into Remote Desktop Manager.

The import feature is only active if the import Permission has been enable inside the user account.

SETTINGS



Import Contact menu

IMPORT FROM CONTACT

It's now possible to import the contact from different sources:

- Microsoft Outlook
- Real VNC
- VCard

Please note the all the entries will be imported in the current folder.

Microsoft Outlook contacts sub-folders are also supported.

7.2.10 Export

DESCRIPTION

Use the ***File – Export*** to export entries from Remote Desktop Manager. Below is a list of export options:

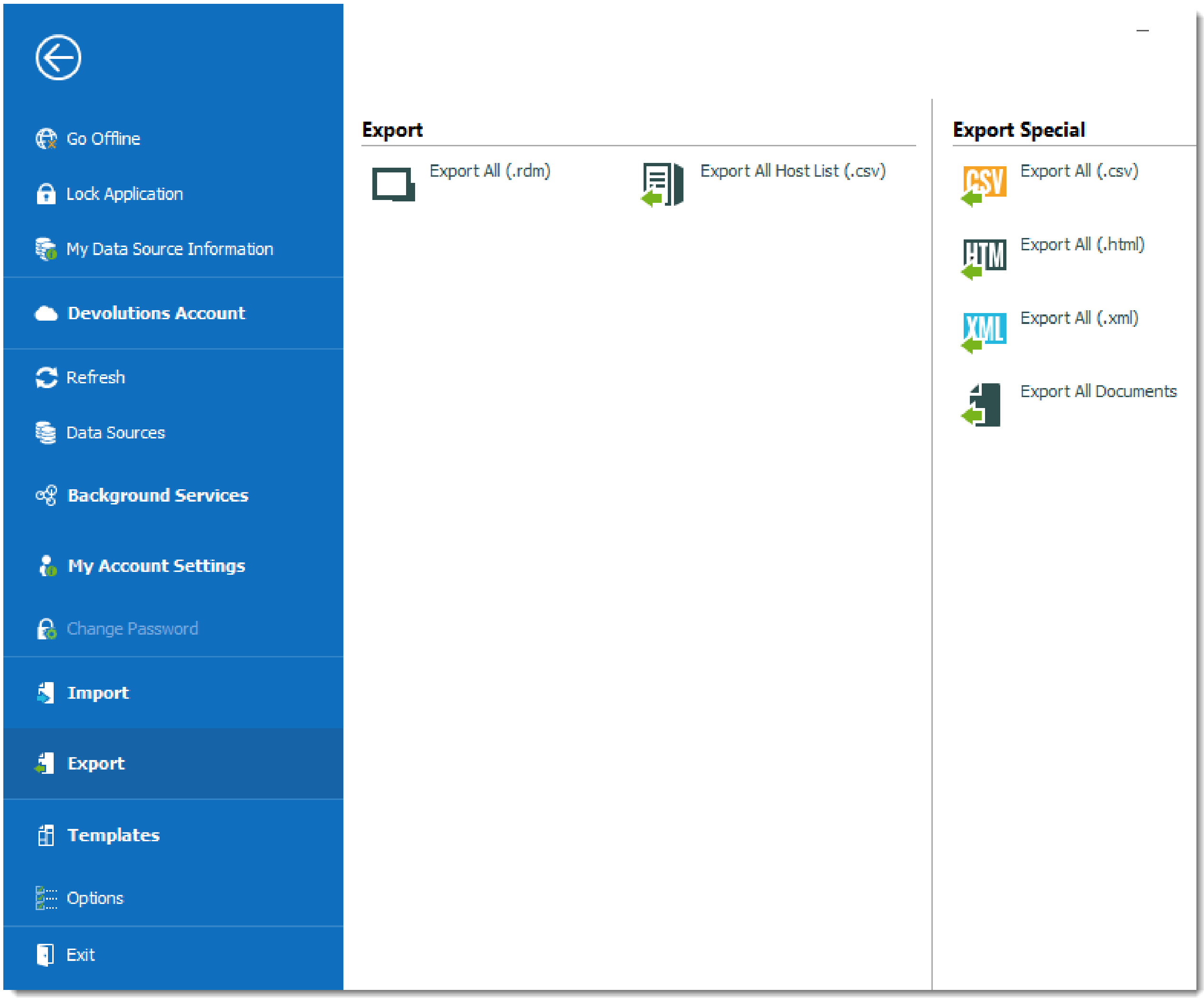
- Export All Entries (.rdm).
- Export All Host List (.csv).
- Export All Entries (.csv).
- Export All Entries (.html).
- Export All Entries (.xml) (It's exactly the same content as a .rdm file but with the XML extension).

> If you have used **Document** entries in the **Stored in database** mode, or used **attachments**, the binary content of the documents is NOT exported in any of our export formats. These documents/attachments MUST be handled manually.

> The export feature is only active if the import Permission has been enabled inside the user account.

> The only appropriate format to import the entries back into Remote Desktop Manager is the .rdm format.

SETTINGS



File - Export

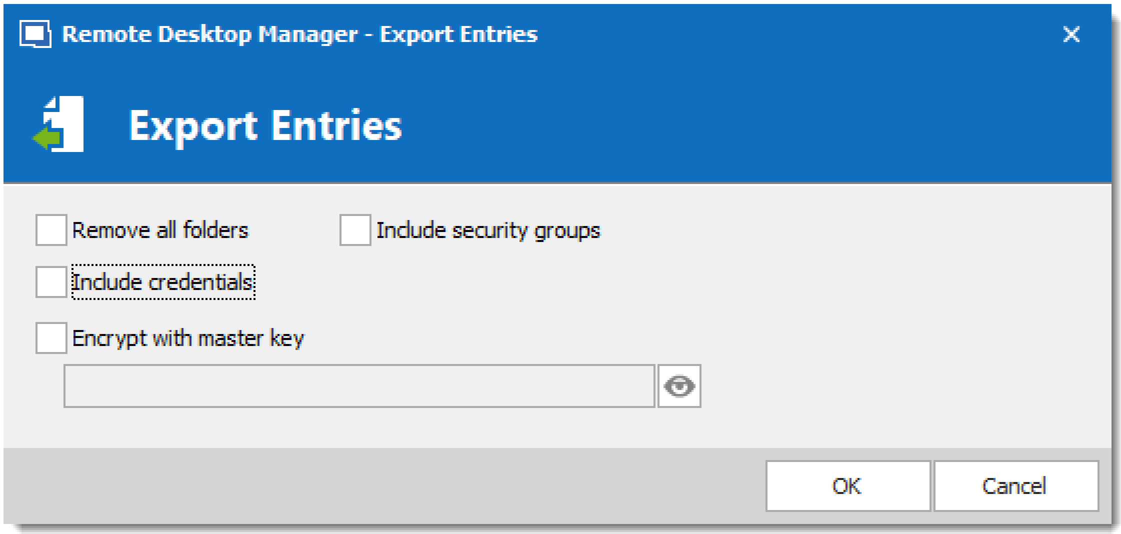
When using an Advanced Data Source, export capabilities can be disabled via security policies at the data source level (no one can export) or at a user level (particular users can't export). See Security Group Management for more information.

EXPORT ALL ENTRIES (.RDM)

Export all entries in a .rdm file that can be imported into any Remote Desktop Manager data source. You can also include credentials in this export format and secure your file with a master key.

By default the credentials are NOT included. It's critical to check the **Credentials** option in order for the exported data to include the credentials.

Specifying a master key will encrypt the whole content of the .rdm file to protect its content. It is highly recommended as a backup measure, but the key is absolutely necessary for decryption. Preserve this as well in a separate storage device for safekeeping.


Remote Desktop Manager - Export Entries
Export Entries
□ Remove all folders
□ Include security groups
□ Include credentials
□ Encrypt with master key
OK
Cancel

Export entries in .rdm

EXPORT ALL HOST LIST (.CSV)

Export a simple host list in .csv format. You will be prompted to see if you wish the export to be slightly more detailed and include the following information: Host, Description, Display Name, Group, Security Group.

EXPORT ALL ENTRIES (.CSV)

Export all entries using the .csv format file. For security reasons the .csv file will be contained within a password encrypted zip file. This type of security can be hacked using brute force attacks, it should be used only when the zip file is under your exclusive control.

Please note that the csv columns will vary depending on entry types being exported. This makes it the wrong format if ever you want to import the data back in Remote Desktop Manager. Use this only to migrate to another system.

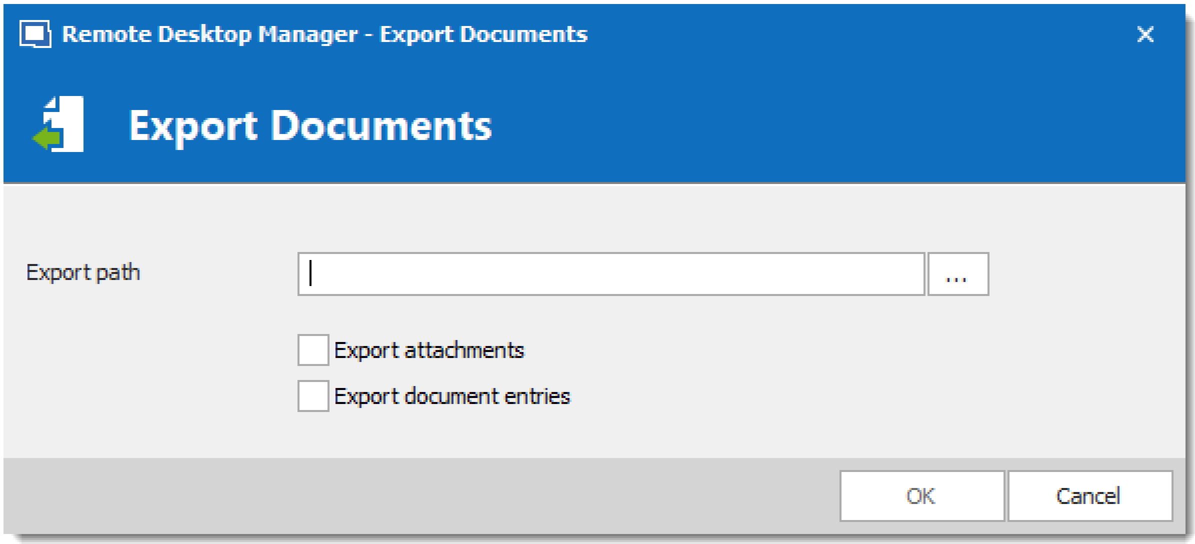
EXPORT ALL ENTRIES (.HTML)

Export all entries within a AES-256 to encrypt self contained html file. See Export Html Encrypted topic for more information.

EXPORT ALL ENTRIES (.XML)

Because it brought confusion to our user base, this export format has been converted to perform the exact same export as the "Export all entries" but sets the file extension to .xml instead.

EXPORT ALL DOCUMENTS


Remote Desktop Manager - Export Documents
Export Documents
Export path
...
□ Export attachments
□ Export document entries
OK
Cancel

Export Documents

Export all attachments or all document entries that are linked to your data source.

7.2.10.1 Encrypted Html

DESCRIPTION

The Html Encrypted export format was designed for simple and secure exports of entries. It allows for an html export of the entry information while using symmetric encryption (AES-256) to encrypt sensitive information such as passwords. The file is an ultra portable self contained html file that requires no external script files or installs. As long as you have a web browser with JavaScript enabled you can get to your encrypted data.

With a secure encrypted document you can freely send the information via email or any other protocol without compromising the sensitive data. Use the export as means of sharing or as a backup for sensitive information.

SETTINGS

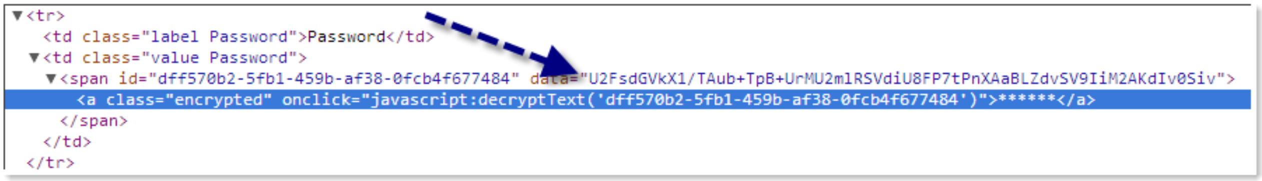
Select the entries to export or export all entries. ***Right-click*** and select ***Export – Export Special – Export All Entries (.html)*** or use ***File – Export – Export All Entries (.html)***. You will be prompted for a password for the symmetric encryption key. Select the file name for the new document. Once the export is completed the file will open in your default browser.

Ensure you do not forget the password as you will not be able to decrypt the data without it.

When exporting multiple entries that are all contained within the same file, at decrypt time, each encrypted value must be decrypted individually for security reasons. Once you're done with the sensitive data simply hit **F5** to refresh the file or simply close it. Your data is now safe from prying eyes.

AES-256

We use AES-256 to encrypt/decrypt your sensitive data. Since the decryption is done entirely in the browser, there’s no need for external tools, downloads or installs.



```
▼<tr>
   <td class="label Password">Password</td>
  ▼<td class="value Password">
    ▼<span id="dff570b2-5fb1-459b-af38-0fcb4f677484" data="U2FsdGVkX1/TAub+TpB+UrMU2mlRSVdiU8FP7tPnXAaBLZdvSV9IiM2AKdIv0Siv">
       <a class="encrypted" onclick="javascript:decryptText('dff570b2-5fb1-459b-af38-0fcb4f677484')">******</a>
     </span>
   </td>
 </tr>
```

Encrypted Value

SAFE & SMART VIRTUAL BACKUP

In addition, HTML Export using symmetric encryption is a great way to securely backup your passwords and other sensitive information. It allows you to share information via email or simply send the file to your personal email account as a backup.

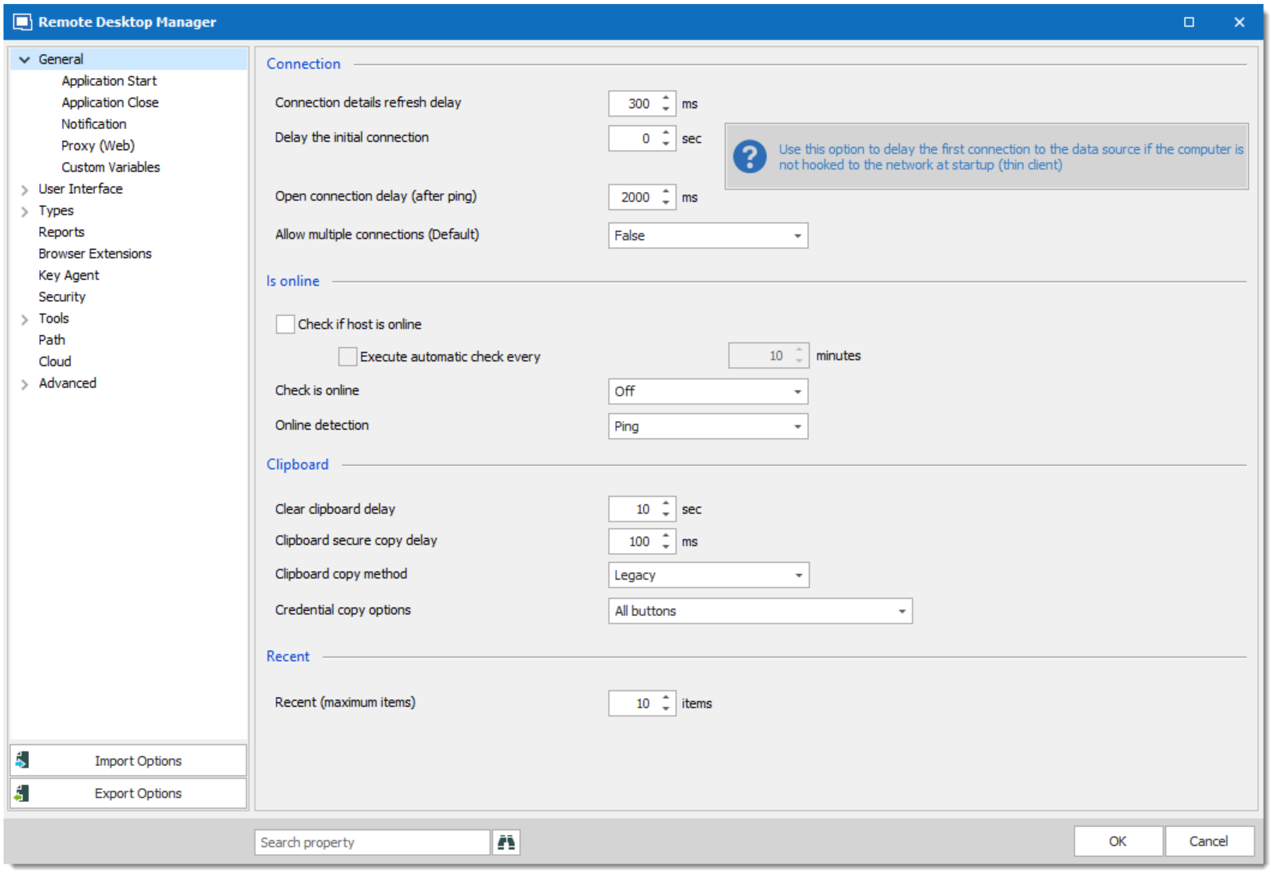
7.2.11 Options

DESCRIPTION

There are multiple options available to manage and customize your Remote Desktop Manager in the menu ***File – Options***. Most of these options are related to changes to the local instance.

Use the **Search property** to find a specific option.

Watch Video



Connection

Connection details refresh delay: 300 ms

Delay the initial connection: 0 sec

Use this option to delay the first connection to the data source if the computer is not hooked to the network at startup (thin client)

Open connection delay (after ping): 2000 ms

Allow multiple connections (Default): False

Is online

□ Check if host is online

□ Execute automatic check every 10 minutes

Check is online: Off

Online detection: Ping

Clipboard

Clear clipboard delay: 10 sec

Clipboard secure copy delay: 100 ms

Clipboard copy method: Legacy

Credential copy options: All buttons

Recent

Recent (maximum items): 10 items

File - Options

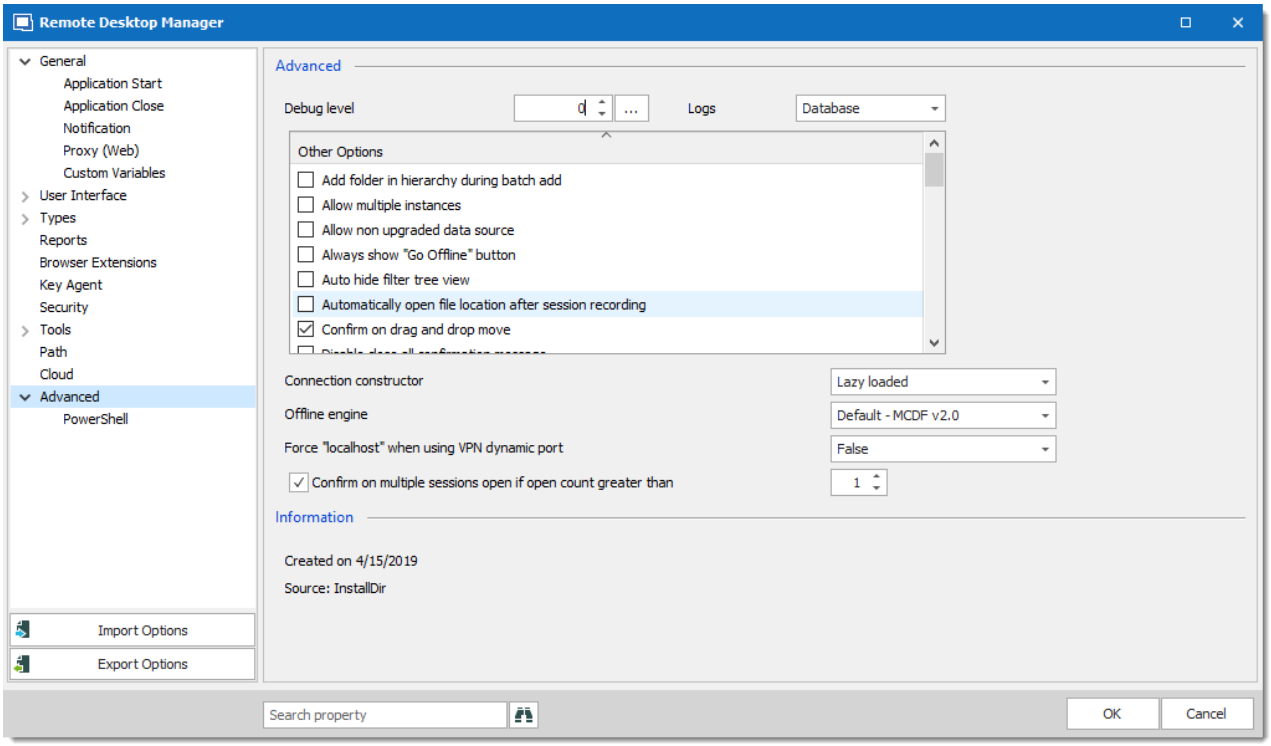
Options you configure:

- **General:** Application Start (including update options), Application Close, Notification, Proxy (Web), Custom Variables
- **User Interface**
- **Types:** Settings for different types of entry, terminal, ssh keys, etc.
- **Reports**
- **Browser Extensions:** Settings for Devolutions Web Login
- **Key Agent:** Hold SSH Keys in memory already decoded and ready for them to be used. Fore more information see Key Agent Manager
- **Security**: Local application security only; You can set security for all users in the data source
- **Tools**
- **Path**: Customize installation paths for Remote Desktop Manager, logs, documents, templates and add-ons
- **Cloud**
- **Advanced**
- **Import Options**
- **Export Options**
- **Search Option Property**

7.2.11.1 Advanced

DESCRIPTION

Use the ***File – Options – Advanced*** tab to control the application behavior as it pertains to low level settings.



Advanced

Debug level 0 ...

Logs Database

Other Options

- ☐ Add folder in hierarchy during batch add
- ☐ Allow multiple instances
- ☐ Allow non upgraded data source
- ☐ Always show "Go Offline" button
- ☐ Auto hide filter tree view
- ☐ Automatically open file location after session recording
- ☑ Confirm on drag and drop move

Connection constructor: Lazy loaded

Offline engine: Default - MCDF v2.0

Force "localhost" when using VPN dynamic port: False

☑ Confirm on multiple sessions open if open count greater than 1

Information

Created on 4/15/2019

Source: InstallDir

Options - Advanced

SETTINGS

ADVANCED

OPTION	DESCRIPTION
Debug level	Set the level of debugging information that Remote Desktop Manager will capture. This should only be modified upon request from a Devolutions support technician as it might cause your system to slow down .
Logs	The logs can be saved in a file or in a database file. Select between: • **Both:** Logs will be saved in a text file and in a database file.

OPTION	DESCRIPTION
	• **Database:** Logs will be saved in a file named RemoteDesktopManager.log.db. The file is located in the installation folder of the application. • **File:** Logs will be saved in a file named RemoteDesktopManager.log. The file is located in the installation folder of the application.
Connection constructor	The connection constructor is used for memory optimization when using legacy. We strongly recommend to leave this option at Default. **Only change this option upon request from a Devolutions support technician.**
Offline engine	You can choose your Offline engine between the SQLite or OpenMCDF. **Only change this option upon request from a Devolutions support technician.**
Force "localhost" when using VPN dynamic port	Forces the use of "localhost" when using the VPN dynamic port.
Confirm on multiple session open if open count greater than	Select a target number where mass opening sessions will demand confirmation.

OTHER OPTIONS - CONNECTIONS

OPTION	DESCRIPTION
Auto close embedded tab on disconnect	Automatically closes all tabs for embedded sessions when they are disconnected.
Confirm on multiple sessions open	When opening more than one session you will be presented with a confirmation dialog. This typically occurs when doing an Open session on a folder.

OPTION	DESCRIPTION
Disable embedded 32 shell execute	Disable the shell embedded 32 execute in Windows for embedded sessions.
Disable logoff confirmation message	When pressing the logoff button in an embedded RDP session, Remote Desktop Manager, will disconnect the session without the logoff confirmation message.
Disable multi-thread loading	This setting allows Remote Desktop Manager to use multiple threads to load the data. Disabling this option will decrease the performance.
Disable multi-thread offline file	This setting allows Remote Desktop Manager to use multiple threads in offline file. Disabling this option will decrease the performance.
Disable RDP virtual channel	Turning off virtual channel disables some Remote Desktop Services features such as clipboard and printer redirection.
Enable advanced Logging for Telnet and SSH (AdvancedTelnetSSH.log)	This option creates an AdvancedTelnetSSH.log file in %LocalAppData%\Devolutions\RemoteDesktopManager. This file can be helpful when retrieving logs for Telnet/SSH connections.
Enable offline read/write locks	Activate locks for the Offline read/write rights.
Ensure that KeePass is running	Validate that KeePass is running on your computer before accessing any KeePass data.
Force refresh before edit entry	Perform a refresh of the entry before entering in edit mode. This is useful in a multi-user environment with a shared data sources. This ensure that you are editing the most recent version of the entry.

OPTION	DESCRIPTION
Force restore application with desktop shortcut	When double-clicking on the desktop shortcut it will restore the application that is already open. If the option is unchecked a second Remote Desktop Manager window will open.
Open shortcut session silent	Disable the command line warning message when using a shortcut.
Use connection loader optimization	Only enable this option upon request from our Support team.
Use DirectX rendering in VNC	By default this option is enabled to use DirectX rendering when available for VNC connection.
Use NTFS Encryption for Offline mode	When using Offline Mode, a local file is created to hold a copy of the data source. If this is enabled the local file is encrypted using the built-in NTFS encryption of Windows. This setting may cause delays when accessing the data source because the local file is refreshed on every access.
Use Secret Server Legacy Interface	Enable to use the Secret Server Legacy interface.

OTHER OPTIONS - GENERAL

OPTION	DESCRIPTION
Allow multiple instances	Allows more than one instance of Remote Desktop Manager to run concurrently. This is not a recommended practice.
Allow non upgraded data source	Allow Remote Desktop Manager to work on an older data source that has not being upgraded.
Confirm on drag and drop move	When session(s) are moved by drag and drop, a confirmation message will appear to confirm the move.

OPTION	DESCRIPTION
Disable Analytics	Disable the computational analysis of data or statistics.
Disable stack trace	Disable the stack trace details when an error occurs in Remote Desktop Manager. This is a security feature.
Focus content on application activation	Set focus on the last embedded session when the application is activated.
Use application directory for local play list	Use the installation folder to save the local play list that has been created.
Use application directory for offline cache	Use the installation folder to save the offline cache file.

OTHER OPTIONS - UI OPTIONS

OPTION	DESCRIPTION
Always show "Go Offline" button	Always display the "Go Offline" button in the status bar when Offline Mode is active.
Disable custom images	Disable the loading of any custom images in the tree view. Too many custom images could dramatically increase the size of the data source and increase the load time at the same time.
Expand all tree nodes on select credential entry	After creating a new credential entry, the tree nodes expands automatically.
Hide last opened play list in play list	Hide the last opened play list at startup in the play list dialog.

OPTION	DESCRIPTION
management	
Use old entry sort	Use the old entry sort from previous version of Remote Desktop Manager.

INFORMATION

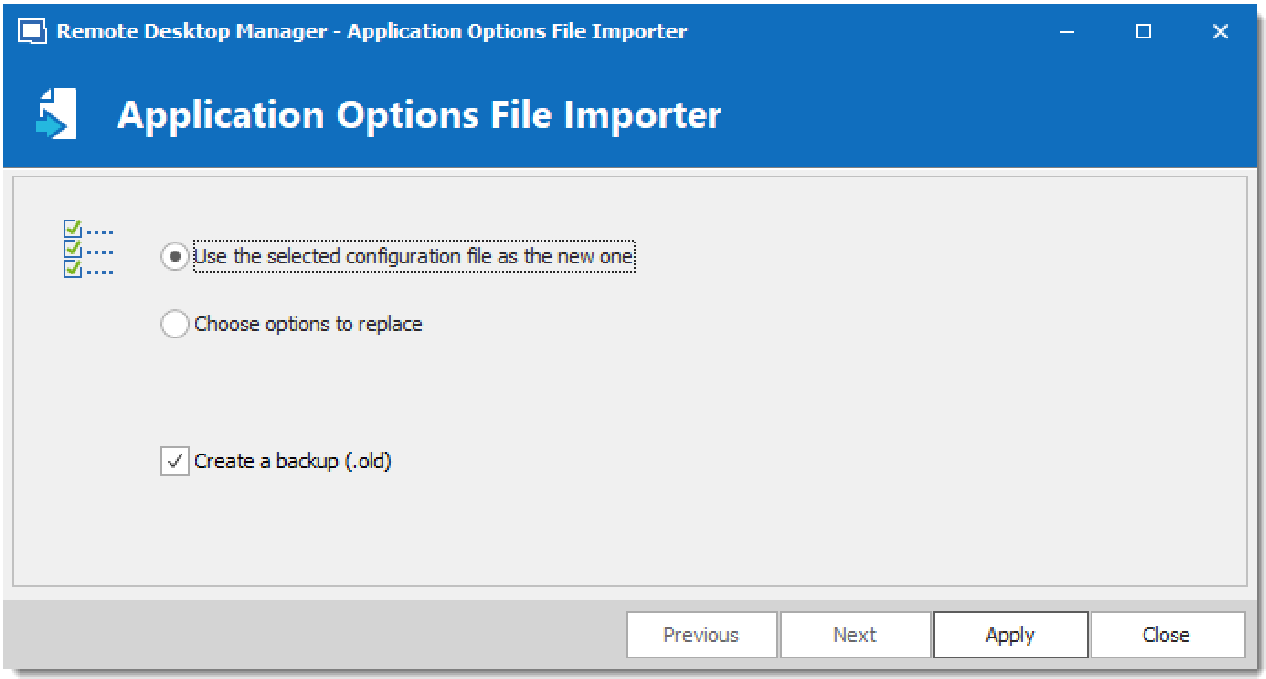
OPTION	DESCRIPTION
Created on	Creation date of Remote Desktop Manager configuration folder.
Source	Source of Remote Desktop Manager configuration settings.
Path	Shortcut to access the configuration folder directly.

7.2.11.2 Import Options

SETTINGS

Select the Configuration File to import in Remote Desktop Manager and click on ***Open.***

REMOTE DESKTOP MANAGER OPTIONS FILE IMPORTER


Remote Desktop Manager - Application Options File Importer
Application Options File Importer
Previous
Next
Apply
Close

● Use the selected configuration file as the new one

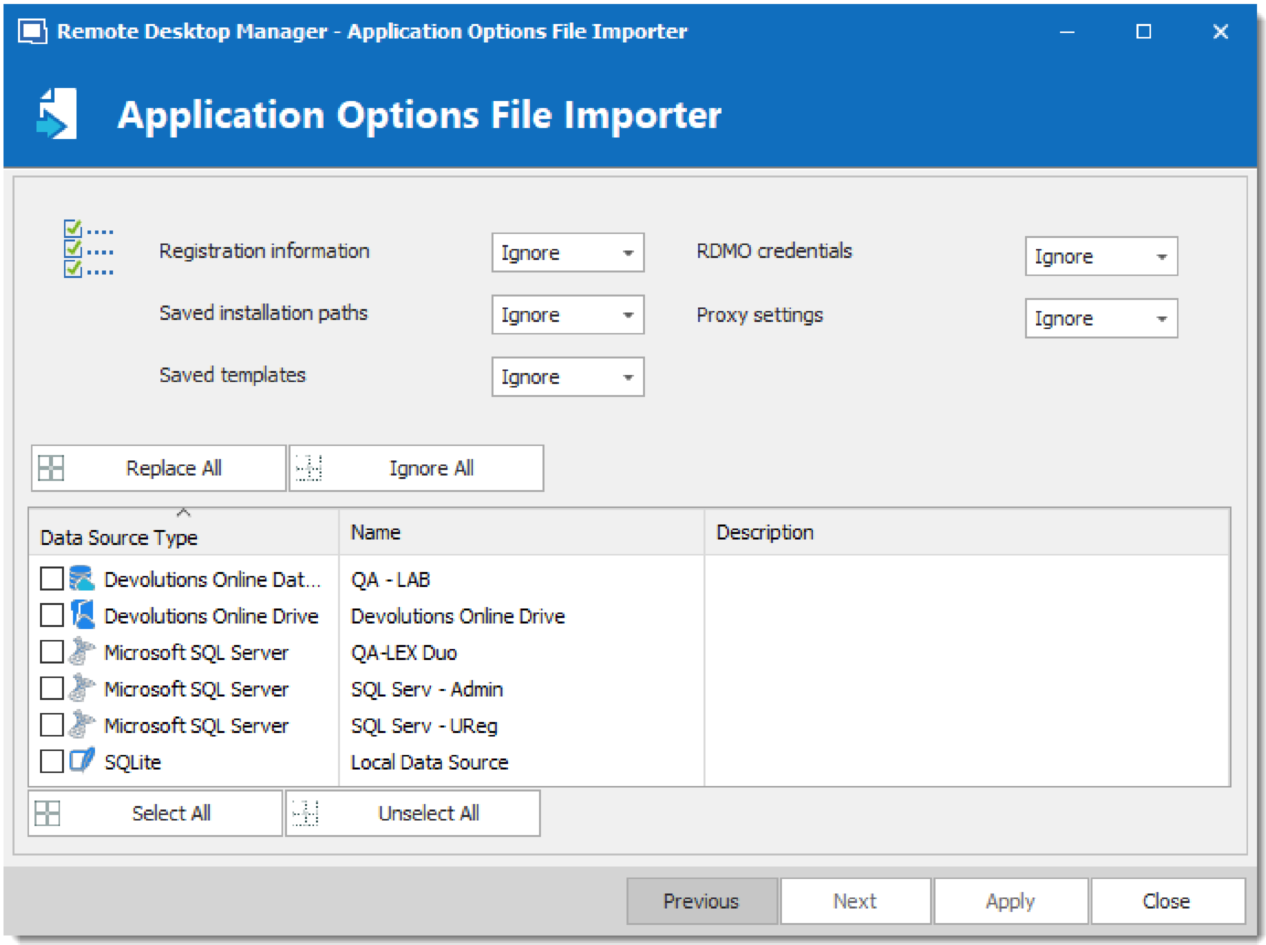
○ Choose options to replace

☑ Create a backup (.old)

Application Options File Importer

OPTION	DESCRIPTION
Use the selected configuration file as the new one	Use the RemoteDesktopManager.cfg file as a new configuration file for your application.
Choose options to replace	Select which options to replace in your actual RemoteDesktopManager.cfg file. See below for more information.
Create a backup (.old)	Create a backup of your old RemoteDesktopManager.cfg

CHOOSE OPTIONS TO REPLACE


Remote Desktop Manager - Application Options File Importer
Application Options File Importer
Replace All
Ignore All
Select All
Unselect All
Previous
Next
Apply
Close

Registration information	Ignore	RDMO credentials	Ignore
Saved installation paths	Ignore	Proxy settings	Ignore
Saved templates	Ignore		

Data Source Type	Name	Description
□ Devolutions Online Dat...	QA - LAB	
□ Devolutions Online Drive	Devolutions Online Drive	
□ Microsoft SQL Server	QA-LEX Duo	
□ Microsoft SQL Server	SQL Serv - Admin	
□ Microsoft SQL Server	SQL Serv - UReg	
□ SQLite	Local Data Source	

Application Options File Importer

Decide which options to replace with the one from RemoteDesktopManager.cfg that you wish to import. Select **Replace** to replace an existing setting with a new one or select **Ignore** if you want to keep the setting that you already have.

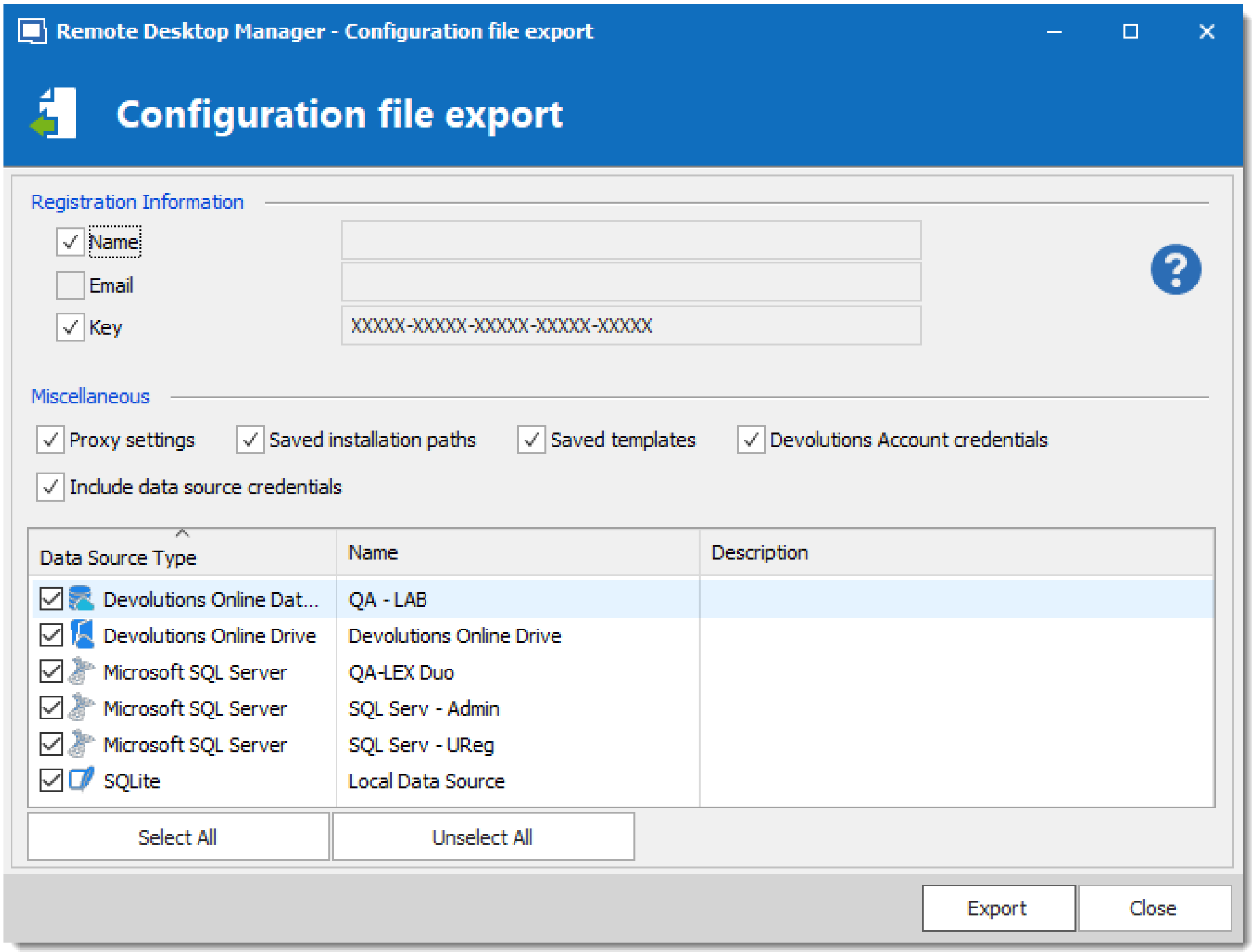
7.2.11.3 Export Options

DESCRIPTION

Use ***File – Options – Export Options*** to control the options to export from your application configuration. Use this to easily transfer settings to another machine.

Sharing the exported file with a colleague would effectively give that person whatever credentials you have set in your data source definitions, including credentials set in your DODB.

Devolutions does not recommend sharing any credential to a team data source.


Remote Desktop Manager - Configuration file export
Configuration file export

Registration Information

☑ Name
□ Email
☑ Key: XXXXX-XXXXX-XXXXX-XXXXX-XXXXX

Miscellaneous

☑ Proxy settings ☑ Saved installation paths ☑ Saved templates ☑ Devolutions Account credentials

☑ Include data source credentials

Data Source Type	Name	Description
☑ Devolutions Online Dat...	QA - LAB	
☑ Devolutions Online Drive	Devolutions Online Drive	
☑ Microsoft SQL Server	QA-LEX Duo	
☑ Microsoft SQL Server	SQL Serv - Admin	
☑ Microsoft SQL Server	SQL Serv - UReg	
☑ SQLite	Local Data Source	

Configuration file export dialog

SETTINGS

REGISTRATION INFORMATION

OPTION	DESCRIPTION
Name	Company registration name.
Email	Registration email.
Key	Serial key.

MISCELLANEOUS

The local templates may contain credentials, ensure you do not share the exported file.

OPTION	DESCRIPTION
Proxy settings	Includes your proxy settings.
Saved installation paths	Preserve your installation paths configured for the external application.
Saved templates	Include your local templates in the export.
DODB Credentials	Includes your Devolutions Online Database credentials.
Include data source credentials	Include your data source credentials.

DATA SOURCES

> The data source configurations you select will be exported with the username/password as they are currently configured. If you are creating a file to quickly set up new employees, you must be careful not to give away your credentials. Using the Custom Installer Service is recommended for this case.

All your configured data sources will be displayed in this section. Select the one(s) that you want to include in the export. Please note that the content of the data source is not exported.

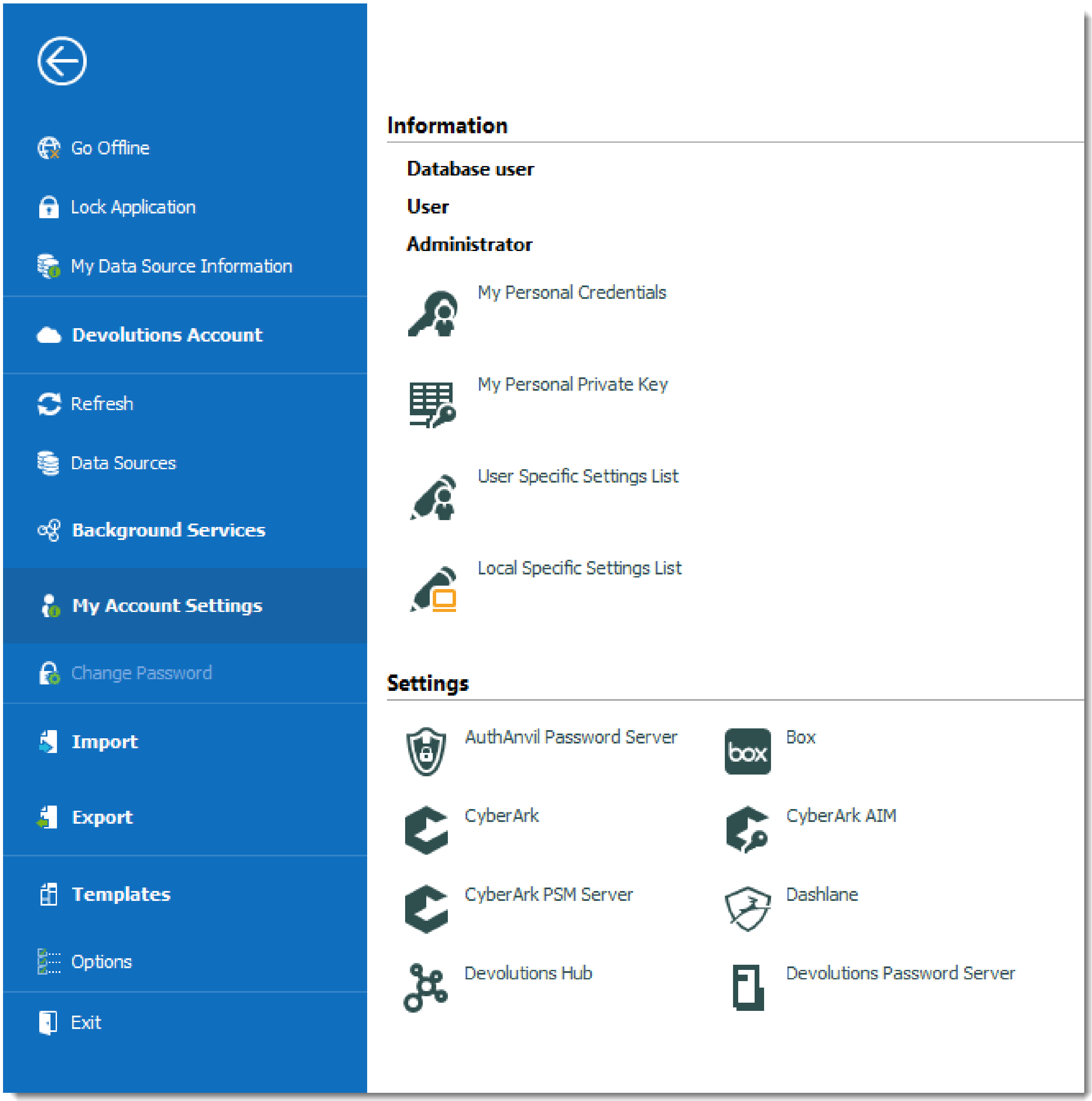
When your settings are customized to your liking, click on **Export**. You will be prompted to save your settings in a RemoteDesktopManager.cfg file.

7.2.12 My Account Settings

DESCRIPTION

Use ***File – My Account Settings*** to configure accounts that connect to different web platforms. Set up account settings one time and use it in entries as many time as required. This section also allows to manage **Personal Credentials**, **Personal Private Key** and **Specific Settings** lists.

SETTINGS



My Account Settings

INFORMATION

OPTION	DESCRIPTION
Database user	Indicates the current user connected to the application.

OPTION	DESCRIPTION
User	Indicates the user of the current Windows session.
Administrator	Indicates if the current user is administrator or not.
My Personal Credentials	Please consult My Personal Credentials topic for more information.
My Personal Private Key	Configure a personal private key for further use in sessions.
User Specific Settings List	Provide a list of all the User Specific Settings configured in Remote Desktop Manager.
Local Specific Settings list	Provide a list of all the Local Specific Settings configured in Remote Desktop Manager.

SETTINGS

We support a specifics settings for a variety of Credentials, explore to your heart's content!

7.2.12.1 My Personal Credentials

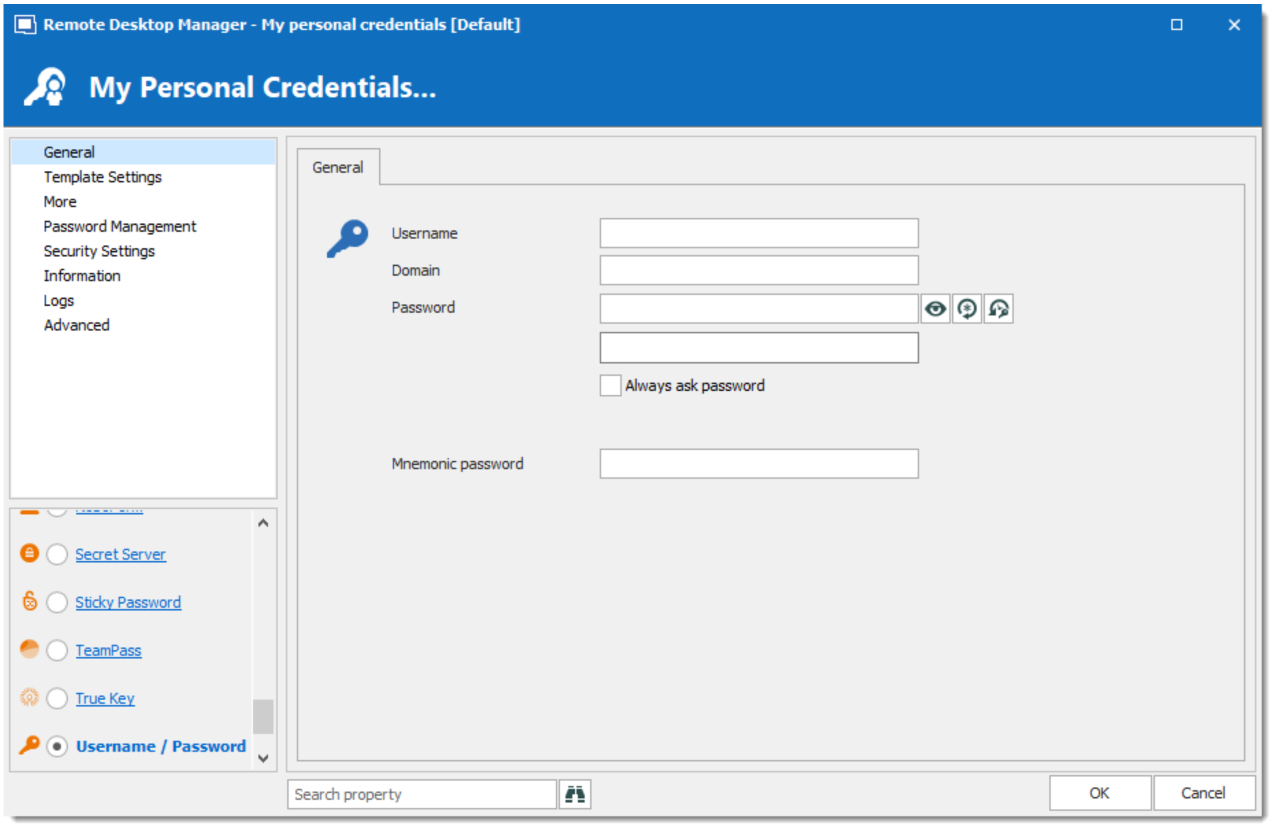
DESCRIPTION

The **My Personal Credentials** feature is a single credential entry which is locally stored on your computer in your Windows profile.

It is typically used to hold the Windows credentials for your running sessions because Remote Desktop Manager can't access them. If you can't use integrated security then you must store your credentials in **My Personal Credentials**.

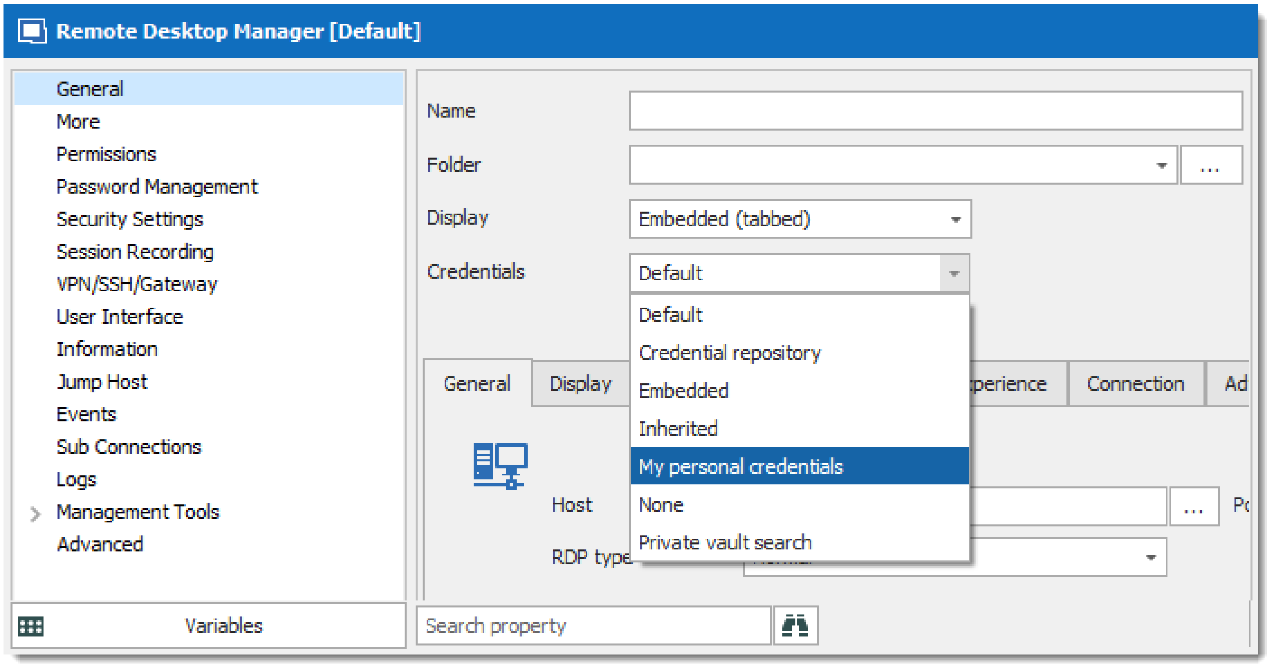
This allows you to centralize one special credential to replace or emulate the ones for your Windows session. When a password change is needed you simply need to change it once in **My Personal Credentials**.

If you want to change the credential type, go in ***%LOCALAPPDATA% (Default) or %APPDATA% (Remote Desktop Services)\Devolutions\RemoteDesktopManager*** and delete the **Credentials.rdt** file to reset it.



My Personal Credentials

My Personal Credentials can be selected in your entries under **Credentials**.



Remote Desktop Manager [Default]

Name

Folder

Display: Embedded (tabbed)

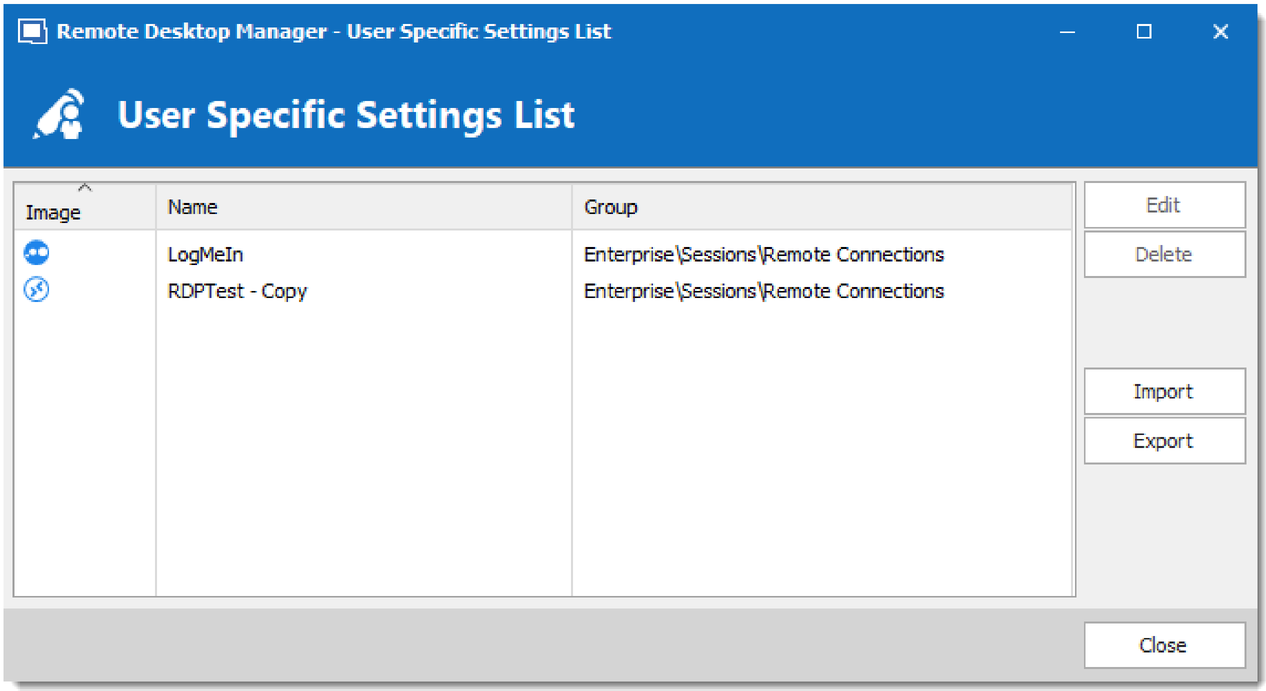
Credentials: Default

Credentials - My personal credentials

7.2.12.2 User Specific Settings List

DESCRIPTION

The **User Specific Settings List** feature will provide all entries that are overridden with user Specific Settings.

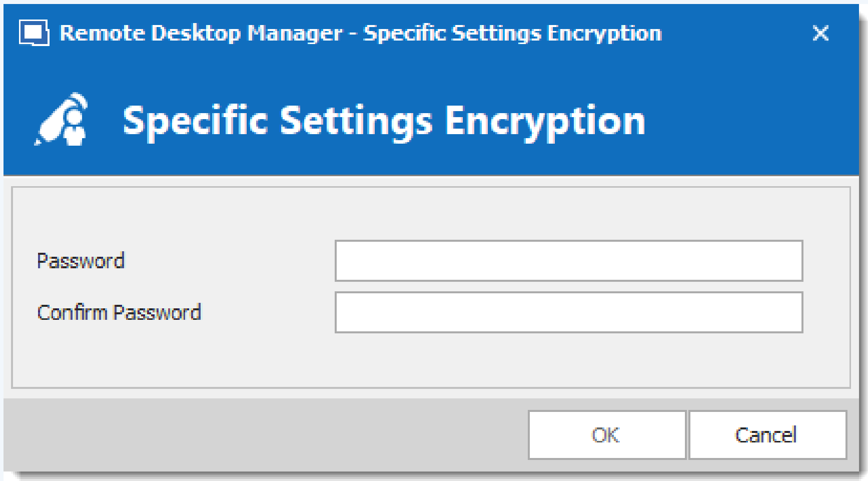


Remote Desktop Manager - User Specific Settings List
User Specific Settings List
Edit
Delete
Import
Export
Close

Image	Name	Group
	LogMeIn	Enterprise\Sessions\Remote Connections
	RDPTest - Copy	Enterprise\Sessions\Remote Connections

User Specific Settings List dialog

OPTION	DESCRIPTION
Edit	Edit the selected User Specific Settings.
Delete	Delete the selected User Specific Settings.
Import	Import a list of user Specific Settings from a .rds file. As this file is encrypted using a mandatory password, you will have to provide the password to successfully import the content of the .rds file.
Export	Export a list of user Specific Settings into a .rds file. A password is required to encrypt the .rds file.

OPTION	DESCRIPTION
	

Remote Desktop Manager - Specific Settings Encryption
Specific Settings Encryption
Password
Confirm Password
OK
Cancel

7.2.13 Templates

DESCRIPTION

Templates are useful to have predefined values when creating an entry. Use templates to:

- Add preconfigured entries
- Use with the Quick connect feature
- Open entries as a template
- Create an import wizard
- Create password templates

To access and manage templates, navigate to ***File – Templates***.

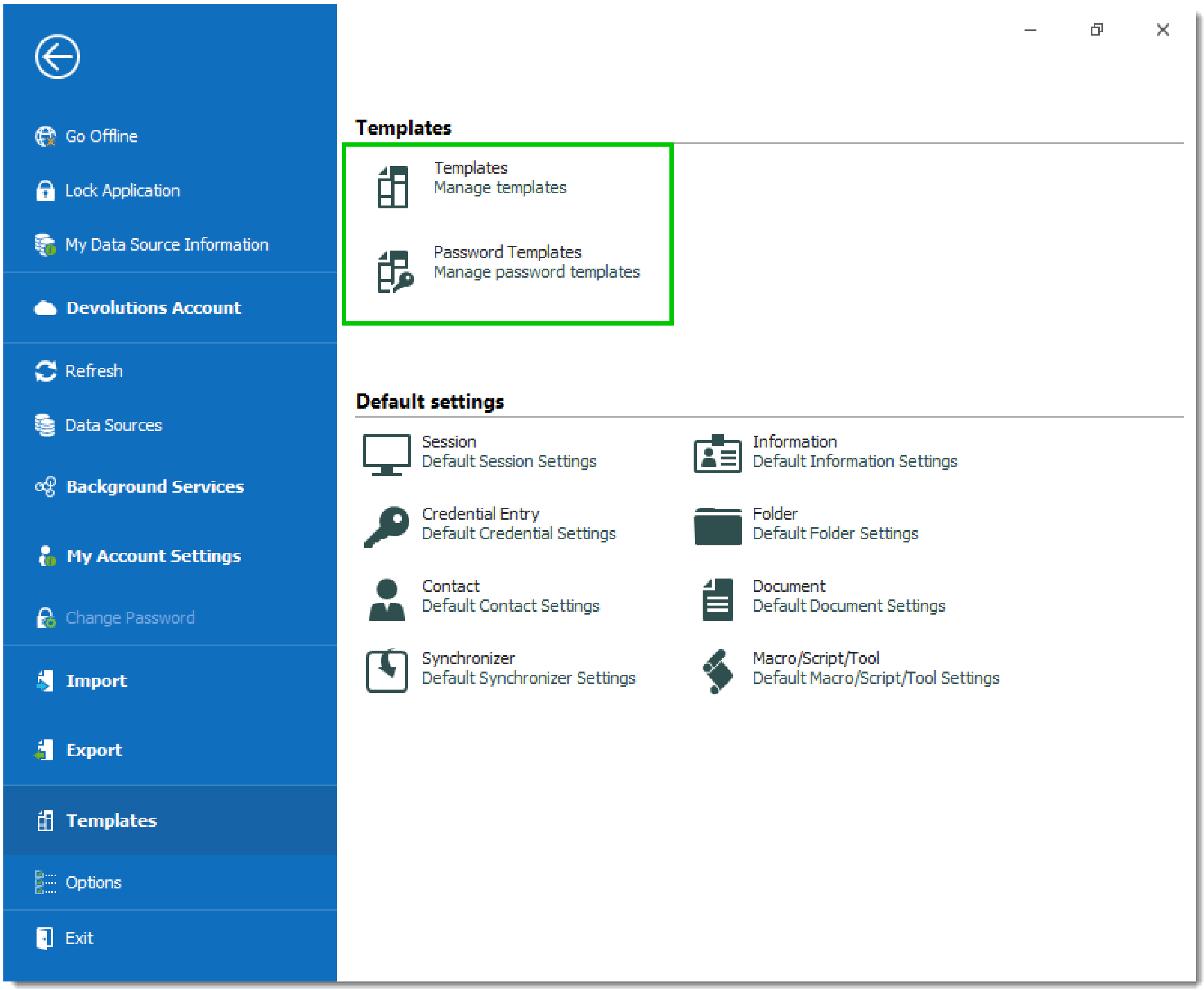
It's possible to create local and database templates.

- Local templates are saved in the Remote Desktop Manager configuration file. They are available only to the current user of the machine.
- Database templates are saved in the database. They are available to all users of the data source.

This allows for creating predefined templates available to use with the quick connect feature or when creating or importing a entries.

By default, standard users cannot create or manage templates. To allow users to create or manage templates, the permission must be granted to users using the **Management** section of the Data source permissions (System Permissions).

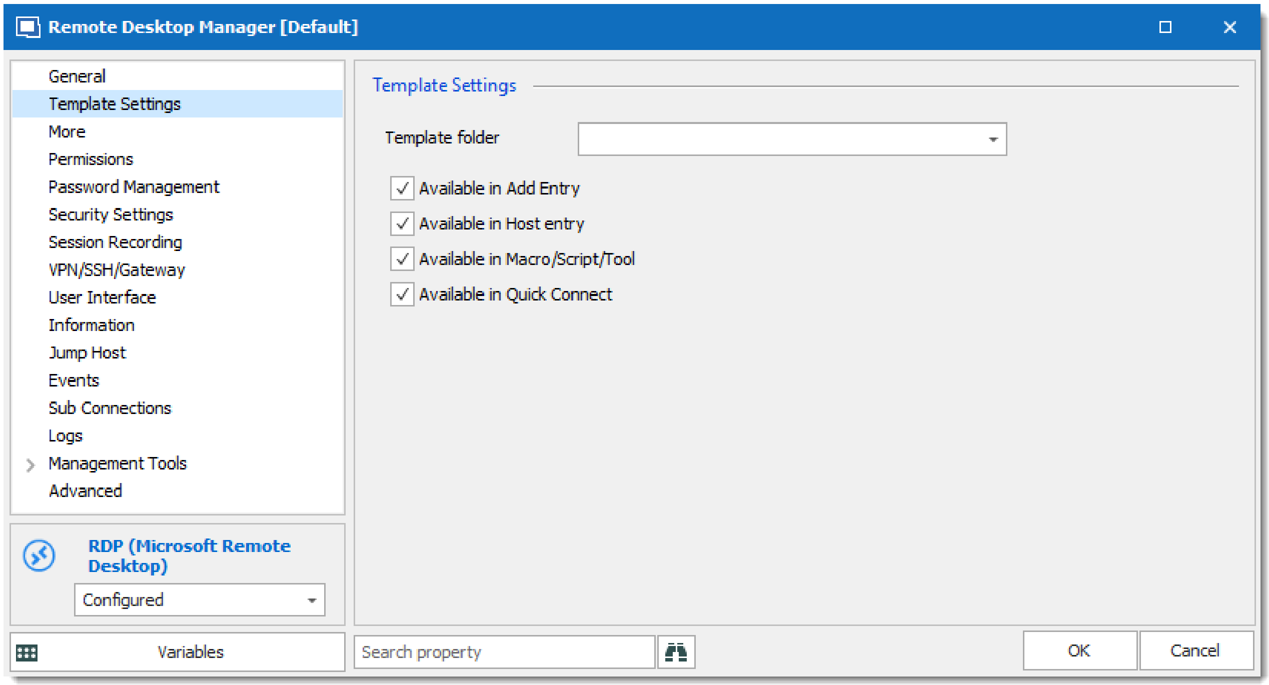
In Advanced Data Sources , local templates are disabled by default. They can be enabled from the Data Source Settings (System Settings).



File – Templates

AVAILABILITY

When creating a template, its availability can be specified in the properties.



Configured

Template Settings

Template folder

☑ Available in Add Entry
☑ Available in Host entry
☑ Available in Macro/Script/Tool
☑ Available in Quick Connect

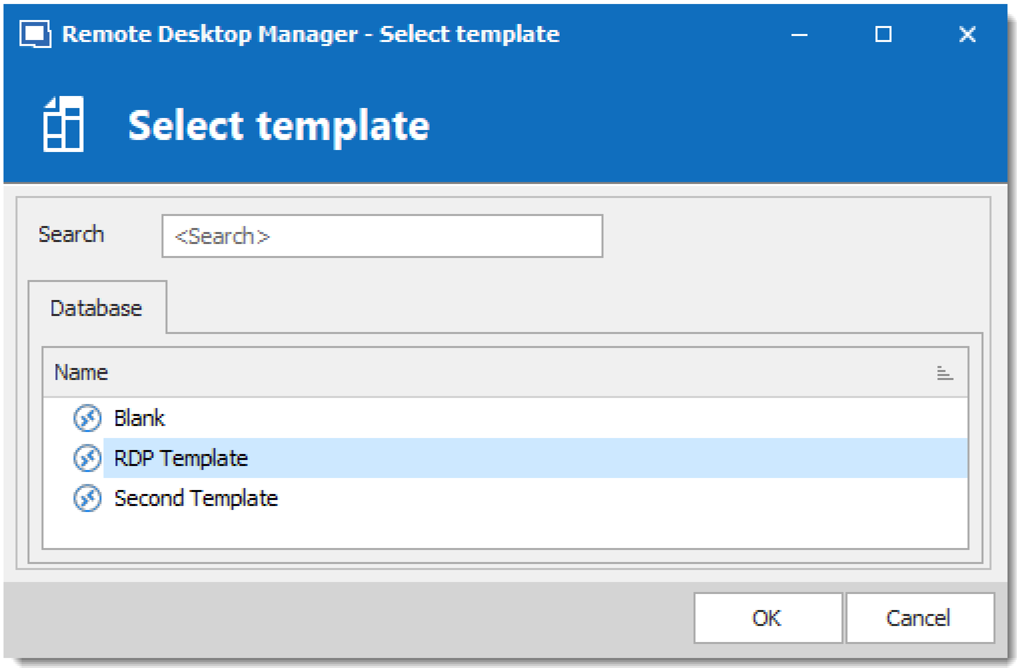
Template properties – Template Settings

USAGE

Templates can be used in the following cases:

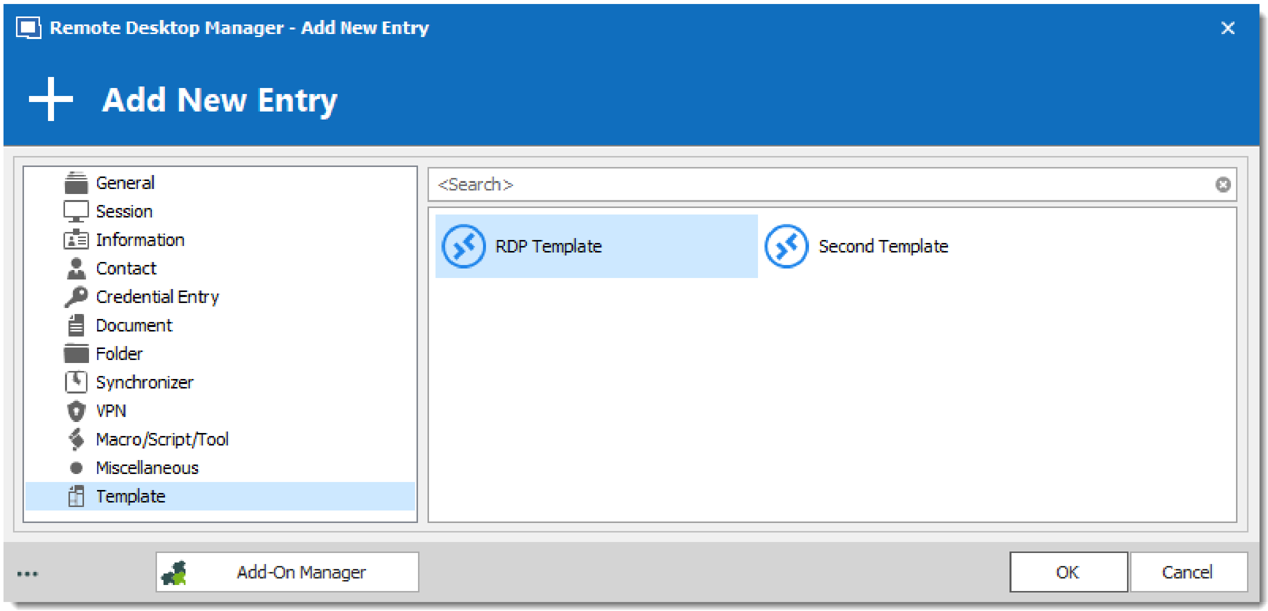
CREATE A NEW ENTRY

By default, when creating an entry of a type that has templates configured for, the user is prompted for a template to use. This behavior can be modified in the Data Source Settings (System Settings).



Select a template

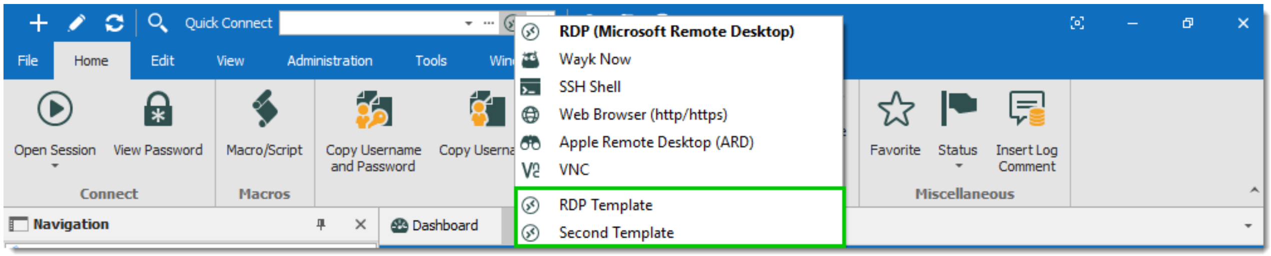
The template can be selected before creating the entry as well. Simply use the **Template** section of the **Add New Entry** window.



Add New Entry – Template

RUN A QUICK CONNECT SESSION

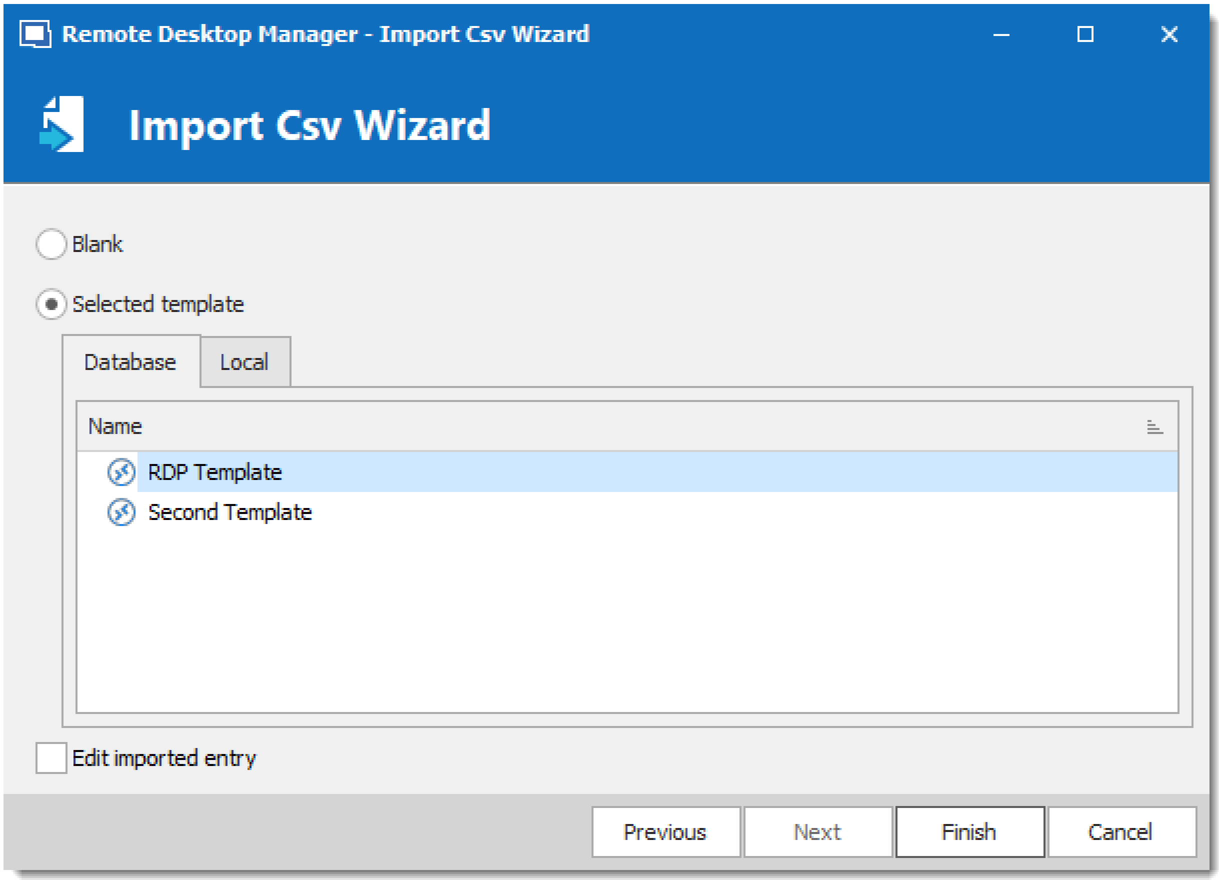
Templates can be used with the **Quick Connect** feature. For example, the same template can be used to connect to different hosts.



Quick Connect

IMPORT WIZARD

The import session wizard uses a template for the imported sessions.


Remote Desktop Manager - Import Csv Wizard

Import Csv Wizard

○ Blank

● Selected template

Name
RDP Template
Second Template

□ Edit imported entry

Import Session Csv Wizard

7.2.13.1 Creating Templates

DESCRIPTION

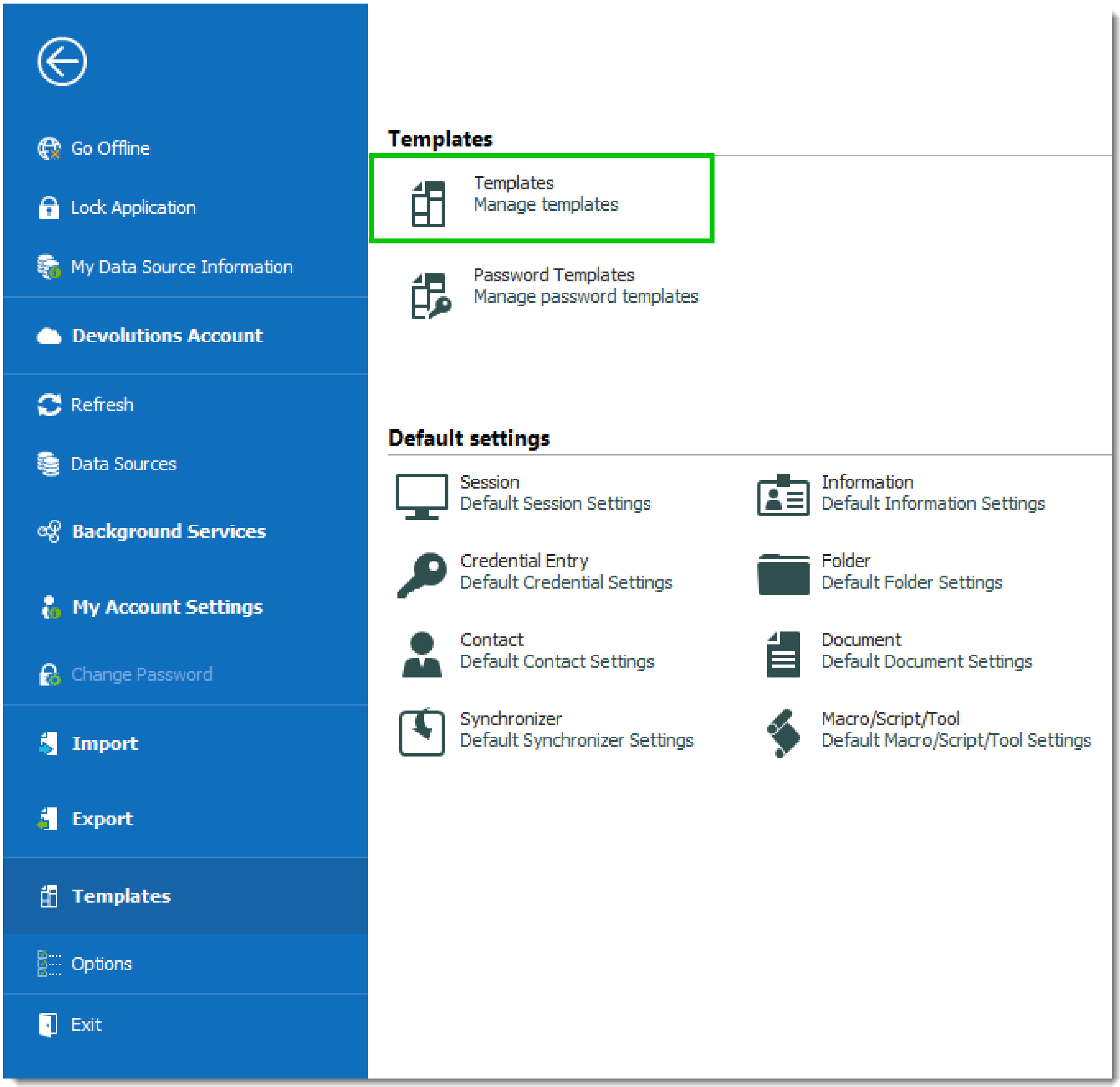
There are many ways to create template for entries. You can create a new template, save an entry as a template, import entries as templates, and duplicate a existing template. It is also possible to create group templates.

In this topic:

- New Template
- Save as Template
- Import Template
- Duplicate Template
- Template Groups

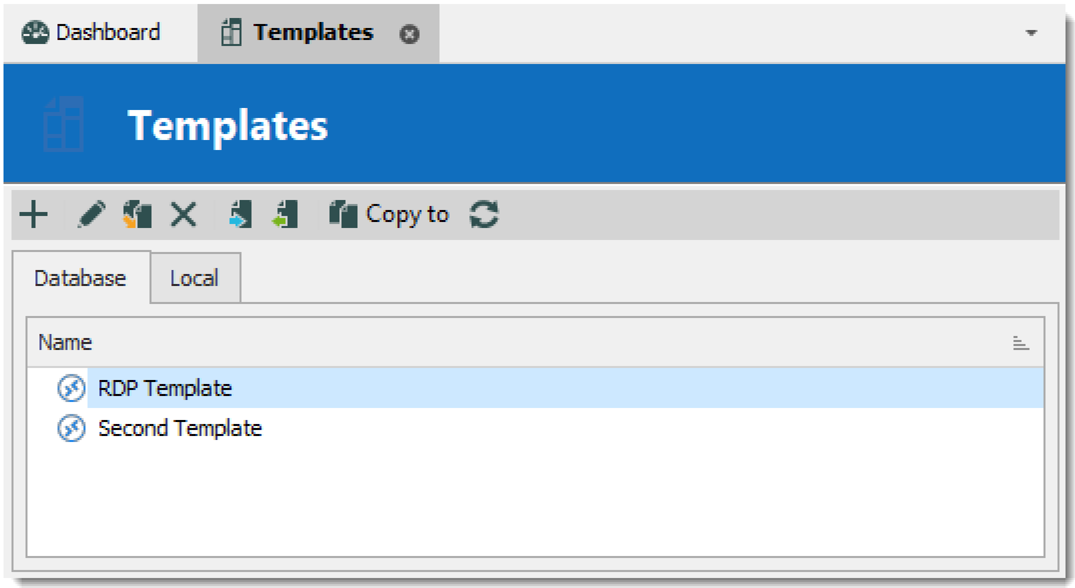
CREATE A NEW TEMPLATE

1. Navigate to ***File – Templates*** and select **Templates**.



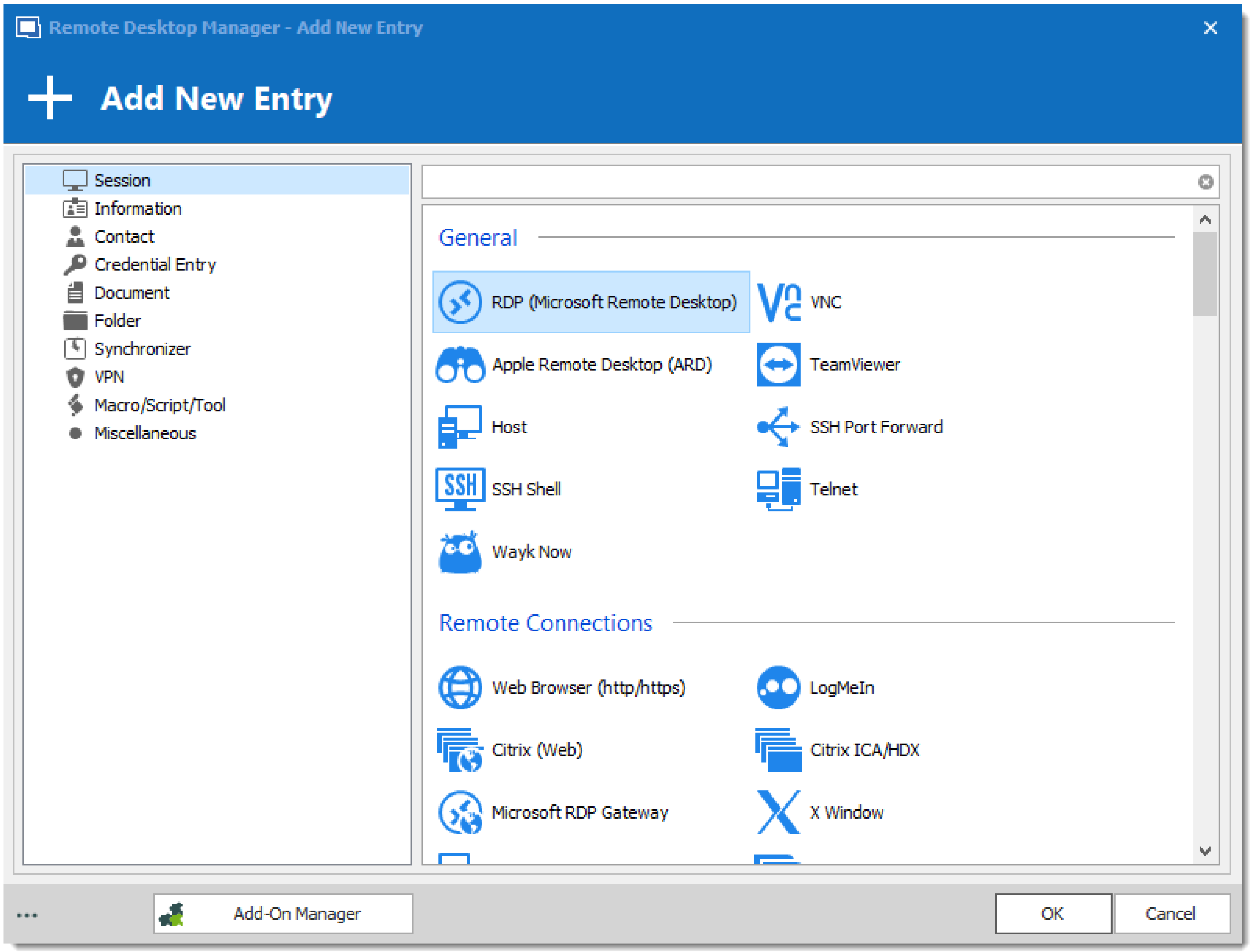
File – Templates

2. In the **Templates** window, click the **Add template** + button.



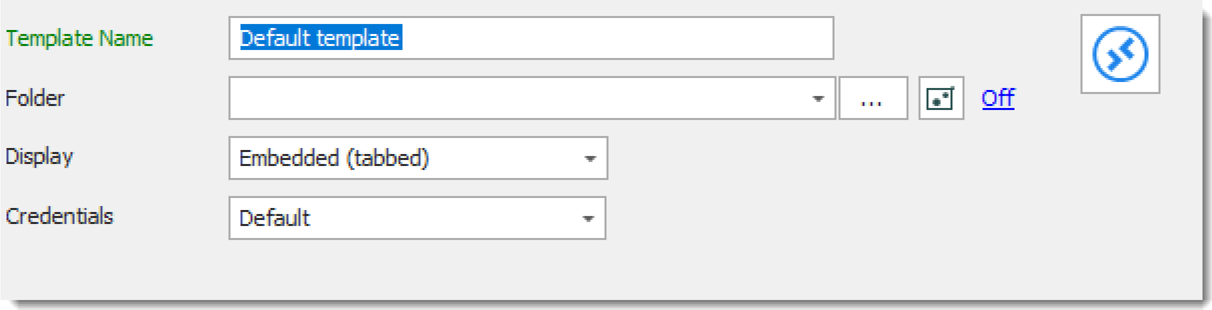
Add a new template

3. Select an entry to create the template for.



Select an entry to create the template for

4. Enter a name for the template, and configure the properties as necessary.



Template Name: Default template

Folder:

Display: Embedded (tabbed)

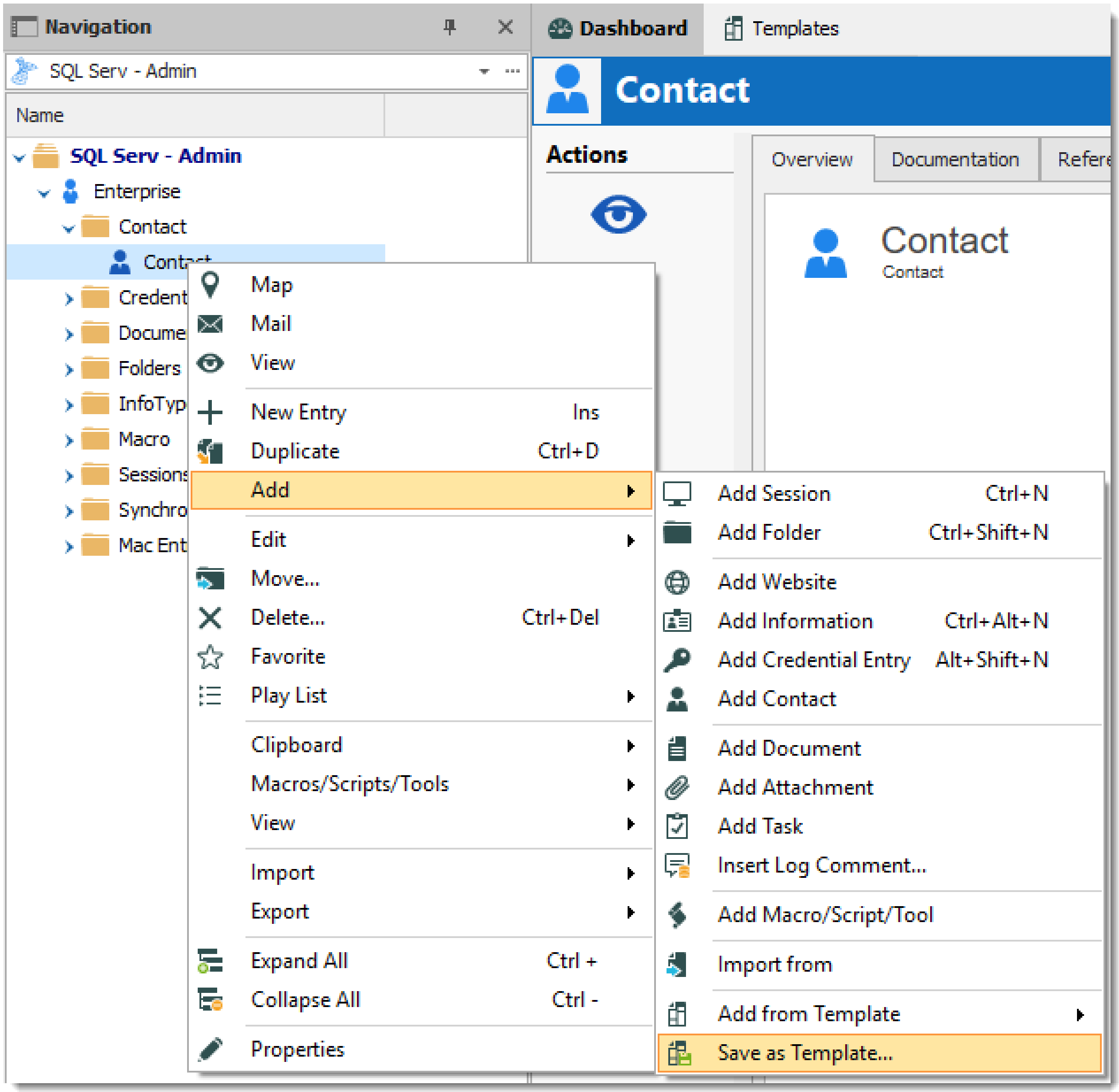
Credentials: Default

Template Properties

SAVE ENTRY AS TEMPLATE

It is possible to save entries as templates to use their properties in other entries. Furthermore, this can be achieve on folders to include all their child items in the template.

From the Navigation Pane, **right-click** an entry and select ***Add – Save as Template...***



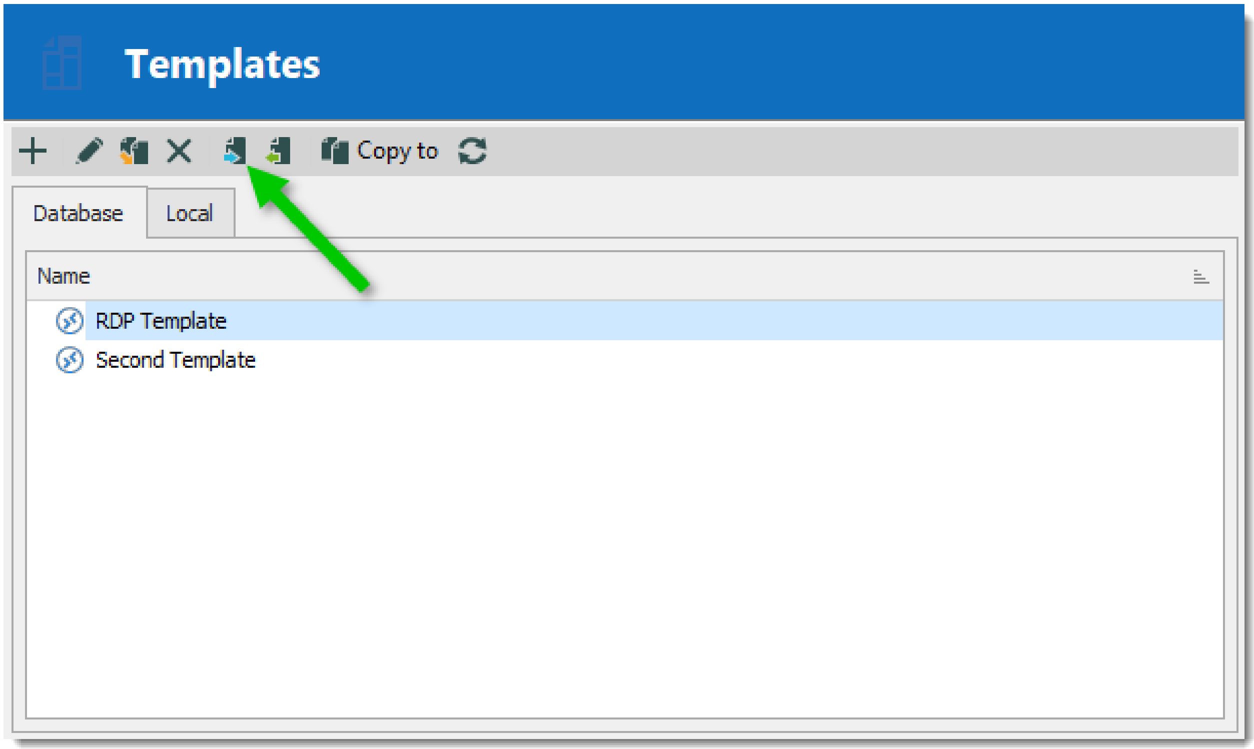
Save as Template...

IMPORT TEMPLATE

It is possible to import previously exported entries as templates.

1. Navigate to ***File – Templates***, and select **Templates**.

   1.1. From the **Templates** window, click on the **Import template** button.



Import Template

2. Select the ***.rdm*** file to import to create a template for each entry in the file.

DUPLICATE TEMPLATE

It is possible to duplicate a template to edit a copy of the properties.

Navigate to ***File – Templates***, and select **Templates**. From the **Templates** window, click on the **Duplicate template** button.

Change the template name to distinguish the copy from the original, and edit the properties to meet your requirements.

TEMPLATE GROUPS

It is possible to save a set of selected entries or a folder and all its child items to a unique template.

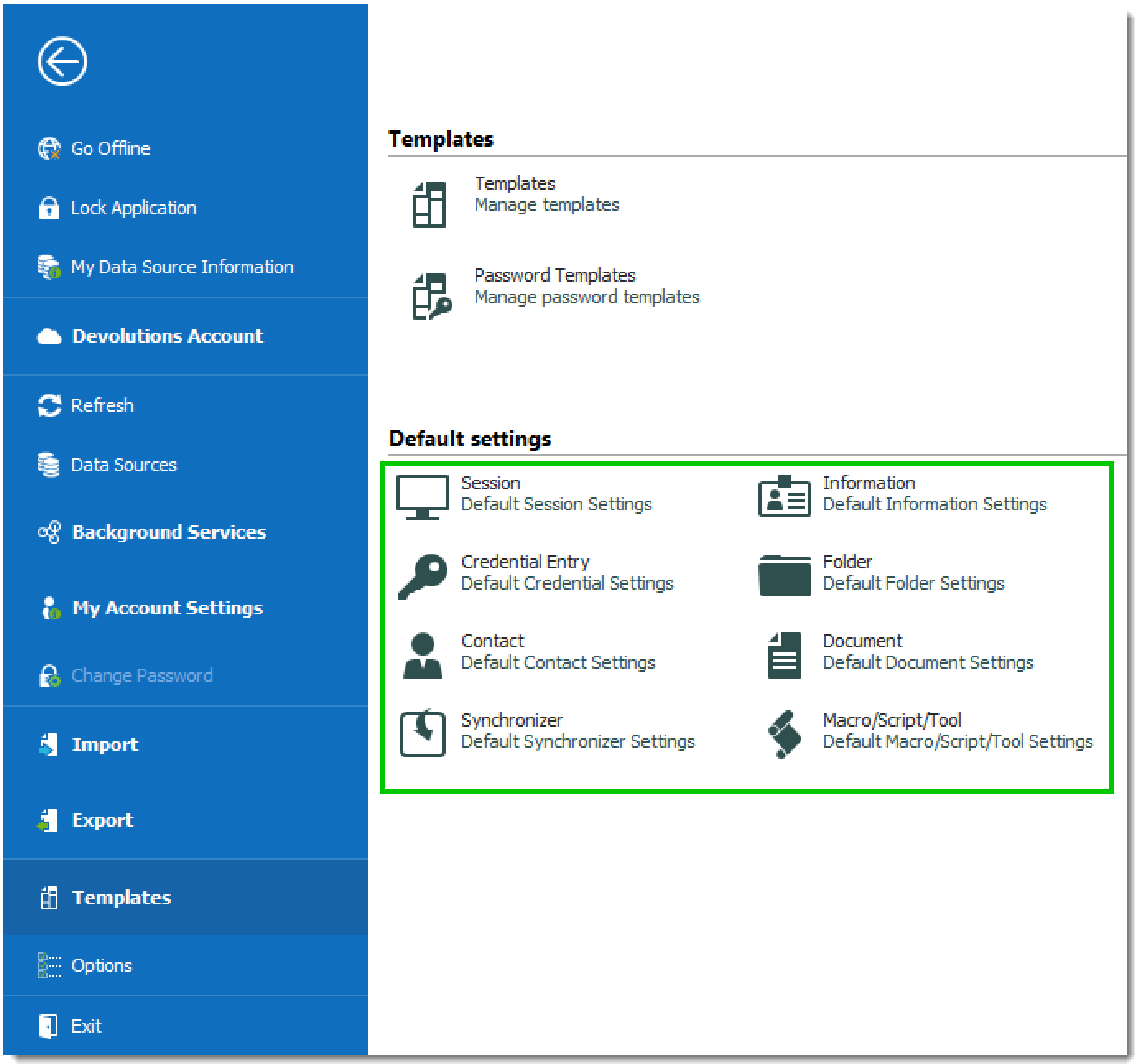
Right-click a selection of entries or a folder, select **Add**, then **Save as Template...**

7.2.13.2 Default Settings

DESCRIPTION

Default Templates create default settings for new entries. Every entry type is supported and can have a default settings template defined.

- **Session**
- **Information**
- **Credential Entry**
- **Folder**
- **Contact**
- **Document**
- **Synchronizer**
- **Macros/Scripts/Tools**



File - Templates - Default settings

SETTINGS

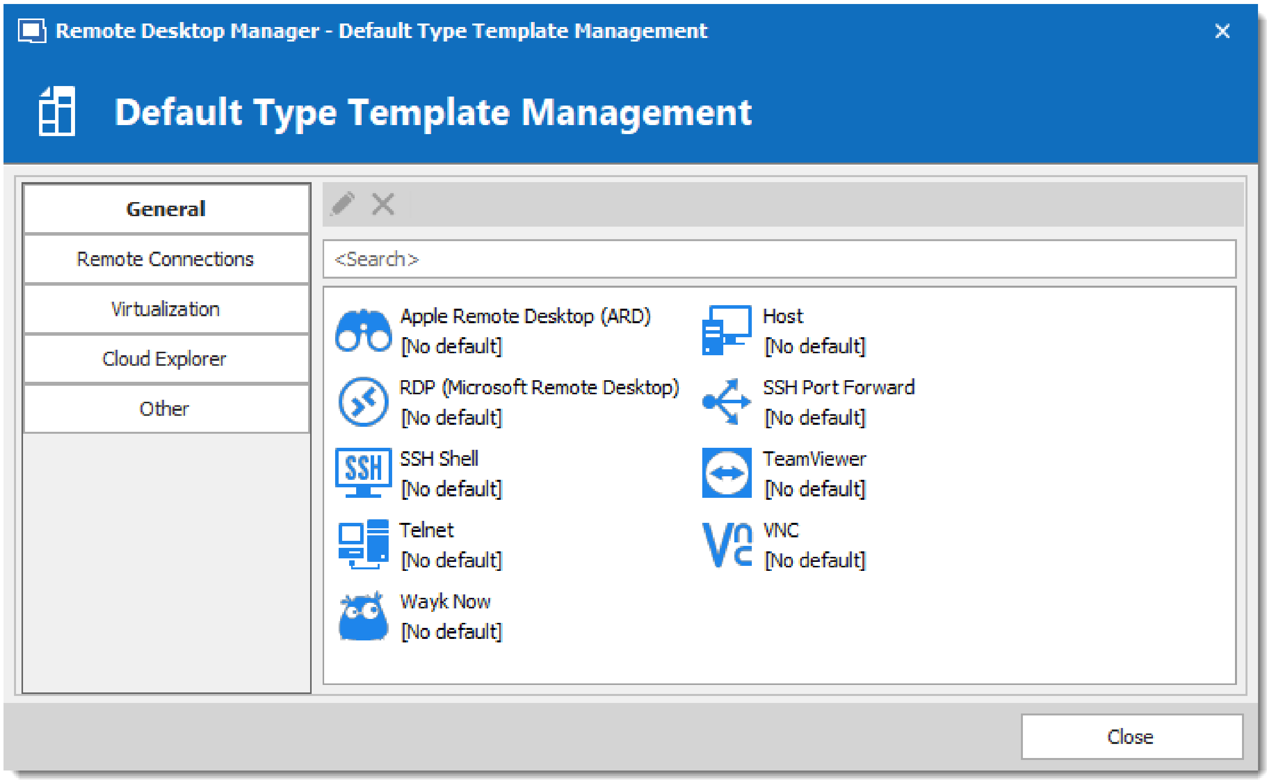
To help you locate the entry type you want to customize, all entry types are organized by category.

Select a category of entry from the ***File – Templates*** menu, then select the specific entry type to be edited.

Please note that a **[No default]** notice is displayed below each type that does not have a default template defined.

All entry types without the **[No default]** notice have a default template. You can double-click on the type to edit the template or press the edit ✎ button.

If you want to remove the default settings template, press the delete ✕ button.



Default Type Template Management

7.2.13.3 Password Templates

DESCRIPTION

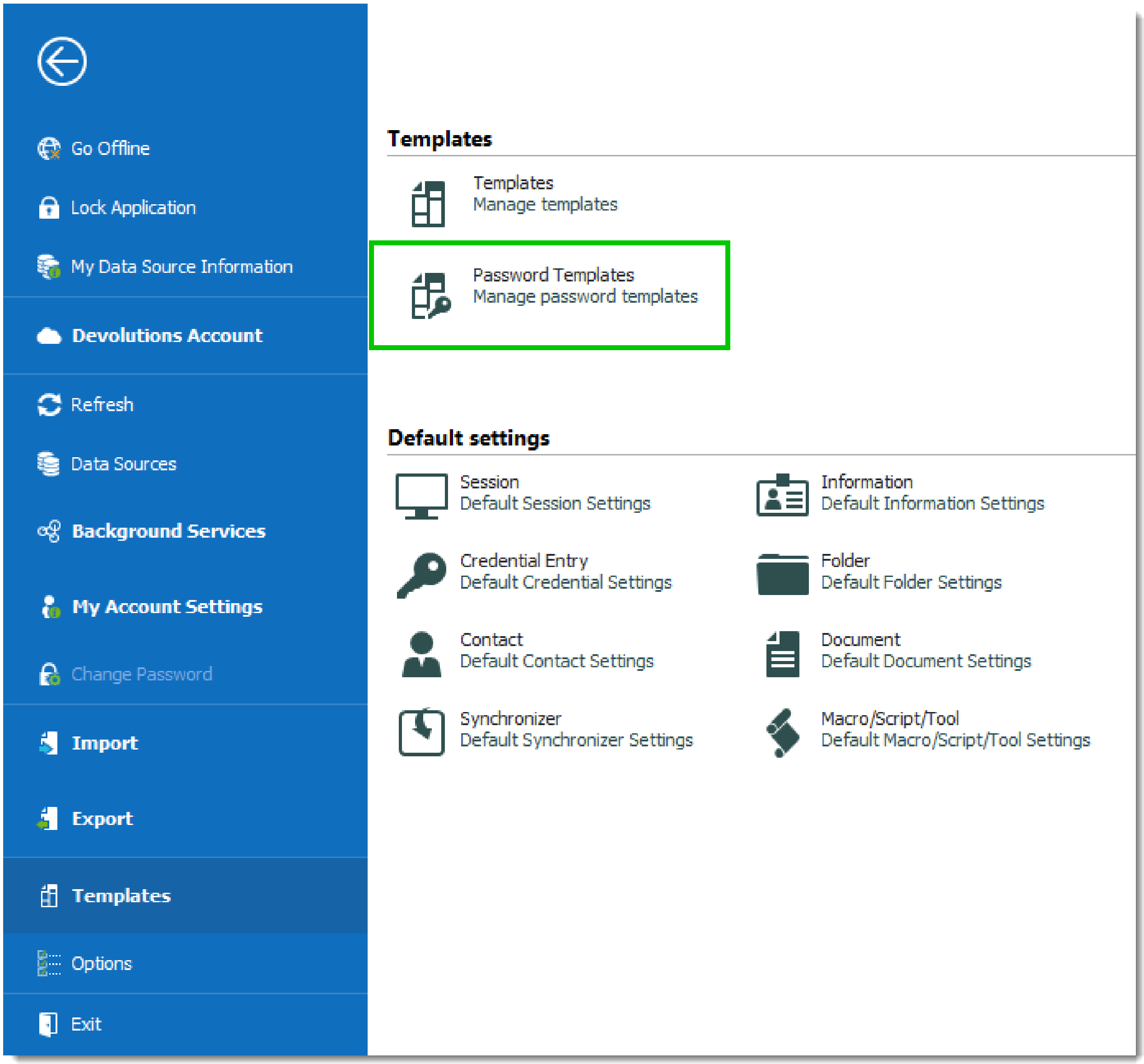
Password templates set requirements for the password format: characters usage, patterns, readability.

Password templates are available in the password generator. Password templates can be optional or required.

SETTINGS

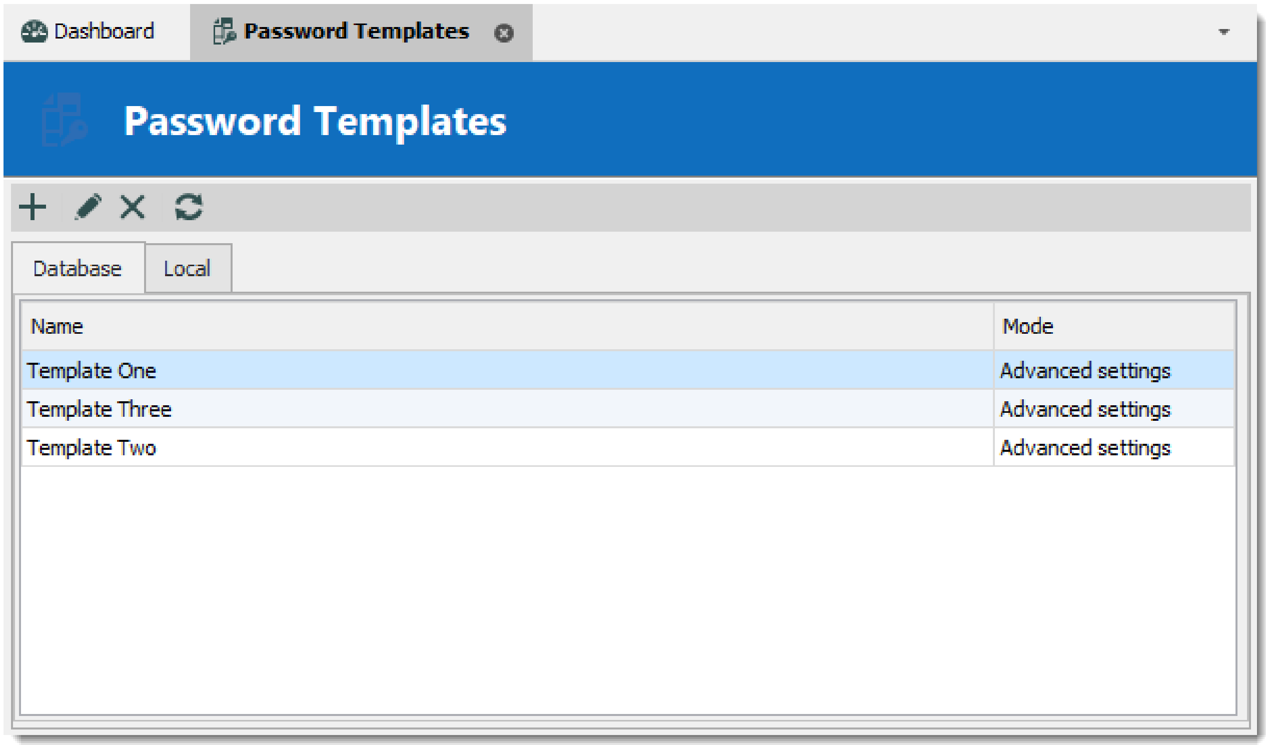
CREATE A PASSWORD TEMPLATE

1. Go to ***File – Templates,*** and click **Password Templates**.



File – Templates – Password Templates

2. The **Password Templates** window provides an overview of current templates, as well as add, edit and delete commands.



Name	Mode
Template One	Advanced settings
Template Three	Advanced settings
Template Two	Advanced settings

Password Template Window

3. To add a new template click **Add** (plus sign).

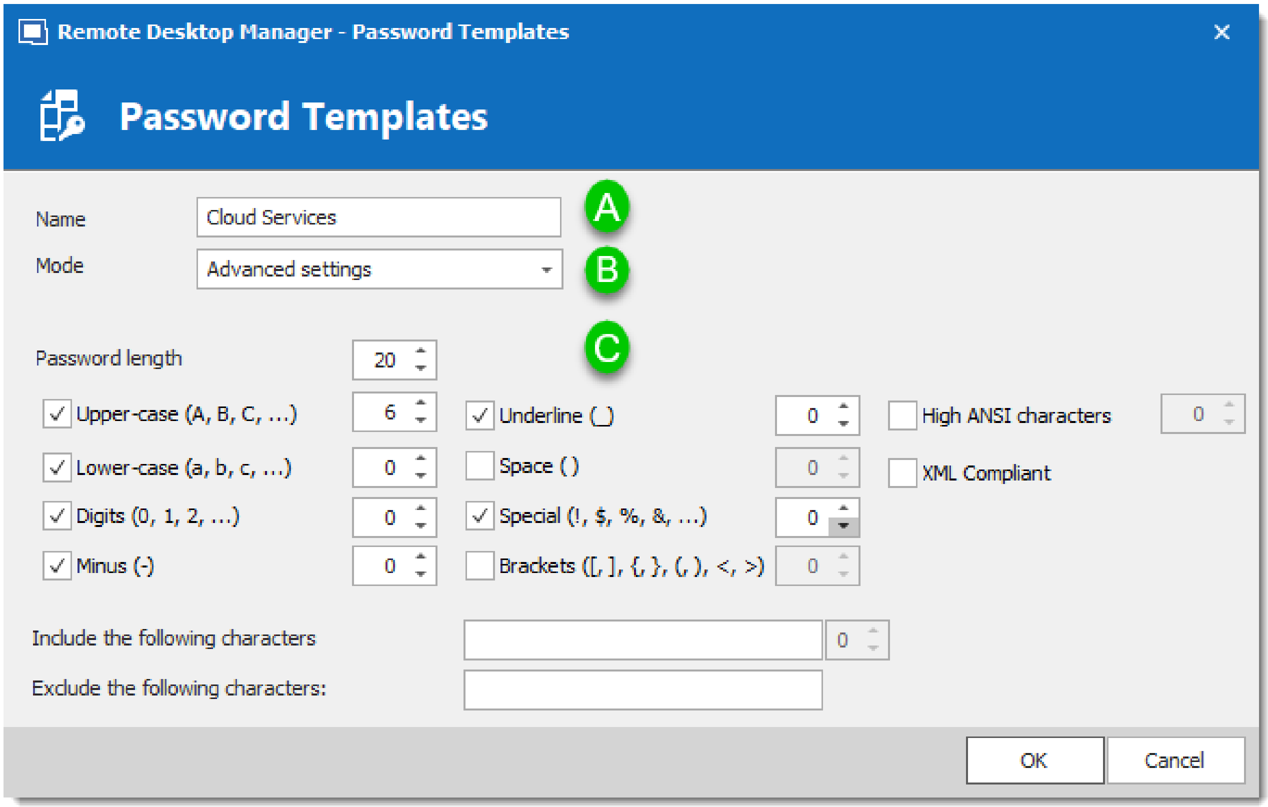
4. a) Enter a template name.

   b) Choose a **Mode** and configure the settings.

OPTION	DESCRIPTION
Default	General settings about length and minimum amounts for characters and symbols.
Advanced settings	Granular character settings (e.g. special characters and symbols, inclusions, exclusions).
Readable password	Settings for syllables, numbers and symbols.
Use a pattern	Set a pattern for the passwords using the key.

OPTION	DESCRIPTION
Pronounceable password	Settings for length, case, digits and characters.

c) Choose specific settings



Remote Desktop Manager - Password Templates

Password Templates

Name: Cloud Services

Mode: Advanced settings

Password length: 20

☑ Upper-case (A, B, C, ...) 6

☑ Lower-case (a, b, c, ...) 0

☑ Digits (0, 1, 2, ...) 0

☑ Minus (-) 0

☑ Underline (_) 0

☐ Space ( ) 0

☑ Special (!, $, %, &, ...) 0

☐ Brackets ([,], {, }, (,), <, >) 0

☐ High ANSI characters 0

☐ XML Compliant

Include the following characters: 0

Exclude the following characters:

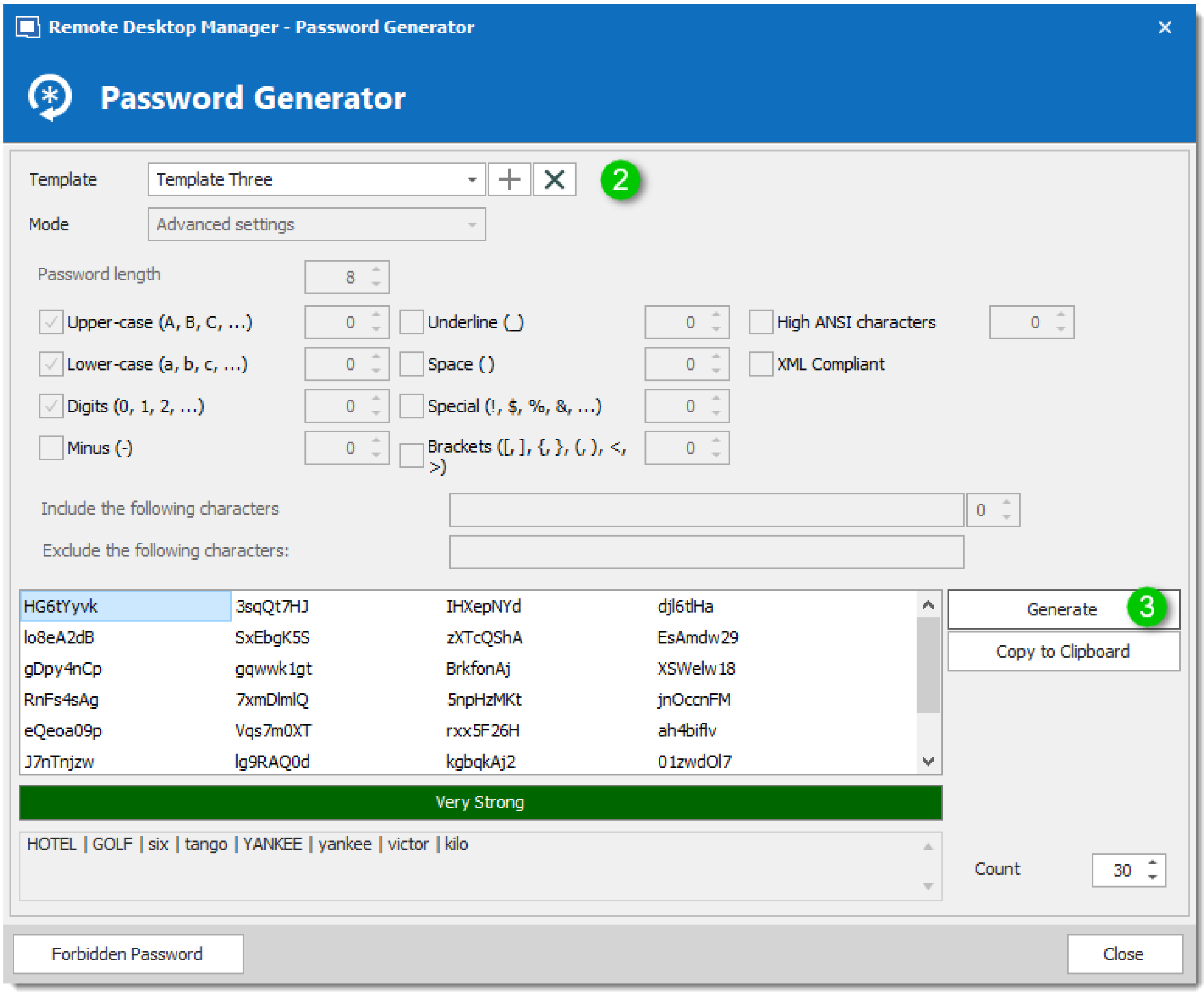
5. The password is now available in the **Password Generator** (**Tools** menu).

USE A PASSWORD TEMPLATE WITH PASSWORD GENERATOR

1. On the **Tools** tab, click **Password Generator**. Or open the password generator from an entry ⚙.

2. To choose a password template, select the title from the list. **Default** is equivalent to no template, until it is configured by an administrator. When you select a template the options are unavailable because they were saved in the template.

3. Click **Generate** to list possible passwords.



Template: Template Three

Mode: Advanced settings

Password length: 8

☑ Upper-case (A, B, C, ...) 0
☑ Lower-case (a, b, c, ...) 0
☑ Digits (0, 1, 2, ...) 0
☐ Minus (-) 0
☐ Underline (_) 0
☐ Space ( ) 0
☐ Special (!, $, %, &, ...) 0
☐ Brackets ([,], {, }, (,), <, >) 0
☐ High ANSI characters 0
☐ XML Compliant

Include the following characters: 0

Exclude the following characters:

HG6tYyvk	3sqQt7HJ	IHXepNYd	dj l6tlHa
lo8eA2dB	SxEbgK5S	zXTcQShA	EsAmdw29
gDpy4nCp	gqwwk1gt	BrkfonAj	XSWelw18
RnFs4sAg	7xmDlmlQ	5npHzMKt	jnOccnFM
eQeoa09p	Vqs7m0XT	rxx5F26H	ah4biflv
J7nTnjzw	lg9RAQ0d	kgbqkAj2	01zwdOl7

Very Strong

HOTEL | GOLF | six | tango | YANKEE | yankee | victor | kilo

Count: 30

Password Generator using a password template

SET A DEFAULT PASSWORD TEMPLATE

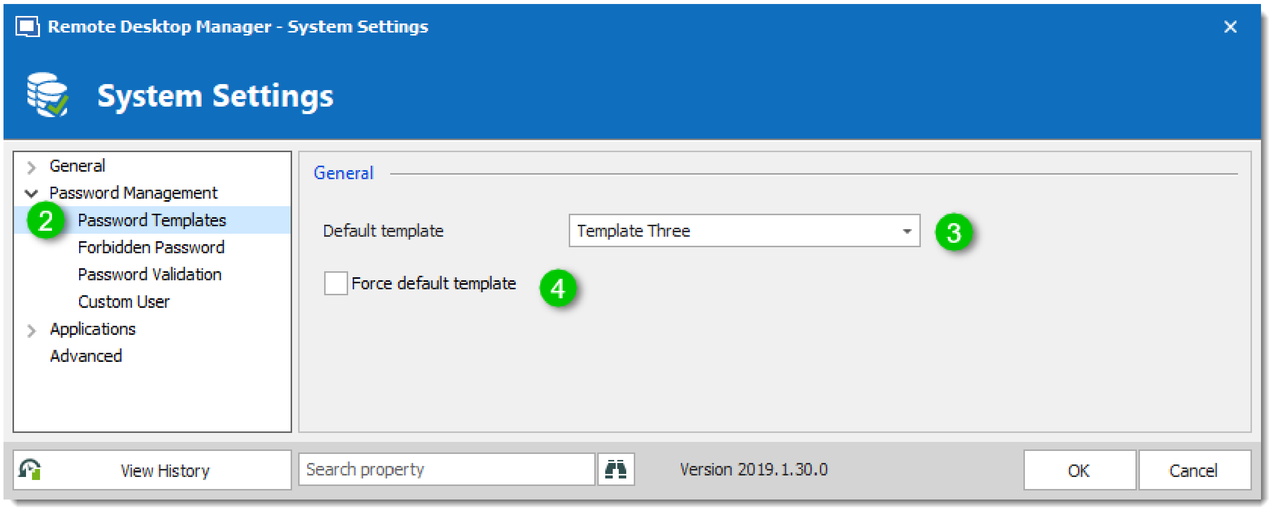
The default template in the **Password Generator** is set to "no template" until an administrator configures the template.

1. On **Administration**, click **Data Source Settings (System Settings)**.

2. Click **Password Templates**.

3. Choose the template. The chosen template will now be the **Default** in Password Generator.

4. If you want to force one template, check **Force default template**. No other choices will be available in the password generator.



General

Default template: Template Three

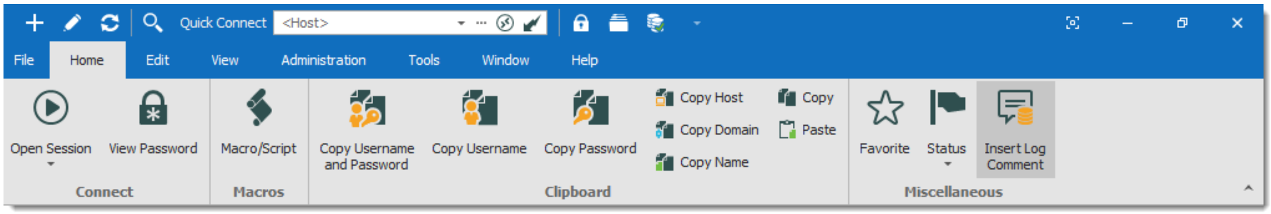
□ Force default template

System Settings – Password Templates

7.3 Home

DESCRIPTION

The **Home** ribbon tab allows you to apply an action on the currently selected session. The ribbon will display the following tab when the session is embedded.



Ribbon - Home

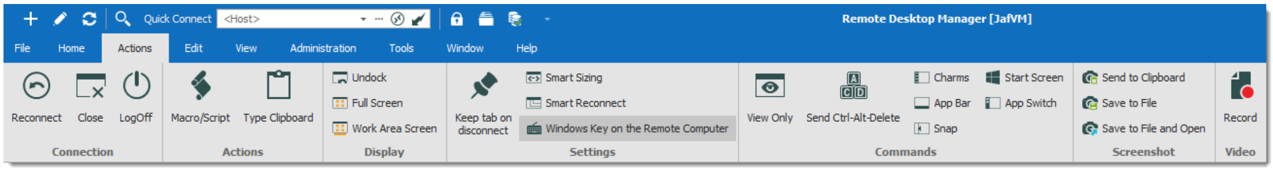
- Connect.
- Macros.
- Clipboard: Configure clipboard in ***File – Options.***
- Miscellaneous.

7.4 Actions

DESCRIPTION

The **Actions** tab is only available when a session is open. Available actions differ depending on the action.

For our example we are running an RDP session. The ribbon will display the following tab when the session runs with the Embedded (tabbed) display mode.



Ribbon - Actions

CONNECTION

OPTION	DESCRIPTION
Reconnect	Quickly close the session and then re-open it automatically. Use it to update the resolution of your embedded RDP connections when you resize the window.
Close	Close the active session.
LogOff	Logoff the RDP session. See Logoff topic for more information.

ACTIONS

Option	**Description**
Execute	Execute the selected macro or script in the previous window or in the current tab. This is only available when there is something to Execute.
Macro/Script	Displays a window where you can select a macro or script, as well as the execution options.

Option	Description
Type Clipboard	Send the content of the clipboard over to the opened session.

DISPLAY

OPTION	DESCRIPTION
Undock	Undock your embedded session and move it anywhere outside Remote Desktop Manager or even on another monitor.
Embedded	Re-embed your session when your session is undocked. This option will only appear if your session is not already in an embedded mode.
Full Screen	Display your session in full screen outside Remote Desktop Manager.
Work Area Screen	This mode allows you to open the connection in full screen but to also have access to your local taskbar.

SETTINGS

OPTION	DESCRIPTION
Keep tab on disconnect	Your session tab will stay after a session disconnect. For more information, see Keep Tab Opened topic.
Smart Sizing	Enable or disable the RDP smart sizing. This setting will determine whether or not the client computer can scale the content on the remote computer to fit the window size of the client computer.

OPTION	DESCRIPTION
Smart Reconnect	Automatically reconnect your session with the most appropriate band.
Windows Key on the Remote Computer	When enabling **Windows key**, it will send the function to your host instead of running it on your computer.

COMMANDS

This tab contains multiple type of commands and keystrokes combinations to affect the current session in a variety of instances. As such, these commands depend on the currently selected (and opened) entry. For a few example scenarios, refer to the following topics:

- RDP
- VNC
- SSH Shell (Rebex)
- Telnet

Session add-ons may add custom command in this section, they will not be documented in these topics but rather in the add-on documentation.

SCREENSHOT

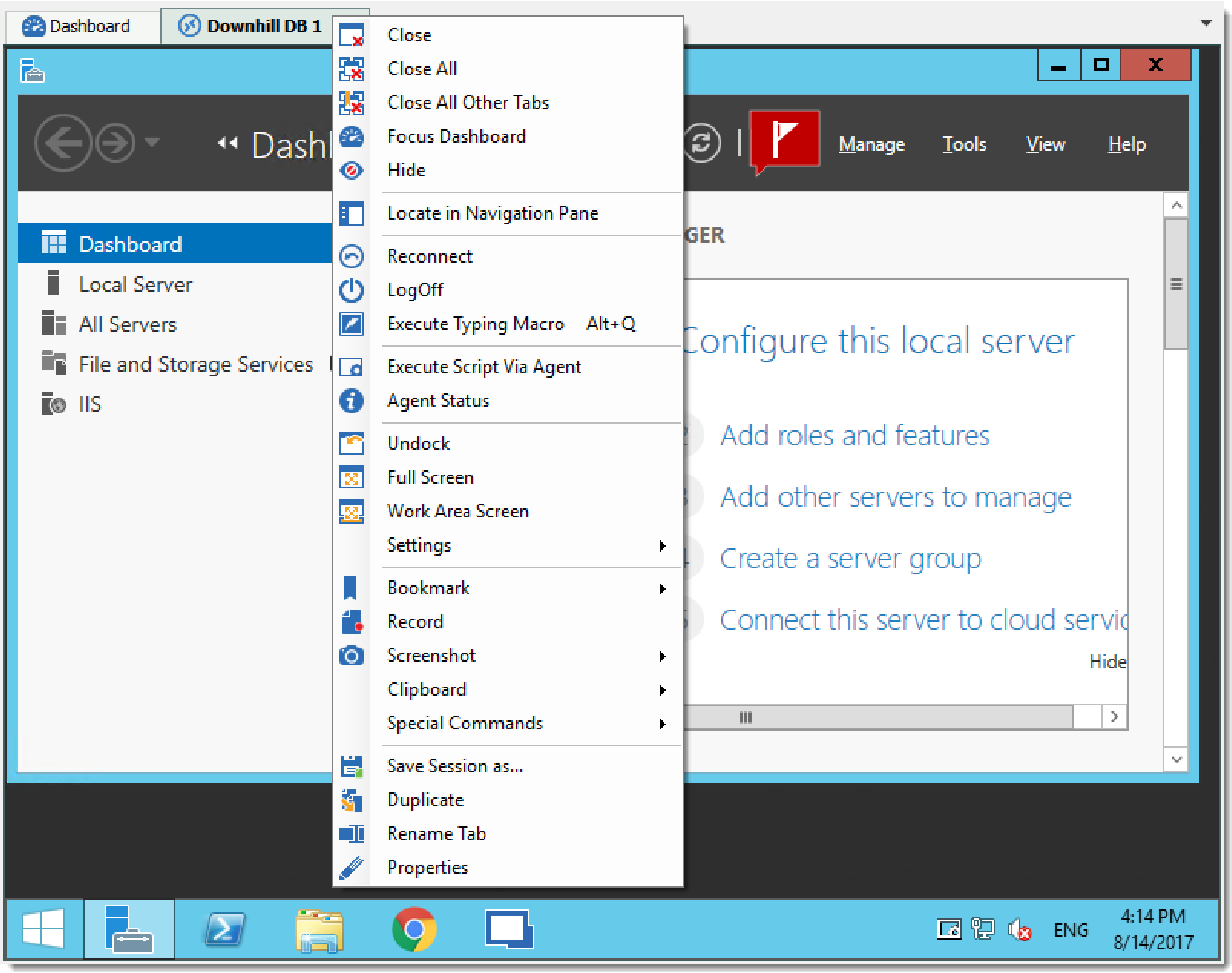
OPTION	DESCRIPTION
Send to Clipboard	Performs a typical capture to the clipboard.
Save to File	Prompts for a file name and saves the capture to that file.

OPTION	DESCRIPTION
Save to File and Open	Prompts for a file name and saves the capture to that file, then automatically open the file using your default editor.

VIDEO

OPTION	DESCRIPTION
Record	Record your screen in an MP4 format. We recommend the use of a VLC player to view the recorded video.

Alternatively, these actions are also available by **right-clicking** on the tab of an embedded session.



Actions Context Menu of an Embedded Session

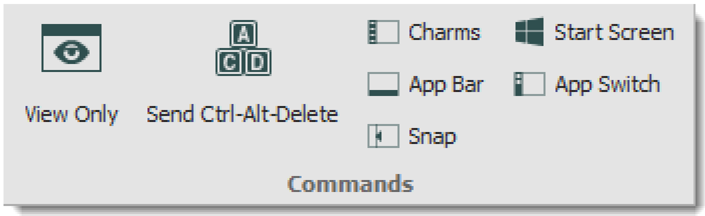
7.4.1 Commands

7.4.1.1 RDP

DESCRIPTION

The commands for an RDP session allows you to send remote commands to your host.

SETTINGS



RDP Commands

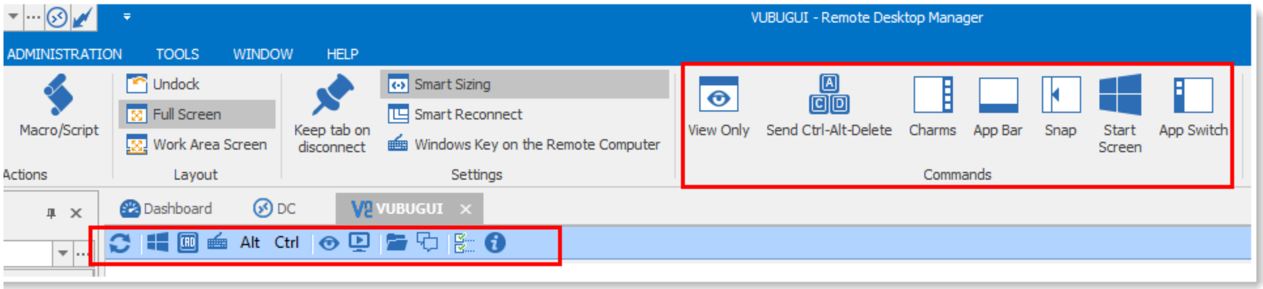
OPTION	DESCRIPTION
View Only	Prevent the session from receiving any input from the keyboard or the mouse. This feature was requested to allow monitoring while preventing manipulation errors. Use it to have a read only access to the remote server.
Send Ctrl+Alt+Delete	Send the key combination CTRL+ALT+DELETE to the host.
Charms	On Windows 8 or Windows 2012 server, displays the Charms bar (Search, Share, Start, Devices, and Settings bar).
App Bar	On Windows 8 or Windows 2012 server, displays the App bar to show navigation, commands, and tools.
Snap	On Windows 8 or Windows 2012 server, allows you to run two applications side-by-side.
Start Screen	Open the Start menu on the host computer.
App Switch	On Windows 8 or Windows 2012 server, switches from an application to another.

7.4.1.2 VNC

DESCRIPTION

The VNC Commands allows you to send remote commands to your host. You will also notice another toolbar holding more defined commands for a VNC session.

SETTINGS



VNC Commands

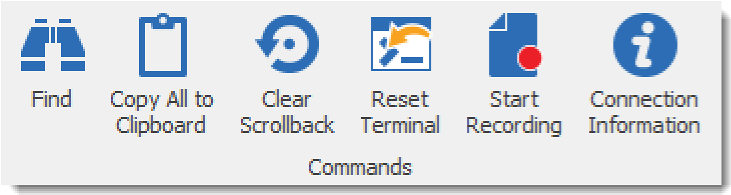
OPTION	DESCRIPTION
Refresh Screen	Refresh the host screen.
Window Start Menu	Open the Start menu on the host computer.
Send Ctrl-Alt-Delete	Send the key combination CTRL+ALT+DELETE to the host.
Send Custom Keys	Send custom keys combination to the host.
Alt	Send ALT to the host.
Ctrl	Send CTRL to the host.
View only mode	This will prevent the session from receiving any input from the keyboard or the mouse. This feature was requested to allow monitoring while preventing manipulation errors. Use it to have a read only access to the remote server.
Remote input	Keyboard and pointer events will be sent to the server and the local and remote clipboard will be synchronized.
Open file transfer	Open the file transfer with the host computer.
Open chat dialog	Open a chat dialog with the host computer.

OPTION	DESCRIPTION
Options	Open the Connection Options window.
Information	Open the window containing information regarding your VNC connection status and traffic.

7.4.1.3 SSH Shell (Rebex)

DESCRIPTION

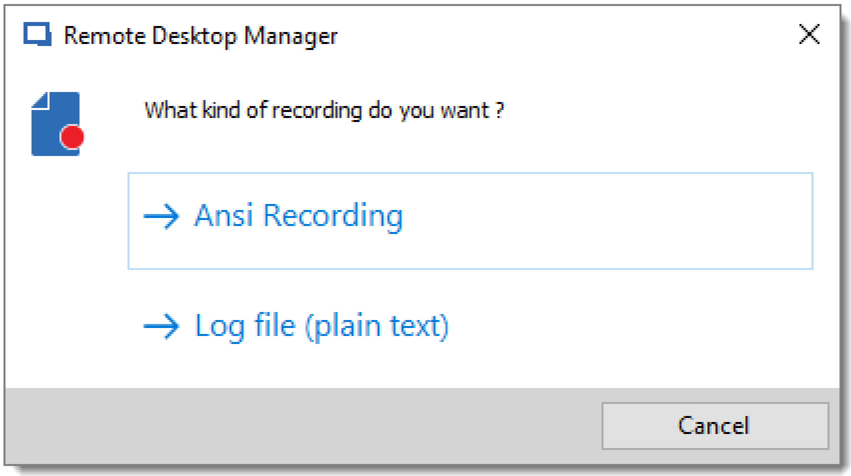
The commands for a SSH Shell session allows you to send remote commands to your host.



Actions – SSH Shell (Rebex) Commands

OPTION	DESCRIPTION
Find	Open a find window to search for a specific word.
Copy All to Clipboard	Copy all selected text to the Clipboard.
Clear Scrollback	Clear the scrolling display that precedes the current line.
Reset Terminal	Reset host terminal connection.

START RECORDING

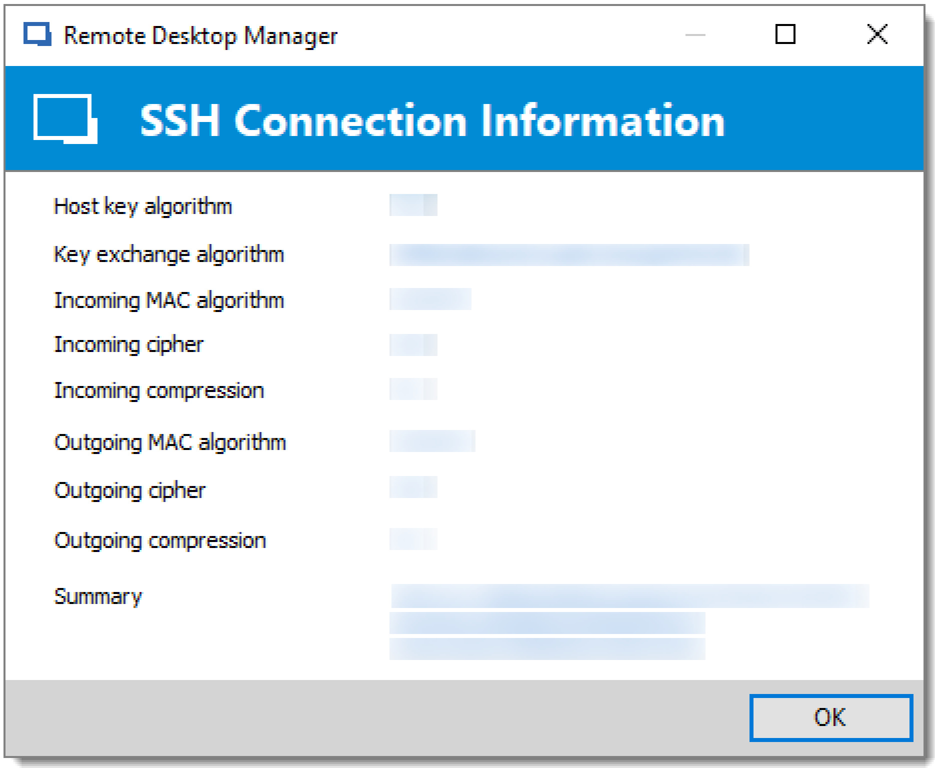


Recording type

OPTION	DESCRIPTION
Ansi Recording	Record all of the activity in the SSH session using the Ansi format. This can be replayed like a video using ***Tools - Tools - Terminal playback (Ansi)***.
Log file (plain text)	Record all of the activity in the SSH Shell (Rebex) session using a text format.

CONNECTION INFORMATION

Provides connection host information in a form as shown below.



Host key algorithm [redacted]

Key exchange algorithm [redacted]

Incoming MAC algorithm [redacted]

Incoming cipher [redacted]

Incoming compression [redacted]

Outgoing MAC algorithm [redacted]

Outgoing cipher [redacted]

Outgoing compression [redacted]

Summary [redacted]

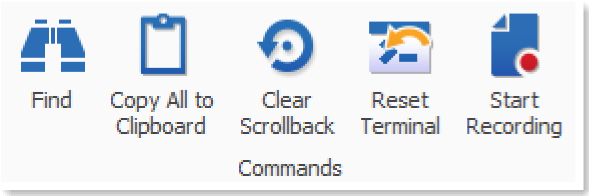
SSH Connection Information

7.4.1.4 Telnet

DESCRIPTION

The actions for a Telnet session allows you to send remote commands to your host.

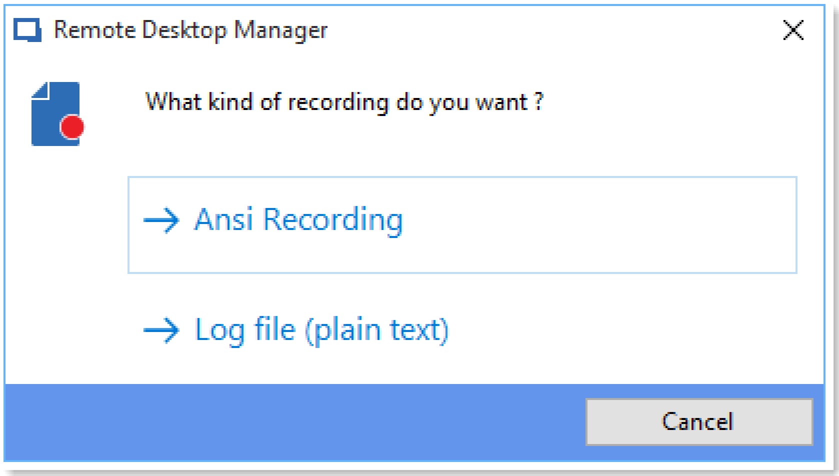
SETTINGS



Telnet Commands Actions

OPTION	DESCRIPTION
Find	Open a find window to search for specific words.
Copy All to Clipboard	Copy all selected text to the Clipboard.
Clear Scrollback	Clear the scrolling display that precedes the current line.
Reset Terminal	Reset host terminal connection.

START RECORDING

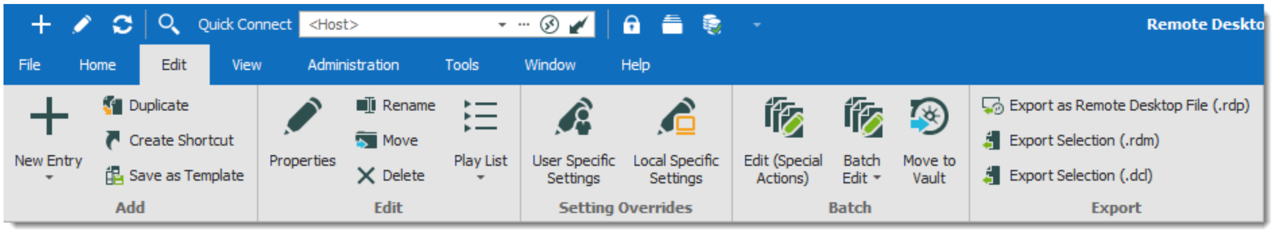


OPTION	DESCRIPTION
Ansi Recording	Will record all of the activity in the SSH session using the Ansi format. This can be replayed like a video using ***Tools - Tools - Terminal playback (Ansi)***.
Log file (plain text)	Will record all of the activity in the SSH session using a text format.

7.5 Edit

DESCRIPTION

The **Edit** tab contains operations to quickly Add, Edit, Overrides, Batch Edit or Export entries.



Ribbon - Edit

ADD

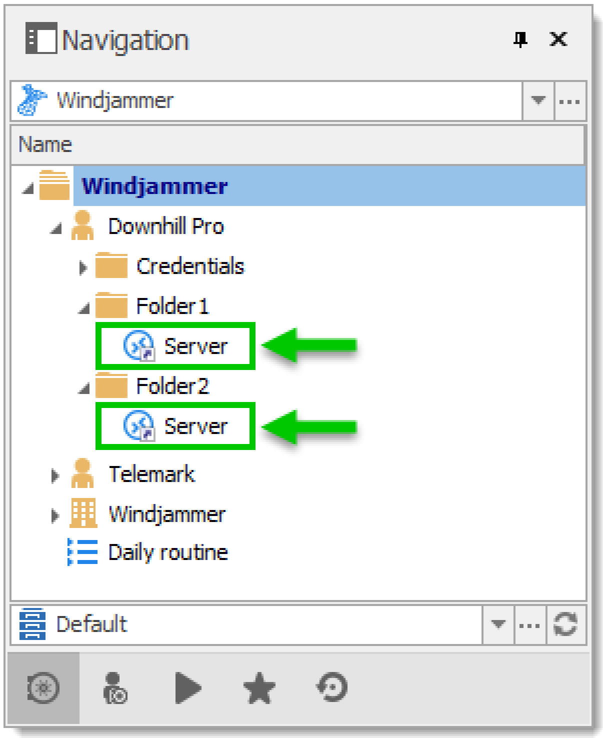
OPTION	DESCRIPTION
New Entry	Create a new entry (session, folder, information entry, credentials, etc.).
Duplicate	Create a duplicate of your entry.
Create Shortcut	Link your entry to more than one group. For more information, consult the text below.
Save as Template	Save the selected entry as a local or database template.

A shortcut is the reiteration of an existing entry. In contrast to a duplicated entry, which has its own ID and properties, a shortcut is a link to an entry and its properties. You can create shortcuts easily by right-clicking the entry ***Edit – Create Shortcut*** or by using the aforementioned button in the **Edit** tab. There are a few scenarios where a user would want to use the same entry differently, such as connecting to two different hosts with a single RDP session.

For example, it is possible to:

- Assign different access to the same entry.

- Create a favorite folder with everything centralized.
- Reuse a document for different scenarios.



These two entries are the exactly the same

Entries reiterated this way also have both folder paths indicated in their Folder field in their properties, the paths are separated by a semi-colon.

> There is no visual differences between the shortcut and the original entry. Therefore, you'll need to delete all entries to completely remove said entry. You will be asked for confirmation when attempting to delete said shortcut.

EDIT

OPTION	DESCRIPTION
Properties	Edit the properties of the selected entry.
Rename	Rename the selected entry.
Move	Move the selected entry to another folder.
Delete	Delete the selected entry. A confirmation dialog is displayed to confirm the action.
Play List	Use the various play list features.

The **Play List** feature in Remote Desktop Manager is a lot like a music play list. It opens a list of entries, in a specific order, automatically.The Play List can be used to create groups of sessions for a specific task or for security reasons. You can build your own Play List and start all entries from a Play List at the same time.

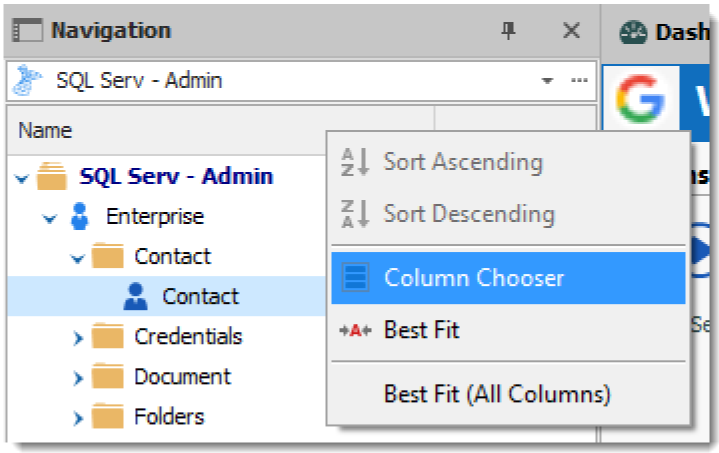
- Create and Edit a Play List
- Using a Play List

SETTING OVERRIDES

OPTION	DESCRIPTION
User Specific Settings	Override properties of the selected entry with settings with settings specific to the current user. For more information, please consult the Specific Settings topic.

OPTION	DESCRIPTION
Local Specific Settings	Override properties of the selected entry with settings specific to the local machine. For more information, please consult the Specific Settings topic.

A Specific Settings column can be added in the Navigation Pane. **Right-click** on the column **Name** in the Navigation Pane and select **Column Chooser**. **Double-Click** on **Specific Settings** to add the column. Now, if there is a specific setting applied to an entry, it is displayed next to the entry's name.



Navigation Pane - Column Chooser

BATCH

OPTION	DESCRIPTION
Edit (Special Actions)	Perform special actions on the selected entries, such as change the type, run a script, and more. For more information, please consult the Batch Actions Samples.
Batch Edit	Perform an action on multiple entries at once. This is particularly useful for doing mass modifications of entries (such as changing the display mode after modifying the workspace or their credential entries when changing your passwords). Multiple entries must be selected for this feature to be visible. For more information, please consult the Batch Edit topic.
Move to Vault	Transfer the selected entries to another Vault in the database.

EXPORT

OPTION	DESCRIPTION
Export Entry as Remote Desktop File (.rdp)	Export the selected entries in a Remote Desktop File (.rdp) format.
Export Selection (.rdm)	Export the selected entries in a .rdm file that can then be imported into any Remote Desktop Manager data source. You could choose to include the credentials of your entry in your export format and secure your file with a master key.

7.5.1 Edit

7.5.1.1 Play List

7.5.1.1.1 Create and Edit a Play List

DESCRIPTION

You can create Local or Shared play List in Remote Desktop Manager. There's several methods to create or edit a Play List:

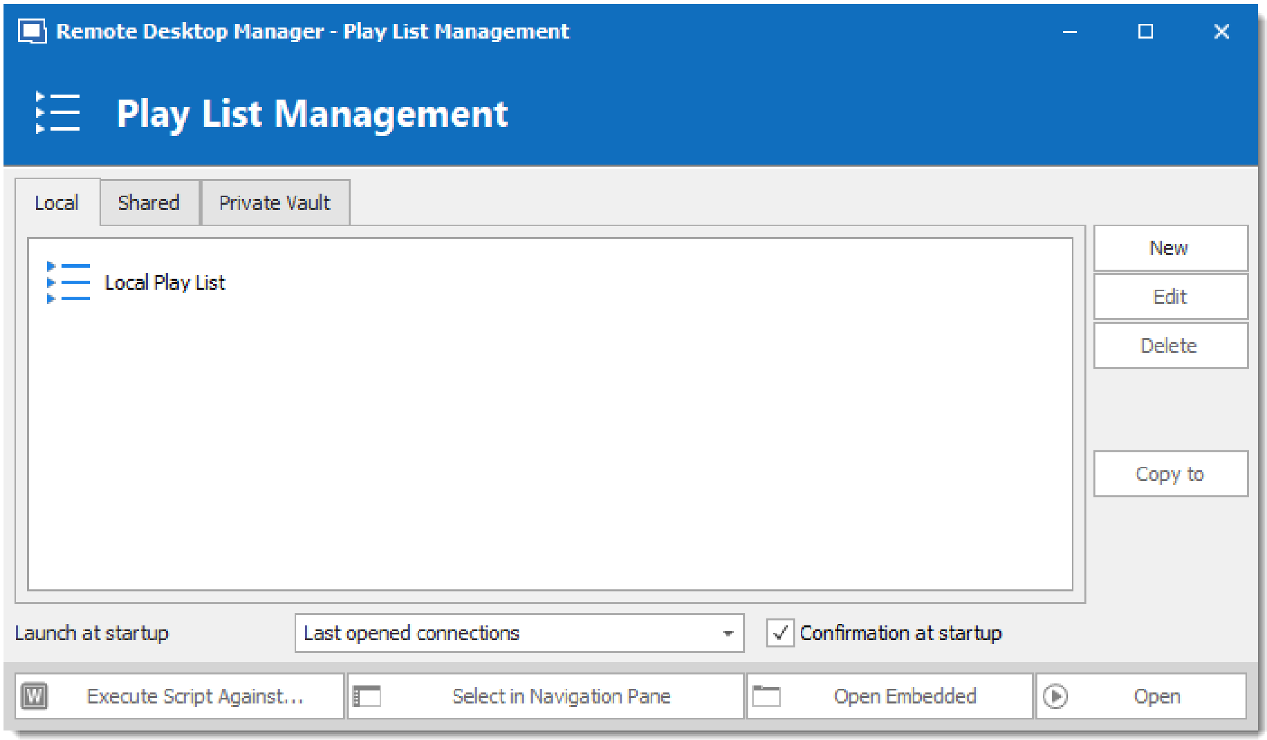
- Using the Play List Management.
- Create Play List depending on entries state and selection.
- Edit an existing Play List

You can also use the context menu to create and edit your **Play List**. When your entries are selected, **right-click** in the Navigation Pane and select ***Play List – Create Play List*** or ***Add to Play List***.

SETTINGS

USE THE PLAY LIST MANAGEMENT

You can access this by selecting Play List Management in the ribbon.



Launch at startup: Last opened connections

☑ Confirmation at startup

Local Play List

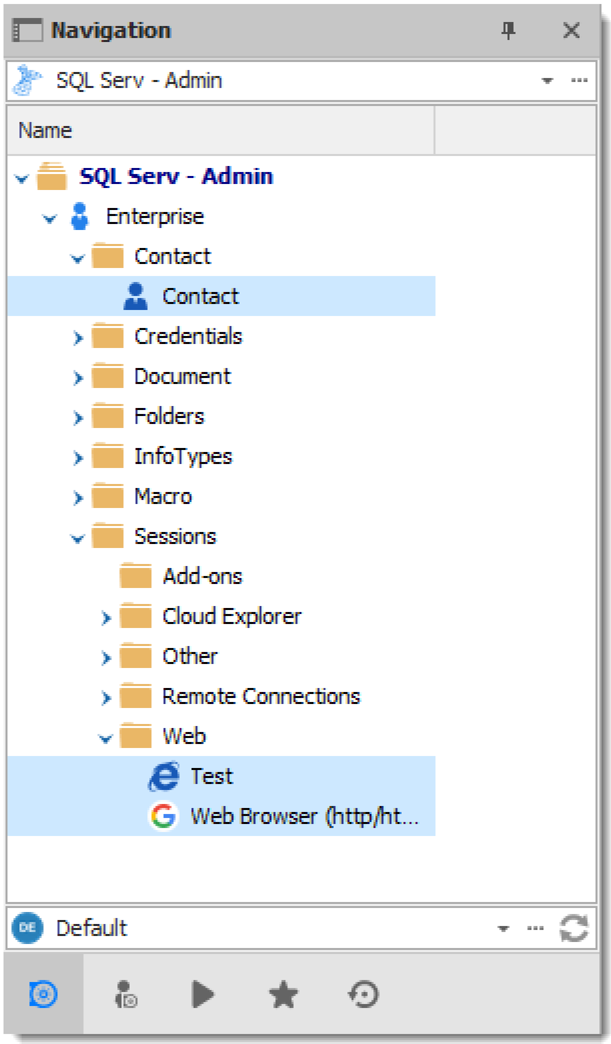
Play lists can be saved three different ways:

OPTION	DESCRIPTION
Local	The Play List is saved locally and can only be accessed as such. These can only be launched through the Play List Management.
Shared	The Play List is saved in the database. It can be accessed by anyone on the data source. These can be launched through the Play List Management or by using the entry itself.
Private Vault	The Play List is saved in your Private Vault and can only be accessed by the user. These can be launched through the Play List Management or by using the entry itself.

ACTIONS

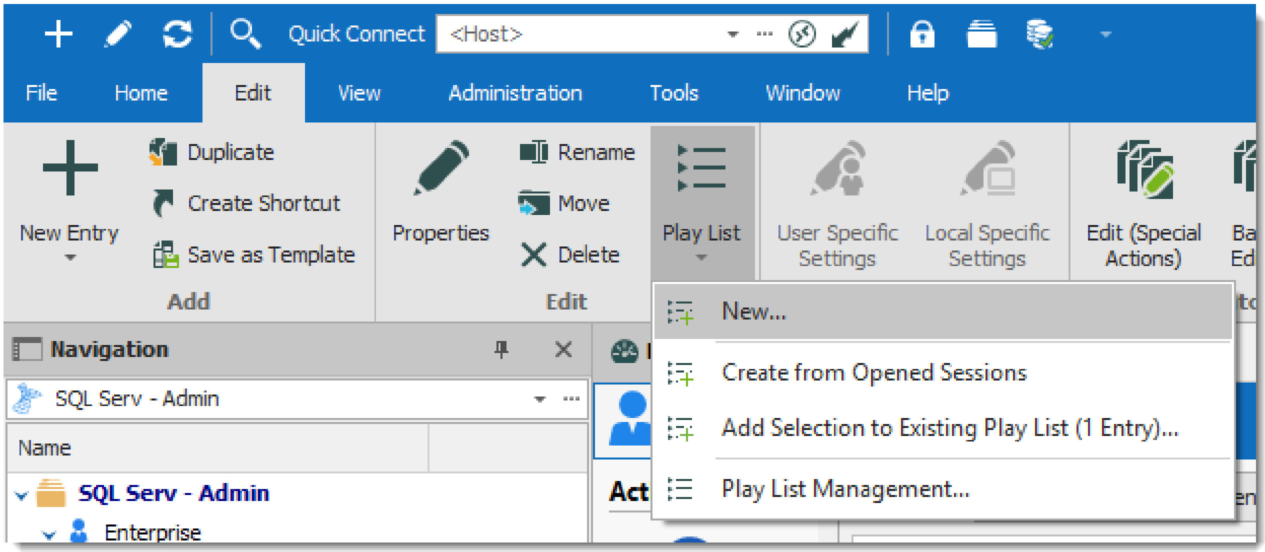
CREATE PLAY LIST DEPENDING ON ENTRIES STATE AND SELECTION

1. If you wish to pre-determine a list of entries, select them for your Play List in the Navigation Pane.



Selected Entries in the Navigation Pane

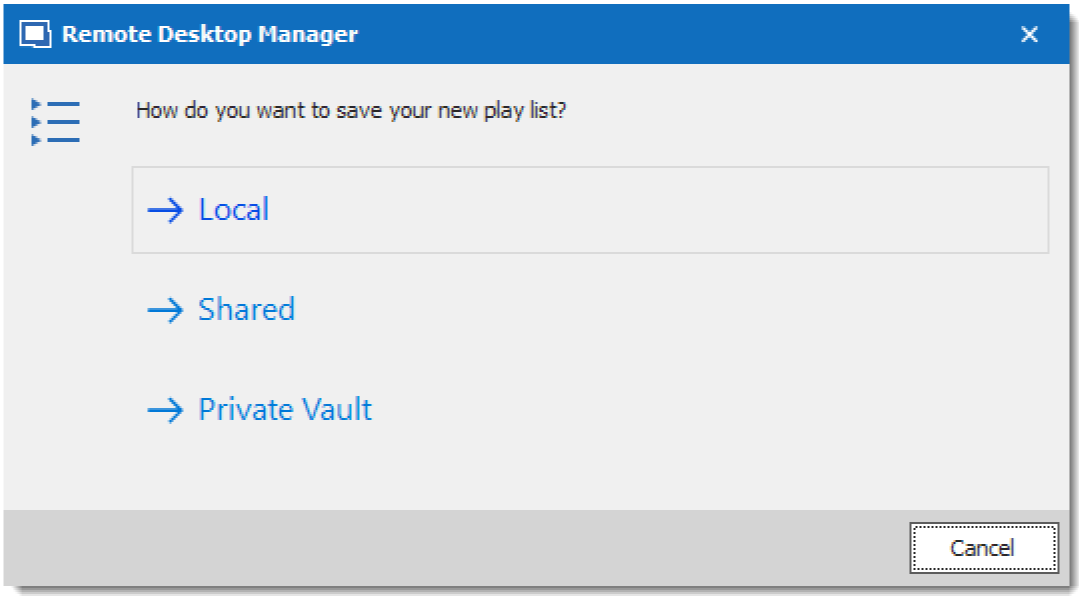
2. On the **Edit** ribbon menu, click **Play List,** then select whichever setting you prefer.



Edit - Play List - New

OPTION	DESCRIPTION
New	Creates a new Play List directly, a window prompt will ask you where you wish to save it and which selection you would like to highlight.
Create from Opened Sessions	Brings up the window for creating a new Play List with all currently opened session already selected for the Play List. You can select and remove additional entries if desired.
Add Selection to Existing Play List (X Entry)	Prompts a window where you can select currently accessible Play Lists and adds the selection in the Navigation Pane to the Play List.

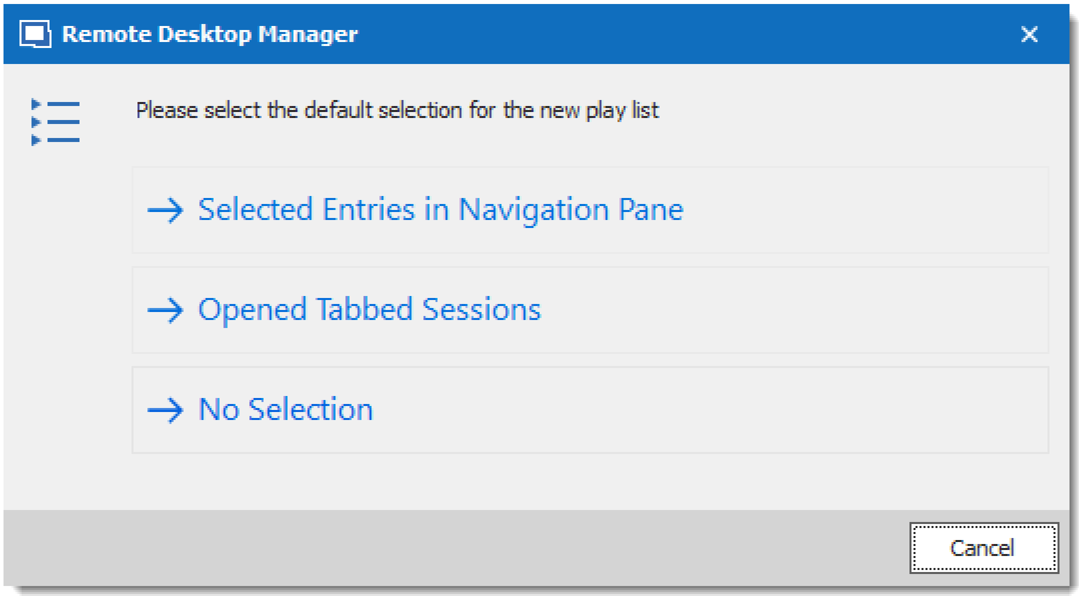
3. Choose if you wish to save your Play List locally, in a shared Vault or in your Private Vault. Saving it locally will prompt a different window. This window will contain everything needed for a local Play List.


Remote Desktop Manager

How do you want to save your new play list?

Save New Play List

4. The next window lets you choose how you want your current selection or opened sessions to affect your playlist.


Remote Desktop Manager

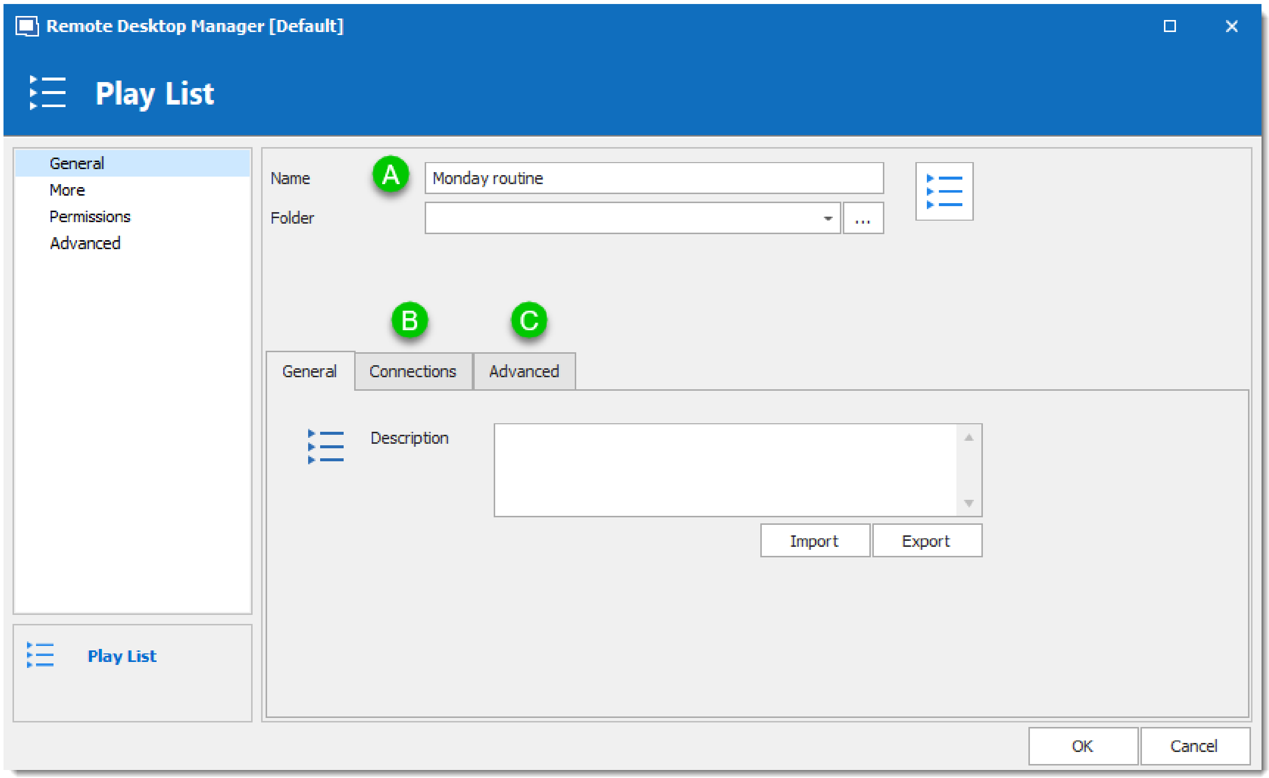
Please select the default selection for the new play list

Selected Entries in Navigation Pane

OPTION	DESCRIPTION
Selected Entries in Navigation	All currently selected entries in the Navigation Pane will already be selected for your Play List. You can still add and remove entries to

OPTION	DESCRIPTION
Pane	the Play List if you desire.
Opened Tabbed Sessions	All currently opened sessions (Embedded only) will already be selected for your Play List. You can still add and remove entries to the Play List if you desire.
No Selection	No pre-determined selection will be taken into account, create your Play List from a fresh start.

5. a) Enter a name for your Play List.
b) You can review, add or remove entries from the play list on the connections tab.
c) In Advanced you can set how the entries open.



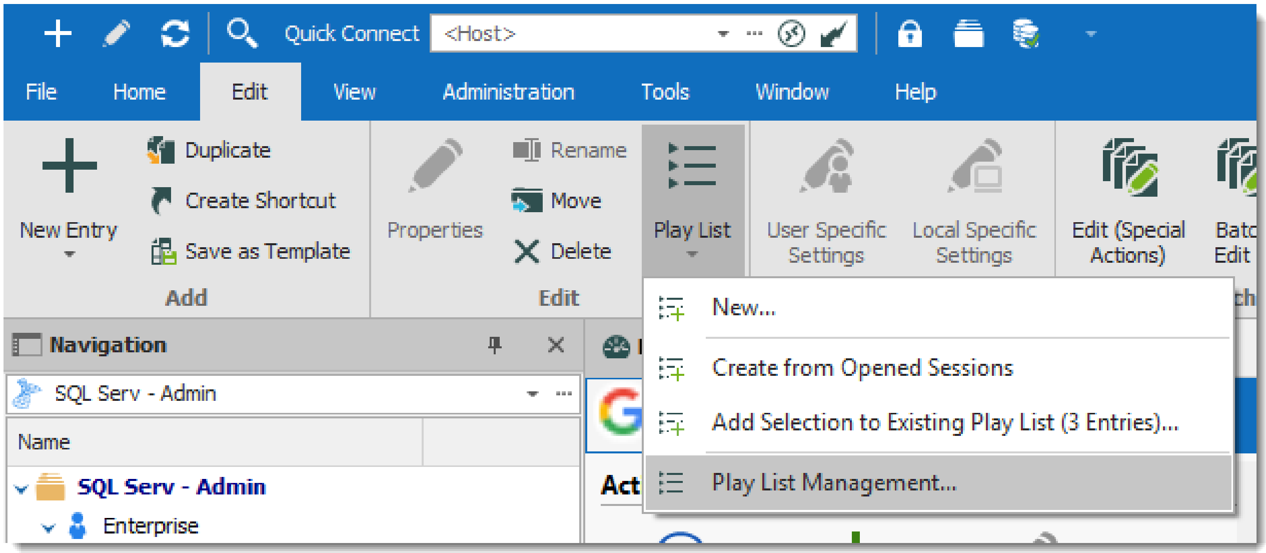
Name: Monday routine
Folder:

Play List Editor

And there you have it, your Play List is ready for use.

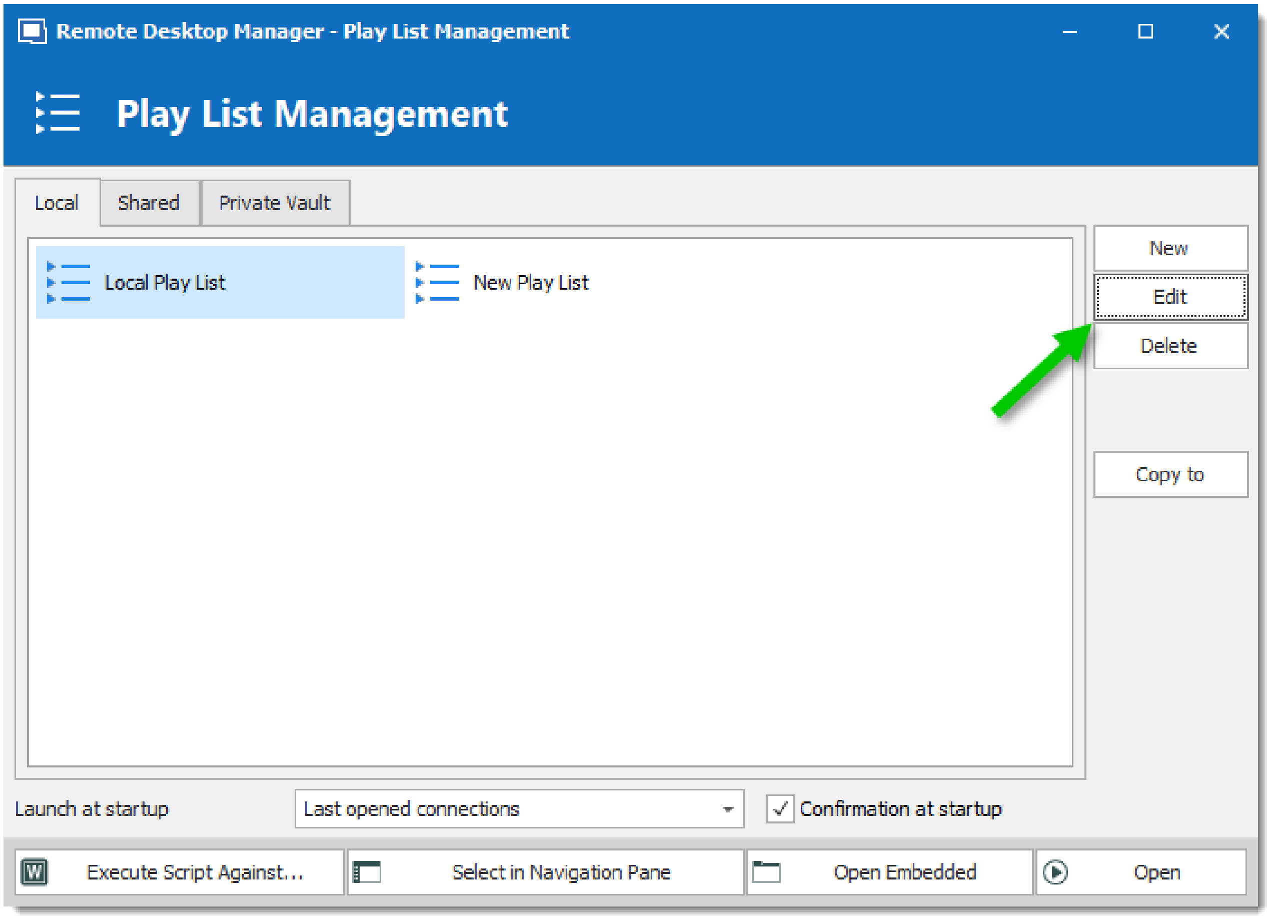
EDIT EXISTING PLAY LIST

1. On Edit, click **Play List Management.**



View - Play List Management

2. Select the Play List you wish to modify and click **Edit**.



Play List Management

If the Play List is shared or saved in your Private Vault, you can also **right-click** the entry and click Properties to access it.

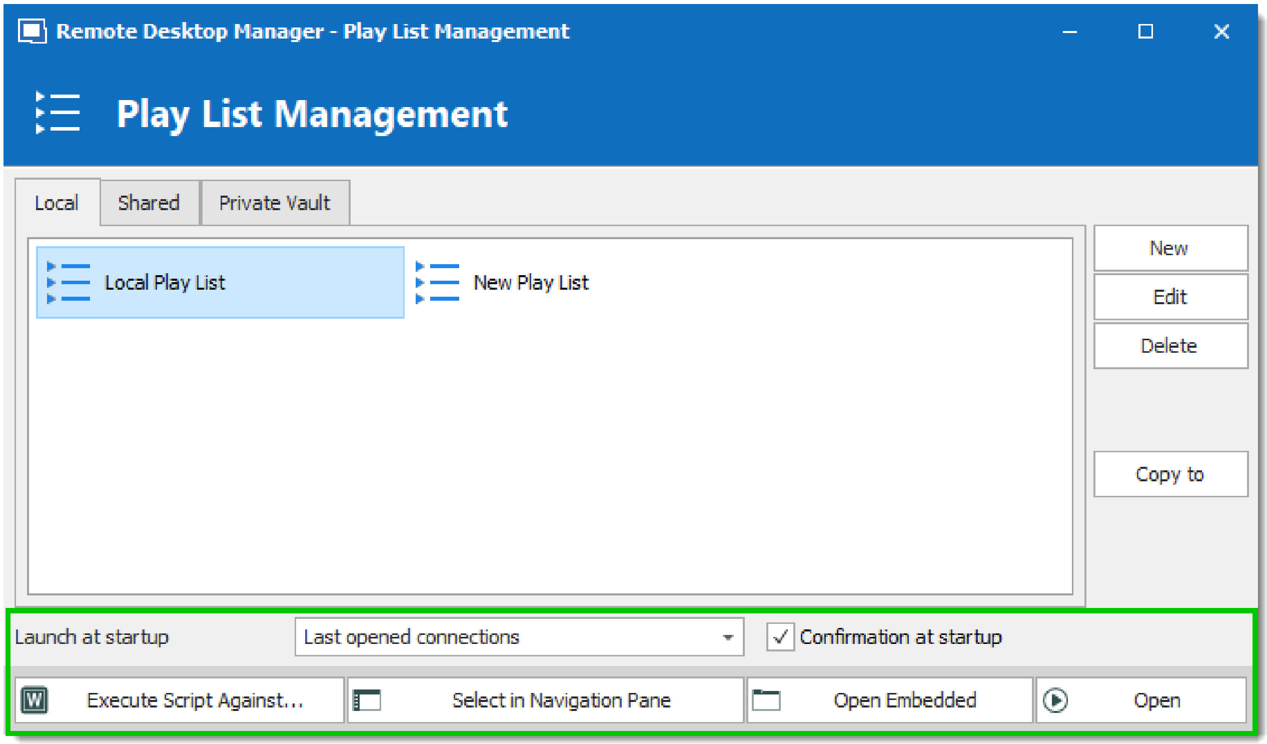
7.5.1.1.2 Play List Management

SETTINGS

USING A PLAY LIST

First, open your Play List Management ***Edit – Play List – Play List Management***.

There are five methods to using your Play List.



Default Mode

OPTION	DESCRIPTION
Open	Launch the selected Play List.
Open Embedded	Overrides the display selection of entries inside the Play Lists and launches them as Embedded (some entries might not support this).
Select in Navigation Pane	Selects all entries the Play List contains in the Navigation Pane.
Execute Script Against...	This will prompt for you to select the **Typing Macro** (exclusively) you wish to execute against your Play list.
Launch at startup	Here you can select a specific Play List you would like launched whenever the application starts. You can also default back to **None** or **Last opened Connections**.

7.5.2 Setting Overrides

7.5.2.1 Specific Settings

DESCRIPTION

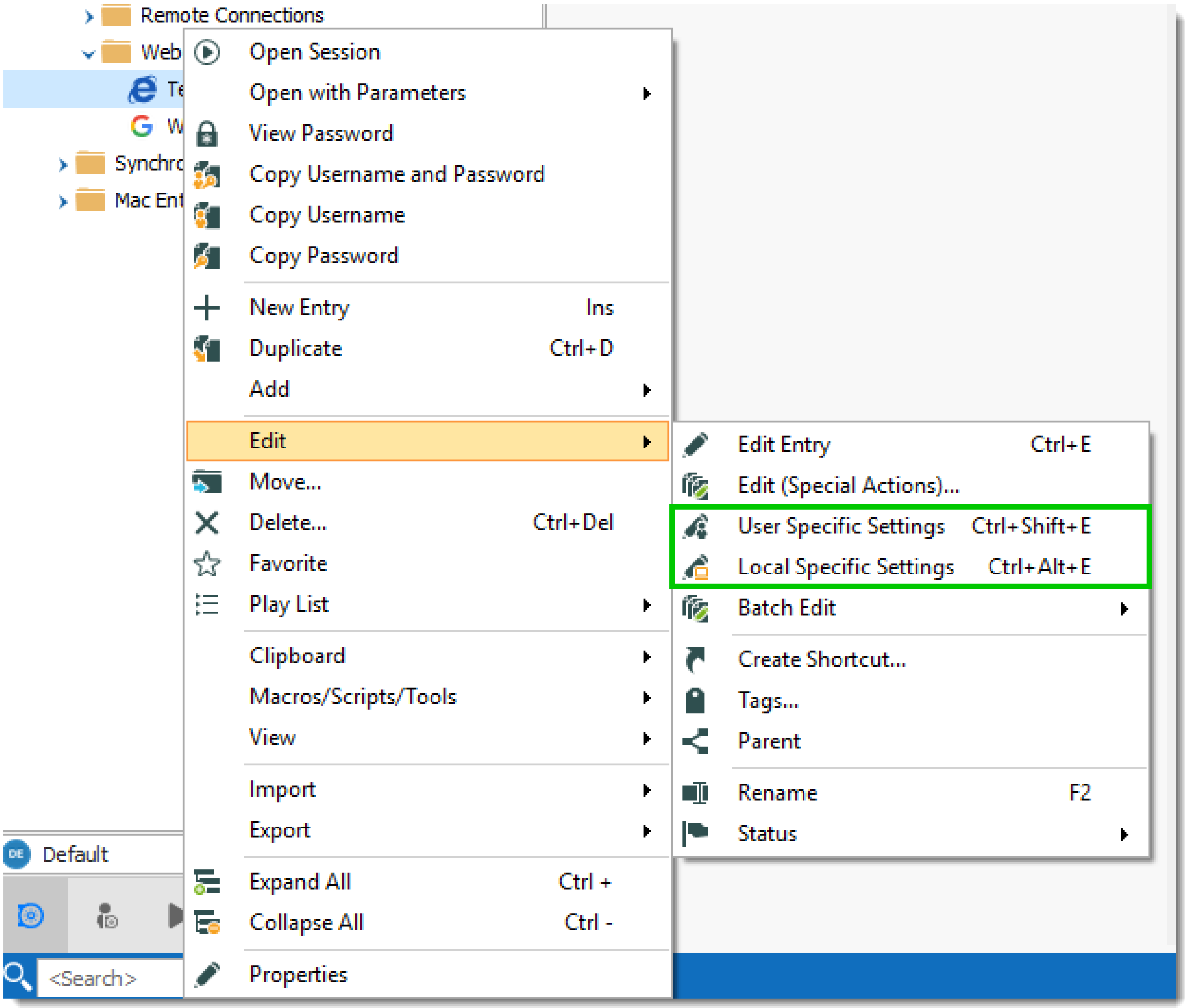
Specific Settings are used to override the properties of an entry. Several settings can be overridden, such as the credentials or the display mode. There are two types of Specific Settings: user Specific Settings and local machine Specific Settings.

- **User Specific Settings** override an entry's properties for a single user.
- **Local Specific Settings** override an entry's properties for all users of a specific device.

This feature is only available when using an Advanced Data Source. A setting on the data source allows usage of Specific Settings. Contact your administrator if the menu is grayed out.

If both User Specific Settings and Local Specific Settings are defined on the same entry, Local Specific Settings have the priority.

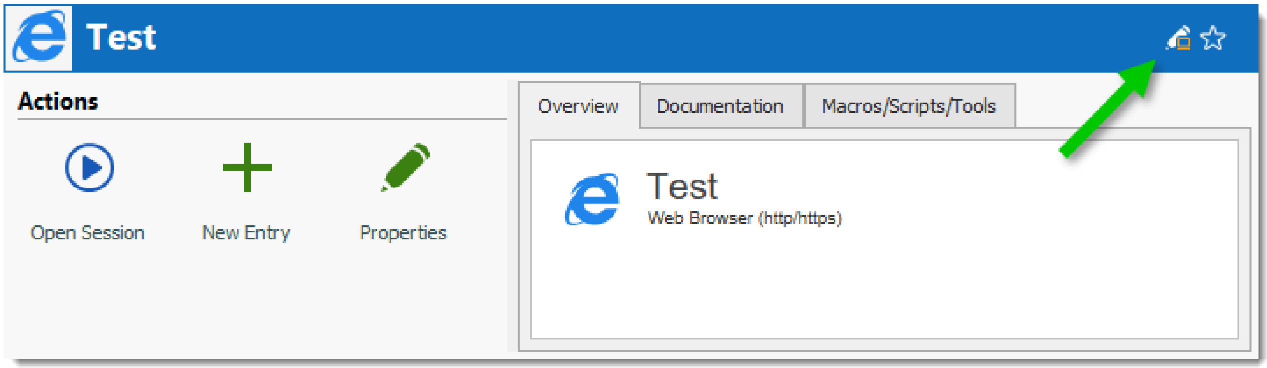
These can also be accessed by using the right-click on an entry and going to ***Edit – User/Local Specific Settings***.



Context menu – Edit – User and Local Specific Settings

SPECIFIC SETTINGS INDICATOR

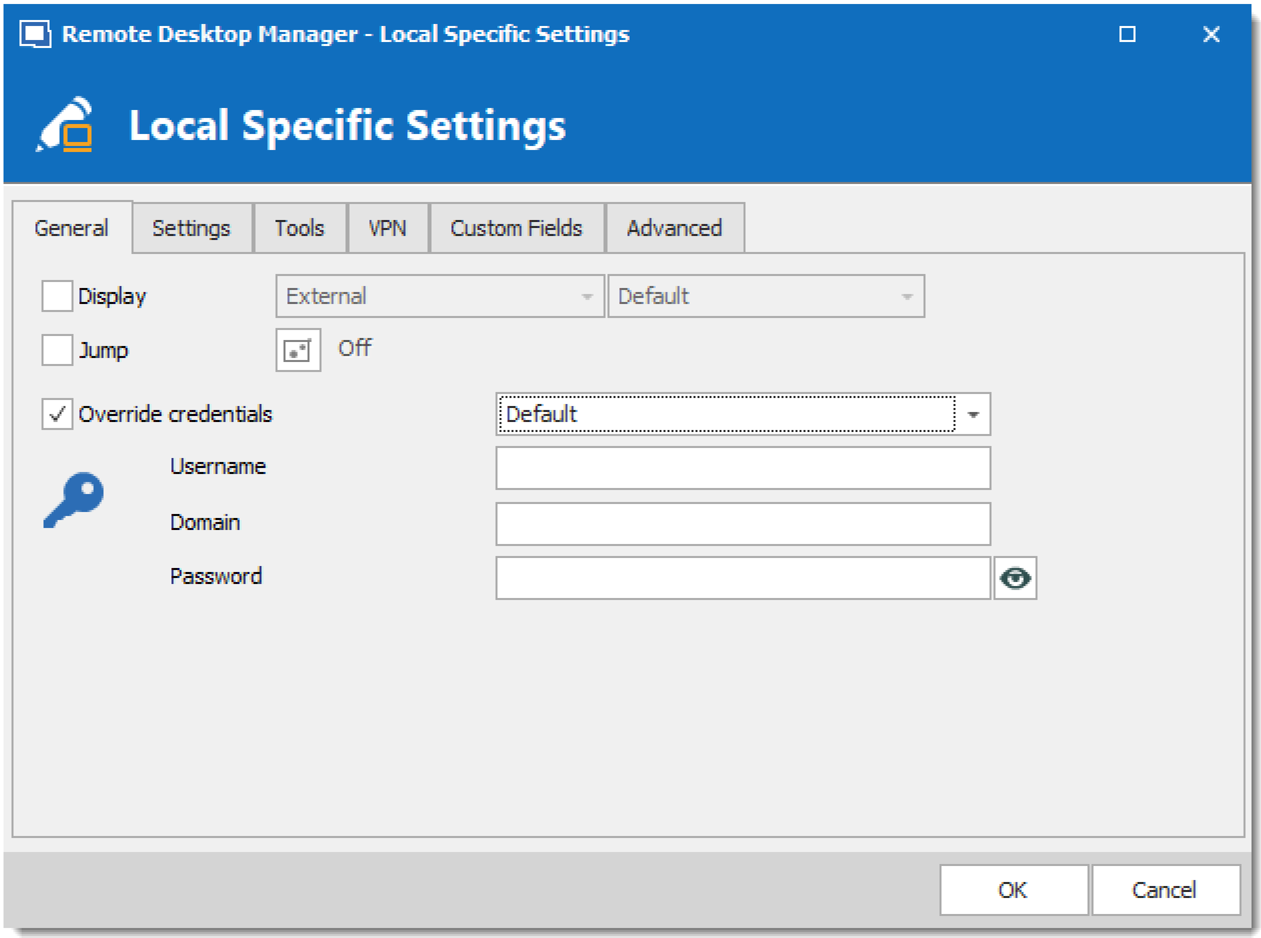
An indicator icon is displayed in the dashboard when an entry with **Specific Settings** is selected. Click on the icon to open the S**pecific Settings** dialog.



Specific Settings indicator

WORKFLOW

In the majority of cases, editing the **Specific Settings** displays the following dialog:



□ Display External Default

□ Jump Off

☑ Override credentials Default

Username

Domain

Password

User Specific Settings

Specific settings are context sensitive, and several settings might not be available for some entry types.

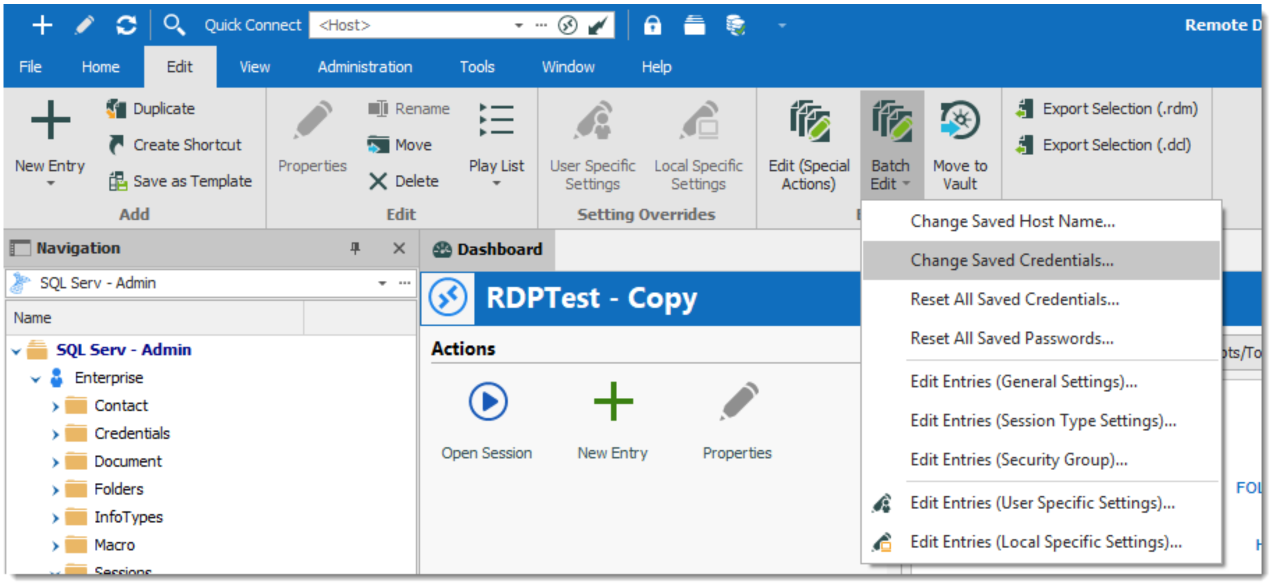
7.5.3 Batch

7.5.3.1 Batch Edit

DESCRIPTION

The **Batch Edit** feature changes the settings of multiple entries in one operation. For example, it can be used to remove or update the credentials of a group of sessions.

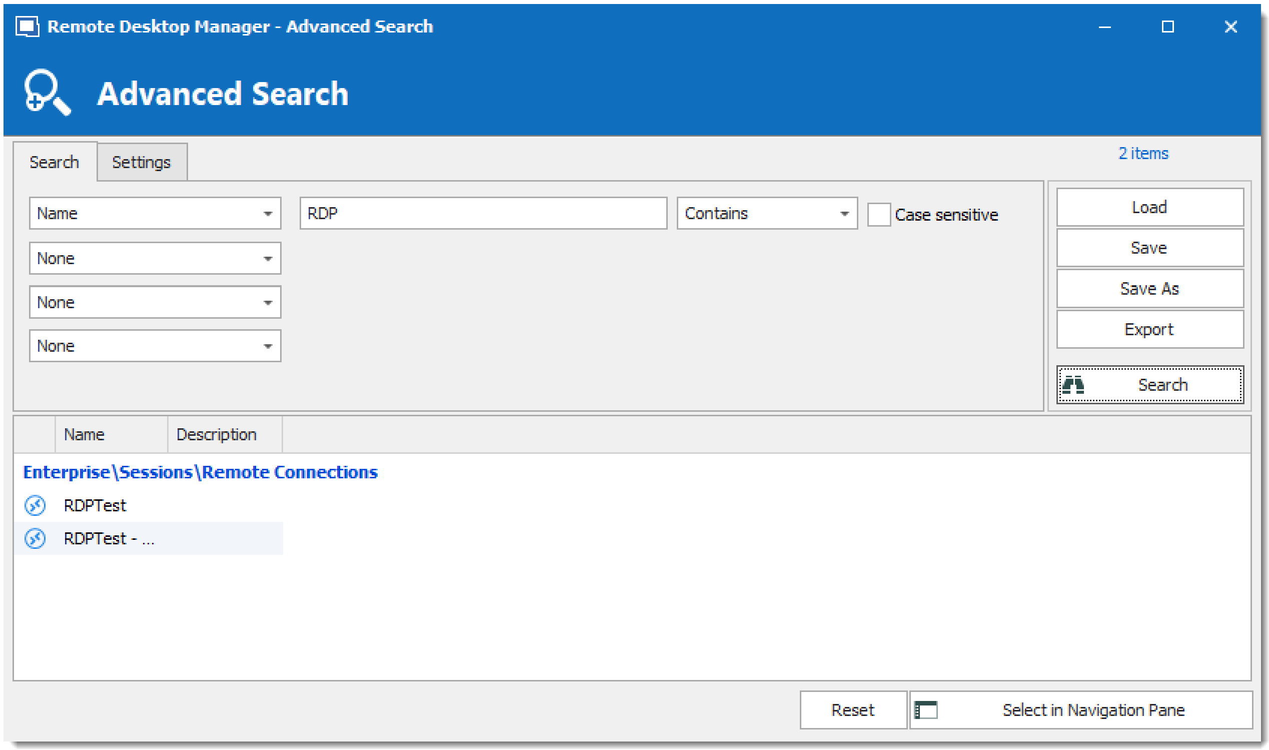
Watch Video



Edit - Batch Edit

ADVANCED SELECTION

Select multiple entries by using the usual **Ctrl/Shift + Left-click**, etc. For a method with a little more power, use the Advanced Search feature, which allows to select multiple entries at once, based on the defined criteria. The advanced search is available in ***View – Advanced Search***. If required, you can achieve similar result with the **Multi Vault Advanced Search**.



Name | RDP | Contains | □ Case sensitive
None
None
None

Name	Description
Enterprise\Sessions\Remote Connections	
RDPTest	
RDPTest - ...	

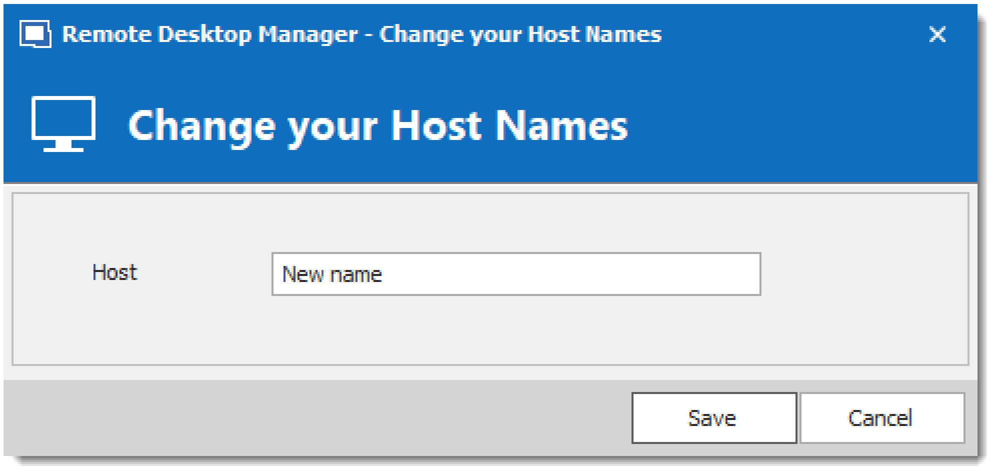
Advanced Search

Press on **Select in Navigation Pane** to select the same entries as in the **Advanced Search** dialog. Then use ***Edit – Batch Edit*** to edit all the selected entries.

SETTINGS

CHANGE SPECIFIC SETTING

You can choose to change a specific setting, for instance, the Host name.



Host: New name

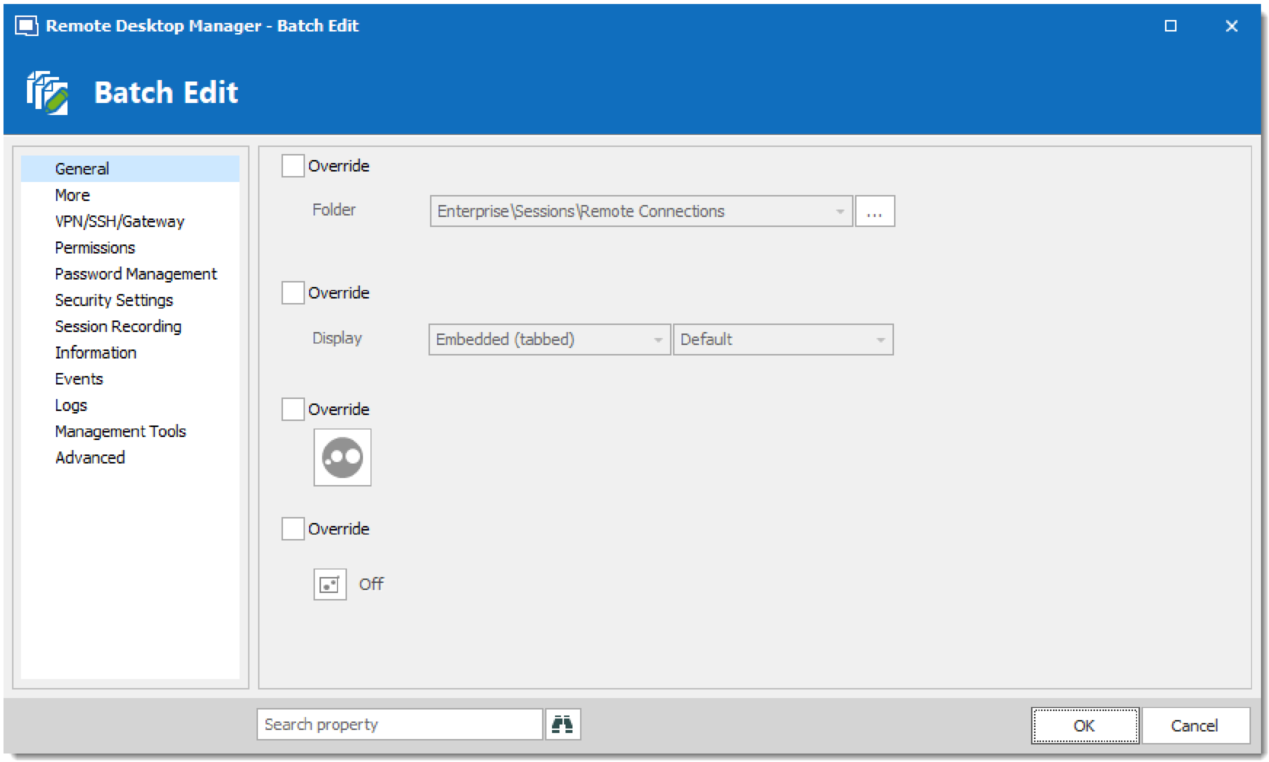
Change Host Name

RESET ALL SAVED CREDENTIALS OR PASSWORD

Clear all the existing credentials of all the selected sessions or specifically the password if desired.

EDIT SESSIONS (GENERAL SETTINGS)

Edit Sessions (General Settings) allows you to change the common settings of all the selected entries.



□ Override

Folder: Enterprise\Sessions\Remote Connections ...

□ Override

Display: Embedded (tabbed) Default

□ Override

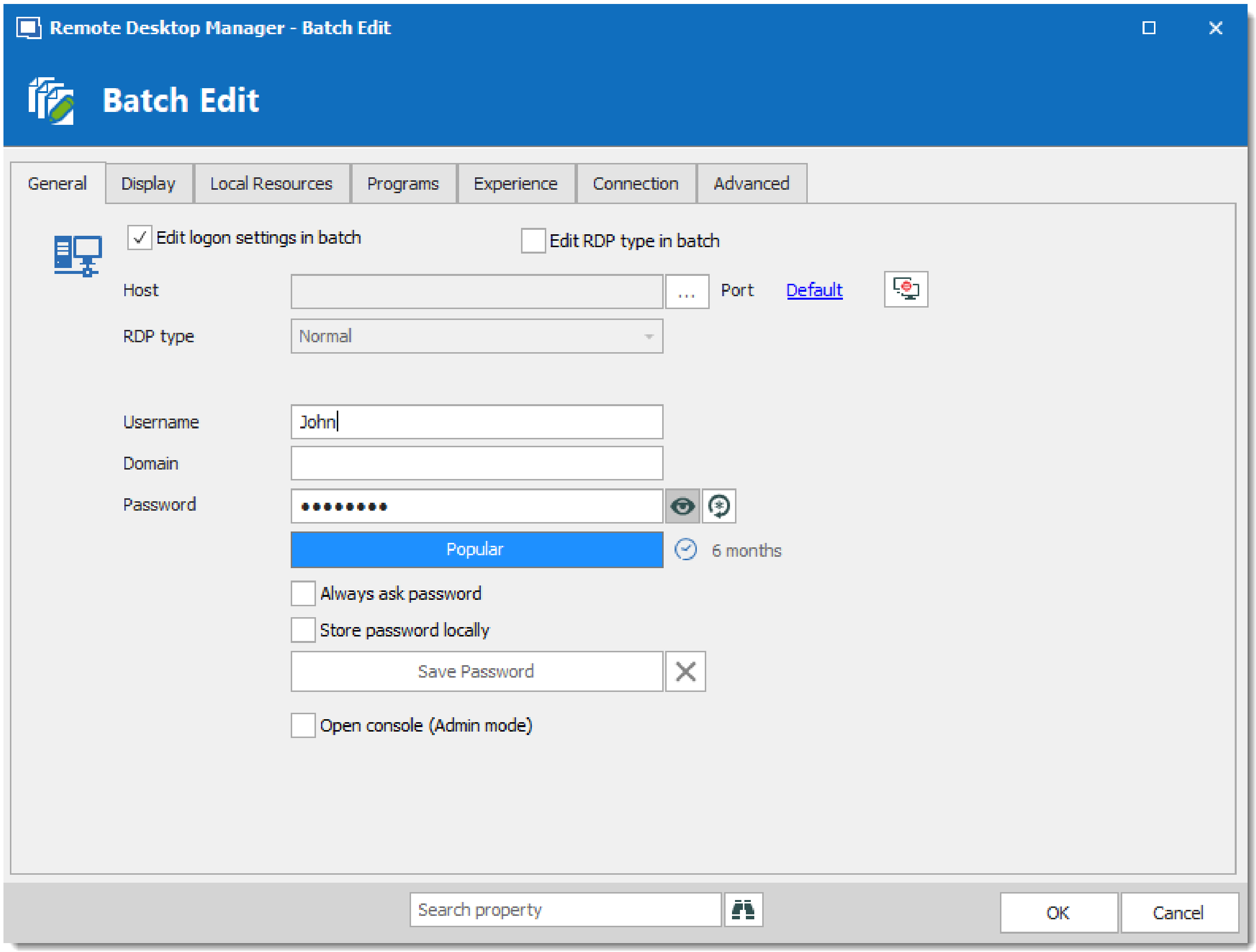
□ Override

Off

Batch Edit – Common settings

EDIT SESSIONS (SESSION TYPE SETTINGS)

Change settings that are is available only for specific session types, such as Microsoft RDP.



☑ Edit logon settings in batch

□ Edit RDP type in batch

Host: … Port: Default

RDP type: Normal

Username: John

Domain:

Password: ••••••••

Popular 6 months

□ Always ask password

□ Store password locally

Save Password

□ Open console (Admin mode)

Sessin Type Settings

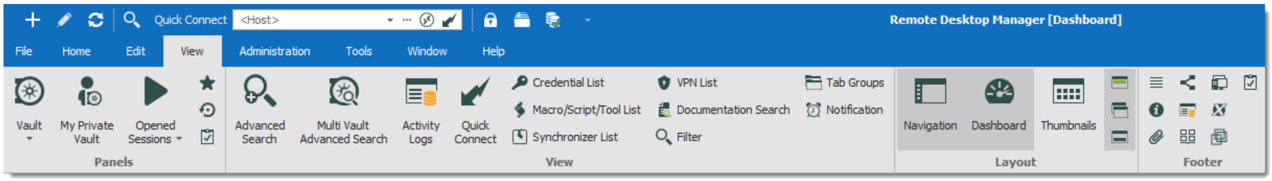
EDIT SESSIONS (USER/LOCAL SPECIFIC SETTINGS)

Specific Settings can be modified in a batch if supported by the type of the edited entries.

7.6 View

DESCRIPTION

The **View** ribbon is used to control different feature regarding the views, layout and logs of Remote Desktop Manager.



Ribbon - View

Refer to the following topics for more information:

PANELS

OPTION	DESCRIPTION
Vault	Access the view mode for your Navigation Pane for the current Vault.
My Private Vault	Display your Private Vault in the Navigation Pane.
Opened Sessions	Display the currently Opened Sessions in your Navigation Pane.
Favorites	Display your Favorite entries and folder in your Navigation Pane.
Recent	Display your Recently Opened Sessions in your Navigation Pane.
Task List	Display your current Task List.

VIEW

OPTION	DESCRIPTION
Advanced Search	Use the Advanced Search feature.
Multi Vault Advanced Search	This functions essentially the same way as **Advanced Search**, but it searches all the Vaults of the database.
Activity Logs	Open the Activity Logs.

OPTION	DESCRIPTION
Quick Connect	Launch a Quick Connect session.
Entry Lists	Prompts a window that displays all the Credential, Macros/Scripts/Tools, VPN or Synchronizer entries in the database (restricted by user rights).
Documentation Search	Allows you to filter entries through their Documentation, such as Description or Procedure.
Filter	This prompts a window to filter the Navigation Pane.
Tab Groups	Open a docked window to browse through the various Tab Groups.
Notification	Open an undocked window to browse threw the various notifications (such as entries expired or about to be, or tasks).

LAYOUT

OPTION	DESCRIPTION
Navigation	Toggle the Navigation Pane.
Dashboard	Toggle the Dashboard.
Thumbnails	Toggle the Thumbnails.
Top Pane (Ribbon/Menubar)	Toggle the Ribbon. (Right-click the Application header to bring it back or use **Alt+F11**).
Grouped Tab Bar	Toggle the grouped tab bar. (Must have group tabs to work).

OPTION	DESCRIPTION
Status Bar	Toggle the Status bar.

FOOTER

The **Footer** section allows you to show or hide the various panes that are provided with Remote Desktop Manager.

> Although they are by default displayed in the footer, all those panes can be dragged and docked anywhere within Remote Desktop Manager.

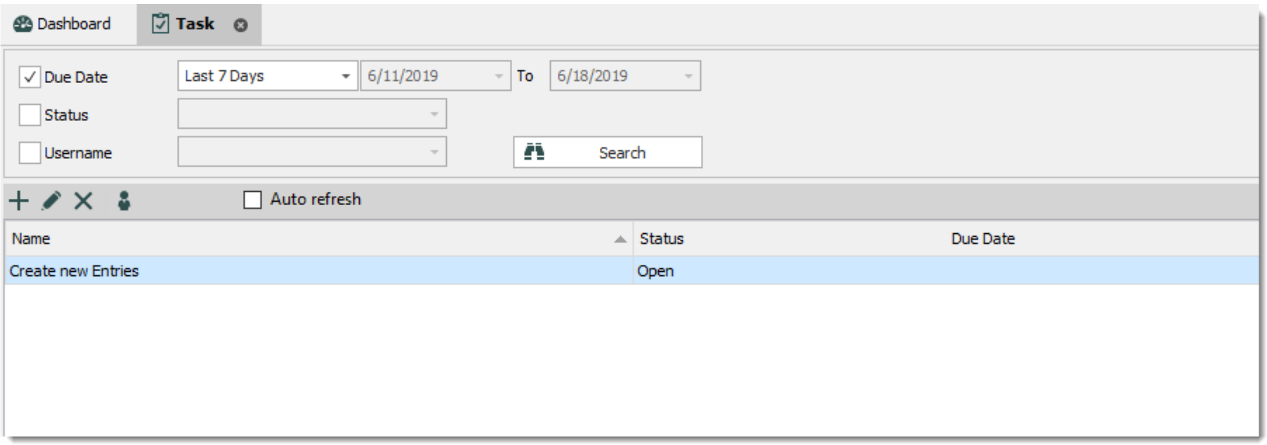
7.6.1 Panels

7.6.1.1 Task List

DESCRIPTION

Create a list of tasks to keep track of work that needs to be done by the team. You can perform a search to filter out the list of displayed tasks. You can search by Due Date, username or by Status.

Task lists can be exported in different types of files for printing or reviewing. Right-click the task list to export in html, xls, xml or csv. You can also export filtered task lists.



☑ Due Date: Last 7 Days, 6/11/2019 To 6/18/2019

☐ Status

☐ Username

☐ Auto refresh

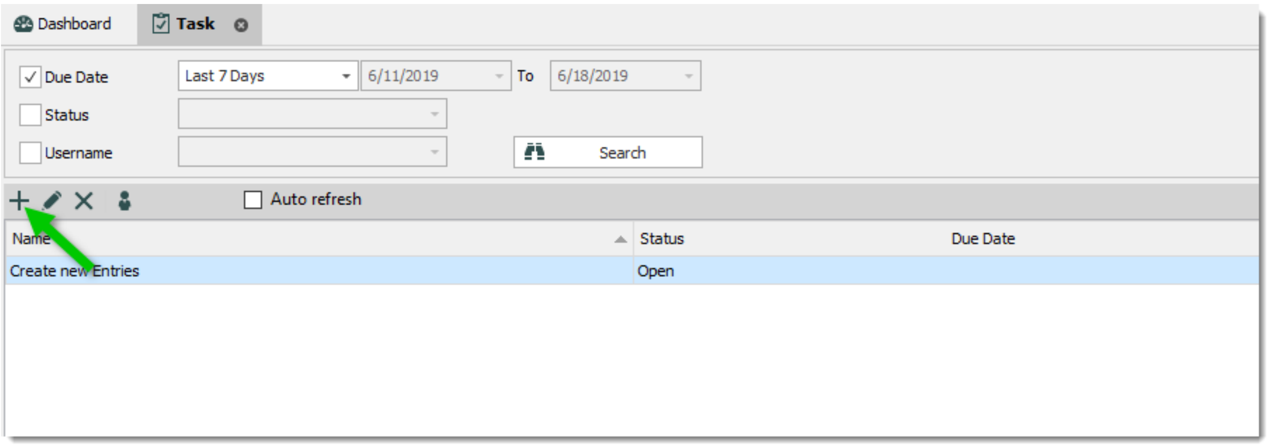
Name	Status	Due Date
Create new Entries	Open	

Task list

This feature is only available for the following data sources: Devolutions Password Server, MariaDB, MySQL, SQL Azure, SQL Server and SQLite.

CREATING A TASK

1. Click on **Add new task**.

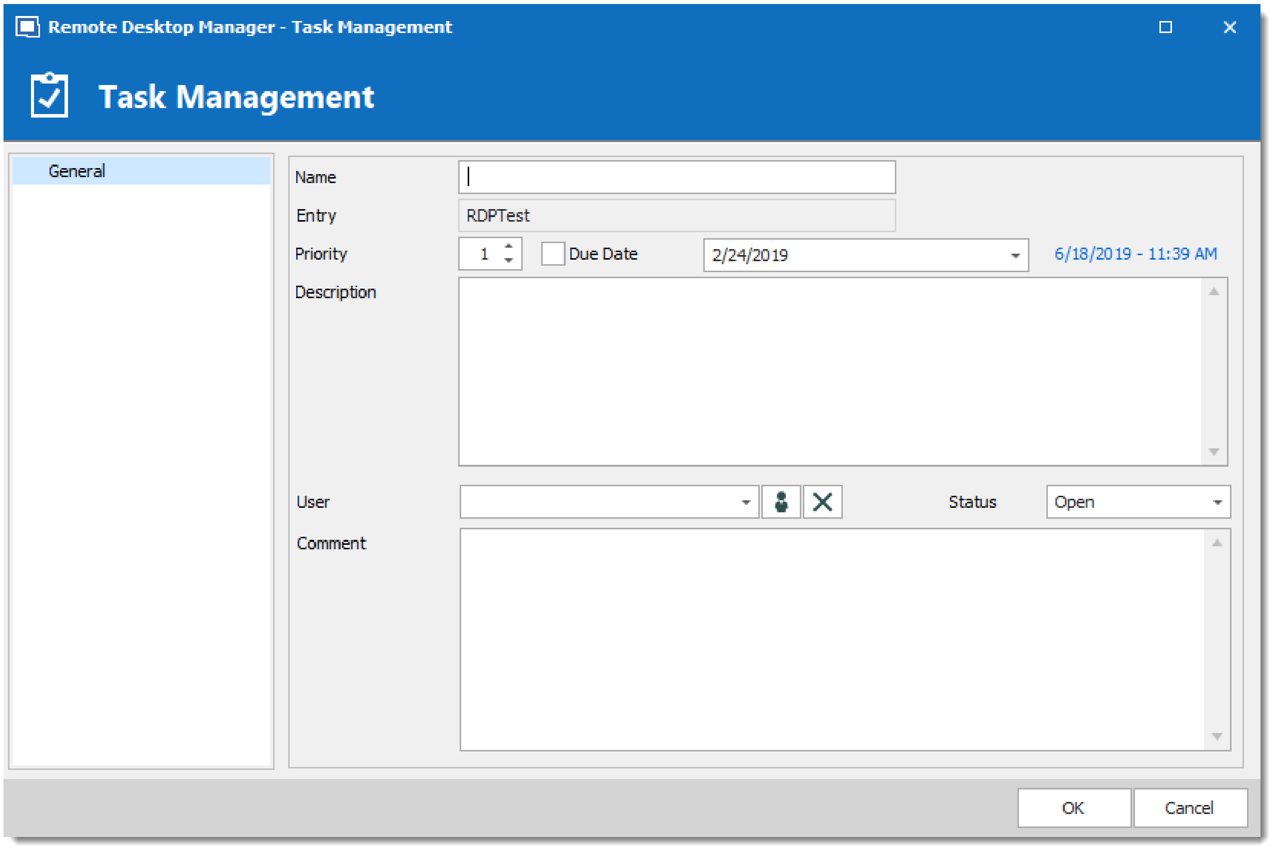


☑ Due Date: Last 7 Days, 6/11/2019 To 6/18/2019
□ Status
□ Username

Name	Status	Due Date
Create new Entries	Open	

Add a task

2. Enter your task information, like the name of the task, the priority, the due date, the description, etc.



Name: |
Entry: RDPTest
Priority: 1 □ Due Date 2/24/2019 6/18/2019 - 11:39 AM
Description:
User:
Status: Open
Comment:

Task Management

OPTION	DESCRIPTION
Name	Enter a custom name for the task
Entry	Displays the entry currently selected in the Navigation Pane. The task is assigned to this entry. Read-only field.
Priority	Set the priority of the task.
Due date	Set a deadline for the task.
Description	Enter a description of the task for the assigned user.
User	Assign a user to the task.
Assign to me 👤	Click this button to assign the task to yourself.

OPTION	DESCRIPTION
Clear assigned user ✖	Clear the assigned user.
Status	Set a status for the task. Select between: • **Open** • **Assigned** • **In progress** • **Closed** • **Done** • **Canceled** • **Postponed**
Comment	Enter a comment for the task.

7.6.2 View

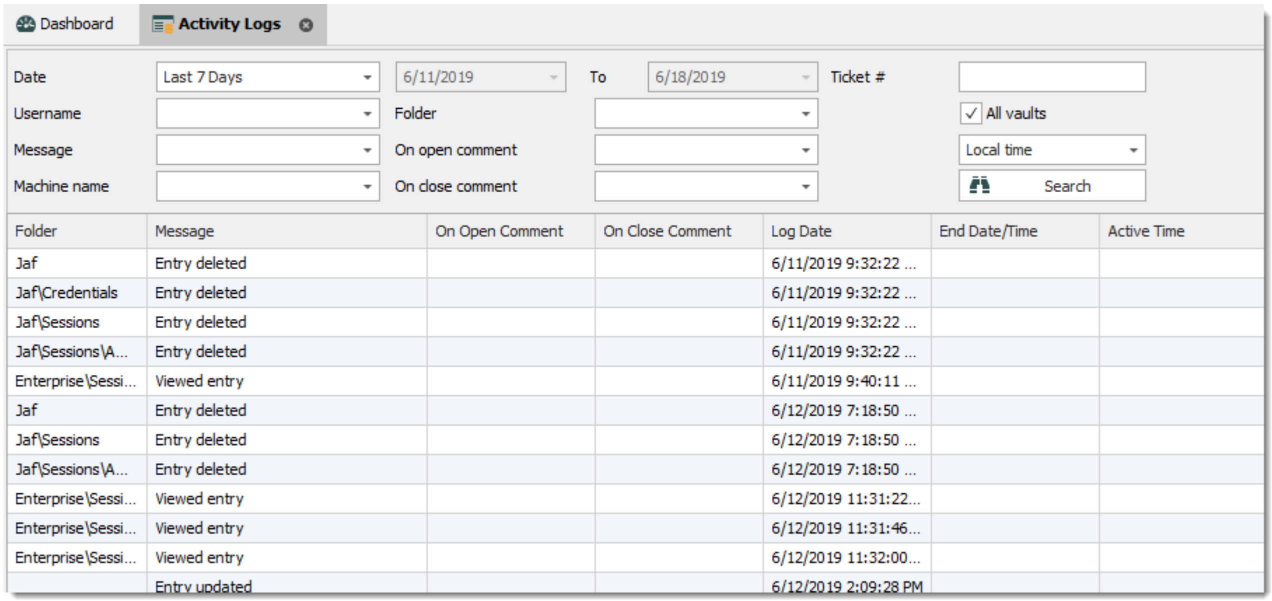
7.6.2.1 Activity Logs

DESCRIPTION

The shared session log offers a more robust solution. Through it, it's possible to monitor an opened session for all users that are using an Advanced Data Sources. The log is available for specific sessions in the context menu, in the session properties (Log tab page) and in the dashboard.

SETTINGS

The log contains all the CRUD (add, edit and delete) operations, passwords being viewed, credentials being used by other sessions, etc...



Date	Last 7 Days	6/11/2019	To	6/18/2019	Ticket #		
Username		Folder			☑ All vaults		
Message		On open comment			Local time		
Machine name		On close comment			Search		

Folder	Message	On Open Comment	On Close Comment	Log Date	End Date/Time	Active Time
Jaf	Entry deleted			6/11/2019 9:32:22 ...		
Jaf\Credentials	Entry deleted			6/11/2019 9:32:22 ...		
Jaf\Sessions	Entry deleted			6/11/2019 9:32:22 ...		
Jaf\Sessions\A...	Entry deleted			6/11/2019 9:32:22 ...		
Enterprise\Sessi...	Viewed entry			6/11/2019 9:40:11 ...		
Jaf	Entry deleted			6/12/2019 7:18:50 ...		
Jaf\Sessions	Entry deleted			6/12/2019 7:18:50 ...		
Jaf\Sessions\A...	Entry deleted			6/12/2019 7:18:50 ...		
Enterprise\Sessi...	Viewed entry			6/12/2019 11:31:22...		
Enterprise\Sessi...	Viewed entry			6/12/2019 11:31:46...		
Enterprise\Sessi...	Viewed entry			6/12/2019 11:32:00...		
	Entry updated			6/12/2019 2:09:28 PM		

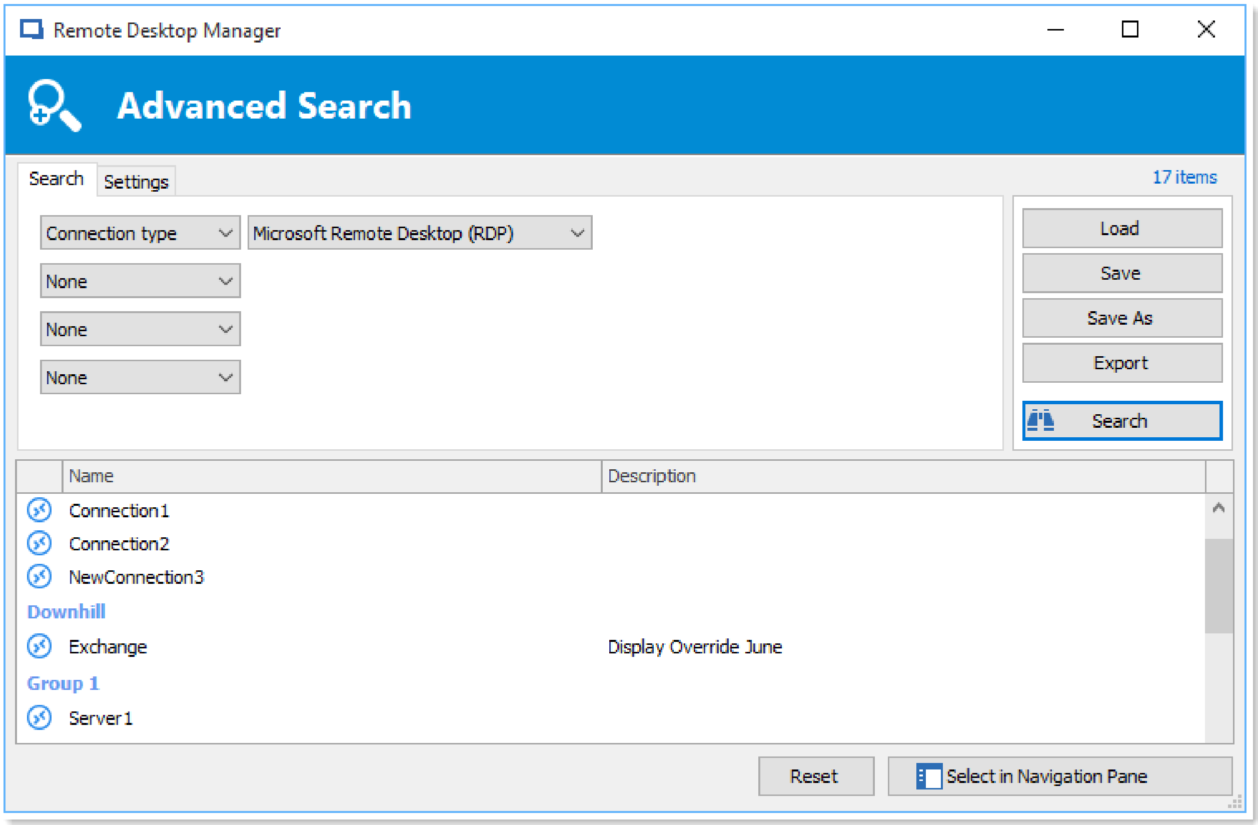
OPTION	DESCRIPTION
Folder	The Folder where your entry is situated.
Connection	The connection being used to open your entry.
Message	Indicate the action that was done on your entry or session.
On Open Comment	The Open Comment is defined in the Log tab of your session, to learn more please see Logs Options
On Close Comment	The Close Comment is defined in the Log tab of your session, to learn more please see Logs Options
Log Date	Indicate the date and time your session was opened or your entry was edited.
End Date/Time	Indicate the date and time when the session or entry was closed.
Active Time	Only available for sessions in embedded mode. It will record your session active time, meaning the time your session was opened in embedded mode and you were active in your session. If your session is opened but

OPTION	DESCRIPTION
	your view is on your Dashboard tab and not on your session tab, no Active Time will be recorded.
Duration	Only available for sessions in embedded mode. When sessions are opened in embedded mode the Duration time will be recorded, meaning that even if your view is on your Dashboard and you are not actively working in your session but your session tab is opened, Duration will record how long it was opened for.
User	Indicate the Windows username and domain.
Database username	Indicate the database username.
Connection user	Indicate the Connection user.
Machine	Indicate the machine name.
Connection Type	Indicate the connection type that was used.

7.6.2.2 Advanced Search

DESCRIPTION

The ***Advanced Search*** allows to search for entries based on multiple criterias.



Connection type: Microsoft Remote Desktop (RDP)
None
None
None

Name	Description
Connection1	
Connection2	
NewConnection3	
Downhill	
Exchange	Display Override June
Group 1	
Server1	

Advanced Search Window

SETTINGS

OPTION	DESCRIPTION
Name	You can select between different criteria to tweak your search: • ***Name*** • ***Connection type*** • ***Contact Reference*** • ***Creation date*** • ***Custom field*** • ***Description***

OPTION	DESCRIPTION
	• ***Domain*** • ***Group*** • ***Host*** • ***Is favourite*** • ***Keywords/tags*** • ***Last update date*** • ***Name*** • ***OS*** • ***Password strength*** • ***Security group*** • ***Status*** • ***Username***
Load	Load searches that has been previously saved.
Save	Allows you to save your search locally and reuse it.
Save as	Use to save a previously saved search but under another name.
Export	Export the entries of your search result as a Csv, Html, Xls or Xml file. Sensitive information will be encrypted using AES.
Search	Once you have selected your search criteria click on ***Search*** to display the search result.
Reset	Reset all your fields to proceed with a new Search.

OPTION	DESCRIPTION
Select in Navigation Pane	Select your search result in your Navigation Pane. This option can be used in combination with a Batch Edit.

There will be a drop-down list next to certain fields (ex: Name) to give you search options for:

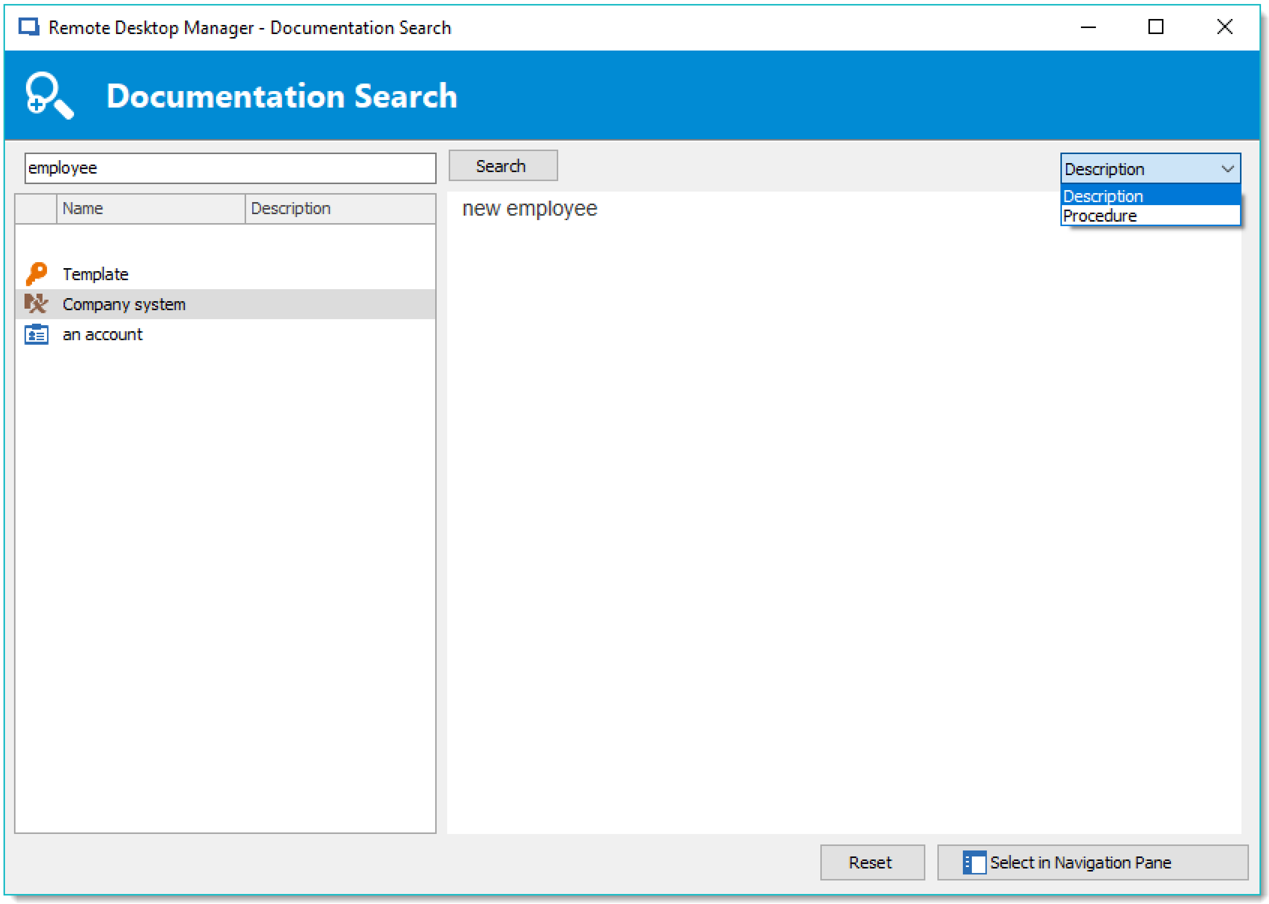
- ***Contains*** - any name that includes the characters you have entered, anywhere in the field name.
- ***Starts With*** - any name beginning with the characters you have entered.
- ***Ends With*** - any name ending with the characters you have entered.
- ***Exact Expression*** - will find names that match every character you have entered, exactly as entered.

7.6.2.3 Documentation Search

DESCRIPTION

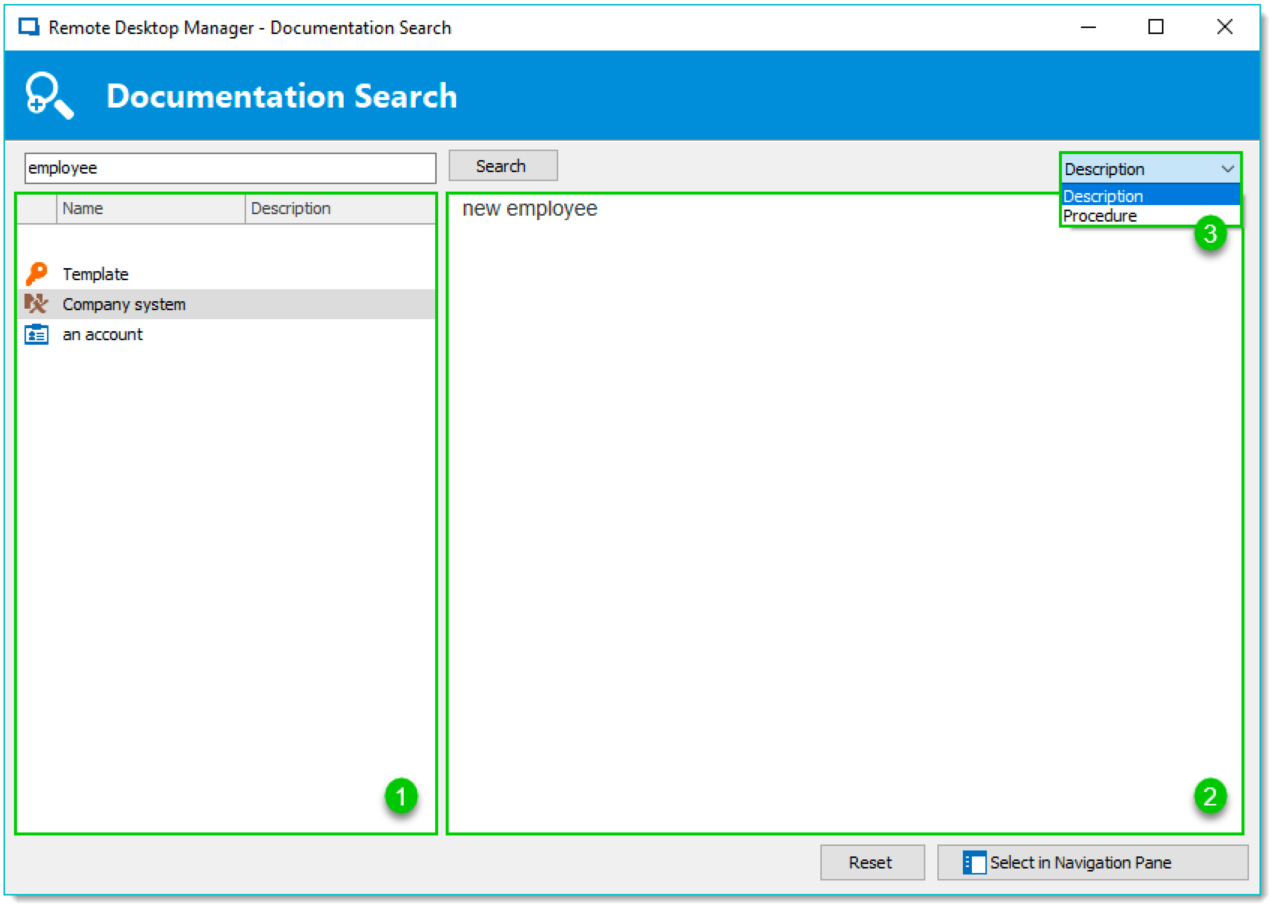
We can search documentation pages linked to entries. Documentation search provides a preview of the documentation pages, page title and related entry details. The tool searches the current repository.

> Documentation Search is available with Devolutions Password Server, MariaDB, MySQL and SQL Server data sources.



Documentation search dialog window

USER INTERFACE



Documentation search

USER INTERFACE

ELEMENTS	DESCRIPTION
Navigation Pane (1)	Lists search results by entry
Content area (2)	Page preview
Drop down menu (3)	Page title; When one entry contains multiple documentation pages with the search term, a list of the page titles is available.

SELECT AN ENTRY

Click **Select in Navigation Pane** to choose the entry in your main tree view.

CLEAR A SEARCH

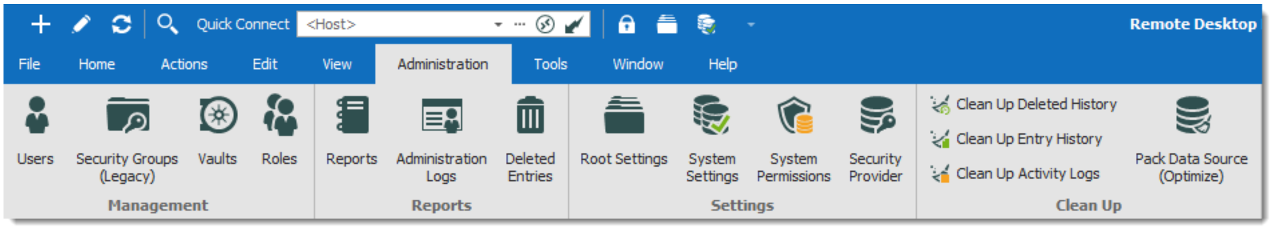
Click **Reset** to clear the search results.

7.7 Administration

DESCRIPTION

The **Administration** tab allows to manage settings and users of a data source, view reports such as the activity logs, and much more. This tab is only available to administrators of the data source.

Most features contained in the Administration tab are only available when using an Advanced Data Source.



Ribbon - Administration

MANAGEMENT

These feature requires an Advanced Data Source.

OPTION	DESCRIPTION
Users	Opens the User Management.
Security Groups (Legacy)	Security Groups are now a Legacy option, and although we have left documentation in the online help to help users identify it, we strongly recommend switching to Roles instead.
Vaults	Opens the Vault Management tab of User Management.
Roles	Opens the Role Management tab of User Management.

REPORTS

The logs feature requires an Advanced Data Source.

OPTION	DESCRIPTION
Reports	Open the Reports section to select which type of report best suit your current needs.
Administration Logs	Opens the Administration Logs.
Deleted Entries	Open a log of all Deleted Entries (since last clean up).

SETTINGS

ℹ These feature requires an Advanced Data Source.

OPTION	DESCRIPTION
Vault Settings	Opens the Vault Settings. The Vault Root Folder is the one at the top of the navigation pane (in Tree View). It is the one from which all entries and folder stem. By default, lower level folders inherit settings and security from parent folder until reaching the vault root. Therefore, using permissions on the vault root folder allows to secure all entries below the vault root level. Refer to Default security for entries for more information.
System Settings (Data Source Settings)	Opens the System Settings. There are many features here, all meant to help you customize your data source and security needs. Remember that these settings applies to all users that have access to the data source.
System Permissions	Modify System Permissions.
Security Provider	Set up a Security Provider for an additional layer of security.

CLEAN UP

ℹ This feature requires an Advanced Data Source.

OPTION	DESCRIPTION
Clean Up Deleted History	Perform a partial or full clean up of the Deleted History.
Clean Up Entry History	Perform a partial or full clean up of the Entry History.
Clean Up Activity Logs	Perform a partial or full clean up of the Activity Logs. You also have the option to clean up the **Administration Logs** if desired.
Pack Data Source (Optimize)	The Pack Data Source (Optimize) feature analyzes all entries, compress and save them, thus saving space in your data source.

7.7.1 Management

7.7.1.1 User Management

DESCRIPTION

The **Users Management** allows to create and manage users and their privileges. You can set the default privileges on the user type in **Data Source Settings (System Settings)**. Remote Desktop Manager offers advanced user rights management that allows for restricting access to entries. Please note that availability of some features depends on the active data source.

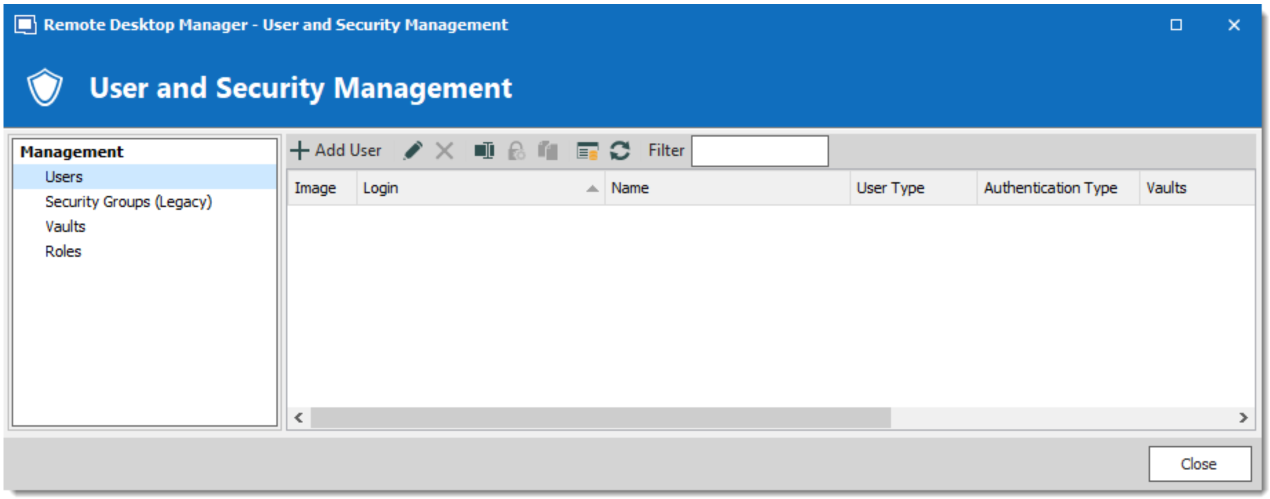
> ℹ This feature requires an Advanced Data Source.

> ℹ A user can be created using default security (specify the password) or Integrated Security. Not all Advanced Data Sources support the use of Integrated Security.

In order to create users and assign rights, you must be administrator of not only Remote Desktop Manager, but also of the underlying database.

MANAGE USERS

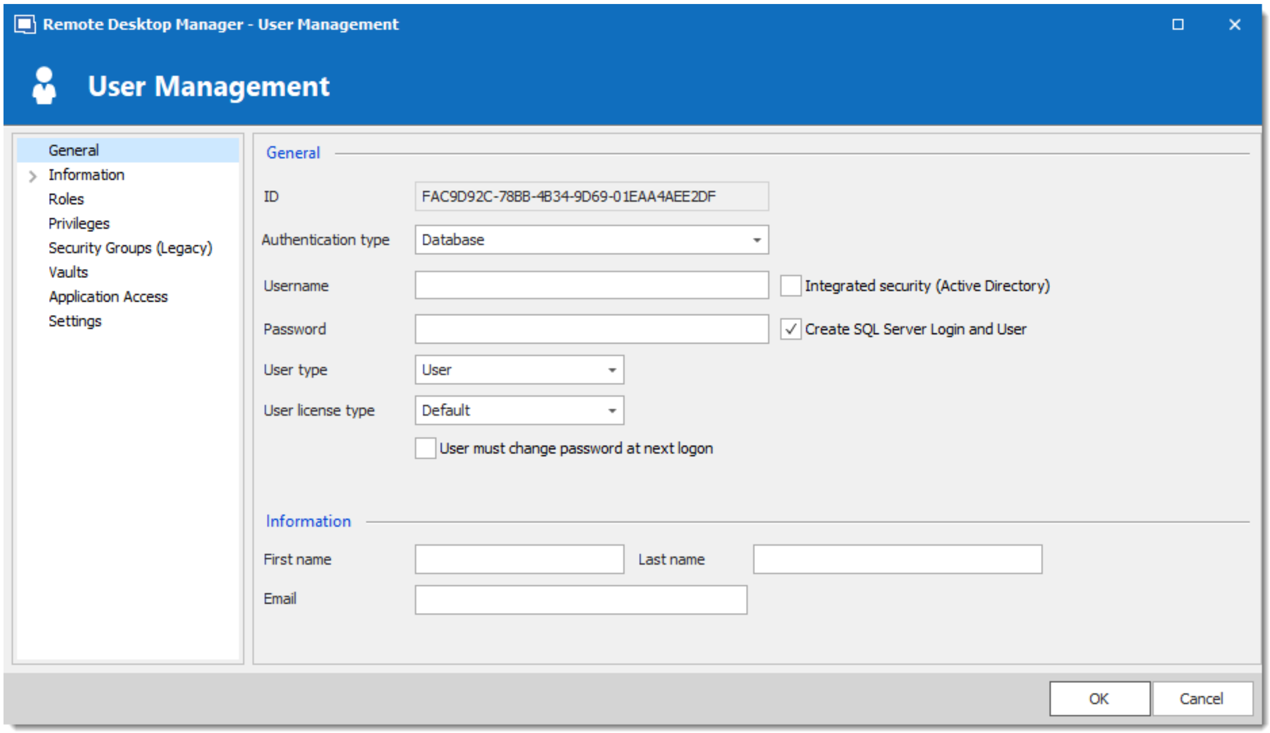
To create, edit, delete, rename or otherwise manage users as a whole, simply use the buttons in the toolbar.



User and Security Management - Toolbar

USER MANAGEMENT SETTINGS

GENERAL



General

ID: FAC9D92C-78BB-4B34-9D69-01EAA4AEE2DF

Authentication type: Database

Username:

☐ Integrated security (Active Directory)

Password:

☑ Create SQL Server Login and User

User type: User

User license type: Default

☐ User must change password at next logon

Information

First name:

Last name:

Email:

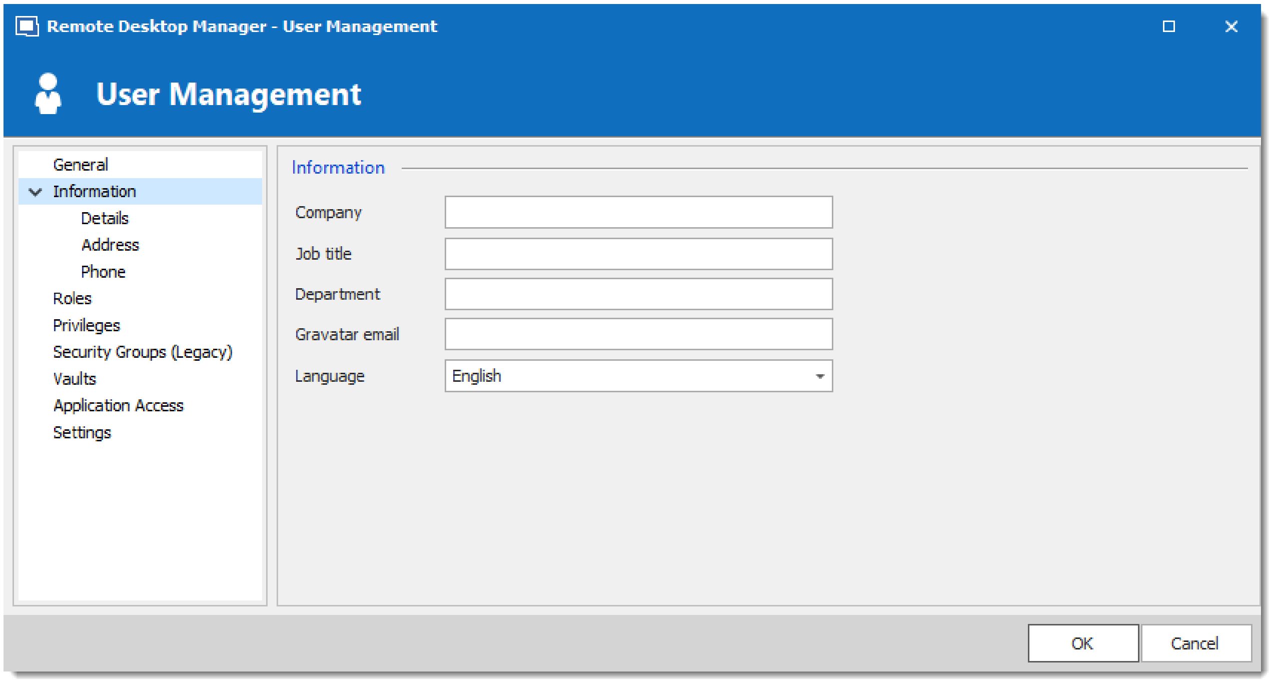
User Management - General

OPTION	DESCRIPTION
Authentication type	Select the user's authentication type: • **Custom (Devolutions)**: create a user specific to Remote Desktop Manager without creating an SQL login. • **Database (SQL Server)**: authenticate using the SQL login from your SQL Server.
Username	Enter the username for the user. When using Integrated Security the user must be selected from the directory.
Integrated security (Active Directory)	Specifie to use Active Directory to authenticate to the data source. Applies only to SQL Server and Devolutions Password Server, depending on their configuration. For more information, please consult the Integrated Security topic.
Password	Enter the user's Password. This field is disabled when using Integrated Security.

OPTION	DESCRIPTION
User type	Select the type of user to create, select between: • **Administrator:** Grant full administrative rights to the user. • **Read only user:** Grant only the view access to the user. • **Restricted user:** Select which rights to grant to the user. • **User:** Grant all basic rights to the user (Add, Edit, Delete). For more information, please consult the User Types topic.
User license type	Select the license type of the user. Select between: • **Default** • **Connection Management** • **Password Management**
Full name	Enter the First name and Last name of the user.
Email	Insert the user's email address.

INFORMATION

The **Information** section allows to store information regarding the users, such as their name, address, and more. The Information section is divided in three sub-sections: **Details, Address, Phone**.



Company

Job title

Department

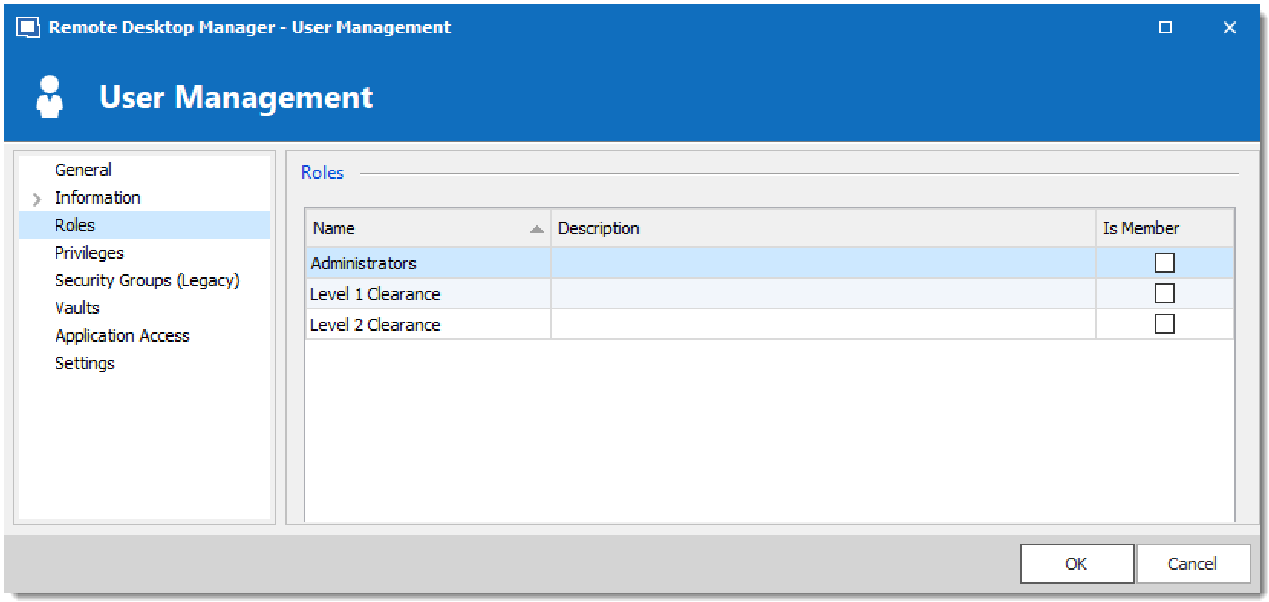
Gravatar email

Language: English

User Management - Information - Details

ROLES

Select roles to assign to the user.

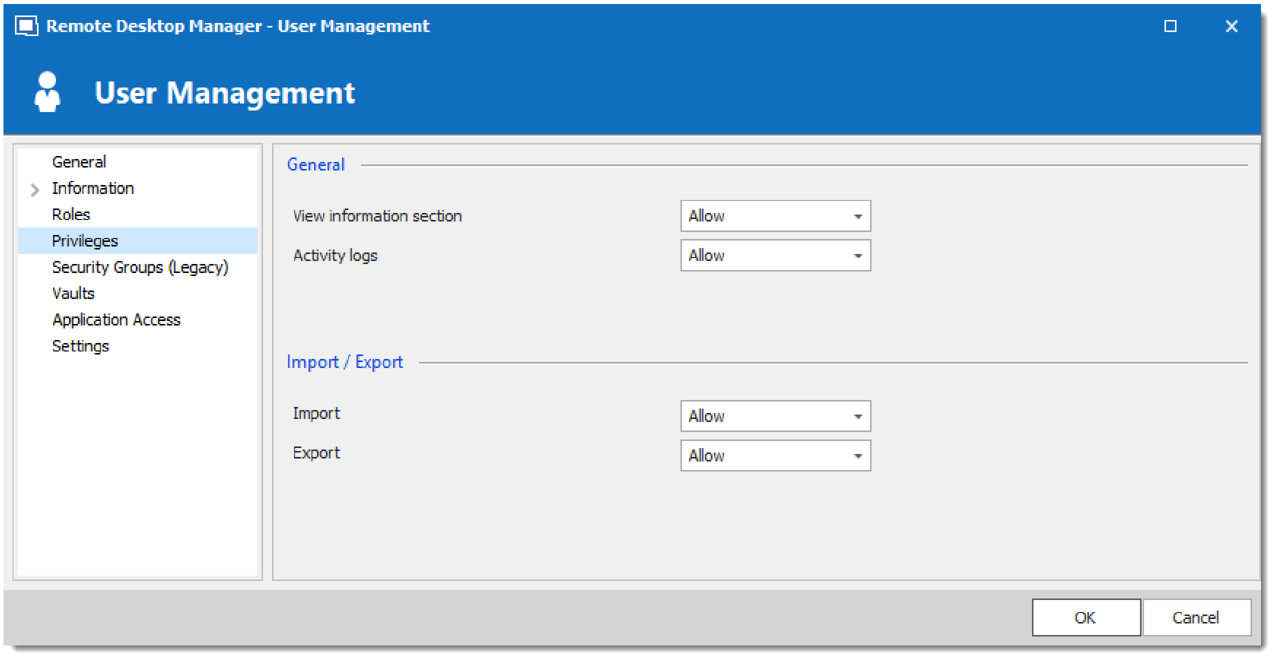


Name	Description	Is Member
Administrators		□
Level 1 Clearance		□
Level 2 Clearance		□

User Management - Roles

OPTION	DESCRIPTION
Roles	Check the **Is Member** box to assign the role to the user. Consult Role Management topic for more information.

PRIVILEGES



View information section: Allow
Activity logs: Allow
Import: Allow
Export: Allow

User Management - Privileges

OPTION	DESCRIPTION
View information section	Allow the user to view the information section.
Activity logs	Allow the user to view the Activity logs.
Import	Allows the user to Import sessions (Clipboard - Paste as well). The import menu (***File – Import***) and the import feature in the context menu will be grayed out if the option is not active.

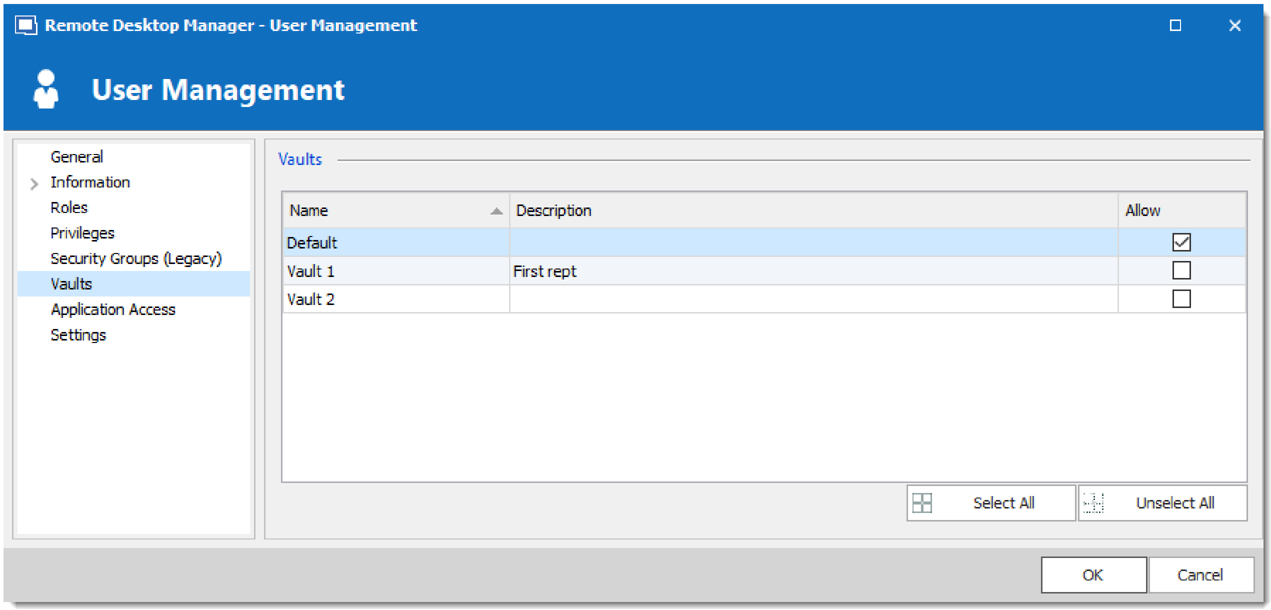
OPTION	DESCRIPTION
Export	Allows the user to Export sessions (Clipboard - Copy as well). The export menu (***File – Export***) and the export feature in the context menu will be grayed out if the option is not active.

SECURITY GROUPS (LEGACY)

Security Groups are a legacy setting, we strongly recommend switching over to Roles instead.

VAULTS

Select which repositories the user has access to. For more information, please consult the Vaults topic.

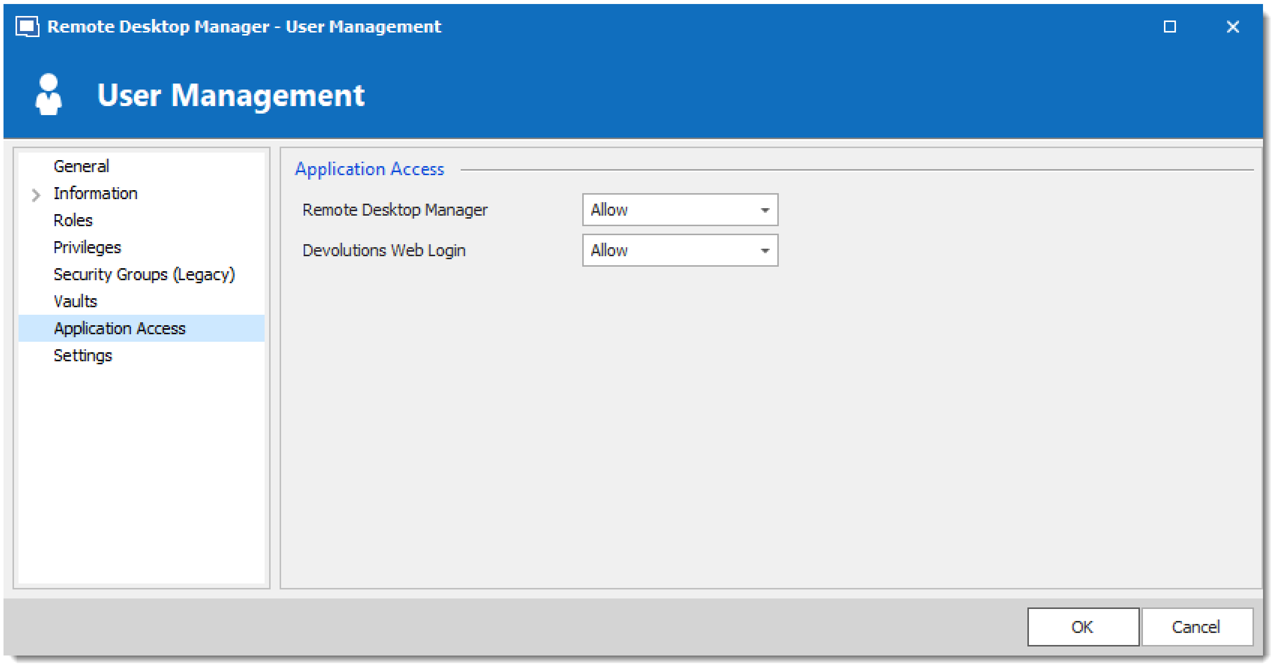


Name	Description	Allow
Default		☑
Vault 1	First rept	☐
Vault 2		☐

User Management - Vaults

APPLICATION ACCESS

The application access section allows to restrain access to Remote Desktop Manager or Devolutions Web Login.



Application Access

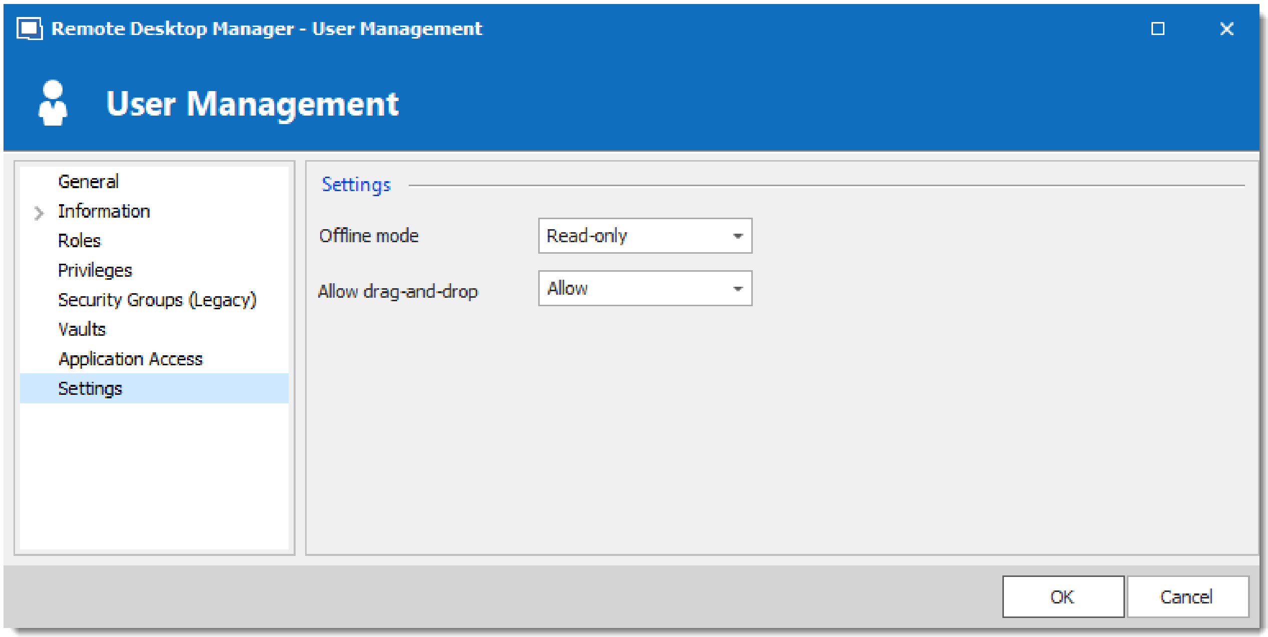
Remote Desktop Manager: Allow

Devolutions Web Login: Allow

User Management - Application Access

OPTION	DESCRIPTION
Remote Desktop Manager	Select if the user can access to the data source from Remote Desktop Manager.
Devolutions Web Login	Select if the user can access to the data source form Devolutions Web Login.

SETTINGS



Offline mode: Read-only

Allow drag-and-drop: Allow

User Management - Settings

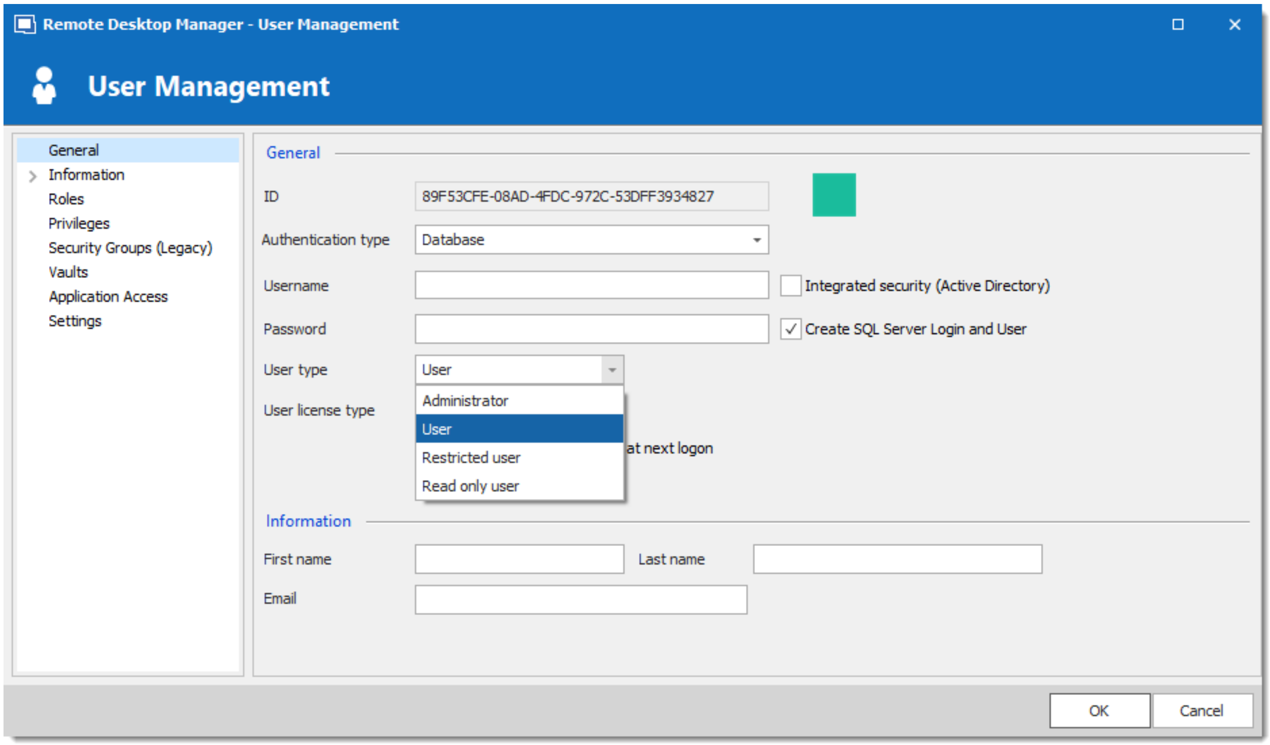
Allow the user to enable the Offline Mode on the data sources. This also depends on the data source being configured to allow it. There are 4 modes available:

OPTION	DESCRIPTION
Disabled	No offline cache allowed for the user.
Cache only	Allow to save a cache of the data source but not the offline mode.
Read-only	A read-only cache. The user will not be able to edit data in the data source. This mode is allowed for Advanced Data Sources only.
Read/Write	An advanced cache, with change synchronization. This mode is allowed for Advanced Data Sources only.

7.7.1.1.1 User Types

DESCRIPTION

When creating users in Remote Desktop Manager, four types of user are available. Basic rights are granted to the created users depending on their type.



ID: 89F53CFE-08AD-4FDC-972C-53DFF3934827

Authentication type: Database

Username:

☐ Integrated security (Active Directory)

Password:

☑ Create SQL Server Login and User

User type: User

- Administrator
- User
- Restricted user
- Read only user

User license type

at next logon

First name: Last name:

Email:

User Management - User Type

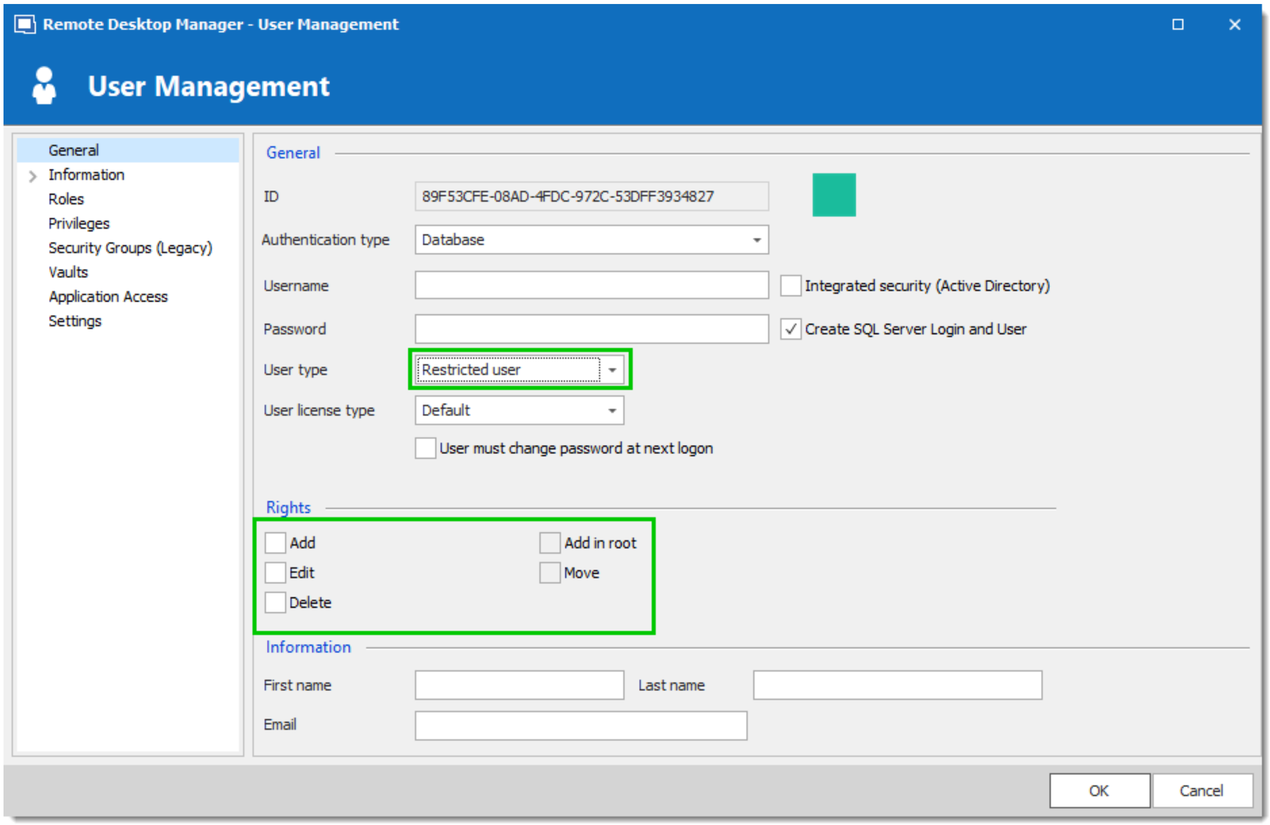
TYPE	DESCRIPTION
Administrator	Grant all rights and permissions to the user.
User	Grant all the basic rights to the user (Add, Edit, Delete). For more information, please consult the Rights section below in this topic.
Restricted user	Personalize the rights to grant to the user.
Read only user	Grant only the view access to the user.

RIGHTS

When setting a user to the **Restricted User** type, rights must be granted manually. These rights have an immediate influence on which actions the user can perform on unsecured entries. Therefore, rights must be granted for users to be able to perform actions on entries, as permissions cannot override the absence of right.

Once rights are granted, they can be restricted with the Role-Based Security or Security Groups.

The **Add** right also displays the **Add in root** option. This must be enable for users to be able to add entries into the vault root folder of the data source.



ID: 89F53CFE-08AD-4FDC-972C-53DFF3934827

Authentication type: Database

Username:

☐ Integrated security (Active Directory)

Password:

☑ Create SQL Server Login and User

User type: Restricted user

User license type: Default

☐ User must change password at next logon

☐ Add ☐ Add in root

☐ Edit ☐ Move

☐ Delete

First name: Last name:

Email:

User Management - Rights

7.7.1.1.2 Integrated Security

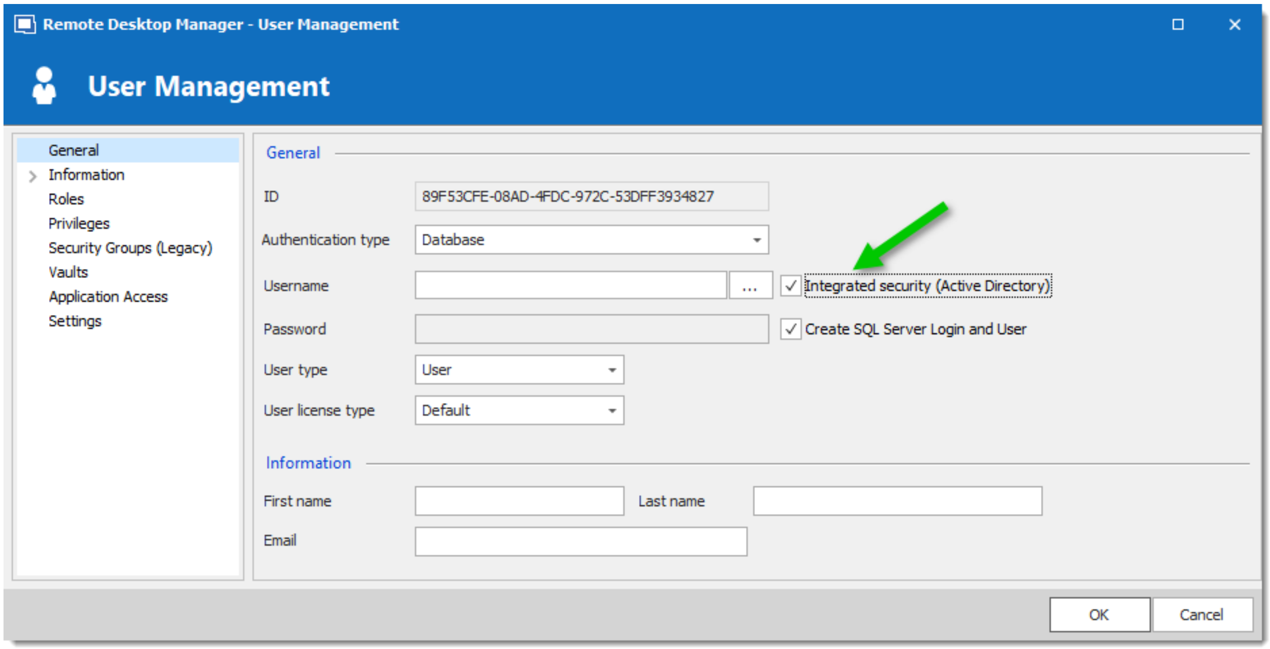
DESCRIPTION

Integrated Security is a Microsoft technology, which uses the credentials of the current Windows session and send them automatically to the remote resources for authentication.

This feature is available with the SQL Server or Devolutions Password Server data sources.

SETTINGS

To use the Integrated Security, enable the **Integrated Security** box in the **User Management** window. The **Password** field is disabled because the operating system will provide a cached copy automatically.



General

ID: 89F53CFE-08AD-4FDC-972C-53DFF3934827

Authentication type: Database

Username: ...

☑ Integrated security (Active Directory)

Password:

☑ Create SQL Server Login and User

User type: User

User license type: Default

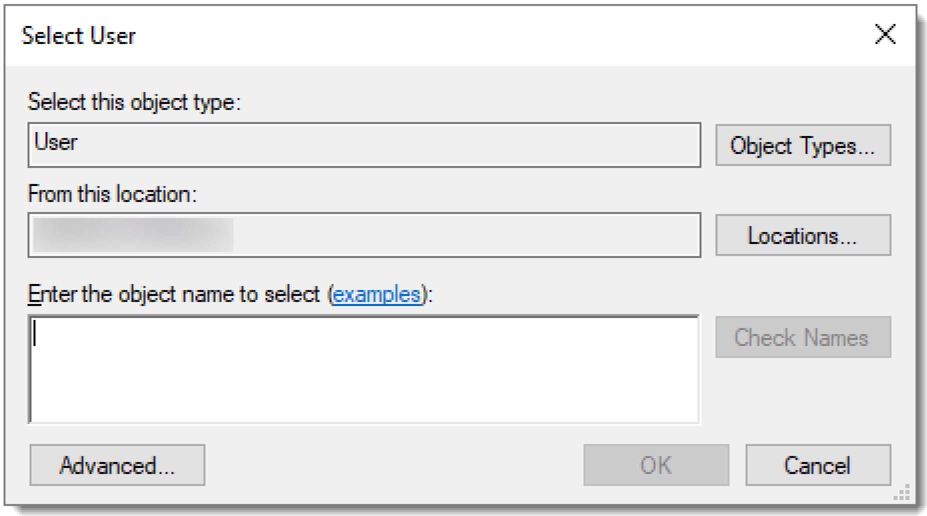
Information

First name: Last name:

Email:

Integrated Security

When the option is activated, an ellipsis button either appears or is enabled. Click this button to display the **Select User** dialog.



Select this object type:

User

From this location:

Enter the object name to select (examples):

Select User

Ensure the appropriate domain is displayed in the **From this location** field. Sometime the location defaults to the local computer. Click the **Locations** button to browse for the domain instead.

When using Integrated Security, the currently running windows session must be from a user of the domain. If you need to use other credentials, Remote Desktop Manager must be started using the RUNAS command as described in Running Remote Desktop Manager as Another User.

7.7.1.1.3 TLS Options

DESCRIPTION

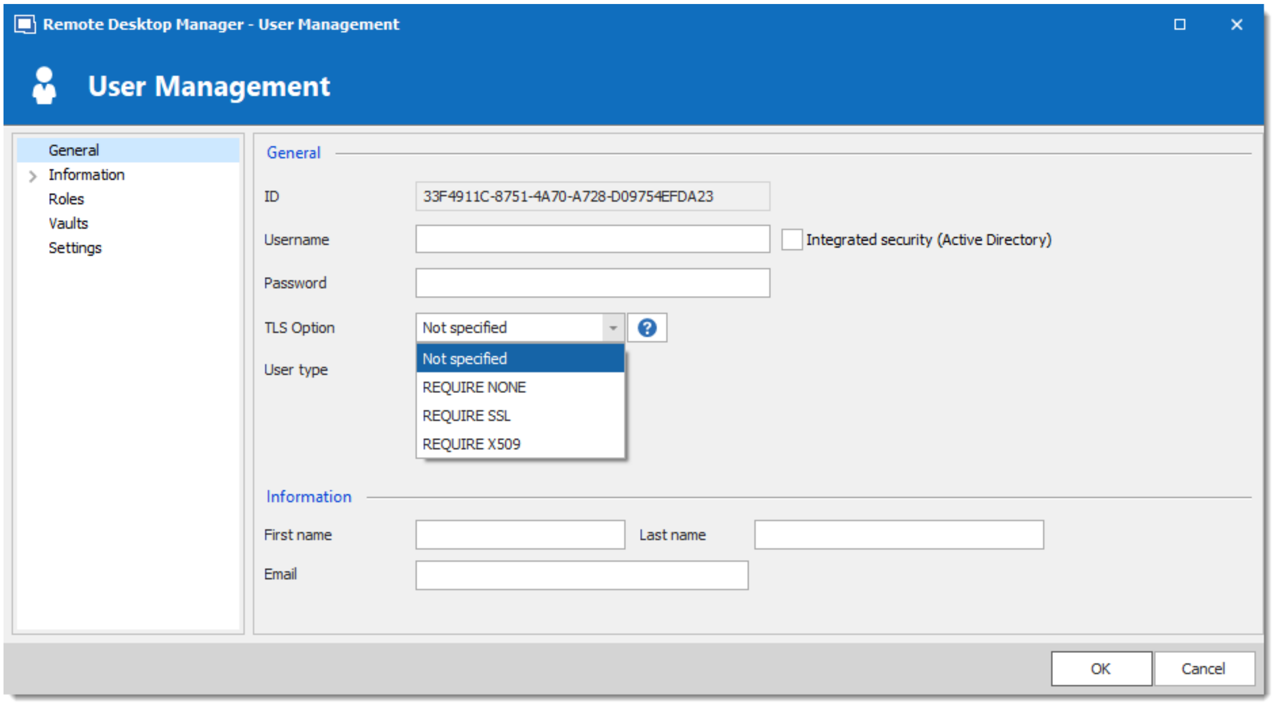
MySQL and MariaDB databases can verify X509 certificate attributes alongside the usual authentication method.

For more information on TLS options, please consult the following topics:

- MySQL GRANT syntax (Other Account Characteristics)
- Maria DB Knowledge base (Per-Account SSL/TLS Options)

CONFIGURATION

When the user is created, select the desired TLS option:



Remote Desktop Manager - User Management

User Management

General

ID: 33F4911C-8751-4A70-A728-D09754EFDA23

Username:

□ Integrated security (Active Directory)

Password:

TLS Option: Not specified

User type:

Not specified
REQUIRE NONE
REQUIRE SSL
REQUIRE X509

Information

First name:

Last name:

Email:

OPTION	DESCRIPTION
Not specified	Do not specify any TLS option.
REQUIRE NONE	Allow the connection without any certificate.
REQUIRE SSL	Allow the connection only with SSL encryption.
REQUIRE X509	Allow the connection only with valid X509 certificate.

7.7.1.2 Role Management

DESCRIPTION

Roles in Remote Desktop Manager manages multiple users at the same time by grouping them. The management of permissions granted to roles are quite similar to the corresponding notions for users, but instead of a single user, they apply to all users to which you've assigned the role.

This feature is only available with an Advanced Data Source.

ROLES IN DEVOLUTIONS PASSWORD SERVER

Roles in Devolutions Password Server are in fact links to Active Directory groups. By leveraging Active Directory integration you can easily define access rights for all domain users in your organization. Once a domain user log in the Devolutions Password Server data source, their user account will be created if needed and users rights will be controlled by the defined groups.

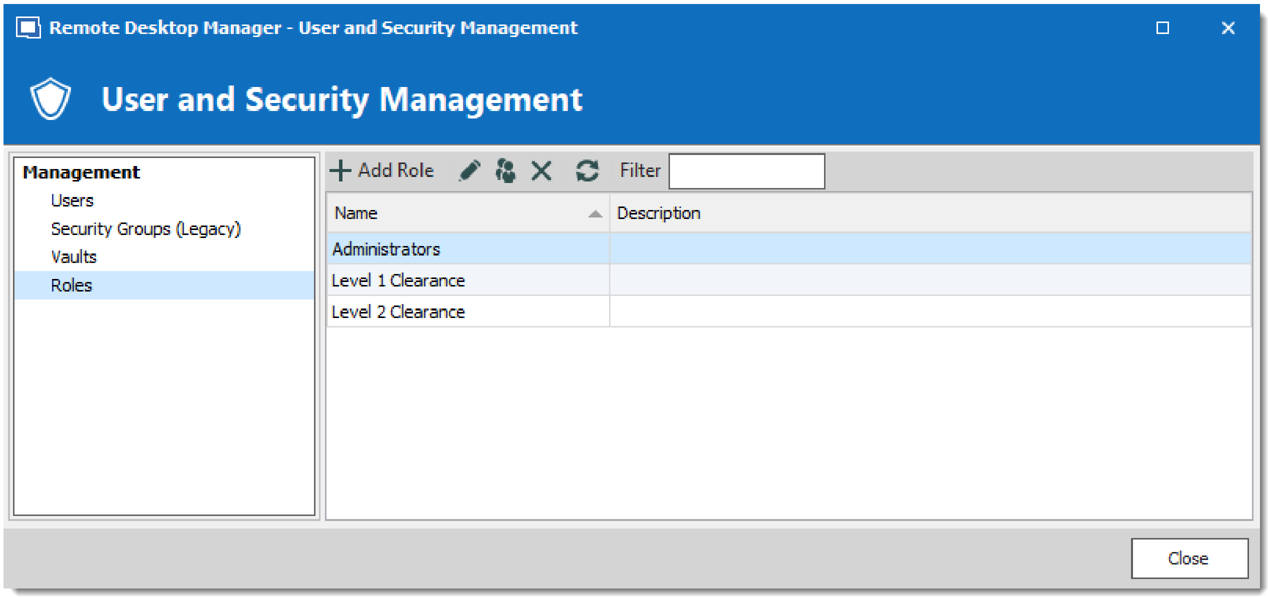
Please note that the Unsecured group permissions (the ones above the grid) are ignored. You must set them on each user individually.

For more information please see Devolutions Password Server Role Management.

CREATE ROLES

Roles in Remote Desktop Manager are mainly used to group users. You can assign multiple roles to each user. The end result is the union of all permissions given to the roles.

To create a role, in the **User and Security Management** window, click the **Add User** button in the **Roles** section. From the same menu, you can also edit, assign users, delete or refresh.


Remote Desktop Manager - User and Security Management
User and Security Management
Management
Users
Security Groups (Legacy)
Vaults
Roles
Add Role
Filter
Close

Name	Description
Administrators	
Level 1 Clearance	
Level 2 Clearance	

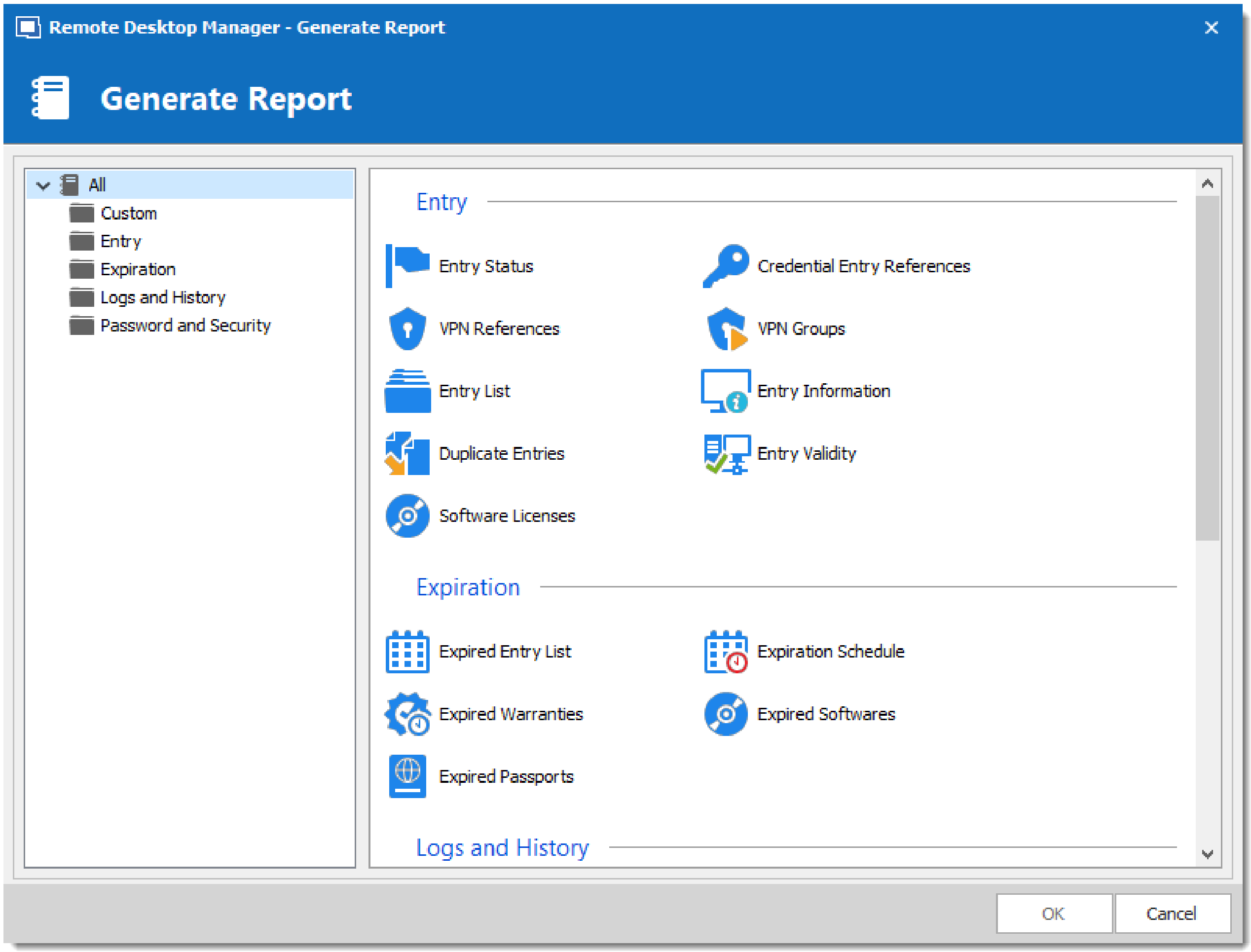
Roles - Add Role

7.7.2 Reports

7.7.2.1 Reports

DESCRIPTION

The **Reports** section automatically generates reports detailing Remote Desktop Manager usage related to: Entries, Expired Assets, Passwords, Security and Users. You have the option to export your generated report, as well as executing and exporting reports through a command line.



Generate Report

From this window, you can browse and select a wide variety of Report Types. Explore to your heart's content.

Once Generated, a report will provide you with all the information you selected during this step. These final results can take various shapes and have different features (such as editing a specific entry or printing the result) depending on what the report actually is.

> These logs are still restricted by user rights. A user with restricted access wouldn't be able to select Password and Security for example.

7.7.2.1.1 Export Reports

DESCRIPTION

The Export Reports is a way to execute and export reports through a command line. You can use this feature in a shortcut or in a batch file and use the Windows task scheduler to execute it.

You will be able to export Data Report, Inventory report as well as most of the reports found in our Generate Report list except for the Password Usage and Security Group.

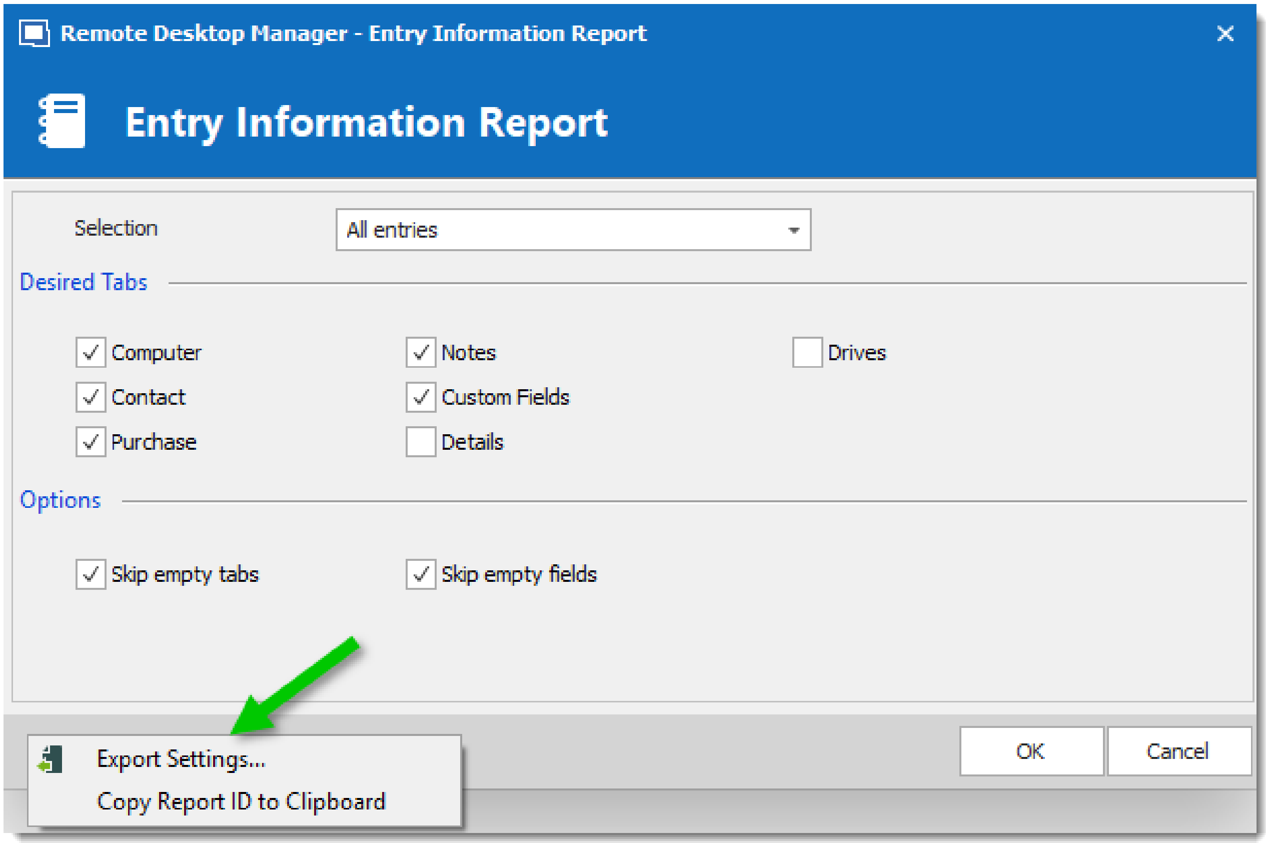
> You must have the rights to run report in Remote Desktop Manager to use this feature.

SETTINGS

Watch Video

For Reports containing settings, you will have to start with exporting your report settings to create the ***.rdr** file that the command line use to generate the reports. Here is a list of reports containing settings:

1. Select your Report in ***Administrations – Report*** and then select the option **Export Settings** in the **More** text button. It will create an ***.rdr** file containing all your report settings. This is also where you Report ID is located (this will be useful later on).



Remote Desktop Manager - Entry Information Report

Entry Information Report

Selection: All entries

Desired Tabs

☑ Computer
☑ Contact
☑ Purchase
☑ Notes
☑ Custom Fields
□ Details
□ Drives

Options

☑ Skip empty tabs
☑ Skip empty fields

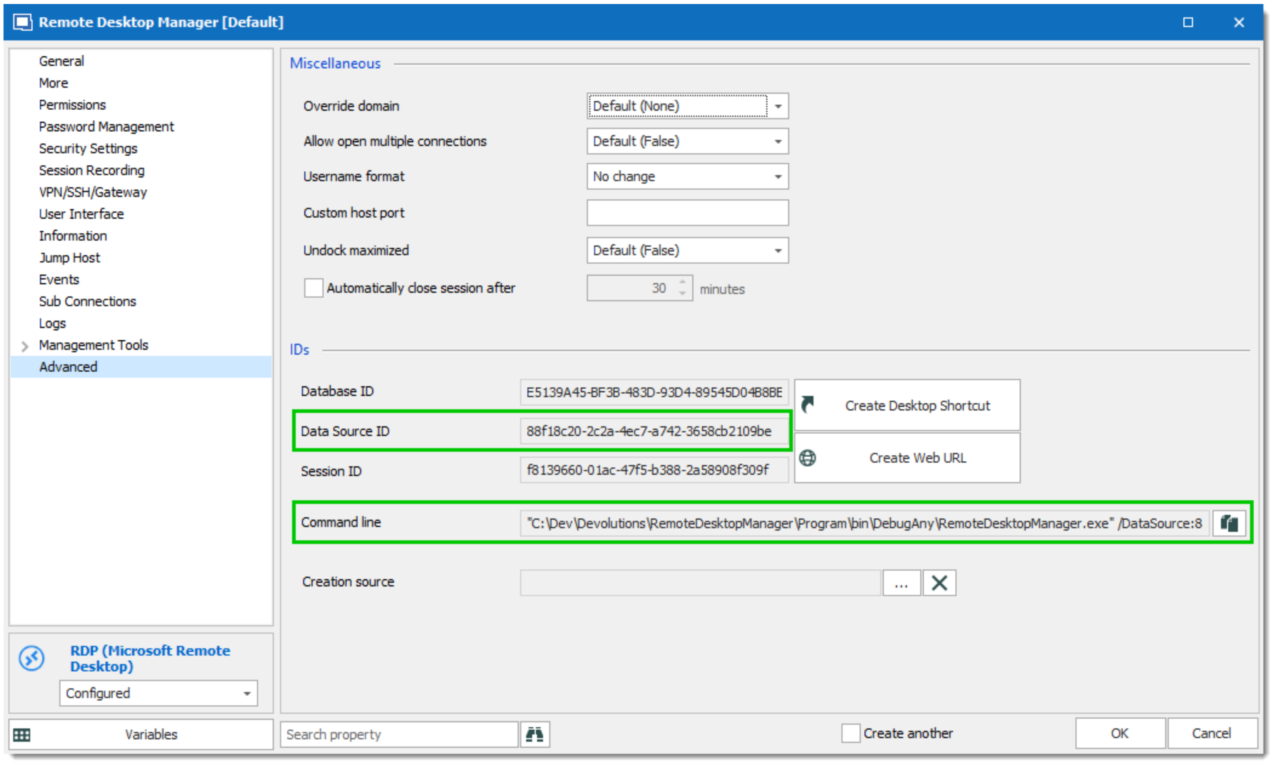
Export Settings

2. In your Windows Command Prompt enter the following command line:

```
C:\*** /DataSource:*** /report:***/reportoutput:"***" /reportsettings:"***.rdr"
```

PARAMETERS	DESCRIPTION
C:\	Enter the path used to start your Remote Desktop Manager application (path of the RemoteDesktopManager.exe file)
/DataSource	Specify the data source ID.
/report	Specify the type of report to generate or the report ID.
/reportoutput	Specify the path to save your report and the name for the newly generated report.
/reportsettings	Specify the path of your report settings file (.rdr).

To find your Data Source ID and the Command Line use to start Remote Desktop Manager edit one of your session from your data source and select the Advanced section.



Miscellaneous

Override domain: Default (None)
Allow open multiple connections: Default (False)
Username format: No change
Custom host port:
Undock maximized: Default (False)
☐ Automatically close session after 30 minutes

IDs

Database ID: E5139A45-BF3B-483D-93D4-89545D04B8BE
Data Source ID: 88f18c20-2c2a-4ec7-a742-3658cb2109be
Session ID: f8139660-01ac-47f5-b388-2a58908f309f
Command line: "C:\Dev\Devolutions\RemoteDesktopManager\Program\bin\DebugAny\RemoteDesktopManager.exe" /DataSource:8
Creation source:

Configured

RDP Session - Advanced Section

Here is a list of types of Reports you can find in Remote Desktop Manager and the name to enter in the command line to generate the report:

REPORT TYPE IN Remote Desktop Manager	REPORT NAME (TYPE) TO INSERT IN THE COMMAND LINE
Usage Log	SharedConnectionLog
Entry Information	EntryInformation
Expiration Schedule	CalendarExpiredEntry
Expired Entry List	ConnectionExpiredEntry
Expired Passports	ConnectionExpiredPassports

REPORT TYPE IN Remote Desktop Manager	REPORT NAME (TYPE) TO INSERT IN THE COMMAND LINE
Expired Softwares	ConnectionExpiredSoftwares
Expired Warranties	ConnectionExpiredWarranties
Entry Status	ConnectionStatus
Credential Entry References	CredentialEntryUsage
Entry Validity Report	EntryValidity
VPN References	VPNEntryUsage
Entry List	Connection
Duplicate Entries	DuplicateEntry
Password Complexity	PasswordComplexity
Password Analyzer	PasswordAnalyzer

Here is an example of a command line for an Entry Information Report:

```
C:\Program Files (x86)\Devolutions\Remote Desktop Manager\RemoteDesktopManager.exe /DataS
/reportoutput:C:\dev\devolutions\Rapport\rapportEntry.csv /reportsettings:C:\dev\devoluti
```

7.7.2.2 Deleted Entries

DESCRIPTION

The ***Administration – View deleted*** option allows you to view the deleted entries as well as restoring them.

This feature requires an Advanced Data Source.

Administrators can permanently delete some or all deleted entries.

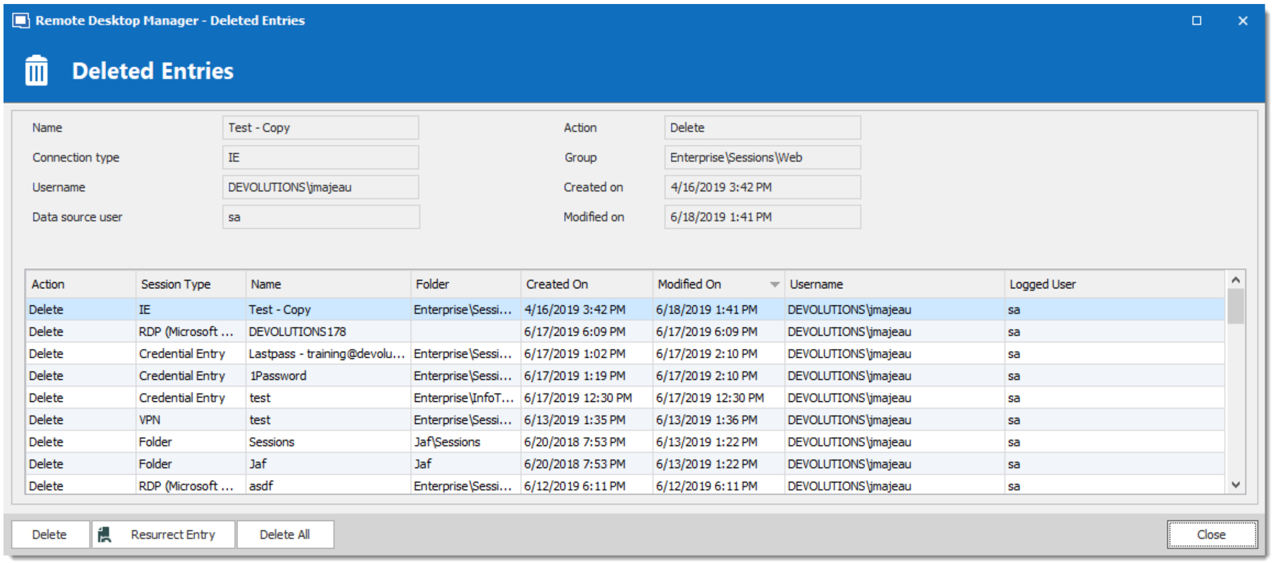
For architectural reasons, the documents stored in our Advanced Data Sources are **NOT** protected from deletions. Once they are deleted, **they cannot be restored**. Please keep a safe copy of all documents in another storage device. Support for this feature will be added in a coming update to our products.

Sub-connections are not retained in the View Deleted window. To restore a sub-connection, please have a look at Entry History.

SETTINGS

MANAGE DELETED ENTRIES

The **Deleted Entries** will generate a list containing all the entries previously deleted from your data source. You may resurrect an entry, meaning it will become an active entry again and will be shown in your data source. You may also chose to permanently delete your entries, once you have permanently deleted your entries you won't be able to resurrect them afterward.



Name	Test - Copy	Action	Delete
Connection type	IE	Group	Enterprise\Sessions\Web
Username	DEVOLUTIONS\jmajeau	Created on	4/16/2019 3:42 PM
Data source user	sa	Modified on	6/18/2019 1:41 PM

Action	Session Type	Name	Folder	Created On	Modified On	Username	Logged User
Delete	IE	Test - Copy	Enterprise\Sessi...	4/16/2019 3:42 PM	6/18/2019 1:41 PM	DEVOLUTIONS\jmajeau	sa
Delete	RDP (Microsoft ...	DEVOLUTIONS178		6/17/2019 6:09 PM	6/17/2019 6:09 PM	DEVOLUTIONS\jmajeau	sa
Delete	Credential Entry	Lastpass - training@devolu...	Enterprise\Sessi...	6/17/2019 1:02 PM	6/17/2019 2:10 PM	DEVOLUTIONS\jmajeau	sa
Delete	Credential Entry	1Password	Enterprise\Sessi...	6/17/2019 1:19 PM	6/17/2019 2:10 PM	DEVOLUTIONS\jmajeau	sa
Delete	Credential Entry	test	Enterprise\InfoT...	6/17/2019 12:30 PM	6/17/2019 12:30 PM	DEVOLUTIONS\jmajeau	sa
Delete	VPN	test	Enterprise\Sessi...	6/13/2019 1:35 PM	6/13/2019 1:36 PM	DEVOLUTIONS\jmajeau	sa
Delete	Folder	Sessions	Jaf\Sessions	6/20/2018 7:53 PM	6/13/2019 1:22 PM	DEVOLUTIONS\jmajeau	sa
Delete	Folder	Jaf	Jaf	6/20/2018 7:53 PM	6/13/2019 1:22 PM	DEVOLUTIONS\jmajeau	sa
Delete	RDP (Microsoft ...	asdf	Enterprise\Sessi...	6/12/2019 6:11 PM	6/12/2019 6:11 PM	DEVOLUTIONS\jmajeau	sa

Deleted Entries

OPTION	DESCRIPTION
Delete	Permanently delete the selected entry.
Resurrect Entry	Use this button to restore an entry.
Delete All	Permanently delete all the deleted entries.

✓ Deleted entries can be resurrected as long as the Security Provider has not been changed since the deleted action.

EXPORT DELETED ENTRIES LIST

You can use the **Right-click** button on one or several lines to export them in CSV, HTML or XML format.

7.7.3 Settings

7.7.3.1 Root (Settings)

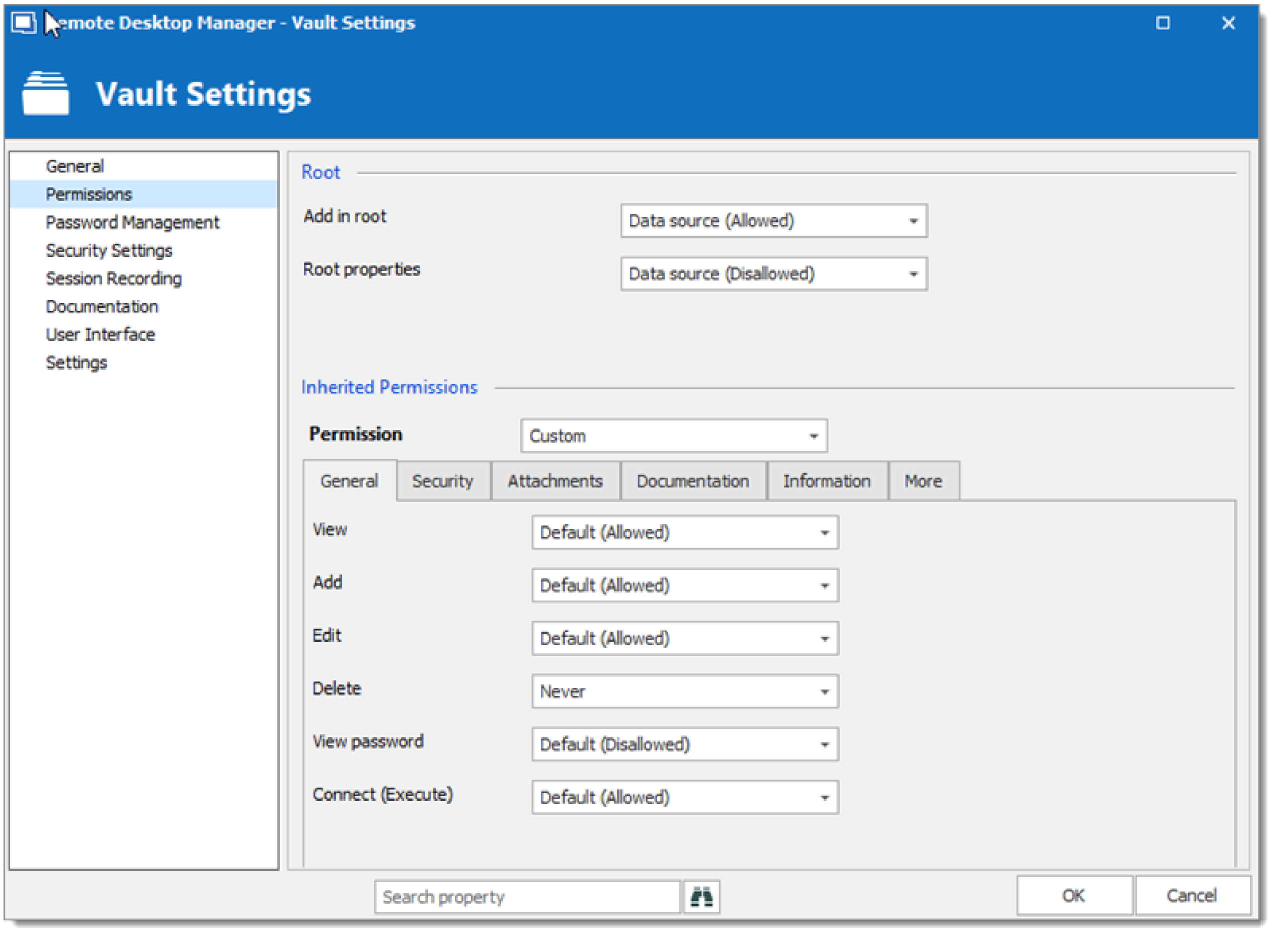
7.7.3.1.1 Default security for entries

DESCRIPTION

In the vault settings, navigate to the **Permissions** section. Under **Inherited Permissions**, change the **Permission** drop down list to the desired settings.

- **Custom** allows to select specific roles/users for each permission below.
- **Never** denies any access to all users.

For more information on the discrete permissions, please consult the Security – Permissions topic.



Remote Desktop Manager - Vault Settings

Vault Settings

Root

Add in root: Data source (Allowed)

Root properties: Data source (Disallowed)

Inherited Permissions

Permission: Custom

View: Default (Allowed)

Add: Default (Allowed)

Edit: Default (Allowed)

Delete: Never

View password: Default (Disallowed)

Connect (Execute): Default (Allowed)

Vault – Permissions

To confirm the change, edit an entry below the vault root and navigate to the ***Security – Permissions*** section. All permissions set to ***Default*** inherit the value from Data Source Permissions (System Permissions) or the user. Inherited values are displayed next to the permissions.

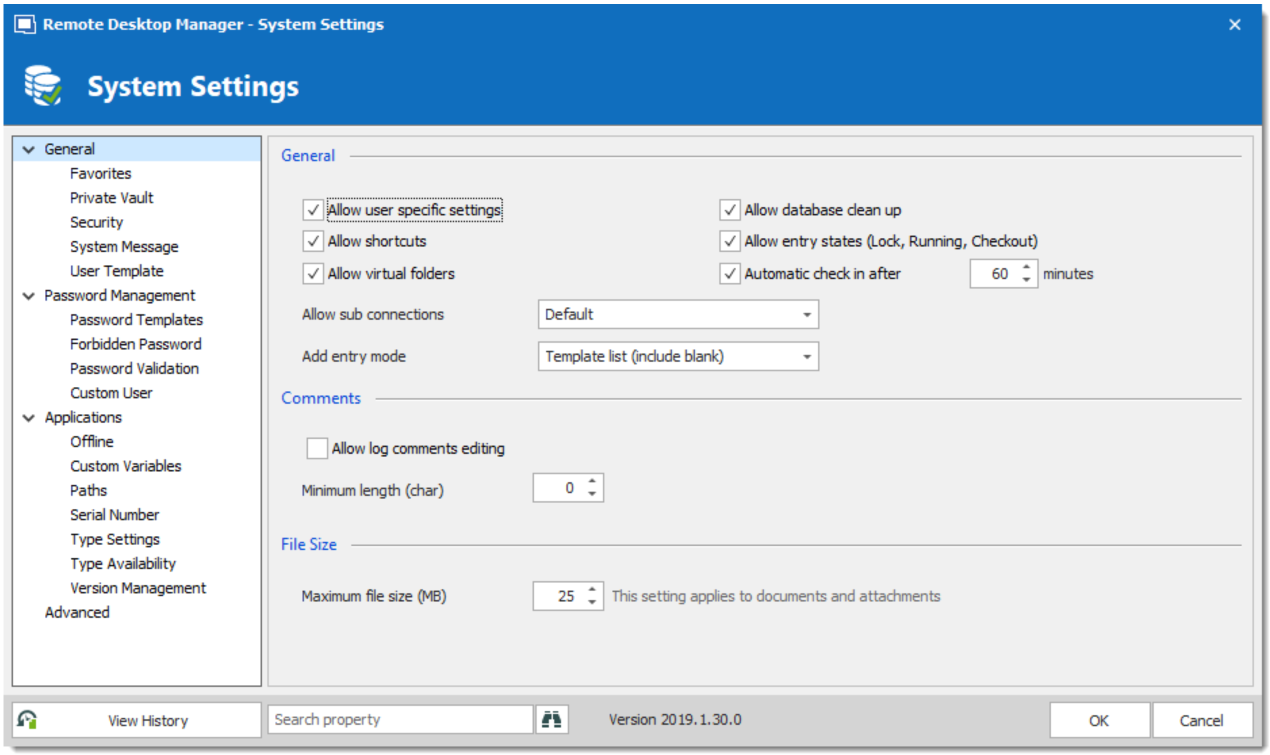
7.7.3.2 System Settings

7.7.3.2.1 General

GENERAL

The **General** section allows to manage the availability of different features related to the database.

These settings applies to all users that have access to the data source.



General

☑ Allow user specific settings
☑ Allow shortcuts
☑ Allow virtual folders
☑ Allow database clean up
☑ Allow entry states (Lock, Running, Checkout)
☑ Automatic check in after 60 minutes

Allow sub connections: Default

Add entry mode: Template list (include blank)

Comments

☐ Allow log comments editing

Minimum length (char): 0

File Size

Maximum file size (MB): 25 This setting applies to documents and attachments

System Settings - General

GENERAL	DESCRIPTION
Allow user Specific Settings	Allow users to save User Specific Settings.
Allow database clean up	Allows logs and deleted history to be cleaned up. For more information, please consult the Clean up topic.
Allow shortcuts	Allow the reiteration of entries through the shortcut feature.
Allow entry states (Lock, Running, Checkout)	Allow entries to be locked when used or edited.
Allow virtual folders	Allow to store entries in virtual folders. (Not supported with Devolutions Password Server.)
Automatic check in after	Forces checked out entries to check in automatically after a set delay.
Allow sub connections	Allow users to create sub connections.
Add entry mode	Select if users are prompted to choose a template when creating a new entry. Select between: • **Default** • **Template list (include default)** • **Template list only** • **No template selection**

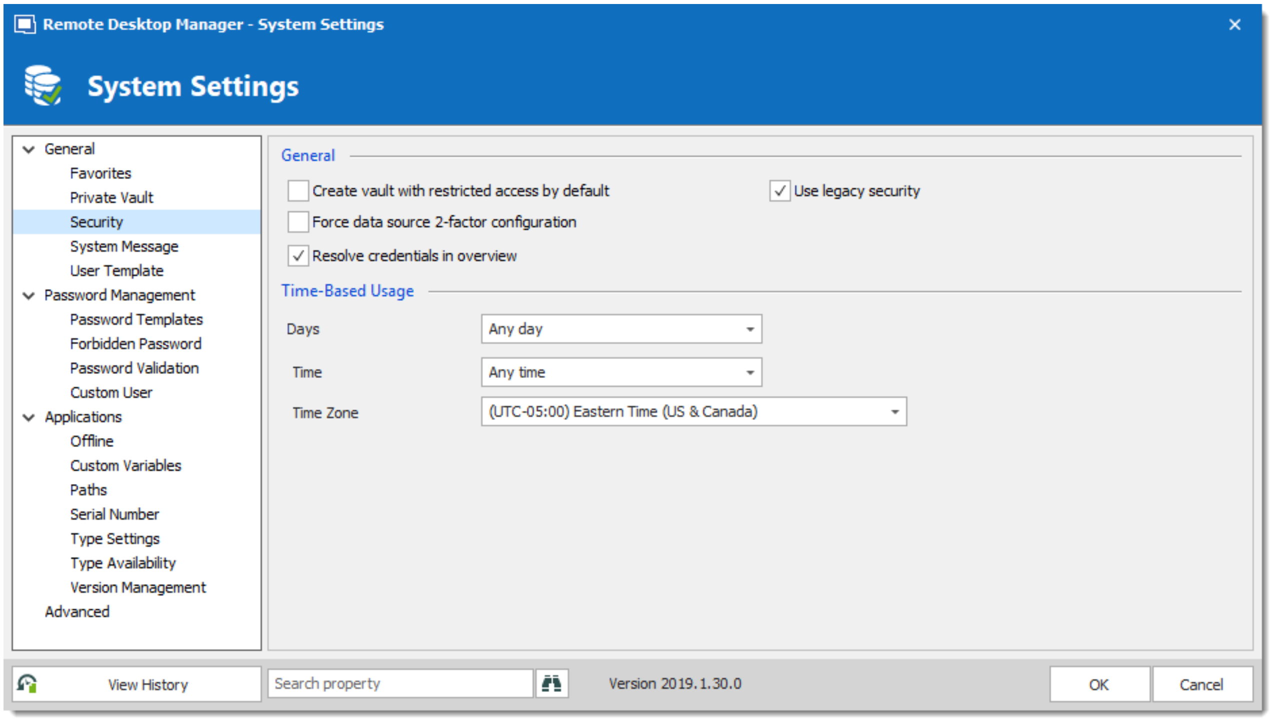
COMMENTS	DESCRIPTION
Allow log comments editing	Enable the log comment editing for all users.

COMMENTS	DESCRIPTION
Minimum length (char)	Set the minimum length (in characters) allowed for comments.

FILE SIZE	DESCRIPTION
Maximum file size (MB)	Limit the size of attachments and document entries to avoid to over load the data source.

7.7.3.2.1.1 Security

SETTINGS



General

☐ Create vault with restricted access by default
☑ Use legacy security
☐ Force data source 2-factor configuration
☑ Resolve credentials in overview

Time-Based Usage

Days: Any day
Time: Any time
Time Zone: (UTC-05:00) Eastern Time (US & Canada)

System Settings - General - Security

DATA SOURCE SECURITY	DESCRIPTION
Create Vault with restricted access by default	Automatically secure the vault settings when creating a repository. Therefore, the permissions settings are set to **Never**.
Force data source 2-factor configuration	Require the users to have a 2-factor configuration applied on the data source. Not shown with Devolutions Password Server as 2FA set elsewhere.
Resolve credentials in overview	Displays username and password fetched from a Credential repository in the entry overview in the dashboard. Uncheck this option if it takes too long to resolve.
Use legacy security	Use the old system of managing privileges: security groups.

TIME-BASED USAGE	DESCRIPTION
Time of day	Select the hours which the data source is limited to. Select between: • **Any time**: the session can be used at any hour. • **Custom**: manually select the time frame the session is available for.
Time of week	Select which days the data source is available for. Select between: • **Any day**: the session can be used any day of the week or week-end. • **Week days**: the session can be used only the week days. • **Week ends**: the session can be used only the week ends. • **Custom**: manually select each day the session is available for.

TIME-BASED USAGE	DESCRIPTION
Time Zone	Select the time zone you are currently in.

7.7.3.2.1.2 Allow Password Access From External System

DESCRIPTION

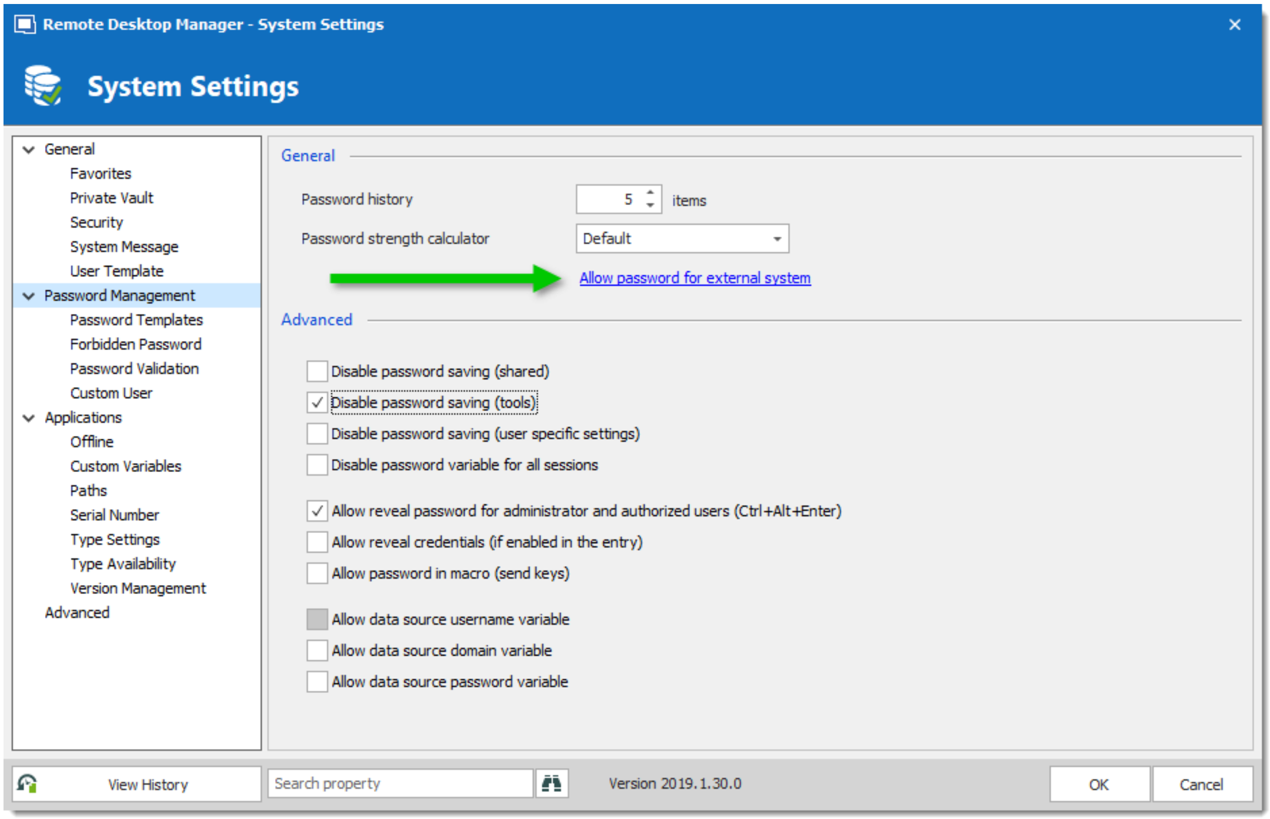
ℹ This feature is only available when using an Advanced Data Source.

Accessing passwords stored in your data source by querying the underlying database is not possible because of the encryption we apply on the passwords. For those of you that need to access passwords directly in the database, for example by a CRM system, we have created a way to achieve this.

SETTINGS

The session information, which is an XML structure, is stored in the **Data** field of the **Connections** table in the underlying database.

However, getting the encrypted password from the database requires the **Allow password for external system** to be configured.



General

Password history 5 items

Password strength calculator Default

Allow password for external system

Advanced

□ Disable password saving (shared)
☑ Disable password saving (tools)
□ Disable password saving (user specific settings)
□ Disable password variable for all sessions

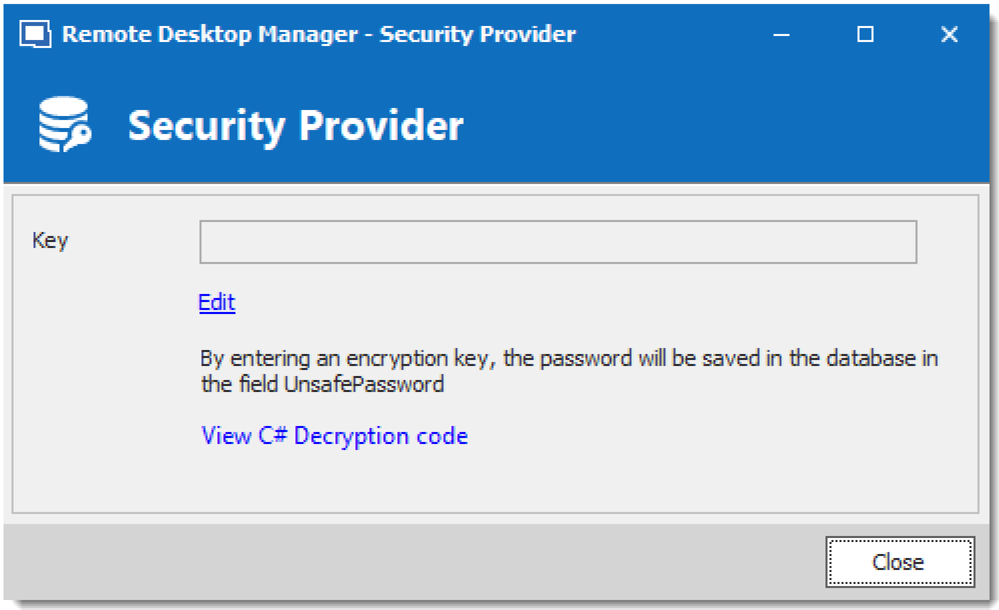
☑ Allow reveal password for administrator and authorized users (Ctrl+Alt+Enter)
□ Allow reveal credentials (if enabled in the entry)
□ Allow password in macro (send keys)

□ Allow data source username variable
□ Allow data source domain variable
□ Allow data source password variable

Version 2019.1.30.0

Password Policy - Allow Password For External System

Enter an encryption key in the **Key** field. Once a key is provided it will cause the system to extract a copy of the password from our XML structure, this will then be re-encrypted using the **key** you have provided and stored back into the **UnsafePassword** field of the **Connections** table.



Key

Edit

By entering an encryption key, the password will be saved in the database in the field UnsafePassword

View C# Decryption code

Security Provider

DECRYPTION CODE

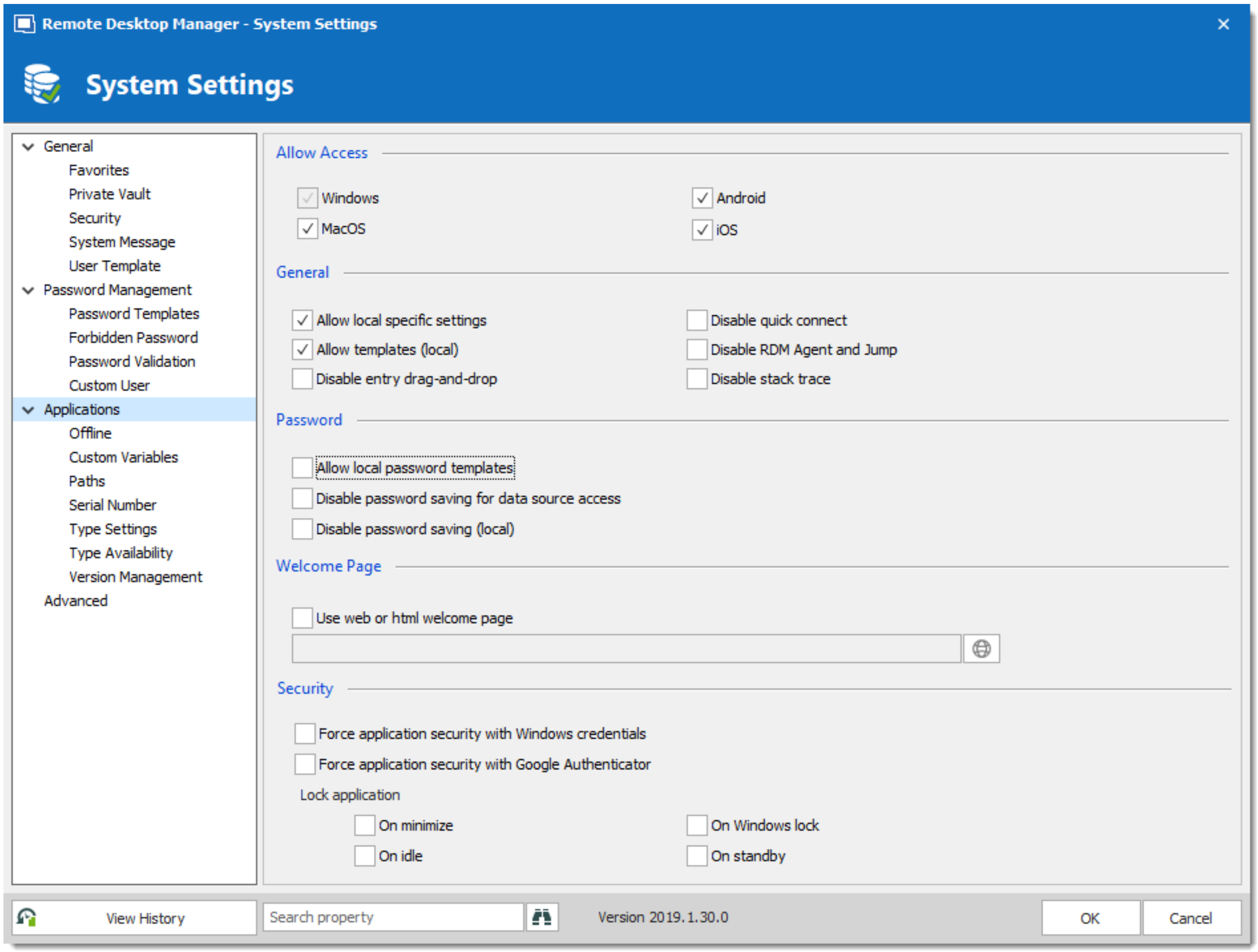
Use the following .net code to decrypt your passwords.

```
public static string Decrypt(string encryptedString, string key)
{
  if (string.IsNullOrEmpty(encryptedString))
  {
    return encryptedString;
  }

  try
  {
    TripleDESCryptoServiceProvider tripleDesCryptoServiceProvider = new TripleDESCrypt
    MD5CryptoServiceProvider cryptoServiceProvider = new MD5CryptoServiceProvider();

    string strTempKey = key;

    byte[] byteHash = cryptoServiceProvider.ComputeHash(Encoding.ASCII.GetBytes(strTem

    tripleDesCryptoServiceProvider.Key = byteHash;

    tripleDesCryptoServiceProvider.Mode = CipherMode.ECB;

    byte[] byteBuff = Convert.FromBase64String(encryptedString);

    string strDecrypted =
      Encoding.UTF8.GetString(
        tripleDesCryptoServiceProvider.CreateDecryptor().TransformFinalBlock(
          byteBuff, 0, byteBuff.Length));

    return strDecrypted;
  }
  catch (Exception)
  {
    return null;
  }
}
```

7.7.3.2.2 Application

DESCRIPTION

The **Applications** section manages the availability of different features related to Remote Desktop Manager application.



Allow Access

☑ Windows
☑ Android
☑ MacOS
☑ iOS

General

☑ Allow local specific settings
□ Disable quick connect
☑ Allow templates (local)
□ Disable RDM Agent and Jump
□ Disable entry drag-and-drop
□ Disable stack trace

Password

□ Allow local password templates
□ Disable password saving for data source access
□ Disable password saving (local)

Welcome Page

□ Use web or html welcome page

Security

□ Force application security with Windows credentials
□ Force application security with Google Authenticator

Lock application

□ On minimize
□ On Windows lock
□ On idle
□ On standby

Version 2019.1.30.0

ALLOW ACCESS	DESCRIPTION
Operating systems	Enable access to the data source from the selected operating systems.

GENERAL	DESCRIPTION
Allow local Specific Settings	Allow users to save Local Specific Settings.
Allow templates (local)	Allows to locally save entry's templates.
Disable entry drag-and-drop	Disable entries drag and drop from one folder to another. This setting is useful for avoiding accidental drag and drop.

GENERAL	DESCRIPTION
Disable quick connect	Disable the Quick Connect feature for all users of the data source.
Disable RDM Agent and Jump	Disable the option to activate a session as an RDM Agent or Jump.
Disable stack trace	Disable the stack trace details when an error occurs in Remote Desktop Manager. This is a security feature.

PASSWORD	DESCRIPTION
Allow local password templates	Allows password templates to be saved locally.
Disable password saving for data source access	Prevent users to save or change the passwords stored in the data source configurations.
Disable password saving (local)	Prevent users from saving passwords in the properties of entries.

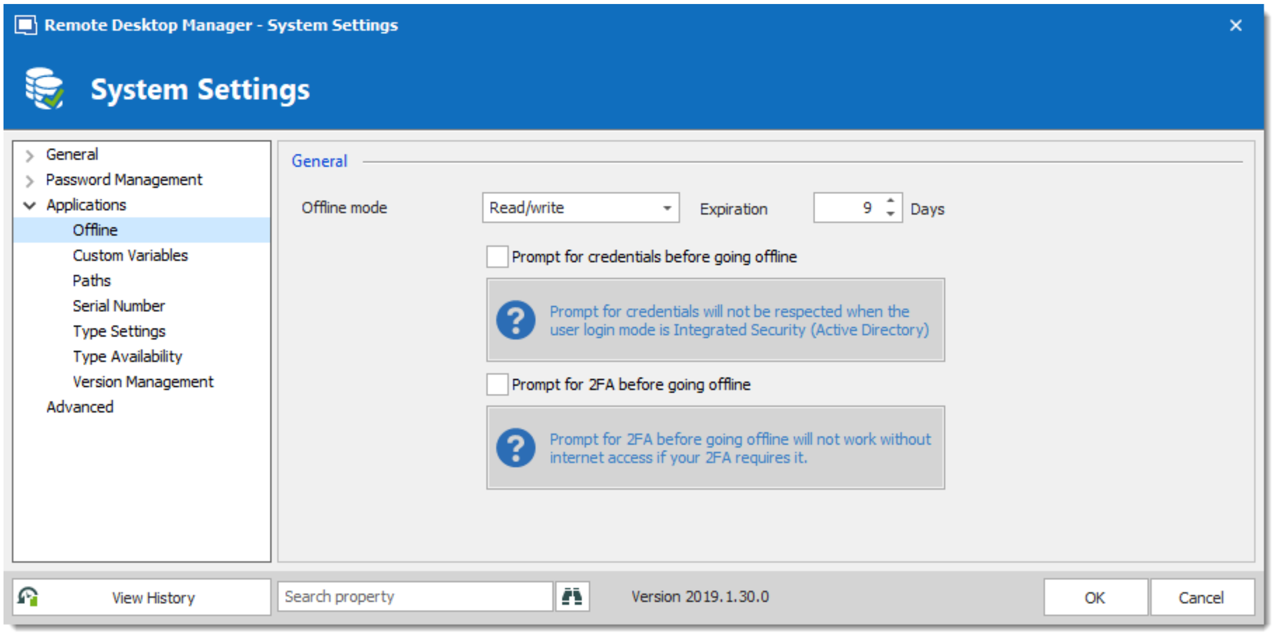
WELCOME PAGE	DESCRIPTION
Use web or html welcome page	Enter an URL to use as the application's welcome page.

SECURITY	DESCRIPTION
Force application security with Windows credentials	Require the users to authenticate with their Windows credentials at application startup.

SECURITY	DESCRIPTION
Force application security with Google Authenticator	Require the users to authenticate with Google Authenticator at application startup.
Lock application	Set the application to lock: • **On Minimize:** lock application when minimized in the taskbar for all users of the data source. • **On Idle:** automatically lock the application when it is not used after a determined amount of time. • **On Windows lock:** lock the application on Windows lock. • **On standby:** lock the application when on standby.

7.7.3.2.2.1 Offline

DESCRIPTION



General

Offline mode: Read/write — Expiration: 9 Days

□ Prompt for credentials before going offline

Prompt for credentials will not be respected when the user login mode is Integrated Security (Active Directory)

□ Prompt for 2FA before going offline

Prompt for 2FA before going offline will not work without internet access if your 2FA requires it.

Version 2019.1.30.0

OPTION	DESCRIPTION
Offline mode	Set the global data source Offline Mode availability. The offline mode is useful when using a VPN connection that makes using local network impossible.
Expiration	Number of days before the offline cache expires. You must go online prior to the end of that period to re-validate the data.
Prompt for credentials before going offline	Force the user to provide their credentials before going offline.
Prompt for 2FA before going offline	Force the user to provide their 2FA before going offline.

> It is not recommended to set the **Expiration** to 0, as this will disable the expiration of the offline cache.

7.7.3.2.2.2 Serial Number

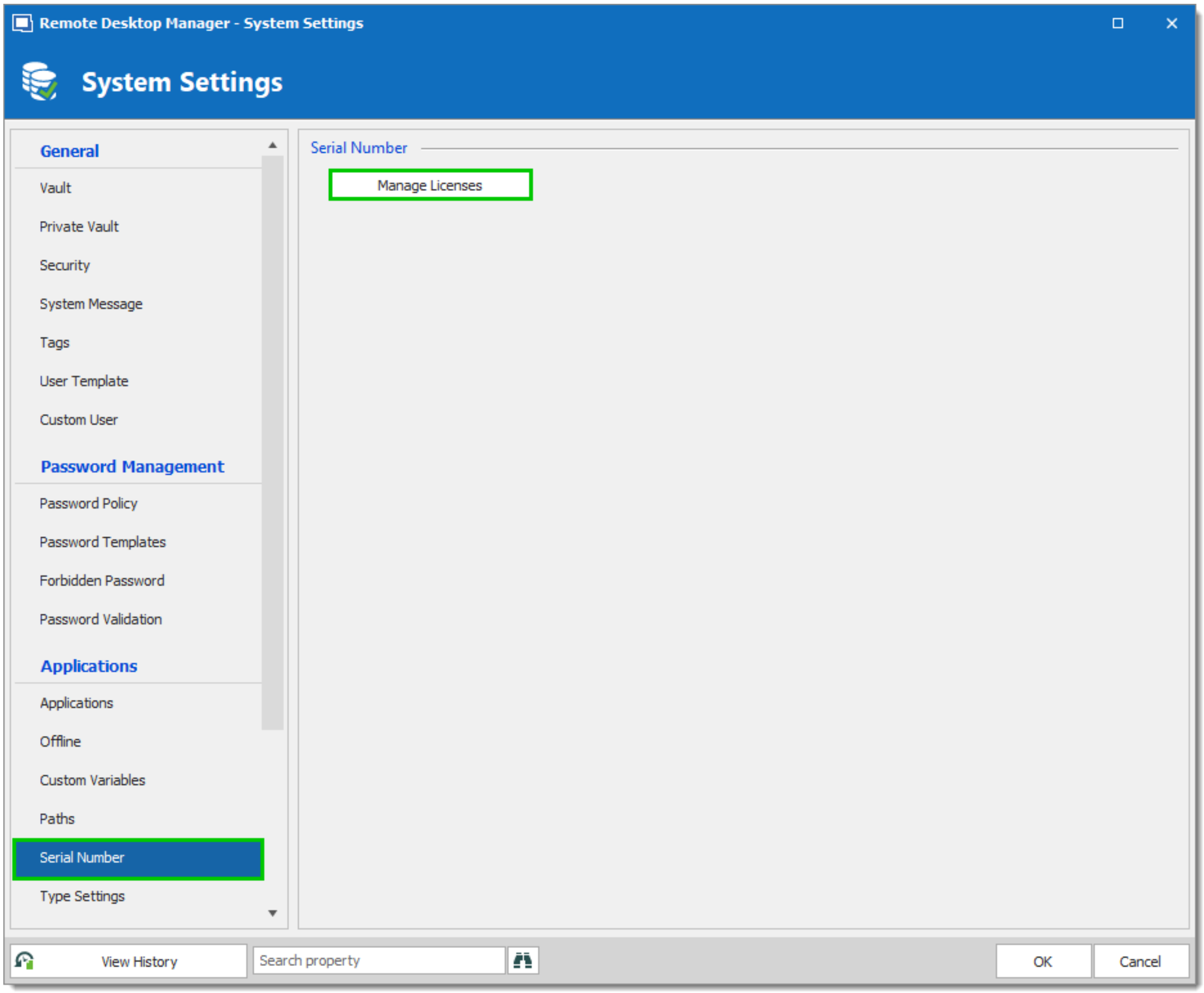
DESCRIPTION

Store an Enterprise Edition Site or Global ***License*** serial to share in the data source.

> When you add a data source with a saved serial in an unregistered version of Remote Desktop Manager, the license serial is automatically retrieved from data source settings.

SETTINGS

You can manage your licenses through a shortcut in ***Administration - System settings - Serial Number***.



System Settings - Serial Number

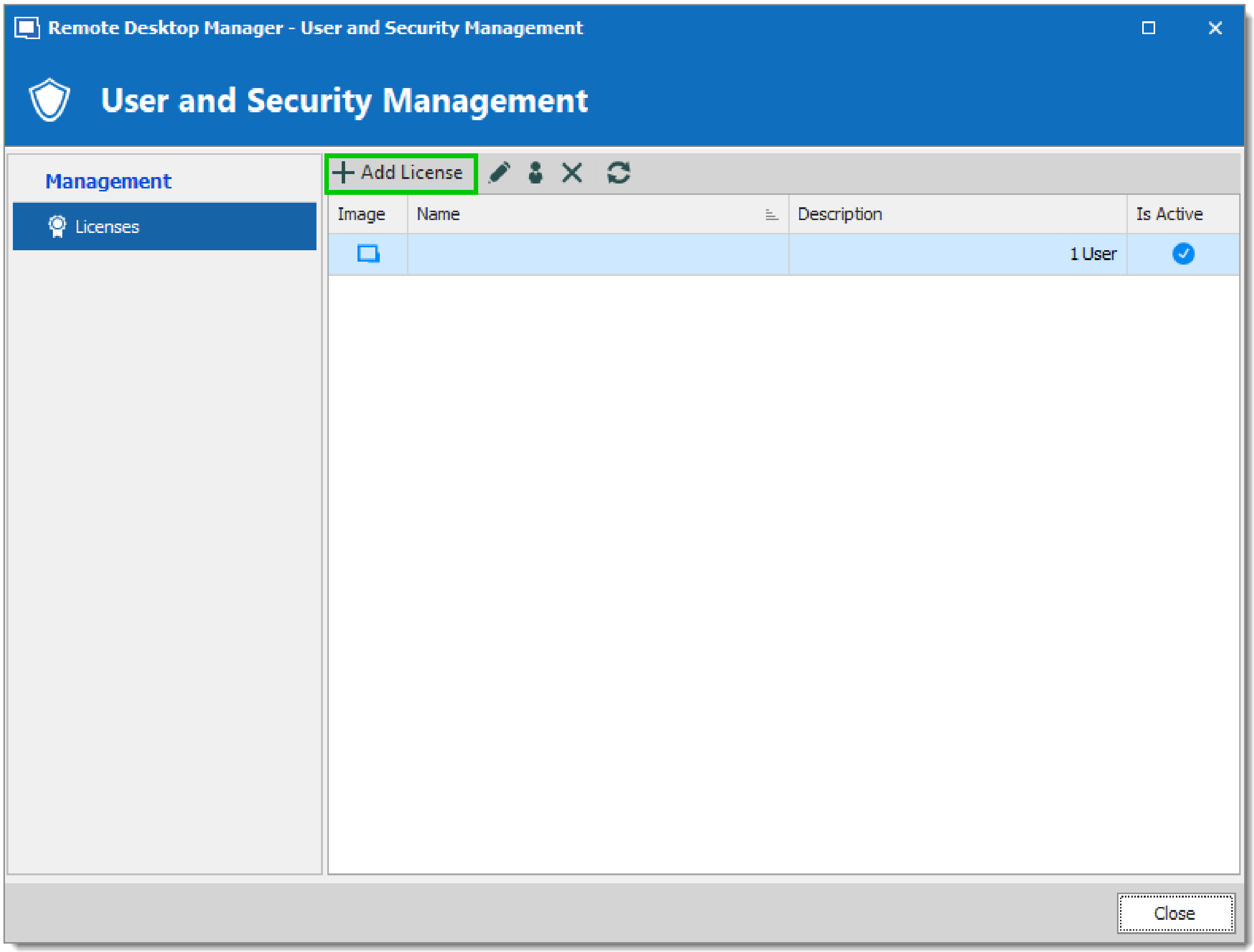
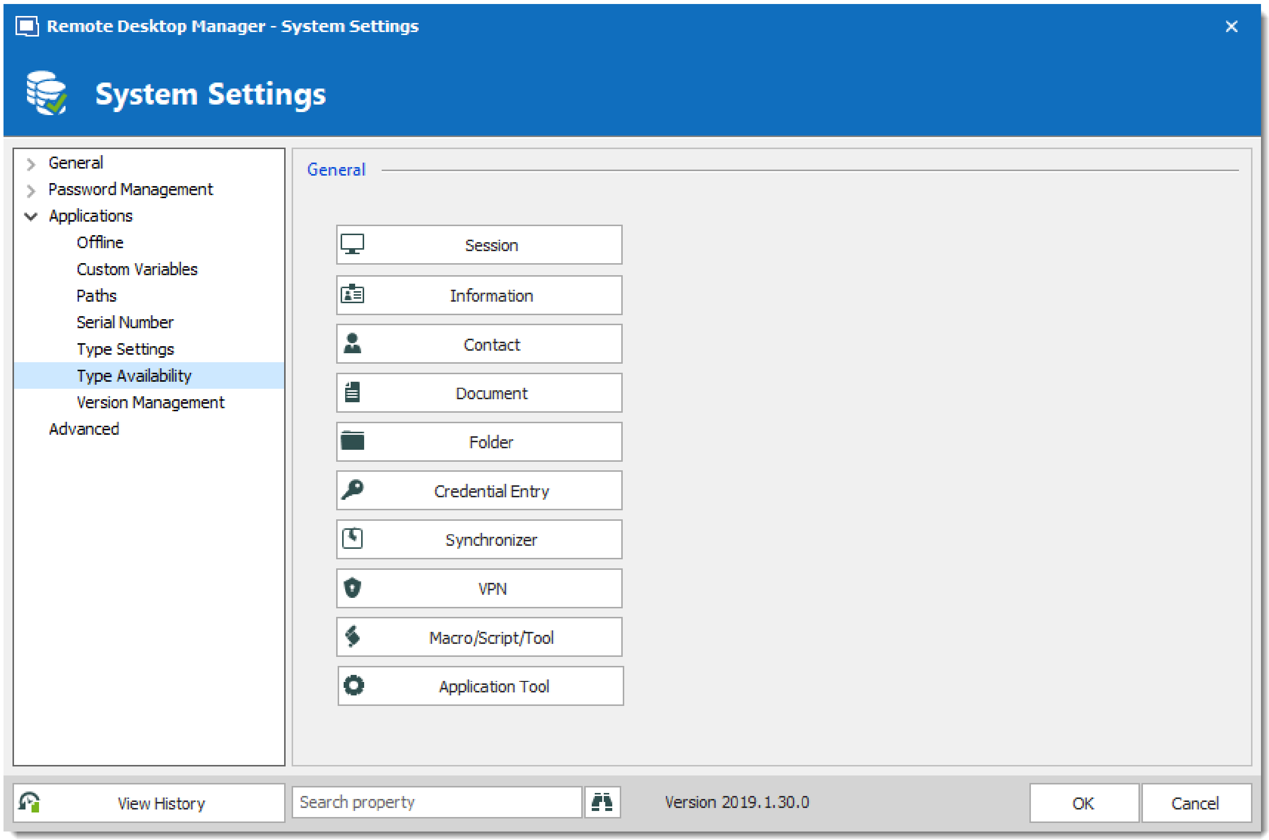

Remote Desktop Manager - User and Security Management
User and Security Management
Management
Licenses
+ Add License
Close

Image	Name	Description	Is Active
☐		1 User	✓

User and Security Management - Add License

7.7.3.2.2.3 Type availability

SETTINGS



System Settings - Types - Availability

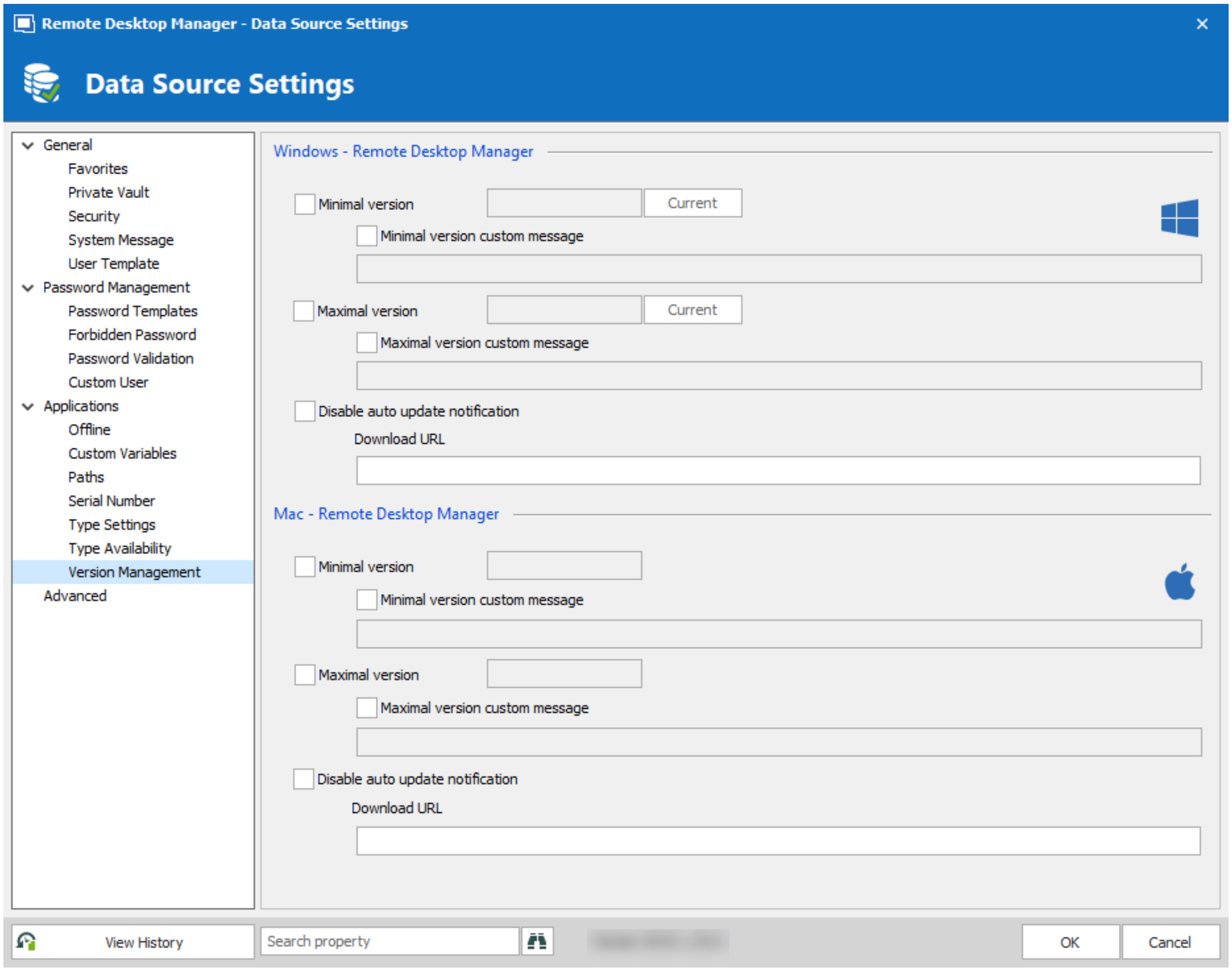
OPTION	DESCRIPTION
Type Availability	Select entry types to exclude. Excluded entries will not be in the **Add New Entry** window.

7.7.3.2.2.4 Version Management

DESCRIPTION

The **Version Management** allows the administrators to manage the data source availability in other versions of Remote Desktop Manager.

WINDOWS AND MACOS



Windows - Remote Desktop Manager

□ Minimal version Current

□ Minimal version custom message

□ Maximal version Current

□ Maximal version custom message

□ Disable auto update notification

Download URL

Mac - Remote Desktop Manager

□ Minimal version

□ Minimal version custom message

□ Maximal version

□ Maximal version custom message

□ Disable auto update notification

Download URL

Version Management

OPTION	DESCRIPTION
Minimal version	Forces users of the data source to use a minimal version of Remote Desktop Manager. Enter the entire version number (2019.1.0.0) to force a specific version. Use this to disable connecting to the data source with an older version.
Minimal version custom message	Enter a custom message for the minimal version notification.
Maximal version	Forces users of the data source to use a maximal version. Enter the entire version number (2019.1.0.0) to

OPTION	DESCRIPTION
	force a specific version. Use this to disable connecting to the data source with a newer version.
Maximal version custom message	Enter a custom message for the maximal version notification.
Disable auto update notification	Disable the auto update notification message. Use this to manually update the application and prevent from getting notified when new versions are available.
Download URL	Use in conjunction with the minimal or maximal version, once a minimal or maximal version requirement is not met the system will prompt the user that the version is no longer valid and it will open the link (path/URL) to download the newer or older version.

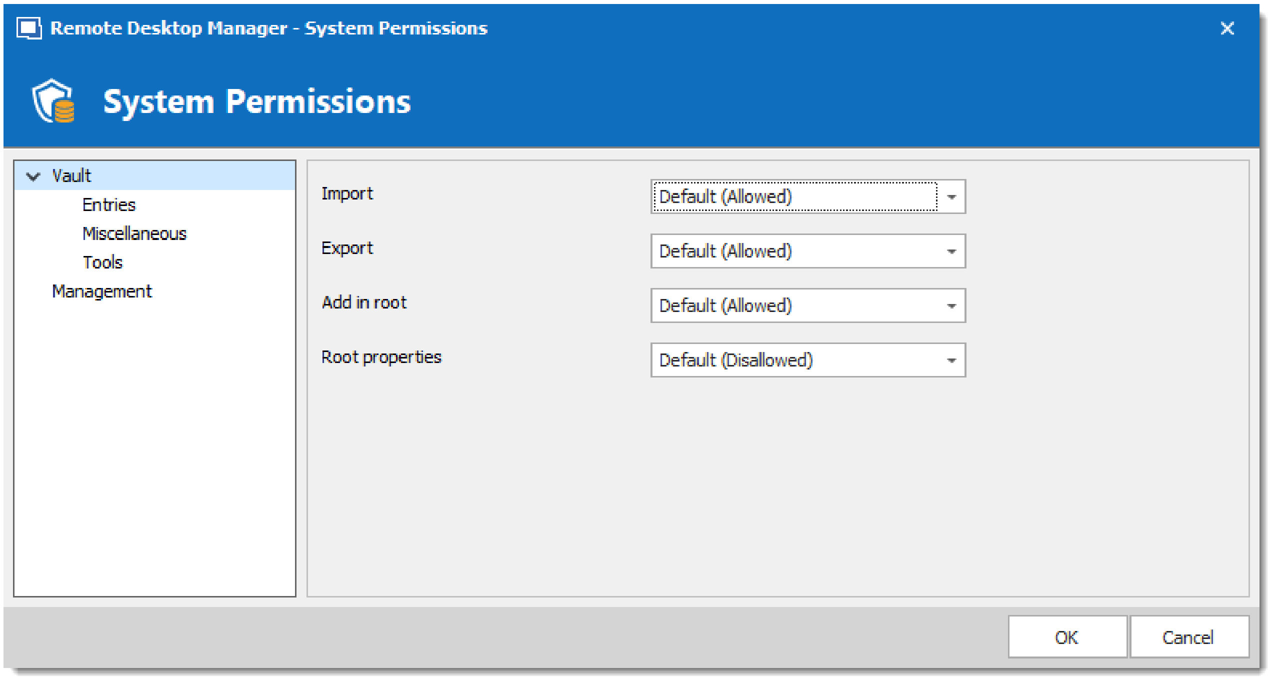
7.7.3.3 System Permissions

DESCRIPTION

The **System Permissions** allows to grant some administrative permissions to standard users without making them administrators. The **Default** setting inherits the permission set on the user or role. For more information about permissions, consult General Security.

> This feature is only available when using an Advanced Data Source.

ENTRIES



Import: Default (Allowed)

Export: Default (Allowed)

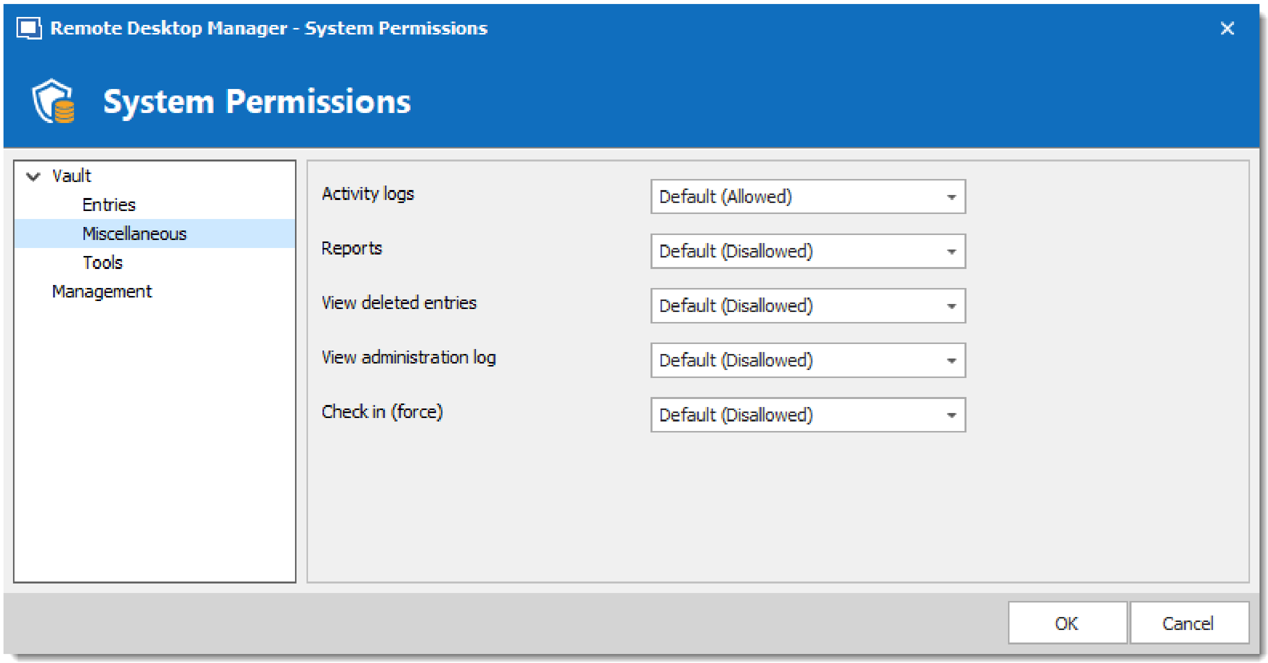
Add in root: Default (Allowed)

Root properties: Default (Disallowed)

System Permissions - Entries

OPTION	DESCRIPTION
Import	Allow users/roles to import entries in the data source.
Export	Allow users/roles to export from the data source.
Add in root	Allow users/roles to create entries in the root folder.
Root properties	Allow users/roles to access the root properties.

MISCELLANEOUS

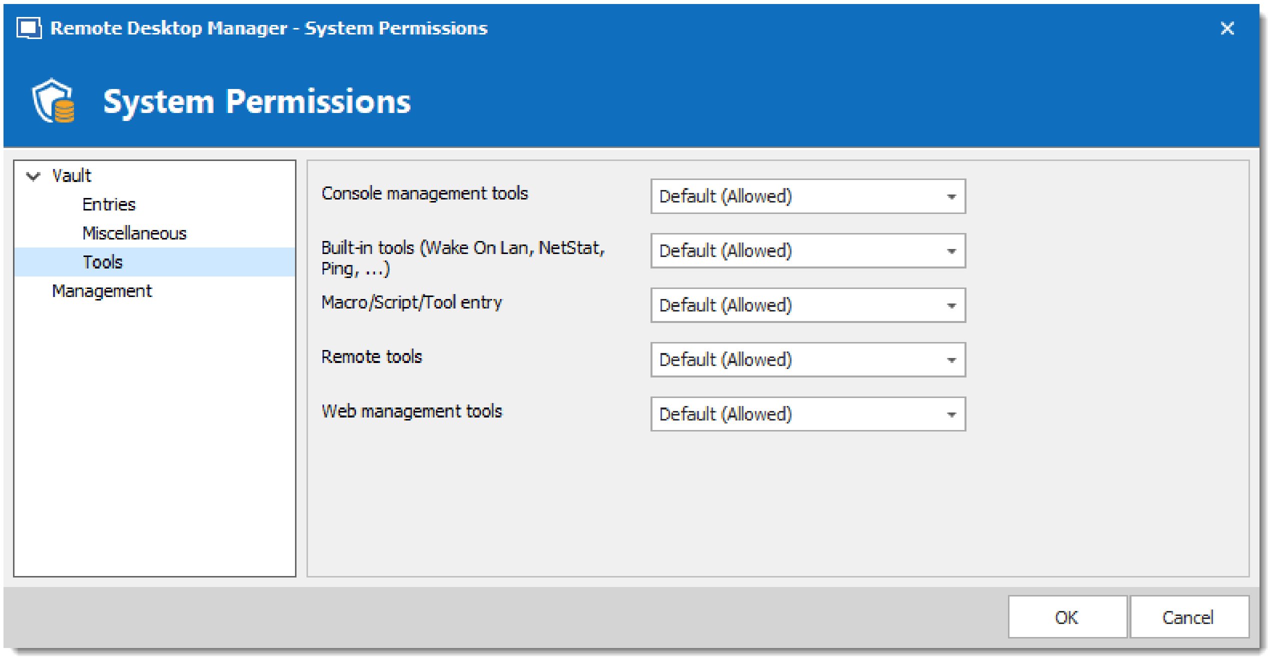


Activity logs: Default (Allowed)
Reports: Default (Disallowed)
View deleted entries: Default (Disallowed)
View administration log: Default (Disallowed)
Check in (force): Default (Disallowed)

System Permissions - Miscellaneous

OPTION	DESCRIPTION
Activity logs	Allow users/roles to view the activity logs.
Reports	Allow users/roles to generate and view reports.
View deleted entries	Allow users/roles to view and restore deleted entries.
View administration logs	Allow users/roles to view the administration logs.
Check in (force)	Allow users/roles to check in entries with the checked out state.

TOOLS



Console management tools: Default (Allowed)

Built-in tools (Wake On Lan, NetStat, Ping, ...): Default (Allowed)

Macro/Script/Tool entry: Default (Allowed)

Remote tools: Default (Allowed)

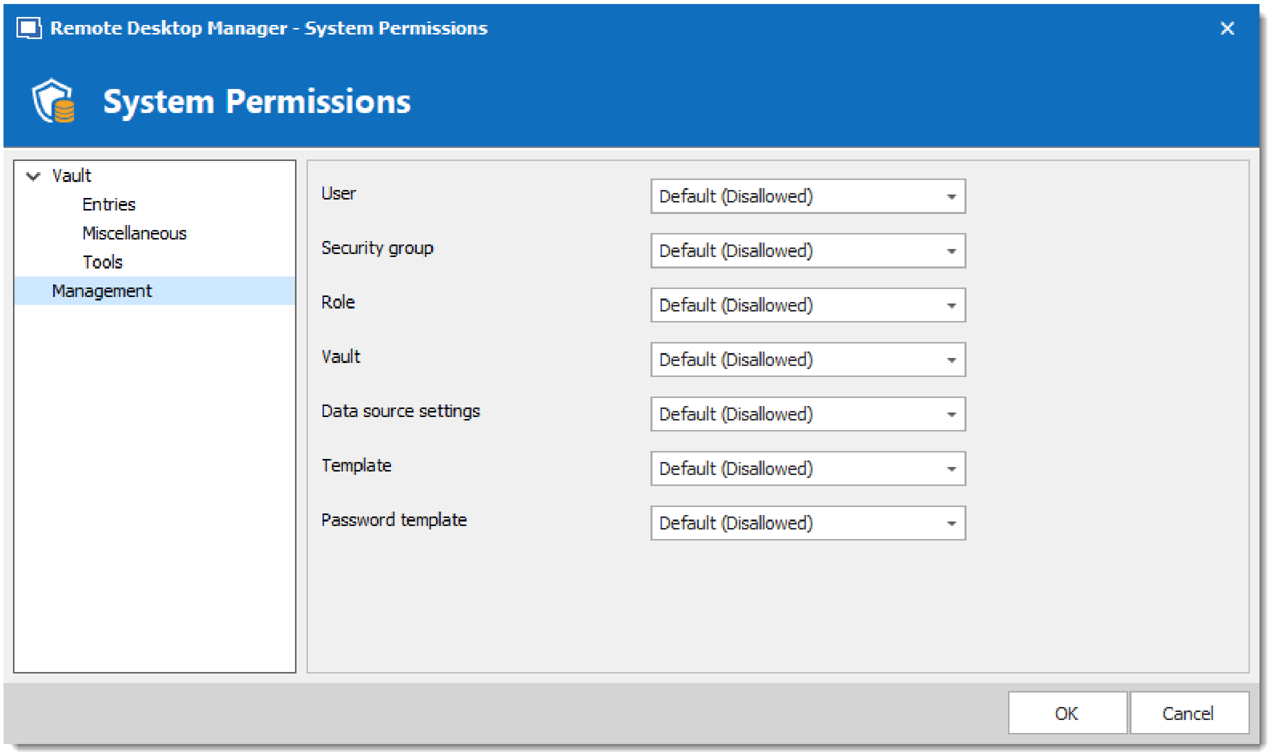
Web management tools: Default (Allowed)

System Permissions - Tools

OPTION	DESCRIPTION
Console management tools	Allow users/roles to use console management tools.
Buit-in tools (Wake-on-LAN, NetStat, Ping, ...)	Allow users/roles to use session related tools.
Macros/Scripts/Tools entry	Allow users/roles to use Macros/Scripts/Tools entries.
Management Tools	Allow users/roles to use Management Tools.
Web management tools	Allow users/roles to use web management tools.

MANAGEMENT

The **Default** value in **Tools** is equivalent to **Never**.



Remote Desktop Manager - System Permissions

System Permissions

User	Default (Disallowed)
Security group	Default (Disallowed)
Role	Default (Disallowed)
Vault	Default (Disallowed)
Data source settings	Default (Disallowed)
Template	Default (Disallowed)
Password template	Default (Disallowed)

System Permissions - Management

OPTION	DESCRIPTION
User	Allow users/roles to access the user management.
Security Group	Allow users/roles to access the security groups management.
Role	Allow users/roles to access the roles management.
Vault	Allow users/roles to manage Vaults.
Data source settings (System Settings)	Allow users/roles to access data source settings.

OPTION	DESCRIPTION
Template	Allow users/roles to create and manage templates.
Password template	Allow users/roles to create and manage password templates.

7.7.3.4 Security Providers

DESCRIPTION

The **Security Provider** allows for encrypting the data source content. To access the security provider, navigate to ***Administration – Security Provider***.

This feature requires an Advanced Data Source.

Regardless of the selected security provider, passwords stored in data sources are **ALWAYS** encrypted using AES 256 bit encryption.

By using a security provider, you ensure that nobody can read entries configuration data, even when people have a direct access to the database(s) or a backup. Shared data sources should always be secured with a security provider especially Devolutions Online Database.

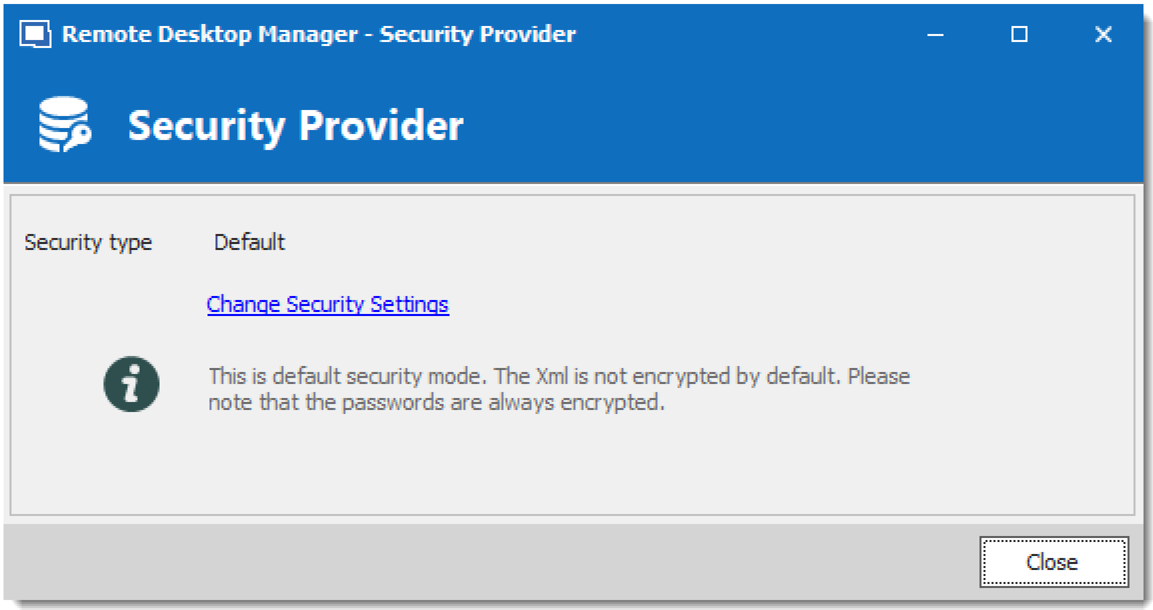
Prior to applying a new or changing an existing security provider, make sure that every users are disconnected from the data source. If you are changing an existing Shared Passphrase or Certificate, please note that users will get back access to the data source when they the new Shared Passphrase or Certificate on their computer.

SETTINGS

Please note that changing a security provider on a data source with a great number of entries is a lengthy operation.

Applying a new security provider does process the whole database, therefore we advise you to create a backup prior to this operation.

1. Click on **Change Security Settings** to change the security provider.



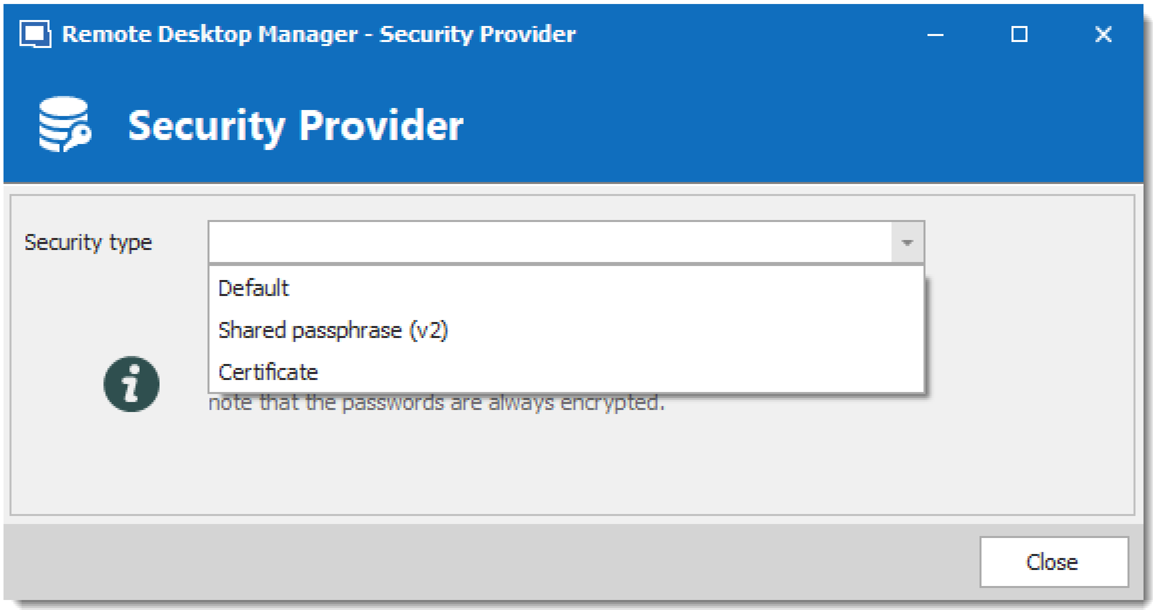
Security type Default

Change Security Settings

This is default security mode. The Xml is not encrypted by default. Please note that the passwords are always encrypted.

Security Provider

2. Select a security type from the drop down list.



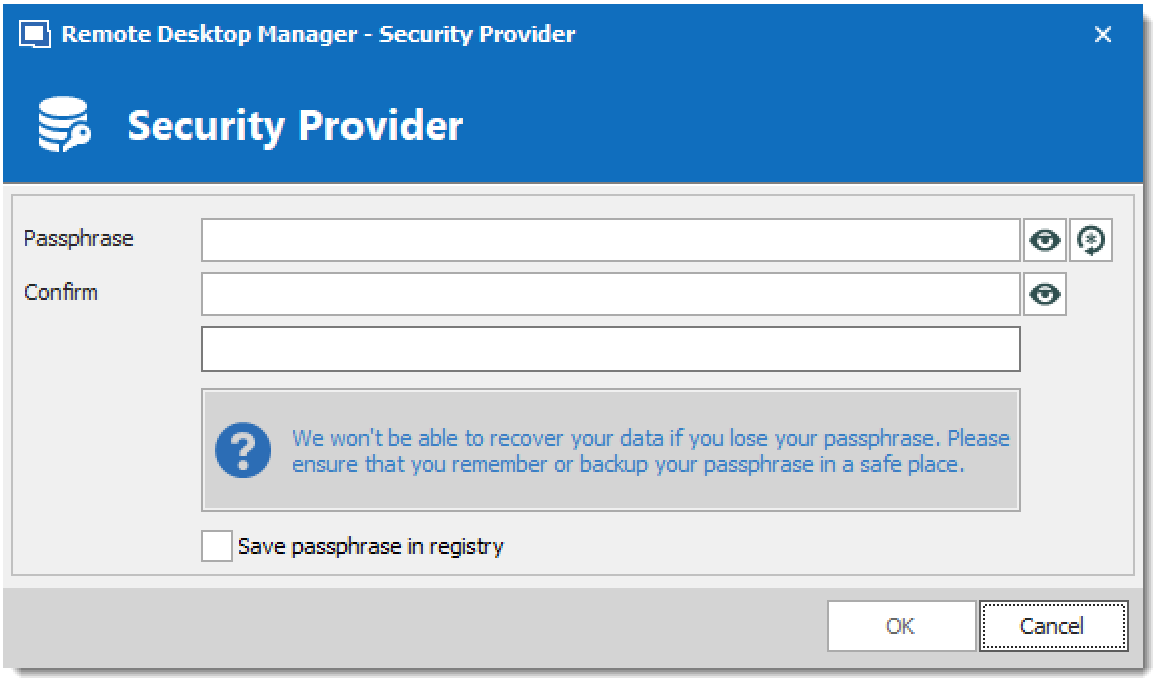
Remote Desktop Manager - Security Provider
Security Provider
Security type
Default
Shared passphrase (v2)
Certificate
note that the passwords are always encrypted.
Close

Security Type

OPTION	DESCRIPTION
Default	This is the legacy security provider. The data is encrypted if the entry configuration is set accordingly in the advanced settings of the entries.
Shared passphrase	Set up a shared passphrase for the Security Provider.
Certificate	Set up a Certificate for the Security Provider.

SHARED PASSPHRASE

If the passphrase is lost, **nothing** that can be done to recover the data. When using a passphrase, always copy it to a secure location.



Remote Desktop Manager - Security Provider
Security Provider
Passphrase
Confirm
Save passphrase in registry
OK
Cancel

We won't be able to recover your data if you lose your passphrase. Please ensure that you remember or backup your passphrase in a safe place.

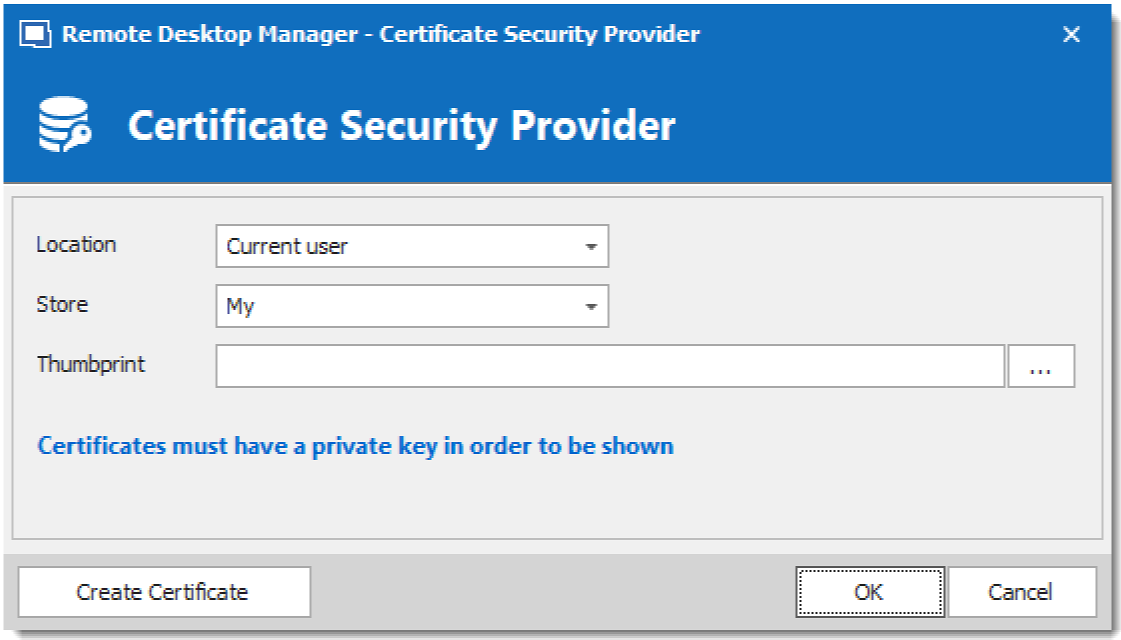
Security Provider - Shared Passphrase

Entries configuration data is encrypted using a mix of a key stored in Remote Desktop Manager and the passphrase you've entered.

The passphrase is required only when configuring the data source. A policy can be enabled to always prompt for the passphrase when connecting to the data source. For more information, please consult the How to modify Group Policy Templates topic.

CERTIFICATE

When choosing **Certificate** as Security Provider, entries configuration data is encrypted using a mix of a key stored in Remote Desktop Manager and the private key contained in the certificate.


Remote Desktop Manager - Certificate Security Provider
Certificate Security Provider

Location: Current user

Store: My

Thumbprint:

Certificates must have a private key in order to be shown

...
Create Certificate
OK
Cancel

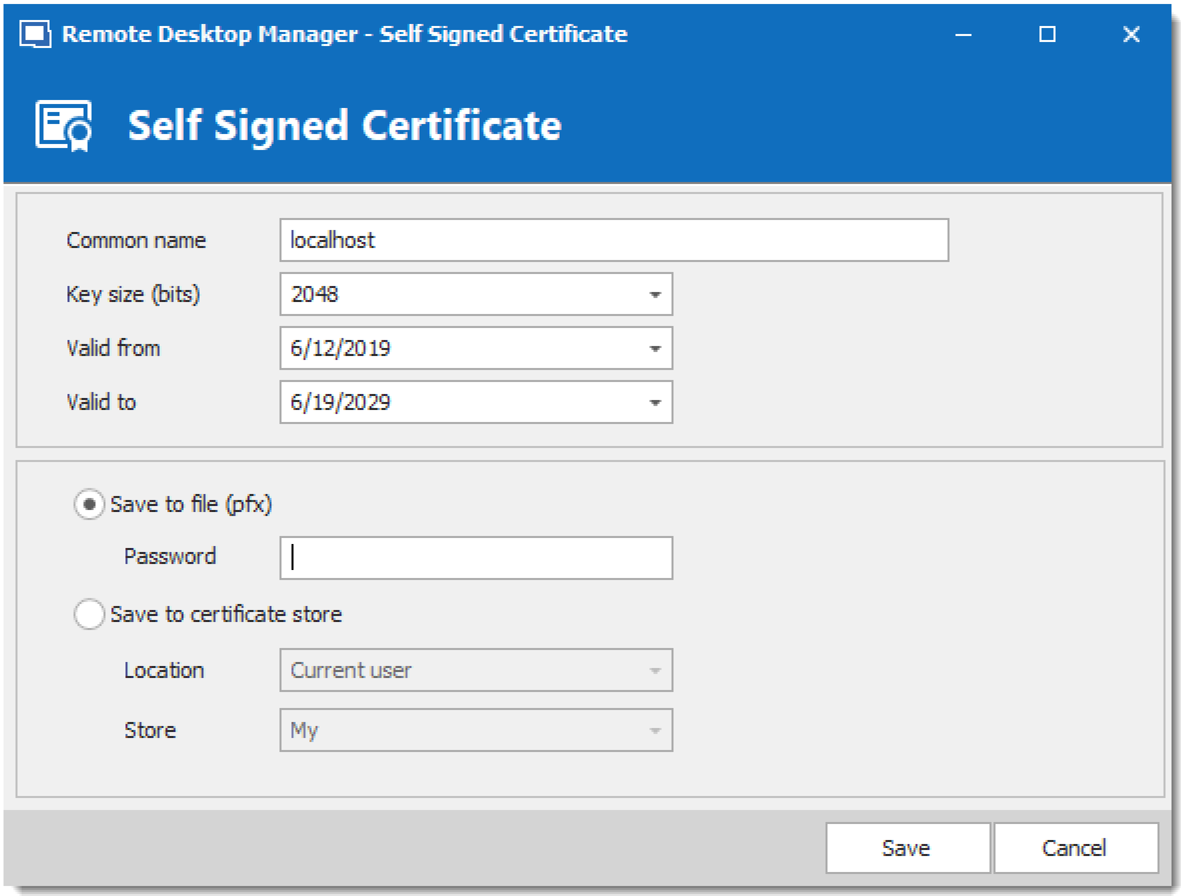
Security Provider - Certificate

OPTION	DESCRIPTION
Location	Indicate the certificate location. Select between: • **Current user** • **Local machine**
Store	Indicate the store location of the certificate. Select between: • **Address book** • **Authorization root** • **Certificate authority** • **Disallowed** • **My** • **Root** • **Trusted people** • **Trusted publisher**

OPTION	DESCRIPTION
Thumbprint	Select an existing certificate.

CREATE CERTIFICATE

It is possible to create a Self Signed certificate by clicking on **Create Certificate**.



Common name: localhost
Key size (bits): 2048
Valid from: 6/12/2019
Valid to: 6/19/2029
● Save to file (pfx)
Password:
○ Save to certificate store
Location: Current user
Store: My

Self Signed Certificate

OPTION	DESCRIPTION
Common name	Name of the certificate.
Key size (bits)	Indicate the key size (bits) of the certificate. Select between:

OPTION	DESCRIPTION
	• **384** • **512** • **1024** • **2048** • **4096** • **8192** • **16384**
Valid from	Start date of the certificate.
Valid to	End date of the certificate.
Save to file (pfx)	Save the certificate as a pfx file and secure this certificate with a password.
Save to certificate store	Indicate the location and the store to save the certificate.

7.7.4 Clean up

7.7.4.1 Clean Up Deleted History

DESCRIPTION

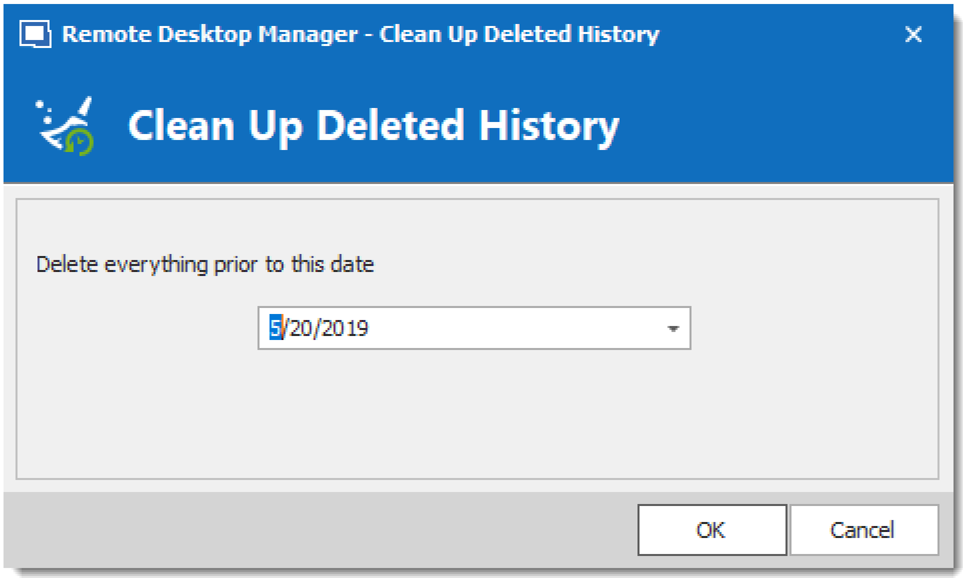
The **Deleted History** permanently delete entries that had been previously deleted. Full history is always preserved because every entry "version" is kept in historical tables.

This feature requires an Advanced Data Source.

You must be an administrator of the data source to perform this action.

SETTINGS

1. Select prior to which date you wish to permanently delete your deleted entries.


Remote Desktop Manager - Clean Up Deleted History

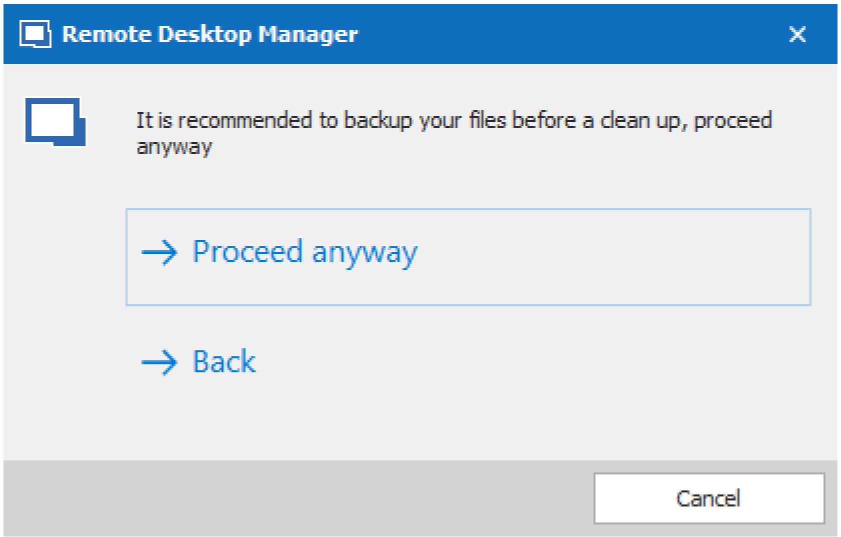
Clean Up Deleted History

Delete everything prior to this date

5/20/2019

Clean up Deleted History

2. Confirm your choice prior to permanently delete your deleted entries.



It is recommended to backup your files before a clean up, proceed anyway

Confirmation window

There will be no backup of your History. We strongly recommend to do a Backup before proceeding.

7.7.4.2 Clean Up Entry History

DESCRIPTION

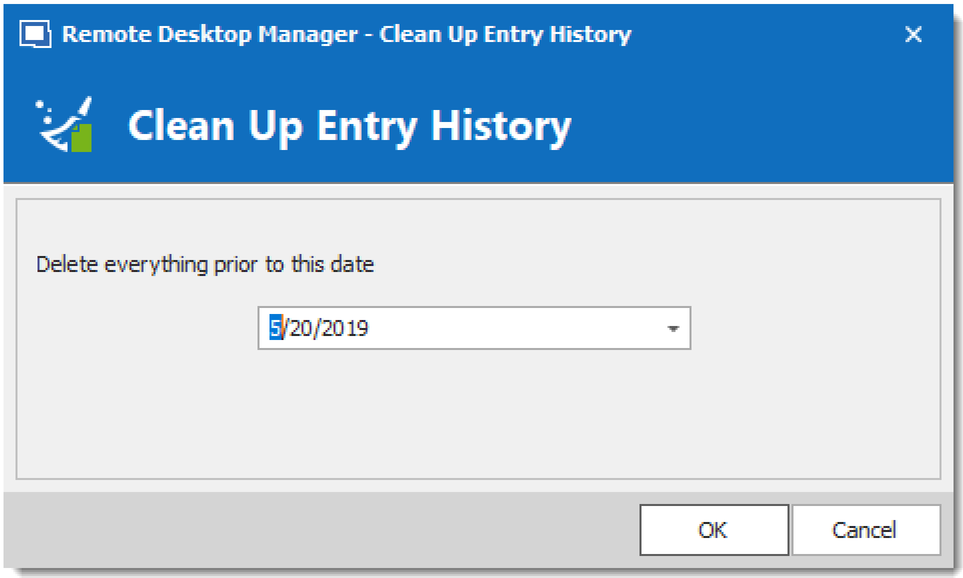
The **Entry History** deletes the history attached to your entry, you can find the history by right clicking on your entry and selecting ***View – Entry history***.

This feature requires an Advanced Data Source.

You must be an administrator of the data source to perform this action.

SETTINGS

1. Select prior to which date you wish to permanently delete your Clean up entry history.



Remote Desktop Manager - Clean Up Entry History

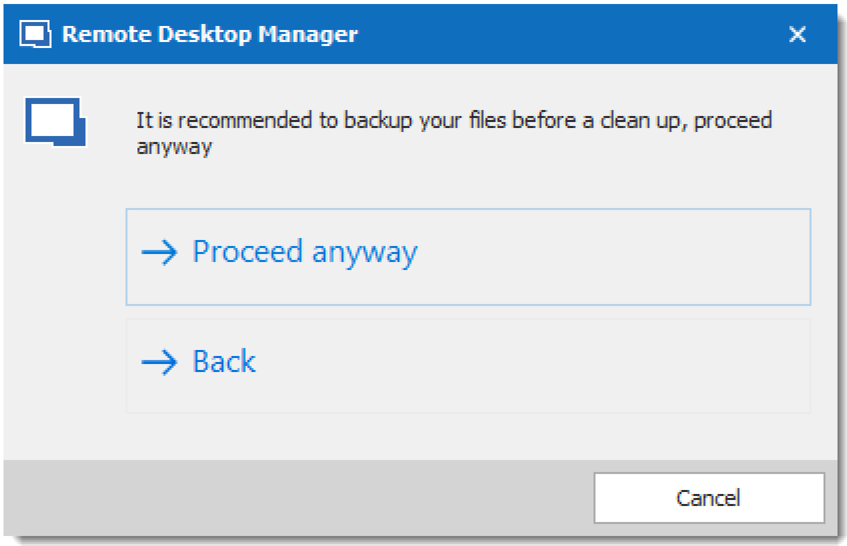
Clean Up Entry History

Delete everything prior to this date

5/20/2019

Clean up Entry History

2. Another window will appear to confirm your choice of deleting all the history prior to the chosen date.



Remote Desktop Manager

It is recommended to backup your files before a clean up, proceed anyway

Confirmation window

No History backup is created. We strongly recommend to do a Backup before proceeding.

7.7.4.3 Clean Up Activity Logs

DESCRIPTION

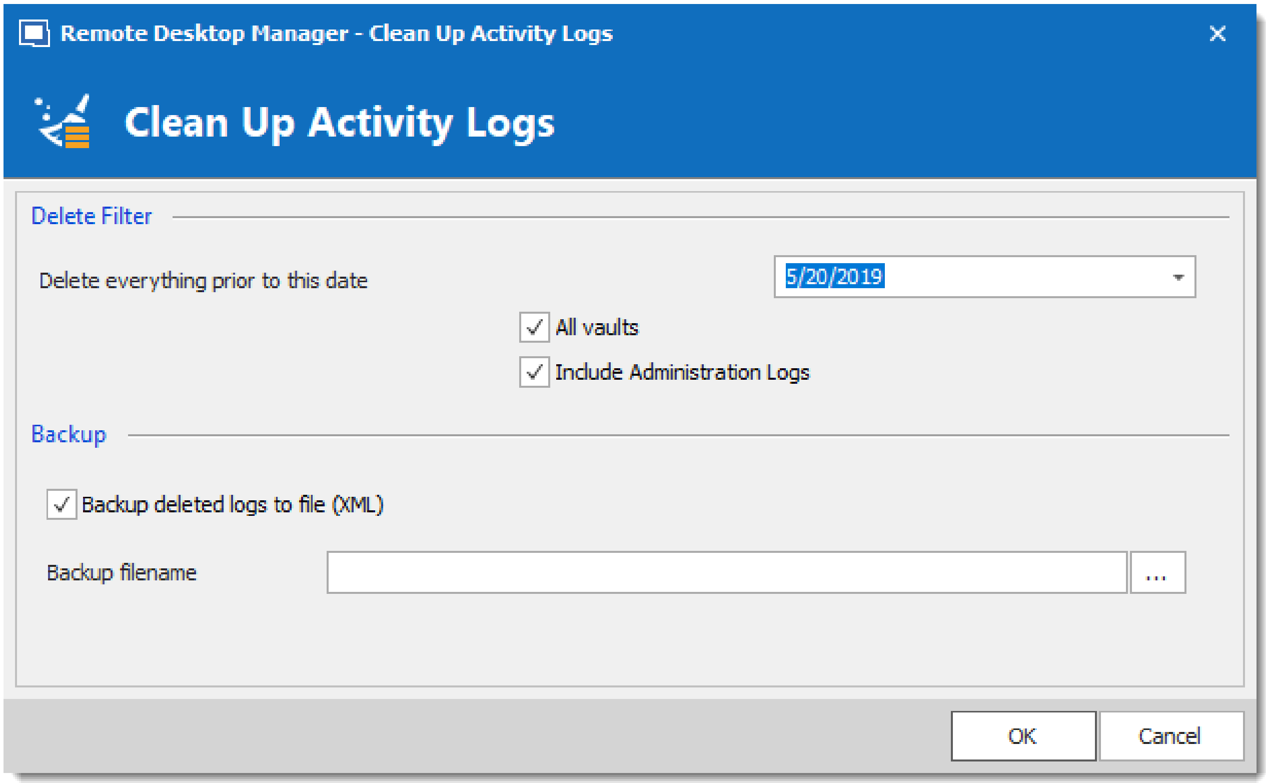
The **Clean Up Activity Logs** will delete your data source's Activity Logs, you also have the option to clean up the **Administration logs** and set up a back up if desired..

> ℹ This feature requires an Advanced Data Source.

> ℹ You must be an administrator of the data source to perform this action.

SETTINGS

1. You must confirm your choice prior to permanently deleting your data source logs.



Delete everything prior to this date: 5/20/2019

☑ All vaults

☑ Include Administration Logs

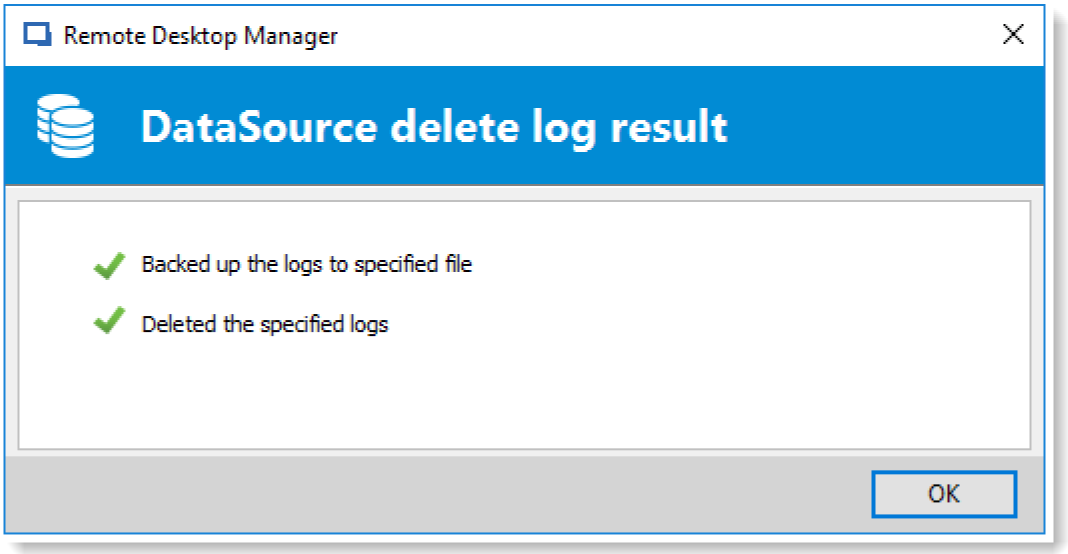
☑ Backup deleted logs to file (XML)

Backup filename:

Clean up Data Source logs

A backup of your log will be created as an XML file although it will then be impossible to import this file in Remote Desktop Manager.

2. Once you have entered your Backup file name and proceeded with the clean up a delete log result window will appear.



✓ Backed up the logs to specified file

✓ Deleted the specified logs

Data Source Delete log result

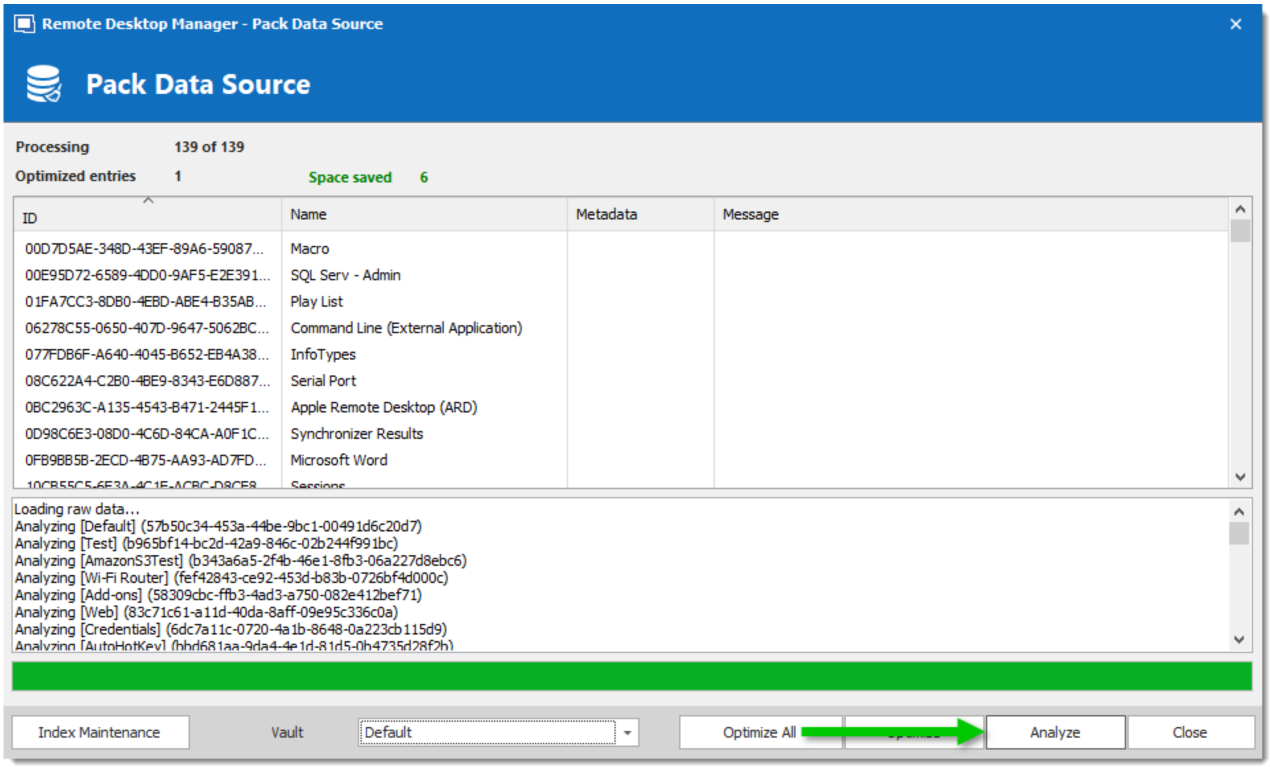
7.7.4.4 Pack Data Source (Optimize)

DESCRIPTION

When holding a great number of entries in your data source it is a best practice to compress them to avoid slowness issues when using your data source. The **Data Source (Optimize)** will analyze all your entries, compress them and then re-saves them, thus saving space in your data source.

SETTINGS

1. Open the data source you wish to optimize. In **Administration** click on **Pack Data Source (Optimize)** and then click on **Analyze**.



Processing 139 of 139
Optimized entries 1 Space saved 6

ID	Name	Metadata	Message
00D7D5AE-348D-43EF-89A6-59087...	Macro		
00E95D72-6589-4DD0-9AF5-E2E391...	SQL Serv - Admin		
01FA7CC3-8DB0-4EBD-ABE4-B35AB...	Play List		
06278C55-0650-407D-9647-5062BC...	Command Line (External Application)		
077FDB6F-A640-4045-B652-EB4A38...	InfoTypes		
08C622A4-C2B0-4BE9-8343-E6D887...	Serial Port		
0BC2963C-A135-4543-B471-2445F1...	Apple Remote Desktop (ARD)		
0D98C6E3-08D0-4C6D-84CA-A0F1C...	Synchronizer Results		
0FB9BB5B-2ECD-4B75-AA93-AD7FD...	Microsoft Word		
10CB55C5-6F3A-4C1E-ACBC-D8CE8	Sessions		

```
Loading raw data...
Analyzing [Default] (57b50c34-453a-44be-9bc1-00491d6c20d7)
Analyzing [Test] (b965bf14-bc2d-42a9-846c-02b244f991bc)
Analyzing [AmazonS3Test] (b343a6a5-2f4b-46e1-8fb3-06a227d8ebc6)
Analyzing [Wi-Fi Router] (fef42843-ce92-453d-b83b-0726bf4d000c)
Analyzing [Add-ons] (58309cbc-ffb3-4ad3-a750-082e412bef71)
Analyzing [Web] (83c71c61-a11d-40da-8aff-09e95c336c0a)
Analyzing [Credentials] (6dc7a11c-0720-4a1b-8648-0a223cb115d9)
Analyzing [AutoHotKey] (bbd681aa-9da4-4e1d-81d5-0b4735d28f2b)
```

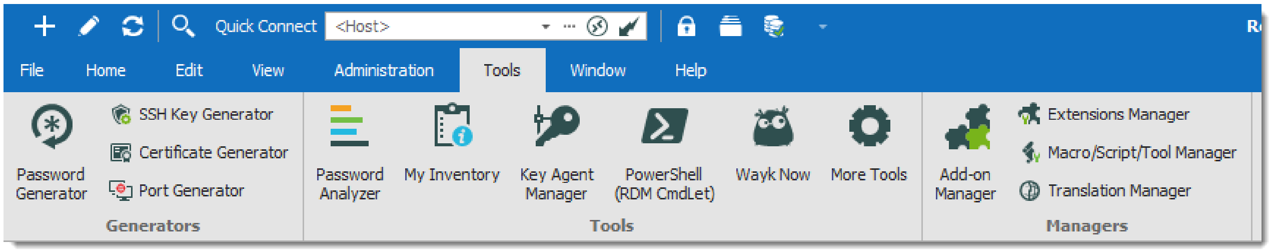
Pack Data Source (Optimize) - Analyze

2. Once the Analyze is completed click on **Optimize** to proceed with the optimization of your data source. You can select which **Vault** you wish to **Analyze** and **Optimize**, or use the **Optimize All** feature to perform the **Optimize** action on all available **Vaults**.

7.8 Tools

DESCRIPTION

The ***Tools*** tab contains your Add-on and Extensions manager as well as your Devolutions Password Server Console, Generators and multiple useful tools.



Ribbon - Tools

GENERATORS

OPTION	DESCRIPTION
Password Generator	Opens the Password Generator window. You can use this to generate password according to pre-determined criteria for better security.
SSH Key Generator	Launches the SSH Key Generator. SSH keys provide a secure way of logging into a virtual private server with SSH than using a password alone.
Certificate Generator	Launches the Certificate Generator. With this you can create a self-signed certificate, which is an identity certificate that is signed by the same entity whose identity is certified.
Port Generator	Launches the Port Generator. With this you can generate ports for your connections.

TOOLS

OPTION	DESCRIPTION
Password Analyzer	Opens the Password Analyzer. This is used to evaluate the strength of passwords stored in the data source. This feature is restricted to Administrators only.
My Inventory	Set up a My Inventory report.
Key Agent Manager	Opens the Key Agent Manager. This is used to hold all your SSH Keys in memory, already decoded and ready for them to be used.

OPTION	DESCRIPTION
PowerShell (RDM CmdLet)	Opens the PowerShell (RDM CmdLet).
Wayk Now	Launches the Wayk Now application.
More Tools	The **More Tools** window contains a variety of application tools such as: Chocolatey Console, Local RDP/RemoteApp Manager, Playback (Ansi), RDM Agent and more.

MANAGERS

OPTION	DESCRIPTION
Add-on Manager	Opens the Add-on Manager. It is used to simplify the management of different add-ons.
Extensions Manager	Opens the Extensions Manager. This is used to simplify the management and installation of Web Browser extensions and other miscellaneous extensions.
Macros/Scripts/Tools Manager	Opens the Macros/Scripts/Tools Manager. This is used to simplify the import of some pre-determined sessions tools.
Translation Manager	Opens the Translation Manager. A cloud based translation repository that is managed by an external application named Devolutions Localizer.

7.8.1 Generators

7.8.1.1 Password Generator

DESCRIPTION

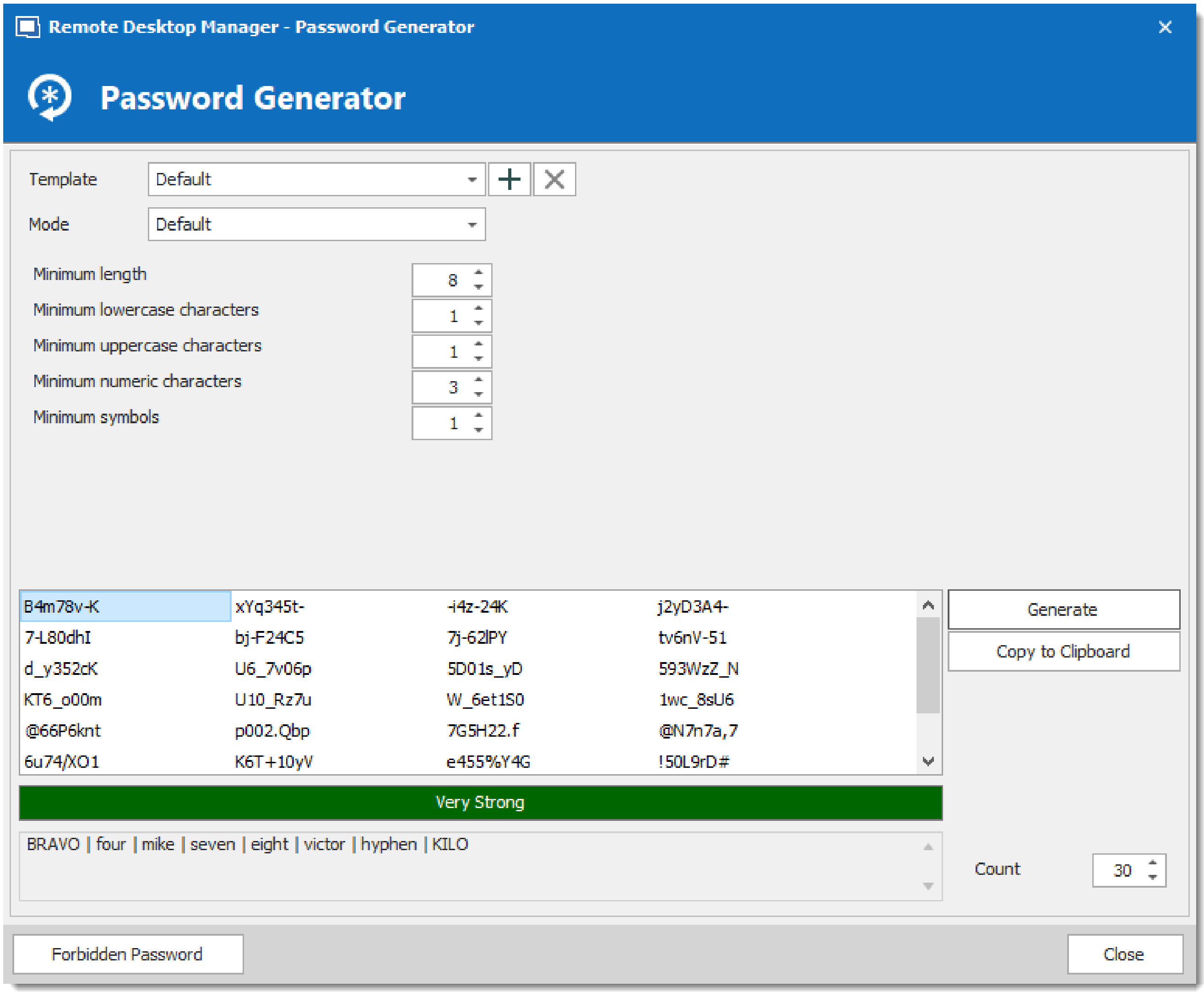
The **Password Generator** is available in the ***Tools – Password Generator*** menu. It allows to create random passwords that are and difficult to interpret or predict, due to a mix of uppercase and lowercase letters, numbers and punctuation symbols.

You can also create password generator templates to generate passwords. After you have selected your mode and settings, you can then create your template.

MODE

DEFAULT

Customize all criteria you would want your password to have.



Template: Default

Mode: Default

Minimum length: 8

Minimum lowercase characters: 1

Minimum uppercase characters: 1

Minimum numeric characters: 3

Minimum symbols: 1

B4m78v-K	xYq345t-	-i4z-24K	j2yD3A4-
7-L80dhI	bj-F24C5	7j-62lPY	tv6nV-51
d_y352cK	U6_7v06p	5D01s_yD	593WzZ_N
KT6_o00m	U10_Rz7u	W_6et1S0	1wc_8sU6
@66P6knt	p002.Qbp	7G5H22.f	@N7n7a,7
6u74/XO1	K6T+10yV	e455%Y4G	!50L9rD#

Very Strong

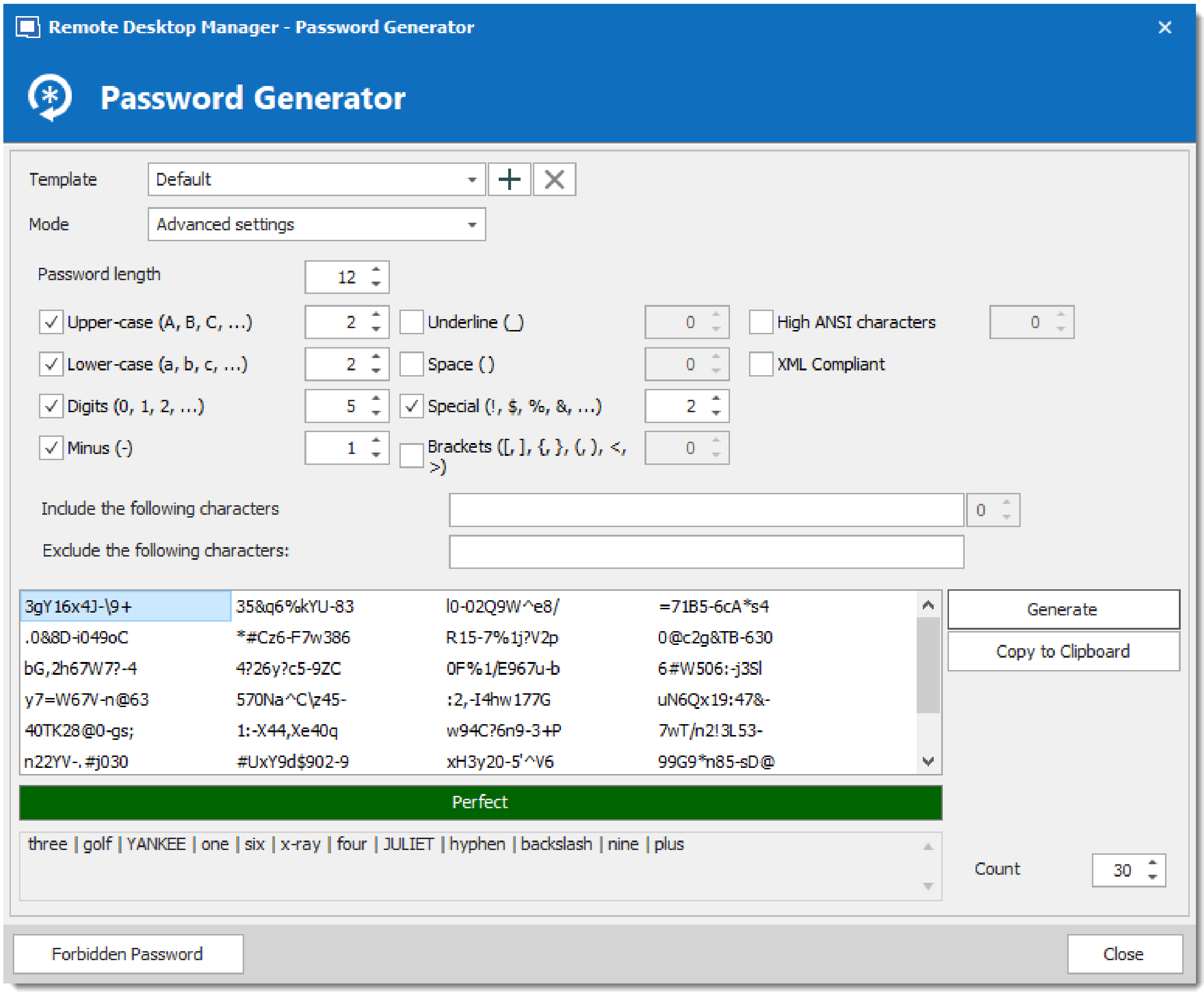
BRAVO | four | mike | seven | eight | victor | hyphen | KILO

Count: 30

Password Generator - Default

ADVANCED SETTINGS

Select the type and amount of characters to include in the password.



Template: Default

Mode: Advanced settings

Password length: 12

☑ Upper-case (A, B, C, ...) 2
☑ Lower-case (a, b, c, ...) 2
☑ Digits (0, 1, 2, ...) 5
☑ Minus (-) 1
□ Underline (_) 0
□ Space ( ) 0
☑ Special (!, $, %, &, ...) 2
□ Brackets ([,], {, }, (,), <, >) 0
□ High ANSI characters 0
□ XML Compliant

Include the following characters: 0

Exclude the following characters:

```
3gY16x4J-\9+     35&q6%kYU-83     l0-02Q9W^e8/     =71B5-6cA*s4
.0&8D-i049oC     *#Cz6-F7w386     R15-7%1j?V2p     0@c2g&TB-630
bG,2h67W7?-4     4?26y?c5-9ZC     0F%1/E967u-b     6#W506:-j3Sl
y7=W67V-n@63     570Na^C\z45-     :2,-I4hw177G     uN6Qx19:47&-
40TK28@0-gs;     1:-X44,Xe40q     w94C?6n9-3+P     7wT/n2!3L53-
n22YV-.#j030     #UxY9d$902-9     xH3y20-5'^V6     99G9*n85-sD@
```

Perfect

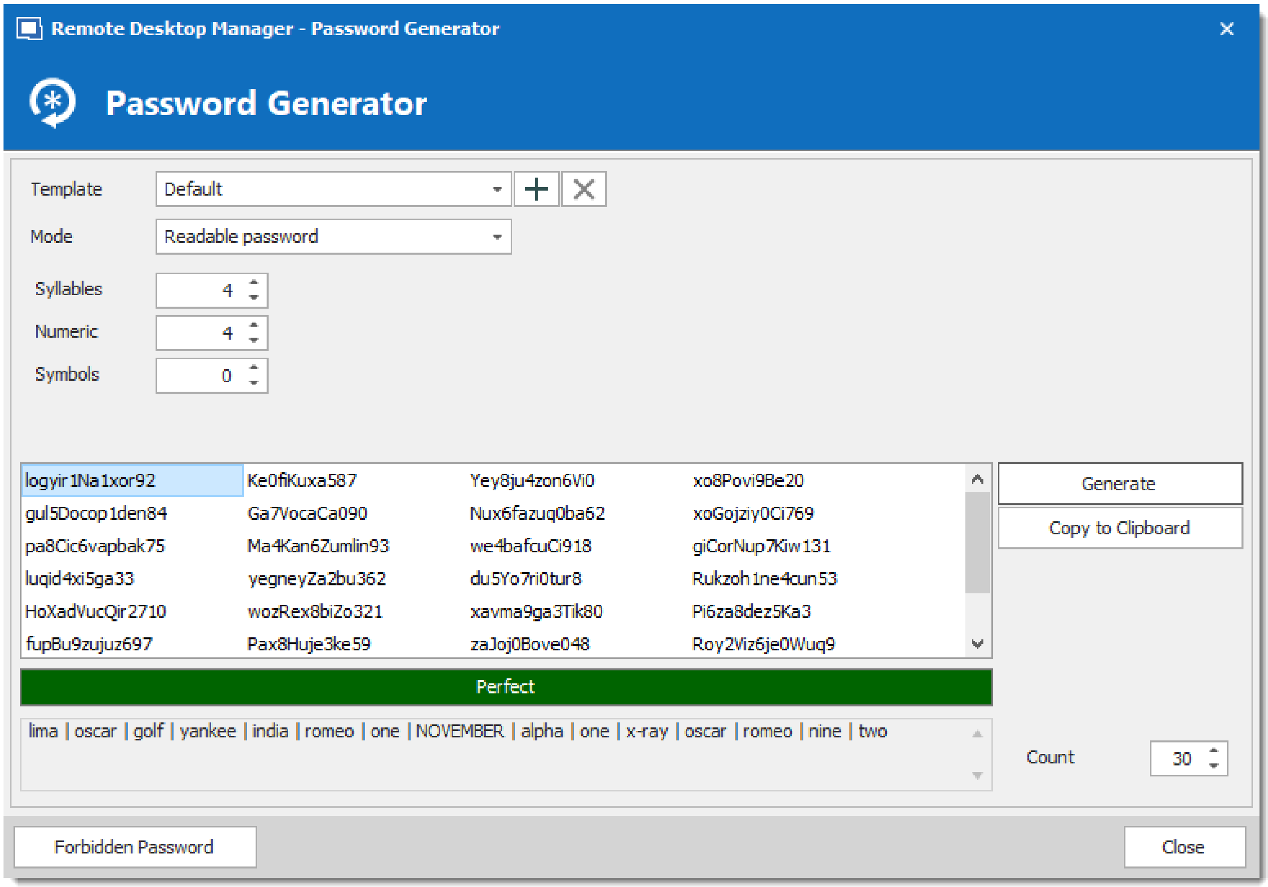
three | golf | YANKEE | one | six | x-ray | four | JULIET | hyphen | backslash | nine | plus

Count: 30

Password Generator - Advanced Settings

READABLE PASSWORD

Generate passwords that are readable but are not actual words.



Template: Default

Mode: Readable password

Syllables: 4

Numeric: 4

Symbols: 0

logyir1Na1xor92	Ke0fiKuxa587	Yey8ju4zon6Vi0	xo8Povi9Be20
gul5Docop1den84	Ga7VocaCa090	Nux6fazuq0ba62	xoGojziy0Ci769
pa8Cic6vapbak75	Ma4Kan6Zumlin93	we4bafcuCi918	giCorNup7Kiw131
luqid4xi5ga33	yegneyZa2bu362	du5Yo7ri0tur8	Rukzoh1ne4cun53
HoXadVucQir2710	wozRex8biZo321	xavma9ga3Tik80	Pi6za8dez5Ka3
fupBu9zujuz697	Pax8Huje3ke59	zaJoj0Bove048	Roy2Viz6je0Wuq9

Perfect

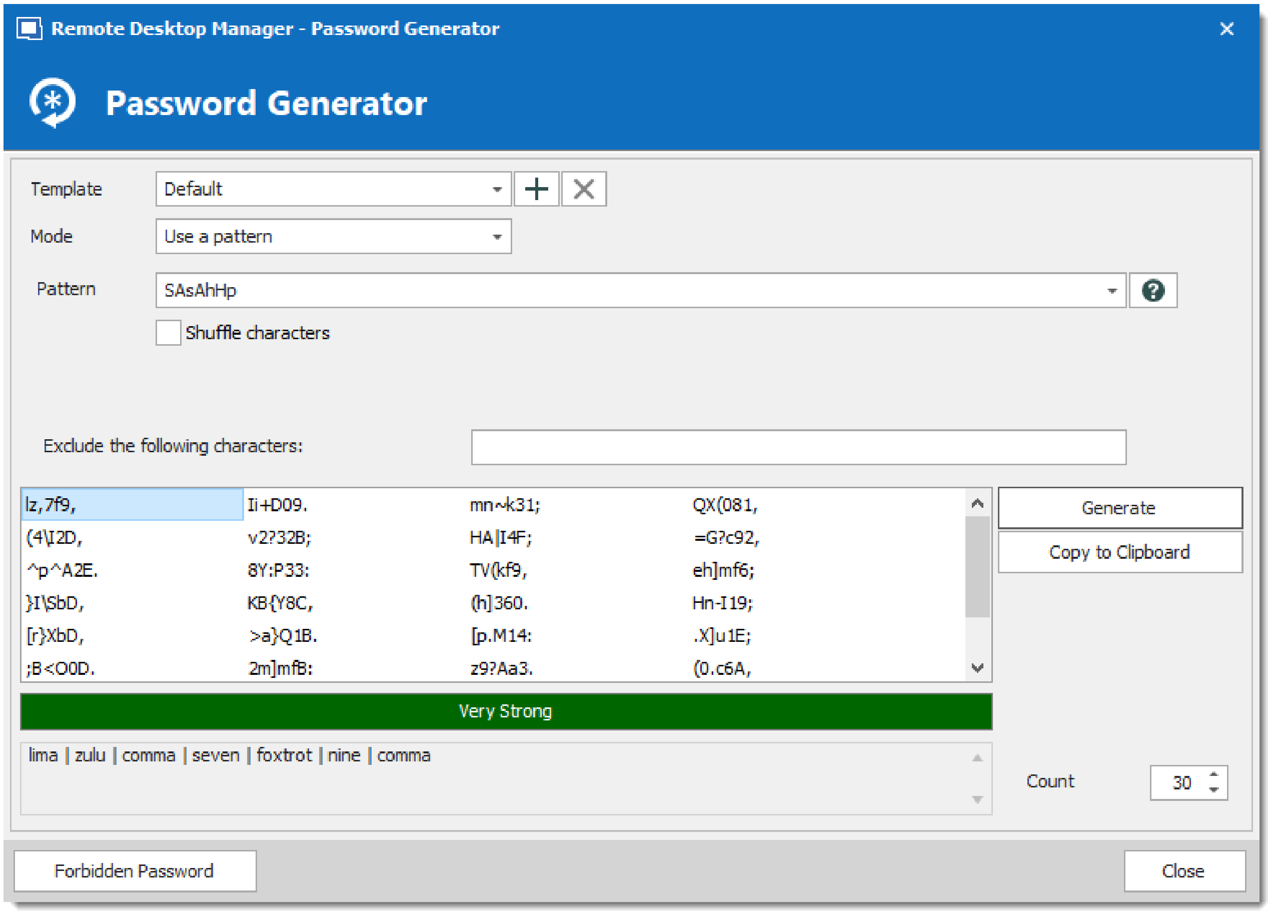
lima | oscar | golf | yankee | india | romeo | one | NOVEMBER | alpha | one | x-ray | oscar | romeo | nine | two

Count: 30

Password Generator - Readable password

USE A PATTERN

Press the ❓ button and select any pattern you need to create the passwords, you can also exclude certain characters if desired. A list of the most recent used pattern will also be created.



Template: Default

Mode: Use a pattern

Pattern: SAsAhHp

□ Shuffle characters

Exclude the following characters:

```
lz,7f9,      Ii+D09.      mn~k31;      QX(081,
(4\I2D,      v2?32B;      HA|I4F;      =G?c92,
^p^A2E.      8Y:P33:      TV(kf9,      eh]mf6;
}I\SbD,      KB{Y8C,      (h]360.      Hn-I19;
[r}XbD,      >a}Q1B.      [p.M14:      .X]u1E;
;B<O0D.      2m]mfB:      z9?Aa3.      (0.c6A,
```

Very Strong

lima | zulu | comma | seven | foxtrot | nine | comma

Count: 30

Password Generator - Use a pattern

The following are supported patterns:

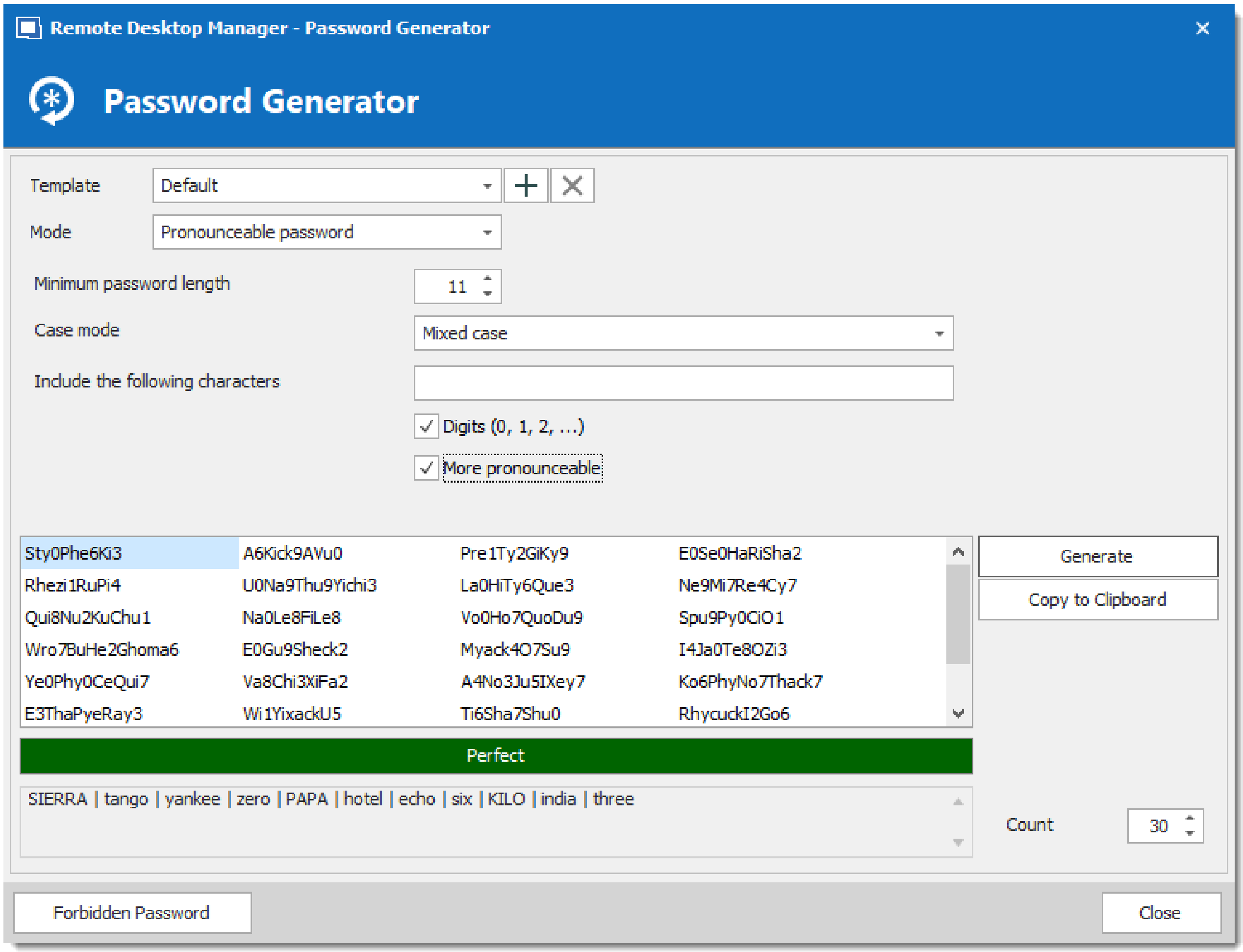
DESCRIPTION	KEY	SAMPLE
Lower-Case Alphanumeric	a	abcdefghijklmnopqrstuvwxyz 0123456789
Mixed-Case Alphanumeric	A	ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmn opqrstuvwxyz 0123456789
Bracket	b	()[]{}<>
Lower-Case Consonant	c	bcdfghjklmnpqrstvwxyz

DESCRIPTION	KEY	SAMPLE
Mixed-Case Consonant	C	BCDFGHJKLMNPQRSTVWXYZ bcdfghjklmnpqrstvwxyz
Digit	d	123456789
Lower-Case Hex Character	h	0123456789 abcdef
Upper-Case Hex Character	H	0123456789 ABCDEF
Lower-Case Letter	l	abcdefghijklmnopqrstuvwxyz
Mixed-Case Letter	L	ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmn opqrstuvwxyz
Punctuation	p	,.;:
Printable 7-Bit Special Character	s	!"#$%&'()*+,-./:;<=>?[\]^_{|}~
Printable 7-Bit ASCII	S	A-Z, a-z, 0-9, !"#$%&'()*+,-./:;<=>?[\]^_{|}~
Upper-Case Letter	u	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Upper-Case Alphanumeric	U	ABCDEFGHIJKLMNOPQRSTUVWXYZ 0123456789
Lower-Case Vowel	v	aeiou
Mixed-Case Vowel	V	AEIOU aeiou
High ANSI	x	From '~' to U255 (excluding U255)

DESCRIPTION	KEY	SAMPLE
Upper-Case Consonant	z	BCDFGHJKLMNPQRSTVWXYZ
Upper-Case Vowel	Z	AEIOU
Escape (Fixed Char)	\	Use following character as is
Escape (Repeat)	{n}	Repeats the previous character n times
Custom character	[x]	Define a custom character sequence

PRONOUNCEABLE PASSWORD

Generate passwords that are pronounceable, but are not actual words.



Template: Default

Mode: Pronounceable password

Minimum password length: 11

Case mode: Mixed case

Include the following characters:

☑ Digits (0, 1, 2, ...)

☑ More pronounceable

Sty0Phe6Ki3	A6Kick9AVu0	Pre1Ty2GiKy9	E0Se0HaRiSha2
Rhezi1RuPi4	U0Na9Thu9Yichi3	La0HiTy6Que3	Ne9Mi7Re4Cy7
Qui8Nu2KuChu1	Na0Le8FiLe8	Vo0Ho7QuoDu9	Spu9Py0CiO1
Wro7BuHe2Ghoma6	E0Gu9Sheck2	Myack4O7Su9	I4Ja0Te8OZi3
Ye0Phy0CeQui7	Va8Chi3XiFa2	A4No3Ju5IXey7	Ko6PhyNo7Thack7
E3ThaPyeRay3	Wi1YixackU5	Ti6Sha7Shu0	RhycuckI2Go6

Perfect

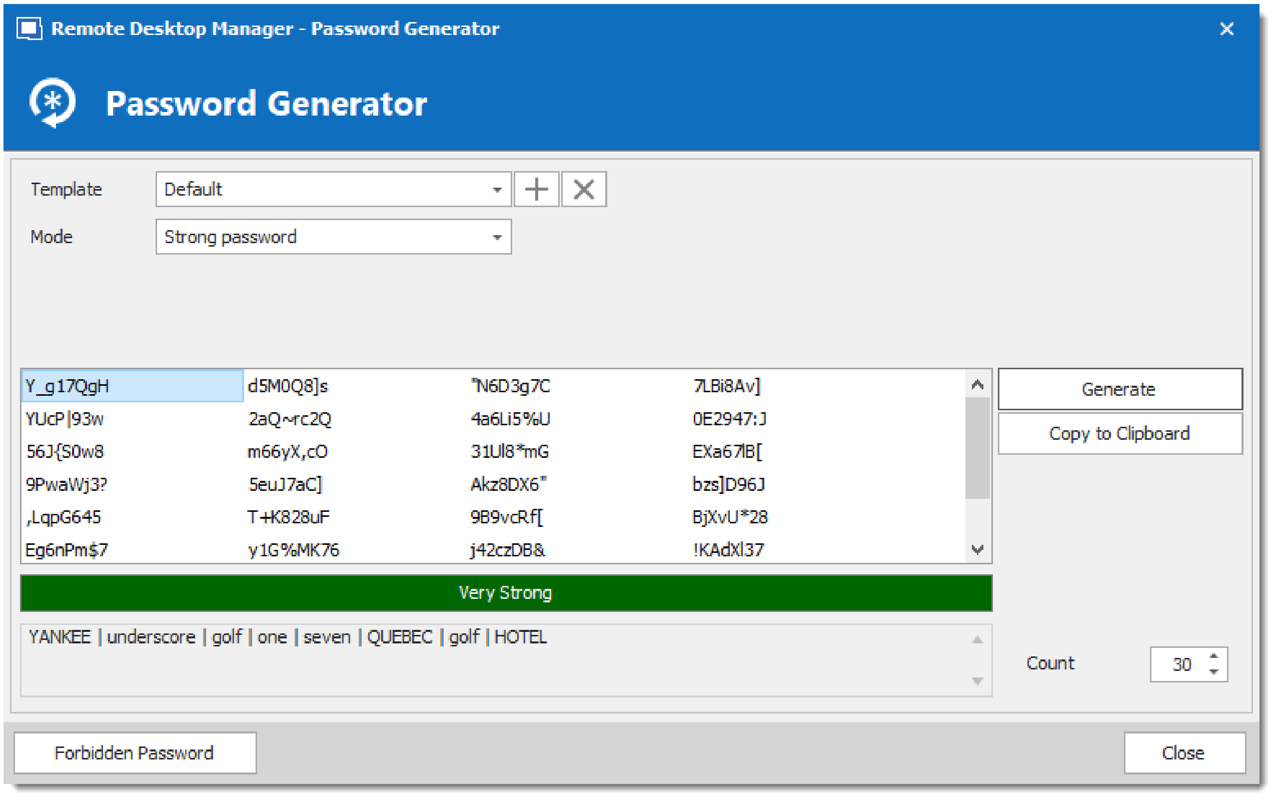
SIERRA | tango | yankee | zero | PAPA | hotel | echo | six | KILO | india | three

Count: 30

Password Generator - Pronounceable password

STRONG PASSWORD

Generate an 8 character passwords with alphanumeric and special characters.



Template: Default

Mode: Strong password

```
Y_g17QgH    d5M0Q8]s    "N6D3g7C    7LBi8Av]
YUcP|93w    2aQ~rc2Q    4a6Li5%U    0E2947:J
56J{S0w8    m66yX,cO    31Ul8*mG    EXa67lB[
9PwaWj3?    5euJ7aC]    Akz8DX6"    bzs]D96J
,LqpG645    T+K828uF    9B9vcRf[    BjXvU*28
Eg6nPm$7    y1G%MK76    j42czDB&    !KAdXl37
```

Very Strong

YANKEE | underscore | golf | one | seven | QUEBEC | golf | HOTEL

Count: 30

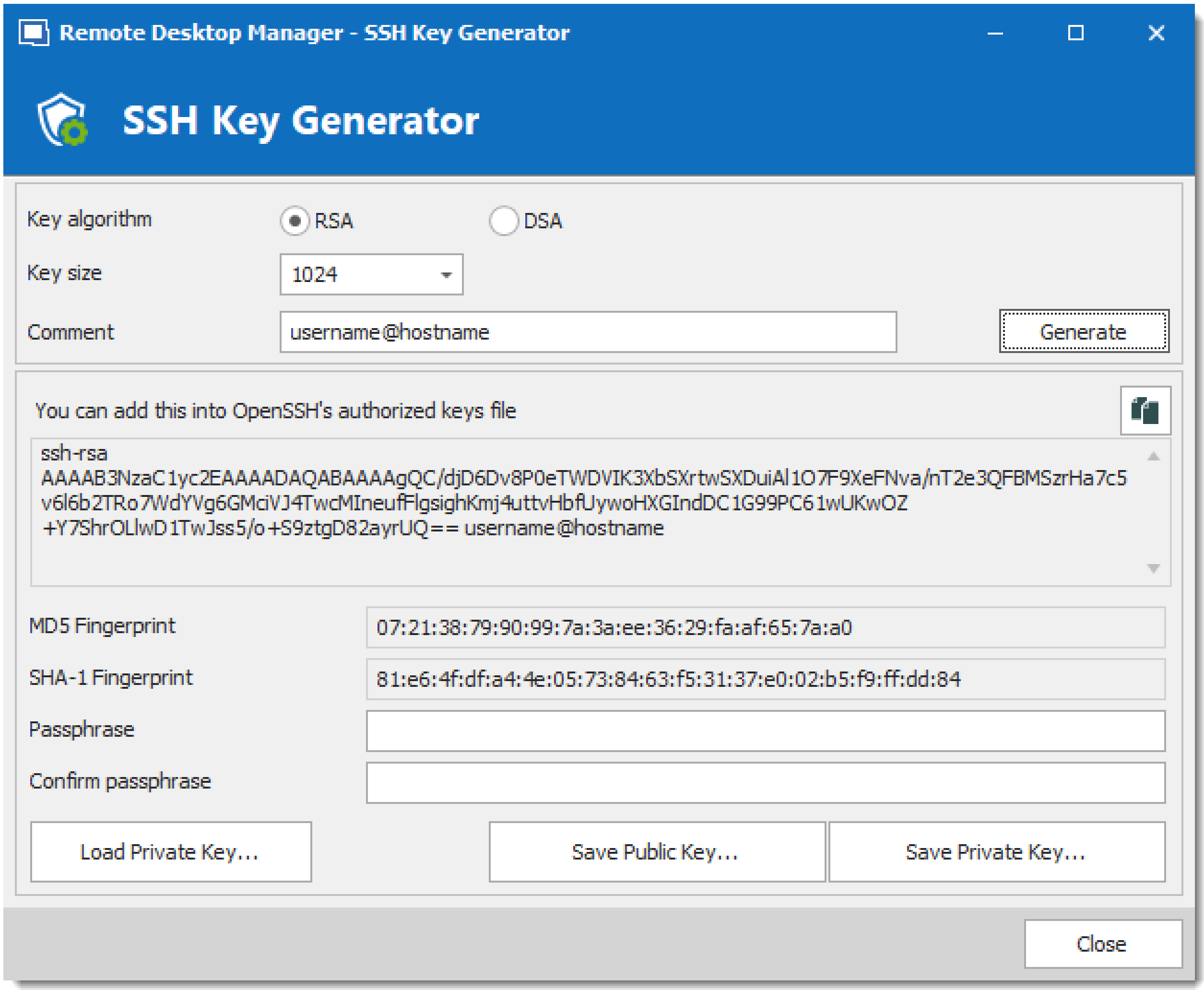
Password Generator - Strong password

7.8.1.2 SSH Key Generator

DESCRIPTION

SSH keys provide a secure way of logging into a virtual private server with SSH than using a password alone. While a password can eventually be cracked with a brute force attack, SSH keys are nearly impossible to decipher by brute force alone.

SETTINGS



Key algorithm ● RSA ○ DSA

Key size 1024

Comment username@hostname

You can add this into OpenSSH's authorized keys file

```
ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAAAgQC/djD6Dv8P0eTWDVIK3XbSXrtwSXDuiAl1O7F9XeFNva/nT2e3QFBMSzrHa7c5
v6l6b2TRo7WdYVg6GMciVJ4TwcMIneufFlgsighKmj4uttvHbfUywoHXGIndDC1G99PC61wUKwOZ
+Y7ShrOLlwD1TwJss5/o+S9ztgD82ayrUQ== username@hostname
```

MD5 Fingerprint 07:21:38:79:90:99:7a:3a:ee:36:29:fa:af:65:7a:a0

SHA-1 Fingerprint 81:e6:4f:df:a4:4e:05:73:84:63:f5:31:37:e0:02:b5:f9:ff:dd:84

Passphrase

Confirm passphrase

SSH Key Generator

OPTION	DESCRIPTION
Key algorithm	You can choose between: **RSA**: RSA can be used for signing/verification and also for encryption/decryption. When using RSA it is recommended to use a 2048 bits key size. **DSA**: It is faster in signing but slower in verifying. It can only be used for signing/verification it **does not encrypt/decrypt**. When using DSA it is a recommended to use a 1024 bits key size.
Key size	You can choose your SSH Key size between:

OPTION	DESCRIPTION
	1024 bits: Minimum key size **2048 bits**: Default and recommended key size **4096 bits**: Maximum key size
Comment	Enter your username and the name of the computer you're transferring your key to.
Load Private Key	This feature will allow you to import a previously saved SSH Key.
Save Public Key	Saving the public key will generate a *.pub file. Simply enter a file name when prompted.
Save Private Key	You will have the option of saving your Private Key in different format, choose between: • PKCS #8 Private Key (*.pri) • PuTTY Private Key (*.ppk) • OpenSSH Private Key (*.pri)

If you did not specify a passphrase you will have to confirm that you do not wish to use a passphrase.

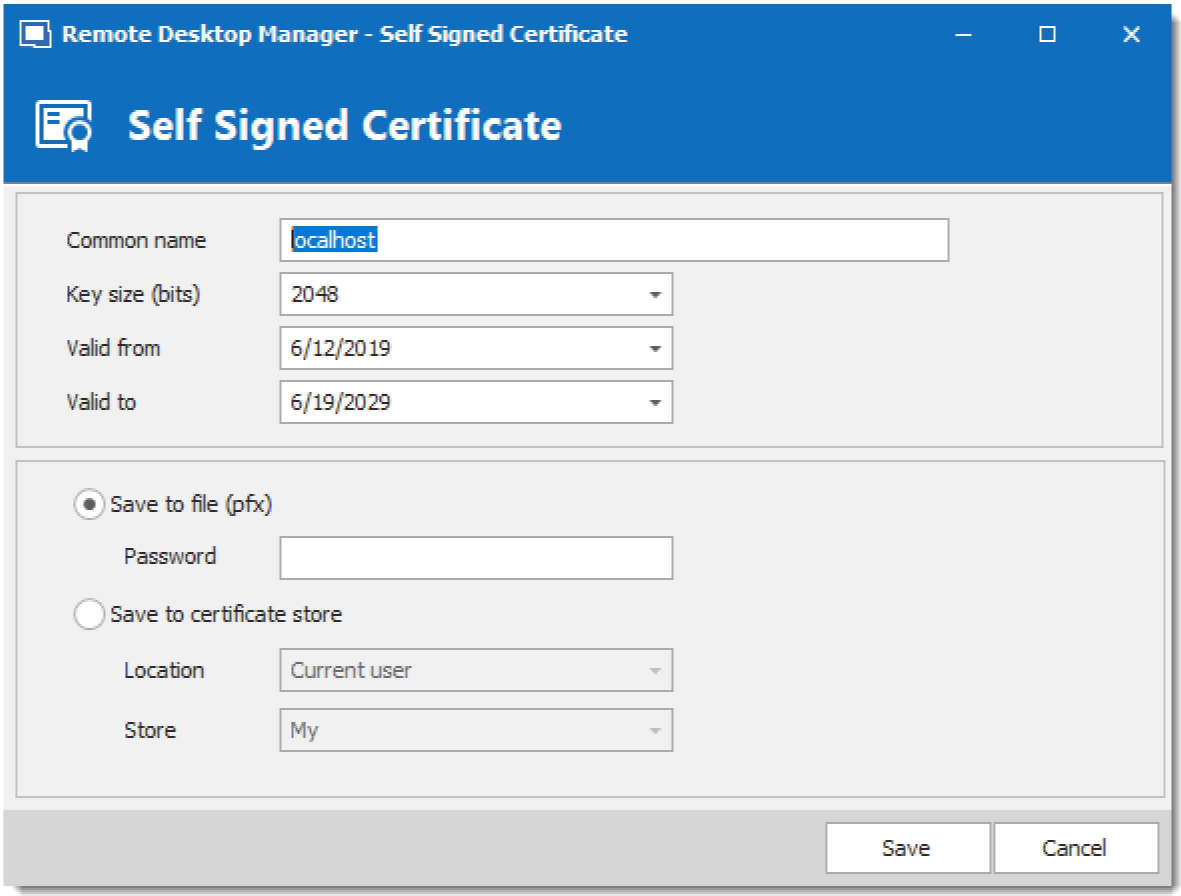
> If using the Key Agent Manager you must chose the PuTTY Private Key (.ppk) file format or the OpenSSH Private Key (.pri) file format. The PKCS Private Key is not a supported file format for the Key Agent Manager.

7.8.1.3 Certificate Generator

DESCRIPTION

The **Certificate Generator** allows you to create a self signed certificate which is an identity certificate that is signed by the same entity whose identity is certified.

SETTINGS



Remote Desktop Manager - Self Signed Certificate

Self Signed Certificate

Common name: localhost

Key size (bits): 2048

Valid from: 6/12/2019

Valid to: 6/19/2029

● Save to file (pfx)

Password:

○ Save to certificate store

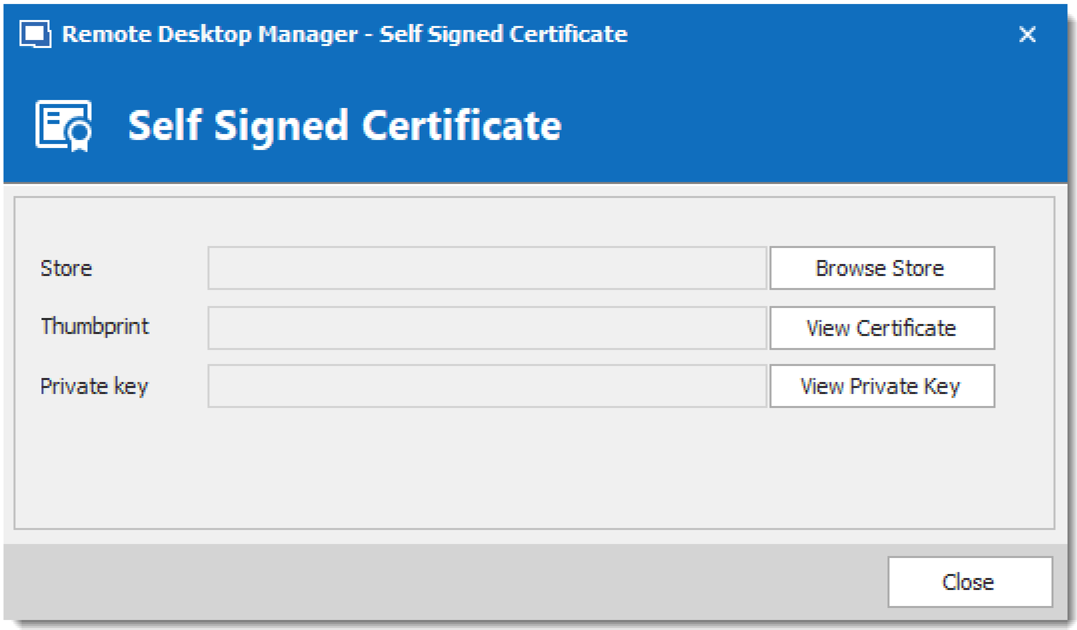
Location: Current user

Store: My

Certificate Generator - Self Signed Certificate

OPTION	DESCRIPTION
Common name	Name of the certificate.
Key size (bits)	Indicates the key size (bits) of the certificate. Select between: • **1024** • **2048** • **4096** • **8192**

OPTION	DESCRIPTION
	• **16384**
Valid from	Starting date of the certificate.
Valid to	Expiration date of the certificate.
Save to file (pfx)	Save the certificate into a ***.pfx** file and secure this certificate with a password.
Save to certificate store	Indicate the location and the store to save the certificate.
Location	Indicate the location of the certificate. Select between: • **Current user** • **Local machine**
Store	Indicate the store location of the certificate. Select between: • **Address book** • **Authorization root** • **Certificate authority** • **Disallowed** • **My** • **Root** • **Trusted people** • **Trusted publisher**



Self Signed Certificate

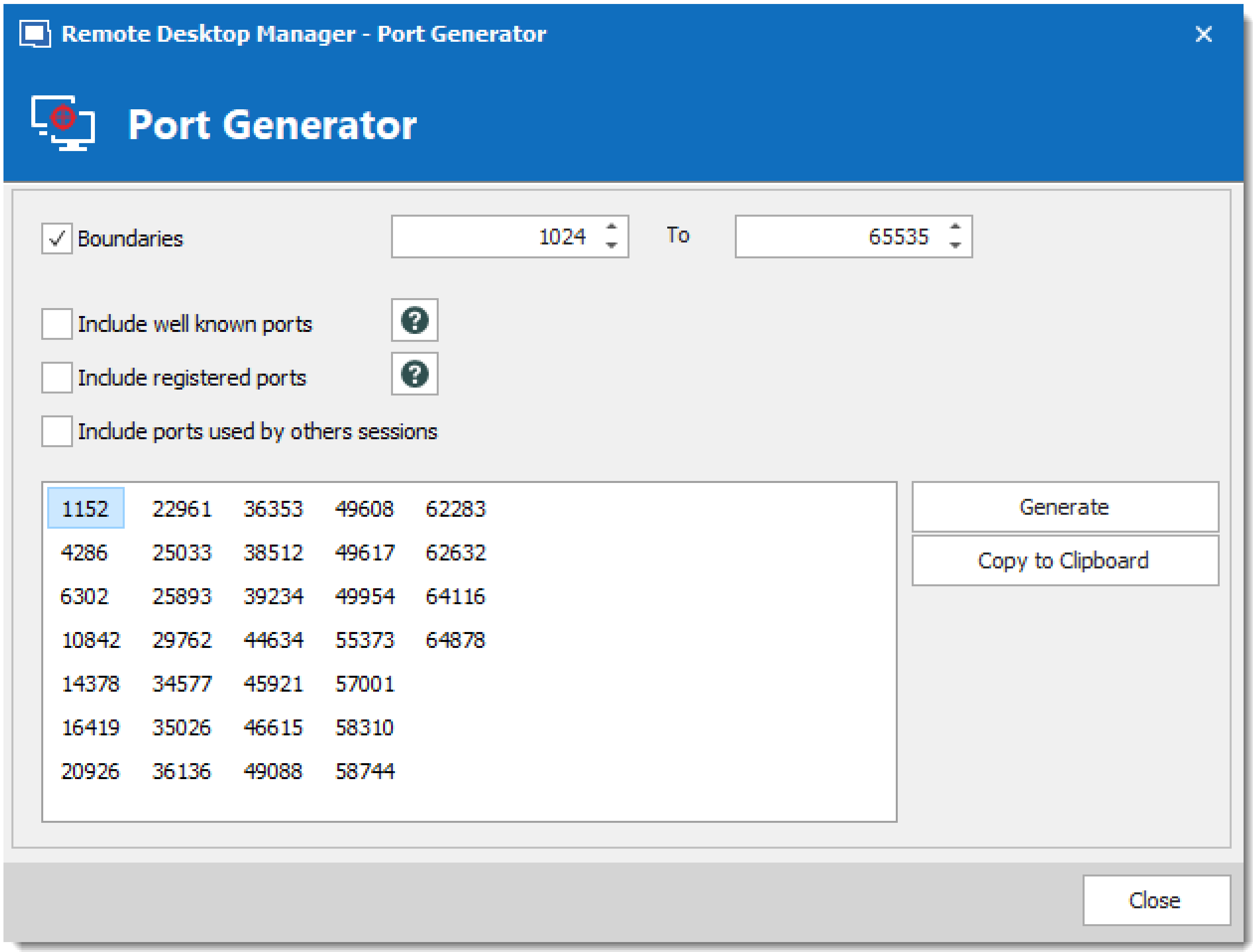
OPTION	DESCRIPTION
Store	Indicate the store where the certificate will be located.
Browse Store	Browse the store that is indicated in the store field.
Thumbprint	Display the certificate thumbprint.
View Certificate	Display the certificate that you have created.
Private Key	Display the certificate private key
View Private Key	View the private key file on your computer.

7.8.1.4 Port Generator

DESCRIPTION

The Port Generator allows you to generate ports for your connections.

SETTINGS



☑ Boundaries 1024 To 65535

□ Include well known ports

□ Include registered ports

□ Include ports used by others sessions

```
1152   22961  36353  49608  62283
4286   25033  38512  49617  62632
6302   25893  39234  49954  64116
10842  29762  44634  55373  64878
14378  34577  45921  57001
16419  35026  46615  58310
20926  36136  49088  58744
```

Port Generator

OPTION	DESCRIPTION
Boundaries	Determinate the port range to generate the ports between those 2 numbers.
Include well known ports	Include ports from range 0 to 1023. They are the well-known ports or system ports. They are used by system processes that provide widely used types of network services

OPTION	DESCRIPTION
Include registered ports	Include ports from range 1024 to 49151. They are assigned by IANA for specific service upon application by a requesting entity. On most systems, registered ports can be used by ordinary users.
Include ports used by others sessions	Include the ports that are already used by other sessions.

7.8.2 Tools

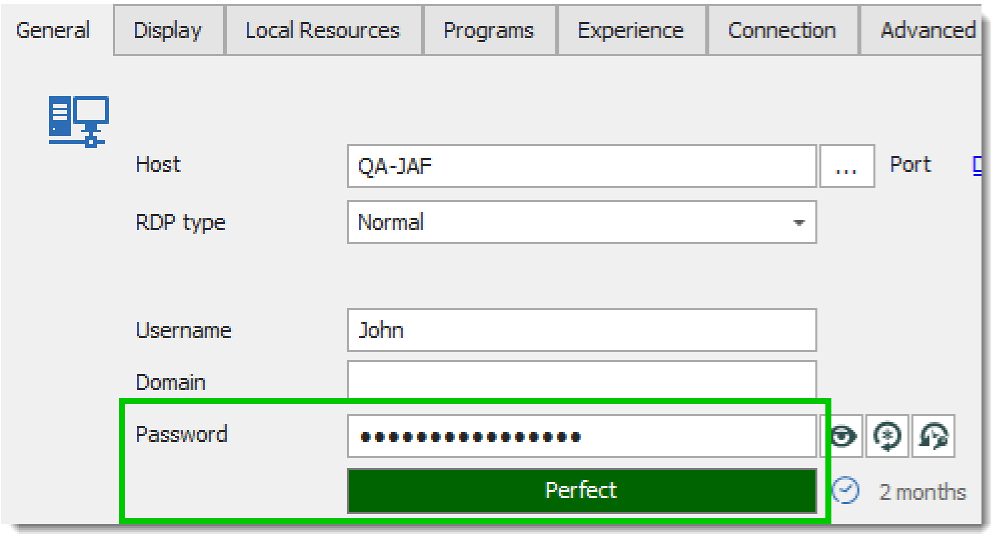
7.8.2.1 Password Analyzer

DESCRIPTION

The information in this topic is how the "Legacy" mode of password analysis works. The mode can be changed in the System Settings for ZXCVBN . The "Legacy" mode is not the default mode.

The **Password Analyzer** evaluates the strength of passwords stored in the data source. To access the password analyzer, navigate to ***Tools – Password Analyzer***.

A password analyzer control is also displayed under most password fields of entries.



Host: QA-JAF

RDP type: Normal

Username: John

Domain:

Password: ●●●●●●●●●●●●●●●●

Perfect

2 months

Entry Properties - Password Field With Password Analyzer

The password analyzer follows a set of rules to determine the strength of the password with a score from 0 to 100. There are two categories of rules.

REINFORCE

These are the rules which make the passwords stronger:

- The password length
- The number of uppercase letters (A-Z)
- The number of lowercase letters (a-z)
- The number of digits (0-9)
- The number of symbols (!, @, #, $, etc.)
- The number of digits or symbols in the middle of the password
- Three or more of the rules above are met

The minimum requirements for a **Strong** password are:

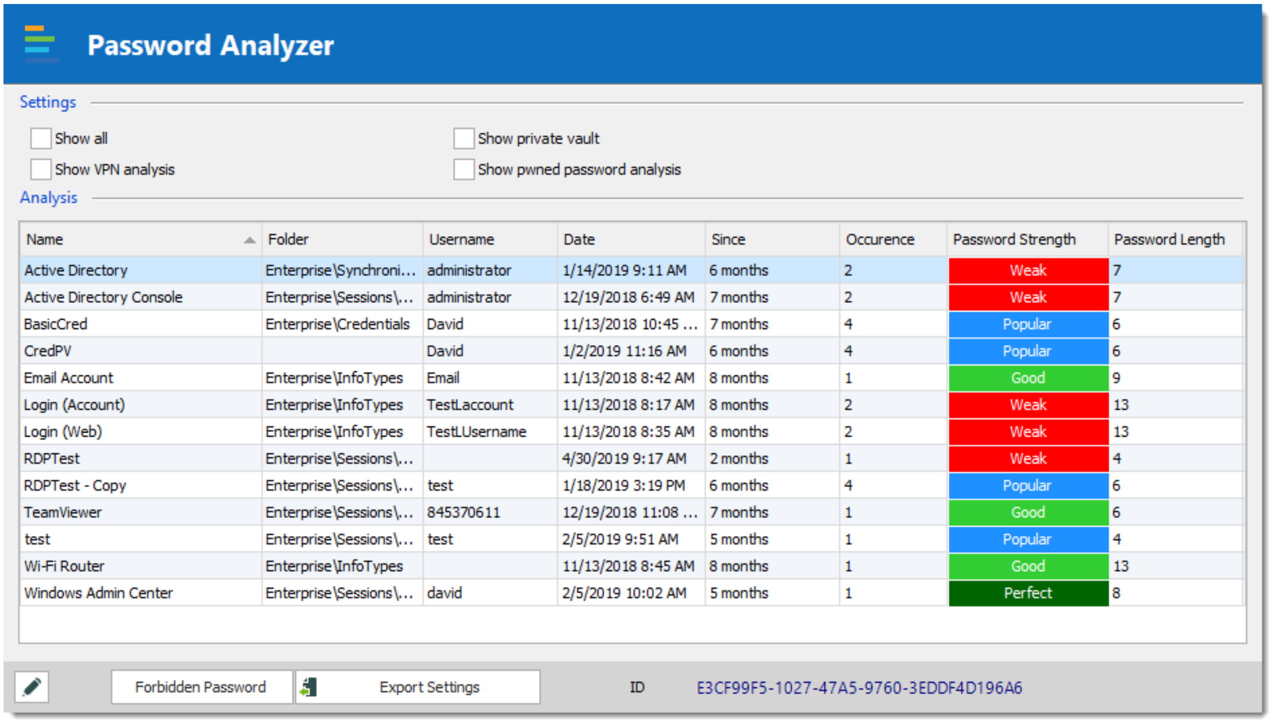
- The password is at least 5 characters long
- The password contains uppercase and lowercase characters
- The password contains digits

WEAKENING

These are the rules which make the passwords weaker:

- The password contains only letters
- The password contains only digits
- The password has repeated characters
- The password has consecutive uppercase letters (two or more)
- The password has consecutive lowercase letters (two or more)
- The password has consecutive digits (two or more)
- The password has sequential letters (ABCD, DCBA)
- The password has sequential digits (1234, 4321)

SETTINGS



Password Analyzer

Settings

□ Show all
□ Show VPN analysis
□ Show private vault
□ Show pwned password analysis

Analysis

Name	Folder	Username	Date	Since	Occurence	Password Strength	Password Length
Active Directory	Enterprise\Synchroni...	administrator	1/14/2019 9:11 AM	6 months	2	Weak	7
Active Directory Console	Enterprise\Sessions\...	administrator	12/19/2018 6:49 AM	7 months	2	Weak	7
BasicCred	Enterprise\Credentials	David	11/13/2018 10:45 ...	7 months	4	Popular	6
CredPV		David	1/2/2019 11:16 AM	6 months	4	Popular	6
Email Account	Enterprise\InfoTypes	Email	11/13/2018 8:42 AM	8 months	1	Good	9
Login (Account)	Enterprise\InfoTypes	TestLaccount	11/13/2018 8:17 AM	8 months	2	Weak	13
Login (Web)	Enterprise\InfoTypes	TestLUsername	11/13/2018 8:35 AM	8 months	2	Weak	13
RDPTest	Enterprise\Sessions\...		4/30/2019 9:17 AM	2 months	1	Weak	4
RDPTest - Copy	Enterprise\Sessions\...	test	1/18/2019 3:19 PM	6 months	4	Popular	6
TeamViewer	Enterprise\Sessions\...	845370611	12/19/2018 11:08 ...	7 months	1	Good	6
test	Enterprise\Sessions\...	test	2/5/2019 9:51 AM	5 months	1	Popular	4
Wi-Fi Router	Enterprise\InfoTypes		11/13/2018 8:45 AM	8 months	1	Good	13
Windows Admin Center	Enterprise\Sessions\...	david	2/5/2019 10:02 AM	5 months	1	Perfect	8

ID E3CF99F5-1027-47A5-9760-3EDDF4D196A6

Tools - Password Analyzer

OPTION	DESCRIPTION
Show all	Shows you all the entries in your session, including those without password.
Show VPN analysis	Add the VPN Host column.
Edit 🖉	Open the current entry to edit it.
Forbidden Password	Create a list of prohibited passwords.
Export Settings	Export the password analyzer settings.

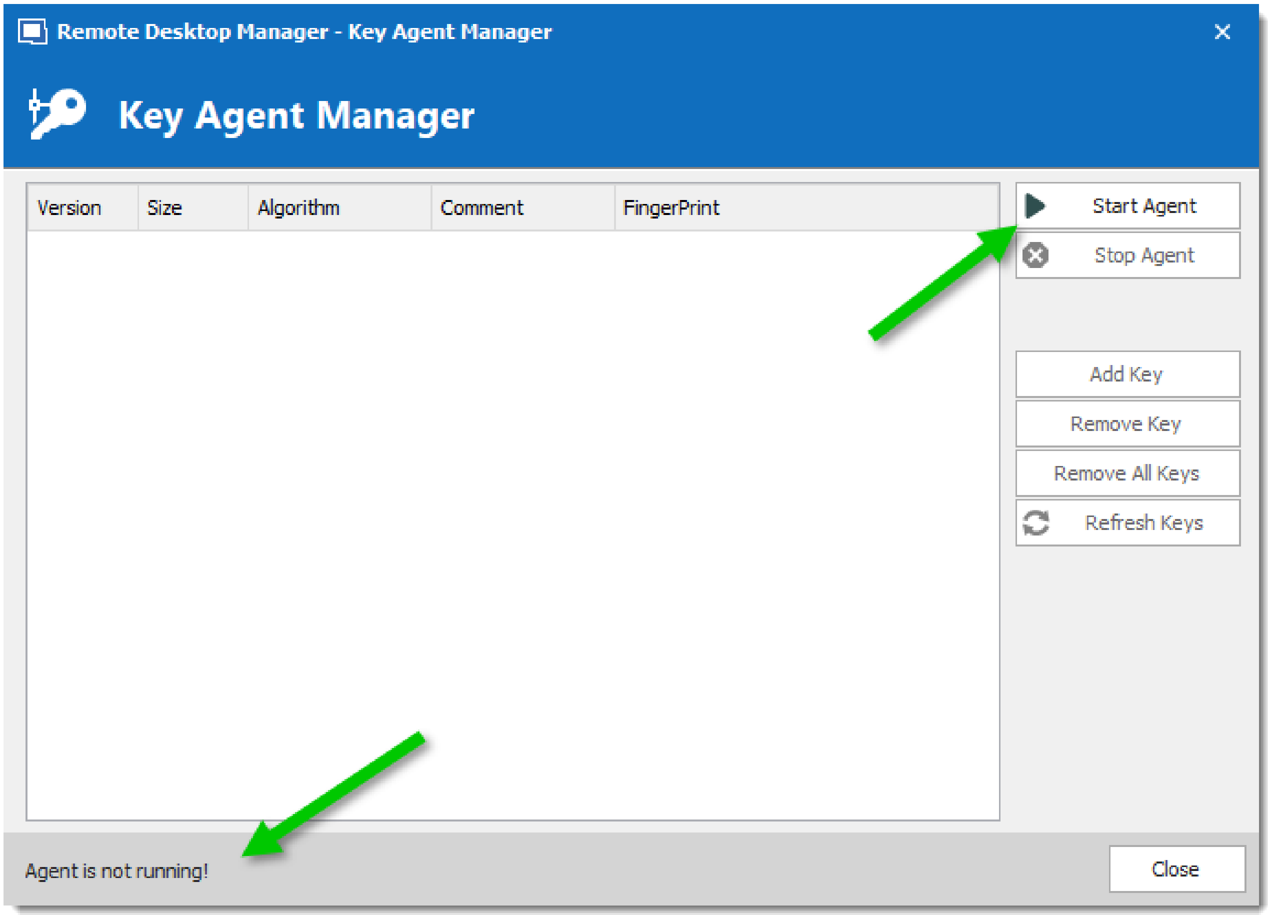
7.8.2.2 Key Agent Manager

DESCRIPTION

The **Key Agent Manager** is used to hold all your SSH Keys in memory, already decoded and ready for them to be used. It has the same use as Pageant (SSH Key Manager) has for Putty except that the Key Agent Manager is used with Remote Desktop Manager.

SETTINGS

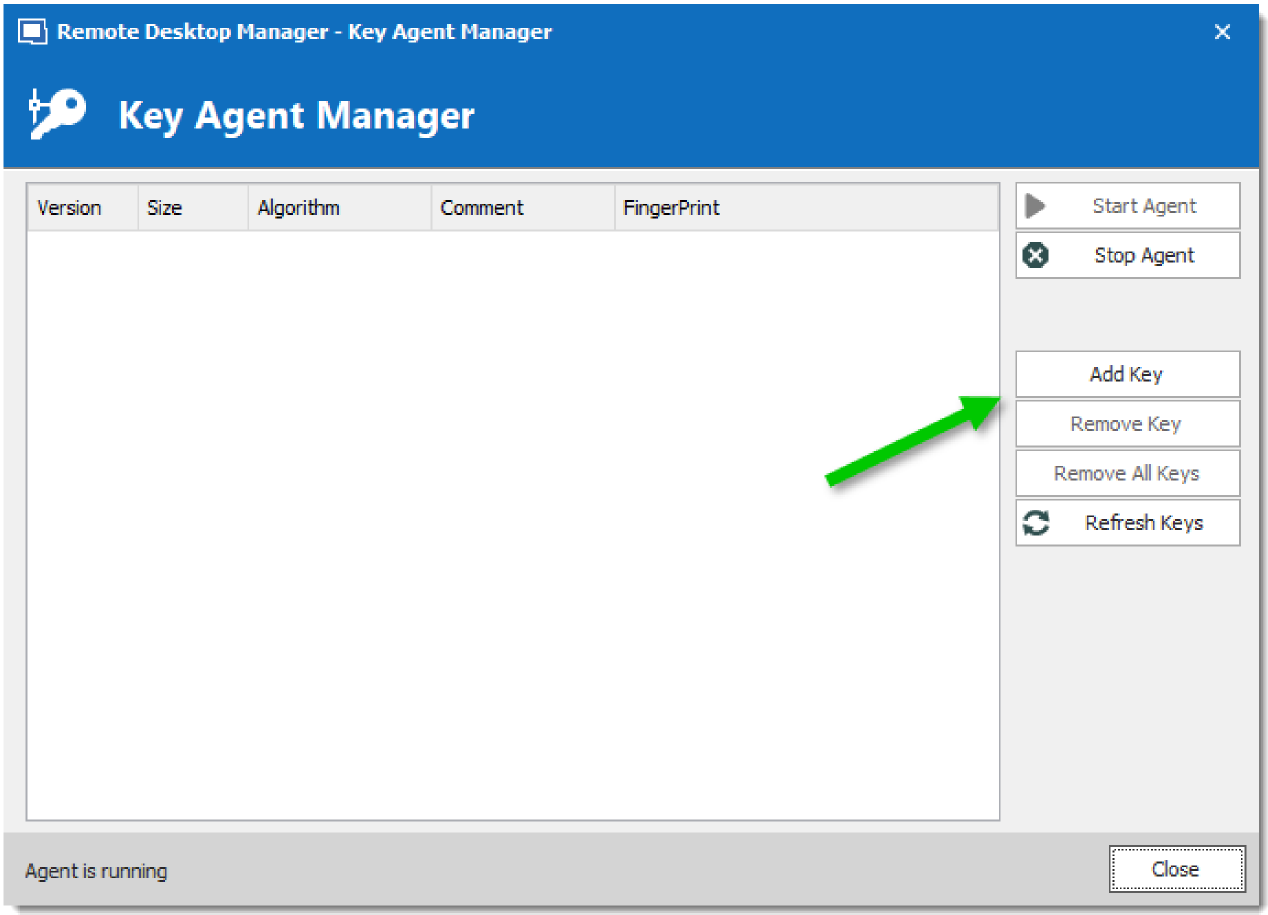
1. When opening the Key Agent Manager you will notice at the bottom right that the **agent is not running** you will need to click on **Start Agent**. If you wish to always have your Key Agent running you can activate the option in ***File – Option – Key Agent – Start agent on application start***.



Agent is not running!

Key Agent Manager - Start Agent

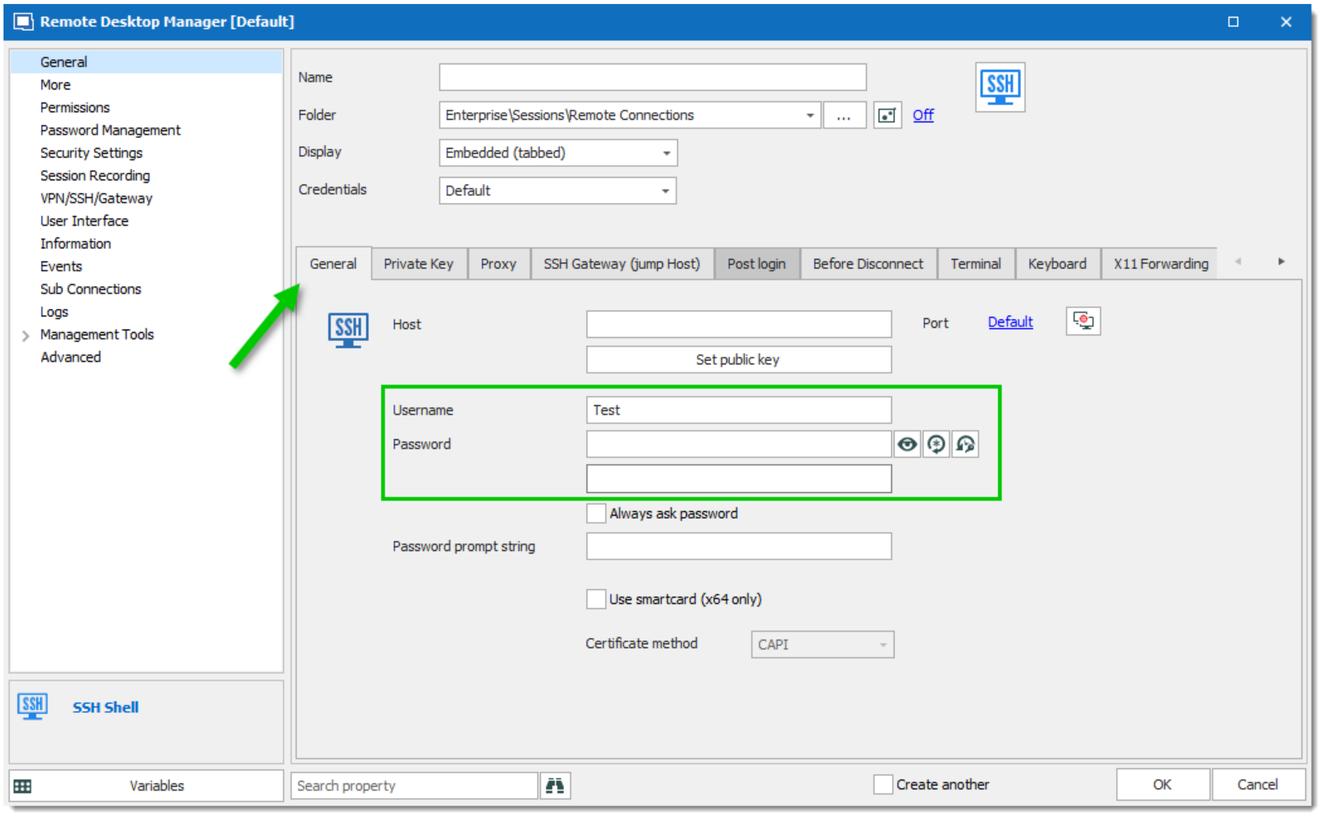
2. Click on **Add key** and select the file to open your SSH key.



Key Agent Manager - Add Key

3. All your added SSH Key will appear in your Key Agent Manager.

4. In your SSH Shell Session in the **General** tab enter a Username and leave the Password field blank.



Name

Folder: Enterprise\Sessions\Remote Connections ... Off

Display: Embedded (tabbed)

Credentials: Default

Host

Port: Default

Username: Test

Password

□ Always ask password

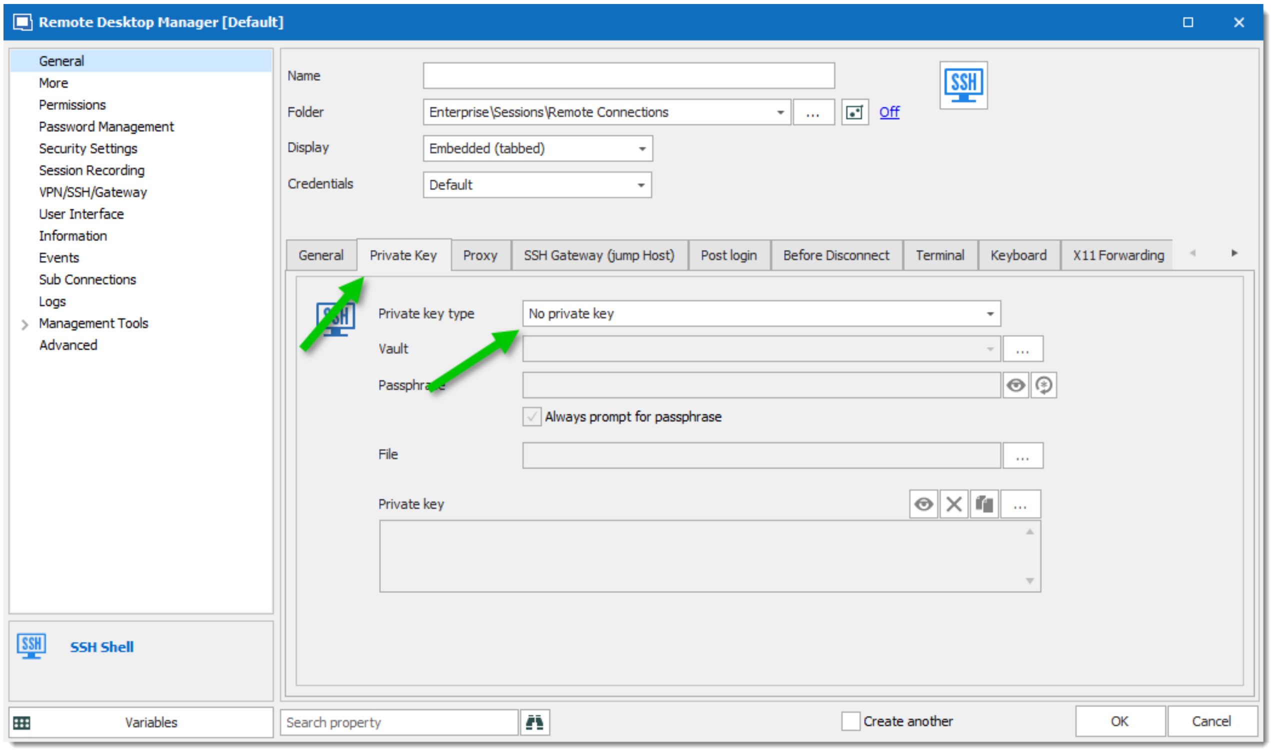
Password prompt string

□ Use smartcard (x64 only)

Certificate method: CAPI

SSH Shell session - General Tab

5. In the **Private Key** tab of your SSH Shell session leave the option for the Private Key to **No Private Key**.



Name

Folder: Enterprise\Sessions\Remote Connections

Display: Embedded (tabbed)

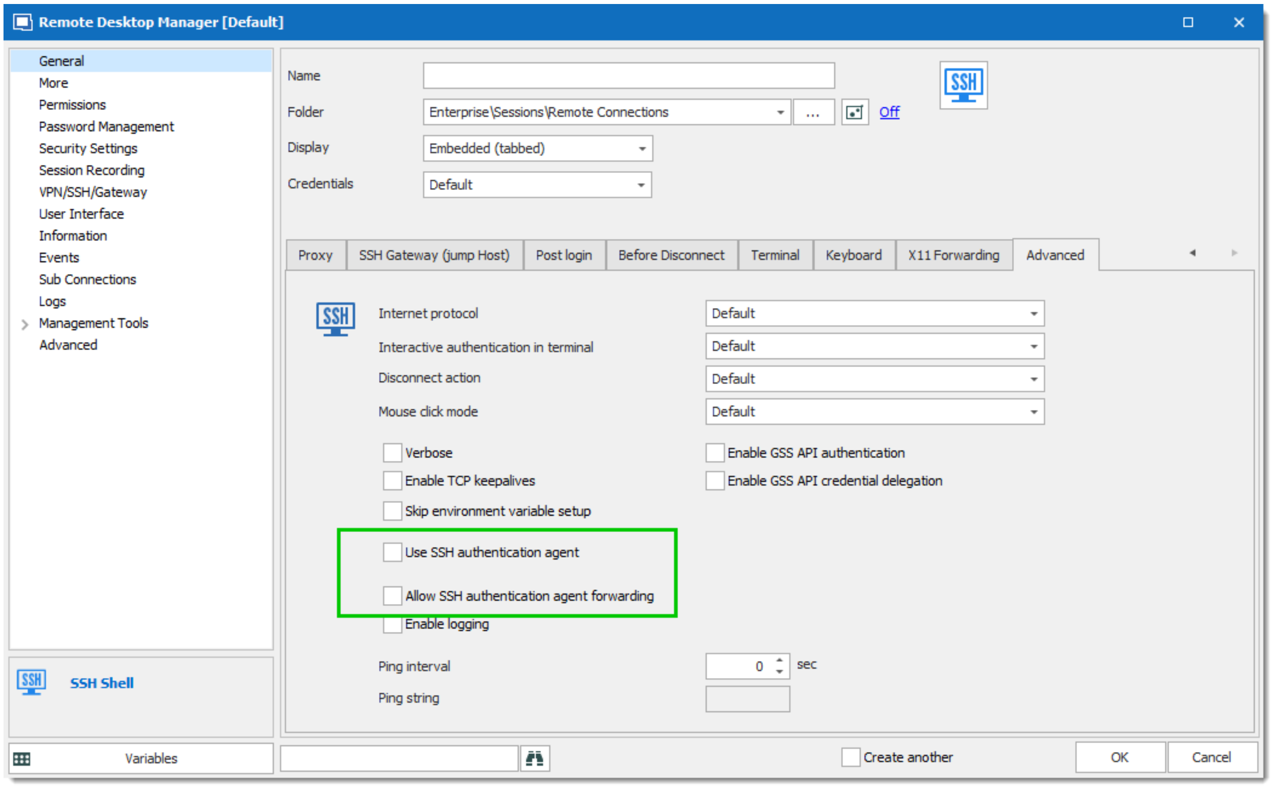
Credentials: Default

Private key type: No private key

☑ Always prompt for passphrase

SSH Shell session - Private Key Tab

6. In the **Advanced** tab of your SSH Shell session activate the option **Use Agent**. The Use Agent automatically take the information of the SSH Key kept in your Key Agent Manager.



Name:
Folder: Enterprise\Sessions\Remote Connections
Off
Display: Embedded (tabbed)
Credentials: Default

Internet protocol: Default
Interactive authentication in terminal: Default
Disconnect action: Default
Mouse click mode: Default

□ Verbose
□ Enable TCP keepalives
□ Skip environment variable setup
□ Use SSH authentication agent
□ Allow SSH authentication agent forwarding
□ Enable logging
□ Enable GSS API authentication
□ Enable GSS API credential delegation

Ping interval: 0 sec
Ping string:

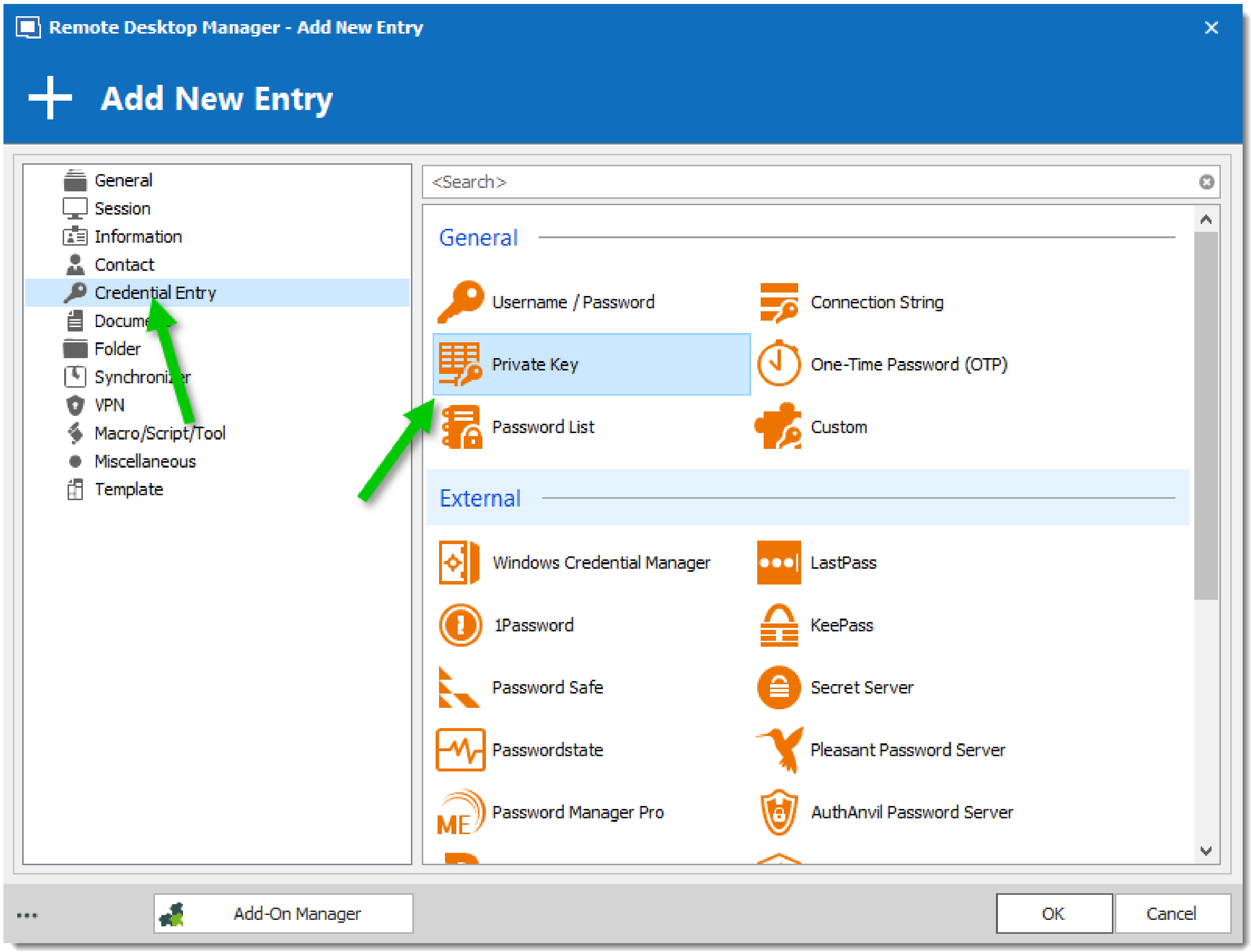
□ Create another

SSH Shell session - Advanced

PRIVATE KEY CREDENTIAL

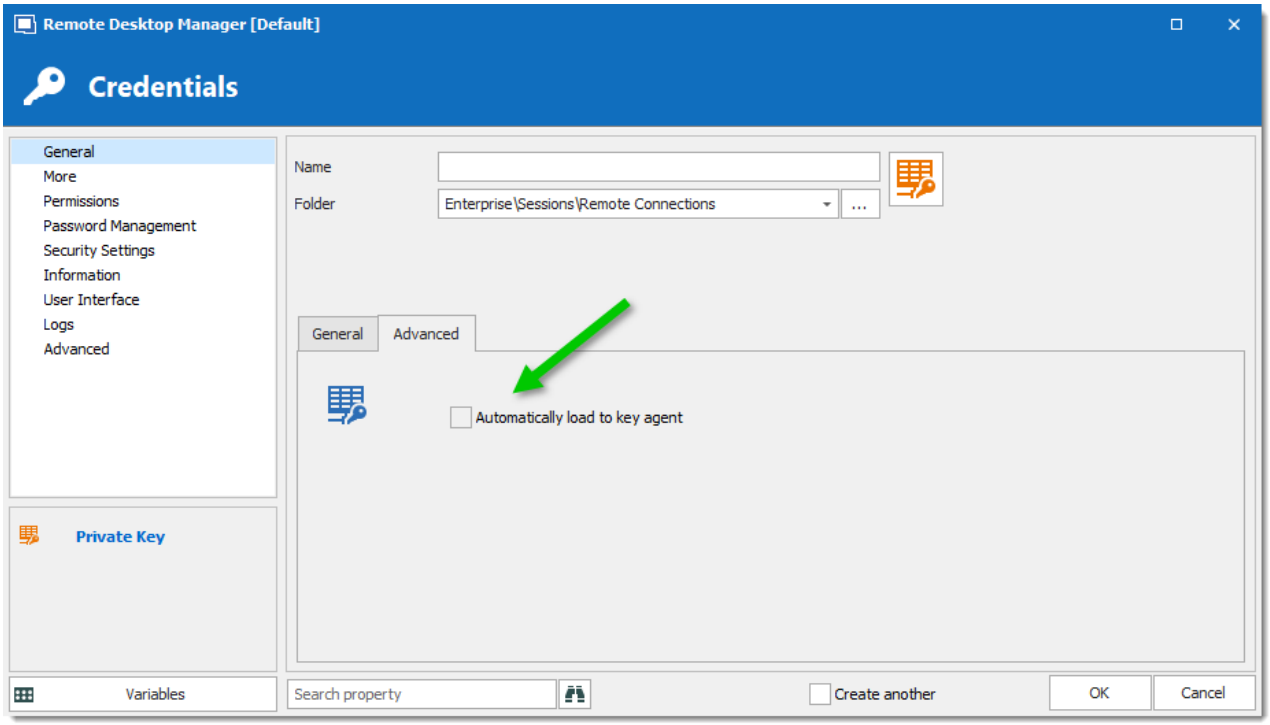
When creating new Private Key credential entry in Remote Desktop Manager you have the option of loading them automatically in your Key Agent Manager.

1. Create your new Private Key credential.



New Credential Entry - Private Key

2. In the **Advanced** tab of your Private Key entry activate the option **Automatically load to key agent.**



Private Key - Advanced Tab

7.8.2.3 PowerShell (RDM CmdLet)

DESCRIPTION

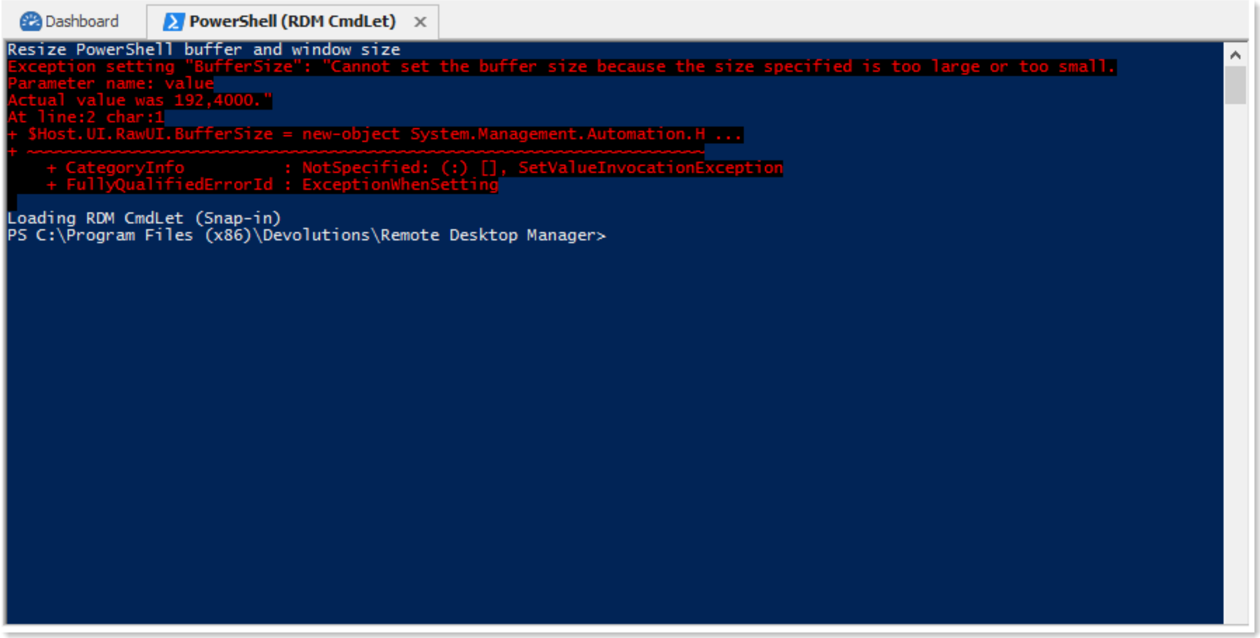
The **PowerShell (RDM CmLet)** automatically opens an embedded PowerShell window. RDM snap-in allows for quick and robust automation of actions such as add/edit/open of sessions, the possibilities are endless.

Since its release, this highly-requested feature has become very useful in solving user requests. A quick search through our forum reveals many usages of the cmdlets, such as automating the creation of Windows Start Menu shortcuts for every RDM session.

To learn more, you can find full RDM cmdlet documentation available via the PowerShell Scripting topic or directly in PowerShell using the Get-Help cmdlet.

SETTINGS

You will find on the Forum multiple PowerShell script to import edit or interact with the Remote Desktop Manager data.



```
Resize PowerShell buffer and window size
Exception setting "BufferSize": "Cannot set the buffer size because the size specified is too large or too small.
Parameter name: value
Actual value was 192,4000."
At line:2 char:1
+ $Host.UI.RawUI.BufferSize = new-object System.Management.Automation.H ...
+ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
    + CategoryInfo          : NotSpecified: (:) [], SetValueInvocationException
    + FullyQualifiedErrorId : ExceptionWhenSetting

Loading RDM CmdLet (Snap-in)
PS C:\Program Files (x86)\Devolutions\Remote Desktop Manager>
```

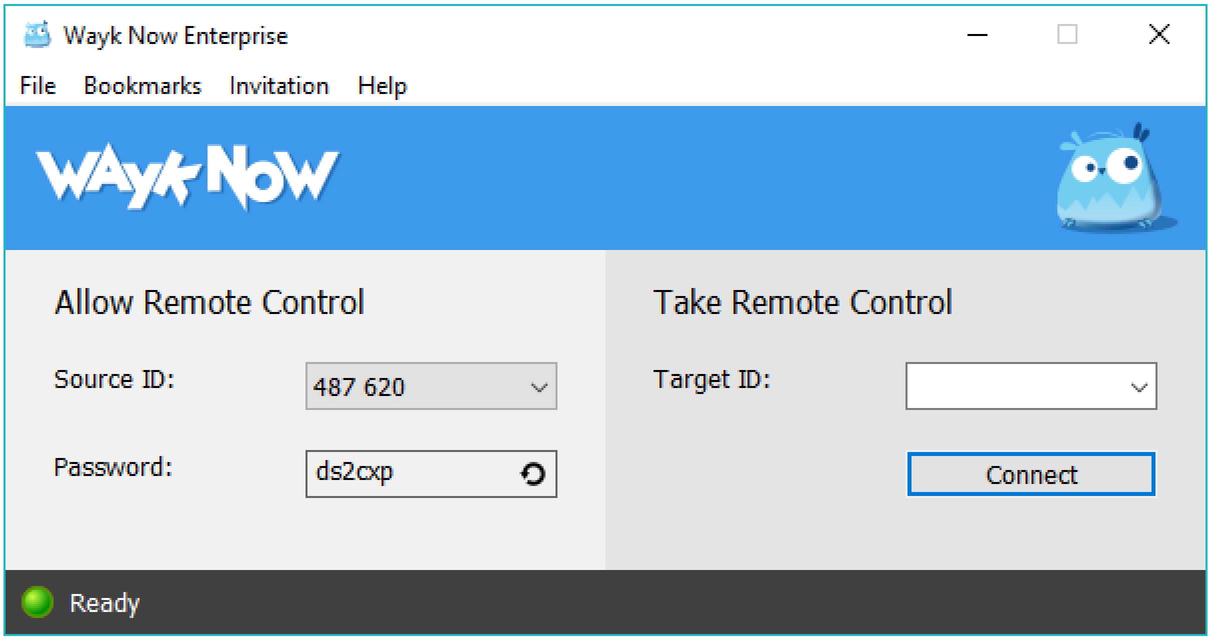
PowerShell

7.8.2.4 Wayk Now

DESCRIPTION

Wayk Now helps you provide remote assistance to others by allowing one user to connect to another person's computer. It is a **Devolutions** product that is integrated with Remote Desktop Manager.

Clicking on this tool opens Wayk Now application externally.



Source ID: 487 620

Password: ds2cxp

Target ID:

Wayk Now

For more information about using Wayk Now consult the Wayk Now Online Help.

7.8.2.5 More Tools

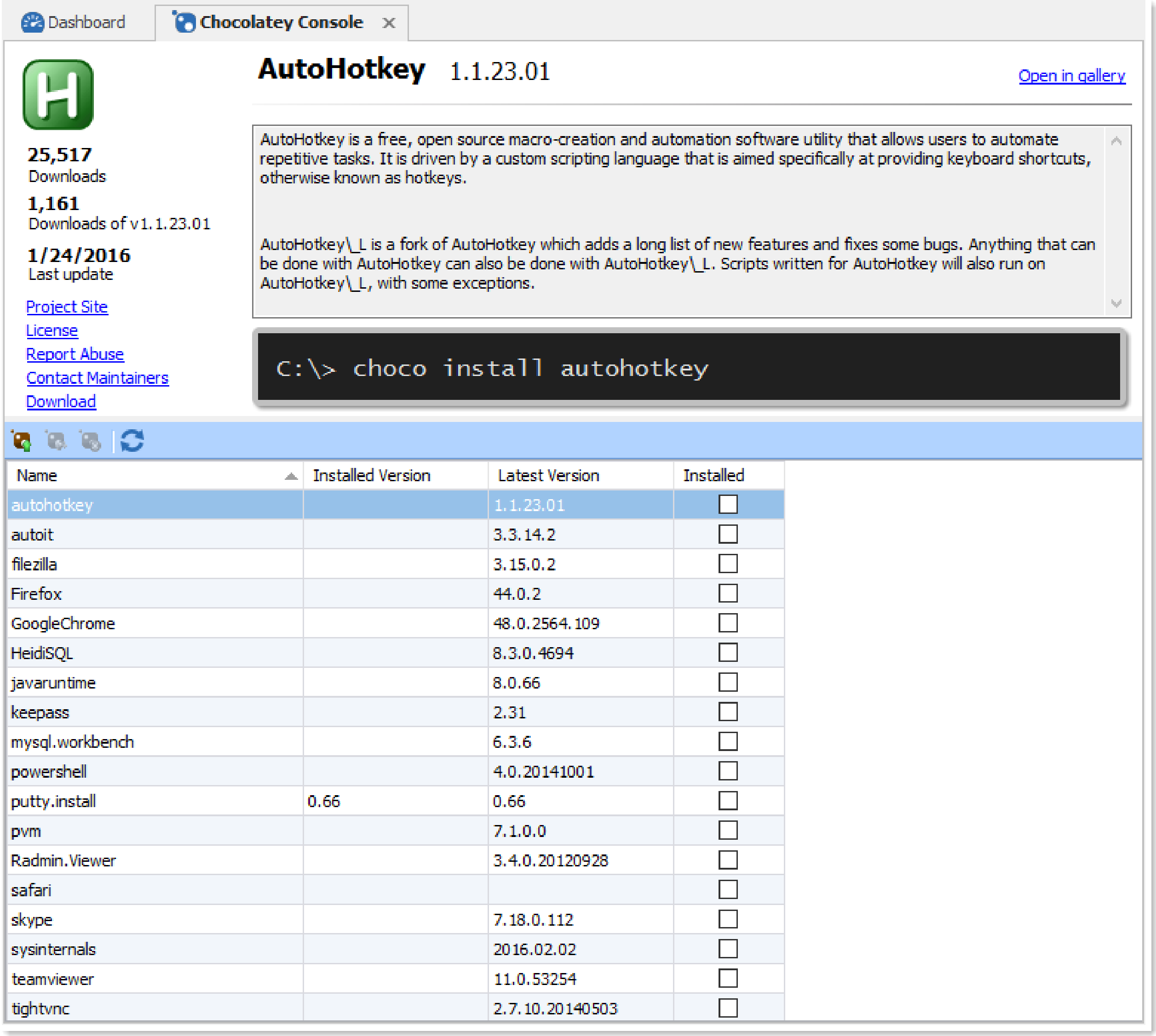
7.8.2.5.1 Chocolatey Console

DESCRIPTION

> Chocolatey need to be installed on your computer to use the Chocolatey Console.

The Chocolatey Console is available in the ***Tools – More Tools - Chocolatey Console*** menu. It allows you to install all the supported applications from Chocolatey directly from Remote Desktop Manager.

SETTINGS



AutoHotkey 1.1.23.01

25,517
Downloads

1,161
Downloads of v1.1.23.01

1/24/2016
Last update

AutoHotkey is a free, open source macro-creation and automation software utility that allows users to automate repetitive tasks. It is driven by a custom scripting language that is aimed specifically at providing keyboard shortcuts, otherwise known as hotkeys.

AutoHotkey_L is a fork of AutoHotkey which adds a long list of new features and fixes some bugs. Anything that can be done with AutoHotkey can also be done with AutoHotkey_L. Scripts written for AutoHotkey will also run on AutoHotkey_L, with some exceptions.

```
C:\> choco install autohotkey
```

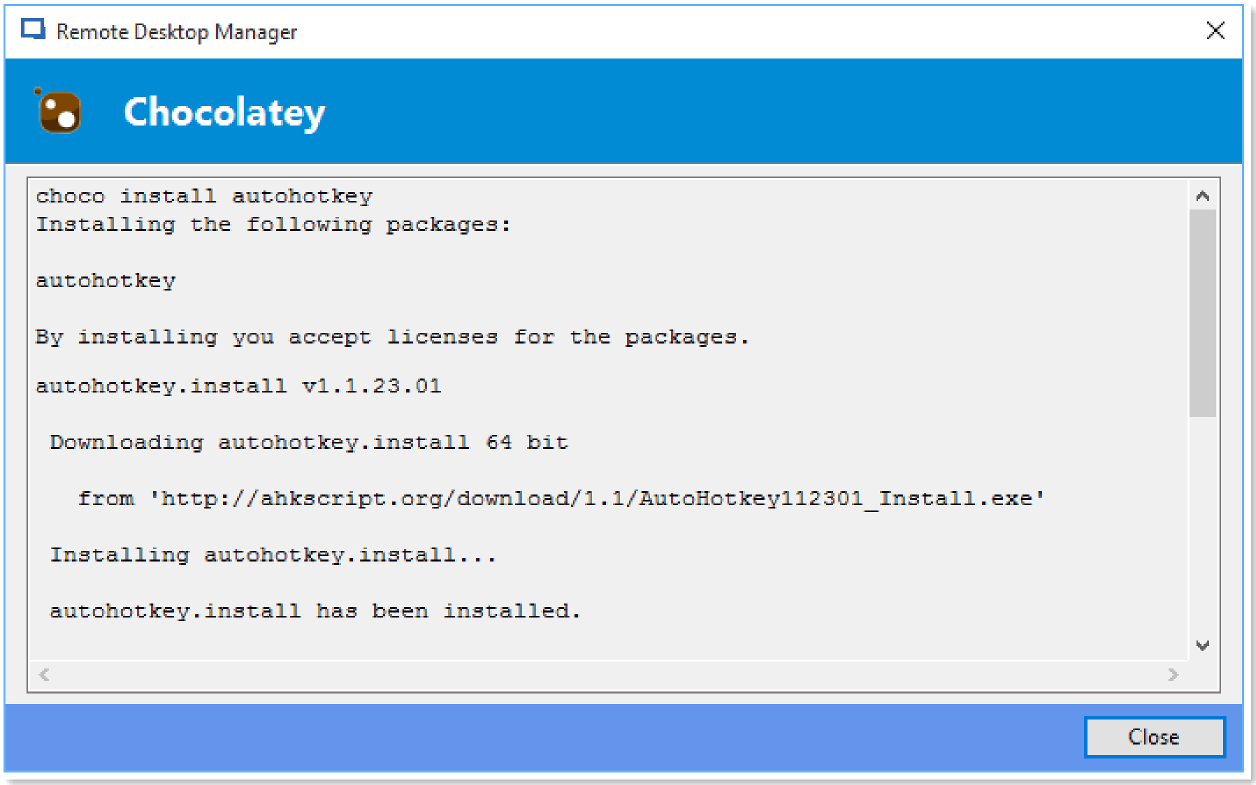
Name	Installed Version	Latest Version	Installed
autohotkey		1.1.23.01	□
autoit		3.3.14.2	□
filezilla		3.15.0.2	□
Firefox		44.0.2	□
GoogleChrome		48.0.2564.109	□
HeidiSQL		8.3.0.4694	□
javaruntime		8.0.66	□
keepass		2.31	□
mysql.workbench		6.3.6	□
powershell		4.0.20141001	□
putty.install	0.66	0.66	□
pvm		7.1.0.0	□
Radmin.Viewer		3.4.0.20120928	□
safari			□
skype		7.18.0.112	□
sysinternals		2016.02.02	□
teamviewer		11.0.53254	□
tightvnc		2.7.10.20140503	□

Chocolatey Console

OPTION	DESCRIPTION
+	Install the selected application.
↑	Update the selected application.
✕	Uninstall the selected application.
⟳	Refresh the Chocolatey details list.

USAGE

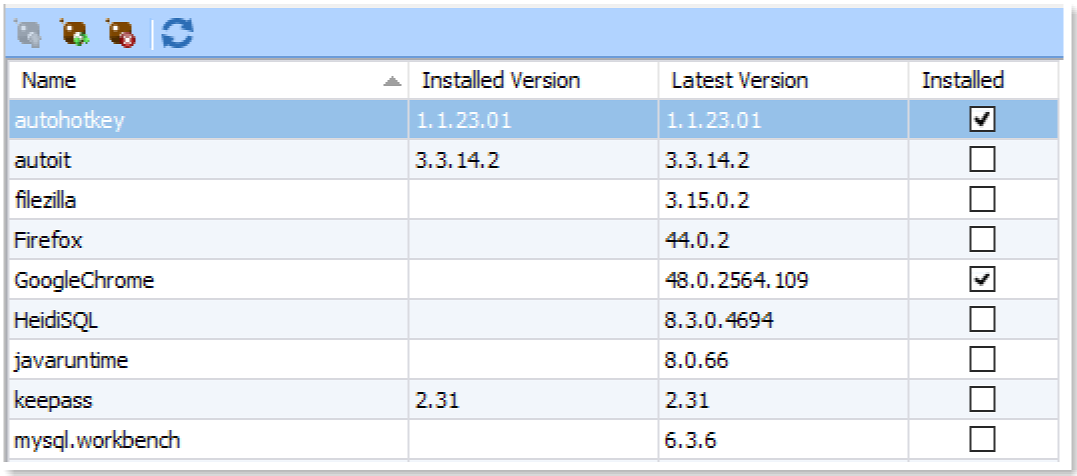
During the installation, you will see the following window.



```
choco install autohotkey
Installing the following packages:

autohotkey

By installing you accept licenses for the packages.

autohotkey.install v1.1.23.01

 Downloading autohotkey.install 64 bit

   from 'http://ahkscript.org/download/1.1/AutoHotkey112301_Install.exe'

 Installing autohotkey.install...

 autohotkey.install has been installed.
```

Installation window

When the installation is completed you will see a check mark in the **Installed** column.



Name	Installed Version	Latest Version	Installed
autohotkey	1.1.23.01	1.1.23.01	☑
autoit	3.3.14.2	3.3.14.2	□
filezilla		3.15.0.2	□
Firefox		44.0.2	□
GoogleChrome		48.0.2564.109	☑
HeidiSQL		8.3.0.4694	□
javaruntime		8.0.66	□
keepass	2.31	2.31	□
mysql.workbench		6.3.6	□

Installation Complete

7.8.2.5.2 Local RDP/RemoteApp Manager

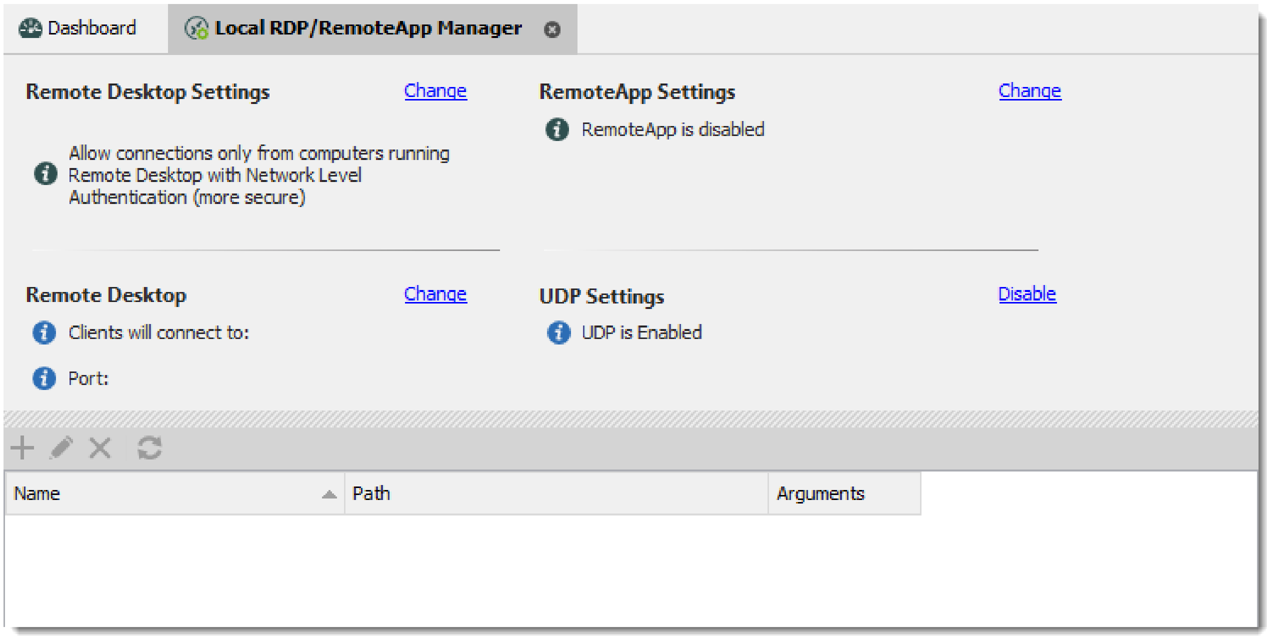
DESCRIPTION

The local RDP settings and the RemoteApp settings are available from ***Tools – More Tools - Local RDP/RemoteApp Manager***.

If you run Remote Desktop Manager on a Windows Server 2008 machine the TS RemoteApp MMC console will be launched.

If you are running on Windows Vista, the RemoteApp console built into Remote Desktop Manager will be launched because RemoteApp functionality is available in Windows 7 but not the MMC console. Therefore instead of having to modify the required registry entries you can use the Remote Desktop Manager RemoteApp Manager.

SETTINGS



Allow connections only from computers running Remote Desktop with Network Level Authentication (more secure)

RemoteApp is disabled

Clients will connect to:

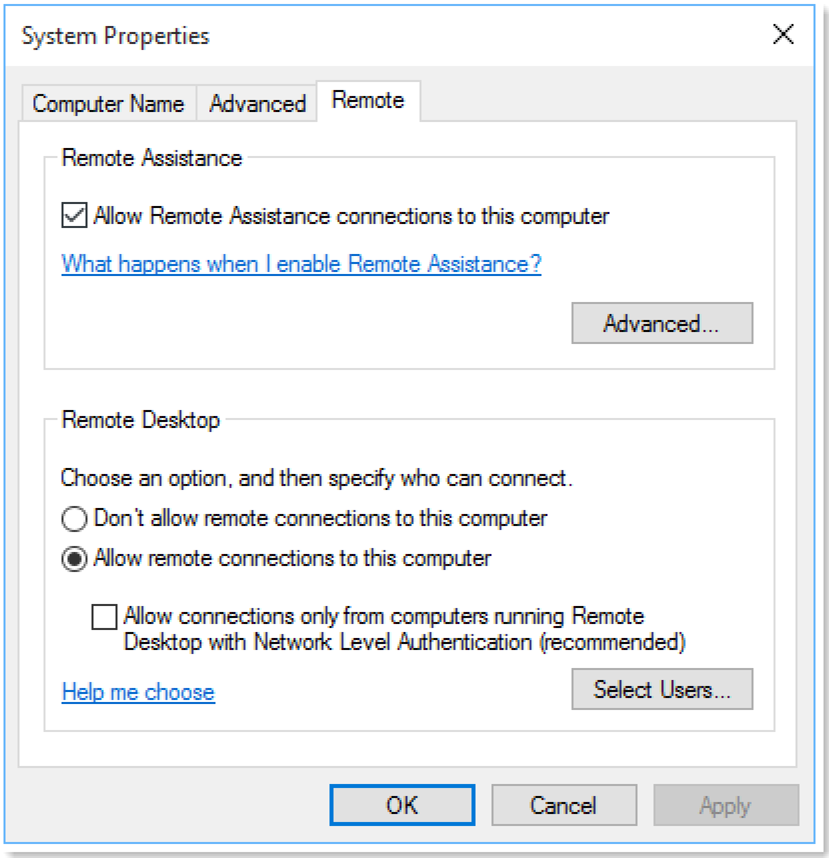
Port:

UDP is Enabled

More Tools - Local RDP/RemoteApp Manager

REMOTE DESKTOP SETTINGS

Allow or disallow the remote connections to your computer.



Remote Assistance

☑ Allow Remote Assistance connections to this computer

What happens when I enable Remote Assistance?

Remote Desktop

Choose an option, and then specify who can connect.

○ Don't allow remote connections to this computer

● Allow remote connections to this computer

□ Allow connections only from computers running Remote Desktop with Network Level Authentication (recommended)

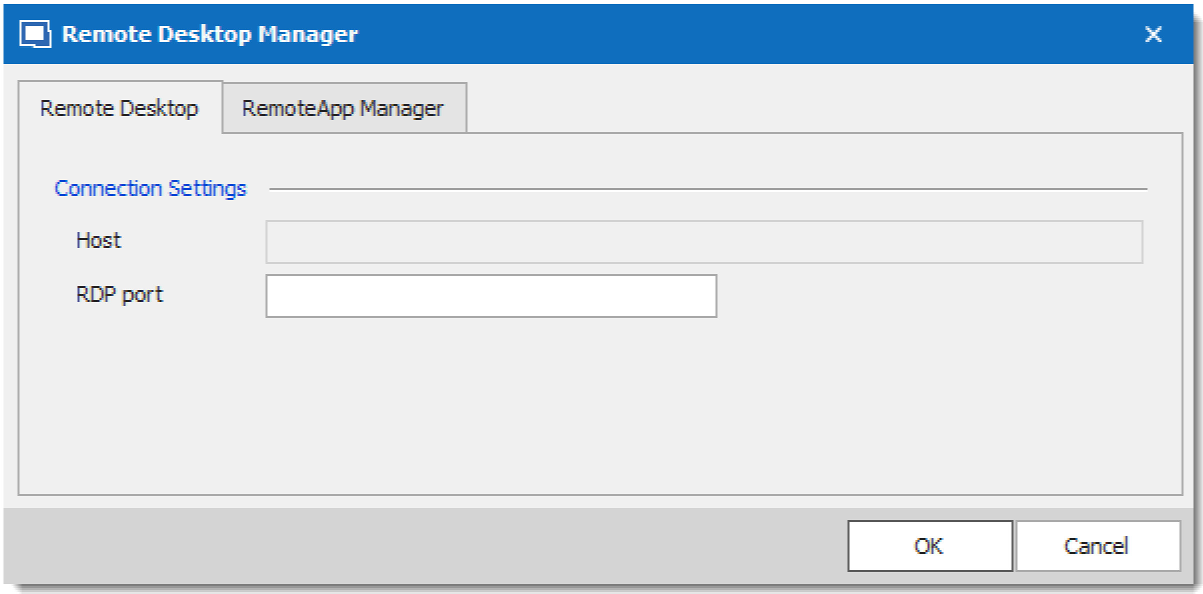
Help me choose

Remote Desktop Settings

REMOTE DESKTOP

Allows you to modify the local RDP port.

Remote Desktop Manager must be run as an administrator to modify the Remote Desktop settings.

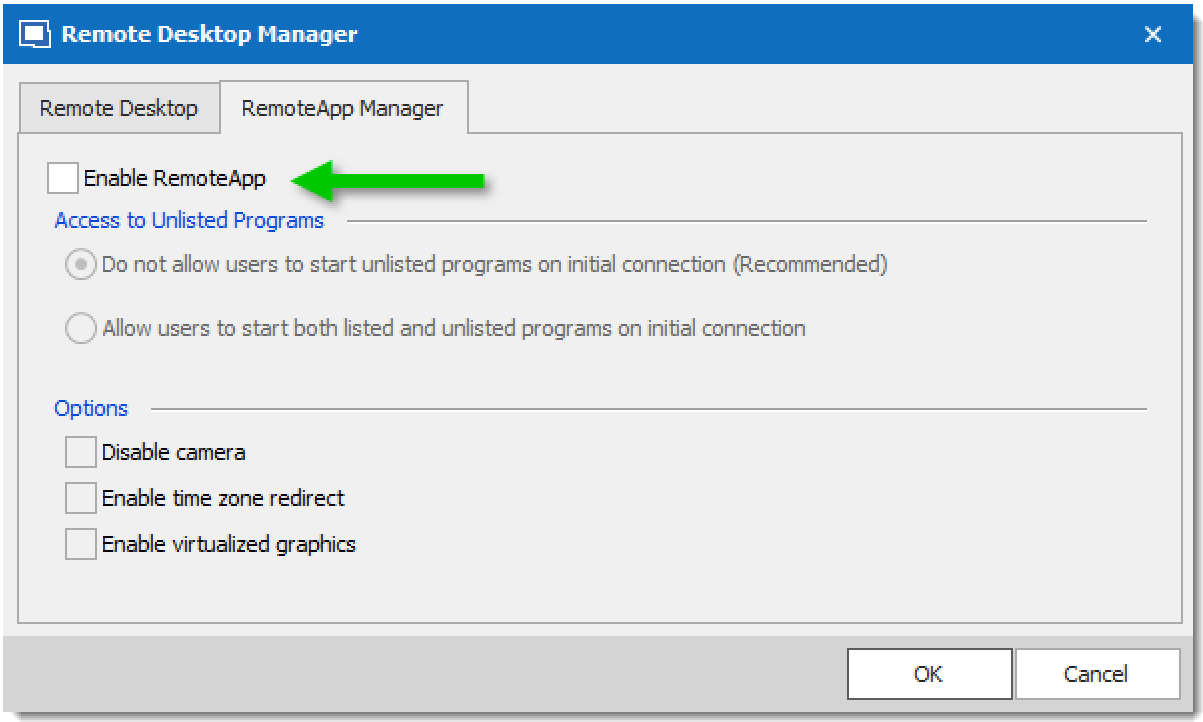


Remote Desktop Connection Settings

REMOTEAPP SETTINGS

You must Enable RemoteApp to be able to create a New RemoteApp Setting.

Remote Desktop Manager must be run as an administrator to modify the RemoteApp settings.



□ Enable RemoteApp

Access to Unlisted Programs

● Do not allow users to start unlisted programs on initial connection (Recommended)

○ Allow users to start both listed and unlisted programs on initial connection

Options

□ Disable camera

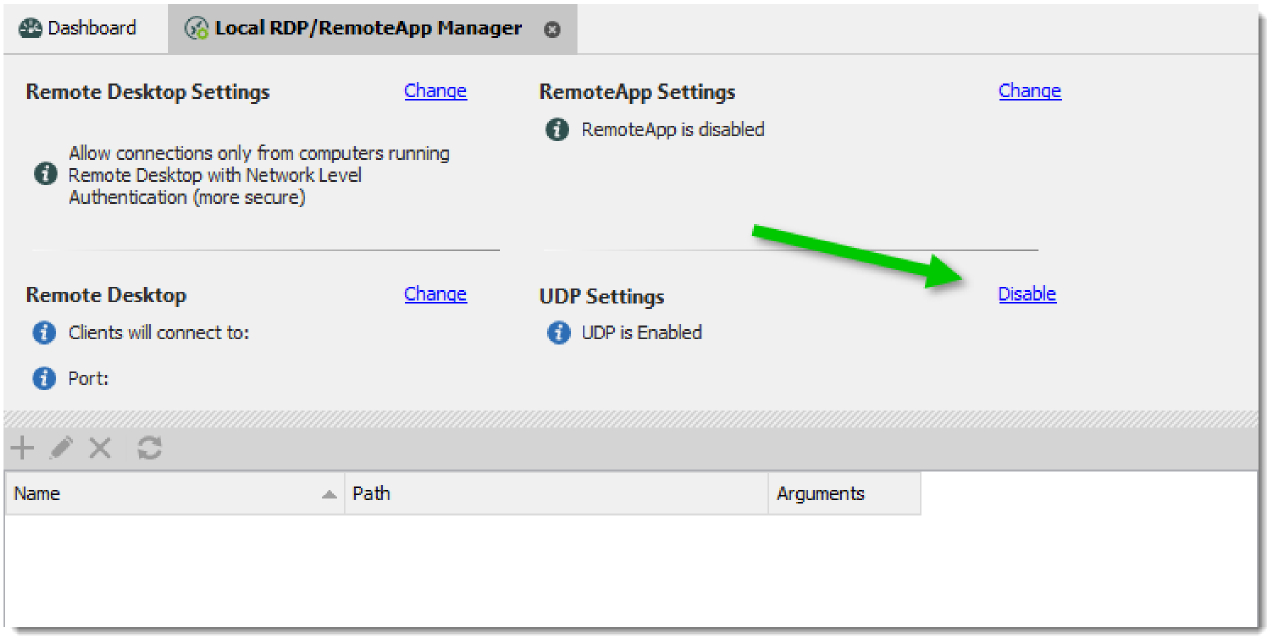
□ Enable time zone redirect

□ Enable virtualized graphics

RemoteApp Settings

UDP SETTINGS

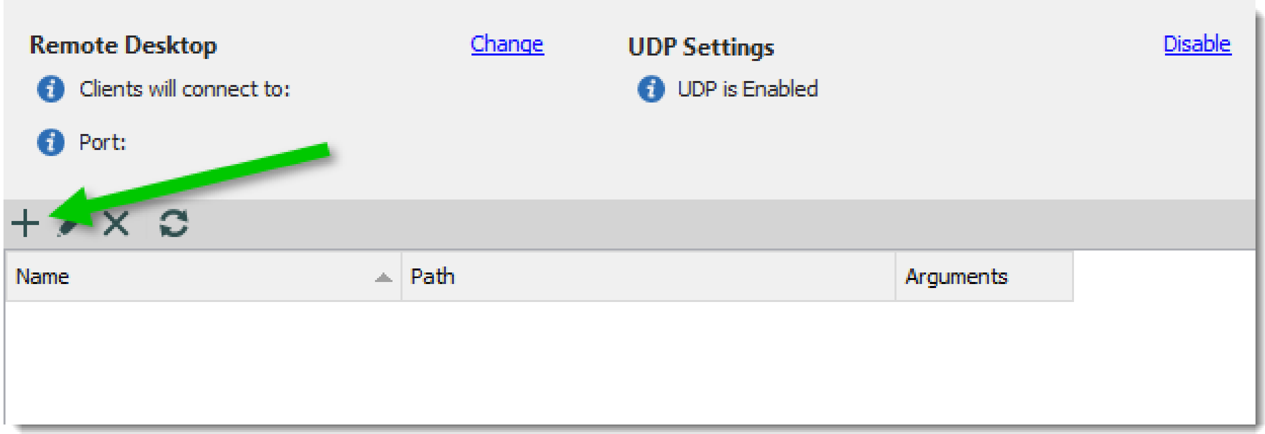
Enable or disable UDP (User Datagram Protocol) locally on your computer. UDP is a communication protocol that offers a limited amount of service when messages are exchanged between computers in a network that uses the Internet Protocol (IP).



Local RDP/RemoteApp Manager - UDP is Enabled

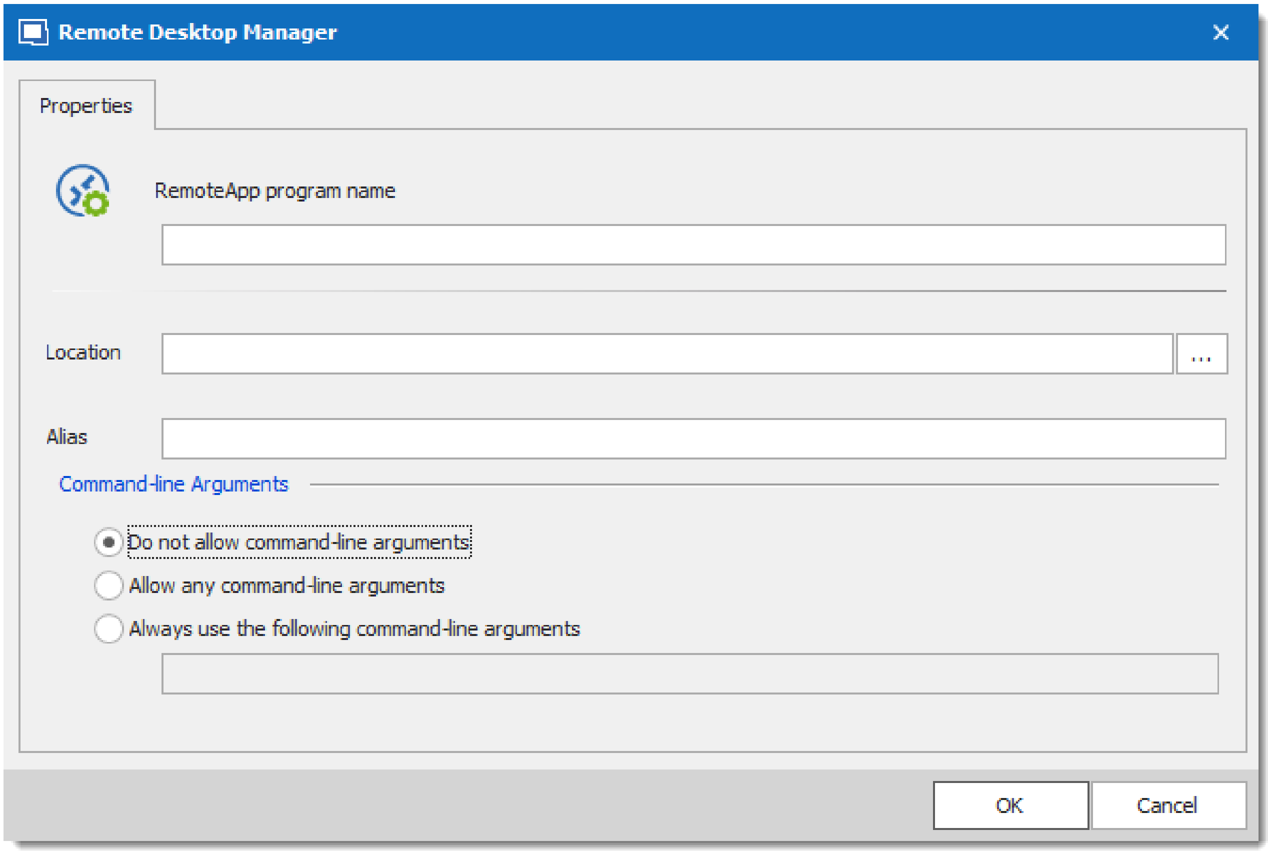
USAGE

1. Click on **New RemoteApp Settings.**



New RemoteApp Settings

2. Configure the RemoteApp



RemoteApp program name

Location

Alias

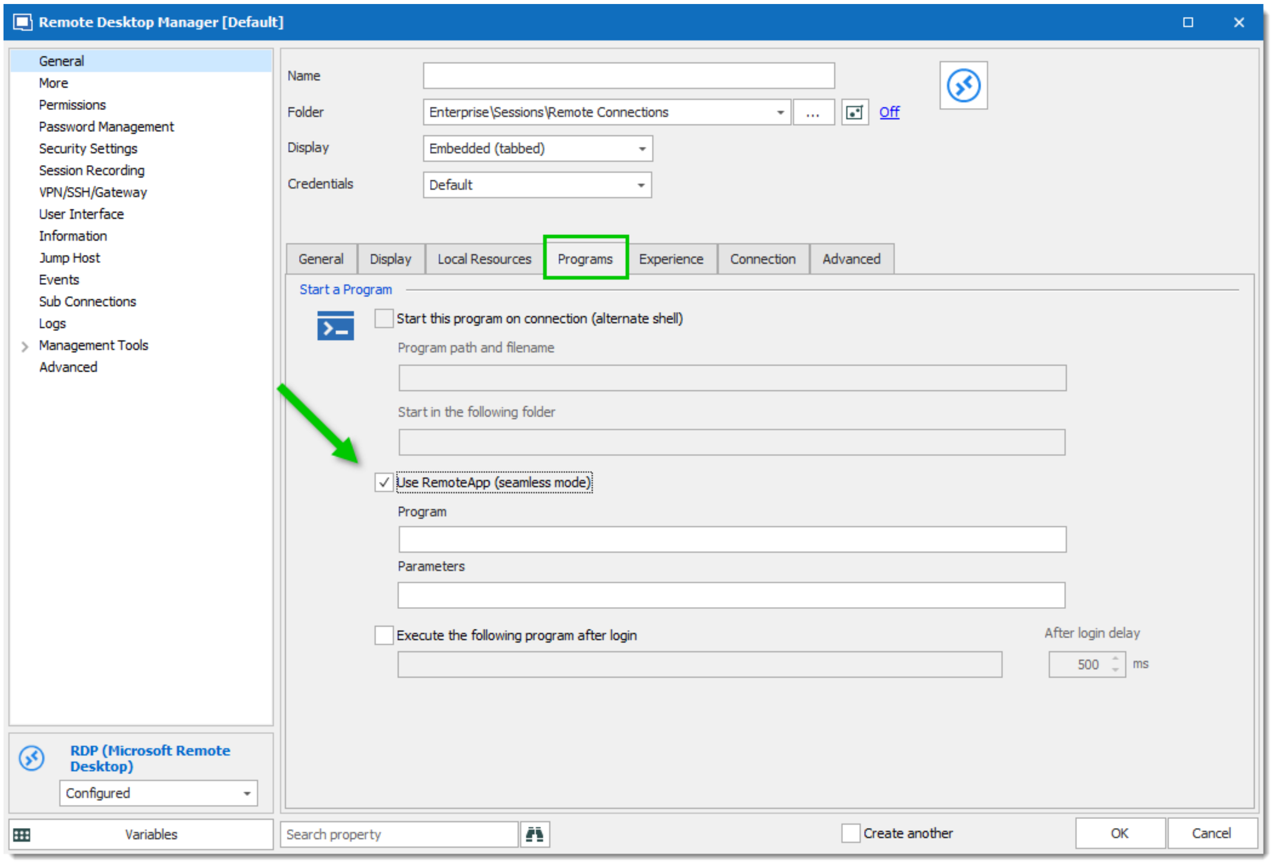
Command-line Arguments

● Do not allow command-line arguments

○ Allow any command-line arguments

○ Always use the following command-line arguments

3. Create a new RDP session and select the **Programs** tab. Enable the **Use RemoteApp** option and then enter the name of the RemoteApp program and save the session. When the session is launched you will have the RemoteApp running locally.



Name

Folder: Enterprise\Sessions\Remote Connections

Display: Embedded (tabbed)

Credentials: Default

Start a Program

□ Start this program on connection (alternate shell)

Program path and filename

Start in the following folder

☑ Use RemoteApp (seamless mode)

Program

Parameters

□ Execute the following program after login

After login delay: 500 ms

Configured

□ Create another

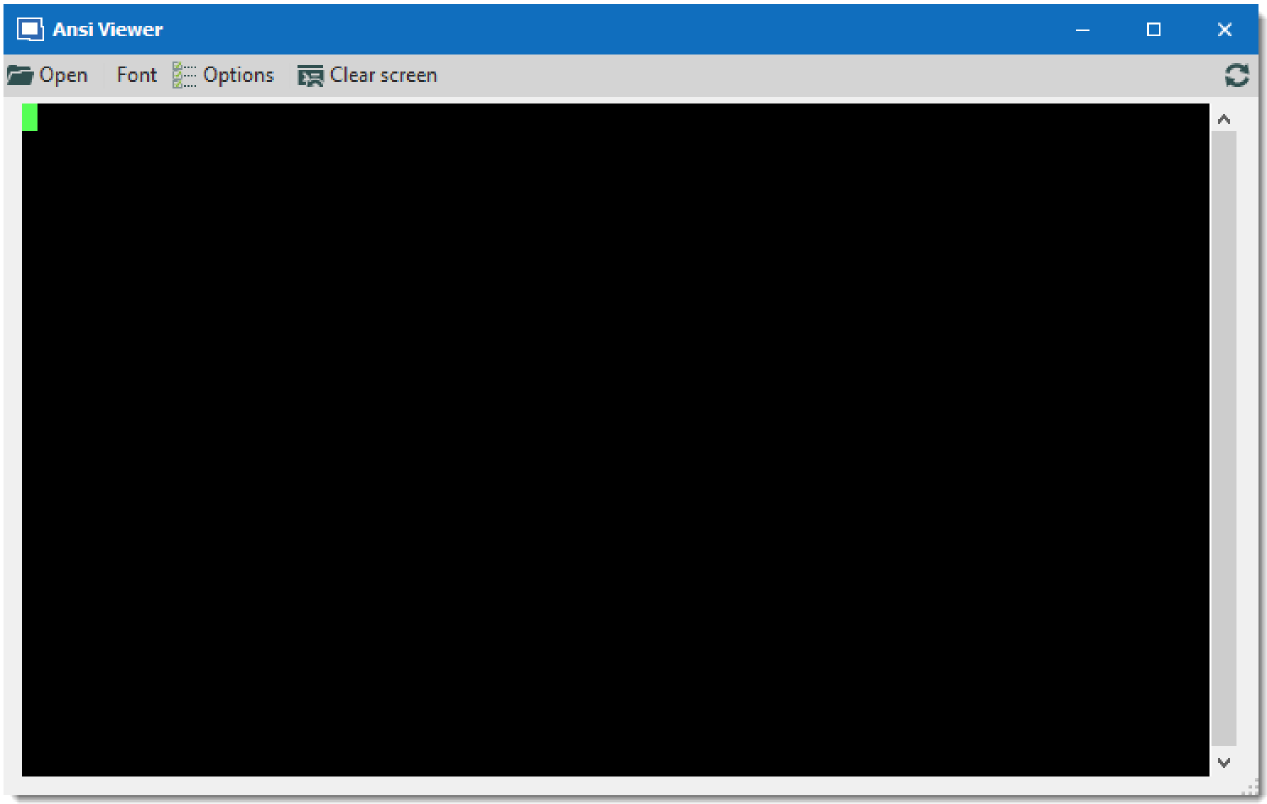
RDP session - Programs Tab

7.8.2.5.3 Playback (Ansi)

DESCRIPTION

The **Playback (Ansi)** is available in ***Tools – More Tools – Playback (Ansi)***.

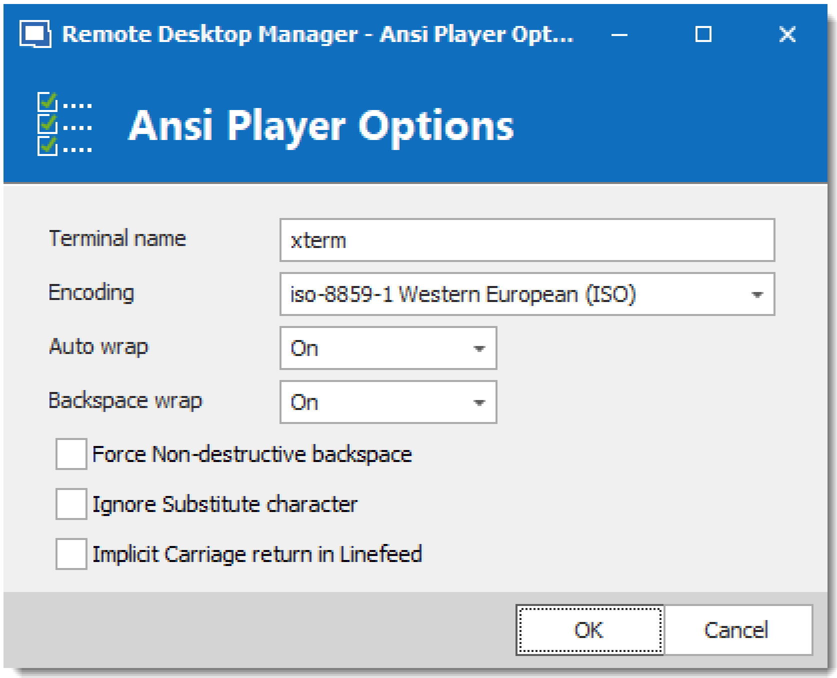
SETTINGS



More Tools - Playback (Ansi)

OPTION	DESCRIPTION
Open	Select the ansi file you wish to open in the Terminal Playback.
Font	Select the font for the Terminal Playback.
Options	See **Options** section.
Clear screen	Clear the screen to play another ansi file.

OPTIONS



Terminal name: xterm
Encoding: iso-8859-1 Western European (ISO)
Auto wrap: On
Backspace wrap: On
□ Force Non-destructive backspace
□ Ignore Substitute character
□ Implicit Carriage return in Linefeed

Playback (Ansi) - Ansi Player Options

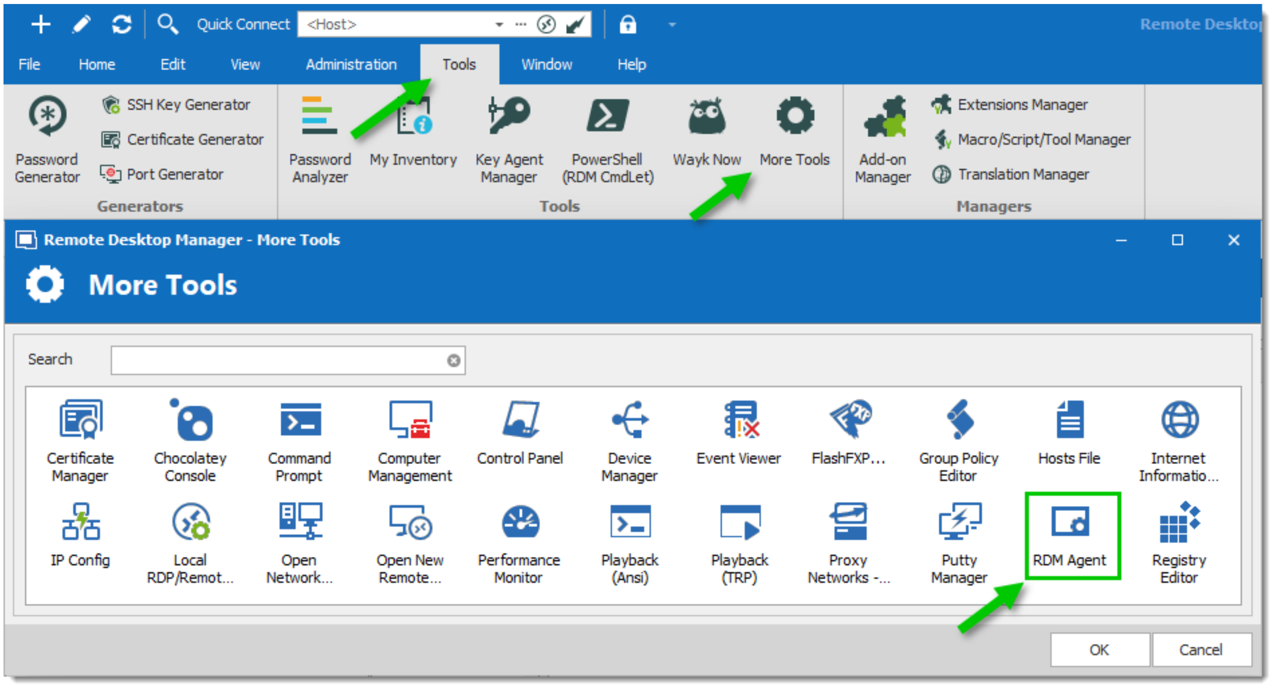
OPTION	DESCRIPTION
Terminal name	Indicate the terminal name.
Encoding	Indicate the encoding you wish to use.
Auto wrap	Indicate what happen when text reaches the right-hand edge of the window. Select between: • **On** • **Off** • **Dos**
Backspace wrap	This option allows you to choose what you want to do when you press backspace. Some terminals believe that the backspace key should send the same thing to the server as Control-H (ASCII code 8). Other terminals believe that the backspace key should send ASCII code 127 (usually known as Control-?) so that it can be distinguished from Control-H. Select between:

OPTION	DESCRIPTION
	• **On** • **Off** • **Dos**
Force Non-destructive backspace	Allow to perform a normal backspace without deleting a character.
Ignore Substitute character	Ignore the substitute character that can be use in Putty.
Implicit Carriage return in Linefeed	Most servers send two control characters, CR and LF, to start a new line on the screen. The CR character makes the cursor return to the left-hand side of the screen. The LF character makes the cursor move one line down (and might make the screen scroll). Some servers only send LF, and expect the terminal to move the cursor over to the left automatically. If you come across a server that does this, you will see a stepped effect on the screen. If this happens to you, try enabling the option and things might go back to normal.

7.8.2.5.4 RDM Agent

DESCRIPTION

The **Remote Desktop Manager Agent** is a very powerful tool that allows commands to be run on multiple machines.

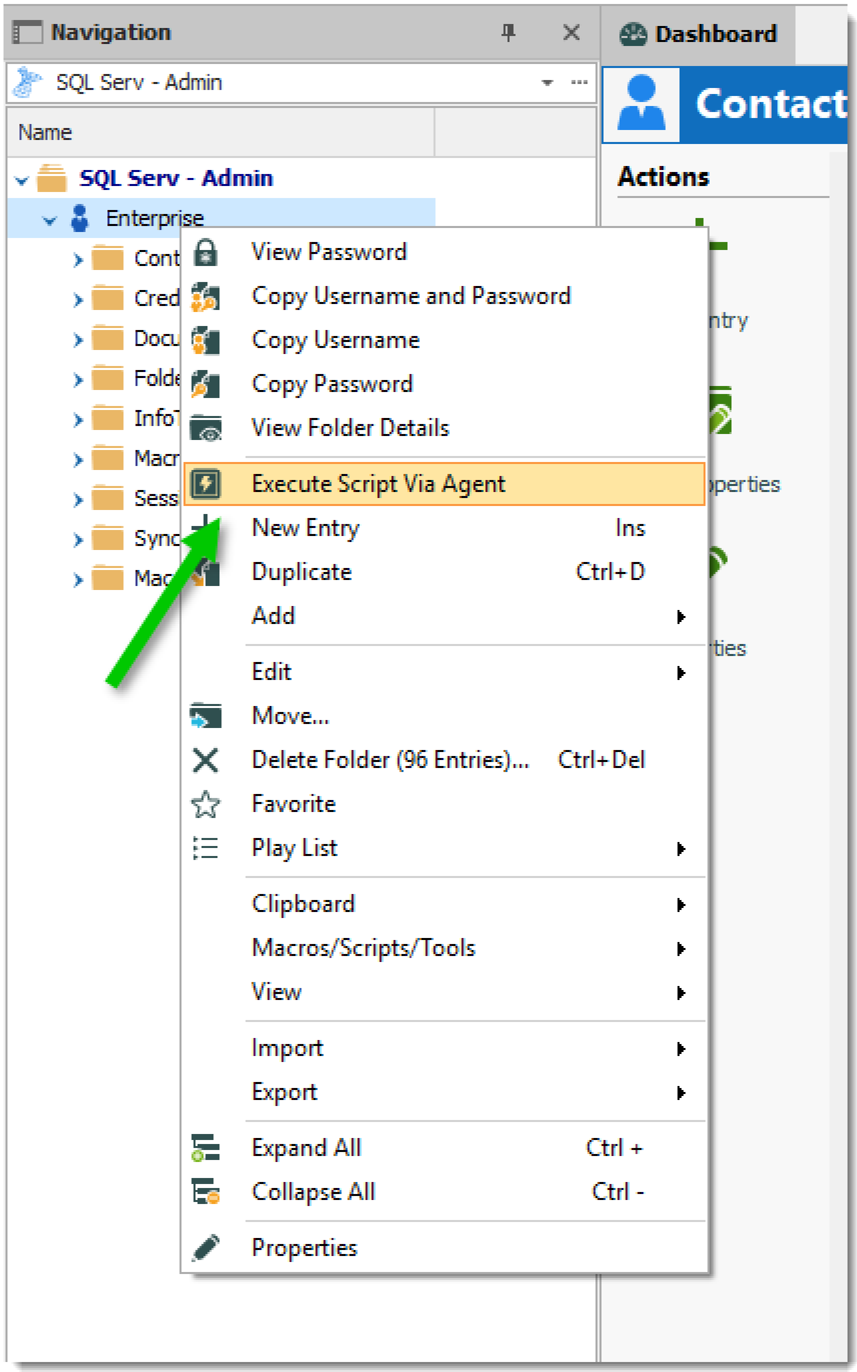


More Tools - RDM Agent

SETTINGS

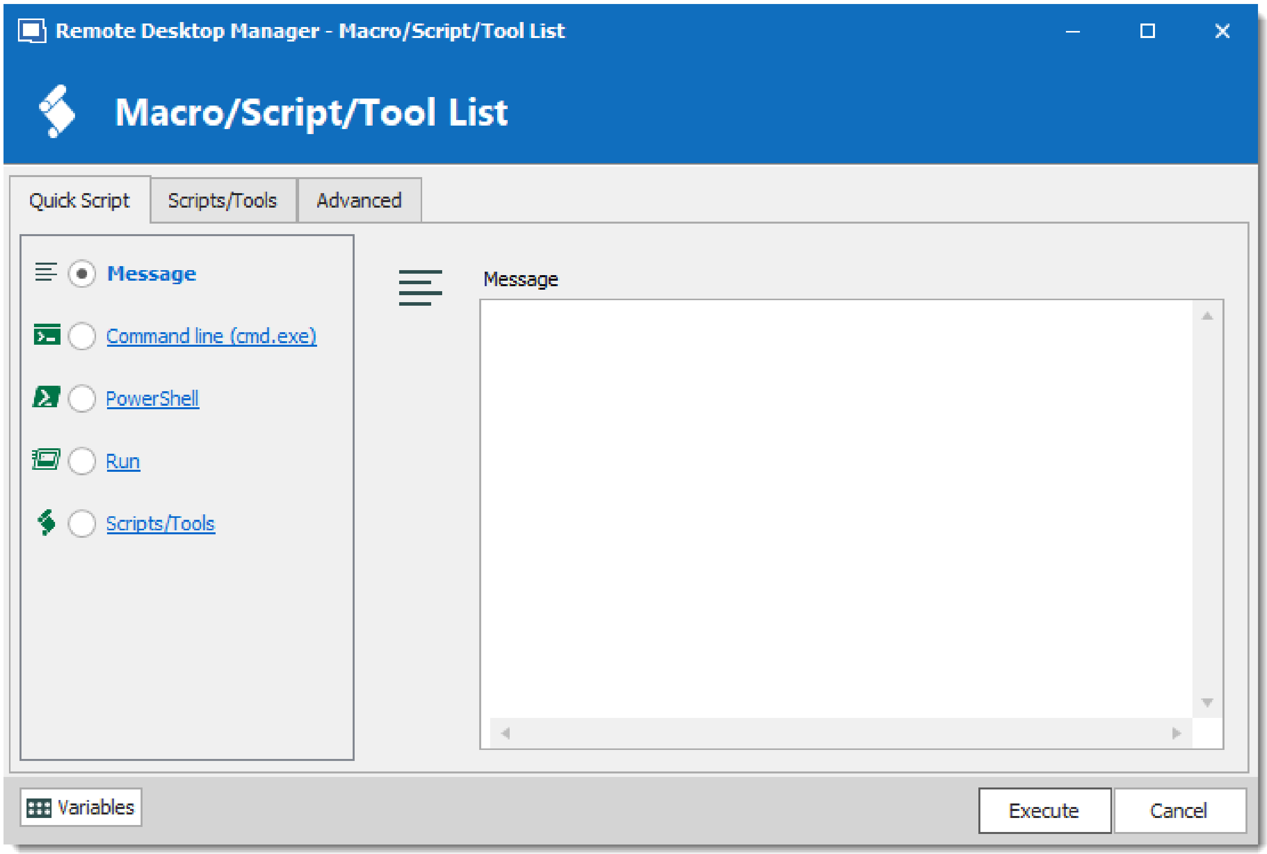
To launch a script through the **RDM Agent**, you first need to open an RDP connection to all the machines you wish to execute the script on. Once opened, select all the opened sessions in the Navigation Pane, right-click them and select Execute Script via Agent.

> Execute script via Agent only needs the RDM Agent when the script is executed from the Quick Script tab. RDM needs to be fully installed on the remote computer when the script is executed from the Scripts/Tools tab.



Execute Script Via Agent

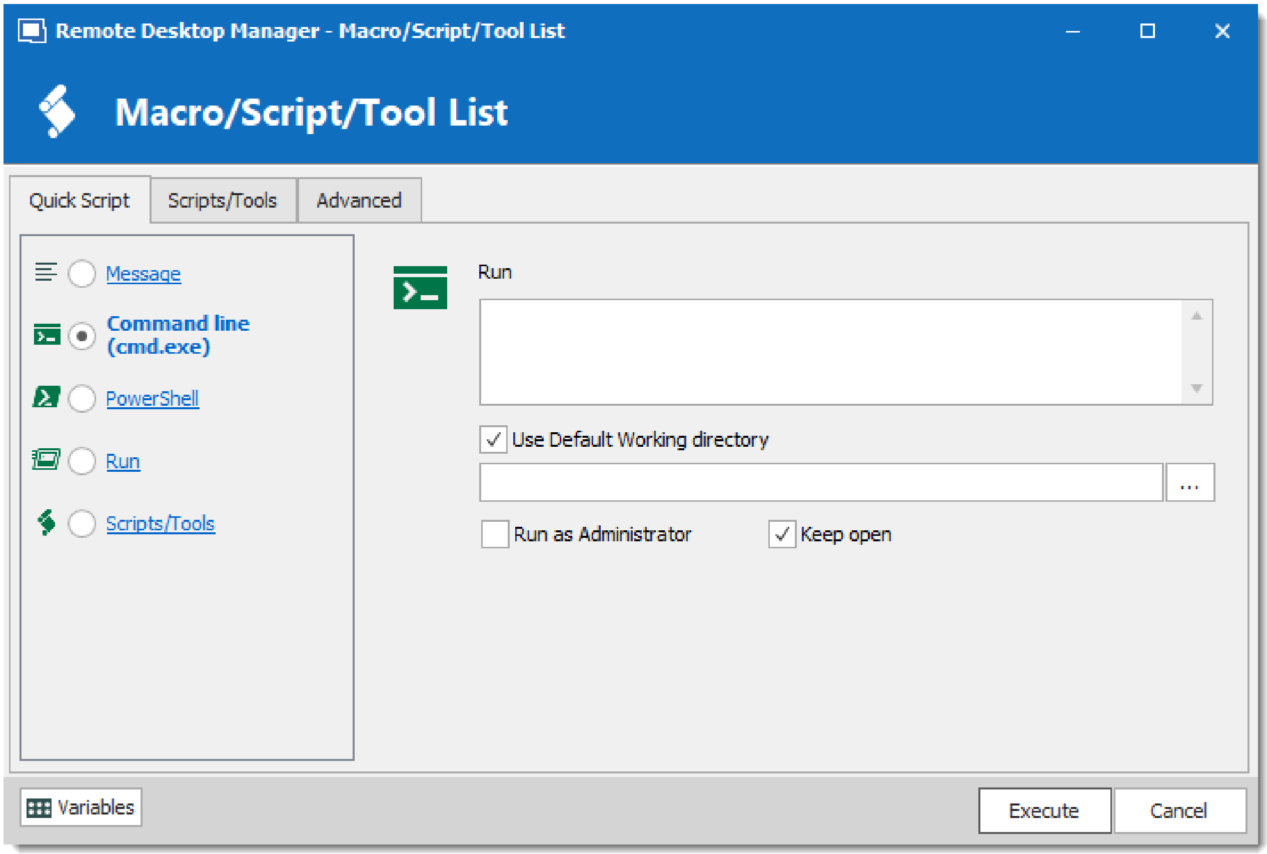
QUICK SCRIPT - MESSAGE



Quick Script - Message

OPTION	DESCRIPTION
Message	Send a message to all targets.

QUICK SCRIPT - COMMAND LINE (CMD.EXE)



○ Message
● Command line (cmd.exe)
○ PowerShell
○ Run
○ Scripts/Tools

Run

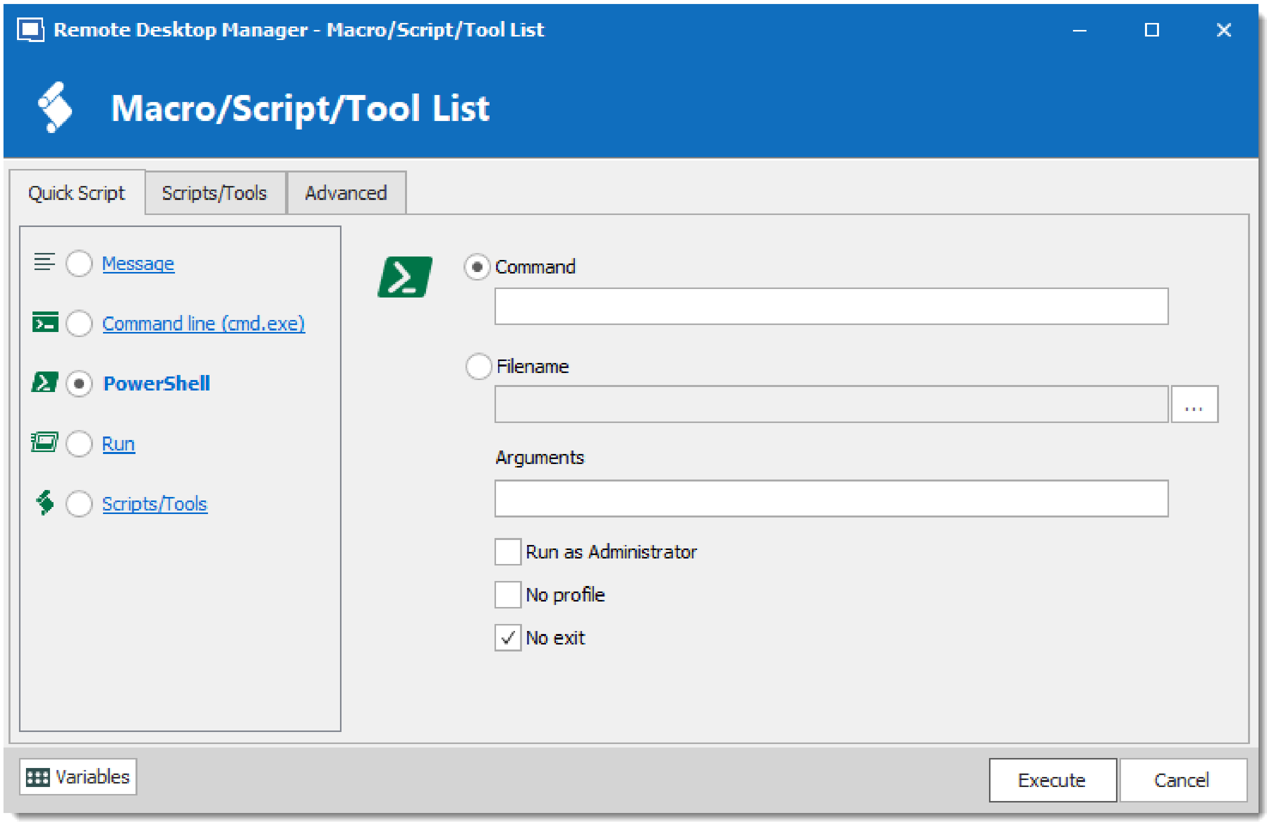
☑ Use Default Working directory

□ Run as Administrator ☑ Keep open

Quick Script - Command Line

OPTION	DESCRIPTION
Run	Indicate the command line that you want to execute.
Use Default Working directory	Use the default working directory when connect to the session.
Run as Administrator	Elevates the process to run as an administrator.
Keep open	Keep the window open after the execution of the command line.

QUICK SCRIPT - POWERSHELL



● PowerShell

● Command

○ Filename

Arguments

□ Run as Administrator

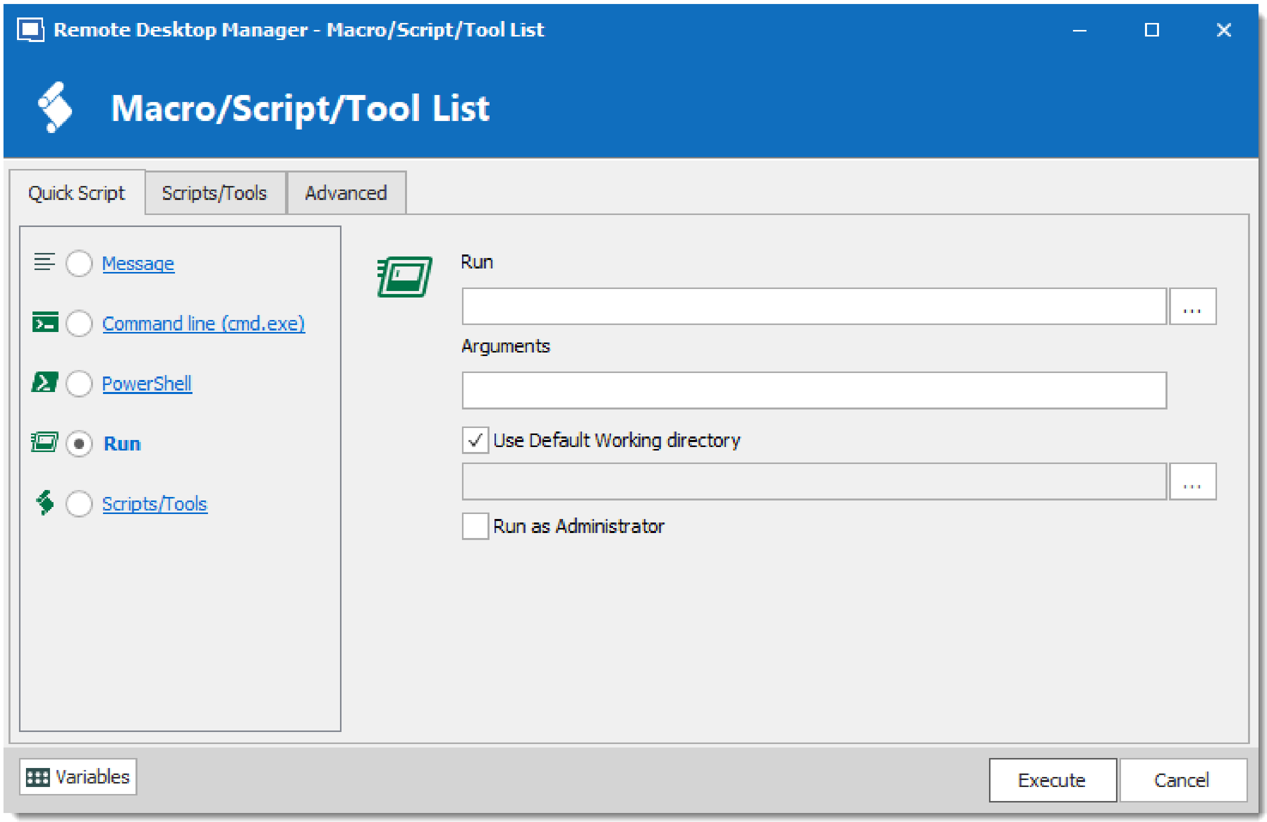
□ No profile

☑ No exit

Quick Script - PowerShell

OPTION	DESCRIPTION
Command	Indicate the PowerShell command that you want to execute.
Filename	Select a PowerShell file on the network or on the computer.
Arguments	Arguments that are appended to the Command.
Run as Administrator	Elevates the process to run as an administrator.
No Profile	Does not load the Windows PowerShell profile.
No exit	Does not exit after running startup commands.

QUICK SCRIPT - RUN



○ Message
○ Command line (cmd.exe)
○ PowerShell
● Run
○ Scripts/Tools

Run

Arguments

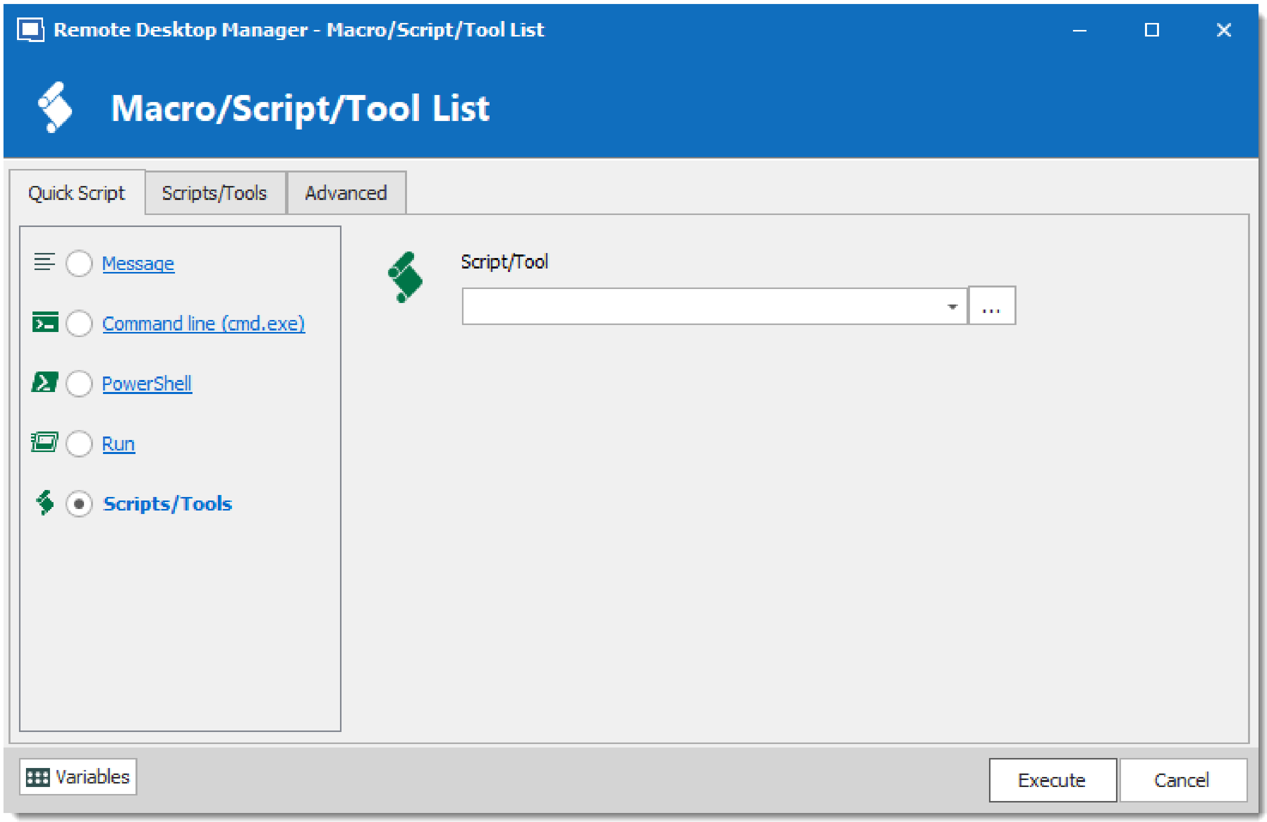
☑ Use Default Working directory

□ Run as Administrator

Quick Script - Run

OPTION	DESCRIPTION
Run	Select the program or file that you want to execute.
Arguments	Arguments that are appended to the Command.
Use Default Working directory	Use the default working directory when connect to the session.
Run as Administrator	Elevates the process to run as an administrator.

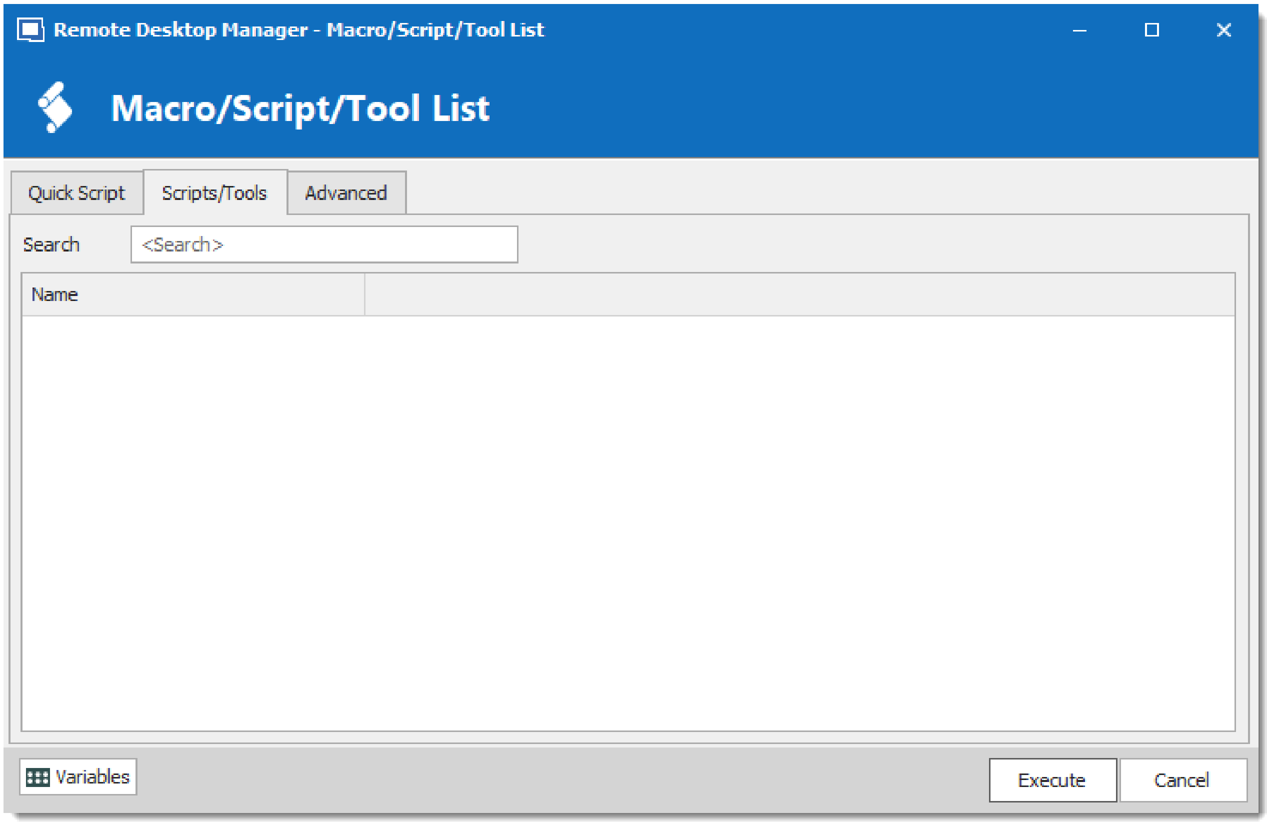
QUICK SCRIPT - SCRIPTS/TOOLS



Quick Script - Scripts/Tools

OPTION	DESCRIPTION
Scripts/Tools	Select a script or a tool session that you have already created in Remote Desktop Manager.

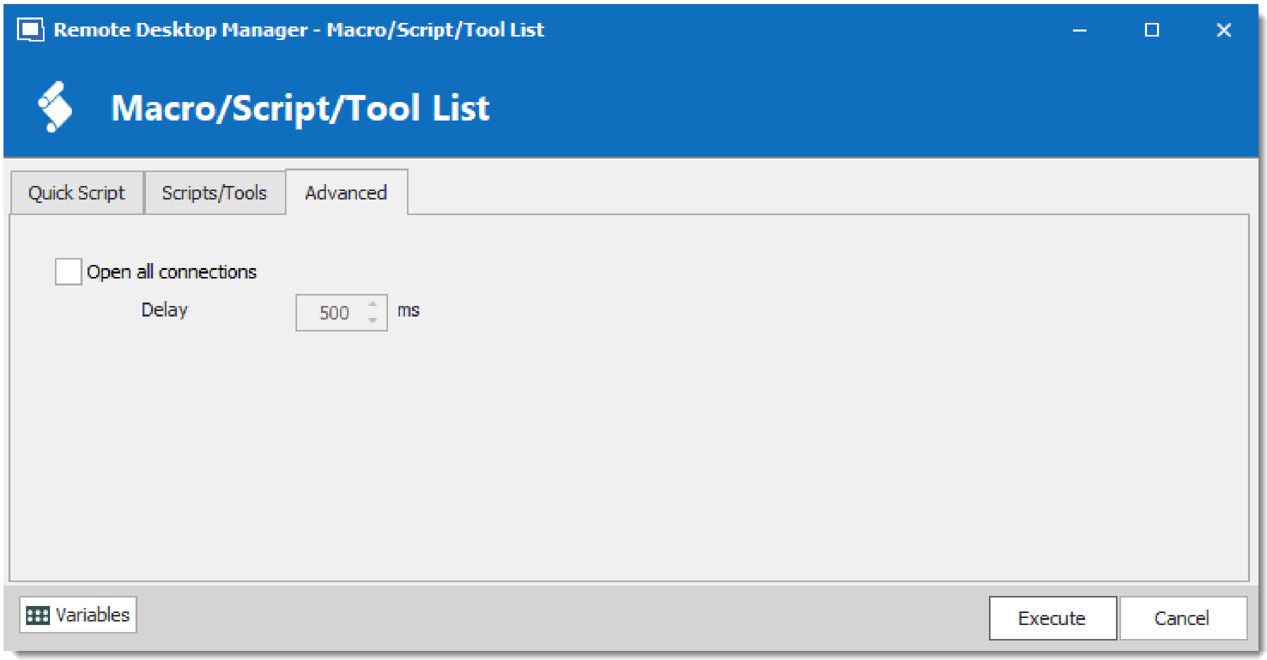
SCRIPT/TOOLS



Scripts/Tools

Search for a script or a tool you wish to execute through the RDM Agent.

SETTINGS



□ Open all connections

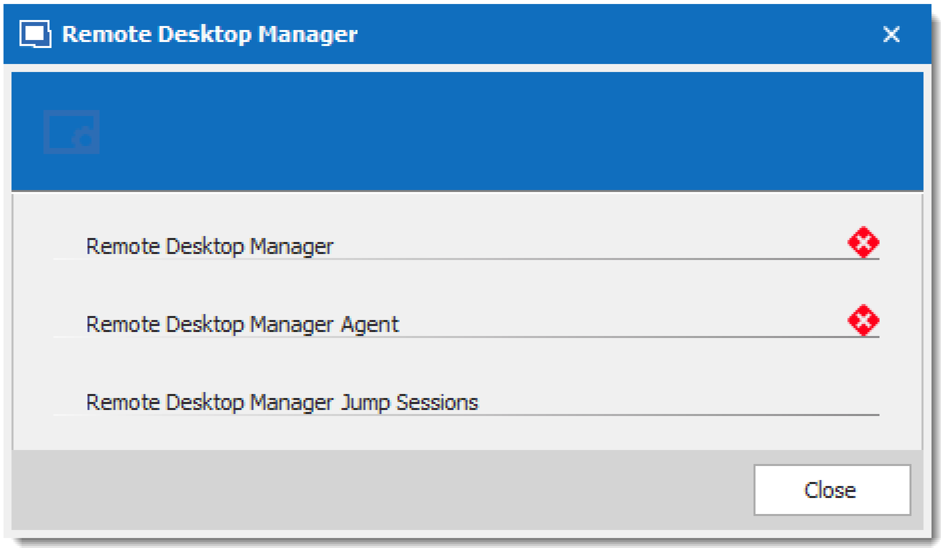
Delay 500 ms

Advanced

OPTION	DESCRIPTION
Open all connections	When multiple sessions are selected to **Execute Script Via Agent**, it will open all the selected connections.
Delay	Enter the time delay between opening each selected session.

AGENT STATUS

Open a RDP session, right-click on this single session and select Agent Status. The Agent Status will show you that Remote Desktop Manager is installed on the remote computer or not, that the Remote Desktop Manager Agent is active or not and how many Remote Desktop Manager Jump sessions are opened.

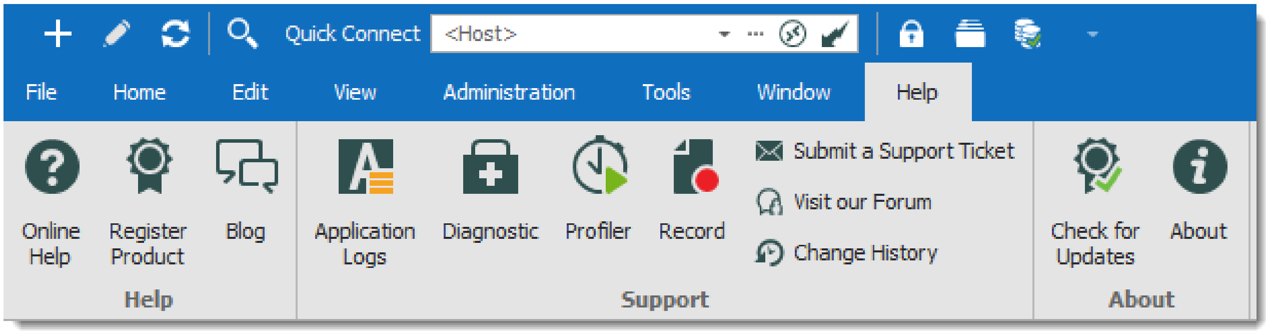

Remote Desktop Manager
Remote Desktop Manager
Remote Desktop Manager Agent
Remote Desktop Manager Jump Sessions
Close

Agent Status

7.9 Help

DESCRIPTION

The **Help** tab contain links to the Devolutions forum and Online Help, and many support related features, such as the **Application Logs**, the **Profiler**, and the **Recorder**.



Ribbon - Help

HELP

OPTION	DESCRIPTION
Online Help	Launches the Online Help you are currently browsing!

OPTION	DESCRIPTION
Register Product	Register the Remote Desktop Manager with a Trial or Enterprise license serial. For more information, please consult the Register Enterprise Edition topic.
Blog	Visit our Blog. Learn about the Devolutions Team, as well as our Goals, Products and more.

SUPPORT

OPTION	DESCRIPTION
Applications Logs	Opens the Application Logs. This is useful for understanding encountered errors.
Diagnostic	Launches the Diagnostic feature.
Profiler	Use the Profiler to acquire specific information. Used to diagnose connectivity issues with a data source.
Record	Use the Recorder. Used to help our Devolutions Support team troubleshoot the problem
Submit a Support Ticket	Submit a Support Ticket. Help us make your experience better by reporting experience issues or by asking for new features.
Visit our Forum	Visit our Forum. You can create an account and experience the bleeding edge of our customer support.
Change History	Send you directly to our Remote Desktop Manager web page to view the new features and enhancements when a new version is release.

ABOUT

OPTION	DESCRIPTION
Check for Updates	Launch the Update Manager.
About	Learn about Remote Desktop Manager.

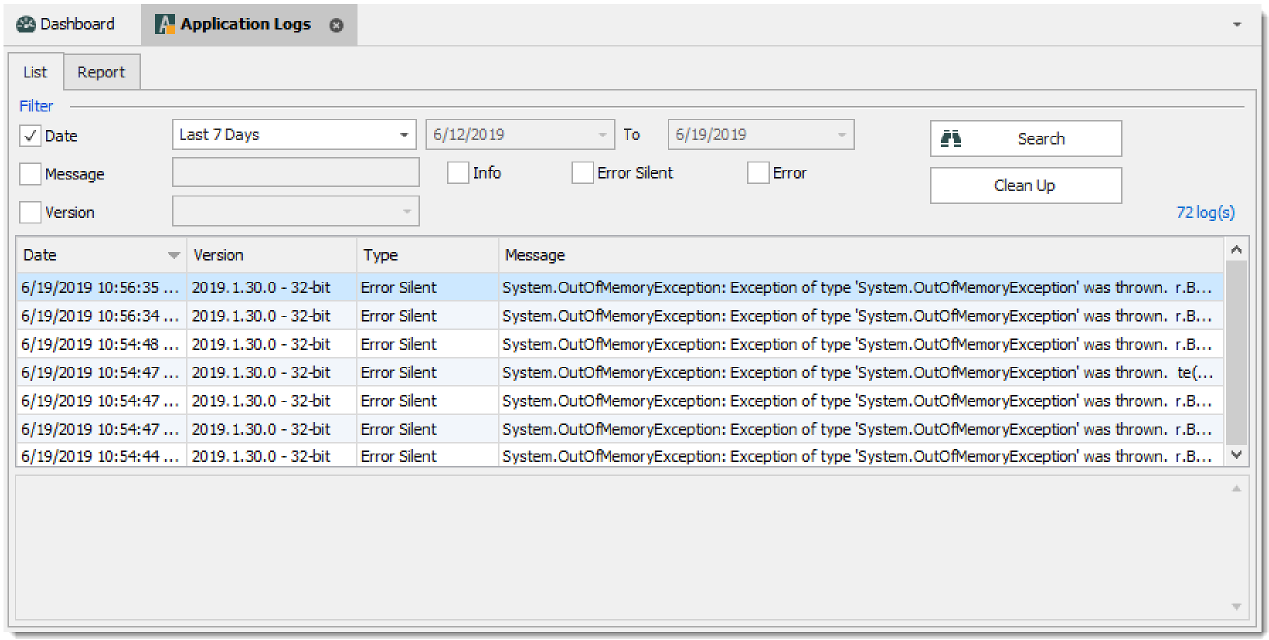
7.9.1 Support

7.9.1.1 Application Log

DESCRIPTION

When encountering errors, you can verify the local application log, which is available in ***Help – Application Logs***.

These logs are saved in ***%LocalAppData%\Devolutions\RemoteDesktopManager\RemoteDesktopManager.log.db***. Logs are displayed as a list which can be filtered by date, message, version,or type of log.



☑ Date: Last 7 Days, 6/12/2019 To 6/19/2019

□ Message

□ Info □ Error Silent □ Error

□ Version

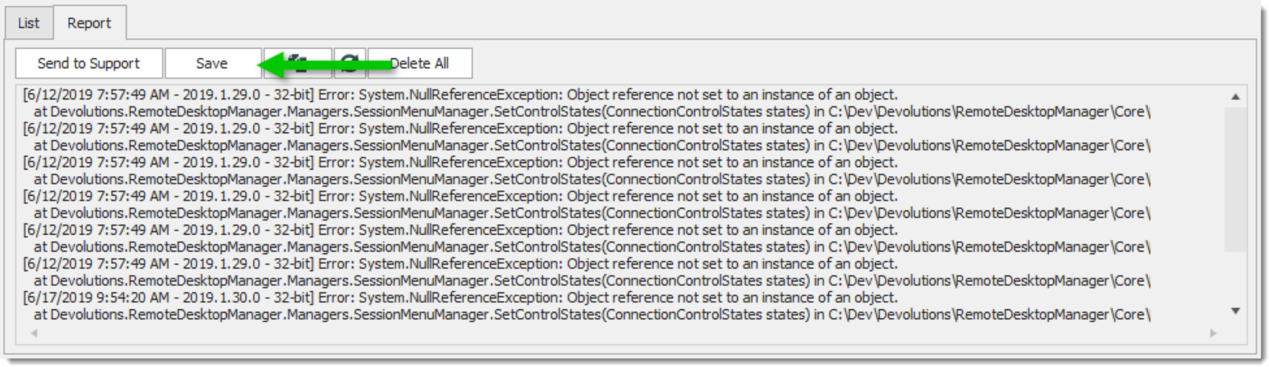
72 log(s)

Date	Version	Type	Message
6/19/2019 10:56:35 ...	2019.1.30.0 - 32-bit	Error Silent	System.OutOfMemoryException: Exception of type 'System.OutOfMemoryException' was thrown. r.B...
6/19/2019 10:56:34 ...	2019.1.30.0 - 32-bit	Error Silent	System.OutOfMemoryException: Exception of type 'System.OutOfMemoryException' was thrown. r.B...
6/19/2019 10:54:48 ...	2019.1.30.0 - 32-bit	Error Silent	System.OutOfMemoryException: Exception of type 'System.OutOfMemoryException' was thrown. r.B...
6/19/2019 10:54:47 ...	2019.1.30.0 - 32-bit	Error Silent	System.OutOfMemoryException: Exception of type 'System.OutOfMemoryException' was thrown. te(...
6/19/2019 10:54:47 ...	2019.1.30.0 - 32-bit	Error Silent	System.OutOfMemoryException: Exception of type 'System.OutOfMemoryException' was thrown. r.B...
6/19/2019 10:54:47 ...	2019.1.30.0 - 32-bit	Error Silent	System.OutOfMemoryException: Exception of type 'System.OutOfMemoryException' was thrown. r.B...
6/19/2019 10:54:44 ...	2019.1.30.0 - 32-bit	Error Silent	System.OutOfMemoryException: Exception of type 'System.OutOfMemoryException' was thrown. r.B...

View Application Log dialog

REPORT

A report of the logs can be saved in a text file as well. Simply navigate to the **Report** tab of the application log, then click on the **Save** button to select a location to save the file.

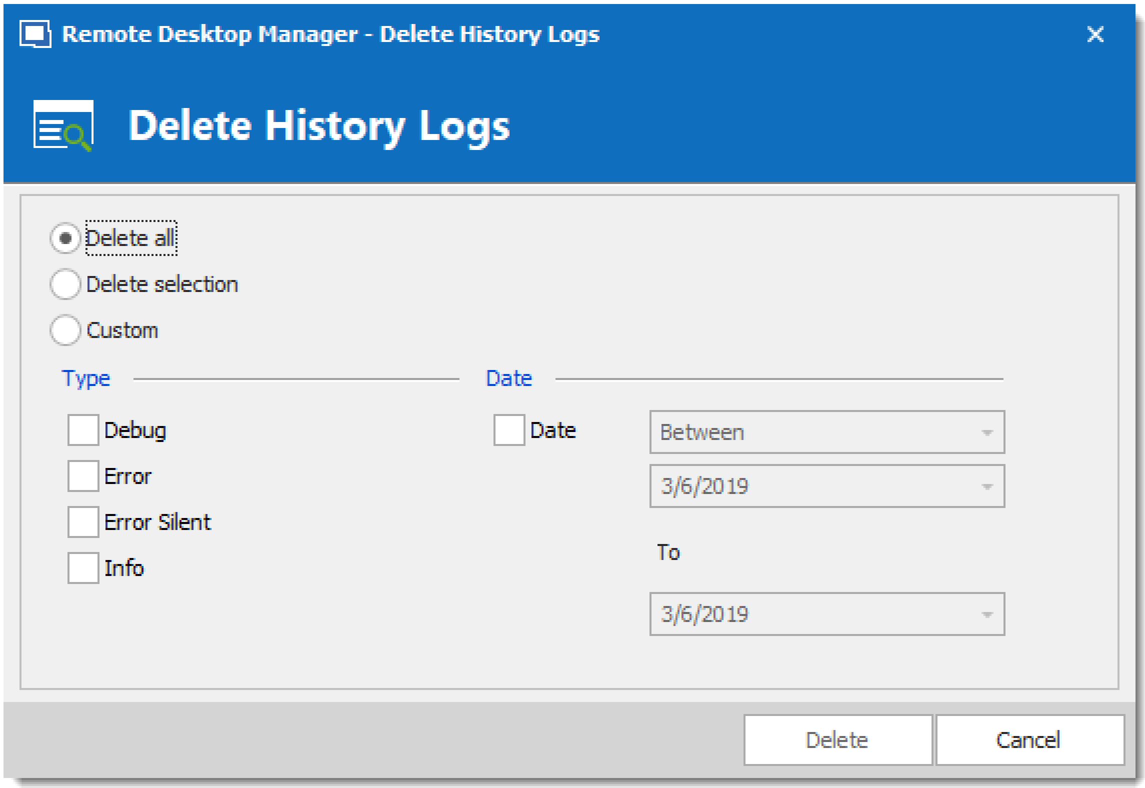


```
[6/12/2019 7:57:49 AM - 2019.1.29.0 - 32-bit] Error: System.NullReferenceException: Object reference not set to an instance of an object.
  at Devolutions.RemoteDesktopManager.Managers.SessionMenuManager.SetControlStates(ConnectionControlStates states) in C:\Dev\Devolutions\RemoteDesktopManager\Core\
[6/12/2019 7:57:49 AM - 2019.1.29.0 - 32-bit] Error: System.NullReferenceException: Object reference not set to an instance of an object.
  at Devolutions.RemoteDesktopManager.Managers.SessionMenuManager.SetControlStates(ConnectionControlStates states) in C:\Dev\Devolutions\RemoteDesktopManager\Core\
[6/12/2019 7:57:49 AM - 2019.1.29.0 - 32-bit] Error: System.NullReferenceException: Object reference not set to an instance of an object.
  at Devolutions.RemoteDesktopManager.Managers.SessionMenuManager.SetControlStates(ConnectionControlStates states) in C:\Dev\Devolutions\RemoteDesktopManager\Core\
[6/12/2019 7:57:49 AM - 2019.1.29.0 - 32-bit] Error: System.NullReferenceException: Object reference not set to an instance of an object.
  at Devolutions.RemoteDesktopManager.Managers.SessionMenuManager.SetControlStates(ConnectionControlStates states) in C:\Dev\Devolutions\RemoteDesktopManager\Core\
[6/12/2019 7:57:49 AM - 2019.1.29.0 - 32-bit] Error: System.NullReferenceException: Object reference not set to an instance of an object.
  at Devolutions.RemoteDesktopManager.Managers.SessionMenuManager.SetControlStates(ConnectionControlStates states) in C:\Dev\Devolutions\RemoteDesktopManager\Core\
[6/12/2019 7:57:49 AM - 2019.1.29.0 - 32-bit] Error: System.NullReferenceException: Object reference not set to an instance of an object.
  at Devolutions.RemoteDesktopManager.Managers.SessionMenuManager.SetControlStates(ConnectionControlStates states) in C:\Dev\Devolutions\RemoteDesktopManager\Core\
[6/17/2019 9:54:20 AM - 2019.1.30.0 - 32-bit] Error: System.NullReferenceException: Object reference not set to an instance of an object.
  at Devolutions.RemoteDesktopManager.Managers.SessionMenuManager.SetControlStates(ConnectionControlStates states) in C:\Dev\Devolutions\RemoteDesktopManager\Core\
```

CLEAN UP

For security reason, it is a best practice is to clean up the application log once every month. To do so, in the application log, use the **Clean Up** feature.

We strongly recommend to do a **Delete all**, but this can be customized to delete specific logs by type, date or selection.



● Delete all
○ Delete selection
○ Custom

Type

□ Debug
□ Error
□ Error Silent
□ Info

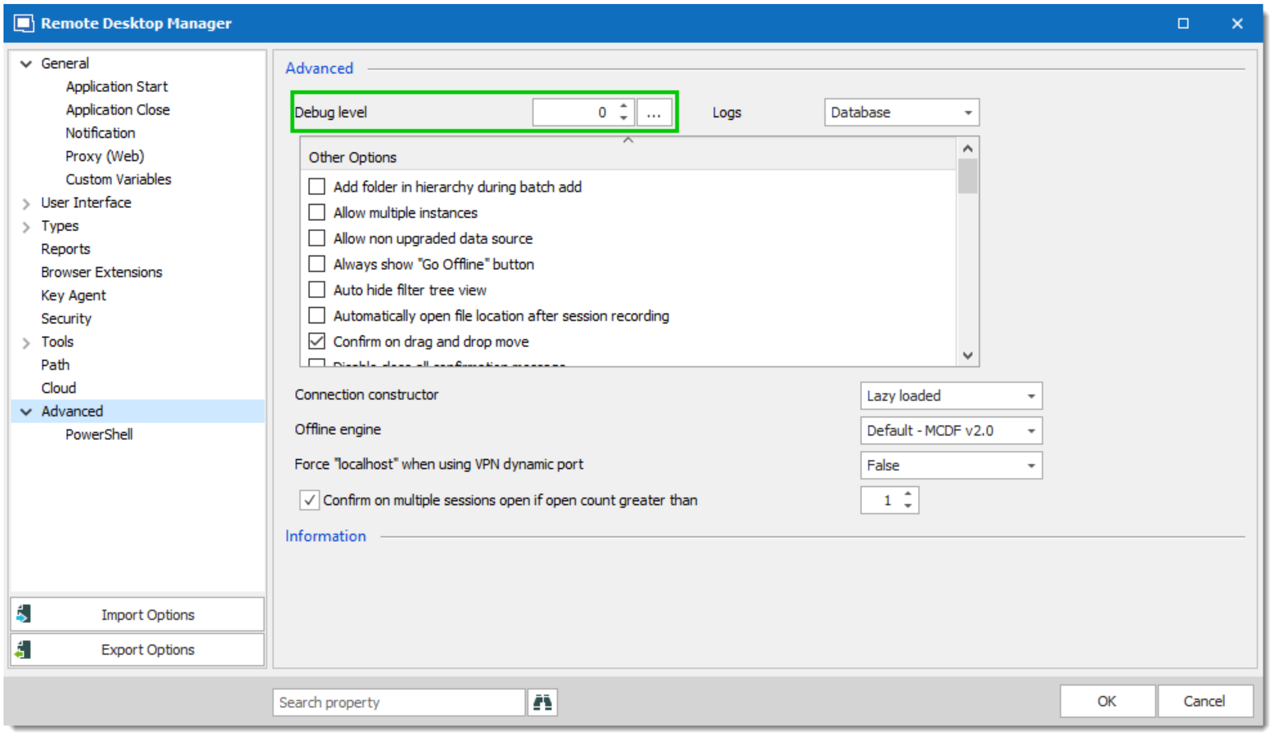
Date

□ Date Between
3/6/2019
To
3/6/2019

INCREASING THE DEBUG LEVEL

When experiencing issues with Remote Desktop Manager our support team might ask you to increase the debug level of the application during the support process. We strongly suggest to only increase the debug level when requested by our support team.

Increase the debug level in File - Options - Advanced.



Debug level 0

Logs Database

Other Options

- ☐ Add folder in hierarchy during batch add
- ☐ Allow multiple instances
- ☐ Allow non upgraded data source
- ☐ Always show "Go Offline" button
- ☐ Auto hide filter tree view
- ☐ Automatically open file location after session recording
- ☑ Confirm on drag and drop move

Connection constructor: Lazy loaded

Offline engine: Default - MCDF v2.0

Force "localhost" when using VPN dynamic port: False

☑ Confirm on multiple sessions open if open count greater than 1

File – Options – Advanced – Debug level

7.9.1.2 Diagnostic

DESCRIPTION

If you encounter a problem with Remote Desktop Manager, you can run a system diagnostic, which is available in ***Help – Diagnostic.*** This could help diagnose or give a pointer to what kind of issues you might be experiencing.

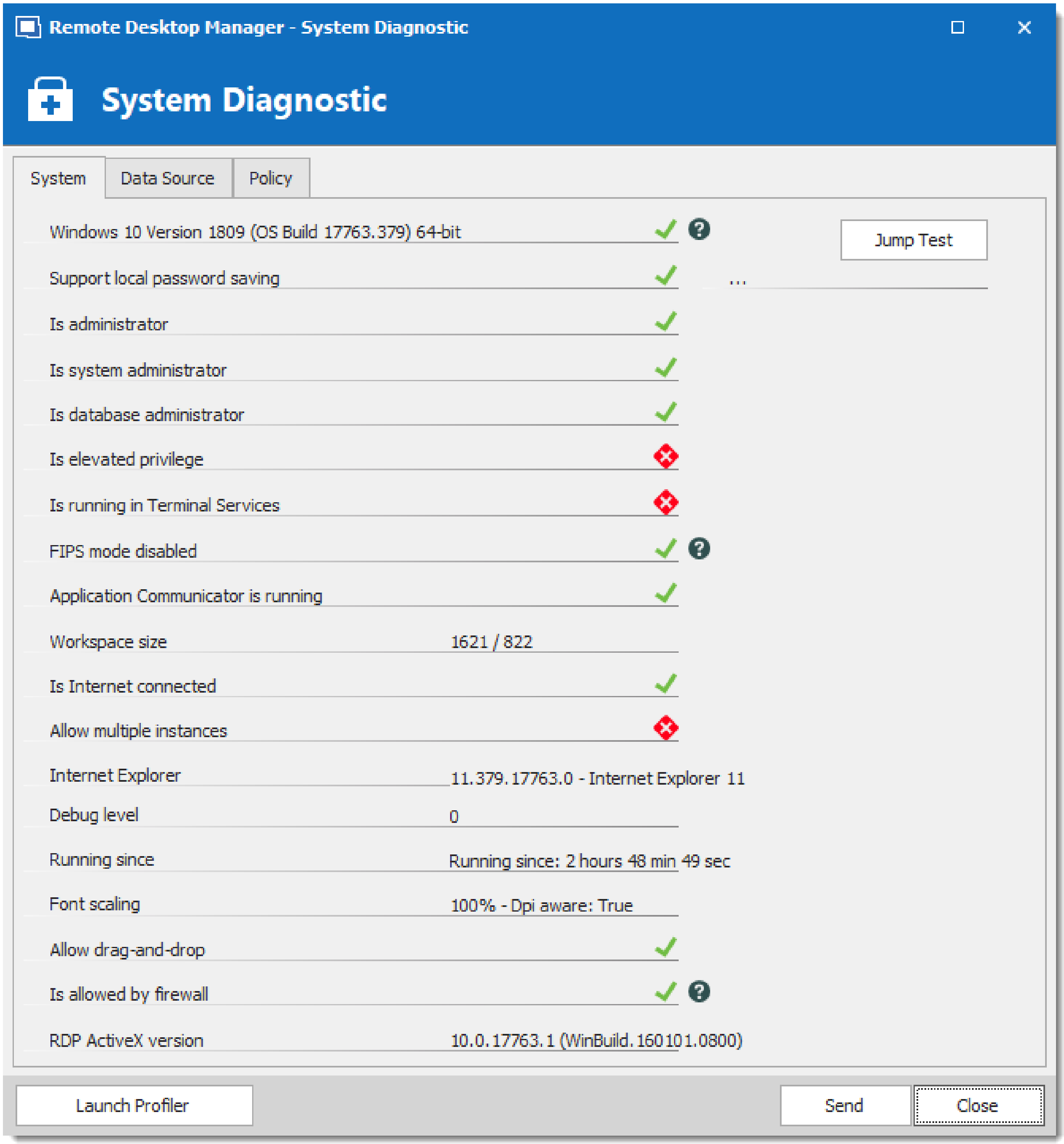
SYSTEM

The administrator item could be the possible source for security problem. This happen often when a user has the SYSDBA or is DB_OWNER of the SQL Server database.

Some other issues could be related to the fact that the application is running in Remote Desktop Services. However Remote Desktop Manager is fully compatible with Remote Desktop Services.

FIPS related issues and solutions can be found in the specific FIPS (Encryption) troubleshooting section.

If you have a Remote Desktop Manager Jump configured you can run a test of your Jump host by clicking on Jump Test.



Windows 10 Version 1809 (OS Build 17763.379) 64-bit	✓	?
Support local password saving	✓	
Is administrator	✓	
Is system administrator	✓	
Is database administrator	✓	
Is elevated privilege	✗	
Is running in Terminal Services	✗	
FIPS mode disabled	✓	?
Application Communicator is running	✓	
Workspace size	1621 / 822	
Is Internet connected	✓	
Allow multiple instances	✗	
Internet Explorer	11.379.17763.0 - Internet Explorer 11	
Debug level	0	
Running since	Running since: 2 hours 48 min 49 sec	
Font scaling	100% - Dpi aware: True	
Allow drag-and-drop	✓	
Is allowed by firewall	✓	?
RDP ActiveX version	10.0.17763.1 (WinBuild.160101.0800)	

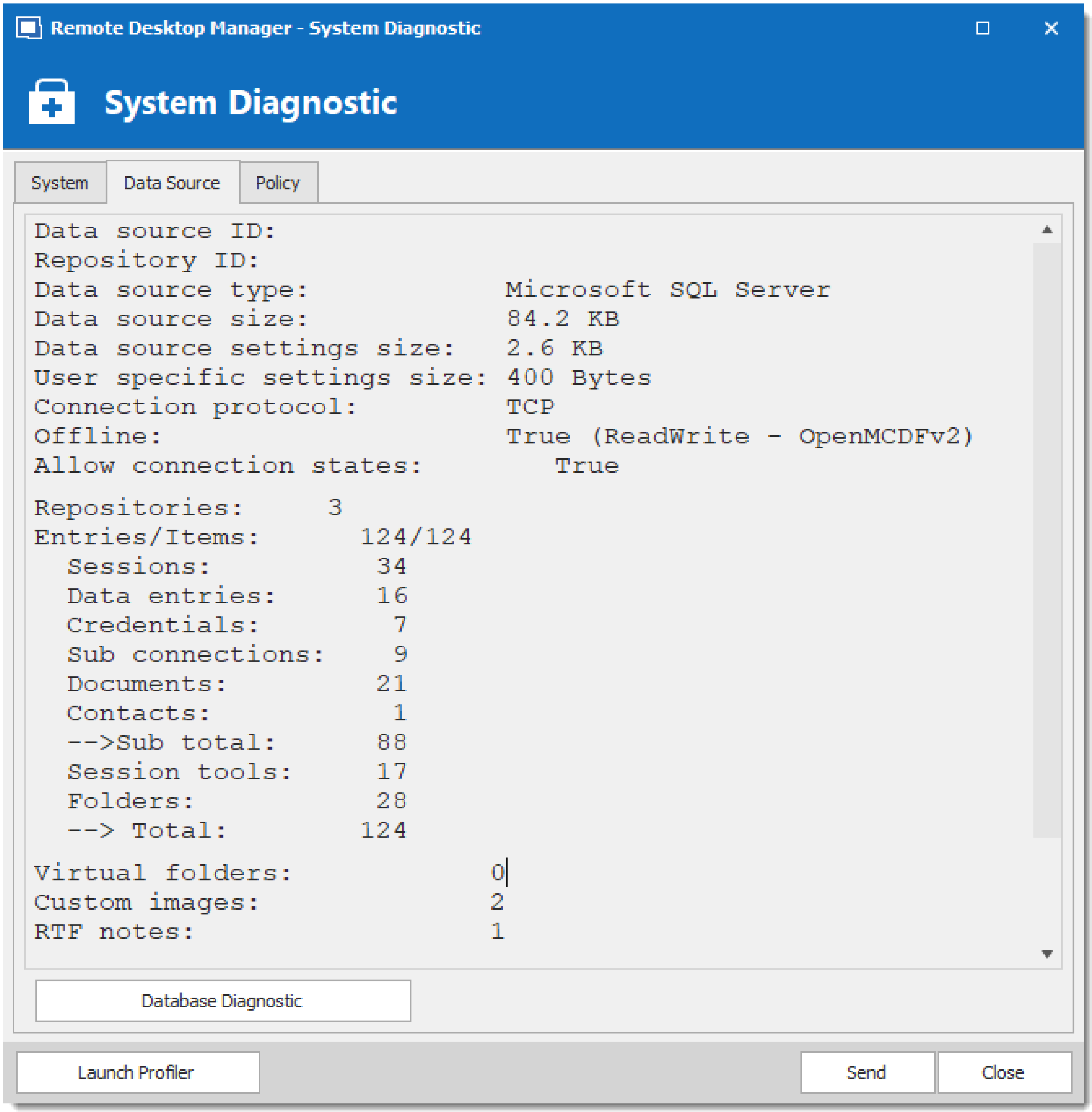
System Diagnostic – System

Please read the Troubleshooting topic if experiencing issues with Remote Desktop Manager, it lists error messages and could contain the fix/workaround for your problem.

DATA SOURCE

The **Data Source** tab contains information regarding the current data source, such as the number of entries it contains, the size of your data source, the number of custom images and the offline state.

> Too many custom images could dramatically increase the size of the data source and cause load time issue.

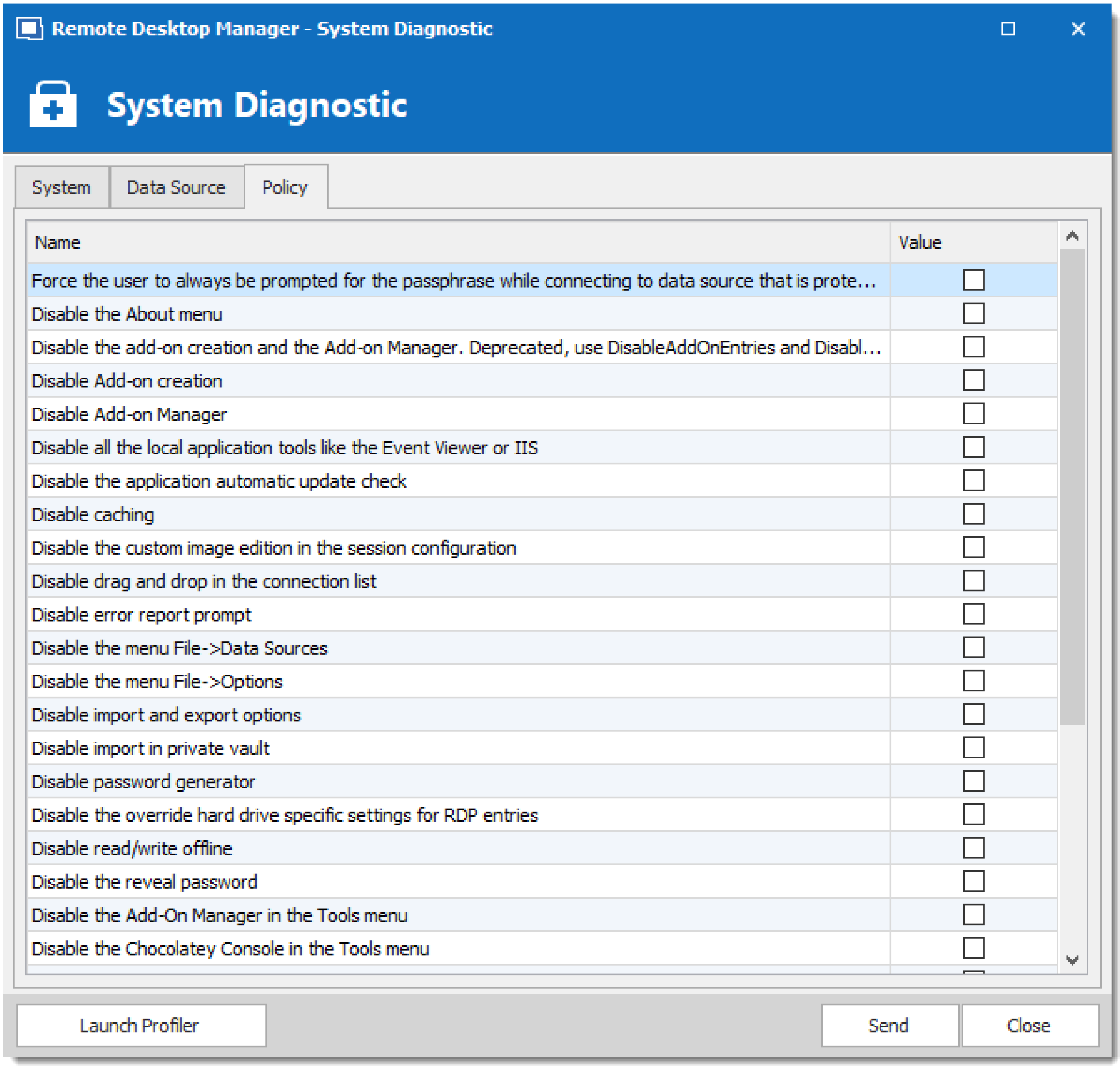


```
Data source ID:
Repository ID:
Data source type:              Microsoft SQL Server
Data source size:              84.2 KB
Data source settings size:     2.6 KB
User specific settings size:   400 Bytes
Connection protocol:           TCP
Offline:                       True (ReadWrite - OpenMCDFv2)
Allow connection states:          True

Repositories:      3
Entries/Items:       124/124
  Sessions:           34
  Data entries:       16
  Credentials:         7
  Sub connections:     9
  Documents:          21
  Contacts:            1
  -->Sub total:       88
  Session tools:      17
  Folders:            28
  --> Total:         124

Virtual folders:             0
Custom images:               2
RTF notes:                   1
```

System Diagnostic - Data Source

POLICY

The Policy tab display the list of Group Policy Templates to see if any of them has been applied.



Name	Value
Force the user to always be prompted for the passphrase while connecting to data source that is prote…	□
Disable the About menu	□
Disable the add-on creation and the Add-on Manager. Deprecated, use DisableAddOnEntries and Disabl…	□
Disable Add-on creation	□
Disable Add-on Manager	□
Disable all the local application tools like the Event Viewer or IIS	□
Disable the application automatic update check	□
Disable caching	□
Disable the custom image edition in the session configuration	□
Disable drag and drop in the connection list	□
Disable error report prompt	□
Disable the menu File->Data Sources	□
Disable the menu File->Options	□
Disable import and export options	□
Disable import in private vault	□
Disable password generator	□
Disable the override hard drive specific settings for RDP entries	□
Disable read/write offline	□
Disable the reveal password	□
Disable the Add-On Manager in the Tools menu	□
Disable the Chocolatey Console in the Tools menu	□

System Diagnostic - Policy

7.9.1.3 Profiler

DESCRIPTION

Remote Desktop Manager has a built-in profiler to diagnose connectivity issues with a data source.

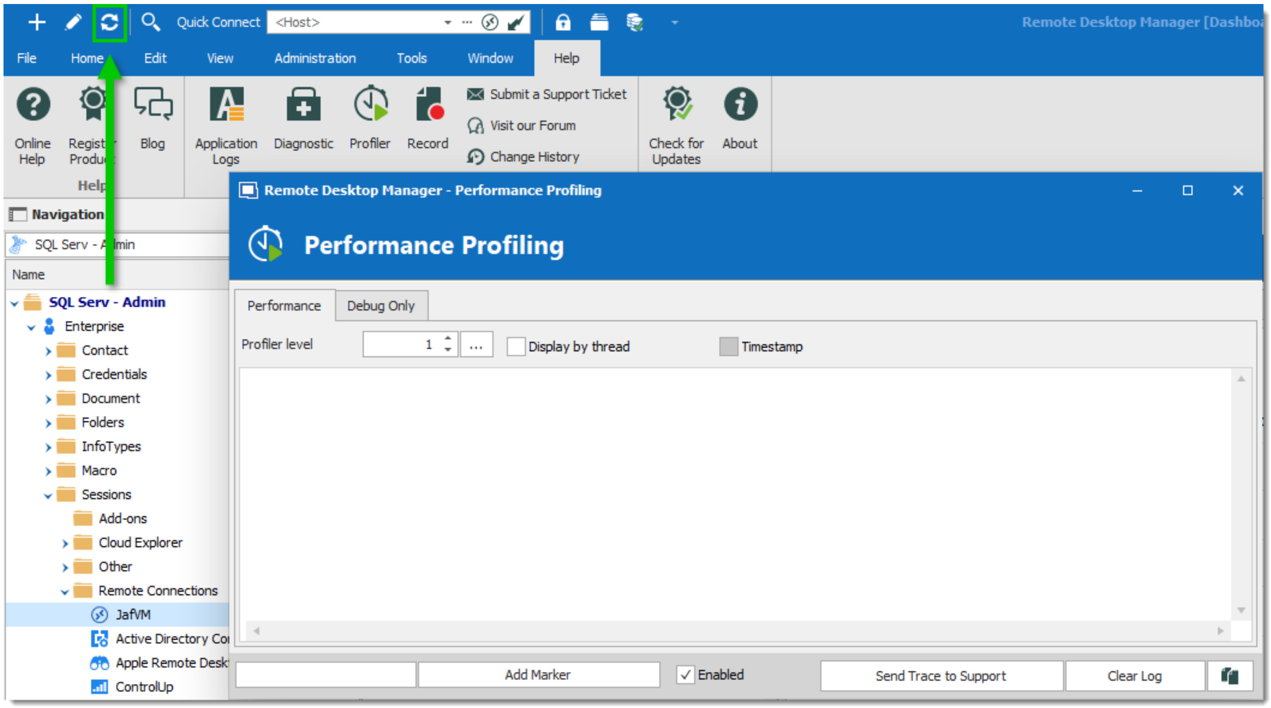
Displaying the Profiler window might slow down the operations on the data source. Proceed with care.

To diagnose startup issues, you can enable the profiler from the command line as described in Command Line Arguments

PROCEDURE

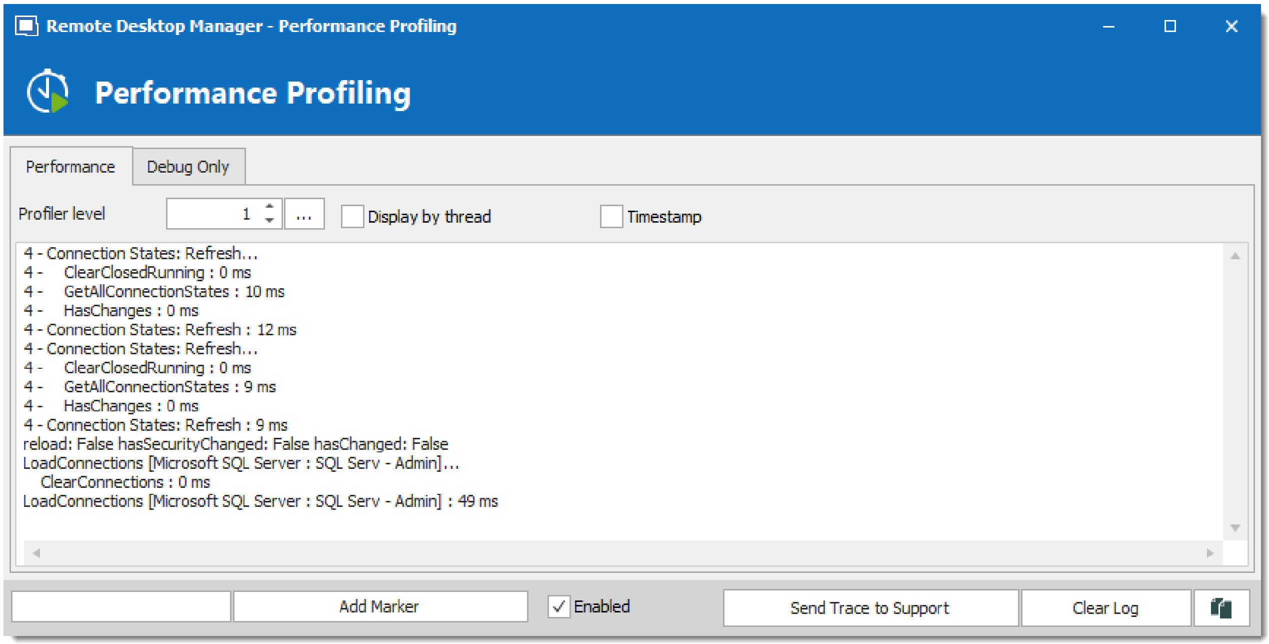
1. Once the Profiler is opened, refresh the data source.

Holding the **Ctrl** key while performing the refresh should force a full reload of the data source, recreating the offline cache.



Refresh Data Source

2. The Profiler data will appear in the **Performance Profiling** window.



Profiler level 1

□ Display by thread

□ Timestamp

```
4 - Connection States: Refresh...
4 -     ClearClosedRunning : 0 ms
4 -     GetAllConnectionStates : 10 ms
4 -     HasChanges : 0 ms
4 - Connection States: Refresh : 12 ms
4 - Connection States: Refresh...
4 -     ClearClosedRunning : 0 ms
4 -     GetAllConnectionStates : 9 ms
4 -     HasChanges : 0 ms
4 - Connection States: Refresh : 9 ms
reload: False hasSecurityChanged: False hasChanged: False
LoadConnections [Microsoft SQL Server : SQL Serv - Admin]...
   ClearConnections : 0 ms
LoadConnections [Microsoft SQL Server : SQL Serv - Admin] : 49 ms
```

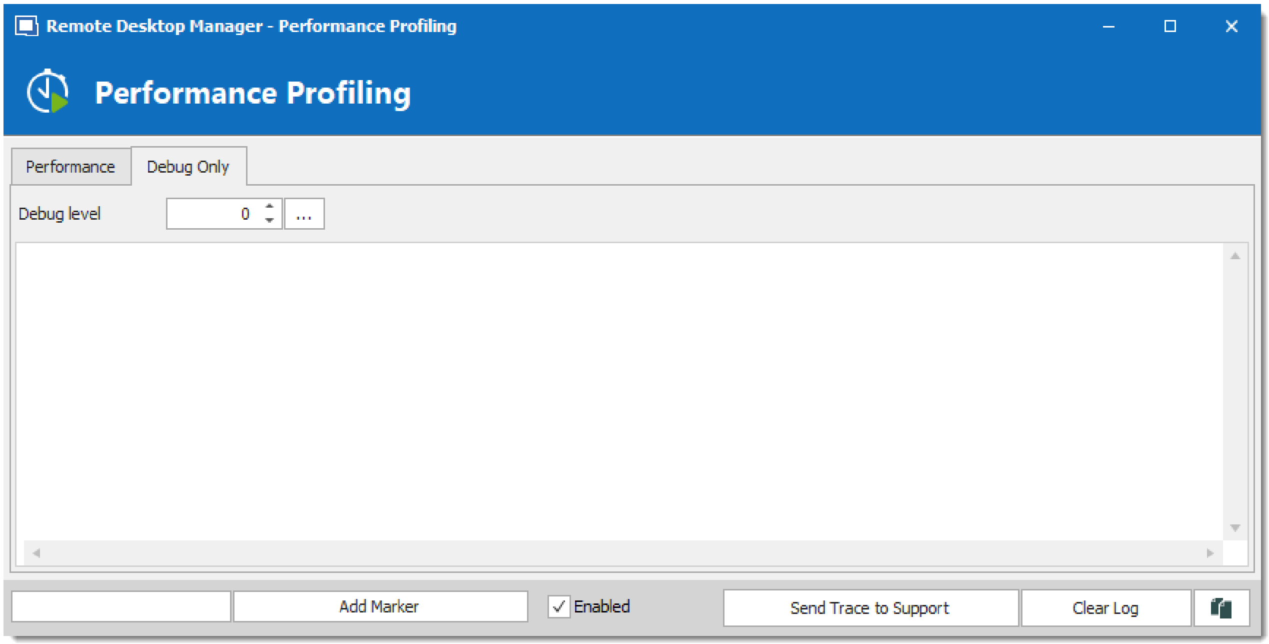
☑ Enabled

Performance Profiling

3. Click on **Send Trace to Support** in order to send the Profiler data logs to our Devolutions support team. You can add a Marker when running multiple tests to separate them.

DEBUG ONLY

To learn more about the **Debug only** tab please see the Debugging topic.



Debug level 0

☑ Enabled

Debug only

7.9.1.4 Record

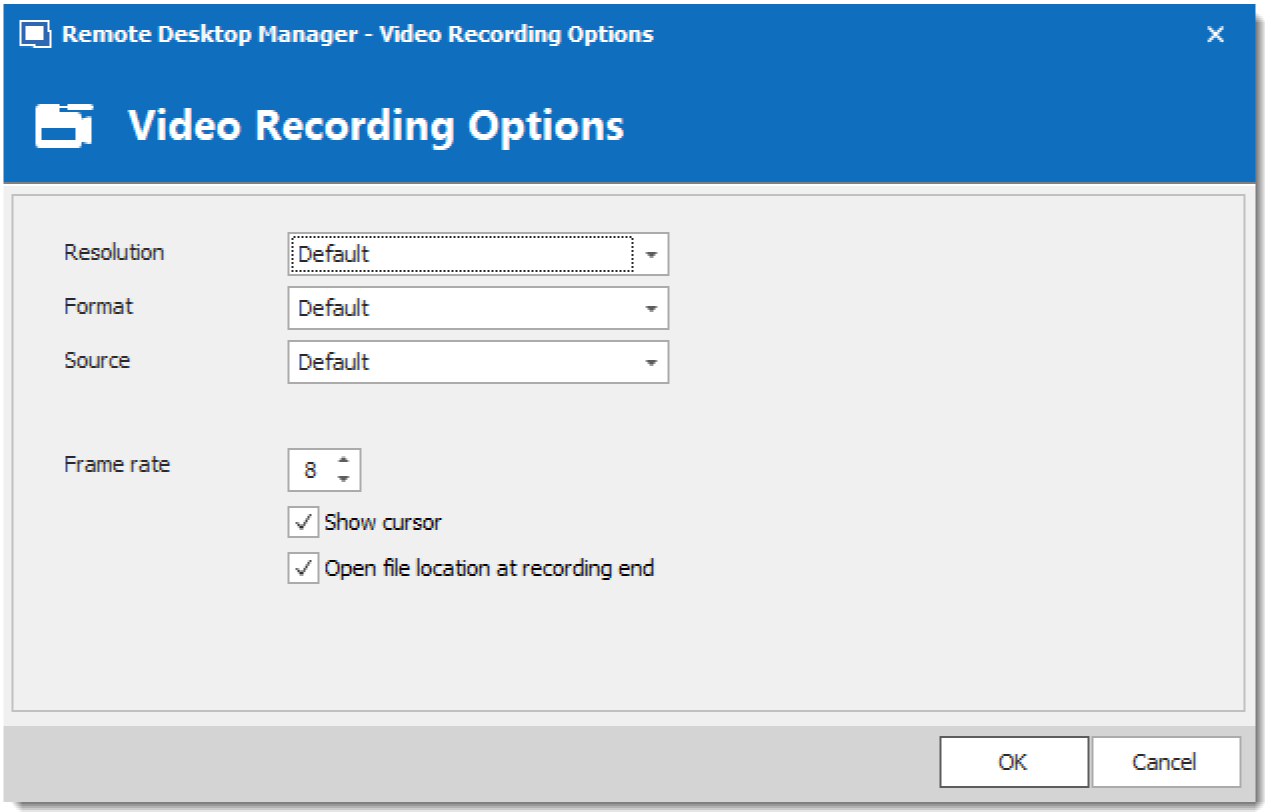
DESCRIPTION

If you are experiencing issues with Remote Desktop Manager, you can help our Devolutions Support team troubleshoot the problem by sending them a short video of your issue. Launch this by using the **Record** feature located in the menu ***Help – Record.***

The **Record** is an easy-to-use built-in screen recorder that could even be a useful for your in-house training as it is not limited to Remote Desktop Manager.

SETTINGS

The Video Recording Options uses the MP4 format, which on Vanilla installs of Windows is not supported. If you encounter any difficulty viewing the video we strongly suggest the use of a VLC player.


Remote Desktop Manager - Video Recording Options

Video Recording Options

Resolution: Default
Format: Default
Source: Default

Frame rate: 8

☑ Show cursor
☑ Open file location at recording end

Video Recording Options

Devolutions Web Login

Part VIII

8 Devolutions Web Login

8.1 Overview

Devolutions Web Login is a web browser password plugin used in conjunction with Remote Desktop Manager, Devolutions Password Server and Devolutions Password Hub, which allows users to securely inject passwords into websites using credentials stored in their vaults.

It gives system administrators full control over the management of passwords, without affecting the user's productivity.

Remote Desktop Manager Centralize, Manage and Secure Remote Connections	**Devolutions Password Server** Secure, Manage and Monitor Access to Privileged Accounts	**Devolutions Password Hub** Vault and Manage Business-User Passwords
Remote Desktop Manager centralizes all remote connections on a single platform that is securely shared between users and across the entire team.	Devolutions Password Server lets you control access to privileged accounts and manage remote sessions through a secure solution that can be deployed on-premises.	Devolutions Password Hub is a secure and cloud-based password manager for teams

Advanced users, other browser extensions, or even JavaScript injection can all result in the password being read from the password edit control, even if it displays dots instead of the password. Any use of an external browser must be carefully weighed against your security requirements.

Warning for all Remote Desktop Manager users:

Devolutions Web Login was created for a normal desktop environment. It uses inter process communication (IPC) with the client application. Using it on a terminal server introduces a level of risk that may be unacceptable for corporate users.

To use it in a safe manner, it is critical that each user is assigned a distinct port and that port be kept secret. An application passcode must be set as well to secure the port. The first client application that starts will be able to use the port exclusively. All **Devolutions Web Login** calling on that port **will get the responses**, unless an application passcode is required.

8.2 Installation

Devolutions Web Login is a free browser extension companion tools. It does require one of our products to function at this time.

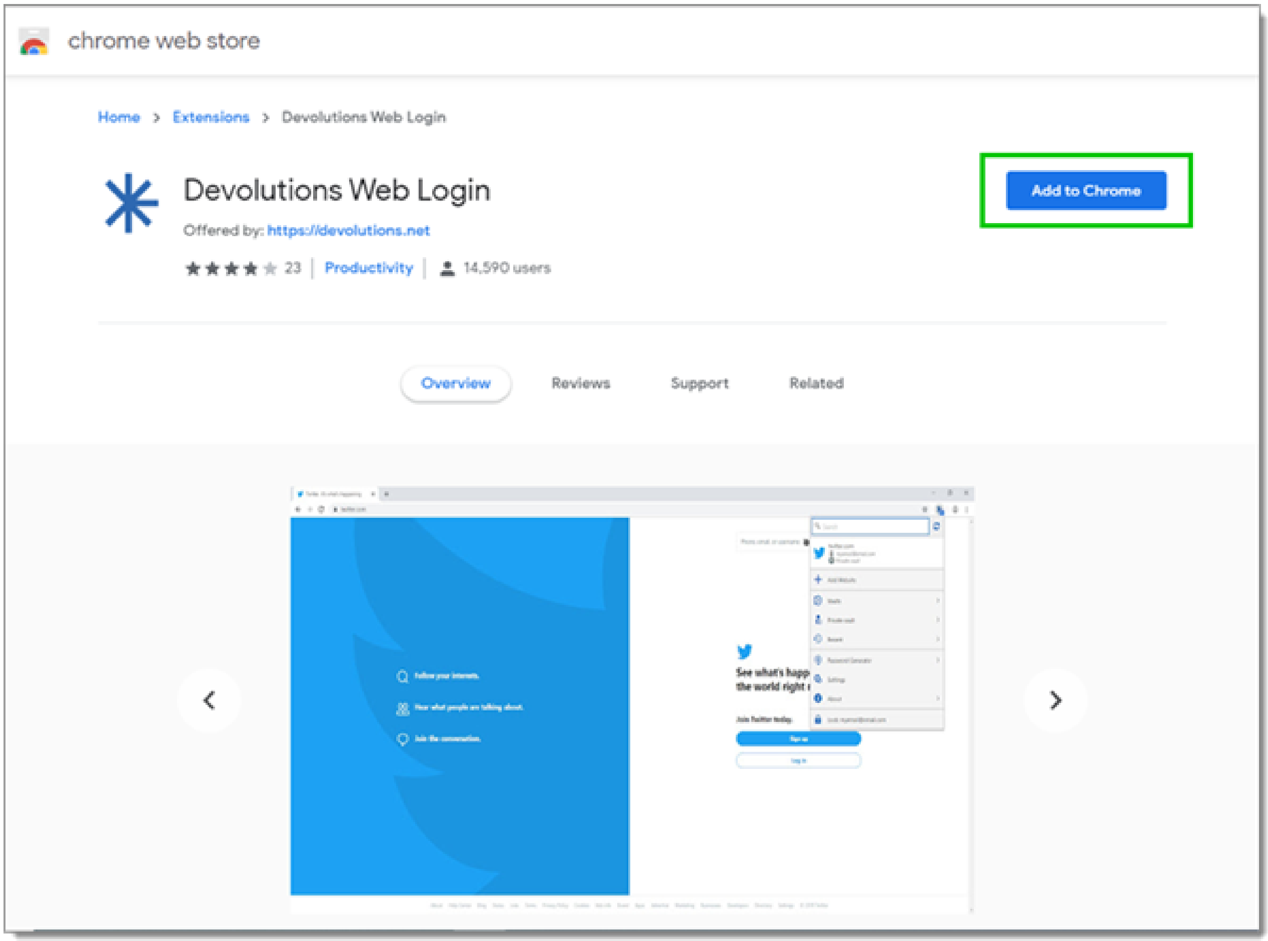
Click on the browser link below to start the installation of Devolutions Web Login plugin:

- Chrome
- Firefox
- Microsoft Edge
- Opera

8.2.1 Chrome

Follow the steps below to complete the installation of Devolutions Web Login in the Google Chrome web browser.

1. Open Google Chrome.
2. Navigate to Devolutions Web Login extension or use the link from our Website
3. Click the ***Add To Chrome*** button.



chrome web store

Home > Extensions > Devolutions Web Login

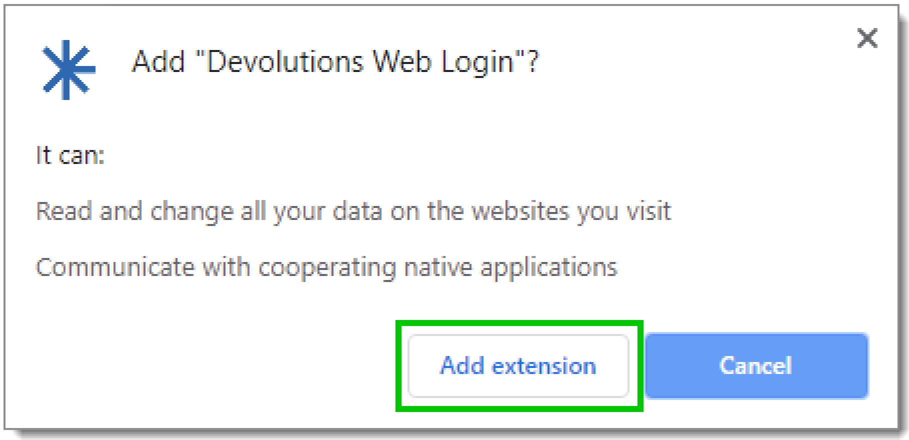
Devolutions Web Login

Offered by: https://devolutions.net

★★★★☆ 23 | Productivity | 14,590 users

Devolutions Web Login Chrome Web Store

4. Click ***Add extension*** in the confirmation dialog.



Add "Devolutions Web Login"?

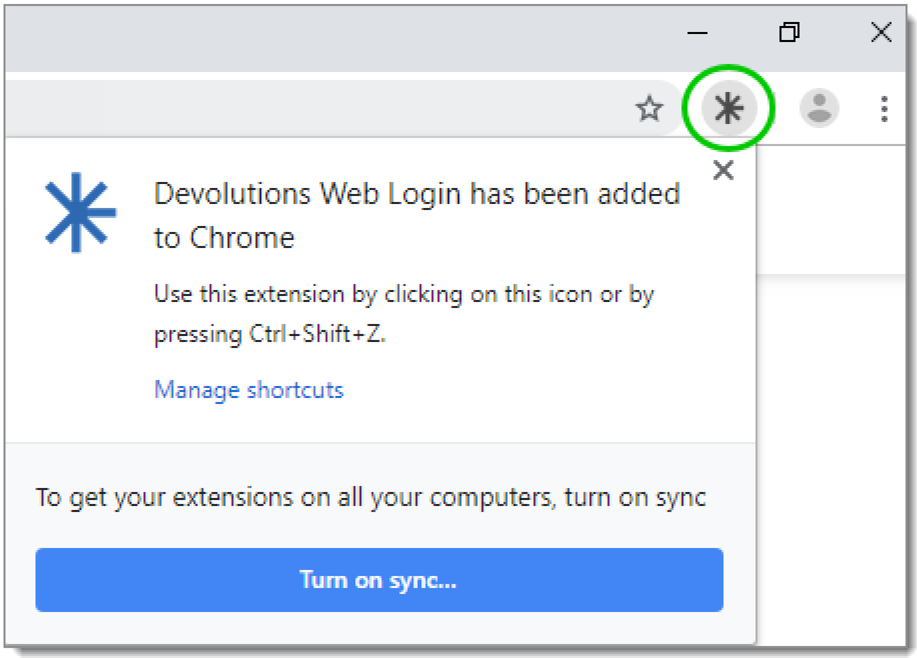
It can:

Read and change all your data on the websites you visit

Communicate with cooperating native applications

Extension Installation Confirmation

Once installed, access the extension by clicking ✱ in the top-right corner of the Google Chrome web browser.



Devolutions Web Login has been added to Chrome

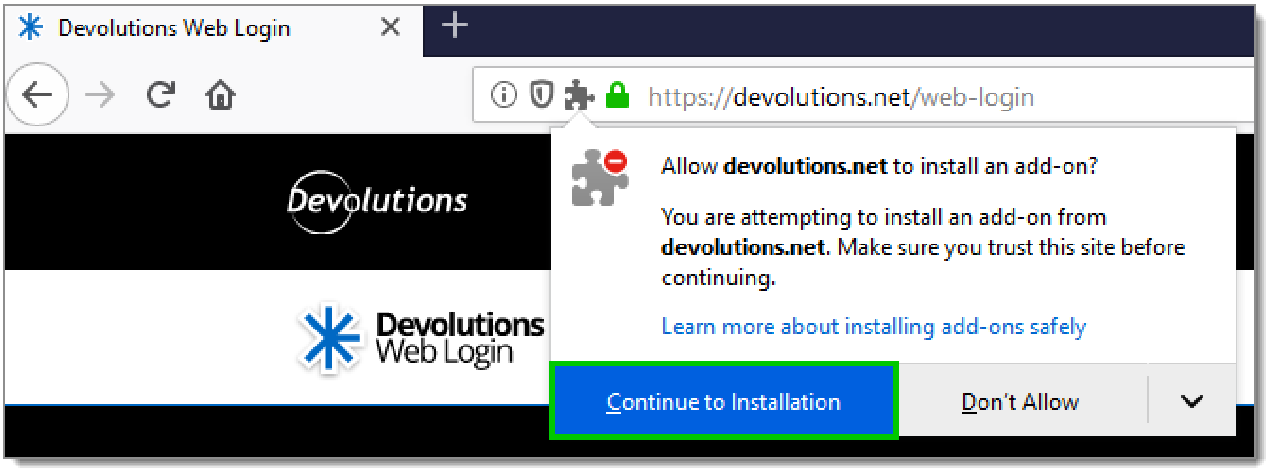
Use this extension by clicking on this icon or by pressing Ctrl+Shift+Z.

Devolutions Web Login Extension Button

8.2.2 Firefox

Follow the steps below to complete the installation of Devolutions Web Login in the Firefox web browser.

1. Open a Firefox window.
2. Download the extension from our [Devolutions Web Login](https://devolutions.net/web-login) website page.
3. Click ***Continue to Installation*** in the confirmation dialog.

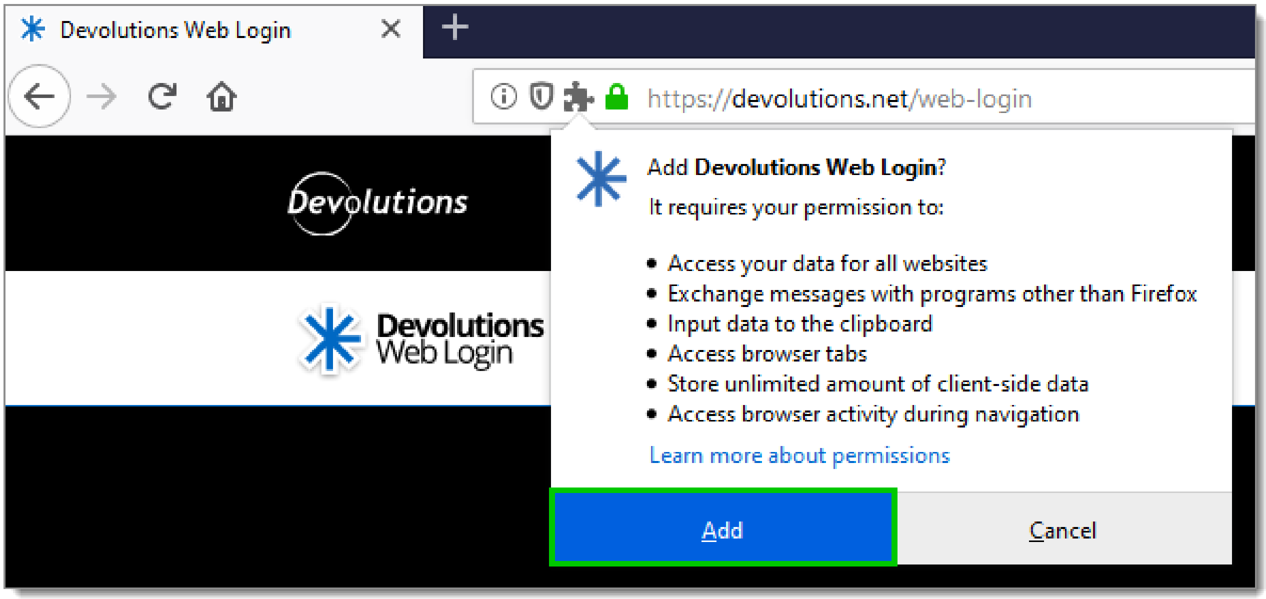


Allow **devolutions.net** to install an add-on?

You are attempting to install an add-on from **devolutions.net**. Make sure you trust this site before continuing.

Continue to Installation

4. Click ***Add***, when prompted to add Devolutions Web Login to the extension.



Add **Devolutions Web Login**?

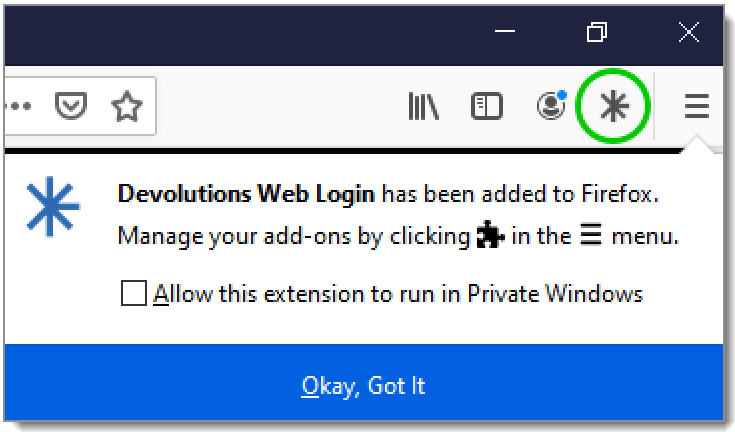
It requires your permission to:

- Access your data for all websites
- Exchange messages with programs other than Firefox
- Input data to the clipboard
- Access browser tabs
- Store unlimited amount of client-side data
- Access browser activity during navigation

Learn more about permissions

Add the Extension

5. Once installed, access the extension by clicking ✳ in the top-right corner of Firefox.



Devolutions Web Login has been added to Firefox.

Manage your add-ons by clicking 🧩 in the ☰ menu.

□ Allow this extension to run in Private Windows

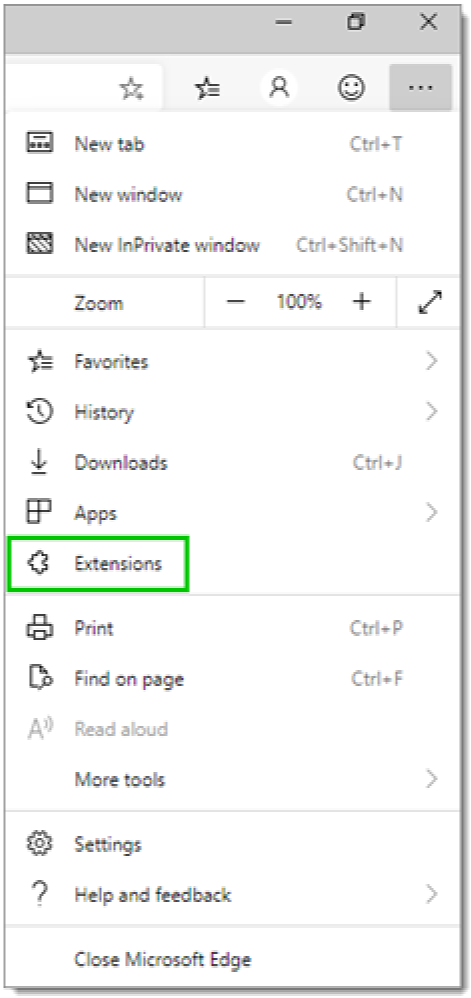
Devolutions Web Login Extension Button

8.2.3 Microsoft Edge Beta

Here are the steps to install Devolutions Web Login on Microsoft Edge Beta.

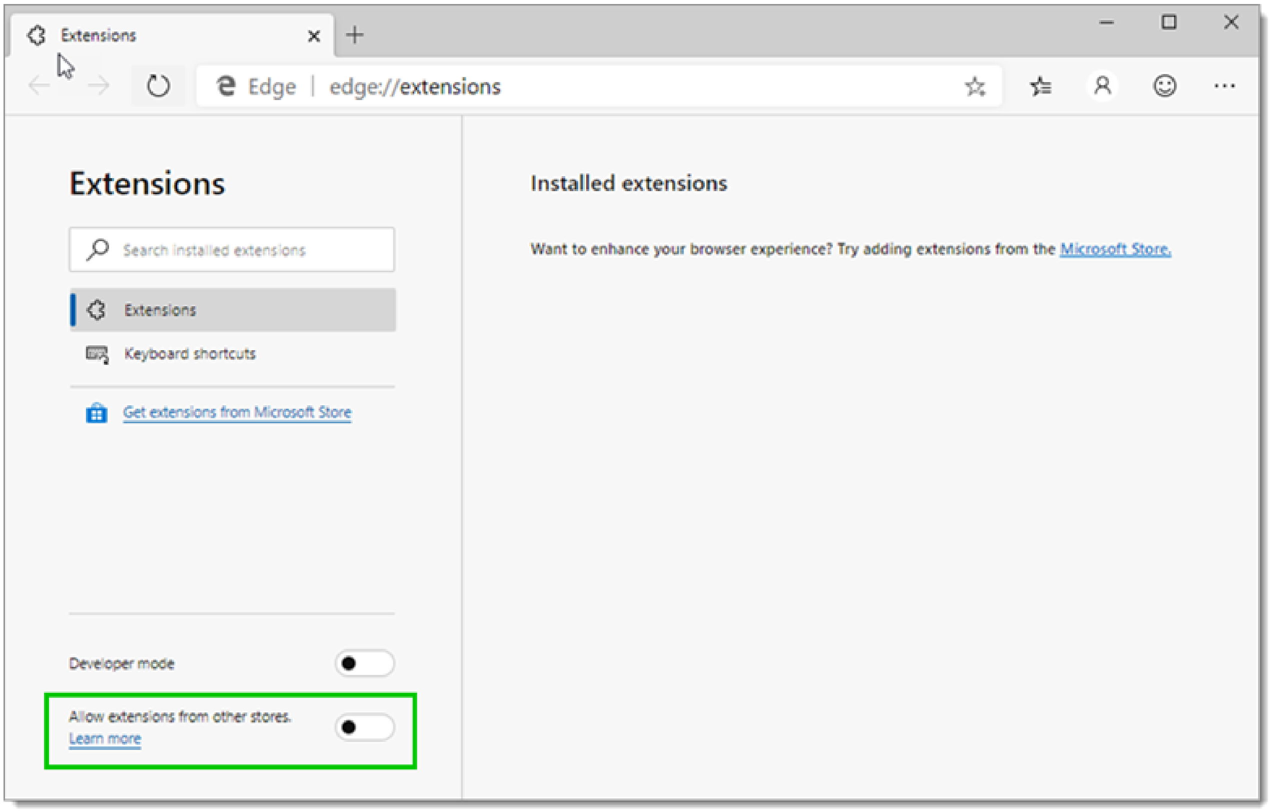
1. Open Microsoft Edge Beta.

2. Click on ***Extensions*** in the menu of the browser.



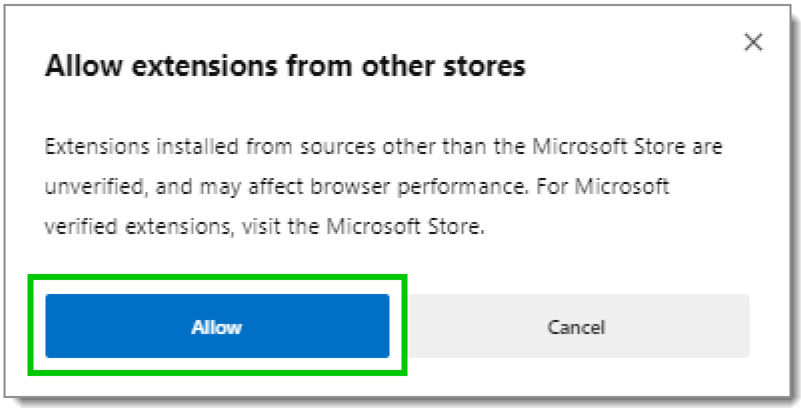
Microsoft Edge Beta Menu

3. Allow extensions from other stores.


Extensions
Edge | edge://extensions
Extensions
Search installed extensions
Extensions
Keyboard shortcuts
Get extensions from Microsoft Store
Developer mode
Allow extensions from other stores. Learn more
Installed extensions
Want to enhance your browser experience? Try adding extensions from the Microsoft Store.

Allow Extensions

4. Allow Non Microsoft Store Extensions.



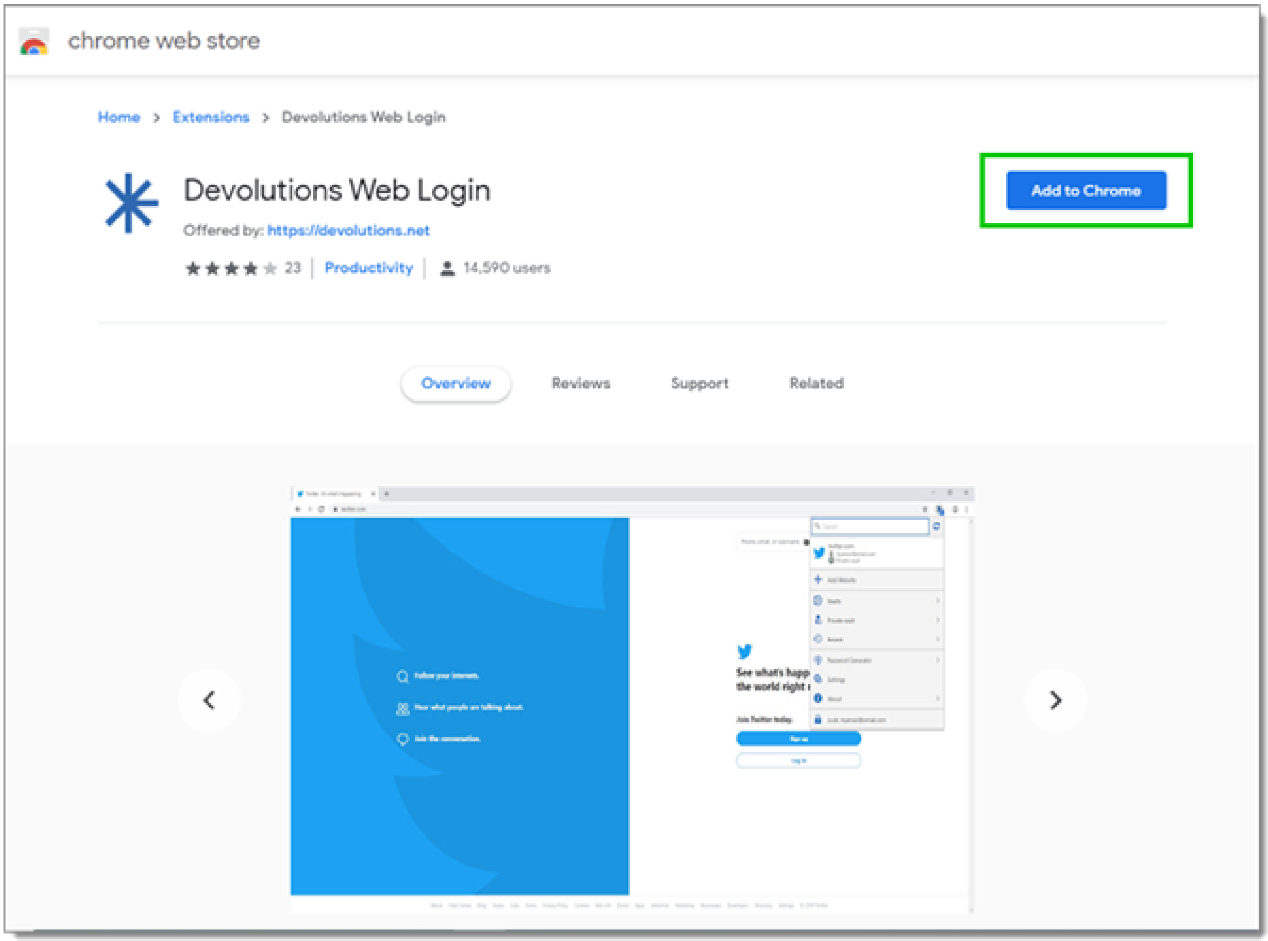
Allow extensions from other stores

Extensions installed from sources other than the Microsoft Store are unverified, and may affect browser performance. For Microsoft verified extensions, visit the Microsoft Store.

Allow Non Microsoft Store Extensions

5. Follow the extension from Devolutions Web Login website page to the Chrome Web Store.

6. Click ***Add to Chrome***.



chrome web store

Home > Extensions > Devolutions Web Login

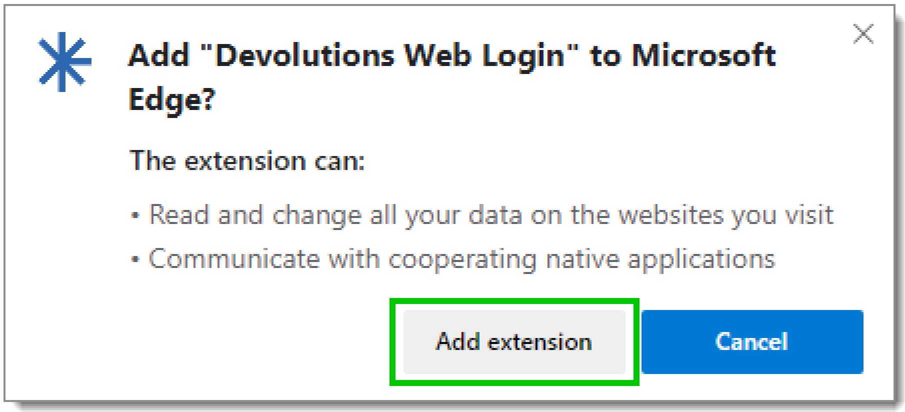
Devolutions Web Login

Offered by: https://devolutions.net

★★★★☆ 23 | Productivity | 14,590 users

Chrome Web Store

7. Add the extension to Microsoft Edge Beta.



Add "Devolutions Web Login" to Microsoft Edge?

The extension can:

- Read and change all your data on the websites you visit
- Communicate with cooperating native applications

Add Devolutions Web Login to Microsoft Edge Beta

The extension is installed. Access it by clicking ✱ in the top-right corner of the Microsoft Edge Beta web browser.

8.2.4 Opera

Follow the steps below to complete the installation of Devolutions Web Login in the Opera web browser.

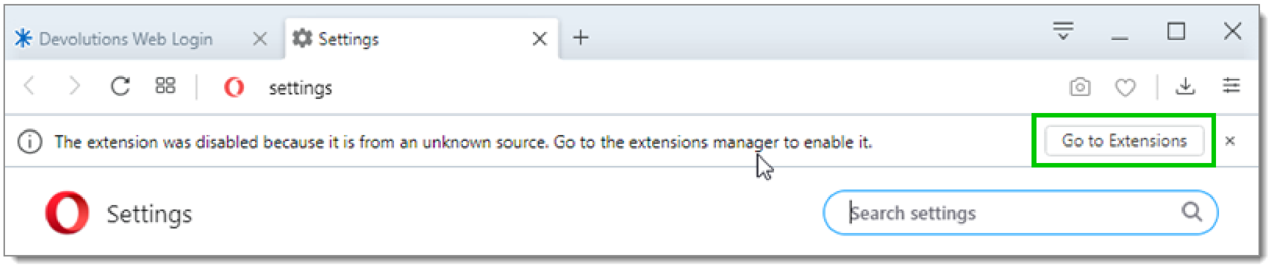
1. Open Opera.

2. Download the extension of Devolutions Web Login from our website page.

3. Go to ***Browser Settings*** in the easy setup of Opera.

4. Drag and drop the .nex file from step 2 from the downloads in the web browser.

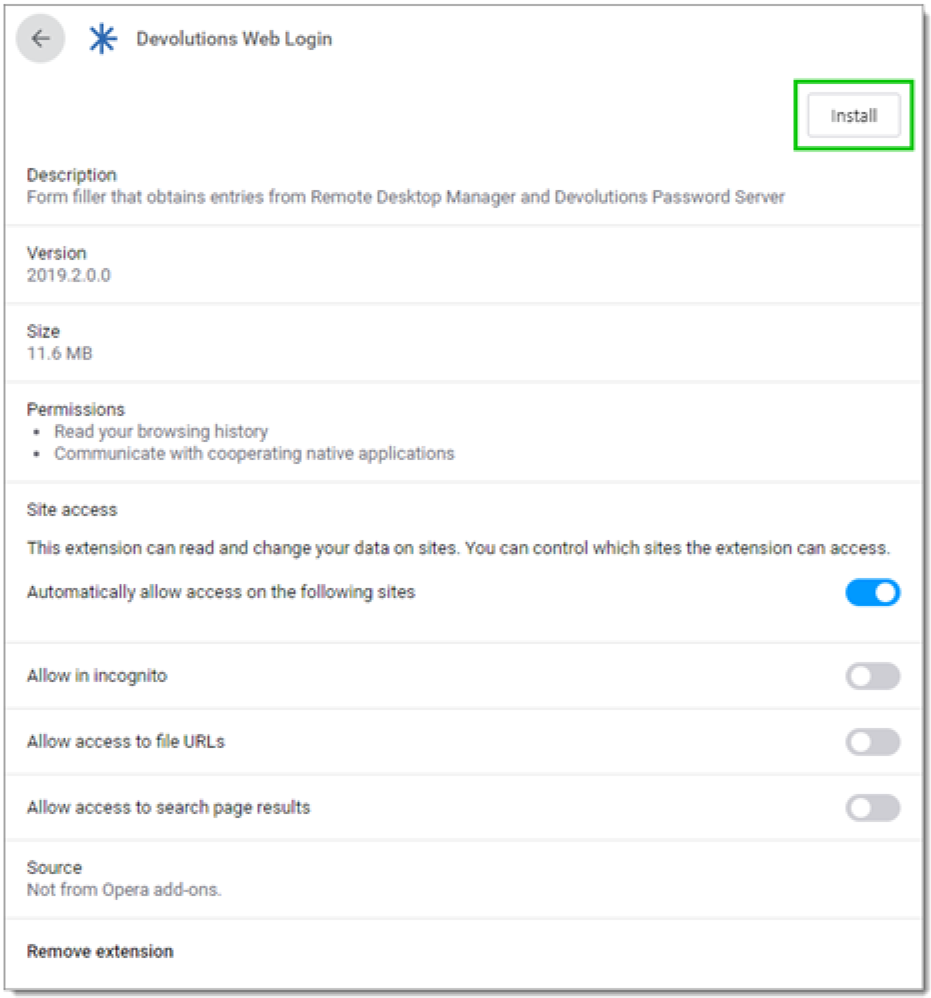
5. Click on ***Go to Extension*** from the information panel at the top.



The extension was disabled because it is from an unknown source. Go to the extensions manager to enable it.

Opera Extensions Enabling

6. Click ***Install*** and the ***Yes, install*** pop up.



Devolutions Web Login

Description
Form filler that obtains entries from Remote Desktop Manager and Devolutions Password Server

Version
2019.2.0.0

Size
11.6 MB

Permissions
- Read your browsing history
- Communicate with cooperating native applications

Site access

This extension can read and change your data on sites. You can control which sites the extension can access.

Automatically allow access on the following sites ●

Allow in incognito ○

Allow access to file URLs ○

Allow access to search page results ○

Source
Not from Opera add-ons.

Opera Install Window

7. Access the extension by clicking ✳ in the top-right corner of Opera.

8.3 First Login

8.3.1 Password Hub

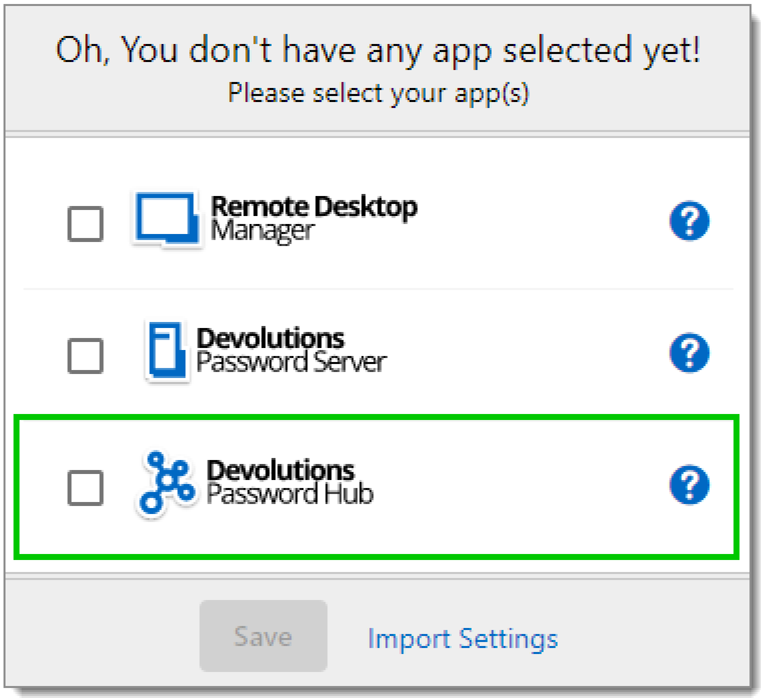
FIRST LOGIN WITH DEVOLUTIONS WEB LOGIN

Follow these steps to connect Devolutions Password Hub to Devolutions Web Login extension:

1. Click on ***Devolutions Web Login*** ✳ extension at the top right corner of your browser.

> ✓ A Devolutions Password Hub access is required to continue.

2. Choose ***Devolutions Password Hub*** in the list and ***Save***. You could at this point import settings; the option will also be available in the Settings menu after the log in.



Oh, You don't have any app selected yet!
Please select your app(s)

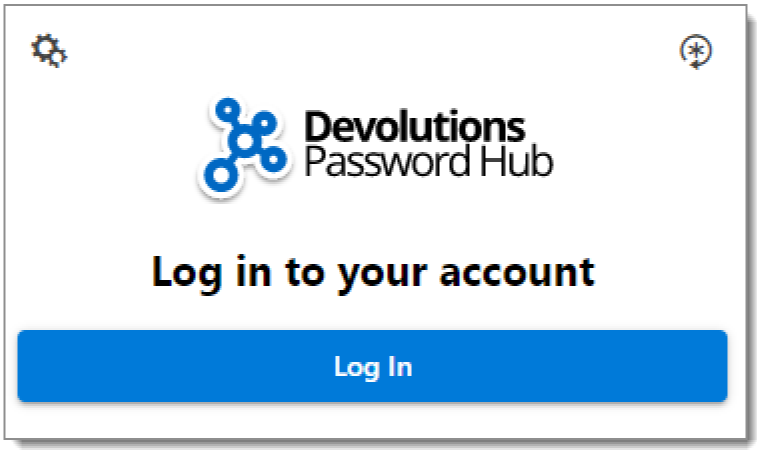
□ Remote Desktop Manager

□ Devolutions Password Server

□ Devolutions Password Hub

First Login

3. ***Log in*** to your account.

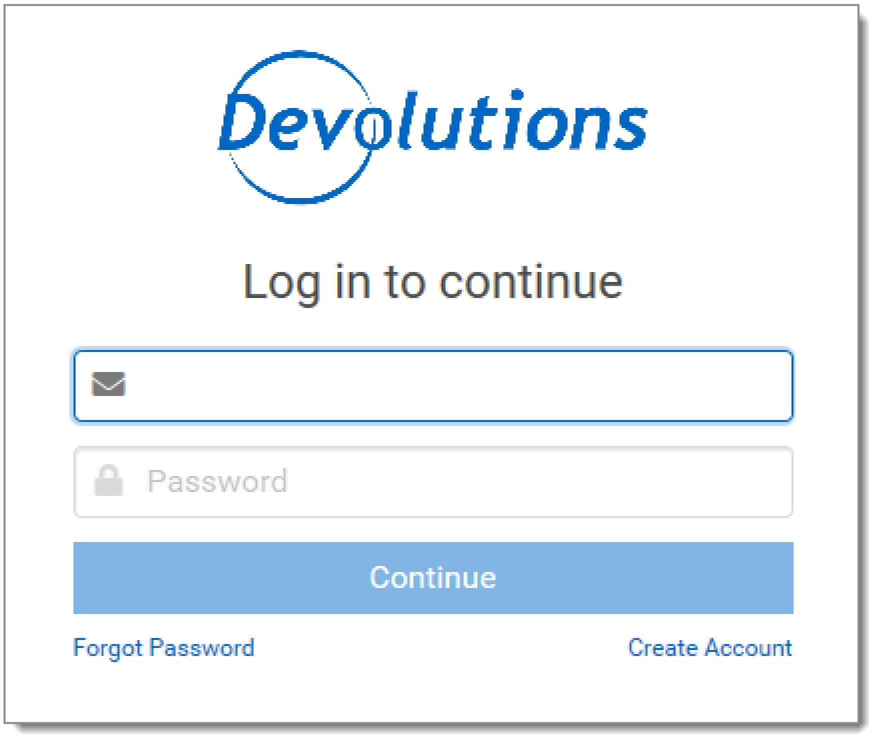


Devolutions Password Hub

Log in to your account

Log In

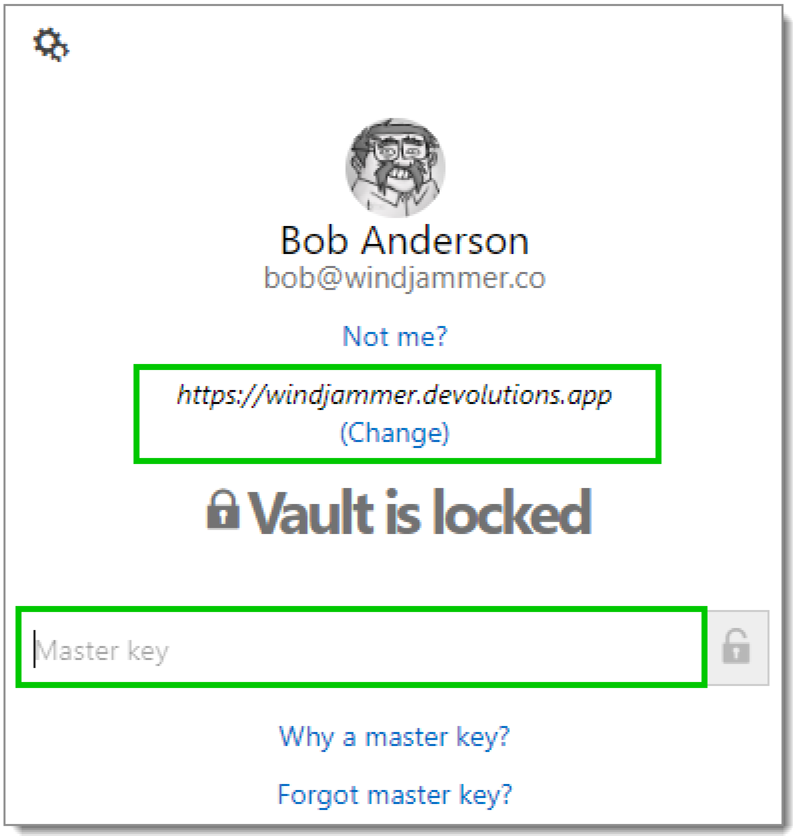
4. Enter the credentials from your Devolutions Account to continue.



Devolutions Account Login

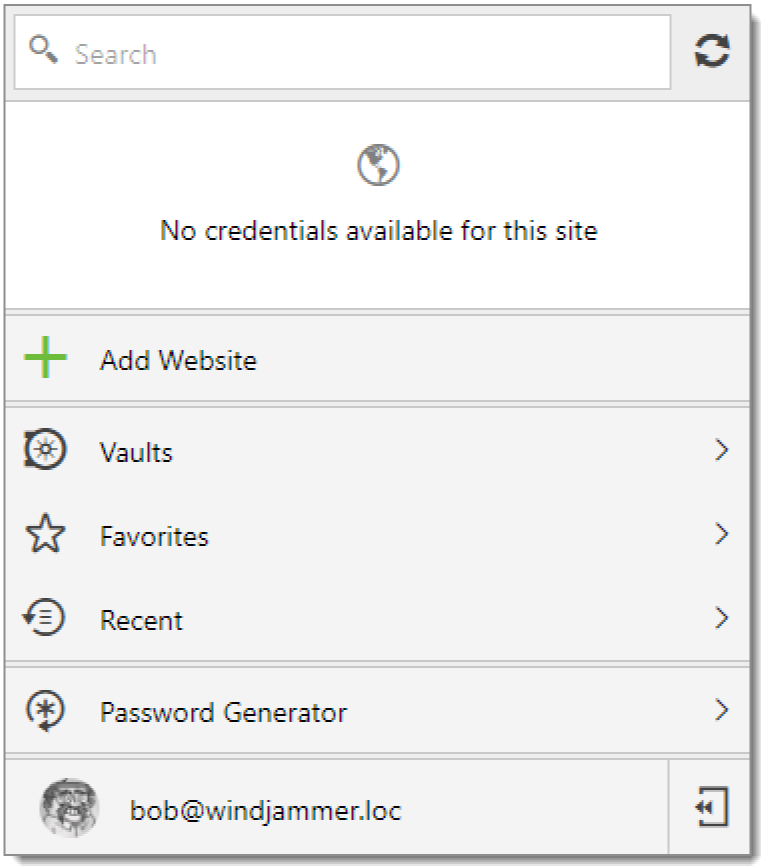
5. Unlock the vault with your master key.

Devolutions Web Login will recognize automatically the Password Hub linked to your Devolutions account. Click ***Change*** to modify the URL.



Password Hub Master key

Devolutions Web Login is now connected to your vaults.



Devolutions Web Login Connected to Devolutions Password Hub

8.3.1.1 Multiple Password Hub

DESCRIPTION

MANAGING MULTIPLE PASSWORD HUB WITH DEVOLUTIONS WEB LOGIN

Devolutions Web Login will automatically acknowledge all Password Hub linked to your Devolutions account.

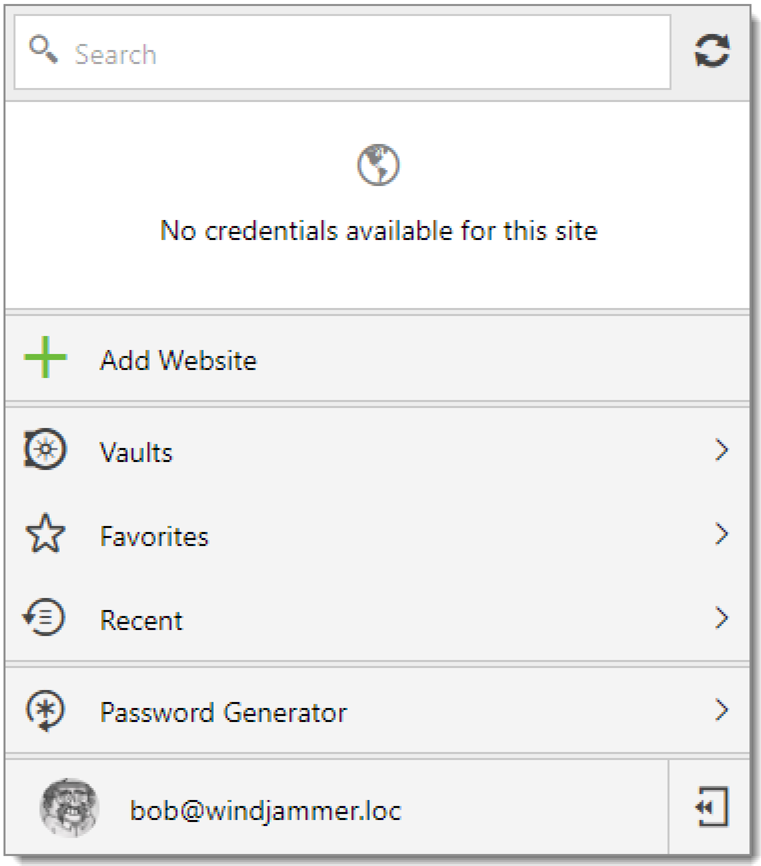
- View active Password Hub
- Switch Password Hub in Devolutions Web Login

> ❗ Devolutions Web Login will only recognize and apply credentials from the **active** Password Hub.

VIEW ACTIVE PASSWORD HUB

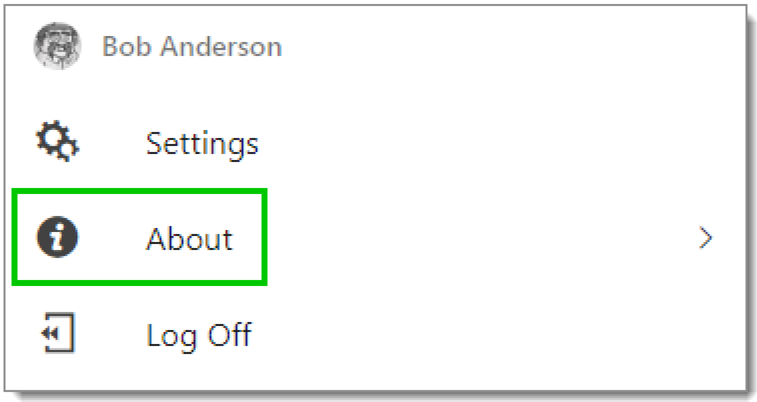
To view/validate the active Password Hub, click on the ***Devolutions Web Login*** ✳ extension at the top right corner of your browser.

1. Click on your avatar at the bottom of the window.



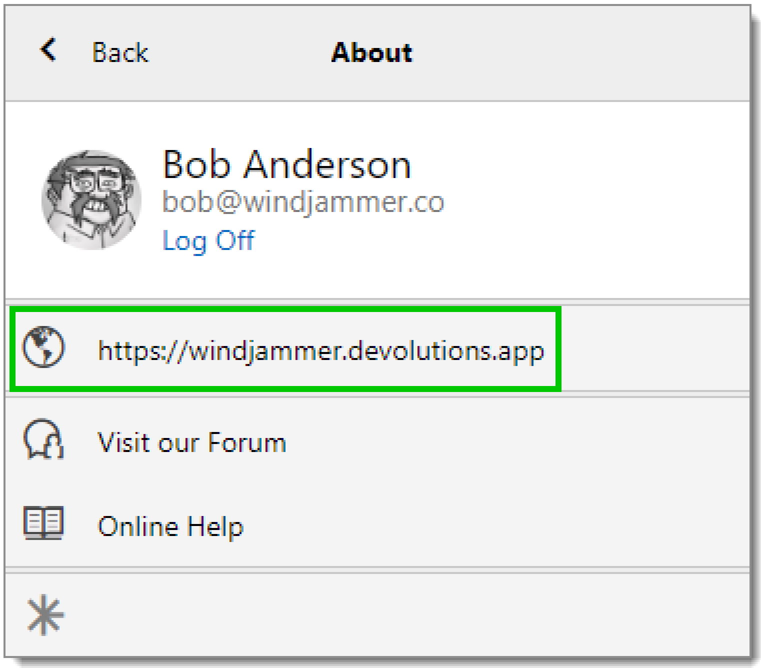
Devolutions Web Login

2. Click ***About***.



Devolutions Web Login About

3. Validate the Password Hub URL.

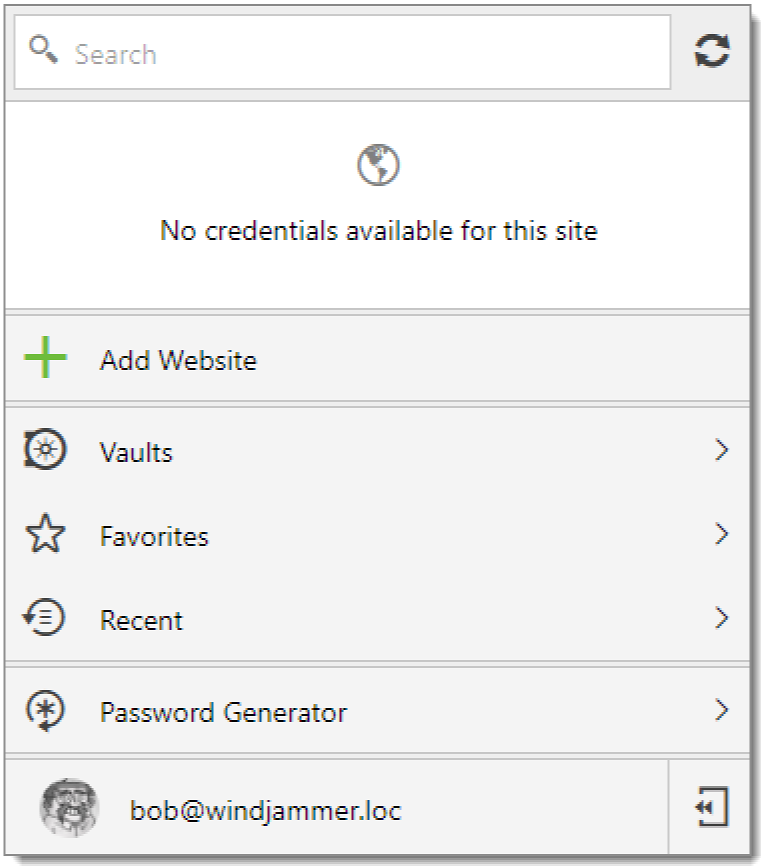


Password Hub URL

SWITCH PASSWORD HUB IN DEVOLUTIONS WEB LOGIN

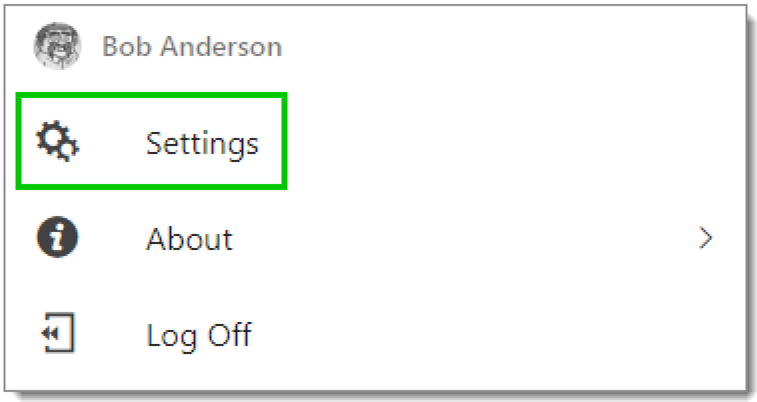
To switch Password Hub in Devolutions Web Login, click on the ***Devolutions Web Login*** ✳ extension at the top right corner of your browser.

1. Click on your avatar at the bottom of the window.



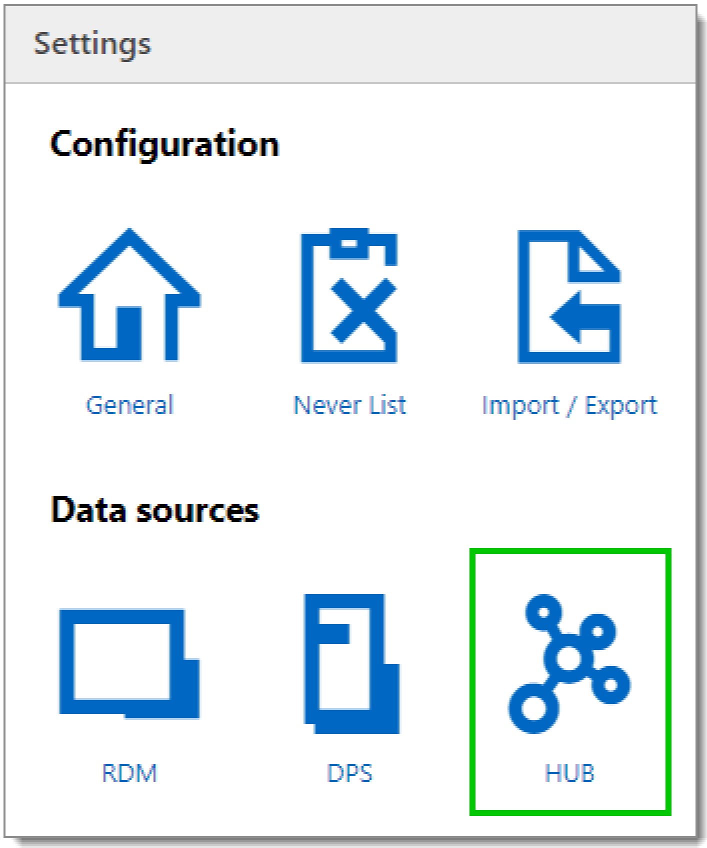
Devolutions Web Login

2. Click ***Settings***.



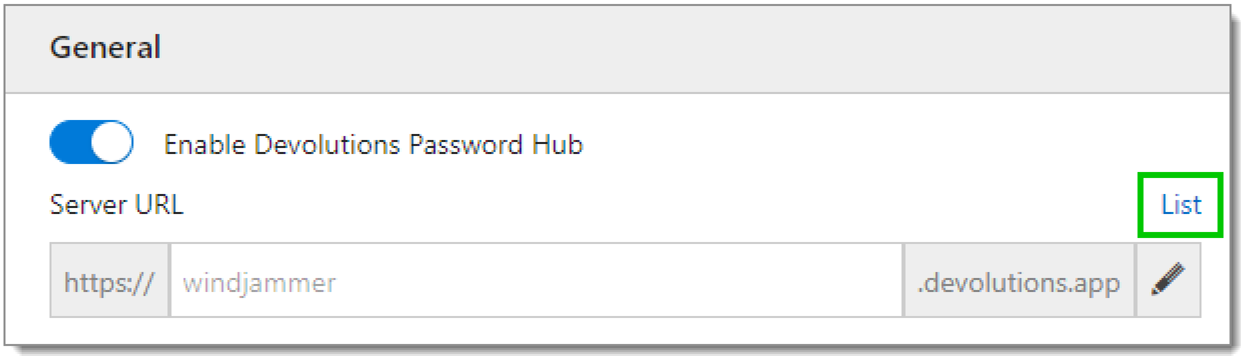
Devolutions Web Login Settings

3. Click ***HUB***.



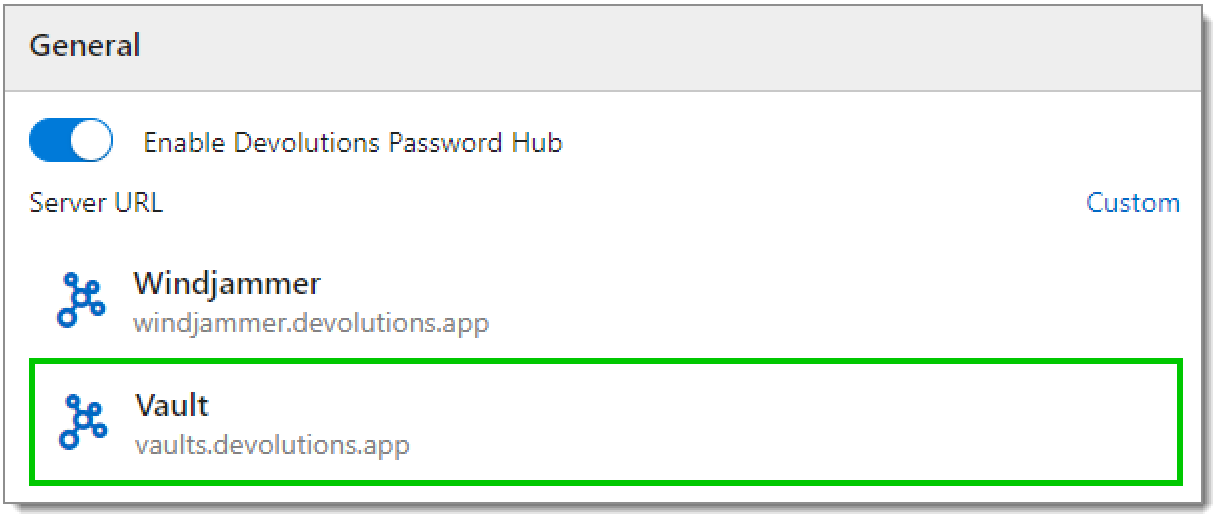
Devolutions Web Login Settings Menu

4. In the ***General*** section, click ***List***.



Devolutions Web Login General Settings

5. All the available Password Hub linked to your Devolutions account will show in the list. Switch by clicking once on the desired Password Hub.


General

Enable Devolutions Password Hub

Server URL

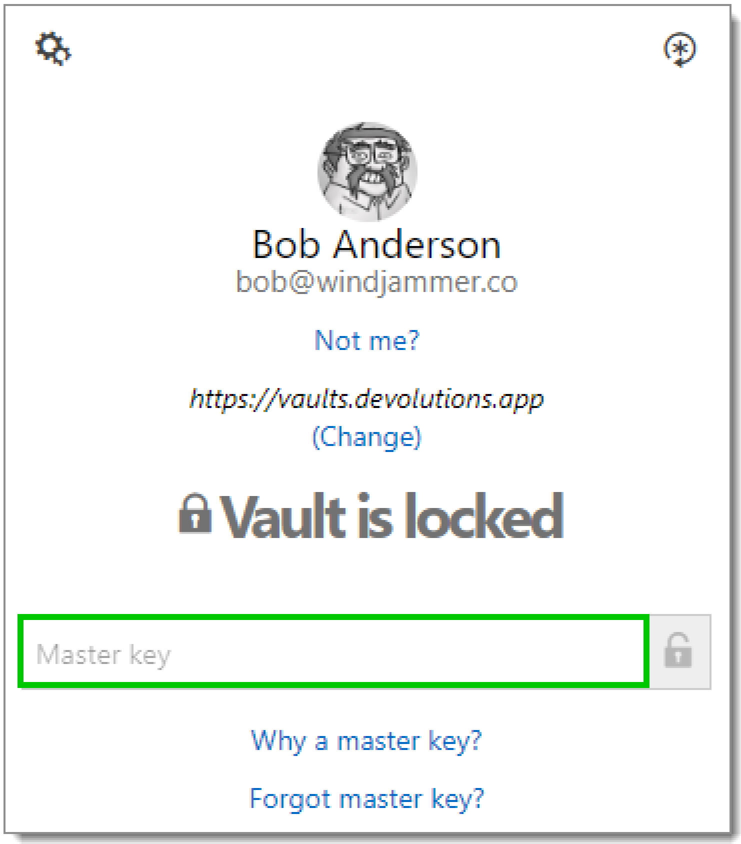
Custom

Windjammer
windjammer.devolutions.app

Vault
vaults.devolutions.app

Password Hub List

6. Click on the ***Devolutions Web Login*** ✳ extension at the top right corner of your browser and enter the Master key associated with this Password Hub.


Bob Anderson
bob@windjammer.co

Not me?

https://vaults.devolutions.app
(Change)

Vault is locked

Master key

Why a master key?

Forgot master key?

Password Hub Switch Master key

8.3.2 Password Server

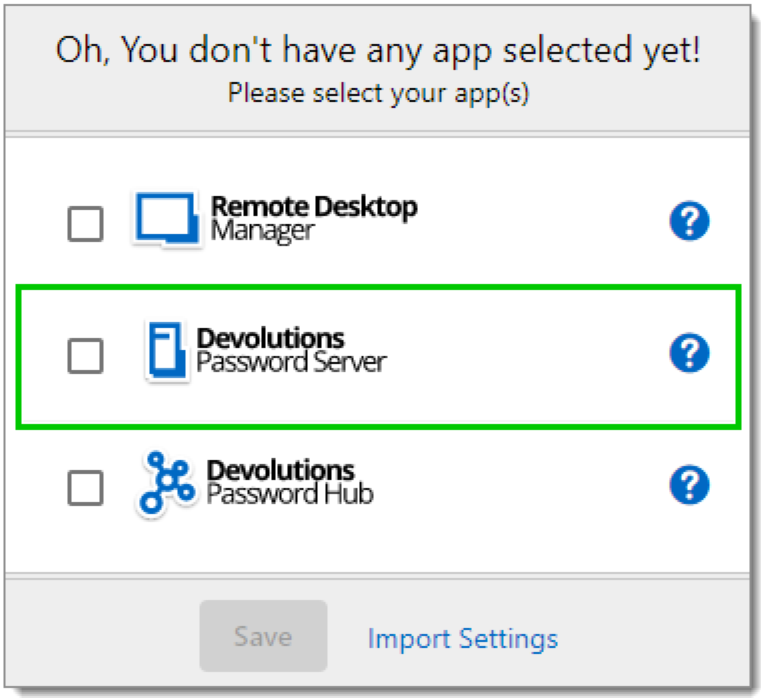
FIRST LOGIN WITH DEVOLUTIONS WEB LOGIN

Follow these steps to connect Devolutions Password Server to Devolutions Web Login extension:

1. Click on ***Devolutions Web Login*** ✳ extension at the top right corner of your browser.

A Devolutions Password Server access is required to continue.

2. Choose ***Devolutions Password Server*** in the list and ***Save***. You could at this point import settings; the option will also be available in the **Settings** menu after the log in.



Oh, You don't have any app selected yet!
Please select your app(s)

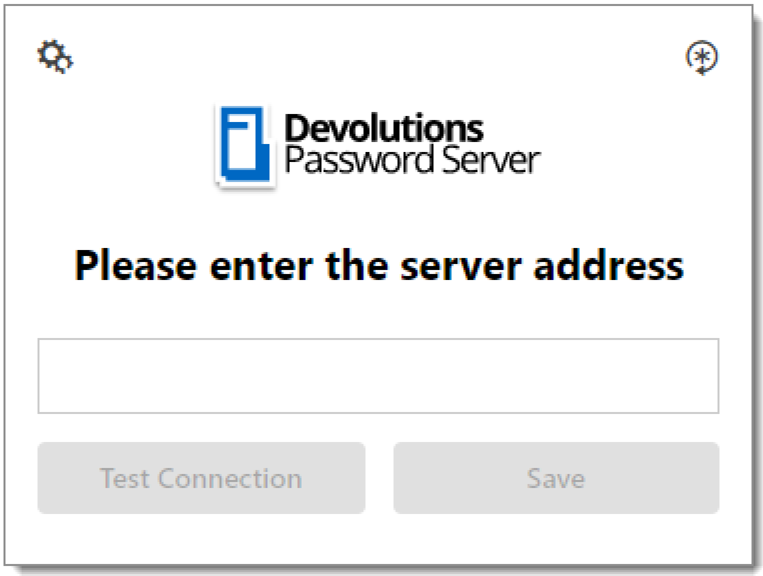
□ Remote Desktop Manager

□ Devolutions Password Server

□ Devolutions Password Hub

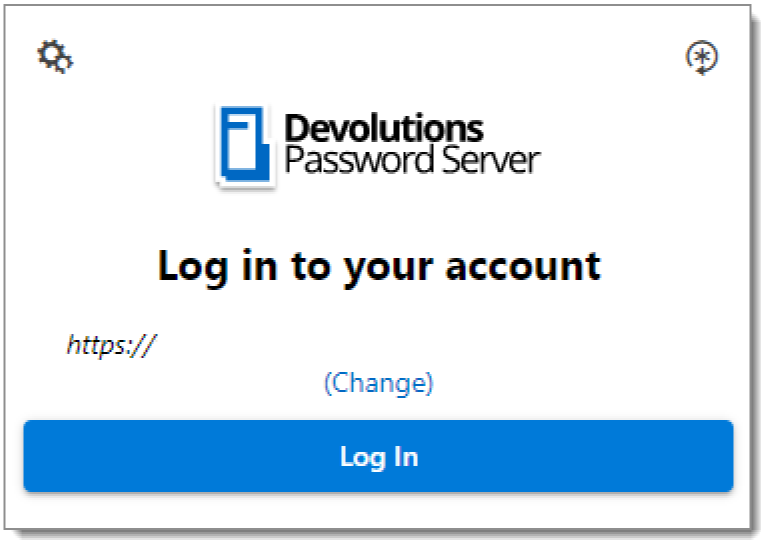
First Login

3. Enter the server address. Test the connection to validate it, then ***Save***.



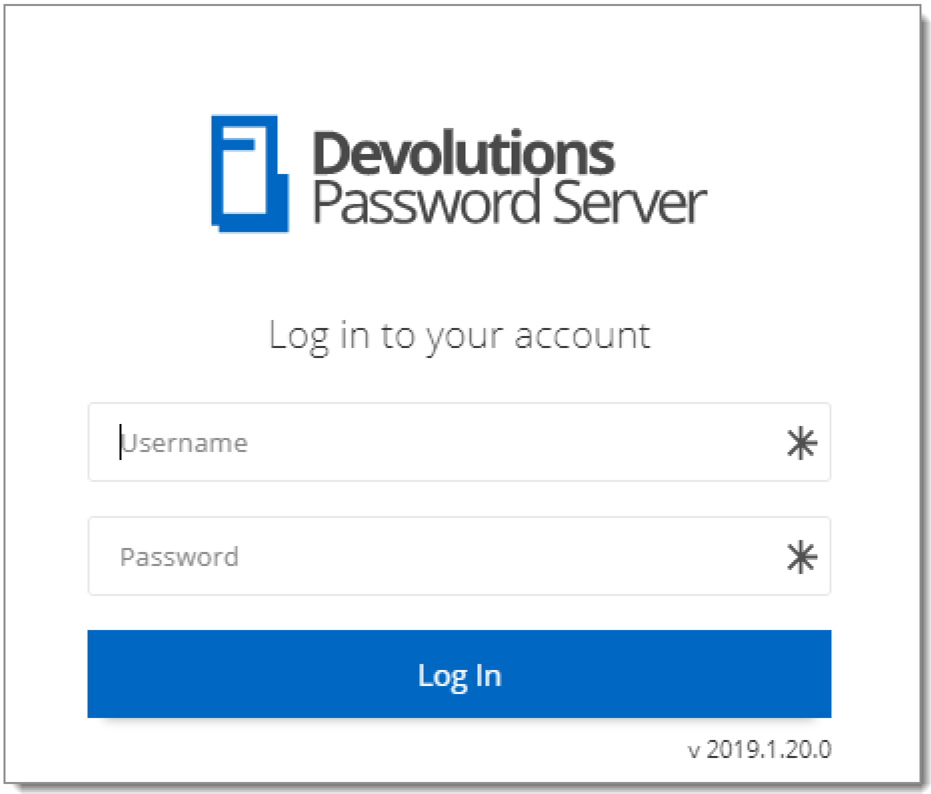
Server Address

4. Press the ***Log In*** after you saved the address.



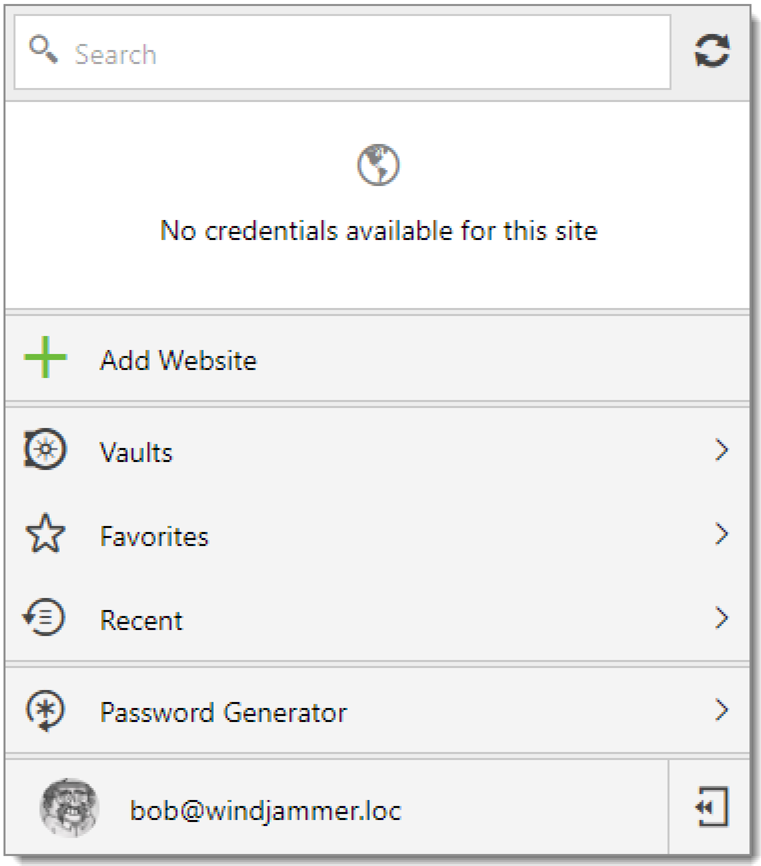
Devolutions Web Login Login

5. Enter your Devolutions Password Server credentials and log in.



Devolutions Password Server Login

Devolutions Web Login is now connected to your vaults.



Devolutions Web Login Connected

8.3.3 Remote Desktop Manager

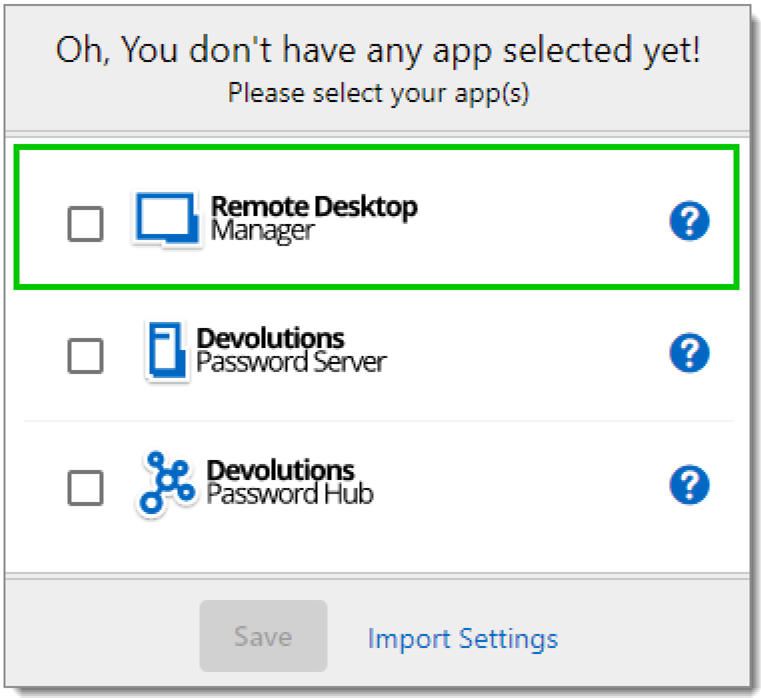
FIRST LOGIN WITH DEVOLUTIONS WEB LOGIN

Follow these steps to connect your Remote Desktop Manager to Devolutions Web Login extension:

1. Click on Devolutions Web Login ✳ extension at the top right corner of your browser.

> Remote Desktop Manager must be installed and running to continue.

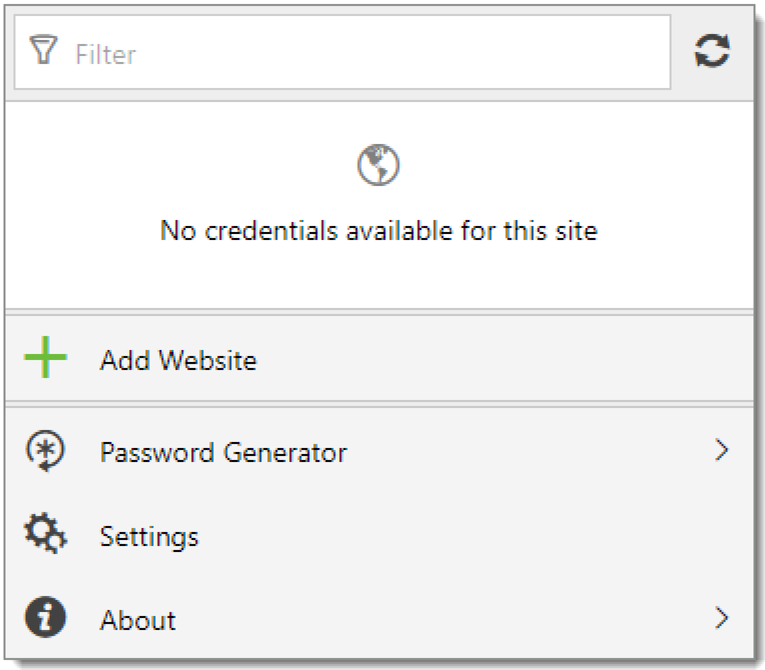
2. Choose ***Remote Desktop Manager*** in the list and ***Save***. You could at this point import settings; the option will also be available in the Settings menu after the log in.


Oh, You don't have any app selected yet!

Please select your app(s)

First Login

You will be automatically connected to your vaults.


No credentials available for this site

Devolutions Web Login Connected

8.4 Exploring Devolutions Web Login

8.4.1 Menu

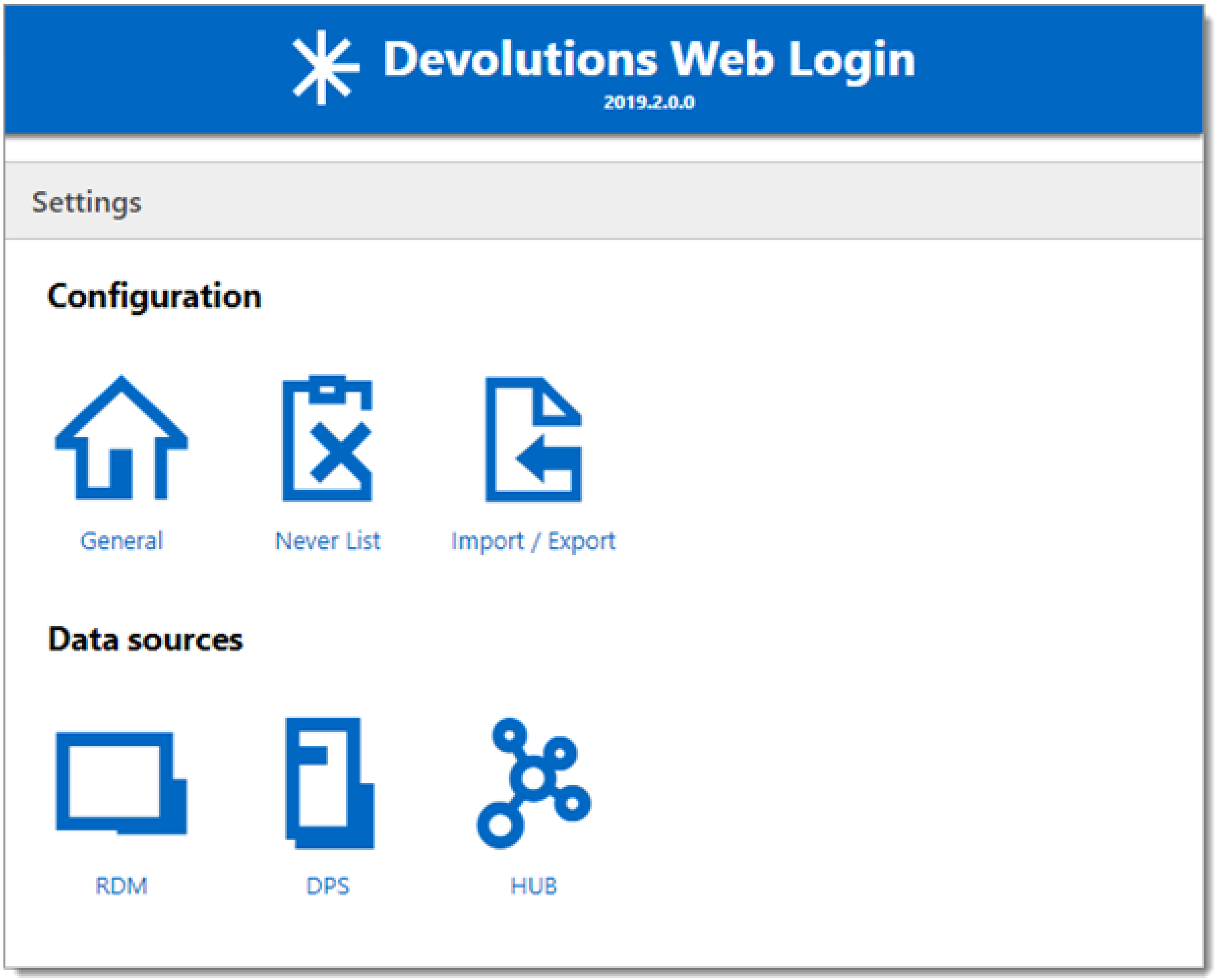
The user interface **Devolutions Web Login** is slightly different in appearance when connected to Remote Desktop Manager, Devolutions Password Server or Devolutions Password Hub.

See below a list of the menu and information available from the Devolutions Web Login extension:

- Refine the credential list available with the **search**.
- **Add a website** from Devolutions Web Login in a specific folder located in a vault or your private vault.
- **Visualize the credential** stored in the vaults if you are connected with Devolutions Password Server or Devolutions Password Hub.
- Browse **recently used entry** or **favorites**.
- Use the **password generator** to create custom and more secure credentials.
- Set Devolutions Web Login **settings**.

8.4.1.1 Settings

Devolutions Web Login settings are separated in two categories, **Configuration** and **Data sources**.



Devolutions Web Login Settings

CONFIGURATION

The ***General*** settings are about the user interface and interaction.

- Show Devolutions Web Login extension icon in the credentials fields.
- Show the prompt when saving credentials on new login.
- Color the fields that are filled with Devolutions Web Login
- Disable the analytics in the advanced setting.

The ***Never list*** displays the list of websites, added locally, to which the user will never be prompted to save credentials.

- Type can range from: Never add site, Never autofill, Never do anything too Never show icons in field.
- Matching options are: Base domains, Host, Starts with, RegEx and Exact.

To remove a website from the never list click the ***trash can*** icon next to it. To edit an entry, delete it and create another.

The ***Import / Export*** setting allows to save and transfer your currently set preferred settings.

- Import setting from other browsers or users.
- Choose to export Devolutions Web Login settings, password generator template and the never list.

DATA SOURCES

The data sources settings are used to customize Devolutions Web Login interactions with Remote Desktop Manager, Devolutions Password Server and Devolutions Password Hub.

REMOTE DESKTOP MANAGER

GENERAL OPTIONS	DESCRIPTION
Enable Remote Desktop Manager app	Retrieve entries from Remote Desktop Manager when the application is open.
Use default port (19443)	Communicate with the default port 19443 between the application.
Add entry in private vault by default	Save new entries in the private vault.
Destination folder	Choose the folder where the credentials are stored in the vault.

ACTION OPTIONS	DESCRIPTION
Automatically retrieve credentials on page load	Devolutions Web Login automatically search for credentials in the data source when connecting to a website. If disabled, click on the Devolutions Web Login extension icon to manually retrieve credentials.
Automatically fill in credentials on load	Fill automatically the credentials when loading a web page.
Automatically submit the form after filling	Submit the credentials automatically when the fields are filled.

ADVANCED OPTIONS	DESCRIPTION
Application key	Secure the port with an application key by using the same code in Remote Desktop Manager and Devolutions Web Login. Navigate to ***File – Options – Browser Extensions*** in Remote Desktop Manager to set the application key.
Enable native messaging	Exchange messages with a native application installed on the user's computer.
Use legacy API	Use the old browser extension API for compatibility with older versions of Remote Desktop Manager.

DEVOLUTIONS PASSWORD SERVER

GENERAL OPTIONS	DESCRIPTION
Enable Devolutions	Retrieve entries from Devolutions Password Server.

GENERAL OPTIONS	DESCRIPTION
Password Server	
Destination folder	Choose the folder where the credentials are stored in the vault.
Server URL	Enter the URL of the Devolutions Password Server instance to connect to.

ACTION OPTIONS	DESCRIPTION
Automatically retrieve credentials on page load	Devolutions Web Login automatically search for credentials in the data source when connecting to a website. If disabled, click on the Devolutions Web Login extension icon to manually retrieve credentials.
Automatically fill in credentials on load	Fill automatically the credentials when loading a web page.
Automatically submit the form after filling	Submit the credentials automatically when the fields are filled.

DEVOLUTIONS PASSWORD HUB

GENERAL OPTIONS	DESCRIPTION
Enable Devolutions Password Hub	Retrieve entries from Devolutions Password Hub.
Server URL	Enter the URL of the Devolutions Password Hub instance to connect to.

ACTION OPTIONS	DESCRIPTION
Automatically fill in credentials on load	Fill automatically the credentials when loading a web page.
Automatically submit the form after filling	Submit the credentials automatically when the fields are filled

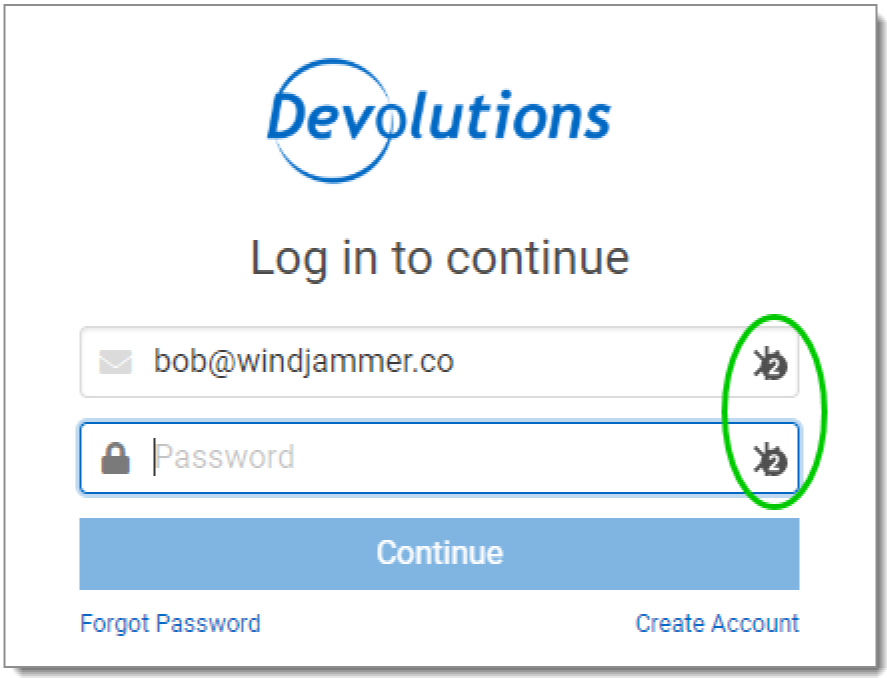
ADVANCED OPTIONS	DESCRIPTION
Devolutions Account login	Set your Devolutions Account login URL.
Show favicon	Display the Devolutions Web Login favicon.

8.4.2 Retrieve Credentials

Once configured in your Devolutions product, credentials are automatically detected by **Devolutions Web Login** when connected to their respective applications.

LOG IN TO A WEBSITE

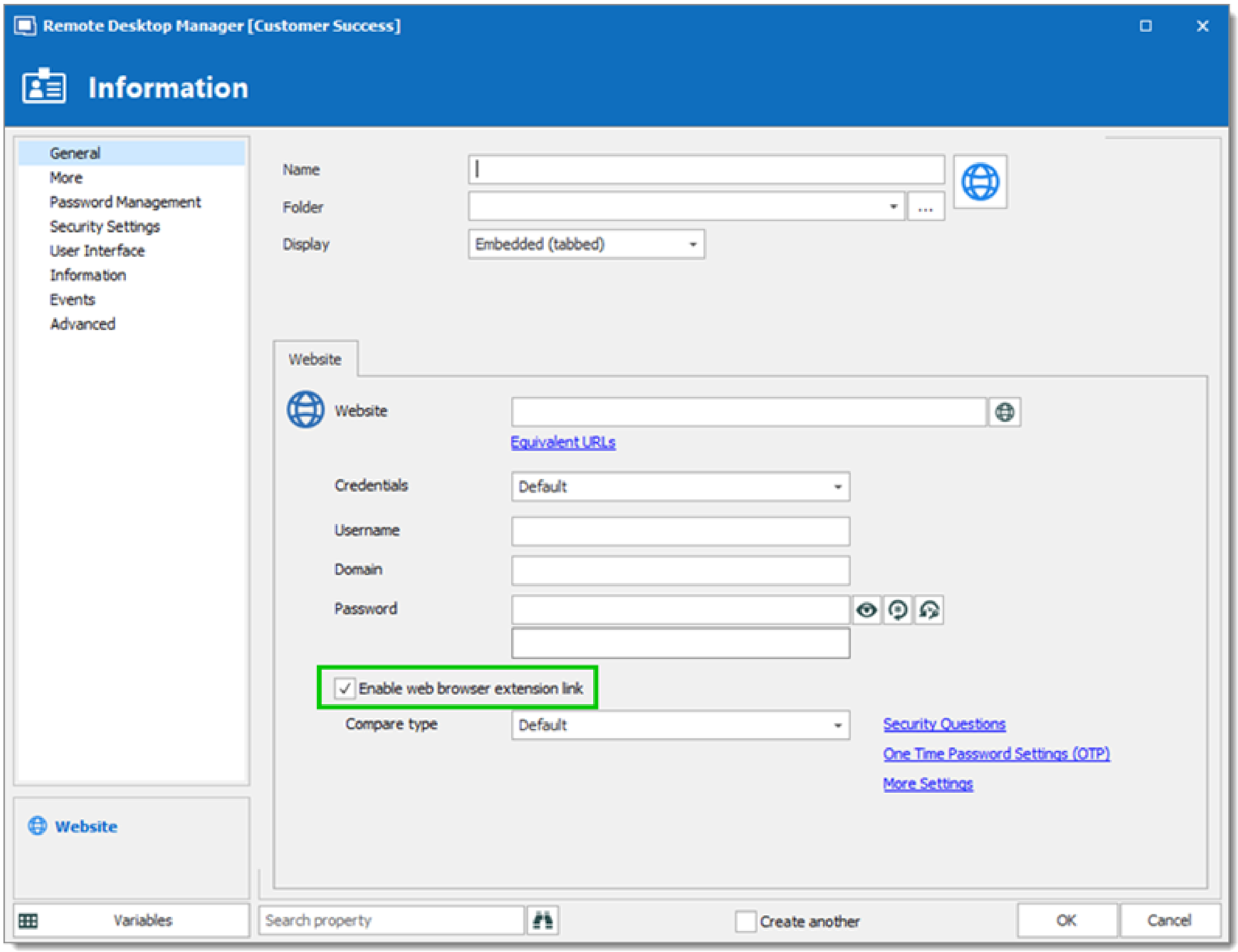
Select an entry from the list in Devolutions Web Login or click on the icon in the credential field to fill in the login information and connect to the website.



Automatic Log In

8.4.2.1 Remote Desktop Manager

Checkmark ***Enable web browser extension link*** in Remote Desktop Manager entries to allow Devolutions Web Login extension to retrieve the credentials when connecting to its respective website.



Enable web browser extension link

8.4.3 Secure Devolutions Web Login

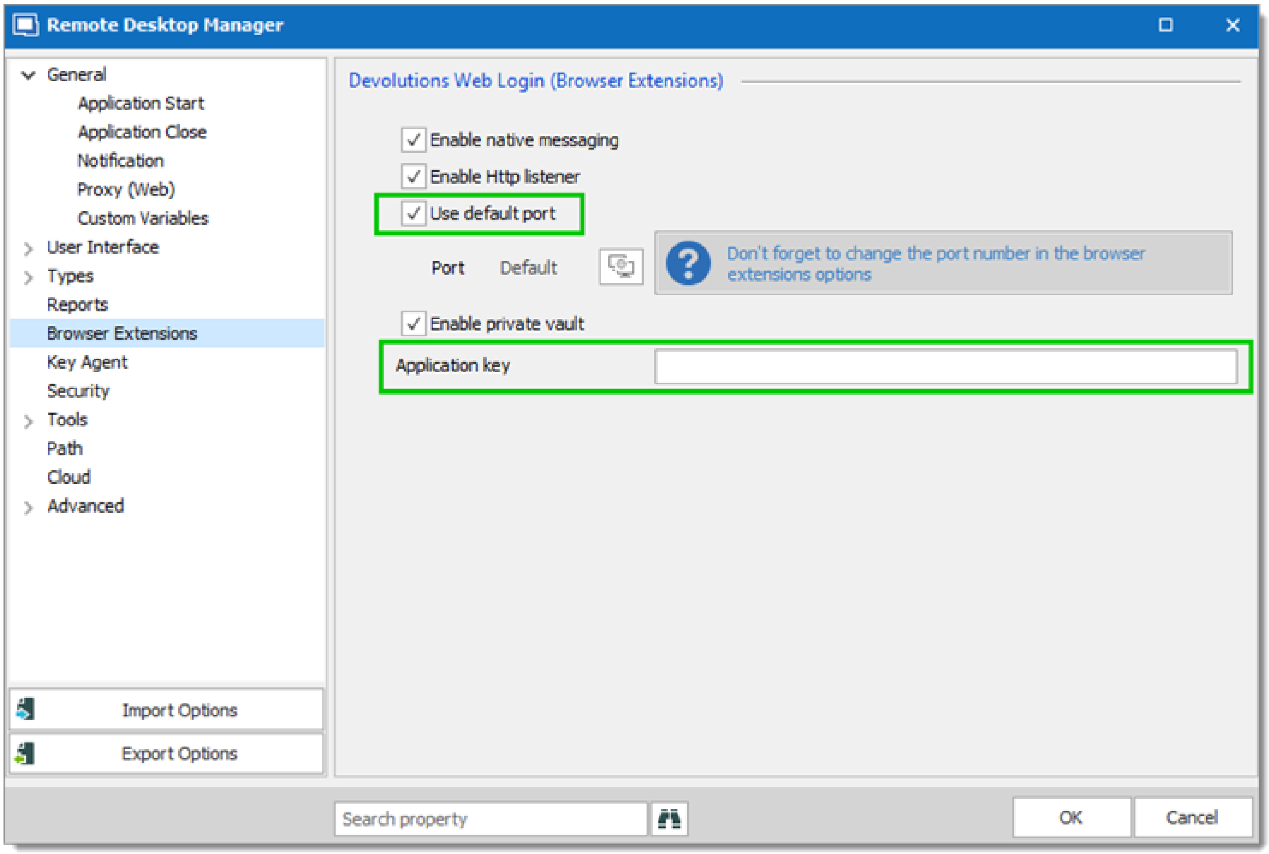
As mentioned in the Devolutions Web Login Overview topic, installing the extension in a Terminal Services environment can introduce security risks. In such environments, each user must have a distinct port assigned, as well as an application key to prevent any other Devolutions Web Login from listening in.

> The application key is displayed in clear text, it must be kept secret by the user.

To enable the security layer in Remote Desktop Manager, follow these steps:

1. Navigate to ***File – Options – Browser Extensions***.
2. Uncheck ***Use default port***.
3. Enter a custom port.

4. Type an **Application key** then click ***OK***



Devolutions Web Login (Browser Extensions)

☑ Enable native messaging

☑ Enable Http listener

☑ Use default port

Port Default

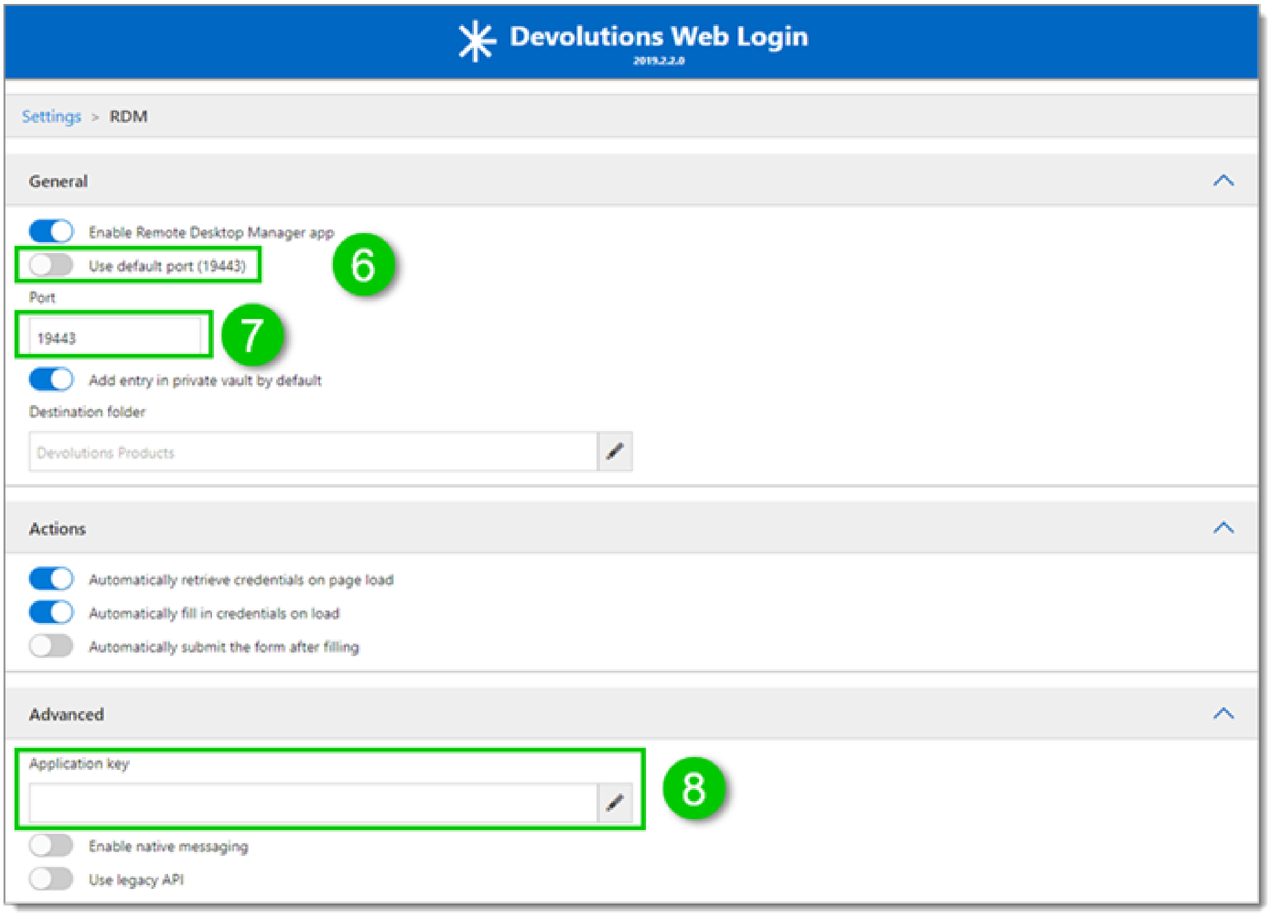
Don't forget to change the port number in the browser extensions options

☑ Enable private vault

Application key

Remote Desktop Manager Browser Extensions Options

5. In your browser, click the Devolutions Web Login icon ✳ and go to Remote Desktop Manager Settings.
6. Disable ***Use default port***.
7. Enter the custom port created earlier in Remote Desktop Manager.
8. Enter the same **Application key** as Remote Desktop Manager .



General

● Enable Remote Desktop Manager app

○ Use default port (19443)

Port: 19443

● Add entry in private vault by default

Destination folder: Devolutions Products

Actions

● Automatically retrieve credentials on page load

● Automatically fill in credentials on load

○ Automatically submit the form after filling

Advanced

Application key:

○ Enable native messaging

○ Use legacy API

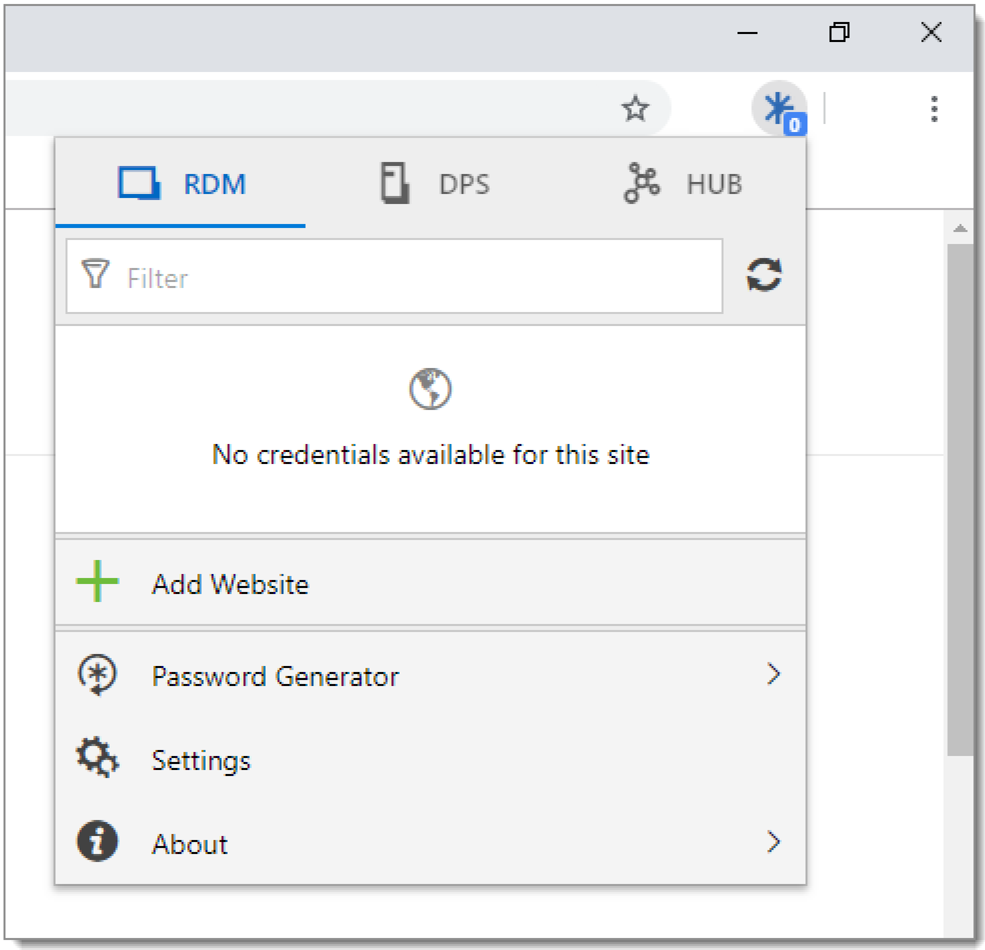
Devolutions Web Login Settings for Remote Desktop Manager

8.4.4 Keyboard Shortcuts

Here is the list of keyboard shortcuts available for Devolutions Web Login:

CTRL+SHIFT+Z

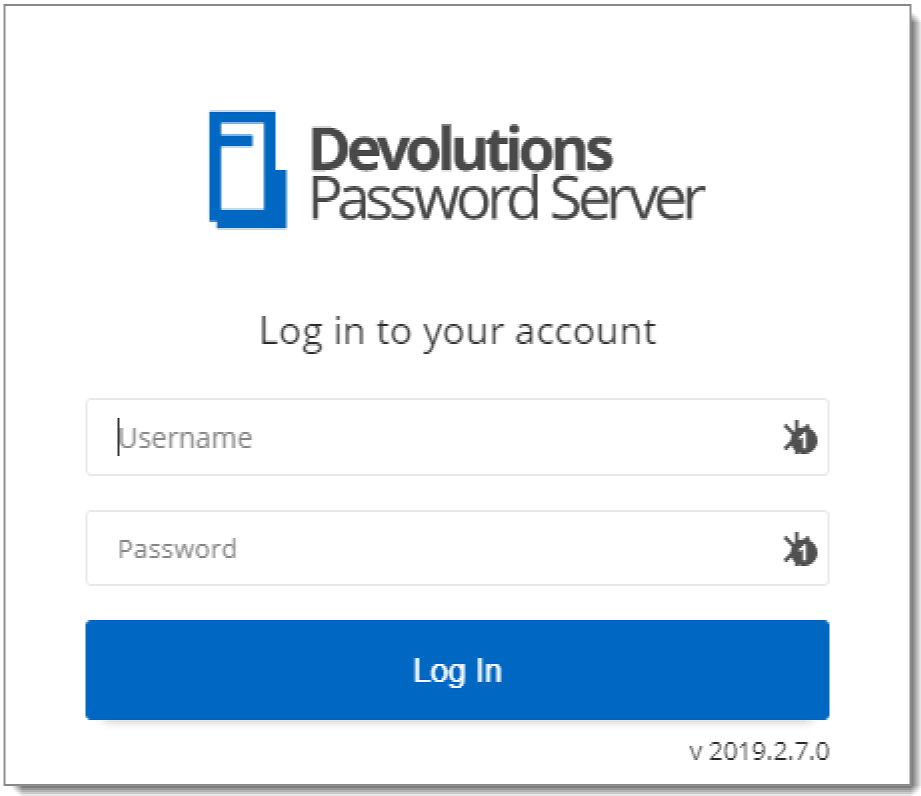
Use this key shortcut to open Devolutions Web Login window in your active browser.



Devolutions Web Login in Chrome

CTRL+SHIFT+Y

Use it to auto-fill your credential when only one is available for an entry.



One Credential Login with Devolutions Web Login

Role Based Access Control

Part IX

9 Role Based Access Control

DESCRIPTION

Remote Desktop Manager role-based access control allows to create a granular protection system that is quite flexible. However, flexibility comes at a price and sometimes making the wrong choices could increase the time involved in managing the system.

The following recommendations are based on our experience with the system and the ideas shared by our community. Follow these guidelines, as they will help you to use the role-based access control efficiently.

Here are the main key points of the role based access system:

- Security is inherited: child items and folders are covered by a parent folder's security.
- Permissions can be overridden: a permission set on a sub folder will override the parent item's permission.
- Permissions are granular: Multiple permissions can be set on entries at once.

ENHANCE THE SECURITY

While the role based access control is a great feature to secure access to entries, many other features can be used to add more security layers. For more information, please consult the following topics:

- Security Provider
- Credential repository
- Password Templates
- Two-factor authentication
- One-time password

SCENARIOS

Because of the great flexibility of our system, it becomes difficult to describe how to achieve the exact security system that matches your needs. For this reason, we have elected to describe the most popular systems that we have seen in use in our current community of users. We hope that one of them will closely match your needs. You can obviously mix and match the various strategies used in our scenarios to achieve your requirements.

Please consult the following:

- Simplified security
- Advanced security

ROLE CONFIGURATION

When using the role-based access control, roles are mostly used to control user access for multiple users at once.

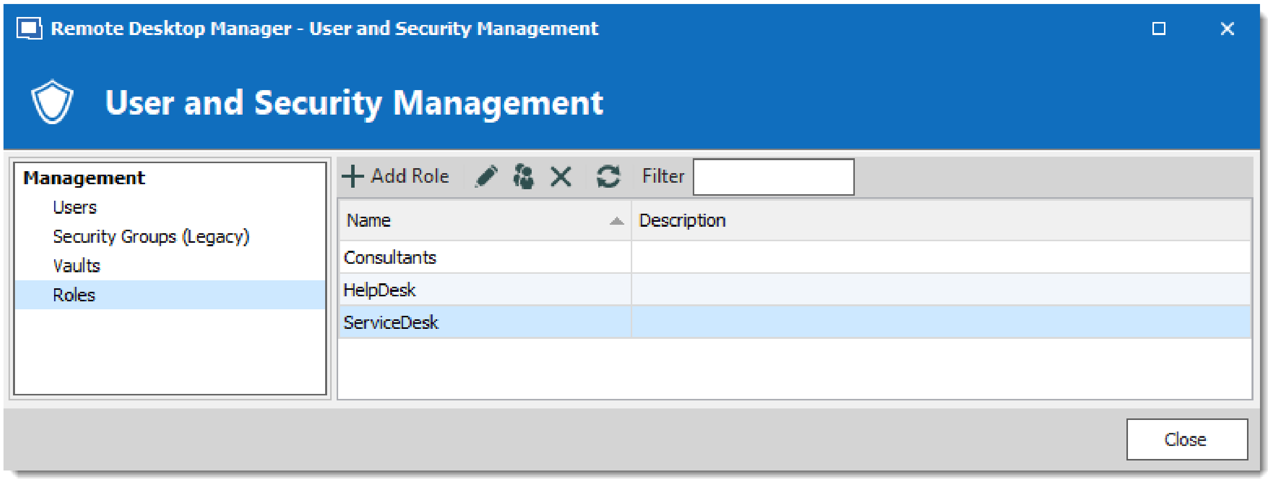
Common roles can be:

- Service Desk: a single point of contact to handle incidents, problems and questions from staff and customers. Provide an interface for activities such as change requests, software licences, configuration management, and more.
- Help Desk: manage, co-ordinate and resolve support requests.
- Consultants: employed externally on a temporary basis, they usually are read-only users and can use only a subset of entries.

To be more specific, we will use these team names in our scenarios.

CREATE THE ROLE

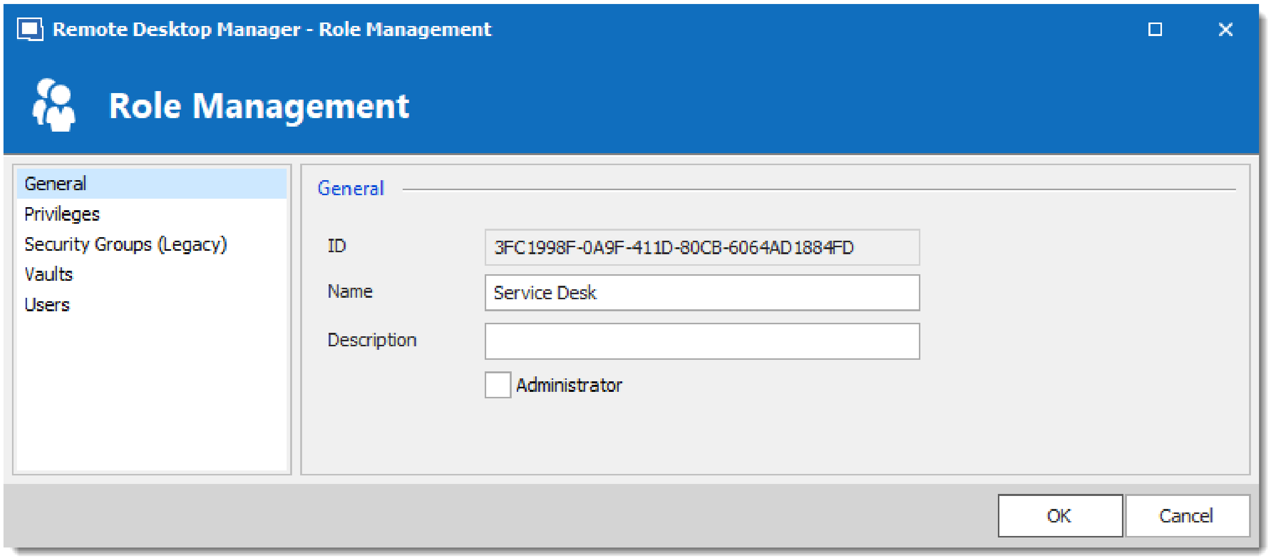
To create roles, navigate to ***Administration – Roles***, then click + **Add Role**.


Remote Desktop Manager - User and Security Management
User and Security Management
Management
Users
Security Groups (Legacy)
Vaults
Roles
Add Role
Filter
Close

Name	Description
Consultants	
HelpDesk	
ServiceDesk	

Create a Role

All settings can be left to default unless the role contains only administrators. In this case, check the **Administrator** box when configuring the role. Enter a **Name** for the role, then click **Ok**.



Remote Desktop Manager - Role Management

Role Management

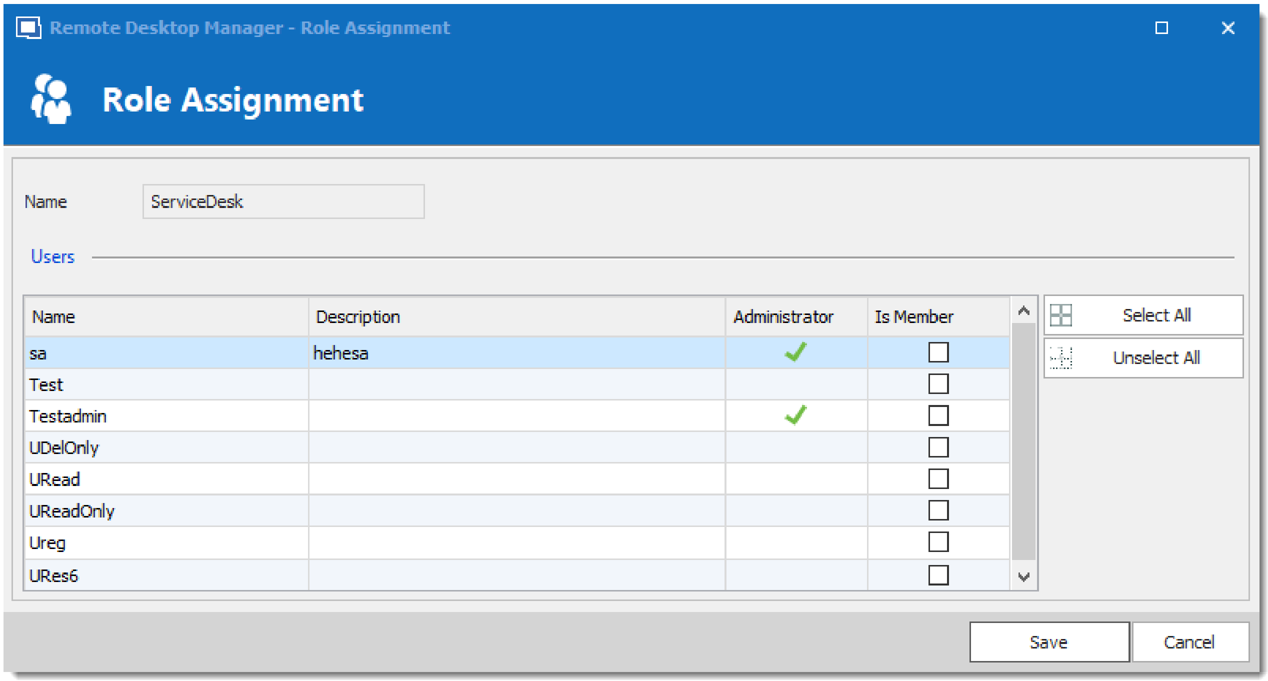
General

ID	3FC1998F-0A9F-411D-80CB-6064AD1884FD
Name	Service Desk
Description	

□ Administrator

Configure a Role

To assign users to the role, click , then check the **Is Member** box of the respective user.



Remote Desktop Manager - Role Assignment

Role Assignment

Name ServiceDesk

Users

Name	Description	Administrator	Is Member
sa	hehesa	✓	□
Test			□
Testadmin		✓	□
UDelOnly			□
URead			□
UReadOnly			□
Ureg			□
URes6			□

Assign a user to the Role

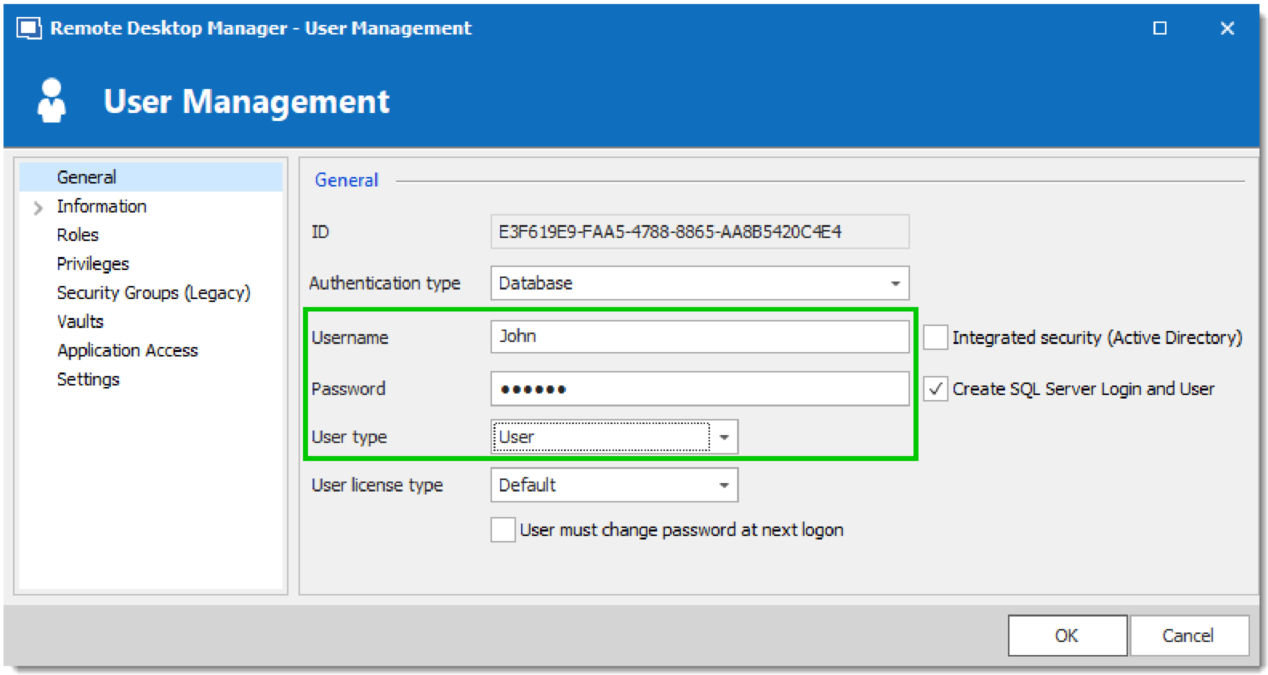
USER CONFIGURATION

USER TEMPLATE

It is possible to change the default user template. To do so, navigate to ***File – Options – Security – User Template***. These settings control the default settings of a new user. The best practice is to disable all privileges.

CREATE THE USER

To create users, navigate to ***Administration – Users***, then click + **Add User**. Enter a **Login** and **Password** for the user and select the **User type**.

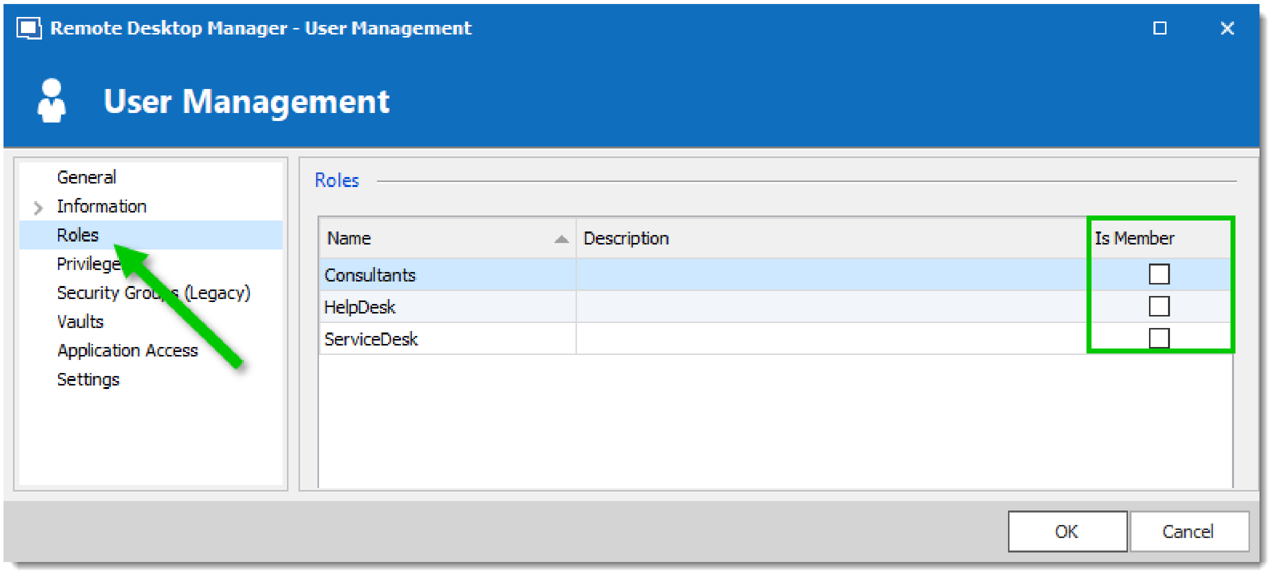


General

ID: E3F619E9-FAA5-4788-8865-AA8B5420C4E4
Authentication type: Database
Username: John
Password: ••••••
User type: User
User license type: Default
□ Integrated security (Active Directory)
☑ Create SQL Server Login and User
□ User must change password at next logon

Create a user

A user can be assigned to multiple roles at once by checking the **Is Member** box of the respective roles in the **Roles** section of the **User Management**.



Roles

Name	Description	Is Member
Consultants		□
HelpDesk		□
ServiceDesk		□

Assign a user to a Role

ADMINISTRATORS

Administrators can do everything, regardless of the security. These users are usually the chief officers and senior management.

RESTRICTED USERS

Restricted users have limited access to resources. They usually have the **Add** and **Edit** rights only. These users can be mid or first level executives, such as service desk and help desk.

USERS

Users also have limited access to resources much like Restricted users. However, Users have by default the **Add**, **Edit** and **Delete** rights and can perform these actions on all unsecured entries.

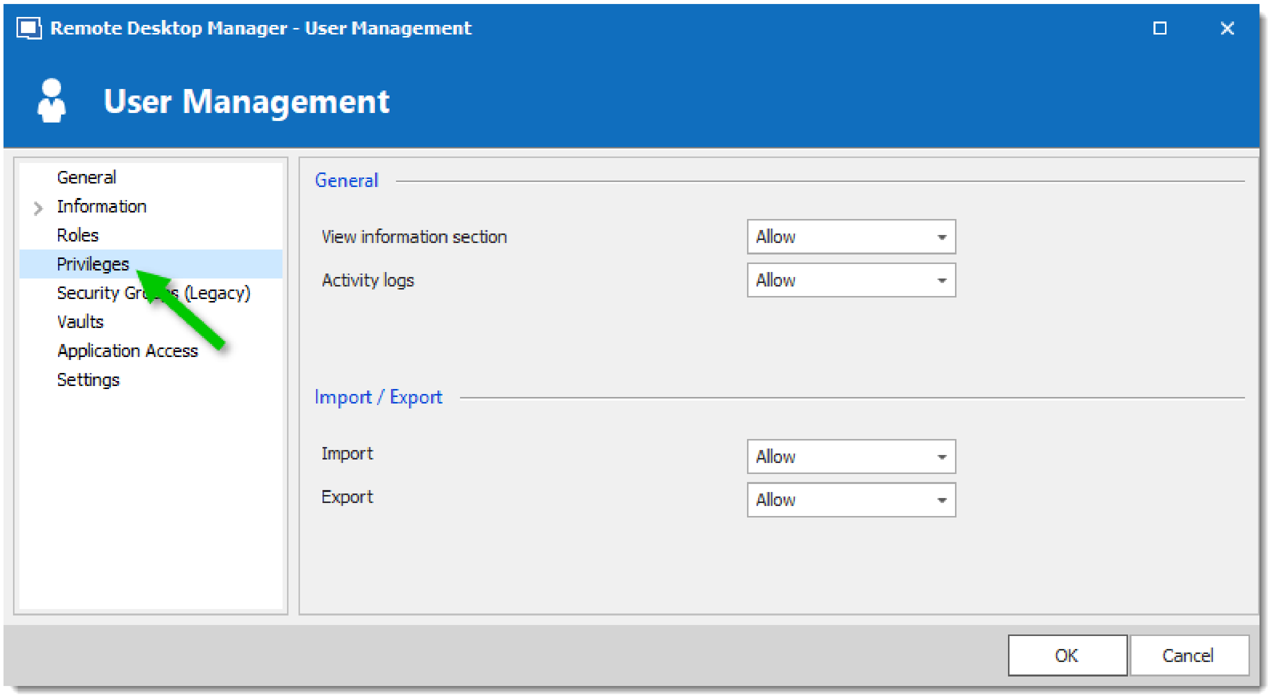
READ ONLY USERS

Read only users can only view and use resources, but cannot edit them. These users are usually external consultants.

SELECT THE APPROPRIATE USER TYPE

When creating users, some key points must be taken into consideration. Ask yourself the following questions while configuring a new user:

- Should they be able to access any resource without restriction? These are your **Administrators**.
- Should they be able to add, edit, or delete entries? A **User** would have all of these. Alternatively, you can select specific rights with **Restricted User**.
- Should they be able to see sensitive information, or import and export entries? **Read-Only** users are best used for those who should very limited access. You can also use the privilege tab for additional control over users.



General

View information section: Allow

Activity logs: Allow

Import / Export

Import: Allow

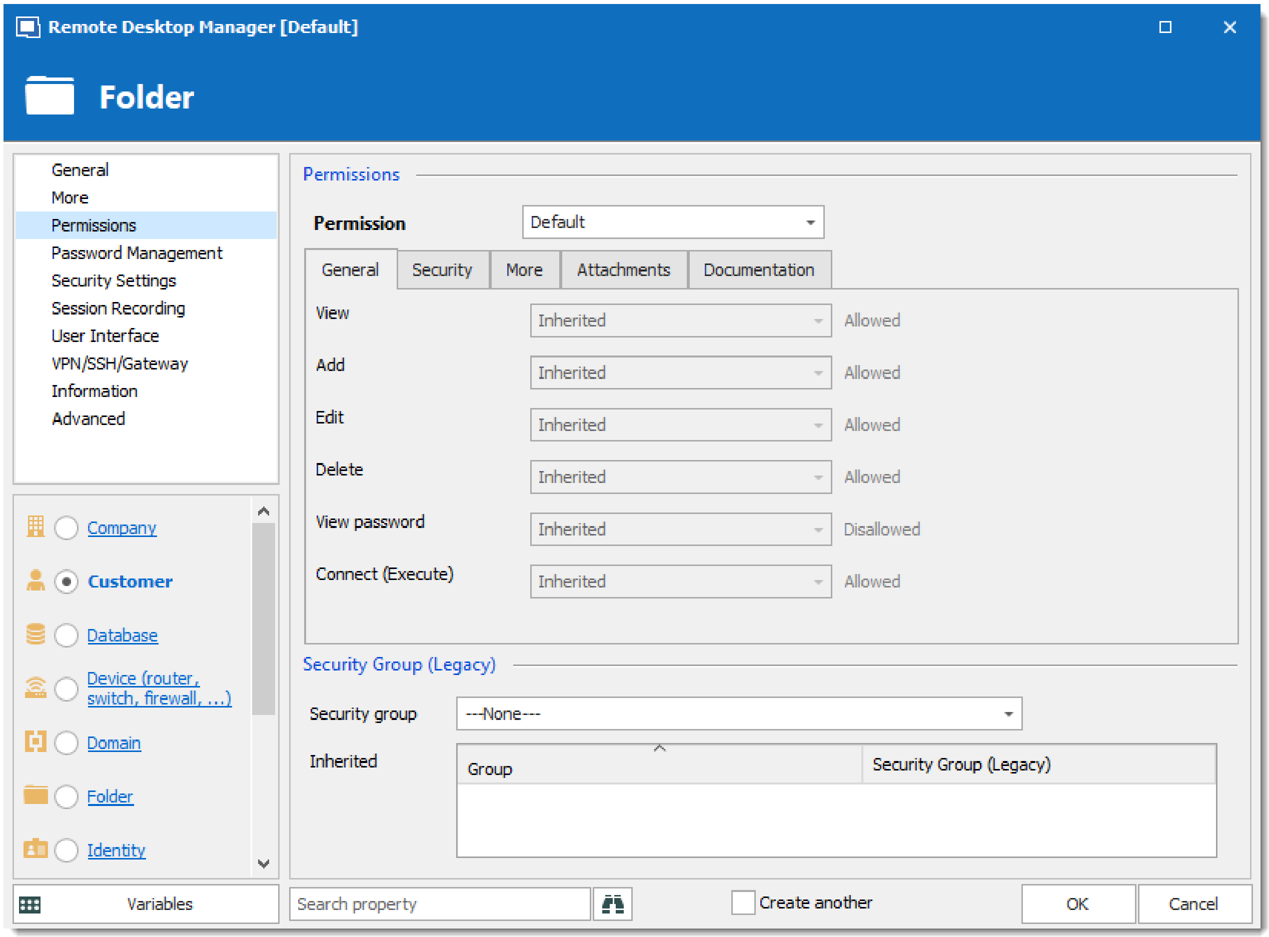
Export: Allow

User Management - Privileges

ENTRY CONFIGURATION

Access is granted or denied to users by setting permission on entries. Permissions can be set to users or roles. The best practice is to grant permissions to roles to control access for multiple users at once.

To set permissions on an entry, edit any entry, then navigate to the **Permissions** section.



Remote Desktop Manager [Default]

Folder

Permissions

Permission: Default

View	Inherited	Allowed
Add	Inherited	Allowed
Edit	Inherited	Allowed
Delete	Inherited	Allowed
View password	Inherited	Disallowed
Connect (Execute)	Inherited	Allowed

Security Group (Legacy)

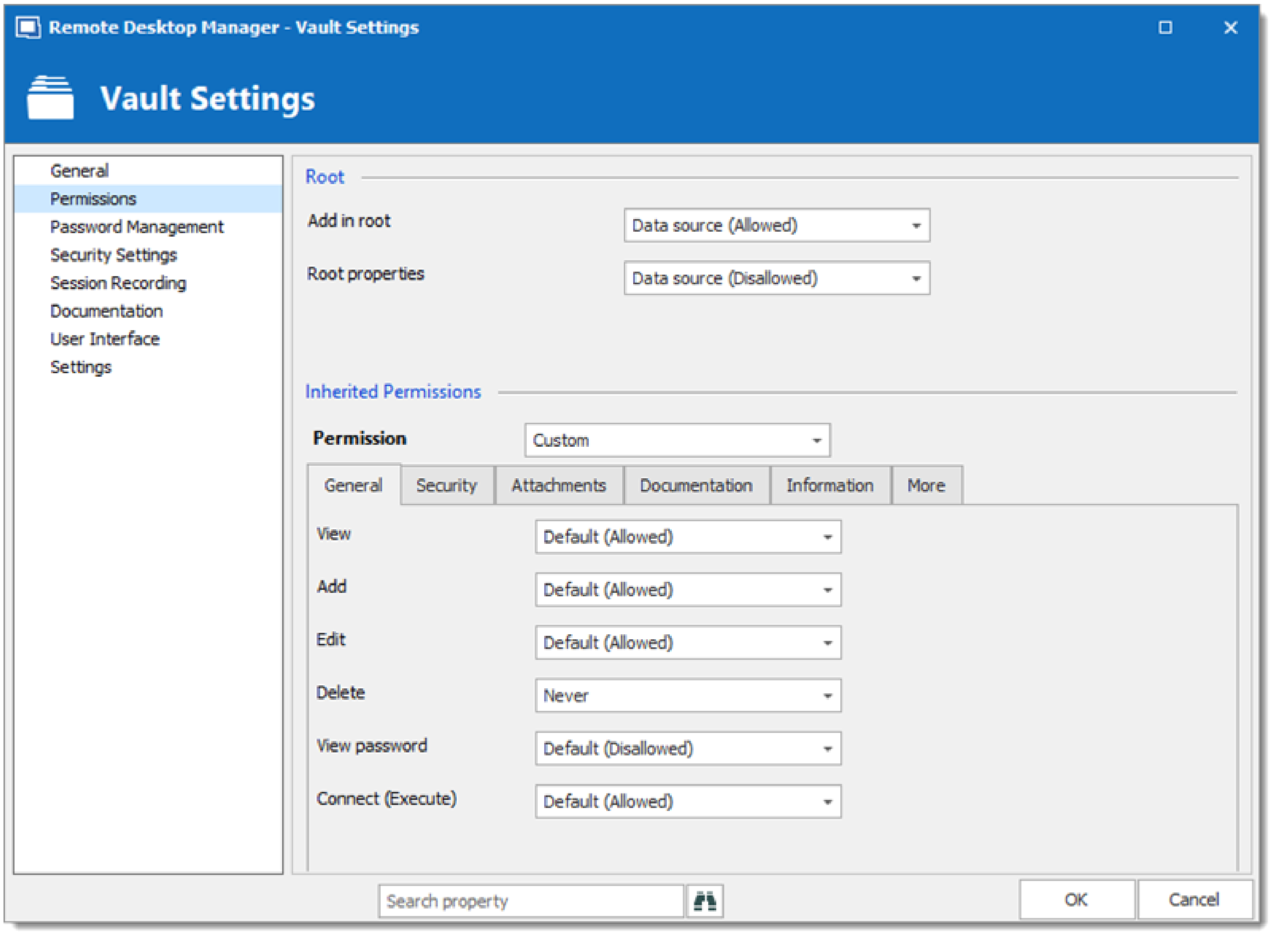
Security group: ---None---

Inherited

Group	Security Group (Legacy)

Entry's permissions

Permissions are usually set on folders, and apply to all child entries. A best practice is to set all the permissions of the vault root folder to **Never**. As a result, all permissions of all entries are denied by default.



Root

Add in root: Data source (Allowed)

Root properties: Data source (Disallowed)

Inherited Permissions

Permission: Custom

View: Default (Allowed)

Add: Default (Allowed)

Edit: Default (Allowed)

Delete: Never

View password: Default (Disallowed)

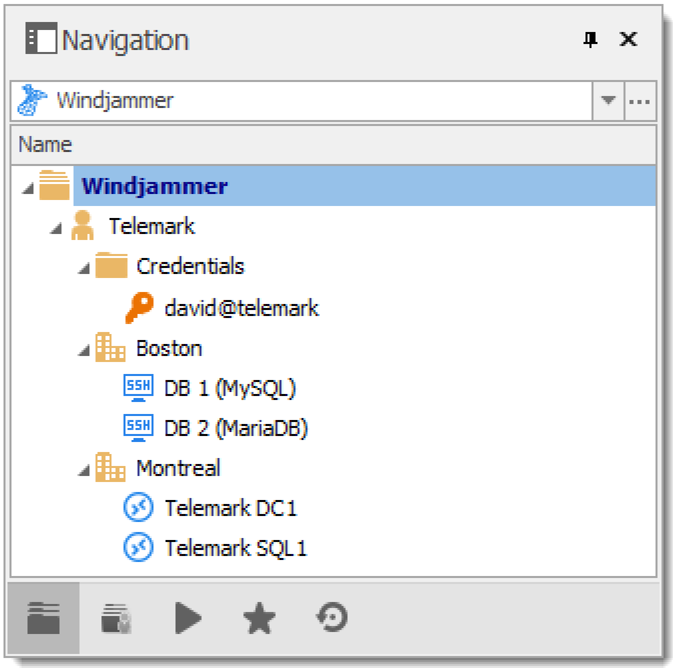
Connect (Execute): Default (Allowed)

Vault Root permissions

Access is denied to users by expressly granting the access to other users. In other words, all users that are not on the list of a permission have the access denied.

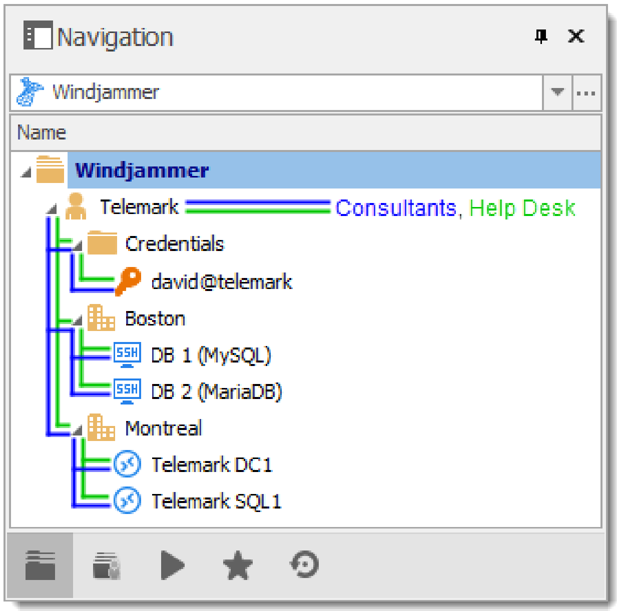
For a user to have access to a sub folder, the user must have at least the view permission on all parent folders.

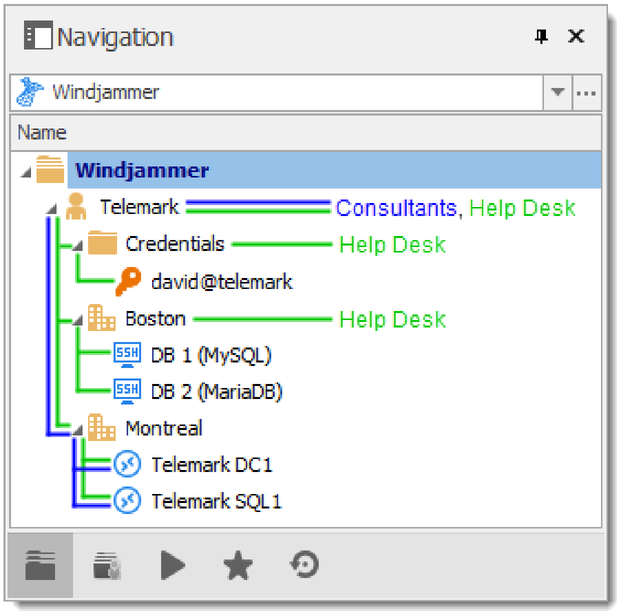
Consider the following structure:



There are three levels of folders: the vault root, Telemark, and child items of Telemark.

Suppose that a user, such as a consultant, must have access to the Montreal folder only. The consultant must be granted the view permission on the Telemark folder as well. However, granting the view access to the Telemark folder gives to the consultant the permissions to view all child items of Telemark. To deny the view permissions for the consultant on specific child items, the view permissions of these items must be expressly set for other users.





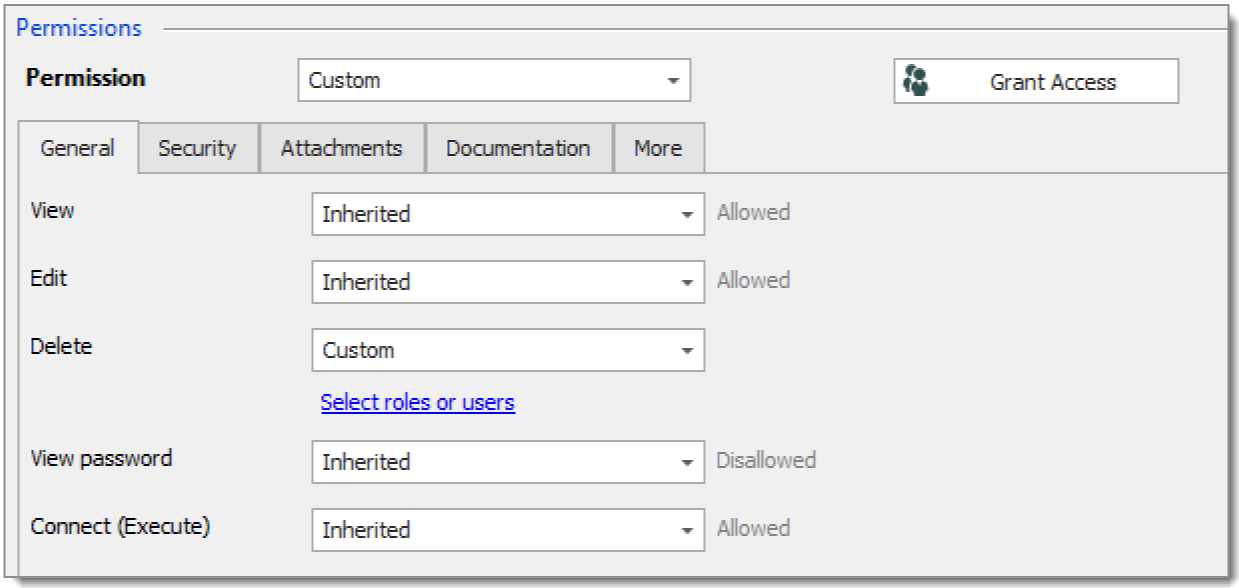
9.1 Permissions

DESCRIPTION

The Permissions window which is only available in an Advanced Data Source, can be found in every entry properties in the **Permissions** section.

The Role Based Access Control feature is not available using an Devolutions Online Database.

The role-based permissions system can give a very accurate control of the security. Here is an overview of the permissions window:



Permissions

Permission: Custom

View: Inherited — Allowed

Edit: Inherited — Allowed

Delete: Custom

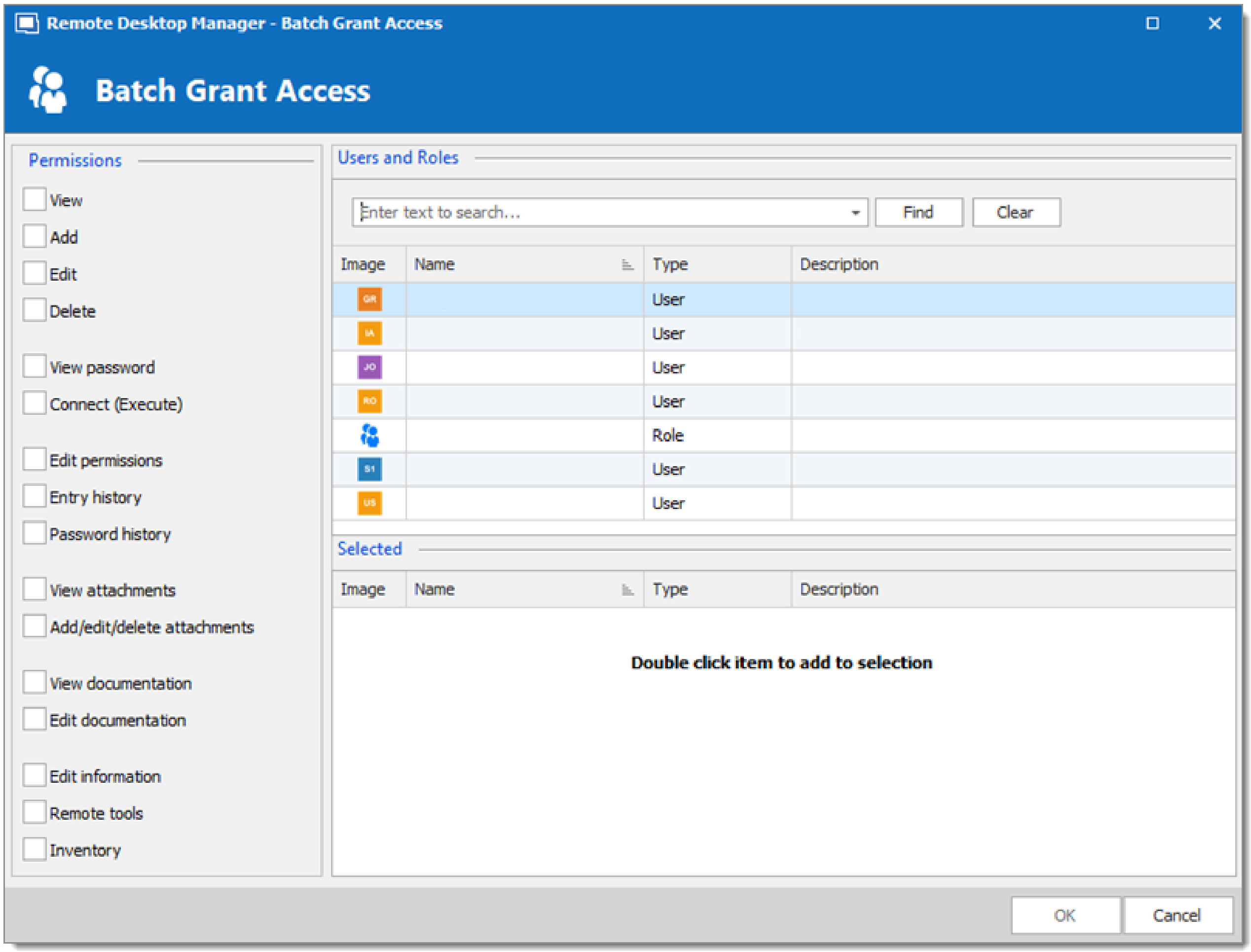
View password: Inherited — Disallowed

Connect (Execute): Inherited — Allowed

Permissions panel

OPTION	DESCRIPTION
Permission	Sets the permission mode. Select between: • **Inherited (Default)**: will inherit the permissions from the parent groups. • **Custom**: lets you specify a custom value for each of the permission. • **Everyone**: everyone will be granted all the permissions below. • **Never**: no one but the administrators will be granted the permission.

OPTION	DESCRIPTION
Grant Access	Allows batch granting access to a specific entry or entries.
Inherited values	Indicates what is inherited from parent groups.
Select roles or users	Lets you select Users / Roles to be granted the permission. Available only if the permission is set to **Custom**.



□ View
□ Add
□ Edit
□ Delete
□ View password
□ Connect (Execute)
□ Edit permissions
□ Entry history
□ Password history
□ View attachments
□ Add/edit/delete attachments
□ View documentation
□ Edit documentation
□ Edit information
□ Remote tools
□ Inventory

Image	Name	Type	Description
GR		User	
IA		User	
JO		User	
RO		User	
		Role	
S1		User	
US		User	

Batch Grant Access

For more details on each permission, please consult our Common Settings - Permission topic.

9.2 Scenarios

9.2.1 Simplified Security

DESCRIPTION

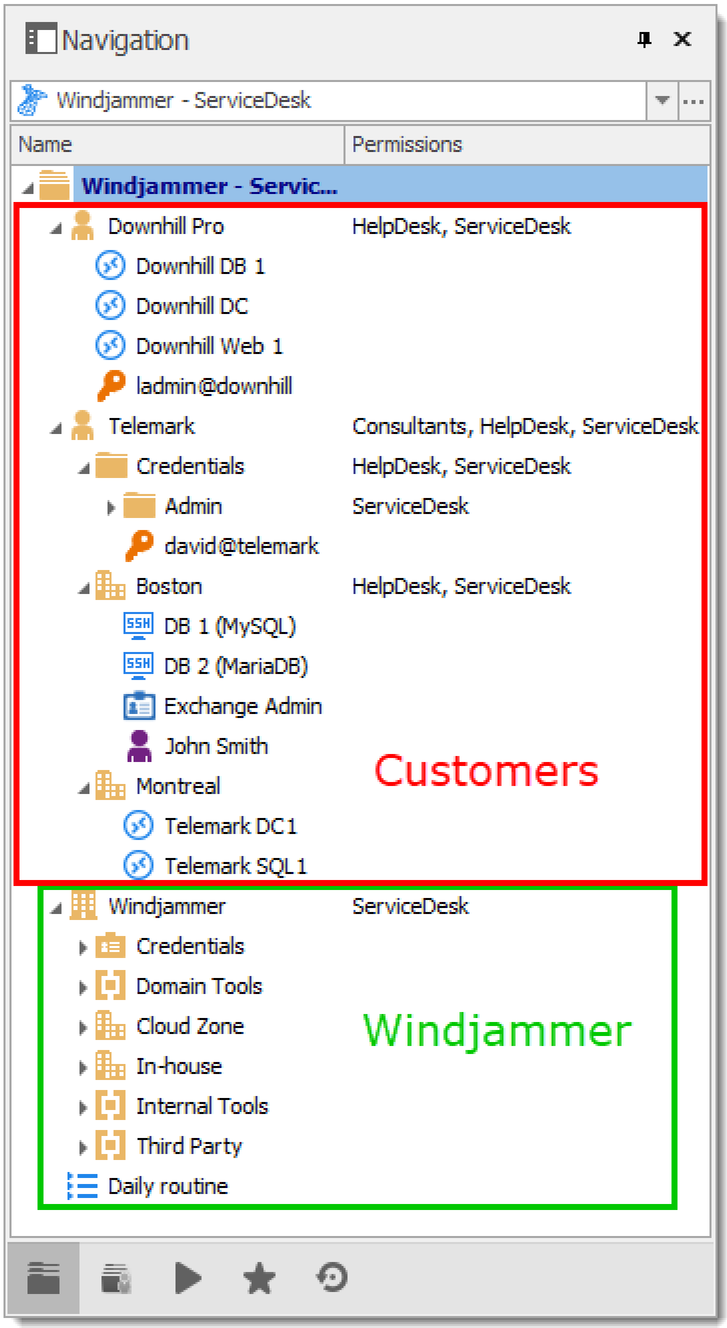
> This feature is only available when using an Advanced Data Source.

> While the following scenario is relevant for small to medium enterprises, it is not recommended for a larger business. For a scenario more suited for large enterprises, please consult the Advanced Security scenario.

Watch Video

Our fictional company, Windjammer, has four roles: HelpDesk, ServiceDesk, Administrations, and Consultants. There are two client companies: Downhill Pro and Telemark.

The following tree structure represents entries which users have access to once all permissions are set:

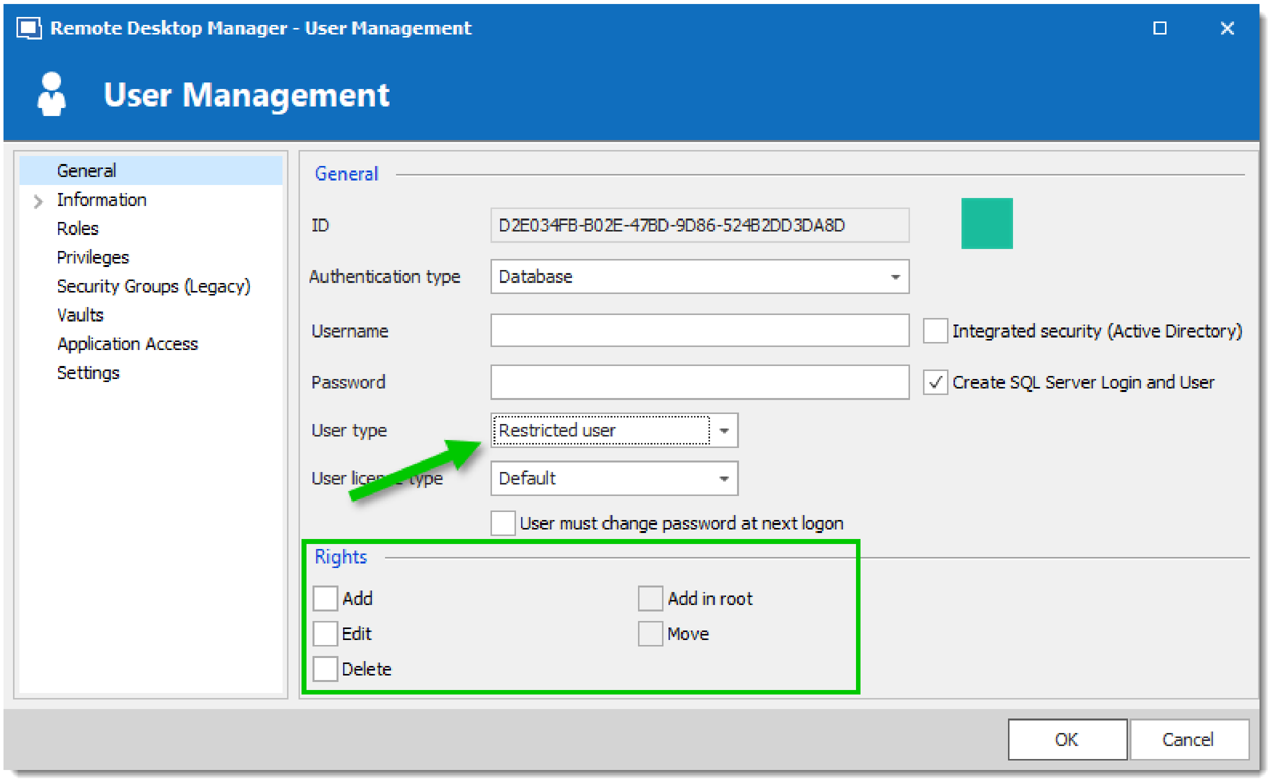


Name	Permissions
Windjammer - Servic...	
Downhill Pro	HelpDesk, ServiceDesk
Downhill DB 1	
Downhill DC	
Downhill Web 1	
ladmin@downhill	
Telemark	Consultants, HelpDesk, ServiceDesk
Credentials	HelpDesk, ServiceDesk
Admin	ServiceDesk
david@telemark	
Boston	HelpDesk, ServiceDesk
DB 1 (MySQL)	
DB 2 (MariaDB)	
Exchange Admin	
John Smith	
Montreal	
Telemark DC1	
Telemark SQL1	
Windjammer	ServiceDesk
Credentials	
Domain Tools	
Cloud Zone	
In-house	
Internal Tools	
Third Party	
Daily routine	

USER CONFIGURATION

Here is an example for user configuration. To create users, navigate to ***Administration – Users – Add User***.

The following rights selection is available when setting a user to **Restricted user**.



Remote Desktop Manager - User Management

User Management

General

ID: D2E034FB-B02E-47BD-9D86-524B2DD3DA8D

Authentication type: Database

Username:

□ Integrated security (Active Directory)

Password:

☑ Create SQL Server Login and User

User type: Restricted user

User license type: Default

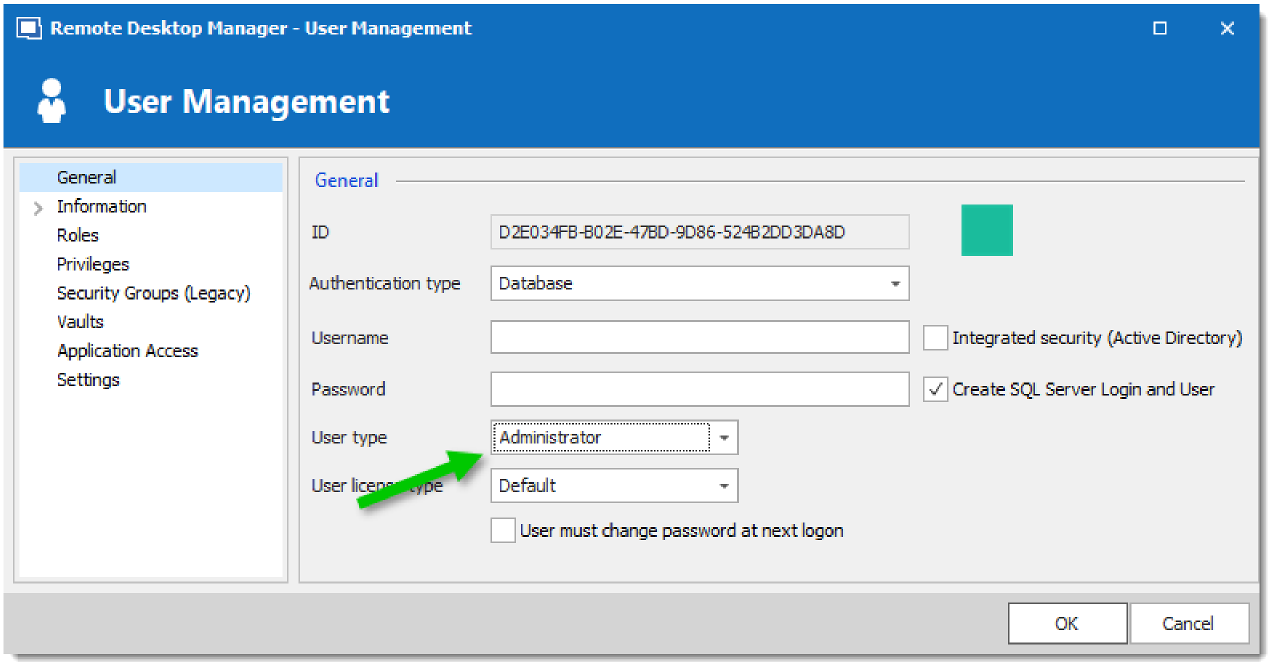
□ User must change password at next logon

Rights

□ Add
□ Add in root
□ Edit
□ Move
□ Delete

User Management - Permissions Section

Administrators: administrators have a lot more access than regular users. When creating these users, set the User type to **Administrator** to give them access to everything. The administrator can access all entries, regardless of permissions.



Remote Desktop Manager - User Management

User Management

General

ID: D2E034FB-B02E-47BD-9D86-524B2DD3DA8D

Authentication type: Database

Username:

□ Integrated security (Active Directory)

Password:

☑ Create SQL Server Login and User

User type: Administrator

User license type: Default

□ User must change password at next logon

User Management - Administrator

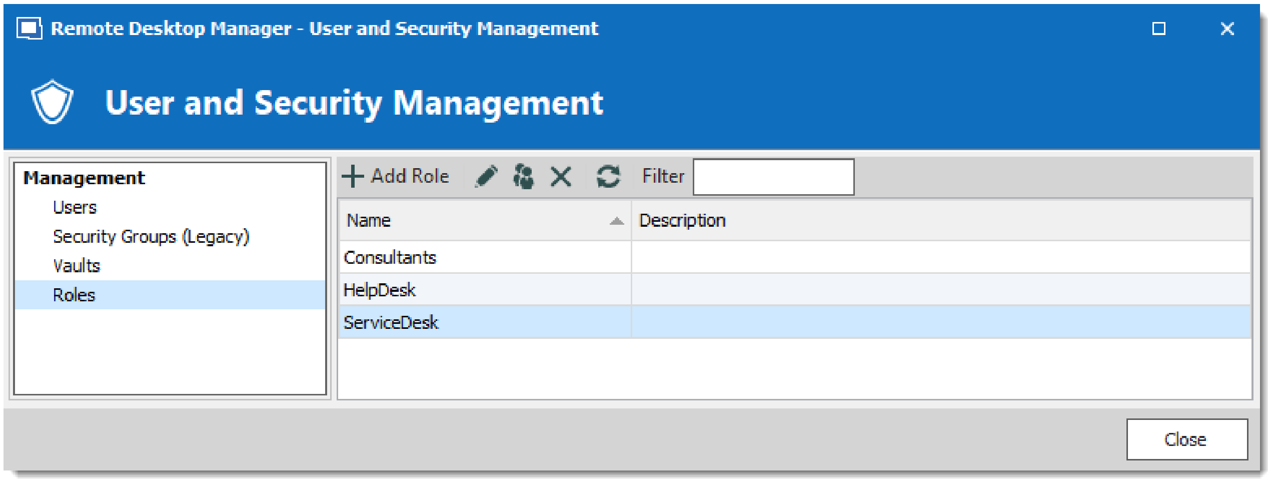
Regular users (User): these users have fewer rights than administrators. They essentially have all the basic rights (except for **View Password**) but are susceptible to all denied permissions. Later, we will deny these rights by specifying which users can actually perform these actions.

Consultants: consultants can only view a subset of entries, we will set those as **Read-Only**. They cannot add, edit or otherwise affect the information in any way.

ROLES CONFIGURATION

Now that the users are created, we will add the roles which we will later grant the permissions to. We need to create the roles to assign users to them. There is no need to grant any privileges to these roles.

- ServiceDesk
- HelpDesk
- Consultants


Remote Desktop Manager - User and Security Management
User and Security Management
Management
Users
Security Groups (Legacy)
Vaults
Roles
Add Role
Filter
Close

Name	Description
Consultants	
HelpDesk	
ServiceDesk	

User and Security Management - Roles

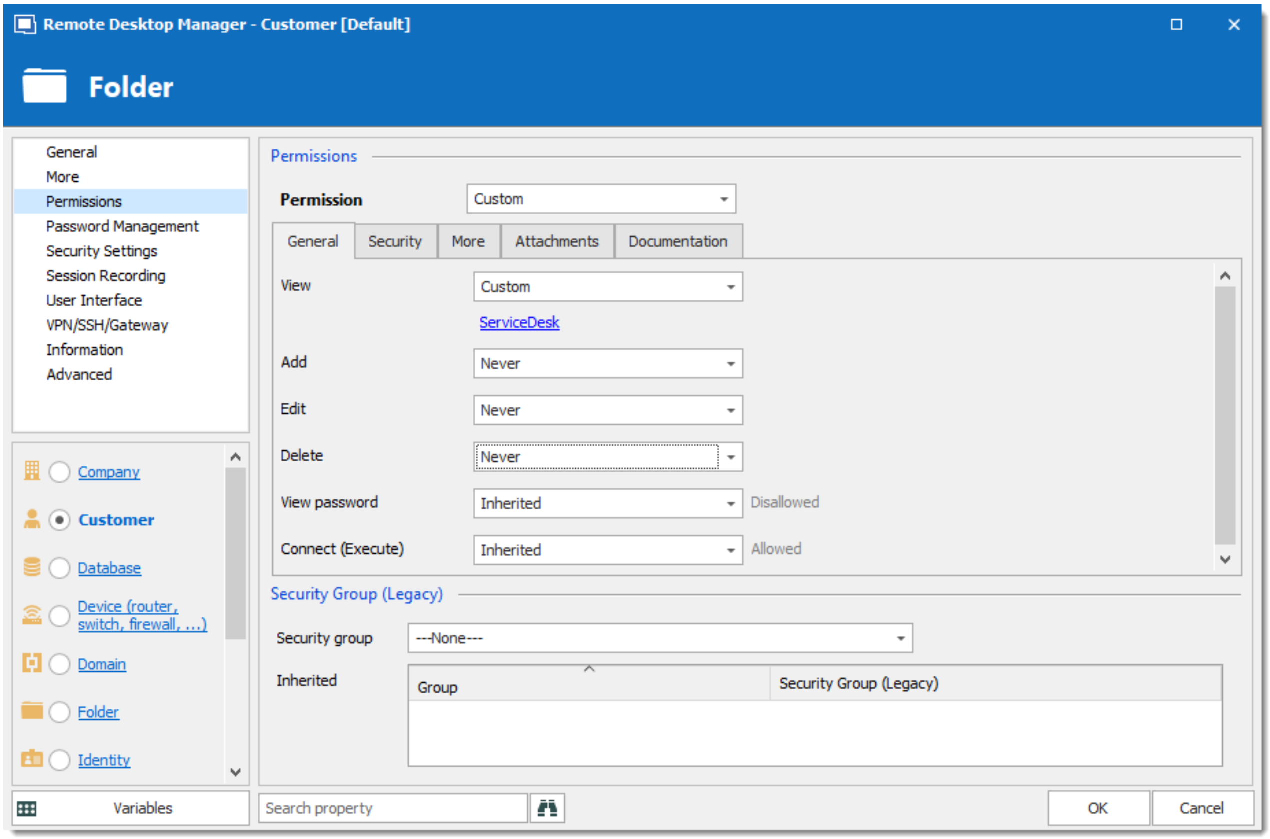
ENTRIES CONFIGURATION

Now, everything is ready to grant or deny access to the roles.

- The ServiceDesk will have the permission to view and open all entries but will be able to edit only the entries in the customer groups/folders.
- The HelpDesk will have the permission to view and open entries in the customer groups/folders only and will not be able to edit them.
- The Consultants will have the permission to view and open entries in the Montreal folder only but will not be able to edit it nor its child items.

We will begin with the vault root level folders: Downhill Pro, Telemark and Windjammer.

The permission to view the Windjammer folder will be set for the ServiceDesk only since we want them to be able to use its child entries. We don’t want the ServiceDesk to add or edit anything. We will set the **Add**, **Edit** and **Delete** permissions to **Never**. Only the administrator will be able to add or edit entries in the Windjammer folder.



Permissions

Permission: Custom

View: Custom
ServiceDesk

Add: Never

Edit: Never

Delete: Never

View password: Inherited Disallowed

Connect (Execute): Inherited Allowed

Security Group (Legacy)

Security group: ---None---

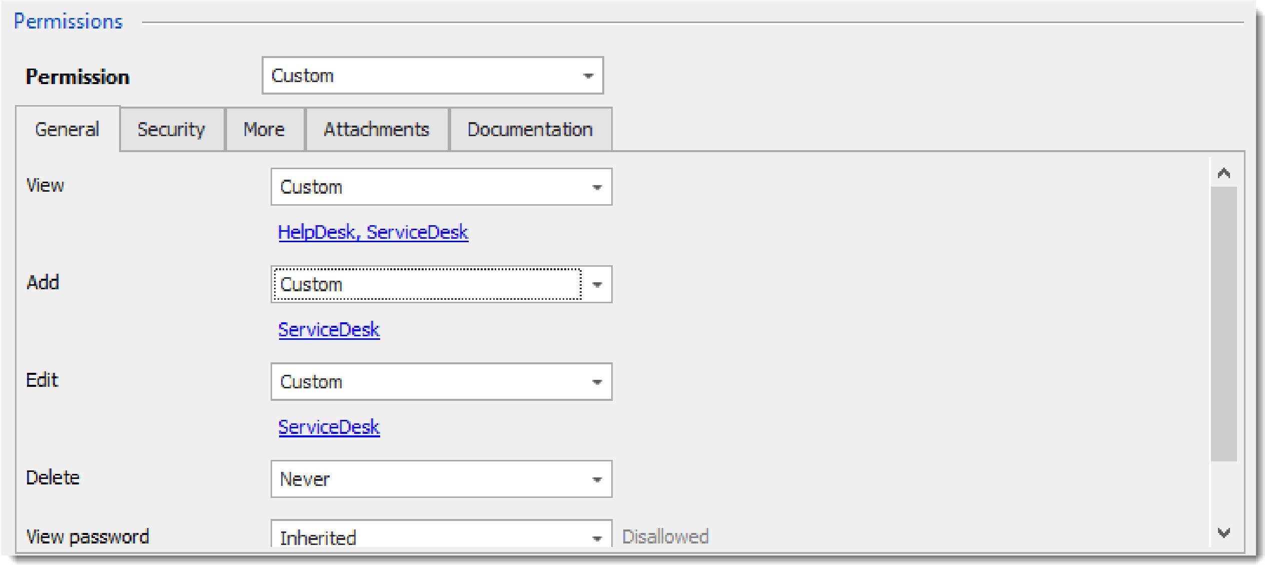
Inherited

Group	Security Group (Legacy)

Windjammer - Permissions

- **View**: **Custom**; ServiceDesk.
- **Add**: **Never**; Only the administrator can add entries.
- **Edit**: **Never**; Only the administrator can edit entries.
- **Delete**: **Never**; Only the administrator can delete entries.

For Downhill Pro, we will grant permissions to the ServiceDesk and the HelpDesk.



Permissions

Permission: Custom

View: Custom
HelpDesk, ServiceDesk

Add: Custom
ServiceDesk

Edit: Custom
ServiceDesk

Delete: Never

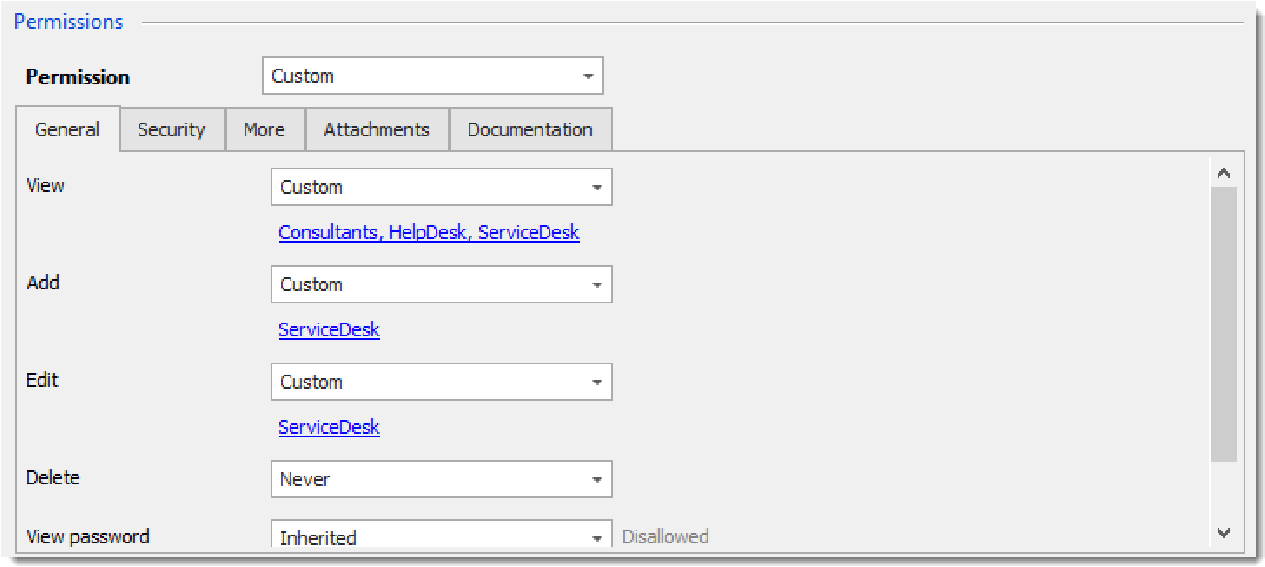
View password: Inherited Disallowed

Downhill Pro - Permissions

- **View**: **Custom**; HelpDesk, ServiceDesk.
- **Add**: **Custom**; ServiceDesk.
- **Edit**: **Custom**; ServiceDesk.
- **Delete**: **Never**; Only the administrator can delete entries.

We already have a good example of the flexibility of Remote Desktop Manager's Security. A ServiceDesk user can view and use all the entries in the Downhill Pro folder, even the credential entries, but it will never be able to see any password since View Password is Disallowed (from the vault root folder).

Next, for the Telemark folder, we will grant permissions to the ServiceDesk, the HelpDesk and the Consultants. This is where things get complex. If we want the Consultants to be able to view only the Montreal folder which is a child item of Telemark, we must grant to consultants the permission to view the entire Telemark content. Then we will grant permissions on child items only to the role that should have access to these items. This last step will deny the view permission for the consultants on the child items.



Permission: Custom

View: Custom
Consultants, HelpDesk, ServiceDesk

Add: Custom
ServiceDesk

Edit: Custom
ServiceDesk

Delete: Never

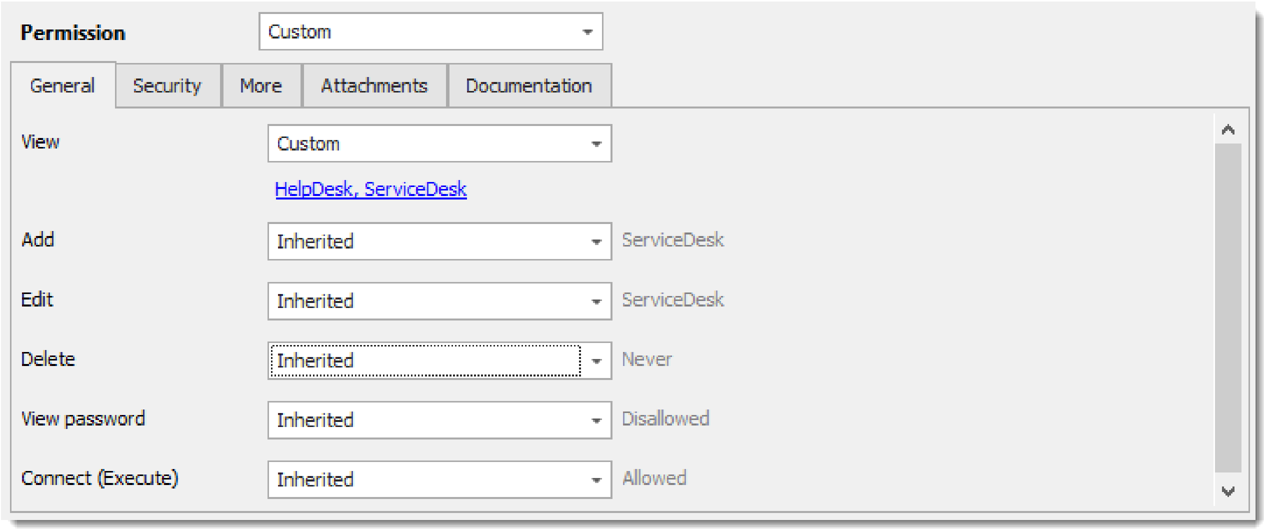
View password: Inherited Disallowed

Telemark - Permissions

- **View**: **Custom**; Consultants, HelpDesk, ServiceDesk.
- **Add**: **Custom**; ServiceDesk.
- **Edit**: **Custom**; ServiceDesk.
- **Delete**: **Never**; Only the administrator can delete entries.

Since we want the users to be able to use the credential entries, we will grant the ServiceDesk and the HelpDesk the permission to view the Credentials folder. This way, the ServiceDesk and HelpDesk will be able to use the entries in the folder without revealing the passwords. Therefore, by specifying that only the HelpDesk and ServiceDesk have the **View** permission, we deny the view access to any role or user that is not in the list of the permission.

The **Add**, **Edit** and **Delete** permissions can be left to **Inherited** since they inherit the settings from the Telemark parent folder. The ServiceDesk is the only role that has been granted the **Add** and **Edit** permission in the parent folder and the **Delete** permission inherits the Never setting.



Permission: Custom

View: Custom
HelpDesk, ServiceDesk

Add: Inherited — ServiceDesk

Edit: Inherited — ServiceDesk

Delete: Inherited — Never

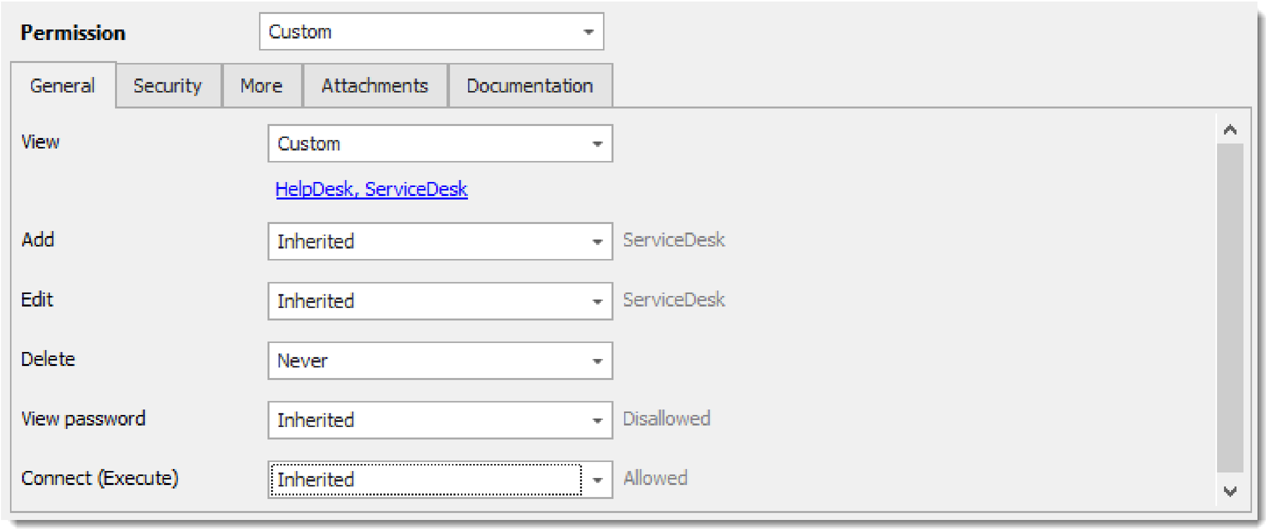
View password: Inherited — Disallowed

Connect (Execute): Inherited — Allowed

Telemark\Credentials - Permissions

- **View**: **Custom**; HelpDesk, ServiceDesk.
- **Add**: **Inherited**; ServiceDesk inherited from Telemark folder.
- **Edit**: **Inherited**; ServiceDesk inherited from Telemark folder.
- **Delete**: **Inherited**; Never inherited from Telemark folder.

We want the ServiceDesk to be able to use the Domain Admin credential entry as well but not the HelpDesk. For this we must grant the **View** permission to the ServiceDesk. The ServiceDesk will still be able to edit the credential entry but will never see the password. The delete permission is set to **Never**.



Permission: Custom

View: Custom
HelpDesk, ServiceDesk

Add: Inherited — ServiceDesk

Edit: Inherited — ServiceDesk

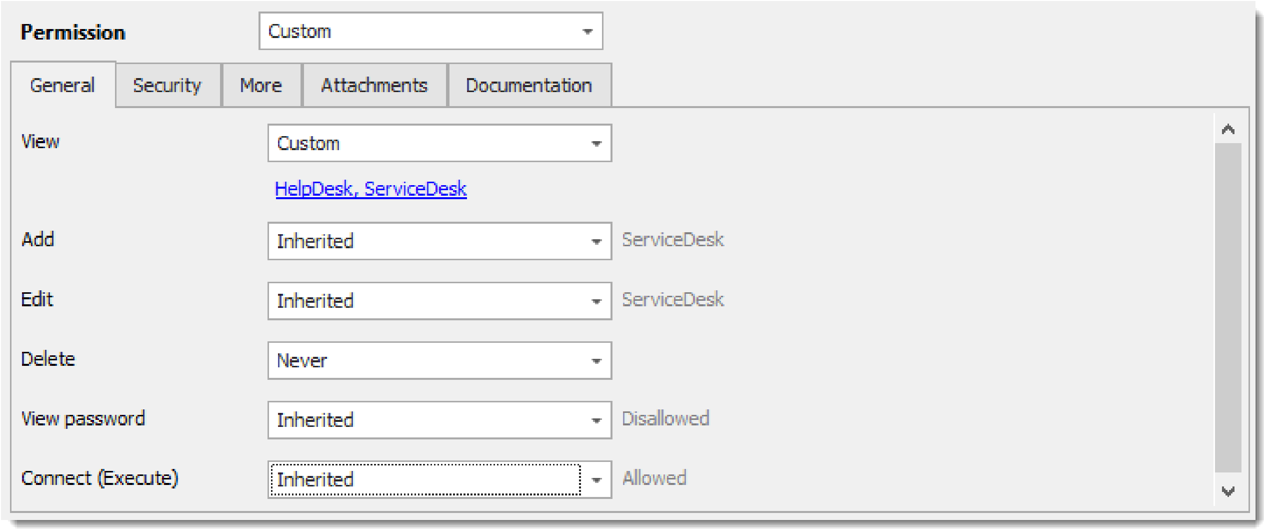
Delete: Never

View password: Inherited — Disallowed

Connect (Execute): Inherited — Allowed

The last step for the Telemark child items is to set the **View** permission to the ServiceDesk and the HelpDesk on the Boston folder and leave every other permission of this folder to **Default**.

This denies the Consultants to view the Boston folder. Now, the Consultants will be able to view and open entries only in the Montreal folder.



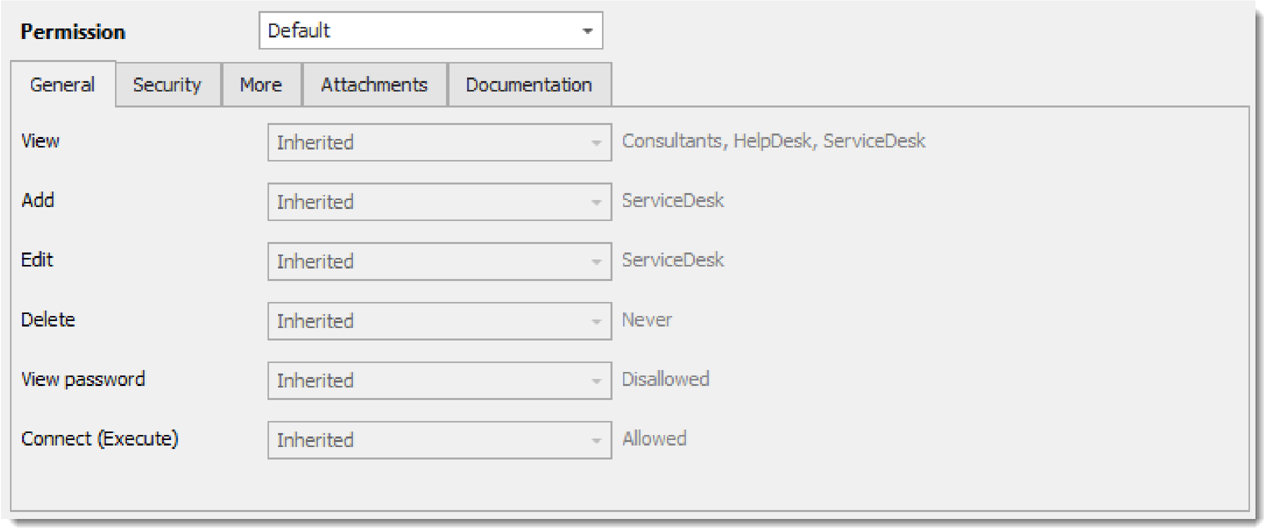
Permission: Custom

View	Custom	HelpDesk, ServiceDesk
Add	Inherited	ServiceDesk
Edit	Inherited	ServiceDesk
Delete	Never	
View password	Inherited	Disallowed
Connect (Execute)	Inherited	Allowed

Telemark\Boston - Permissions

Every time a new folder is added, the **View** permission must be set for ServiceDesk and HelpDesk to hide the new folder and its content from the Consultants.

No need to set any permissions on the Montreal folder, since they are inherited from the parent folders.



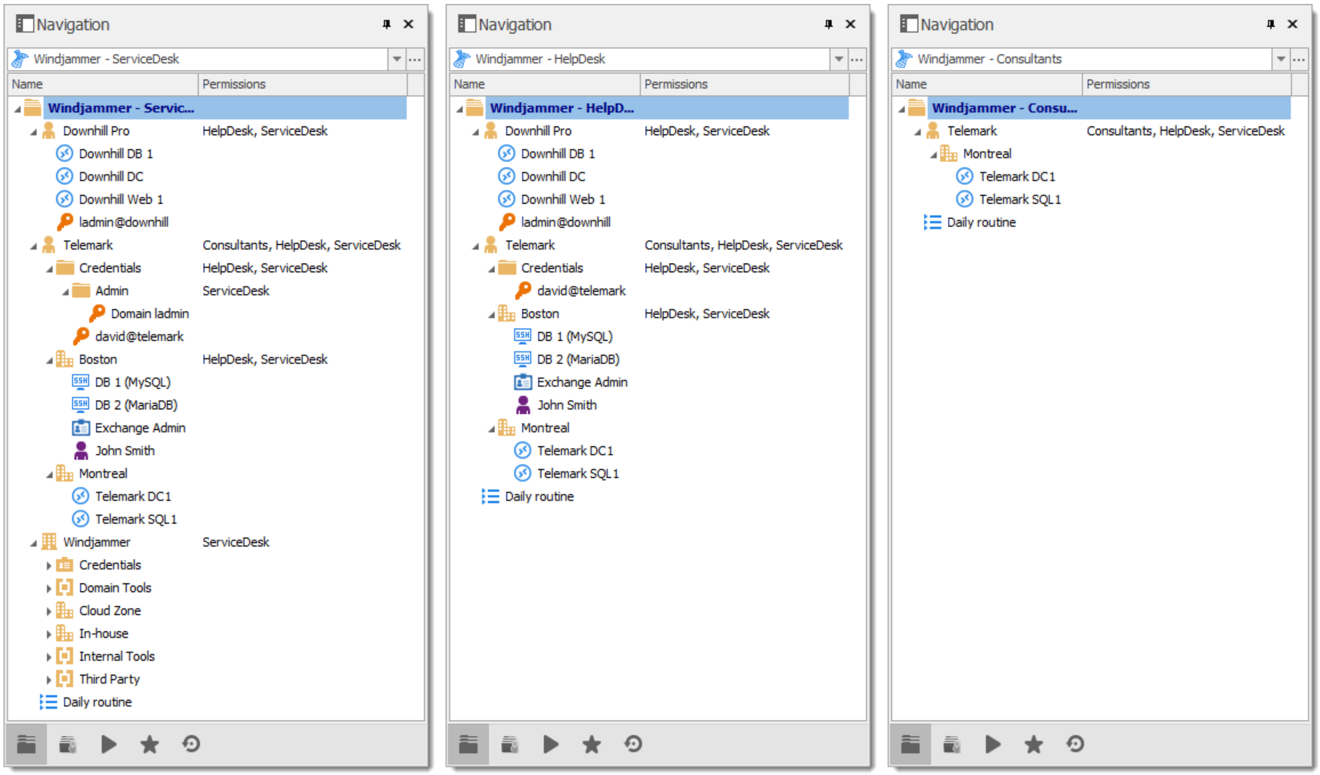
Permission: Default

View	Inherited	Consultants, HelpDesk, ServiceDesk
Add	Inherited	ServiceDesk
Edit	Inherited	ServiceDesk
Delete	Inherited	Never
View password	Inherited	Disallowed
Connect (Execute)	Inherited	Allowed

Telemark\Montreal - Permissions

IN CONCLUSION

The permissions are now correctly set. Note that every entry added at vault root level will have no security by default. This means they would be available for anyone, even the consultants. This can be confirmed by looking at the screenshot below in which the entry **Daily routine** is available for everyone. Here is what each user should see in the tree view:



Name	Permissions
Windjammer - Servic...	
Downhill Pro	HelpDesk, ServiceDesk
Downhill DB 1	
Downhill DC	
Downhill Web 1	
ladmin@downhill	
Telemark	Consultants, HelpDesk, ServiceDesk
Credentials	HelpDesk, ServiceDesk
Admin	ServiceDesk
Domain ladmin	
david@telemark	
Boston	HelpDesk, ServiceDesk
DB 1 (MySQL)	
DB 2 (MariaDB)	
Exchange Admin	
John Smith	
Montreal	
Telemark DC1	
Telemark SQL1	
Windjammer	ServiceDesk
Credentials	
Domain Tools	
Cloud Zone	
In-house	
Internal Tools	
Third Party	
Daily routine	

Name	Permissions
Windjammer - HelpD...	
Downhill Pro	HelpDesk, ServiceDesk
Downhill DB 1	
Downhill DC	
Downhill Web 1	
ladmin@downhill	
Telemark	Consultants, HelpDesk, ServiceDesk
Credentials	HelpDesk, ServiceDesk
david@telemark	
Boston	HelpDesk, ServiceDesk
DB 1 (MySQL)	
DB 2 (MariaDB)	
Exchange Admin	
John Smith	
Montreal	
Telemark DC1	
Telemark SQL1	
Daily routine	

Name	Permissions
Windjammer - Consu...	
Telemark	Consultants, HelpDesk, ServiceDesk
Montreal	
Telemark DC1	
Telemark SQL1	
Daily routine	

Side by Side Tree View

You can further customize your permissions by using the **Security Settings** tab when editing entries, or the **Logs** tab to add more traces of coming and goings. As always, great care must be taken when granting permissions.

If you need more details on each permission, please consult our Common Settings – Permissions topic.

9.2.2 Advanced Security

DESCRIPTION

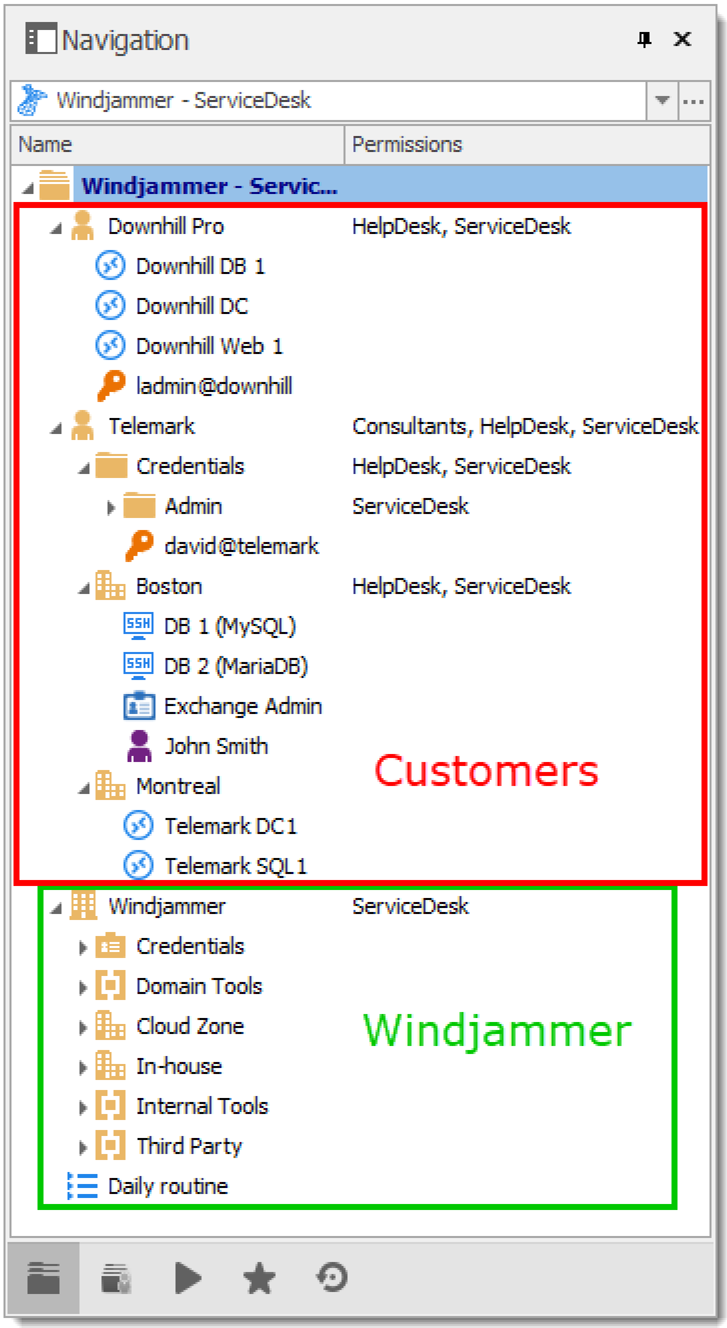
> This feature is only available when using an Advanced Data Source.

The following scenario is designed for large enterprises. For a scenario more suited for small enterprises, please consult our Simplified Security scenario.

While this example fits for large enterprises, please keep in mind that any privilege should be granted only as necessary. Be careful when granting permissions to a user or a role.

Our fictional company, Windjammer, has three roles: HelpDesk, ServiceDesk, and Consultants. There are two client companies: Downhill Pro and Telemark.

The following tree view structure represents entries which users have access to once all permissions are set:



Name	Permissions
Windjammer - Servic...	
Downhill Pro	HelpDesk, ServiceDesk
Downhill DB 1	
Downhill DC	
Downhill Web 1	
ladmin@downhill	
Telemark	Consultants, HelpDesk, ServiceDesk
Credentials	HelpDesk, ServiceDesk
Admin	ServiceDesk
david@telemark	
Boston	HelpDesk, ServiceDesk
DB 1 (MySQL)	
DB 2 (MariaDB)	
Exchange Admin	
John Smith	
Montreal	
Telemark DC1	
Telemark SQL1	
Windjammer	ServiceDesk
Credentials	
Domain Tools	
Cloud Zone	
In-house	
Internal Tools	
Third Party	
Daily routine	

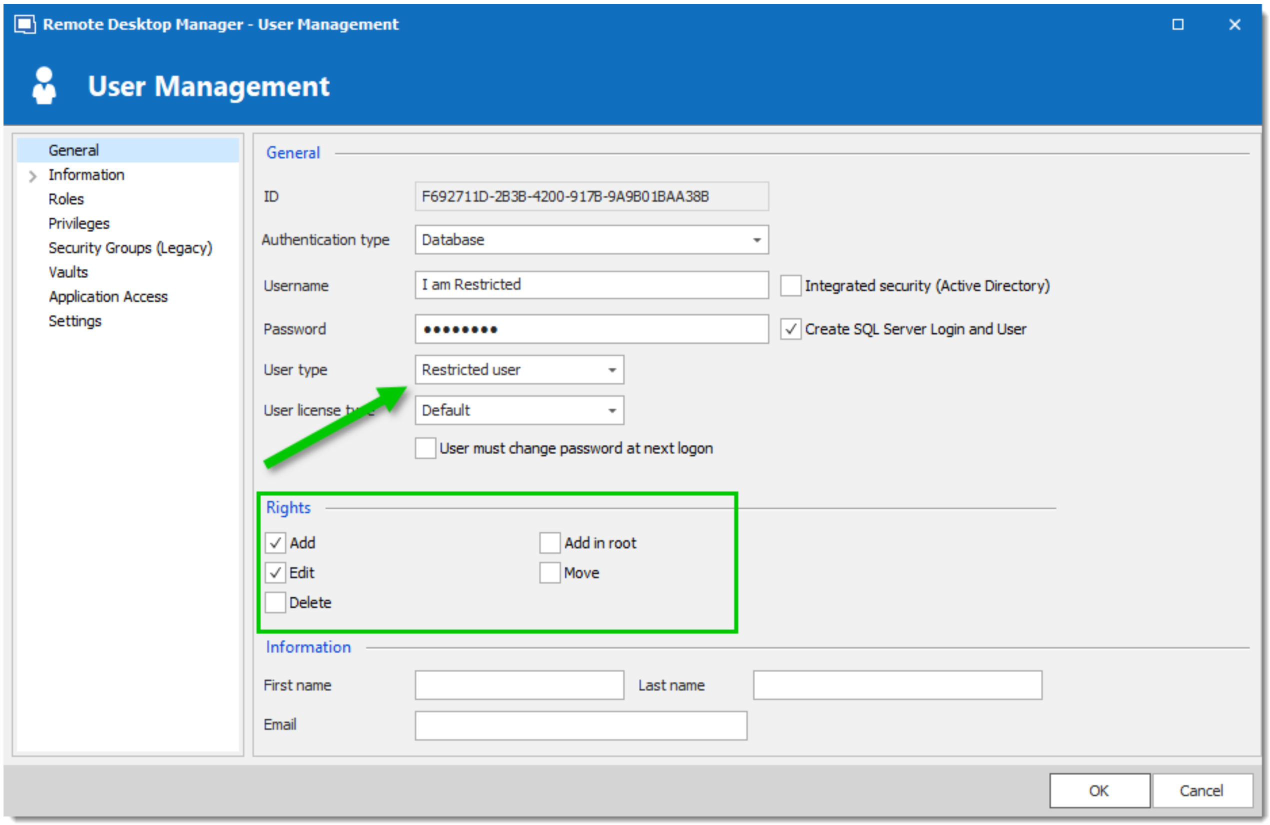
USER CONFIGURATION

Here is an example of user configuration. To create users, navigate to ***Administration – Users – Add User.***

In this scenario, all the options in the **Privileges** section of the **User Management** are set to **None**.

Here we select the user type to give them the most basic rights (**Add**, **Edit**, and **Delete**).

ServiceDesk users are **Restricted users**. They have the **Add** and **Edit** rights. However, they cannot add entries into the root folder.



General

ID: F692711D-2B3B-4200-917B-9A9B01BAA38B

Authentication type: Database

Username: I am Restricted ☐ Integrated security (Active Directory)

Password: •••••••• ☑ Create SQL Server Login and User

User type: Restricted user

User license type: Default

☐ User must change password at next logon

Rights

☑ Add ☐ Add in root

☑ Edit ☐ Move

☐ Delete

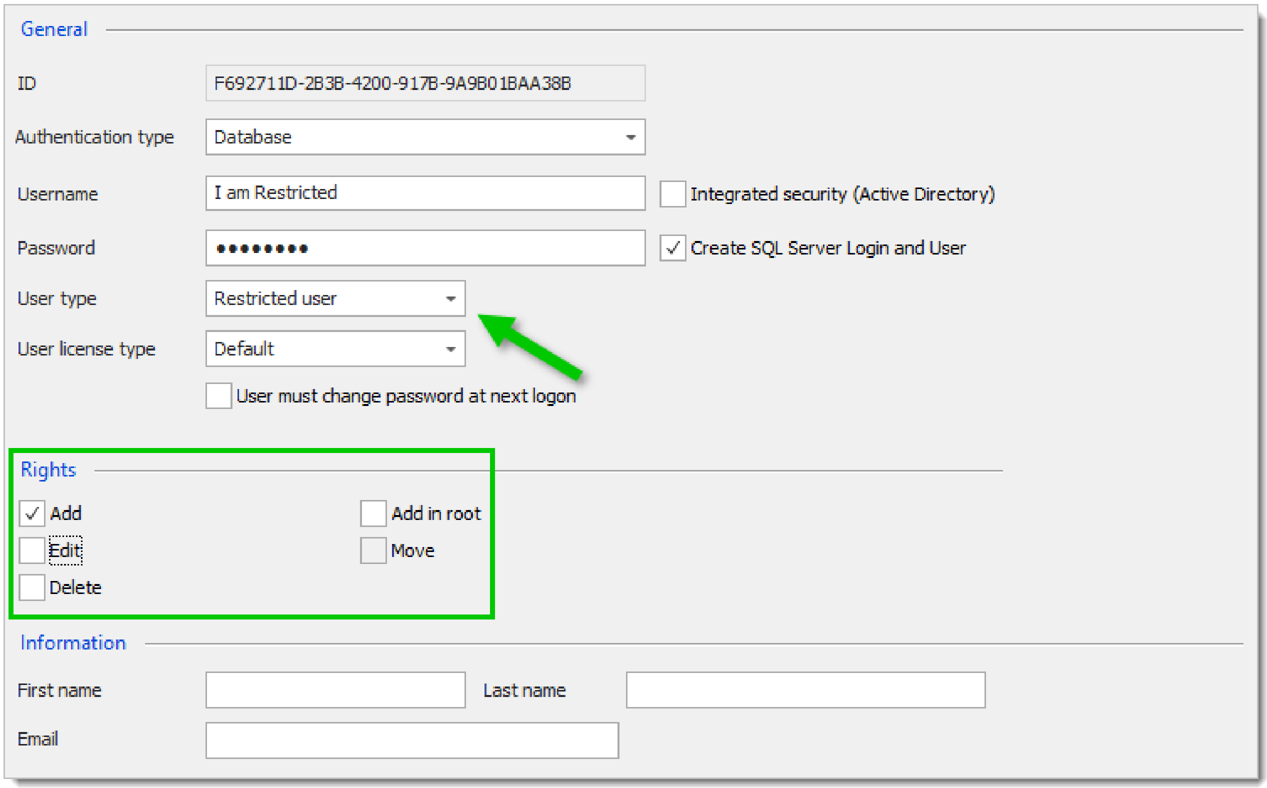
Information

First name: Last name:

Email:

User Management - ServiceDesk - Restricted User

HelpDesk users are **Restricted Users** as well. They only have the **Add** right. However, they cannot add entries into the root folder.



General

ID F692711D-2B3B-4200-917B-9A9B01BAA38B

Authentication type Database

Username I am Restricted □ Integrated security (Active Directory)

Password ●●●●●●●● ☑ Create SQL Server Login and User

User type Restricted user

User license type Default

□ User must change password at next logon

Rights

☑ Add □ Add in root

□ Edit □ Move

□ Delete

Information

First name Last name

Email

User Management - HelpDesk - Restricted User

Consultants are **Read Only Users** and can only view a subset of entries. They cannot add or edit anything.

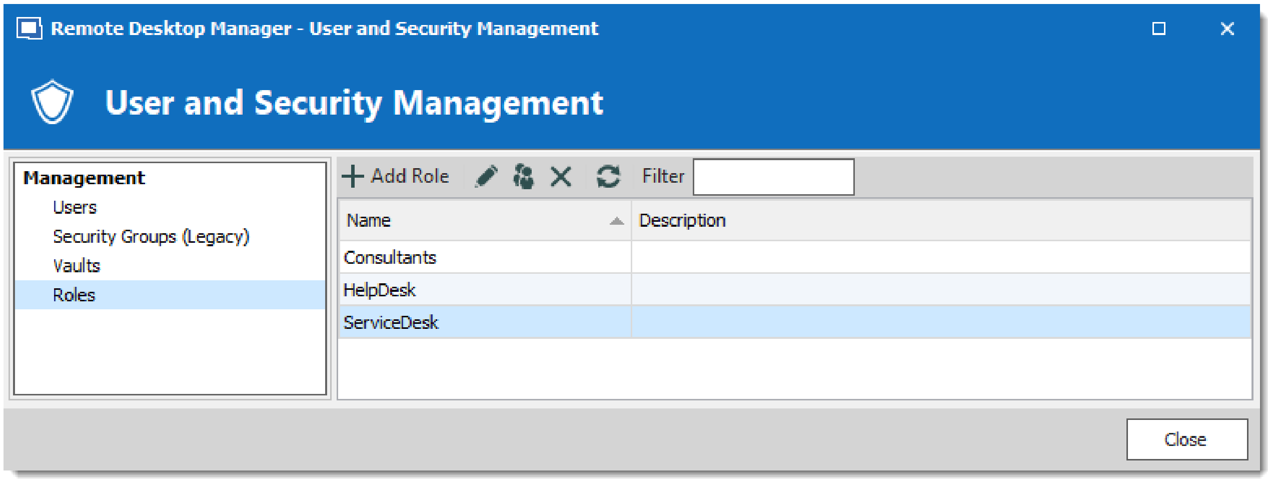
ROLE CONFIGURATION

Now that the users are created, we will add the roles which we will later grant the permissions to. We need to create the roles and assign the respective user to each role. There is no need to grant any privilege to these roles since they are mainly empty shells used to group multiple users. This allows for controlling multiple users at once instead of granting permissions to each users, one at a time.

- ServiceDesk
- HelpDesk
- Consultants

To add a role, click the **Add Role** + button, enter a name for the role, and click **Ok**.

To assign users to a role, select a role and click the **Assign roles** button. Use the **Is Member** check boxes to add users to the role.


Remote Desktop Manager - User and Security Management
User and Security Management
Management
Users
Security Groups (Legacy)
Vaults
Roles
Add Role
Filter
Close

Name	Description
Consultants	
HelpDesk	
ServiceDesk	

User and Security Management - Roles

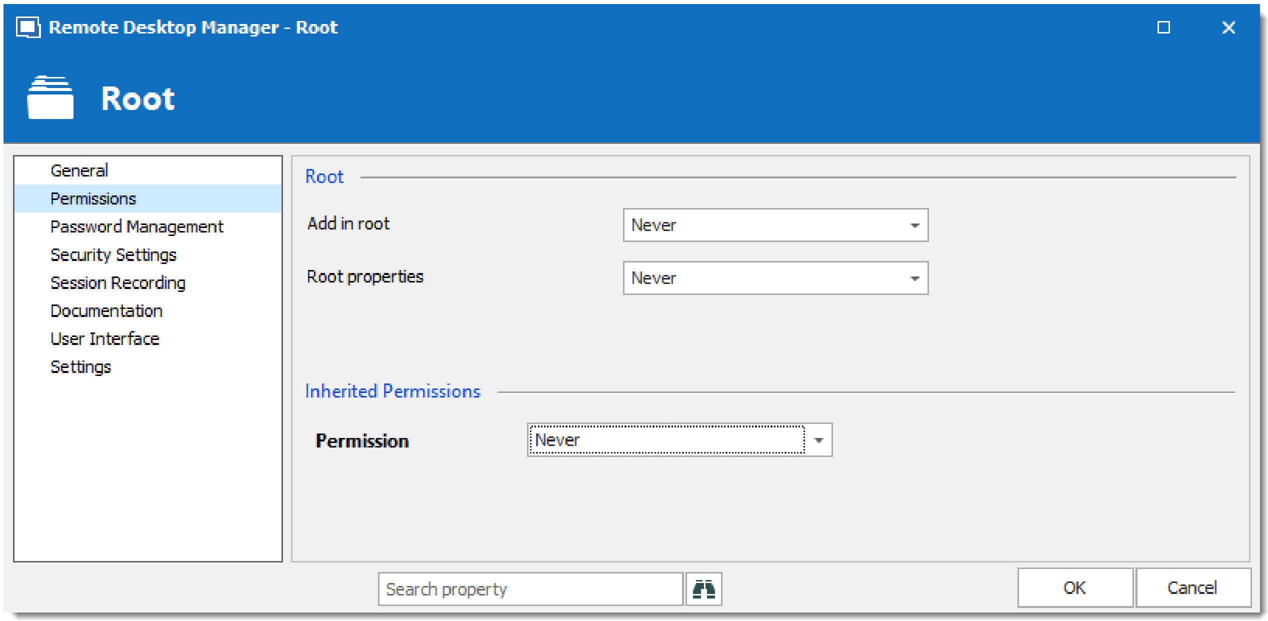
ENTRY CONFIGURATION

Now, everything is ready to grant or deny access to the roles.

- All root folder permissions are set to **Never**. By inheritance, this denies the child items default access to everyone.
- The ServiceDesk has the permission to view and open all entries but is able to edit only the entries in the client's groups/folders.
- The HelpDesk has the permission to view and open entries in the client's groups/folders only and is not able to edit them.
- The Consultants have the permission to view and open entries in the Montreal folder only but is not able to edit it or its child items.

Root

As mentioned above, **ALL** root folder permissions are set to **Never**. This denies the default access to other users.



Root

Add in root: Never

Root properties: Never

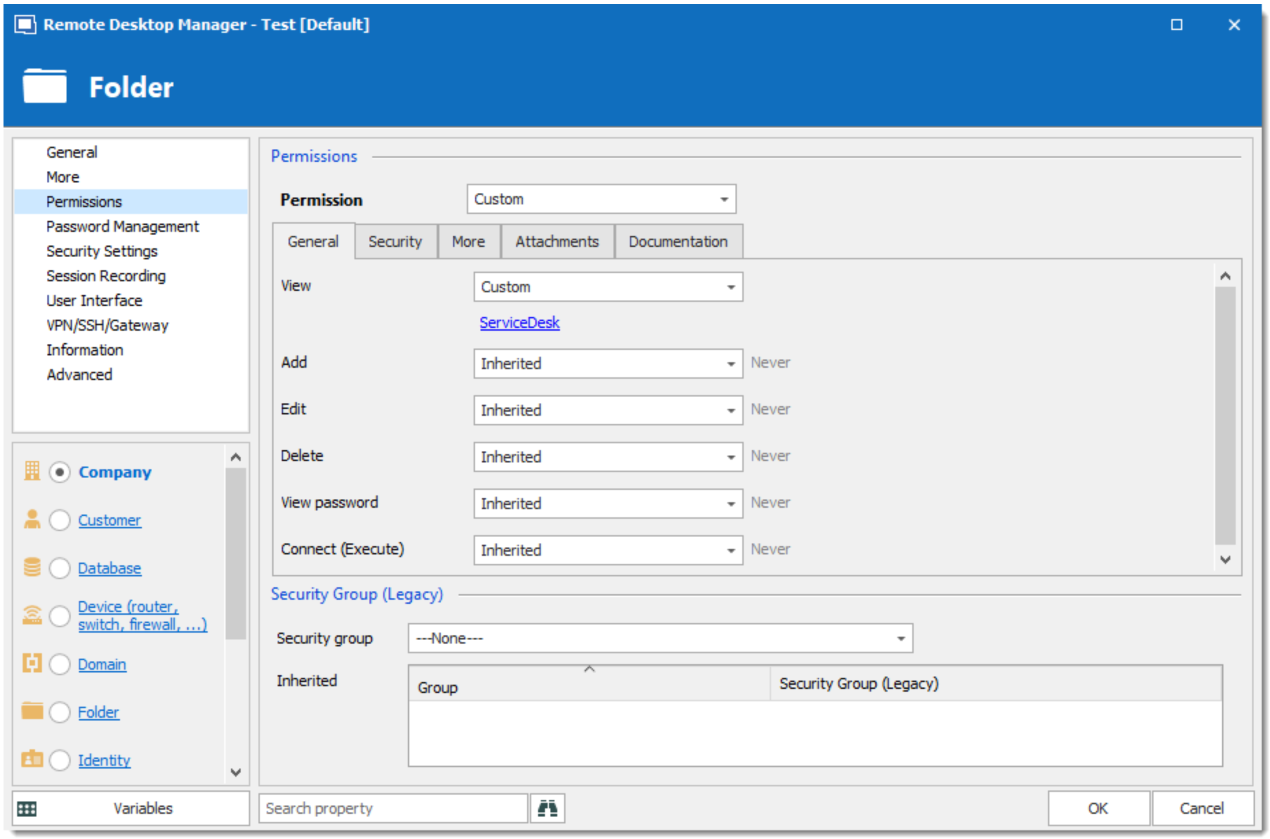
Inherited Permissions

Permission: Never

Root - Permissions

Windjammer Downhill Pro, and Telemark, the root level groups/folders

The permission to view the Windjammer folder is set for the ServiceDesk only since we want them to be able to use the child entries. We don't want the ServiceDesk to add, edit or delete anything. We leave the **Add**, **Edit** and **Delete** permissions to **Inherited** so only the administrators can perform these action on the Windjammer folder and its child items.



Permissions

Permission: Custom

General | Security | More | Attachments | Documentation

View: Custom
ServiceDesk

Add: Inherited Never

Edit: Inherited Never

Delete: Inherited Never

View password: Inherited Never

Connect (Execute): Inherited Never

Security Group (Legacy)

Security group: ---None---

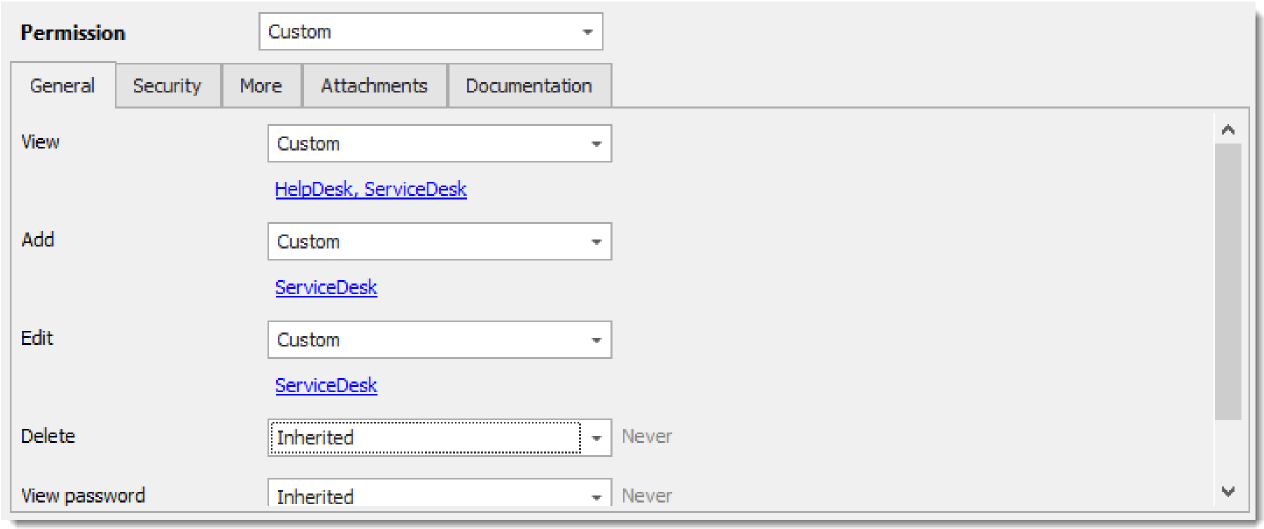
Inherited

Group	Security Group (Legacy)

Windjammer - Permissions

- **View: Custom;** ServiceDesk.
- **Add: Inherited; Never** inherited from Root. Only the administrator can add entries.
- **Edit: Inherited; Never** inherited from Root. Only the administrator can edit entries.
- **Delete: Inherited; Never** inherited from Root. Only the administrator can delete entries.

For Downhill Pro, we grant permissions to the ServiceDesk and the HelpDesk.



Permission: Custom

View: Custom
HelpDesk, ServiceDesk

Add: Custom
ServiceDesk

Edit: Custom
ServiceDesk

Delete: Inherited Never

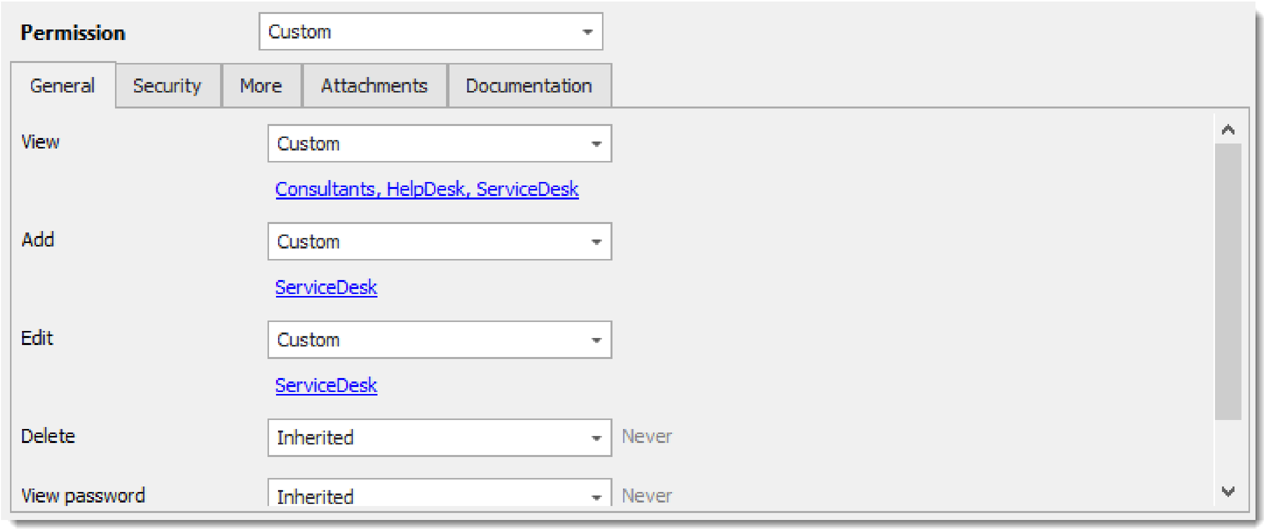
View password: Inherited Never

Downhill Pro - Permissions

- **View: Custom;** HelpDesk, ServiceDesk.
- **Add: Custom;** ServiceDesk.
- **Edit: Custom;** ServiceDesk.
- **Delete: Inherited; Never** inherited from Root. Only the administrator can delete entries.

We already have a good example of the flexibility of Remote Desktop Manager Security. ServiceDesk and HelpDesk users can view and use all the entries in the Downhill Pro folder, even the credential entries, but they will never see any passwords since the ServiceDesk and HelpDesk users do not have the privilege to reveal passwords.

Next, for the Telemark folder, we grant permissions to the ServiceDesk, the HelpDesk and the Consultants. This is where things get complex. If we want the Consultants to be able to view only the Montreal folder, which is a child item of Telemark, we must grant Consultants the permission to view the parent folder, thereby the entire Telemark content. Then we will grant permissions on child items only to the role that should have access to these items. This last step will deny the view permission for the Consultants on the child items.



Permission: Custom

View: Custom
Consultants, HelpDesk, ServiceDesk

Add: Custom
ServiceDesk

Edit: Custom
ServiceDesk

Delete: Inherited Never

View password: Inherited Never

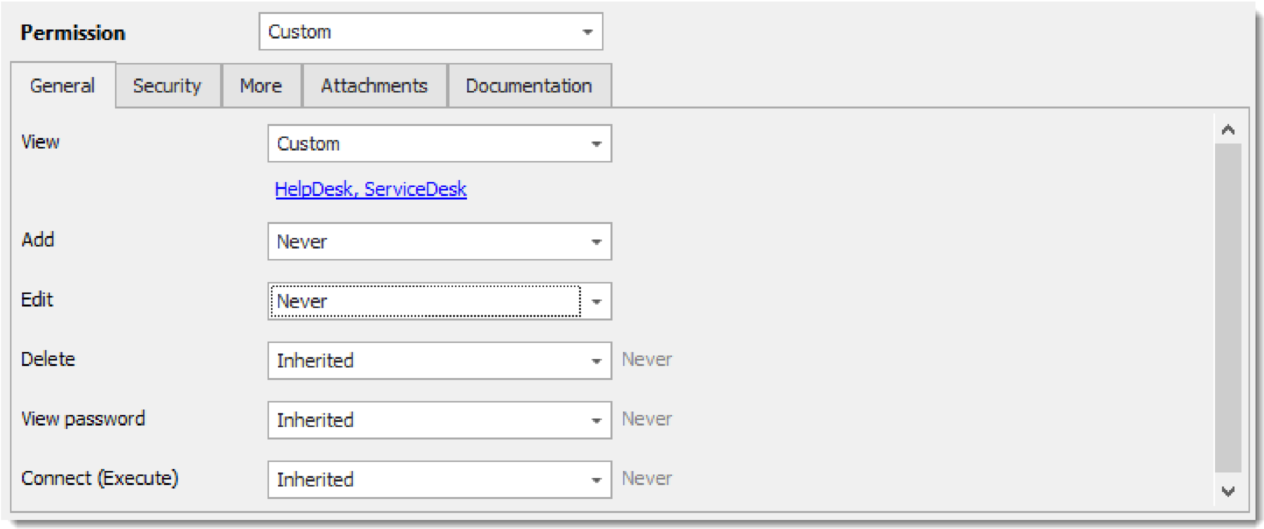
Telemark - Permissions

- **View: Custom;** Consultants, HelpDesk, ServiceDesk.
- **Add: Custom;** ServiceDesk.
- **Edit: Custom;** ServiceDesk.
- **Delete: Inherited; Never** inherited from Root. Only the administrator can delete entries.

Telemark Child Items

Since we want the users to be able to use the credential entries, we grant the ServiceDesk and the HelpDesk the permission to view the Credentials folder. Therefore, the ServiceDesk and HelpDesk are able to use the entries in the folder without revealing the passwords. By specifying that only the HelpDesk and ServiceDesk have the **View** permission, we deny the view access to any role or user that is not on the list of the permission.

The **Add** and **Edit** permissions are set to **Never** and the **Delete** permission can be left to **Inherited** since it inherits the **Never** settings from the Root. Only the administrators can perform these actions in groups/folders containing credentials.



Permission: Custom

View: Custom
HelpDesk, ServiceDesk

Add: Never

Edit: Never

Delete: Inherited Never

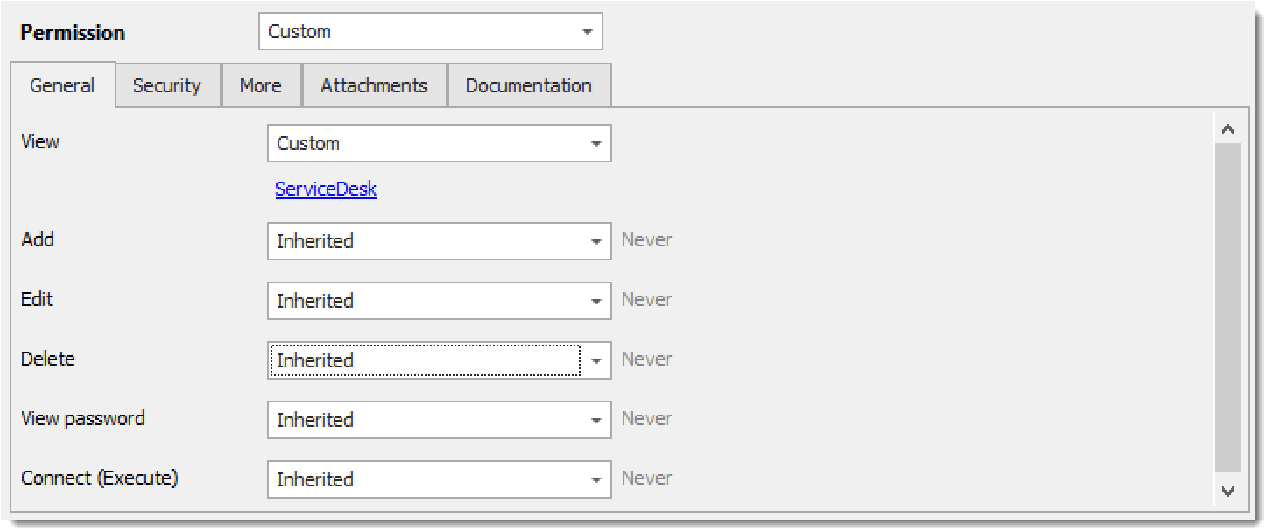
View password: Inherited Never

Connect (Execute): Inherited Never

Telemark/Credentials - Permissions

- **View: Custom;** HelpDesk, ServiceDesk.
- **Add: Never;** Only administrators can add credential entries.
- **Edit: Never;** Only administrators can edit entries.
- **Delete: Inherited; Never** inherited from Root. Only administrators can delete entries.

We want the ServiceDesk to be able to use the **Domain ladmin** credential entry, but not the HelpDesk. For this, we must grant the **View** permission to the ServiceDesk. The ServiceDesk is still be able to use the credential entry but will never see the password.



Permission: Custom

View: Custom
ServiceDesk

Add: Inherited Never

Edit: Inherited Never

Delete: Inherited Never

View password: Inherited Never

Connect (Execute): Inherited Never

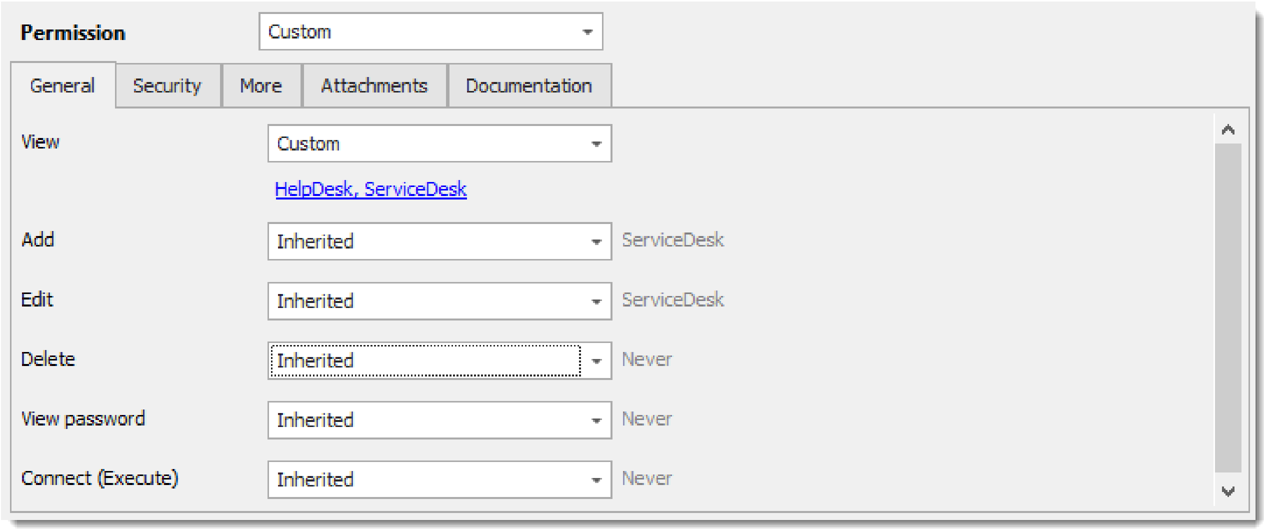
Telemark\Credentials\Admin - Permissions

- **View: Custom;** ServiceDesk.
- **Add: Inherited; Never** inherited from Root. Only administrators can add credential entries.

- **Edit: Inherited; Never** inherited from Root. Only administrators can edit credential entries.

- **Delete: Inherited; Never** inherited from Telemark\Credentials. Only administrators can delete credential entries.

The last step for the Telemark child items is to set the **View** permission to the ServiceDesk and the HelpDesk on the Boston folder and leave every other permissions of this folder to **Inherited**. This denies the Consultants to view the Boston folder. Now, the Consultants are able to view and open entries only in the Montreal folder.



Permission: Custom

View: Custom
HelpDesk, ServiceDesk

Add: Inherited — ServiceDesk

Edit: Inherited — ServiceDesk

Delete: Inherited — Never

View password: Inherited — Never

Connect (Execute): Inherited — Never

Telemark\Boston - Permissions

- **View: Custom;** HelpDesk, ServiceDesk.

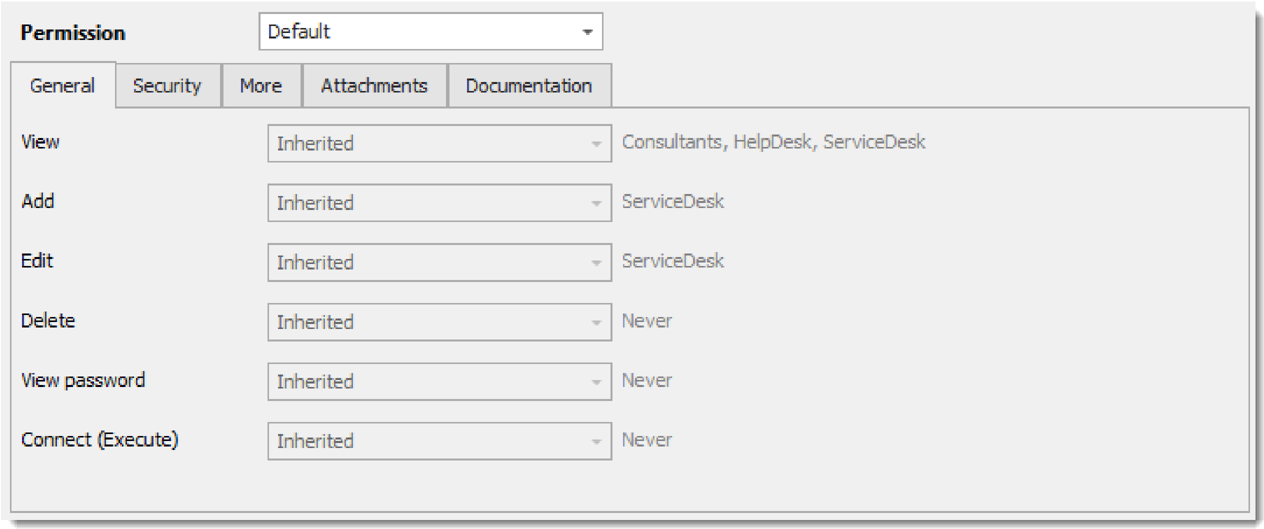
- **Add: Inherited;** ServiceDesk inherited from Telemark.

- **Edit: Inherited;** ServiceDesk inherited from Telemark.

- **Delete: Inherited; Never** inherited from Root.

> Every time a new folder is added as a child of the Telemark folder, the **View** permission must be set for ServiceDesk and/or HelpDesk to hide the new folder and its content from the Consultants.

There is no need to set any permissions on the Montreal folder, since they all inherit values from parent folders.



Permission	Default

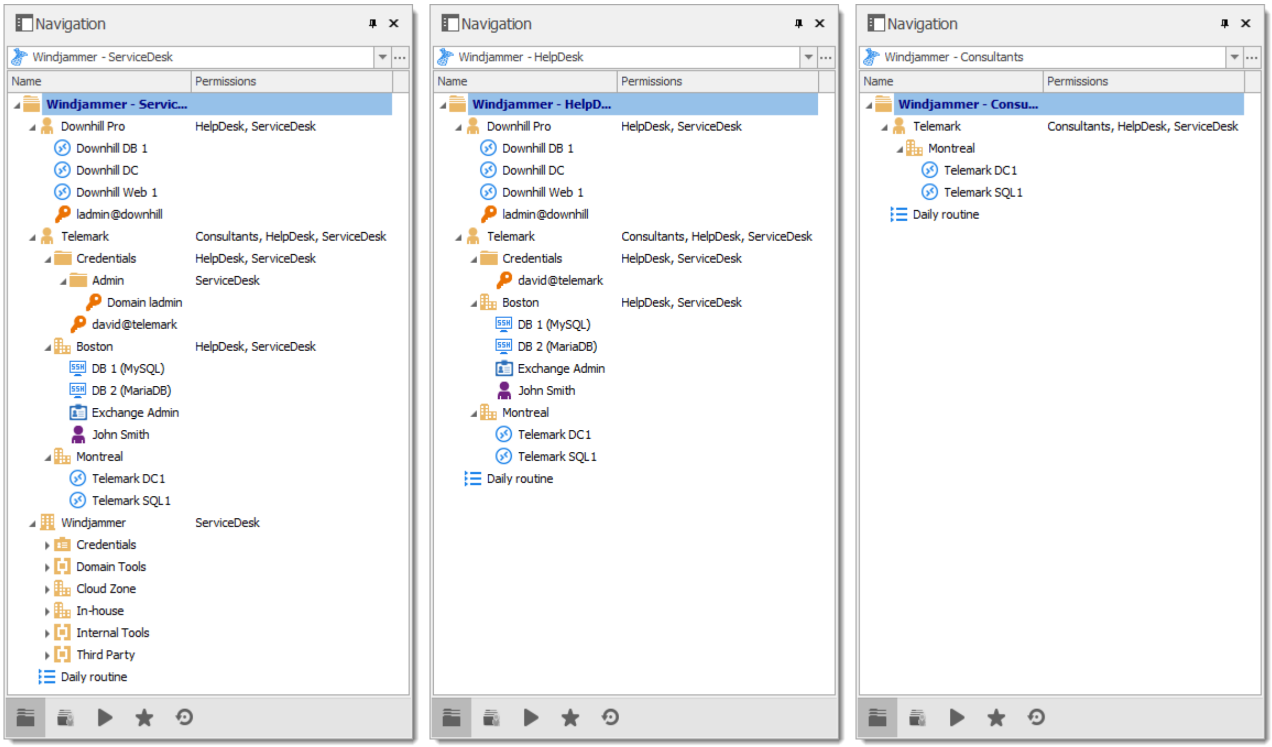
General | Security | More | Attachments | Documentation

View	Inherited	Consultants, HelpDesk, ServiceDesk
Add	Inherited	ServiceDesk
Edit	Inherited	ServiceDesk
Delete	Inherited	Never
View password	Inherited	Never
Connect (Execute)	Inherited	Never

Telemark\Montreal - Permissions

IN CONCLUSION

The permissions are now correctly set. Note that every entry added at root level are inheriting from the Root as well. This means they would be available to admins only, unless their permissions were modified. This can be confirmed by looking at the screenshot below, in which the entry **Daily routine** is available for everyone (It's permissions have been changed to Everyone. Here is what each user should see in the tree view:



Navigation — Windjammer - ServiceDesk

Name	Permissions
Windjammer - Servic...	
Downhill Pro	HelpDesk, ServiceDesk
Downhill DB 1	
Downhill DC	
Downhill Web 1	
ladmin@downhill	
Telemark	Consultants, HelpDesk, ServiceDesk
Credentials	HelpDesk, ServiceDesk
Admin	ServiceDesk
Domain ladmin	
david@telemark	
Boston	HelpDesk, ServiceDesk
DB 1 (MySQL)	
DB 2 (MariaDB)	
Exchange Admin	
John Smith	
Montreal	
Telemark DC1	
Telemark SQL1	
Windjammer	ServiceDesk
Credentials	
Domain Tools	
Cloud Zone	
In-house	
Internal Tools	
Third Party	
Daily routine	

Navigation — Windjammer - HelpDesk

Name	Permissions
Windjammer - HelpD...	
Downhill Pro	HelpDesk, ServiceDesk
Downhill DB 1	
Downhill DC	
Downhill Web 1	
ladmin@downhill	
Telemark	Consultants, HelpDesk, ServiceDesk
Credentials	HelpDesk, ServiceDesk
david@telemark	
Boston	HelpDesk, ServiceDesk
DB 1 (MySQL)	
DB 2 (MariaDB)	
Exchange Admin	
John Smith	
Montreal	
Telemark DC1	
Telemark SQL1	
Daily routine	

Navigation — Windjammer - Consultants

Name	Permissions
Windjammer - Consu...	
Telemark	Consultants, HelpDesk, ServiceDesk
Montreal	
Telemark DC1	
Telemark SQL1	
Daily routine	

Side by Side Tree View

You can further customize permissions by using the **Security Settings** tab when editing entries. As always, great care must be taken when granting permissions.

If you need more details on each permission, please consult our Common Settings – Permissions topic.

9.3 Legacy Information

DESCRIPTION

Describing such a flexible security system takes a lot of effort. This chapter contains valuable information, but that may have been optimized by a newer topic.

9.3.1 Small to Medium Enterprise

DESCRIPTION

Here we will give you a security structure example that should be relevant for small to medium business.

In this scenario, all the options in the ***Privileges*** section of the user properties will be left disabled.

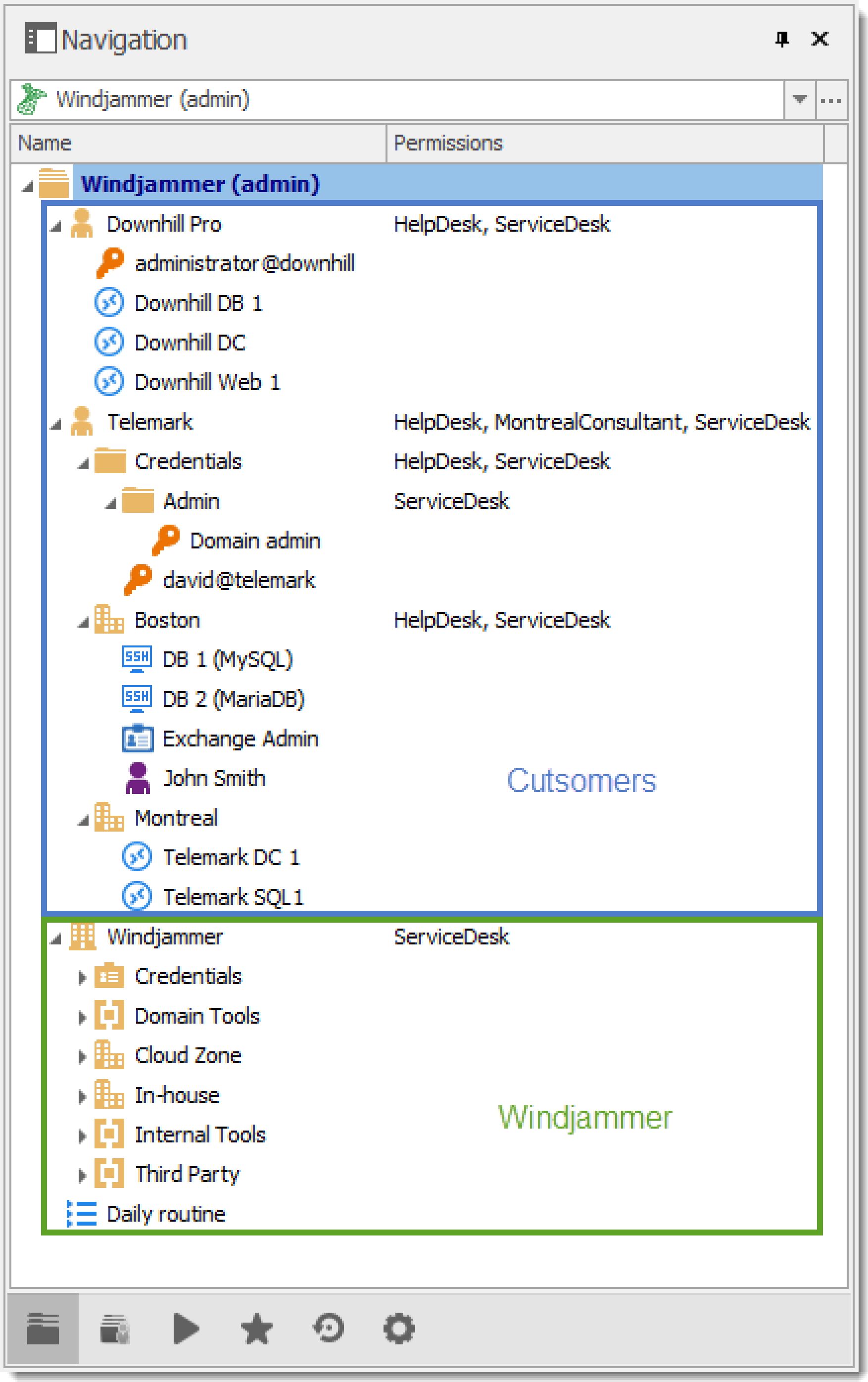
While this example might fit for many enterprises, please keep in mind that any privilege should be granted only if needed. Be extremely careful when granting permissions to a user or a role.

> This feature is only available when using an Advanced Data Source.

STEPS

Our fictional company *Windjammer* has a *HelpDesk* and a *ServiceDesk* department, an administrator and a *MontrealConsultant*. We can also see two customers: *Downhill Pro* and *Telemark*.

Here is a view of the data source tree view structure:



Name	Permissions
Windjammer (admin)	
Downhill Pro	HelpDesk, ServiceDesk
administrator@downhill	
Downhill DB 1	
Downhill DC	
Downhill Web 1	
Telemark	HelpDesk, MontrealConsultant, ServiceDesk
Credentials	HelpDesk, ServiceDesk
Admin	ServiceDesk
Domain admin	
david@telemark	
Boston	HelpDesk, ServiceDesk
DB 1 (MySQL)	
DB 2 (MariaDB)	
Exchange Admin	
John Smith	
Montreal	
Telemark DC 1	
Telemark SQL1	
Windjammer	ServiceDesk
Credentials	
Domain Tools	
Cloud Zone	
In-house	
Internal Tools	
Third Party	
Daily routine	

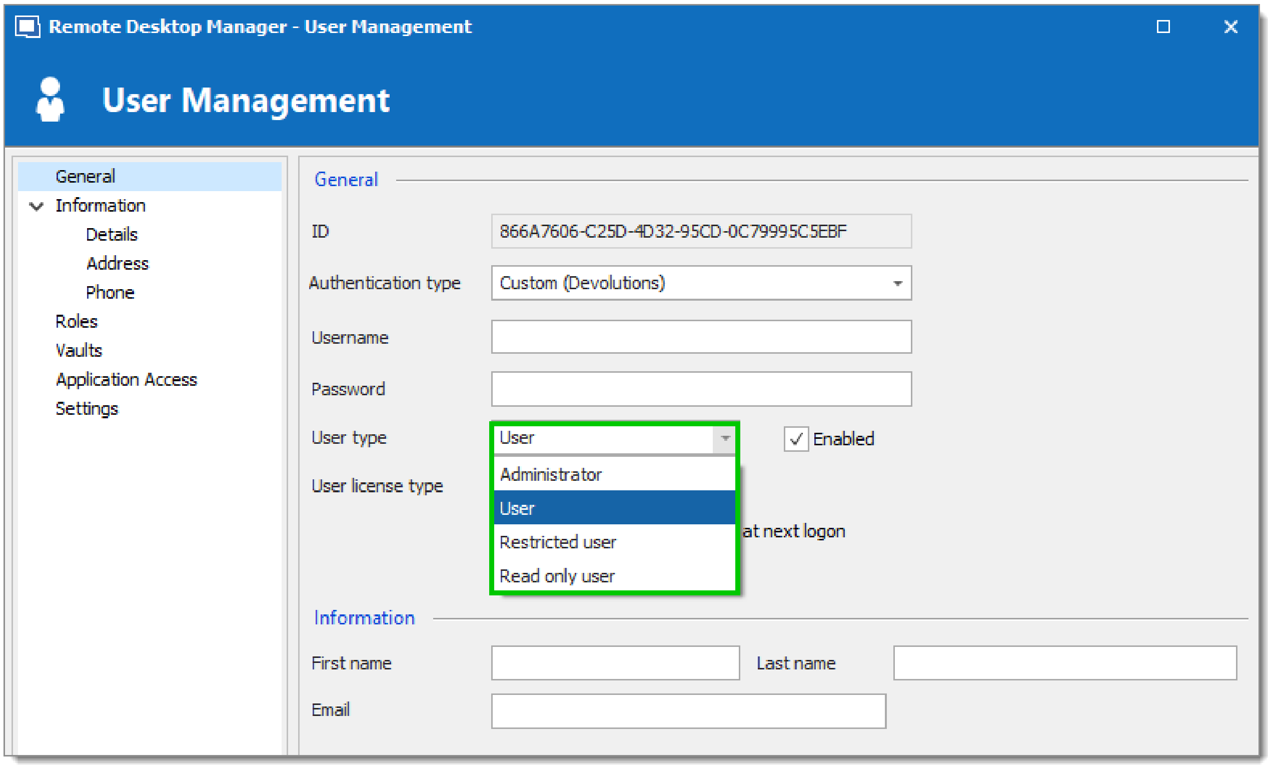
Windjammer tree view structure

USER CONFIGURATIONS

Here is an example for user configurations.

The administrator:

- When creating the user, select the ***Administrator*** in the dropdown menu to give it access to everything.



Remote Desktop Manager - User Management

User Management

General

ID: 866A7606-C25D-4D32-95CD-0C79995C5EBF

Authentication type: Custom (Devolutions)

Username

Password

User type: User

☑ Enabled

User license type

Information

First name

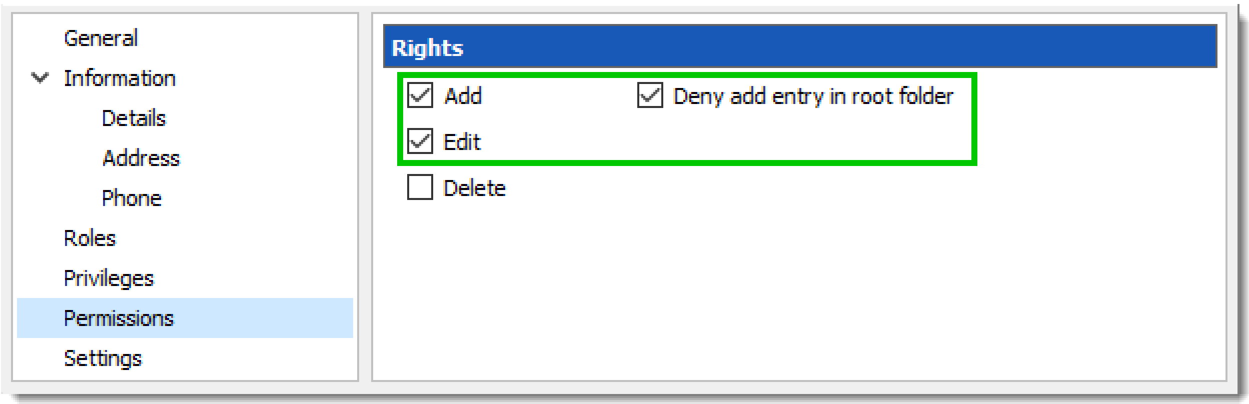
Last name

Email

Administrator Permission

The *ServiceDesk*:

- ***Add***
- ***Edit***
- ***Deny add entry in root folder***

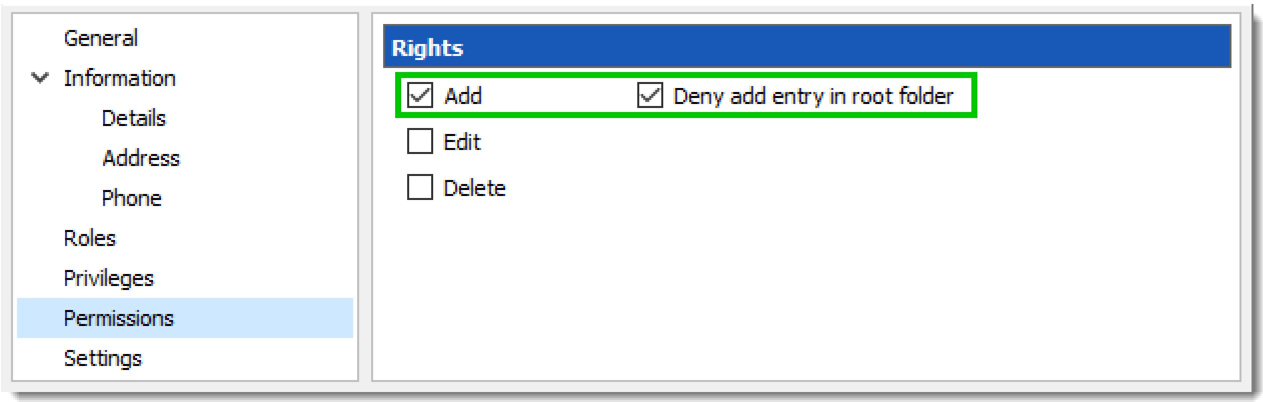


☑ Add ☑ Deny add entry in root folder
☑ Edit
□ Delete

ServiceDesk Rights

The *HelpDesk*:

- ***Add***
- ***Deny add entry in root folder***

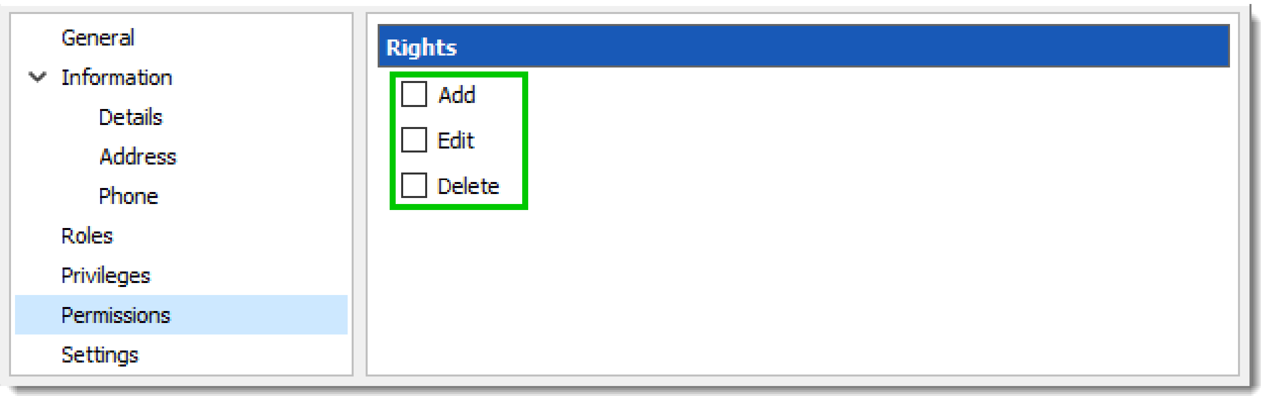


☑ Add ☑ Deny add entry in root folder
□ Edit
□ Delete

HelpDesk Rights

The MontrealConsultant has read-only access. He cannot see any password or entry detail.

- Leave everything disable for this user



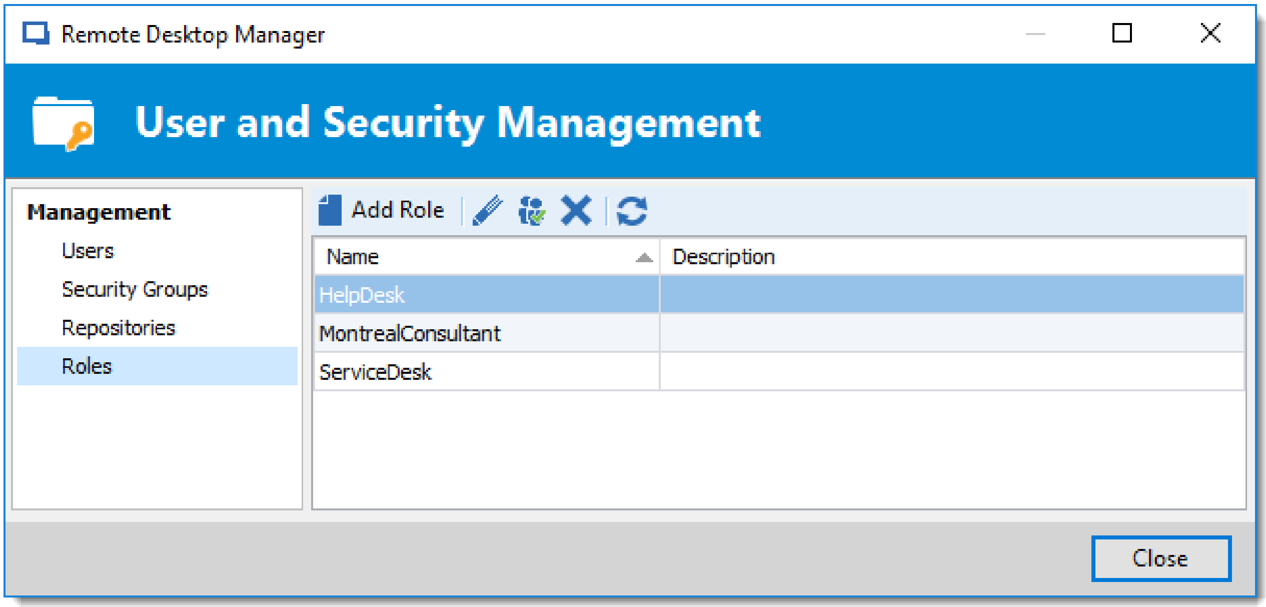
□ Add
□ Edit
□ Delete

MontrealConsultant Rights

ROLES CONFIGURATION

Now that the users are created we will add the roles to which we will later grant the permissions. We just need the roles to assign users to them. No need to grant them any privileges.

- ServiceDesk
- HelpDesk
- MontrealConsultant



Name	Description
HelpDesk	
MontrealConsultant	
ServiceDesk	

Roles

ENTRIES CONFIGURATION

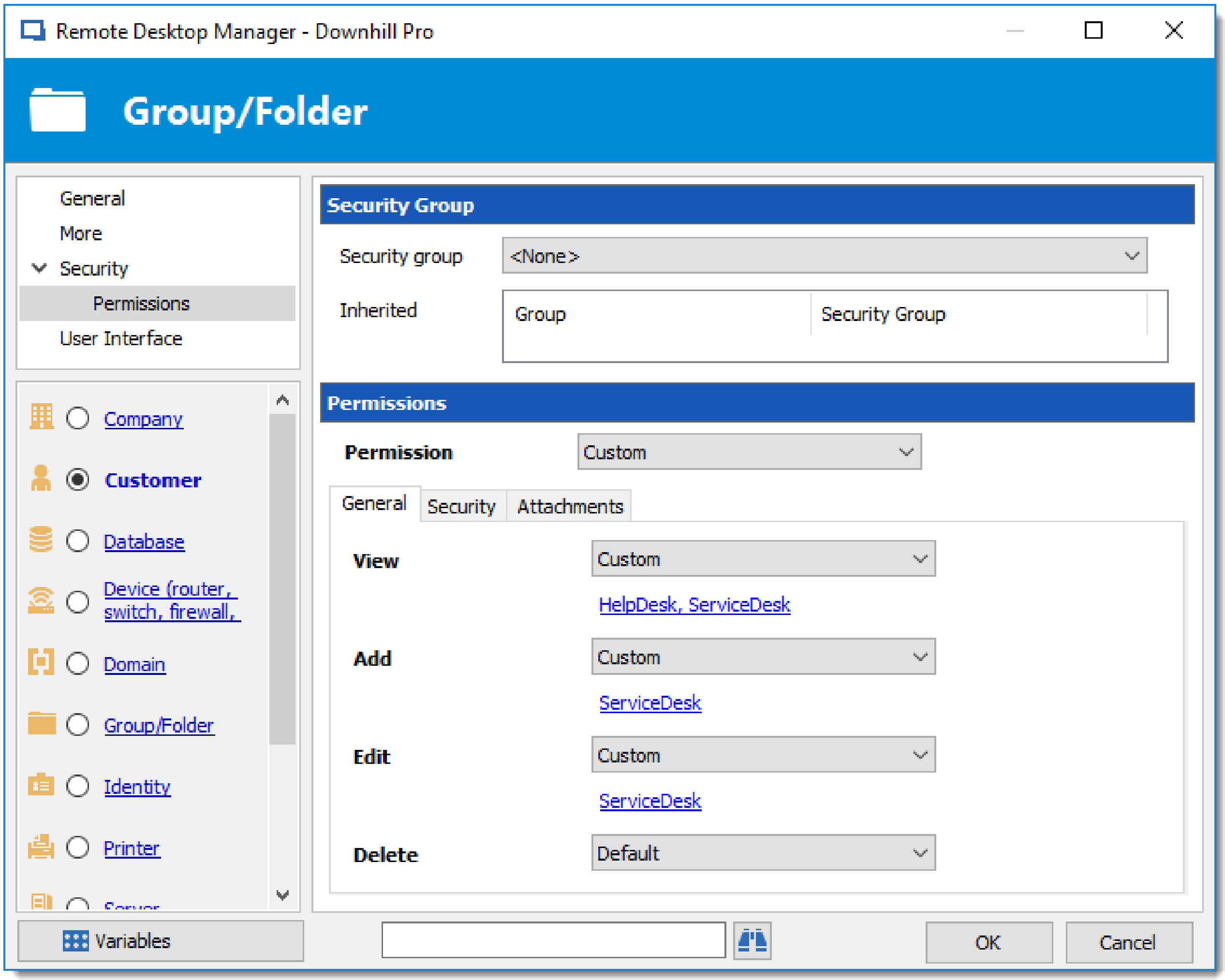
Now everything is ready to grant or deny access to the roles.

- The ServiceDesk will have the permission to view and open all entries but will be able to edit only the entries in the customer groups/folders.

- The HelpDesk will have the permission to view and open entries on the customer groups/folders only and will not be able to edit them.
- The MontrealConsultant will have the permission to view and open entries on the Montreal goup/folder only and will not be able to edit it nor its child items.

We will begin with the root level groups/folders: Downhill Pro, Telemark and Windjammer.

For Downhill Pro, we will grant permissions to the ServiceDesk and the HelpDesk.



Security Group

Security group: <None>

Inherited: Group | Security Group

Permissions

Permission: Custom

General | Security | Attachments

View: Custom
HelpDesk, ServiceDesk

Add: Custom
ServiceDesk

Edit: Custom
ServiceDesk

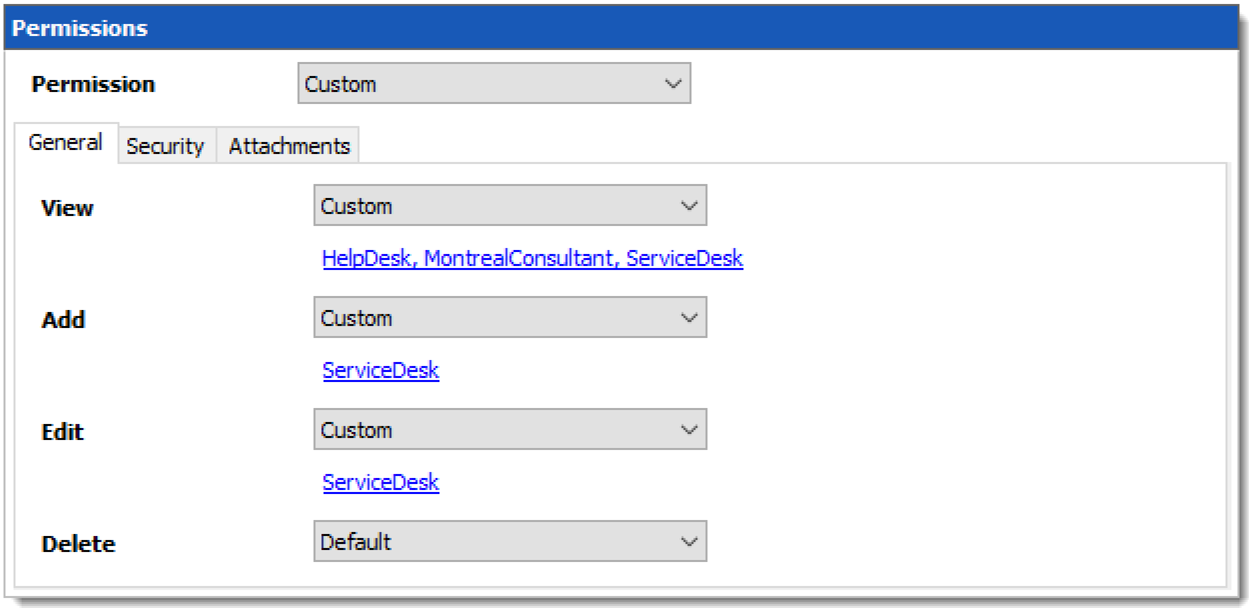
Delete: Default

Downhill Pro - Permissions

- ***View***: HelpDesk, ServiceDesk
- ***Add***: ServiceDesk
- ***Edit***: ServiceDesk
- ***Delete***: Since no user have the delete right we can leave this permission to ***Default***.

We already have a good example of the flexibility of Remote Desktop Manager's Security. A ServiceDesk user can view and open all the entries in the Downhill Pro folder, even the credential entry, but it will never be able to see any password.

Next for the Telemark folder, we will grant permissions to the ServiceDesk, the HelpDesk and the MontrealConsultant. This is where things get complex. If we want the MontrealConsultant to be able to view only the Montreal folder which is a child item of Telemark, we must grant to the consultant the permission to view the entire Telemark content. Then we will grant permissions on child items only to the role that should have access to these items. This last step will deny the view permission for the consultant on the child items.



Permissions

Permission: Custom

View: Custom
HelpDesk, MontrealConsultant, ServiceDesk

Add: Custom
ServiceDesk

Edit: Custom
ServiceDesk

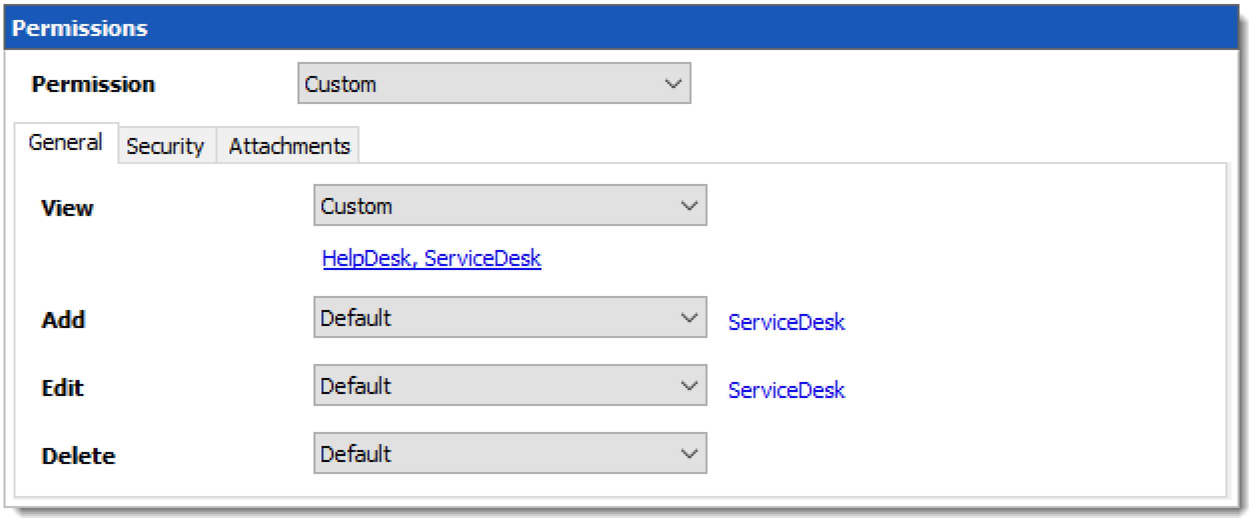
Delete: Default

Telemark - Permissions

- ***View***: HelpDesk, MontrealConsultant, ServiceDesk
- ***Add***: ServiceDesk
- ***Edit***: ServiceDesk
- ***Delete***: Default

Since we want the users to be able to use the credential entries, we will grant the ServiceDesk and the HelpDesk the permission to View the Credentials folder. This way they will be able to use the entries without being able to view the passwords.

The ***Add*** and ***Edit*** permissions can be left to ***Default*** since the ServiceDesk is the only role that has been granted these permissions in the parent folder.



Permissions

Permission: Custom

View: Custom
HelpDesk, ServiceDesk

Add: Default — ServiceDesk

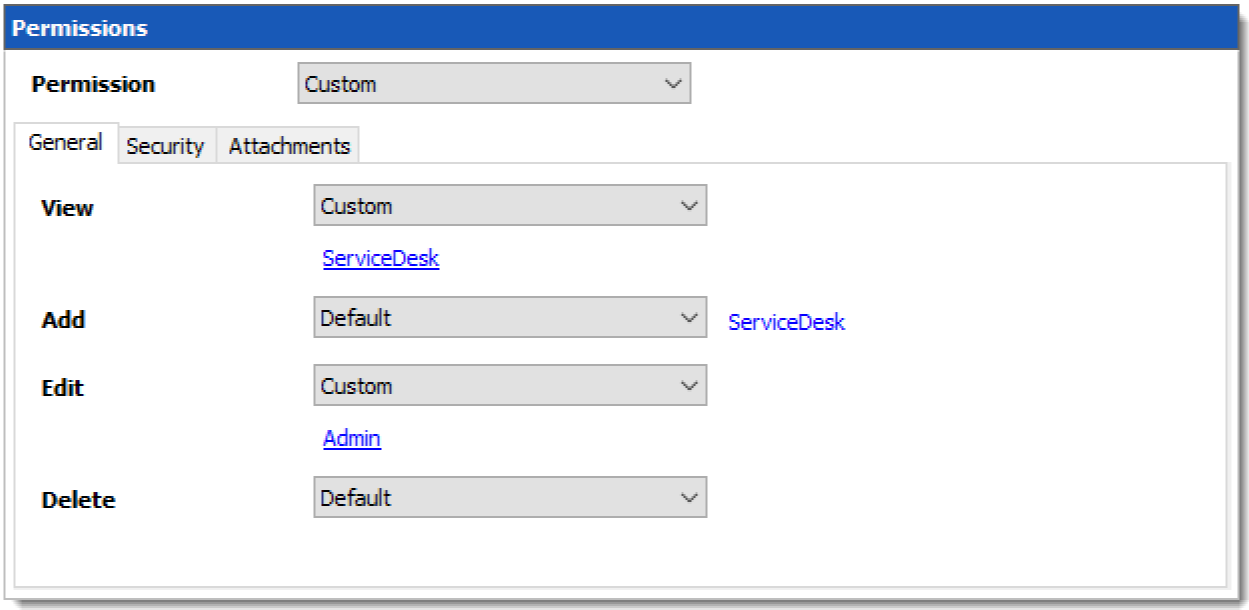
Edit: Default — ServiceDesk

Delete: Default

Telemark\Credentials - Permissions

- ***View***: HelpDesk, ServiceDesk
- ***Add***: Default
- ***Edit***: Default
- ***Delete***: Default

We want the ServiceDesk to be able to use the Domain Admin credential entry as well but not the HelpDesk. For this we must grant the ***View*** permission to the ServiceDesk only and change the ***Add*** and ***Edit*** permission to ***Never***. The ServiceDesk will still be able to edit the credential entry but will never see the password. If you prefer you can set the ***Edit*** permission to an Administrator user or role to deny it to the ServiceDesk.



Permission: Custom

View: Custom
ServiceDesk

Add: Default ServiceDesk

Edit: Custom
Admin

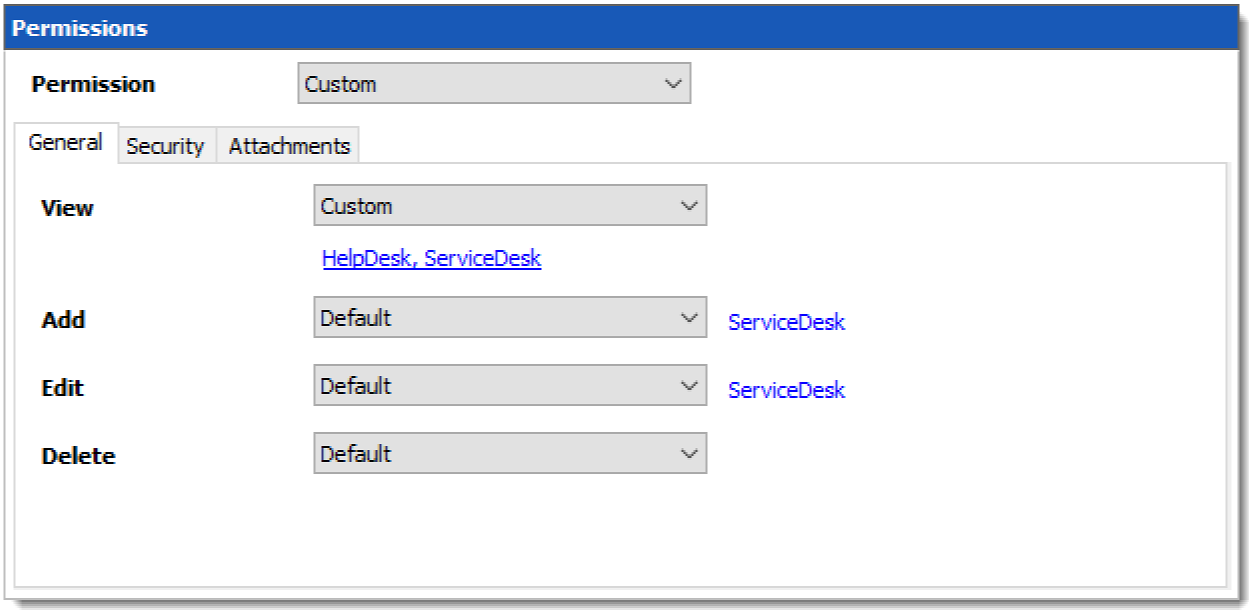
Delete: Default

Telemark\Credentials\Admin - Permissions

- ***View***: ServiceDesk
- ***Add***: Default (ServiceDesk)
- ***Edit***: Default or Administrator user/role
- ***Delete***: Default

The last step for the Telemark child items would be to set the ***View*** permission to the ServiceDesk and the HelpDesk on the Boston folder and leave every other permission to ***Default***.

Now the MontrealConsultant will be able to view and open entries only in the Montreal folder. Every time a new folder is added the ***View*** permission must be set for ServiceDesk and HelpDesk to hide the new folder and its content from the consultant.


Permissions

Permission: Custom

View: Custom
HelpDesk, ServiceDesk

Add: Default ServiceDesk

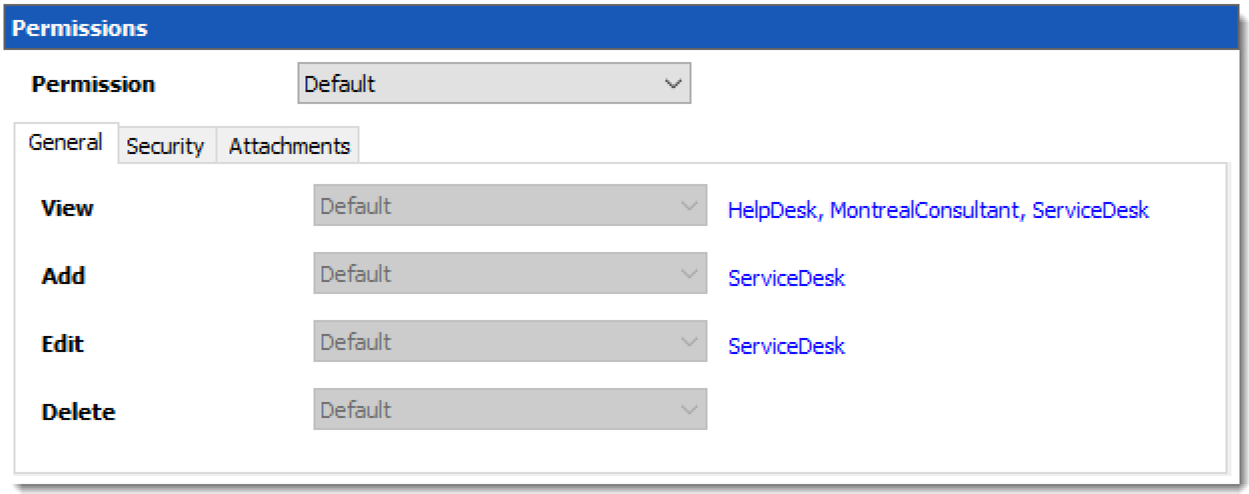
Edit: Default ServiceDesk

Delete: Default

Telemark\Boston - Permissions

- ***View***: HelpDesk, ServiceDesk
- ***Add***: Default (ServiceDesk)
- ***Edit***: Default (ServiceDesk)
- ***Delete***: Default

No need to set any permissions on the Montreal folder, since they are inherited from the parent folders.


Permissions

Permission: Default

View: Default HelpDesk, MontrealConsultant, ServiceDesk

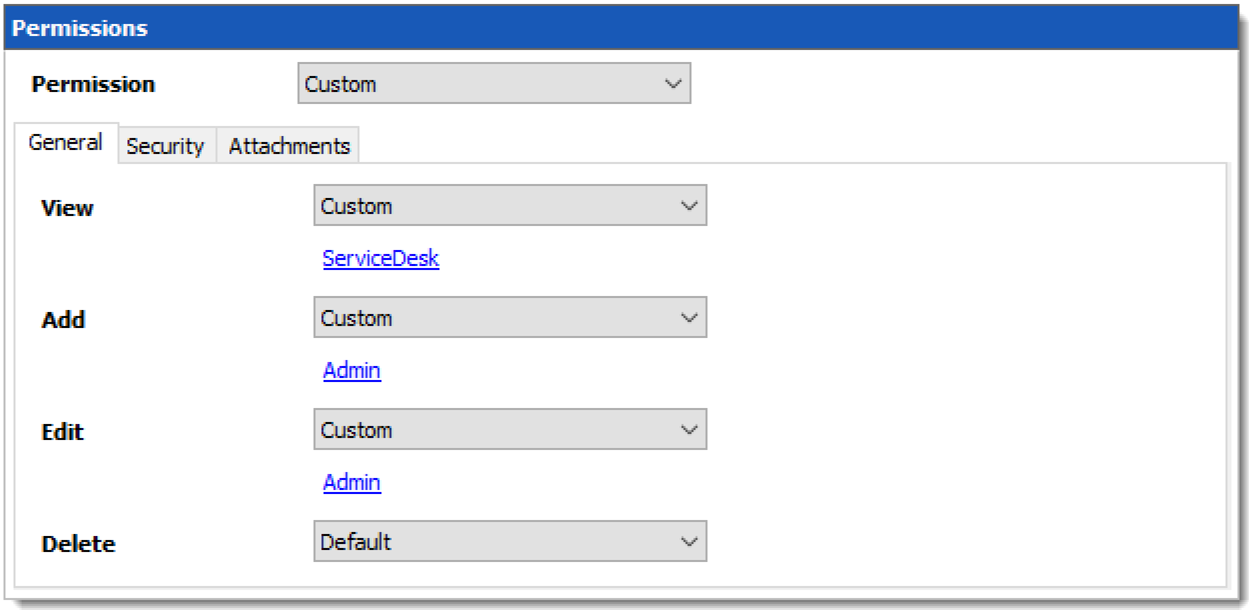
Add: Default ServiceDesk

Edit: Default ServiceDesk

Delete: Default

Telemark\Montreal - Permissions

Finally, the permission to view the Windjammer folder will be set for the ServiceDesk only since we want them to be able to use its child entries. We don't want them to add or edit anything so we will set the ***Add*** and ***Edit*** permissions to the Administrator user/role.



Permissions

Permission: Custom

General | Security | Attachments

View: Custom
ServiceDesk

Add: Custom
Admin

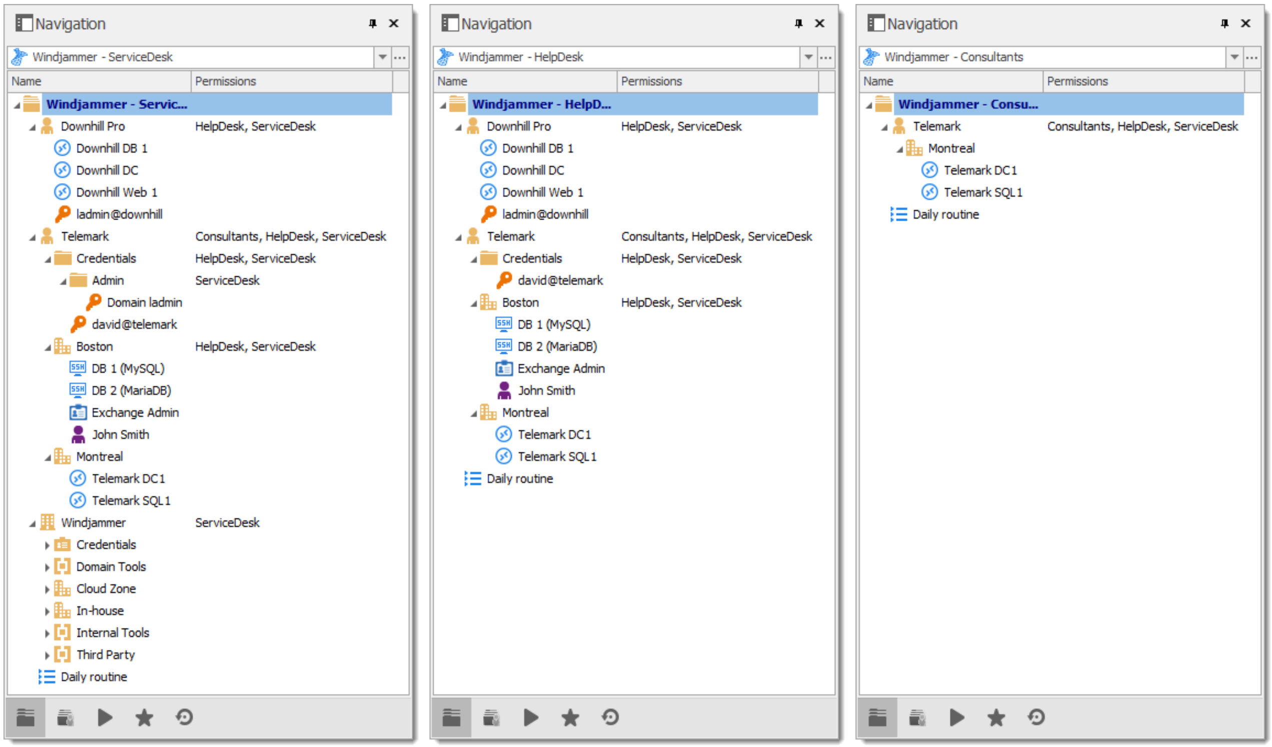
Edit: Custom
Admin

Delete: Default

Windjammer - Permissions

IN CONCLUSION

The permissions are now correctly set. Note that every entry added higher than the root level groups/folders will have no security by default. This means they would be available for anyone, even the consultant. This can be confirmed by looking at the screenshot below in which the entry Daily routine is available for everyone. Here is what each user should see in the tree view:



Name	Permissions
Windjammer - Servic...	
Downhill Pro	HelpDesk, ServiceDesk
Downhill DB 1	
Downhill DC	
Downhill Web 1	
ladmin@downhill	
Telemark	Consultants, HelpDesk, ServiceDesk
Credentials	HelpDesk, ServiceDesk
Admin	ServiceDesk
Domain ladmin	
david@telemark	
Boston	HelpDesk, ServiceDesk
DB 1 (MySQL)	
DB 2 (MariaDB)	
Exchange Admin	
John Smith	
Montreal	
Telemark DC1	
Telemark SQL1	
Windjammer	ServiceDesk
Credentials	
Domain Tools	
Cloud Zone	
In-house	
Internal Tools	
Third Party	
Daily routine	

Name	Permissions
Windjammer - HelpD...	
Downhill Pro	HelpDesk, ServiceDesk
Downhill DB 1	
Downhill DC	
Downhill Web 1	
ladmin@downhill	
Telemark	Consultants, HelpDesk, ServiceDesk
Credentials	HelpDesk, ServiceDesk
david@telemark	
Boston	HelpDesk, ServiceDesk
DB 1 (MySQL)	
DB 2 (MariaDB)	
Exchange Admin	
John Smith	
Montreal	
Telemark DC1	
Telemark SQL1	
Daily routine	

Name	Permissions
Windjammer - Consu...	
Telemark	Consultants, HelpDesk, ServiceDesk
Montreal	
Telemark DC1	
Telemark SQL1	
Daily routine	

Side by side tree views

You can go further with granting permissions by using the ***Security*** and ***Attachments*** tabs of the permissions section. As always, a great care must be taken when granting permissions and users should have very strict privileges.

If you need more details on each permission, please consult our Common Settings – Permissions topic.

PowerShell Scripting

Part X

10 PowerShell Scripting

DESCRIPTION

Remote Desktop Manager supports Windows PowerShell. PowerShell is a powerful scripting shell that lets administrators automate Remote Desktop Manager. They are provided in a PowerShell module.

MANUALLY IMPORT THE POWERSHELL MODULE

The Remote Desktop Manager PowerShell Module, which is called RemoteDesktopManager.PowerShellModule.dll, is located in the Remote Desktop Manager installation directory. If you want to manually import the module in another application, for instance PowerShell ISE, you can use the Import-Module CmdLet to load the module. Simply use the following command:

```
Import-Module "${env:ProgramFiles(x86)}\Devolutions\Remote Desktop Manager\RemoteDesktopM
```

> If the sample above does not work due to a different Remote Desktop Manager installation directory, simply change ***${env:ProgramFiles(x86)}\Devolutions\Remote Desktop Manager*** for the correct application path.

COMMANDS

To list all cmdlet commands, please enter this command:

```
Get-Command -Module RemoteDesktopManager.PowerShellModule
```

For more information on those commands, use the following command:

```
get-help [command name]
```

> Here's how to generate a text file with all the commands:

```
Get-Command -Module RemoteDesktopManager.PowerShellModule -Type Cmdlet `
```

```
  | Sort-Object -Property Name `
  | Format-Table -Property Name `
  | out-file $env:temp\pshelp.txt

Get-Command -Module RemoteDesktopManager.PowerShellModule `
  | ForEach-Object { get-help -name $_.Name -full } `
  | out-file -append $env:temp\pshelp.txt
```

For further information on the subject, or if you have questions, join us on the forum and our team will be glad to assist you.

10.1 Tips and tricks

DESCRIPTION

We are always asked for a full list of property names and sadly it is extremely hard to provide for multiple reasons. The best way is still to look at the xml structure of an entry of the proper type to identify the field names.

REVERSE ENGINEERING AN ENTRY'S STRUCTURE

1. Create an entry of the needed type, add only mandatory data at this time. Save the entry.
2. Right-click on the entry, then use ***Clipboard – Copy***.
3. In the dialog that appears, switch to the **Preview** tab, copy the xml structure to a text file. This is the **BEFORE**.
4. Manually perform the modification to the entry that you would like to automate using PowerShell, save the entry.
5. Using ***Clipboard – Copy***, save the modified xml to another file. This is the **AFTER**.
6. Compare the two files with your favorite difference tool, you will see the fields that have changed, and the values that have been assigned. This indicates what your script should do.

ESSENTIAL INFORMATION ABOUT REMOTE DESKTOP MANAGER'S XML FORMAT

- To save space, most fields have a default value and when the field contains that default value, it simply does **NOT** appear in the content. That is why you must watch out for new fields that appear in the AFTER content.

- Credentials are handled in a special way. They contain a GUID when they refer to other entries, but they hold Well-Known static GUIDs when they use other mechanisms.

SETTING	WELL KNOWN GUID
Default	""
Credential repository --- *Prompt on connection* ---	"45479560-173E-435D-8848-C22F863FDC96"
Embedded	should be used for backwards compatibility only, we prefer not to list it here.
Parent (only for sub-connections)	"E2CC9029-CA3A-4308-BA54-16D5029BC8ED"
Inherited	"1310CF82-6FAB-4B7A-9EEA-3E2E451CA2CF"
My personal credentials	"9F3C3BCF-068A-4927-B996-CA52154CAE3B"
None	"B87B29D9-9239-4D7B-86D8-9B53DCD3BA9F"
Private Vault, paired with *PersonalConnectionID*	"245A4245-48E7-4DF5-9C4C-11861D8E1F81"
Private Vault Search, paired with *CredentialPrivateVaultsearchString*	"88E4BE76-4C5B-4694-AA9C-D53B7E0FE0DC"

TIPS AND TRICKS

- Use the Set-RDMProperty cmdlet to set almost any value within the session object. To find properties and paths, reverse engineer the session XML file format. Create a sample session in RDM and export it using the right click menu Import/Export - Export Session (.rdm).... Once exported, open the .rdm file with your favorite editor. Browse the XML structure to find the property path and name.

- Use the AddDataEntryKind method to set the data entry kind to Web (11 in this case). This is not actually documented – it's just a bonus tip that we use here at Devolutions all the time!

10.2 PowerShell Samples

DESCRIPTION

These are the recipes to perform various tasks using our PowerShell cmdlets.

10.2.1 Creating an entry

DESCRIPTION

This sample creates an entry.

SAMPLE

```
$computerName = "wind10";
$theusername = "david";
$thedomain = "windjammer";
$thepassword = "123456";
$session = New-RDMSession -Host $computerName -Type "RDPConfigured" -Name $computerName;
Set-RDMSession -Session $session -Refresh;
Update-RDMUI;
Set-RDMSessionUsername -ID $session.ID $theusername;
Set-RDMSessionDomain -ID $session.ID $thedomain;
$pass = ConvertTo-SecureString $thepassword -asplaintext -force;
Set-RDMSessionPassword -ID $session.ID -Password $pass;
```

NOTES

The Update-RMUI call is to allow the entry to be physically saved and available for the rest of the script. It may not be necessary for a types of data sources and our objective is to make it unnecessary for this scenario.

CMDLETS REFERENCE

10.2.2 Creating Group Folder Structure from CSV file

DESCRIPTION

Please note that the CSV file must be encoded in UTF-8 to support special characters.

This sample creates a Group Folder structure from a CSV file.

SAMPLE

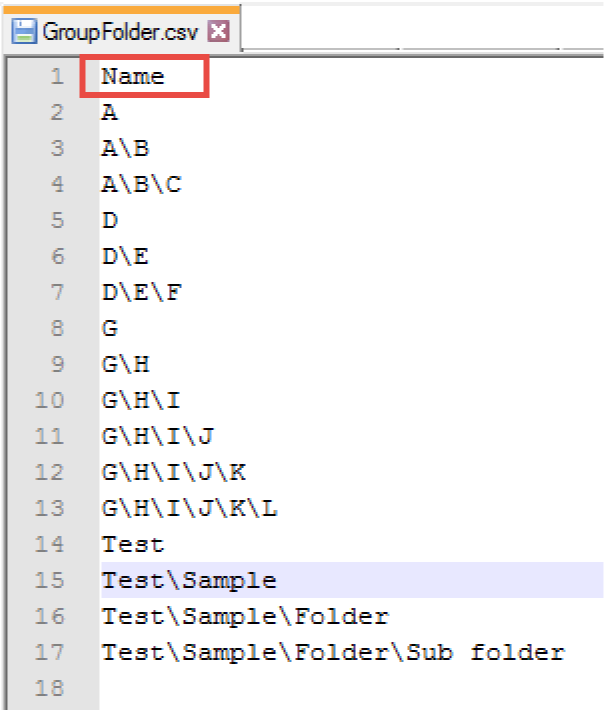
```
$csv = Import-Csv "c:\YourFolder\GroupFolder.csv"

foreach ($csvEntry in $csv) {
    $groupName = $csvEntry.Name

      # Extract the group folder name
      if ($groupName.Contains("\")) {
      $groupName = $groupName.Substring($groupName.LastIndexOf("\"), $groupName.Length -
      $groupName = $groupName.TrimStart("\")
            }

      # Create the group folder if it is not null, empty or fill in with space characters
      if (![string]::IsNullOrWhiteSpace($groupName)) {
          $session = New-RDMSession -Type "Group" -Name $groupName
          $session.Group = $csvEntry.Name
          Set-RDMSession $session
          Write-Host "Group Folder $groupName created" -f Yellow
      }
}

Update-RDMUI
```

NOTES

The CSV file must have only one column with the title set as Name.

The full path must be specified for each sub folder.

Here is an example of this CSV file :



```
Name
A
A\B
A\B\C
D
D\E
D\E\F
G
G\H
G\H\I
G\H\I\J
G\H\I\J\K
G\H\I\J\K\L
Test
Test\Sample
Test\Sample\Folder
Test\Sample\Folder\Sub folder

```

CSV File example

CMDLETS REFERENCE

10.3 Batch Actions Samples

DESCRIPTION

The Batch Actions allow for a quick way to modify multiple sessions at once, but within Remote Desktop Manager itself.

To be able to create your PowerShell script, you would need the name of the field(s) that you would like to update. To retrieve the exact name of the field, right-click on your session and select ***Clipboard – Copy***. You can then paste the information in a text editor to retrieve the name of the field(s) that you would like to modify via the Custom PowerShell Command.

Since they use the Powershell technology, we provides samples in this section because the fields are the same when accessed through our Batch Actions or through Powershell.

SAMPLES

DISABLE ONLY SEND PASSWORD IN HTML PASSWORD FIELD OPTION IN WEB BROWSER SESSIONS

```
$connection.Web.OnlySendPasswordInPasswordField = $false;
$RDM.Save ( ) ;
```

ENABLE VIEW URL EMBEDDED (INFORMATION ENTRIES)

```
$connection.DataEntry.ViewUrlDisplayMode = "Default";
$RDM.Save();
```

ViewUrlDisplayMode: "Default" = embedded, "External" = external.

OPEN URL (EXTERNAL) FOR WEB LOGIN (INFORMATION ENTRIES)

```
$connection.DataEntry.DefaultAction = "OpenUrlExternal";
$RDM.Save();
```

SSH SHELL BATCH EDIT (SESSION TYPE SETTINGS)

```
$connection.Terminal.MaxScrollbackLines = 2000;

$connection.Terminal.AlwaysAcceptFingerprint = $true;

$connection.Terminal.EnableLogging = $true;
$connection.Terminal.LogPath = '$LOGPATH$\$NAME$_$DATE_TEXT_ISO$_$TIME_TEXT_ISO$.log
$connection.Terminal.LogMode = 1;
$connection.Terminal.LogOverwriteMode = 0;
$RDM.Save();
```

Here are some values that you can change for this command;

LogPath: your path between ' ' (single quotes). You can also use variables. i.e. %USERPROFILE%, $NAME$, etc.
In this example $LOGPATH$ is a custom variable defined in the Data Source Settings (System Settings) - Custom Variables
LogMode: 1 = Printable Output, 0 = Event
TerminalLogOverwriteMode: 0 = default, 1 = prompt, 2 = append, 3 = overwrite
Here's also other options that you can modify;

$connection.Terminal.BellMode = 'Visual'
$connection.Terminal.CloseOnDisconnect = $false

CONVERT WEB BROWSER SESSIONS INTO LOGMEIN SESSIONS

```
$connection.ConnectionType = 'LogMeIn';
$connection.ConnectionSubType = '' ;
$connection.LogMeIn.Url = $connection.WebBrowserUrl;
$RDM.Save();
```

Enable the "Hide script errors in all your LogMeIn sessions."

```
$connection.LogMeIn.ScriptErrorsSuppressed = $true;
$RDM.Save();
```

Hide navigation bar.

```
$connection.LogMeIn.ShowUrl = $false;
$RDM.Save();
```

Change the Web Browser Application.

```
$connection.LogMeIn.WebBrowserApplication = "GoogleChrome";
$RDM.Save();
```

Enable the Sandbox Process.

```
$connection.LogMeIn.SandboxProcess = $true;
$RDM.Save();
```

Change the URL.

```
$connection.LogMeIn.Url = " ";
$RDM.Save();
```

Change the Portal Login field.

```
$connection.LogMeIn.DashboardHostUrl = " ";
$RDM.Save();
```

Change Username & Password.

Please run these two one at a time

Host;

```
$connection.LogMeIn.UserName = " ";
$RDM.Save();
$connection.LogMeIn.SafePassword = " ";
$RDM.Save();
```

Portal;

```
$connection.LogMeIn. DashboardEmail = " ";
$RDM.Save();
$connection.LogMeIn. SafePasswordDashboard = " ";
$RDM.Save();
```

CHANGE A CUSTOM FIELD VALUE WITHOUT CHANGING THE DATA

```
$connection.MetaInformation.CustomField3Title = "MyField"
$RDM.Save();
```

Please note that you would need to change "MyField" for the value that you want to replace Custom field #3 with.

BULK UPDATE FQDN INFO TO SESSIONS.

```
$connection.host = $Connection.name + ".mydomain.com"
$RDM.Save();
```

BULK CHANGE RECORDING FIELD FOR PUTTY SESSIONS

```
$connection.Putty.RecordingMode = 1;
$connection.Putty.RecordingFileName = "C:\path\to\your\file.log"
$RDM.Save();
```

CHANGE THE COMPUTER FIELD OF AN RDP SESSION

```
$connection.Url = " ";
$RDM.Save();
```

ENCODING

```
$connection.Putty.TelnetEncoding = "UTF-8";
$RDM.Save();
```

CHANGE THE EXPIRATION DATE OF AN RDP SESSION

The date must be specified using the ISO8601 format.

```
$connection.MetaInformation.Expiration = "2018-12-25T00:00:00-05:00";
$RDM.Save();
```

CHANGE THE EXPIRATION DATE OF AN RDP SESSION WITH A RELATIVE DATE

Use any date time operator supported by PowerShell.

```
$connection.MetaInformation.Expiration = (Get-Date).AddMonths(6);
$RDM.Save();
```

MODIFY PAGE TAB TITLE IN UI

```
$connection.TabTitle = '$COMPANY_NAME$ - $NAME$';
$RDM.Save();
```

CLEAR KEYWORDS IN SESSION

```
$connection.MetaInformation.Keywords = "";
$RDM.Save();
```

CHANGE HISTORY MAX LINES FOR SSH SHELL (REBEX)

```
$connection.Putty.HistoryMaxLength = 2000;
$RDM.Save();
```

CONVERT COMMAND LINE TOOL TO A COMMAND LINE SESSION

```
$connection.ConnectionType = 3;
$RDM.Save();
```

CHANGE KEYBOARD HOOK FOR AN RDP SESSION

```
$connection.KeyboardHook = "OnTheRemoteComputer";
$RDM.Save();
```

Knowledge Base

Part XI

11 Knowledge Base

11.1 Protocols and application

11.1.1 Remote Desktop Manager

11.1.1.1 Add a web link in Macros/Scripts/Tools Session

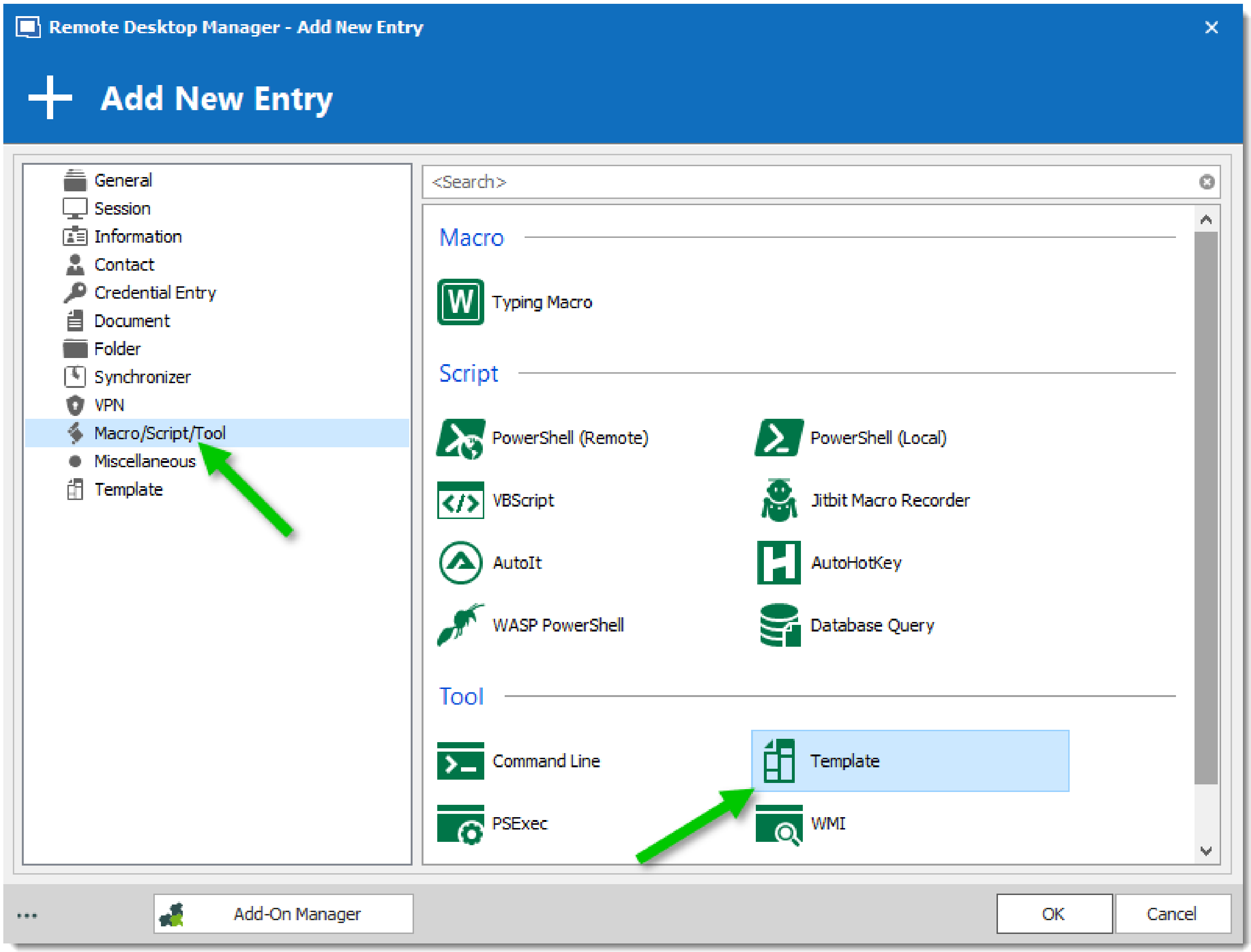
DESCRIPTION

Macros/Scripts/Tools sessions can be used to open web links in Remote Desktop Manager.

CREATE THE EMBEDDED WEB LINK

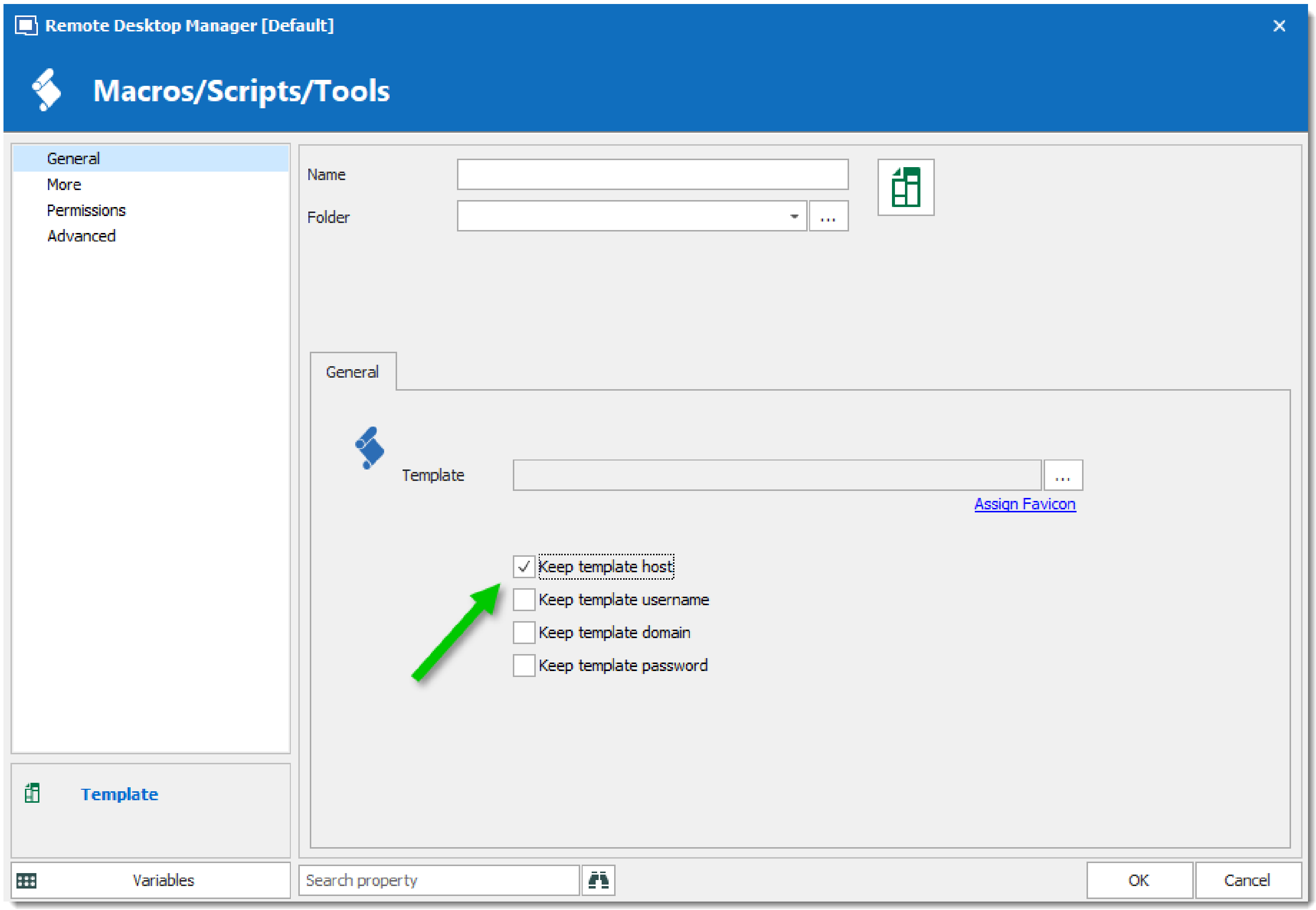
1. Create a **shared web session** Template.

2. Once the template is created, add a new entry ***Macros/Scripts/Tools – Template***.



3. *Assign the new template to your newly created Macros/Scripts/Tools session using the ellipsis button.*

> ! Make sure to check the **Keep template host** option.



☑ Keep template host
□ Keep template username
□ Keep template domain
□ Keep template password

11.1.1.2 Configure VPN for multiple sessions

DESCRIPTION

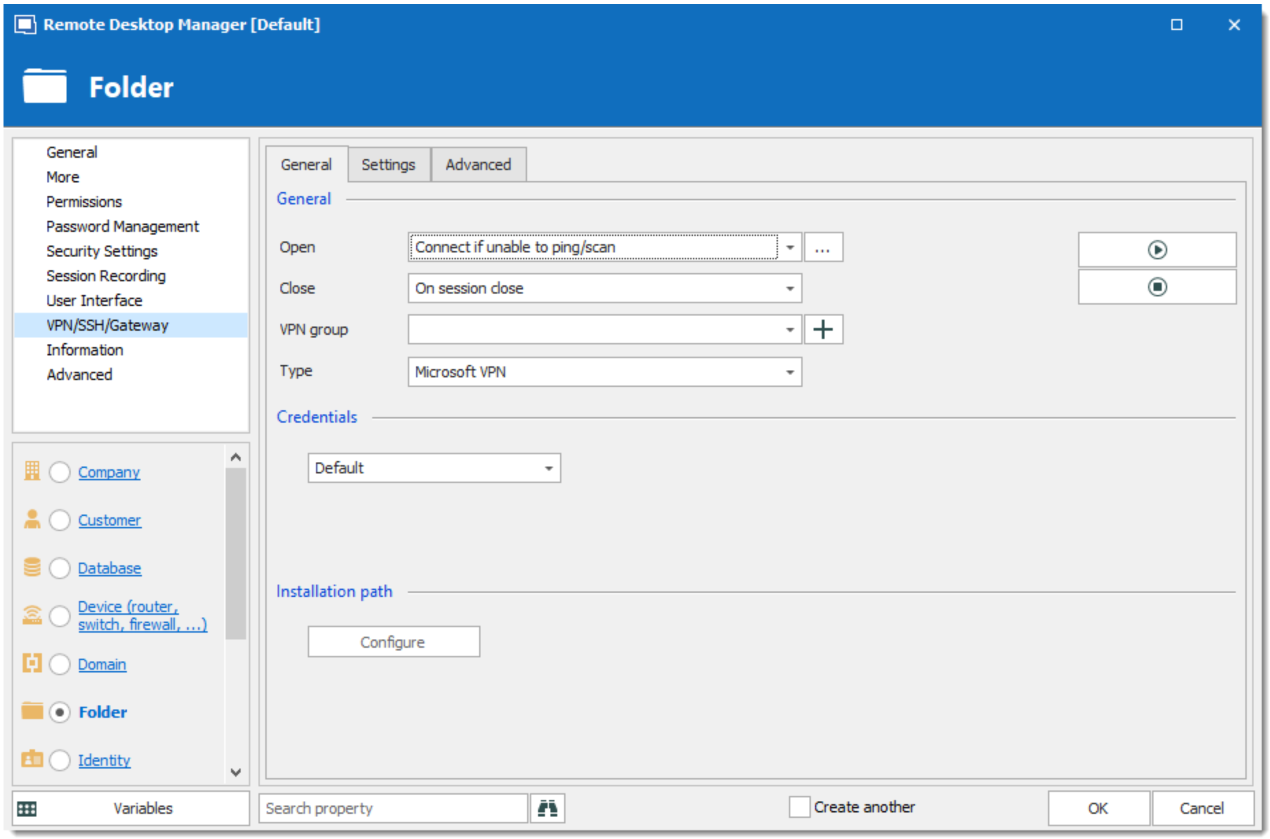
Remote Desktop Manager automates opening a VPN when launching a remote session. This configuration is well suited to situations where you need one VPN for a group of servers at a remote location. This procedure sets the VPN configurations on the folder and the entries inherit the settings.

STEPS

Before following the steps below, create a VPN entry and remote session entries, then place these entries in a folder. For more information about VPN entries, consult the VPN topic.

CONFIGURE THE VPN SETTINGS ON THE FOLDER ENTRY

1. Select the folder and open its **Properties** then select **VPN/SSH/Gateway** from the menu on the left.



Open: Connect if unable to ping/scan

Close: On session close

VPN group:

Type: Microsoft VPN

Credentials: Default

Folder properties - VPN/SSH/Gateway

2. In the **Open** list, select how the VPN opens when you launch a remote session. We recommend choosing **Connect if unable to ping/scan** on the folder, later we'll set **Inherited** for each session entry.

OPTION	DESCRIPTION
None	VPN does not open when the session is opened.
Always connect	VPN opens when the session is opened.
Manual	VPN requires user to manually activate the VPN before opening the session.
Connect if unable to ping/scan	Remote Desktop Manager tests if the host responds, if not the VPN opens.

OPTION	DESCRIPTION
Inherited	VPN inherits the settings.
Ask for confirmation	VPN prompts for confirmation before opening.
Connect if network adapter not found	Remote Desktop Manager tests if network adapter is installed and active, if not the VPN opens.
Prompt if unable to ping/scan	Tests if the host responds, if not VPN prompts for confirmation before opening.

3. In the **Close** list, select how the VPN closes at the end of a remote session. We recommend **On session close**.

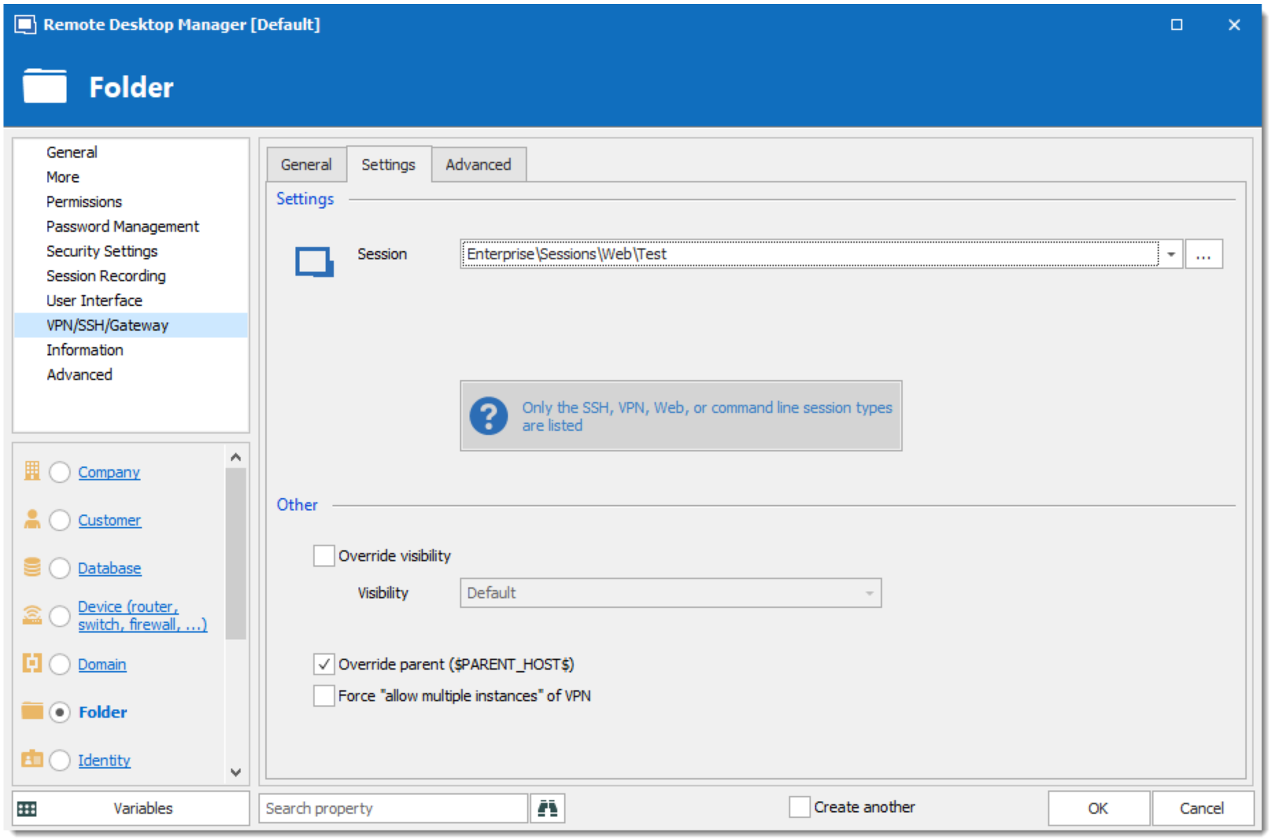
OPTION	DESCRIPTION
On session close	VPN closes automatically when the session is closed.
Manually Later	VPN requires user to manually close the VPN entry when finished.
Confirm disconnect	VPN prompts to close the VPN when session is closed.

4. Create a **VPN group** so the VPN only closes when the last session in the **VPN group** is closed.

4.1 Click the plus sign to add a new **VPN group**, then enter a group name.

5. In the **Type** list, click **Session**.

6. Click the **Settings** tab.



Settings

Session: Enterprise\Sessions\Web\Test

Only the SSH, VPN, Web, or command line session types are listed

Other

□ Override visibility

Visibility: Default

☑ Override parent ($PARENT_HOST$)

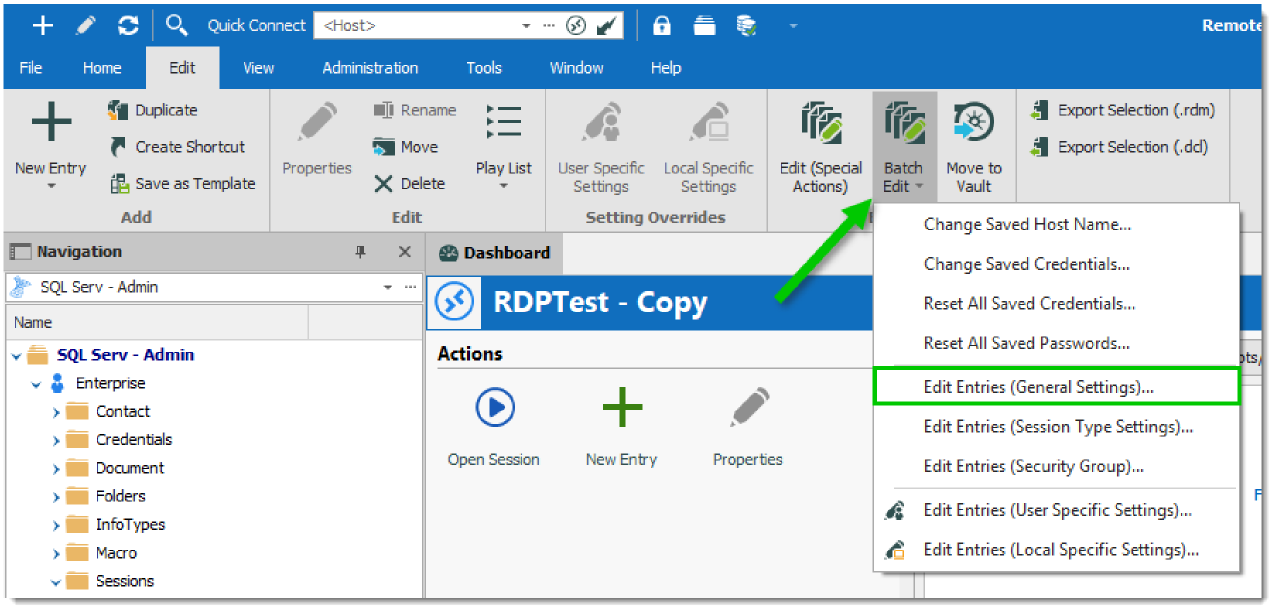
□ Force "allow multiple instances" of VPN

Folder Properties - VPN/SSH/Gateway - Settings

7. In the **Session** list, select the VPN entry you created.

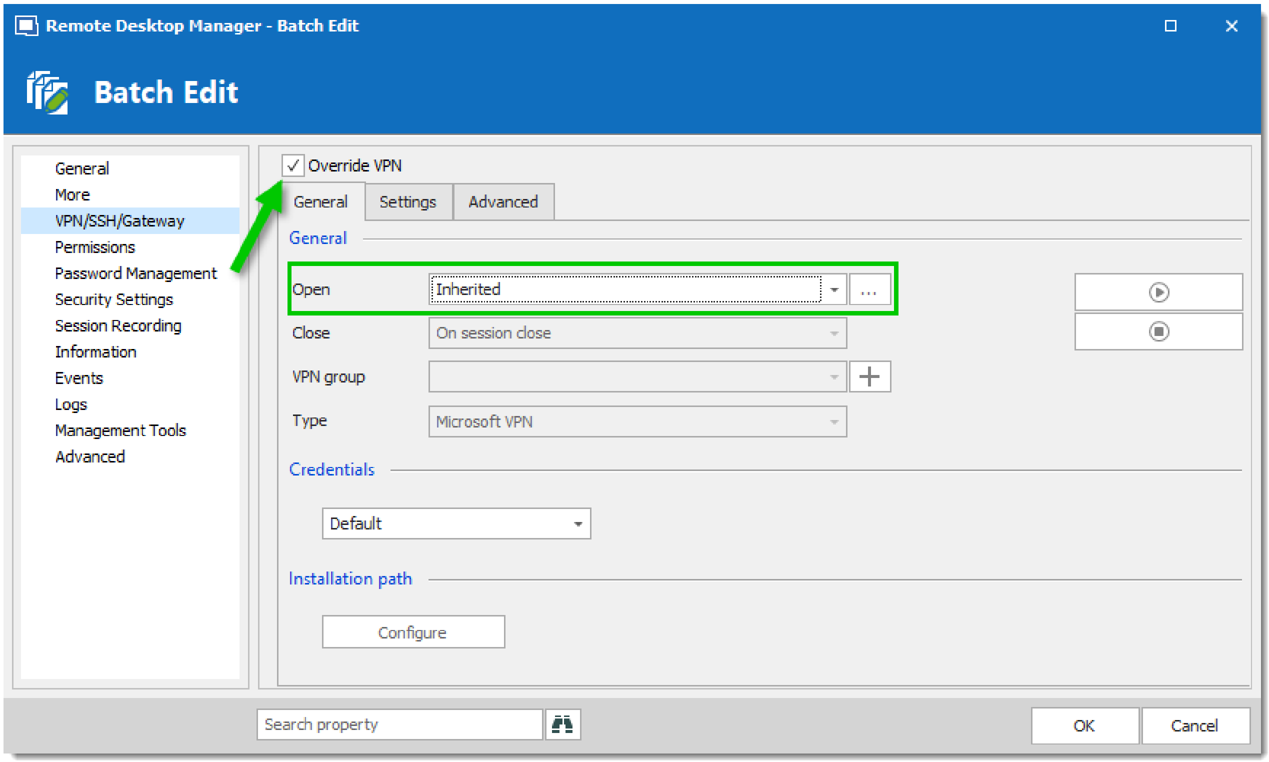
PERFORM A BATCH EDIT TO CONFIGURE THE SESSION ENTRIES

1. Select the session entries in the folder.
2. On the **Edit** tab, click **Batch Edit**, then select **Edit Entries (General Settings)**. **Batch Edit** is also available in the right-click context menu.



Batch Edit - Edit Entries (General Settings)

3. On **VPN/SSH/Gateway**, select **Override VPN** box.



☑ Override VPN

Open: Inherited

Close: On session close

VPN group:

Type: Microsoft VPN

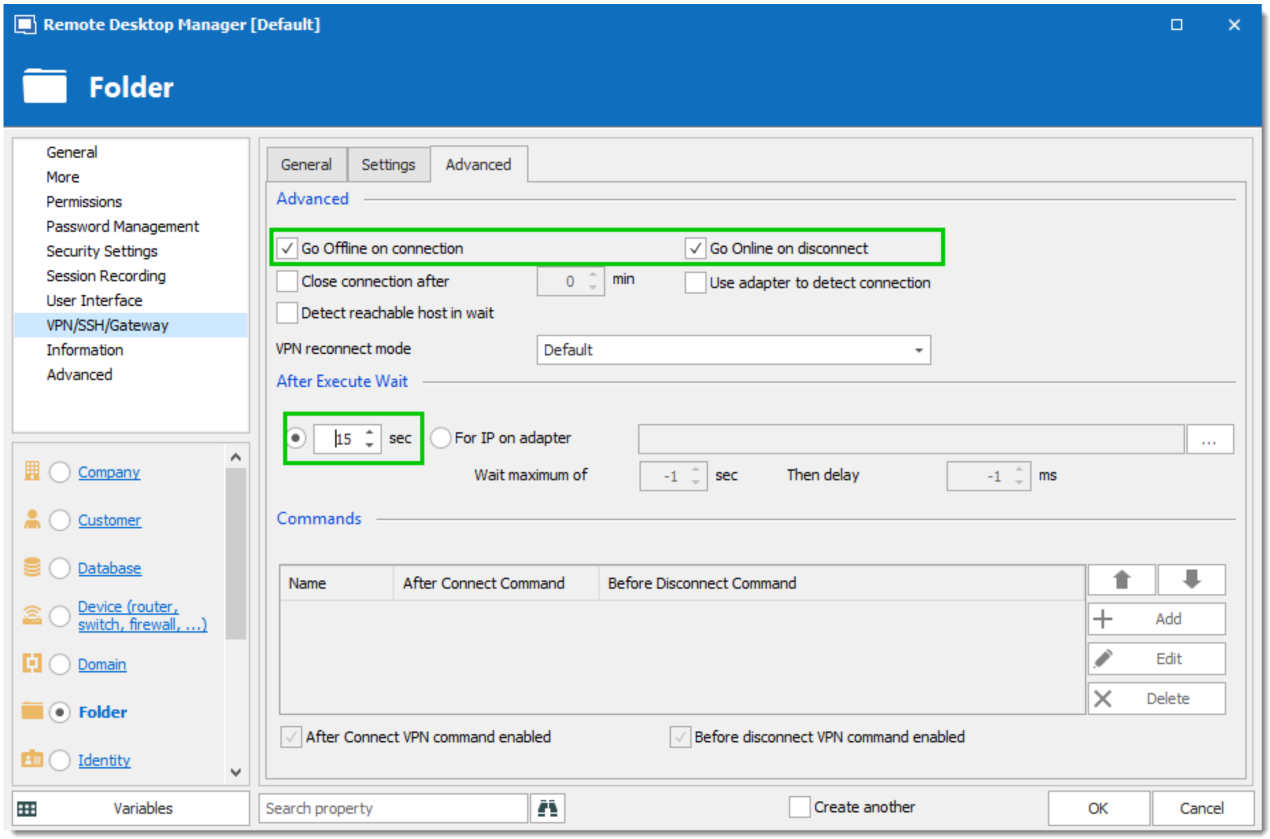
Credentials: Default

Batch Edit - VPN/SSH/Gateway

4. Select **Inherited** in the **Open** list. It will set all the **General** options to **Inherited**.

SETTINGS FOR SPECIFIC SITUATIONS

There are many options to accommodate a range of VPN types. Below are two common situations and options to make using the VPN more efficient.



Advanced

☑ Go Offline on connection ☑ Go Online on disconnect

□ Close connection after 0 min □ Use adapter to detect connection

□ Detect reachable host in wait

VPN reconnect mode Default

After Execute Wait

● 15 sec ○ For IP on adapter

Wait maximum of -1 sec Then delay -1 ms

Commands

Name	After Connect Command	Before Disconnect Command

☑ After Connect VPN command enabled ☑ Before disconnect VPN command enabled

VPN/SSH/Gateway - Advanced

1. You lose connection to the data source when the VPN is active.

Automate going offline when the VPN opens.

Select **Go Offline on connection** and **Go Online on disconnect** check boxes.

2. The VPN is slow to connect.

You can adjust the time Remote Desktop Manager waits for the VPN to open.

In the **sec** box, enter the a time in seconds.

-1 sec is the default time (5 seconds). Change the default time for all VPN entries in ***File – Options – Types – VPN – VPN default pause***.

11.1.1.3 Import Credentials From Keepass

DESCRIPTION

Remote Desktop Manager imports credentials from Keepass. It is a simple way to build your data. The imported information can be converted into three types of entry: **Username/Password** and **Website**. The entries include credentials, url addresses and notes.

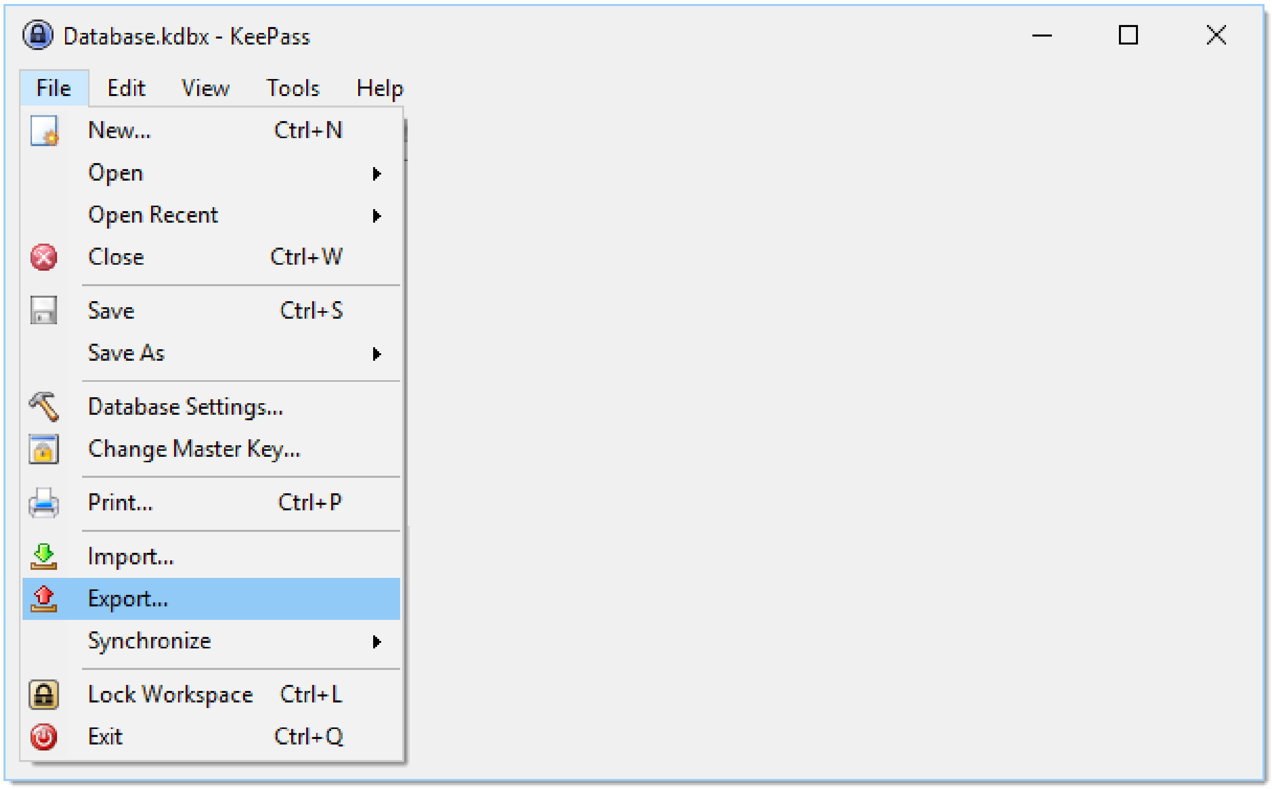
HOW TO IMPORT VARIOUS ENTRIES

Step-by-step instructions to import credentials and websites from Keepass

PROCEDURE

EXPORT ENTRIES FROM KEEPASS

1. In the **File** menu, click **Export**.

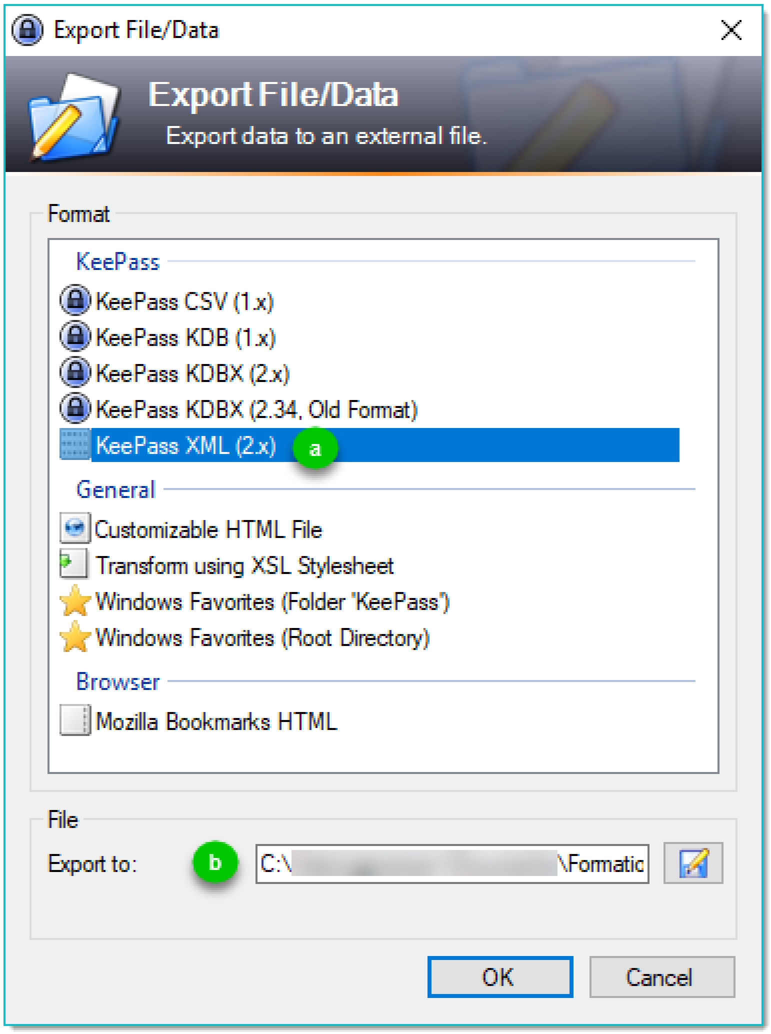


Keepass - File - Export

2. Export Data to an external file. RDM supports two file types for KeePass: XML and CSV. An XML file will retain the folder structure from KeePass.

a) Choose desired file type: **KeePass CSV (1.x)** or **KeePass XML (2.x)**

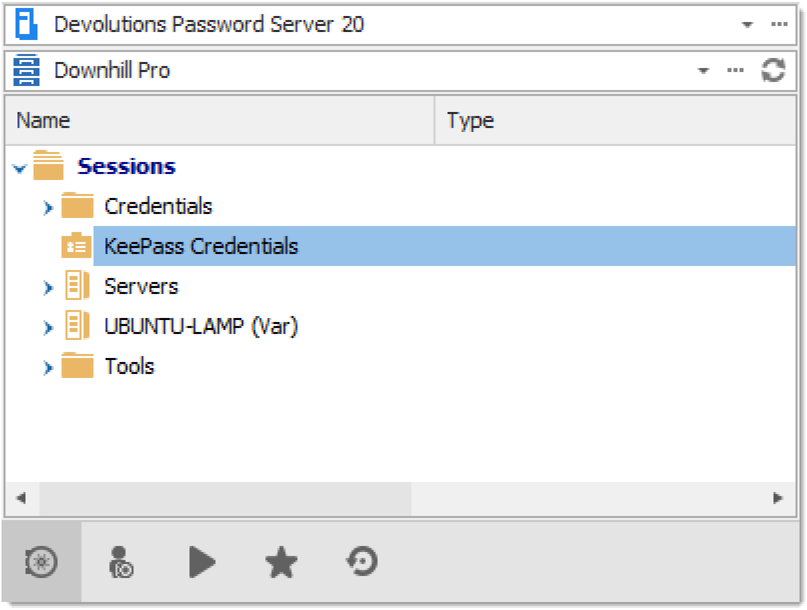
b) Select path to save the exported file.



KeePass - Export Data

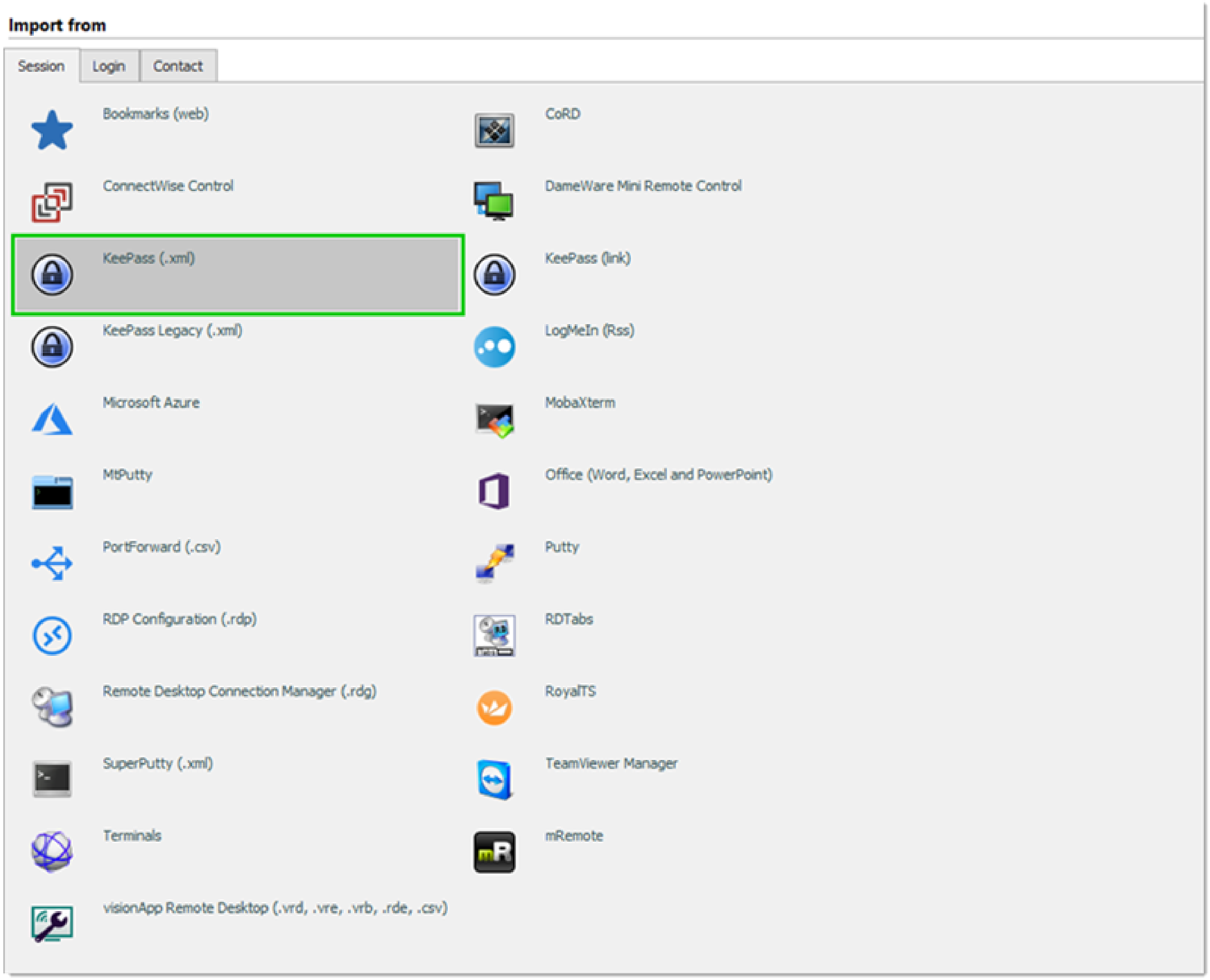
IMPORT DATA INTO REMOTE DESKTOP MANAGER

1. The data is imported into the currently selected folder.



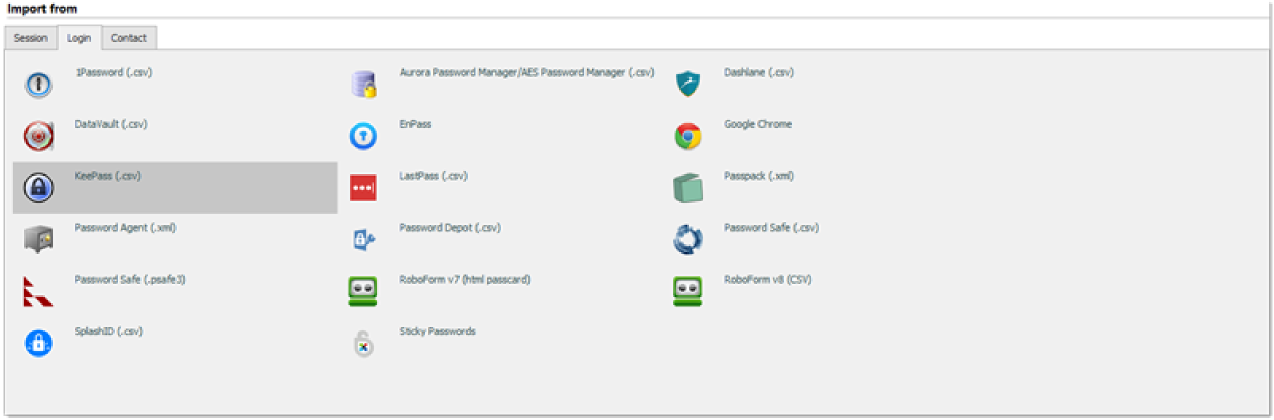
2. Choose the file type to import in ***File – Import.***

2.1 To import an xml file, choose **Import from Session**.



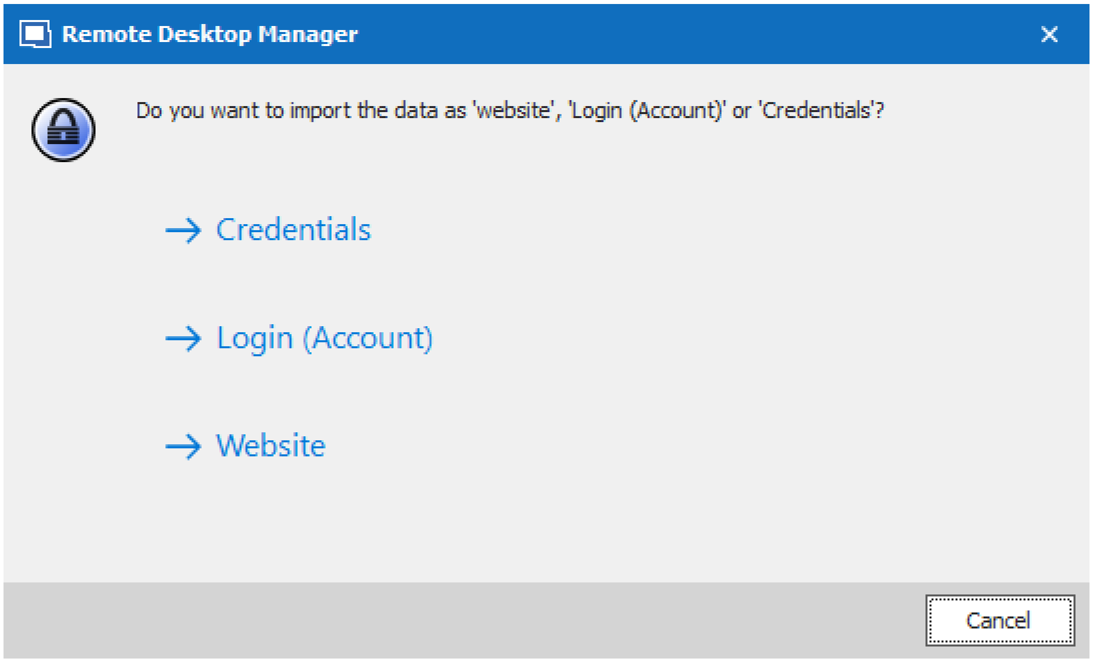
File – Import from Session (XML)

2.2 To import a csv file, choose **Import from Login**.



File - Import from Login (CSV)

3. Choose an entry type. All imported entries are converted to this type.



Do you want to import the data as 'website', 'Login (Account)' or 'Credentials'?

→ Credentials

→ Login (Account)

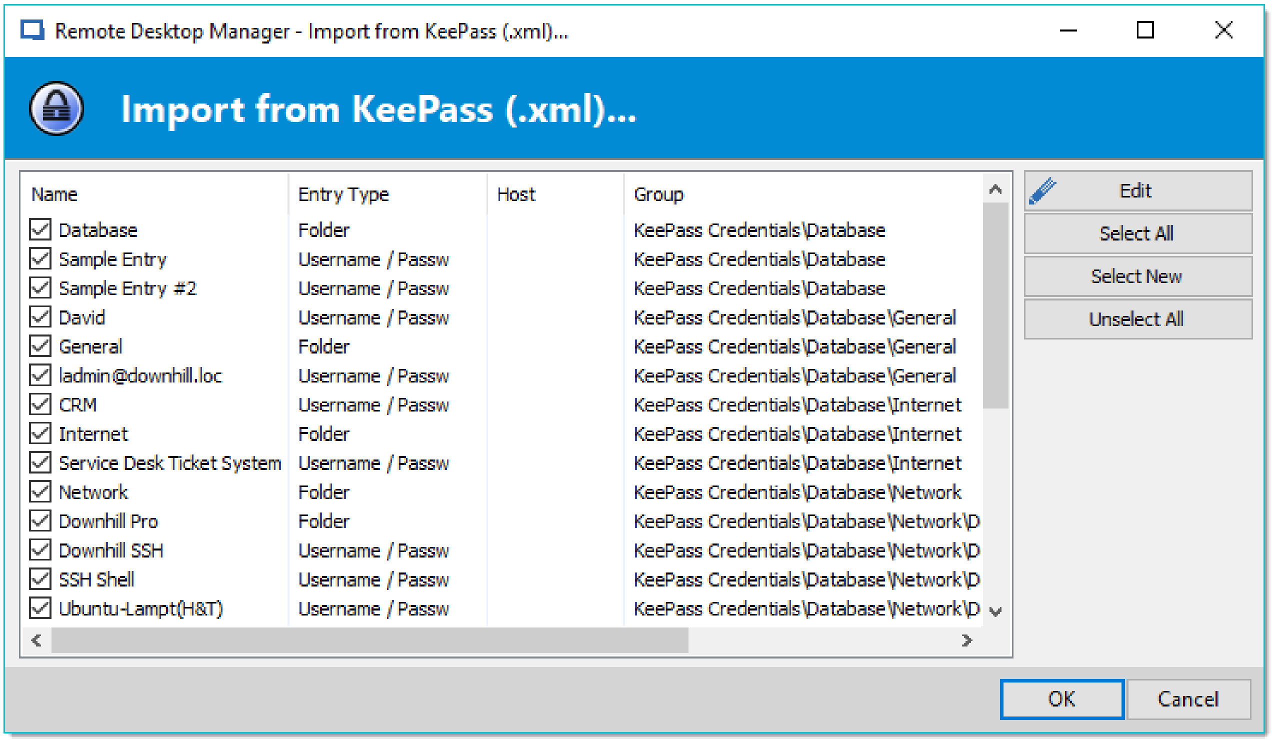
→ Website

Entry Type - Imported Data

OPTION	DESCRIPTION
Credentials	Includes username, password and domain.
Website	Includes username, password, and website address. Good choice for website information and can be used with Devolutions Web Login. Has more settings for default web browser, display, credentials and security questions.

4. Select the KeePass exported file in the file explorer and click **Open**.

5. Choose the entries you want to import.

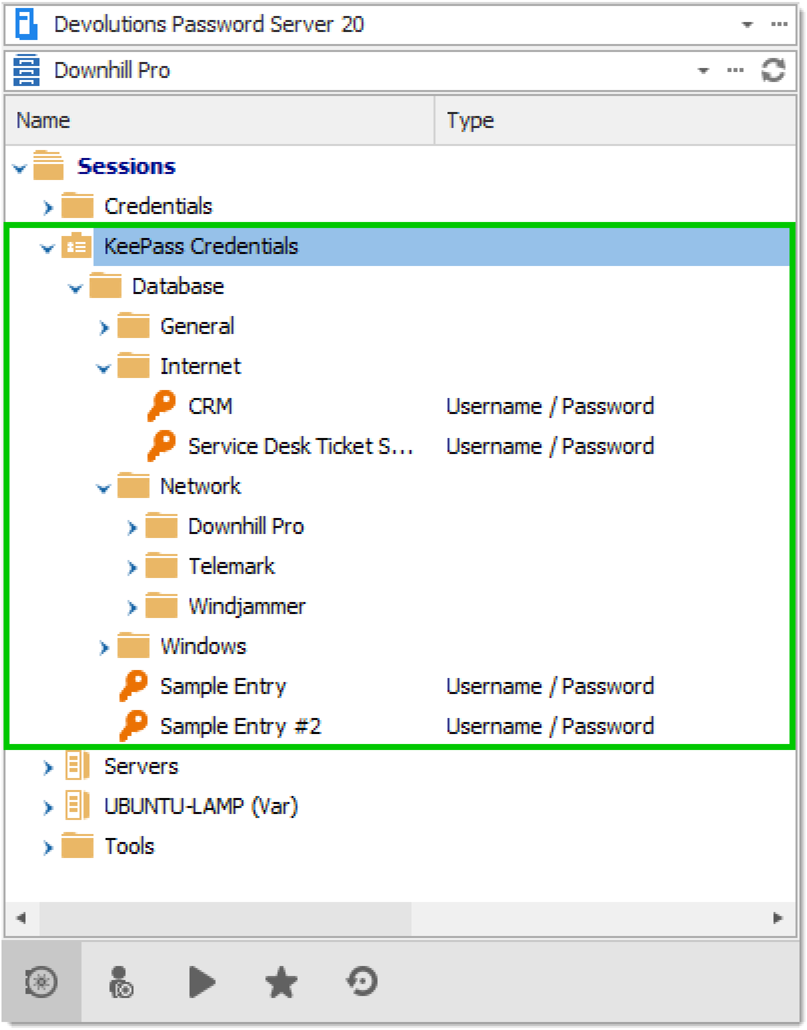


Remote Desktop Manager - Import from KeePass (.xml)...
Import from KeePass (.xml)...
Edit
Select All
Select New
Unselect All
OK
Cancel

Name	Entry Type	Host	Group
☑ Database	Folder		KeePass Credentials\Database
☑ Sample Entry	Username / Passw		KeePass Credentials\Database
☑ Sample Entry #2	Username / Passw		KeePass Credentials\Database
☑ David	Username / Passw		KeePass Credentials\Database\General
☑ General	Folder		KeePass Credentials\Database\General
☑ ladmin@downhill.loc	Username / Passw		KeePass Credentials\Database\General
☑ CRM	Username / Passw		KeePass Credentials\Database\Internet
☑ Internet	Folder		KeePass Credentials\Database\Internet
☑ Service Desk Ticket System	Username / Passw		KeePass Credentials\Database\Internet
☑ Network	Folder		KeePass Credentials\Database\Network
☑ Downhill Pro	Folder		KeePass Credentials\Database\Network\D
☑ Downhill SSH	Username / Passw		KeePass Credentials\Database\Network\D
☑ SSH Shell	Username / Passw		KeePass Credentials\Database\Network\D
☑ Ubuntu-Lampt(H&T)	Username / Passw		KeePass Credentials\Database\Network\D

Import entries from KeePass

6. The imported entries are ready to use.



Imported KeePass entries in Remote Desktop Manager

11.1.1.4 Import and Export

DESCRIPTION

To simplify deployment for multiple users, it is possible to import and export data sources, entries, and even the application's configuration. Configure the application once, with data sources, entries, and options. Export any of these configurations, then import them in another Remote Desktop Manager instance.

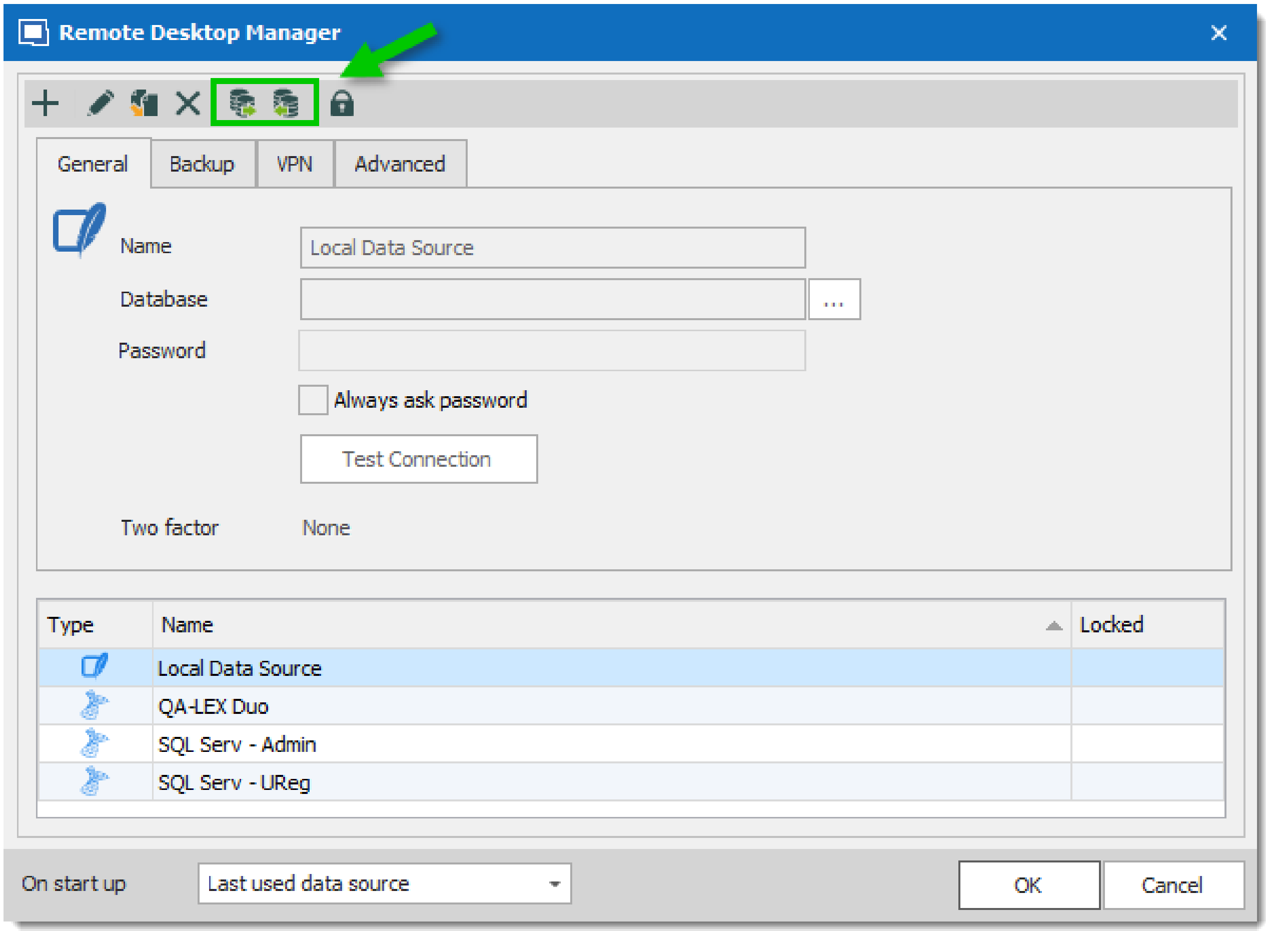
> Instead of exporting/importing data sources and options separately, it is possible to create a custom installer. Our Custom Installer Service replicates the configuration of a Remote Desktop Manager instance.

HOW TO EXPORT ENTRIES FROM RDM

Export entries from RDM and into My Private Vault DPS

DATA SOURCES

Only the data source configuration is exported. The resulting .rdd file does not contain the database content. It contains only the configuration used to connect to the database. From ***File – Data Sources***, click on the **Export Data Source Configuration...** button, then save the ***.rdd** file on your computer.



Name: Local Data Source

Database: ...

Password:

□ Always ask password

Two factor: None

Type	Name	Locked
	Local Data Source	
	QA-LEX Duo	
	SQL Serv - Admin	
	SQL Serv - UReg	

On start up: Last used data source

Data Sources - Import and Export

To import the data source in another Remote Desktop Manager instance, use ***File – Data Sources***, and click on the **Import Data Source Configuration** button.

A locked data source can be exported and imported, but the content will be locked unless a password is entered when the data source is selected. See Lock Data Source for more information.

ENTRIES

Entries configuration can be exported to save the time of creating the same set of entries for multiple users. There are many ways of exporting entries. The only formats allowed to import entries previously exported from Remote Desktop Manager are .rdm, and .xml.

Export a set of entries:

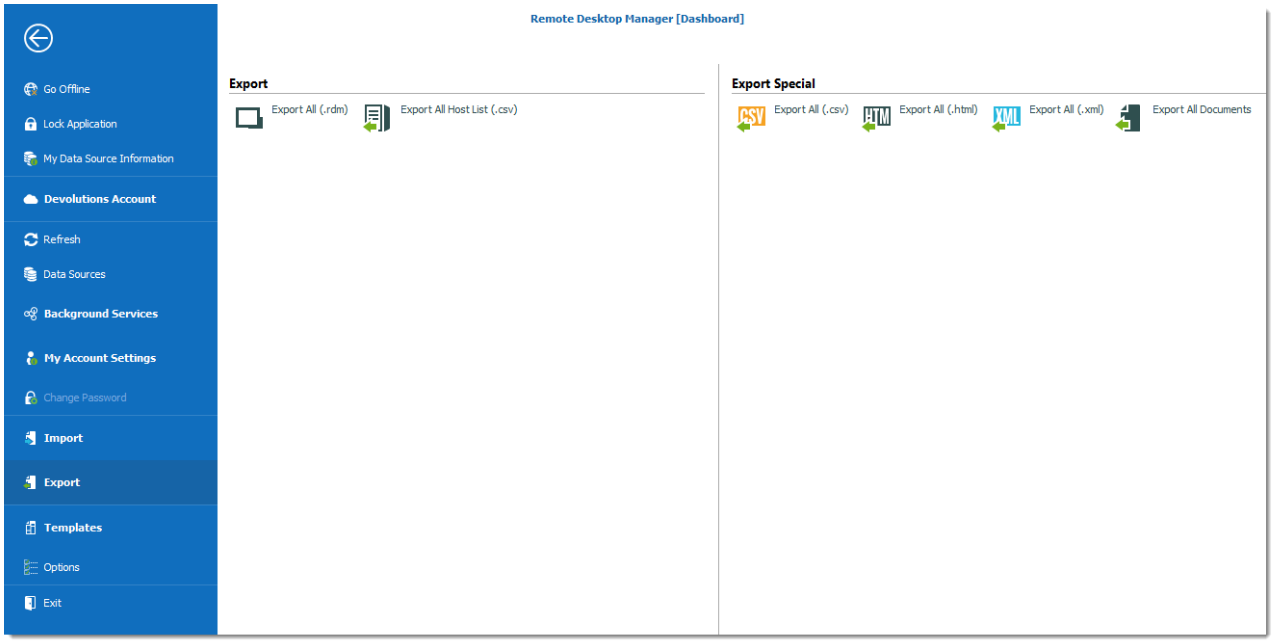
OPTION	DESCRIPTION
Export Selection	Select one entry or more, then right-click the selection. In the context menu, under **Export**, select **Export Selection (.rdm)...**
Export Special	Select one entry or more, then right-click the selection. In the context menu, under ***Export – Export Special***, select the desired export format.
Export as RDP	Select one RDP entry, then right-click the selection. In the context menu, under **Export**, select **Export Entry as Remote Desktop File (.rdp)...**

Export all entries:

OPTION	DESCRIPTION
Export All Entries	Right-click an entry in the Navigation Pane. In the context menu, under **Export**, select **Export All Entries (.rdm)...**
Export Special	Right-click an entry in the Navigation Pane. In the context menu, under ***Export – Export Special***, select the desired export format.
Export All Host	Right-click an entry in the Navigation Pane. In the context menu, under **Export**, select **Export All Hosts List (.csv)...**

OPTION	DESCRIPTION
Export All Documents	Right-click an entry in the Navigation Pane. In the context menu, under ***Export – Export Special***, select **Export All Documents...**

The functionalities for exporting all entries are also available in the ***File – Export*** Menu.

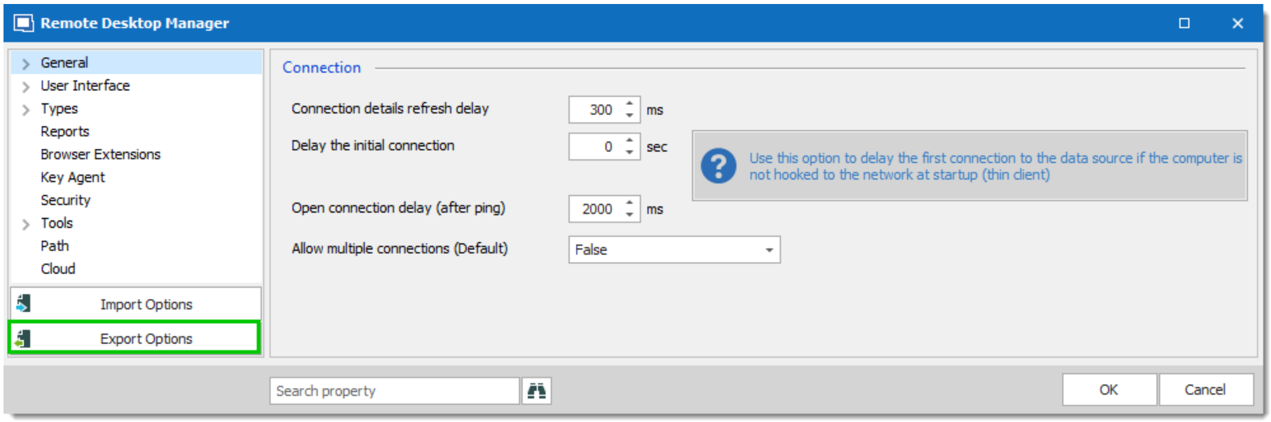


File - Export

APPLICATION CONFIGURATION

The application's configuration can be exported to replicate the configuration in other Remote Desktop Manager instances.

Use ***File – Options – Export Options***, and save the RemoteDesktopManager.cfg file on your computer.



Connection details refresh delay 300 ms

Delay the initial connection 0 sec

Use this option to delay the first connection to the data source if the computer is not hooked to the network at startup (thin client)

Open connection delay (after ping) 2000 ms

Allow multiple connections (Default) False

File - Options - Export Options

To import the configuration, use File - Options - Import Options, and select the exported RemoteDesktopManager.cfg. You can also copy the file to the installation directory of another Remote Desktop Manager instance.

11.1.1.5 Multiple Types of Connections to a single computer

DESCRIPTION

You have hosts for which you need to use many different remote access technologies (ex: RDP, SSH, Web, etc).

There are three solutions to this scenario:

1. Ad-hoc Launch with a Template
2. Folders and Dynamic Variables
3. Host with Templates

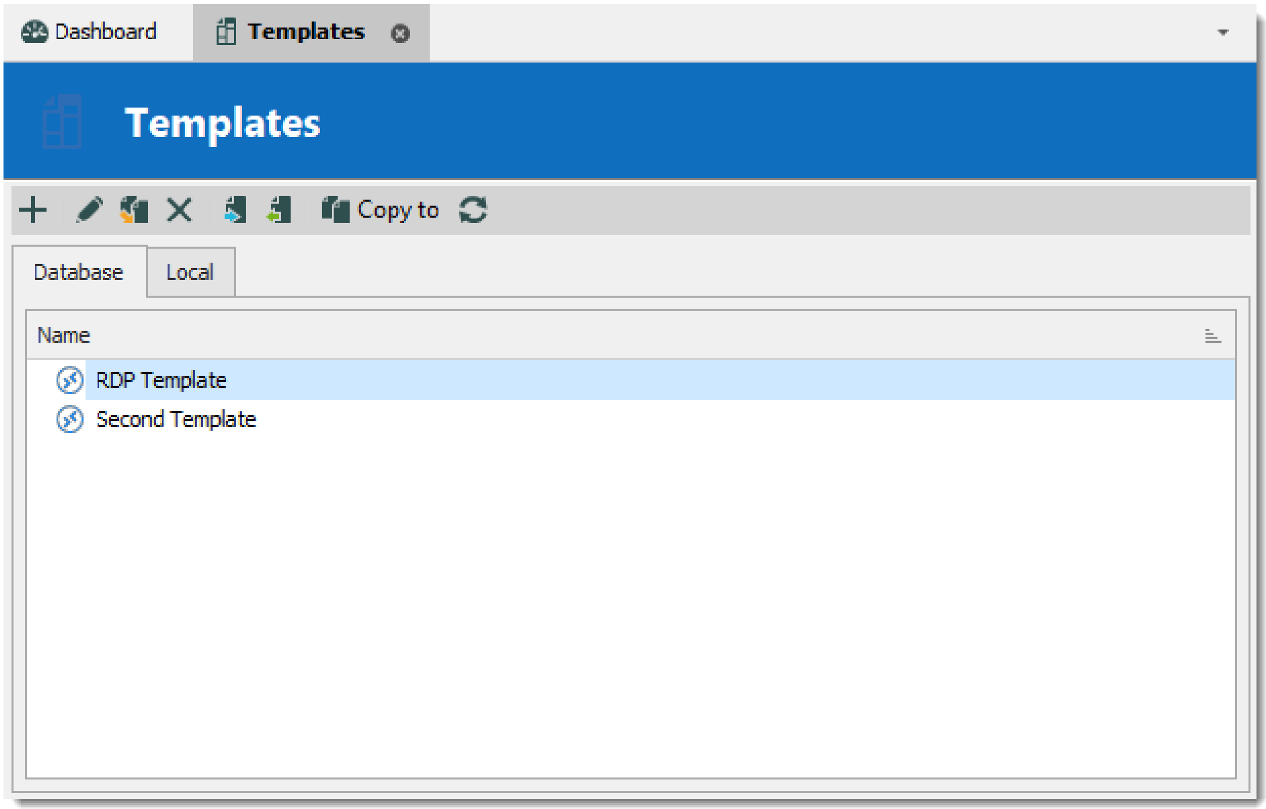
11.1.1.5.1 Ad-hoc Launch w ith a Template

DESCRIPTION

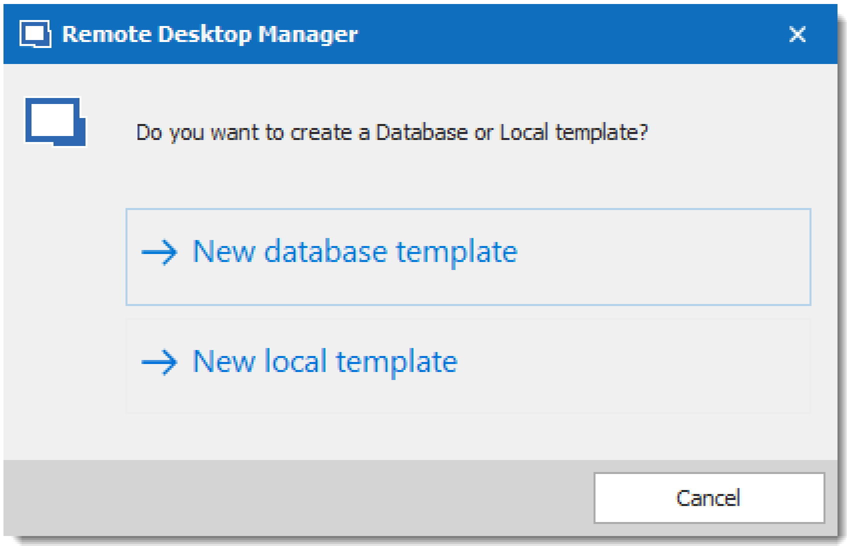
This method uses a dashboard command that is available on all sessions. It's a good fit for a scenario where you usually connect with a specific technology, but occasionally need to use another.

SETTINGS

1. Create a local or database template in ***File – Templates – Templates.***



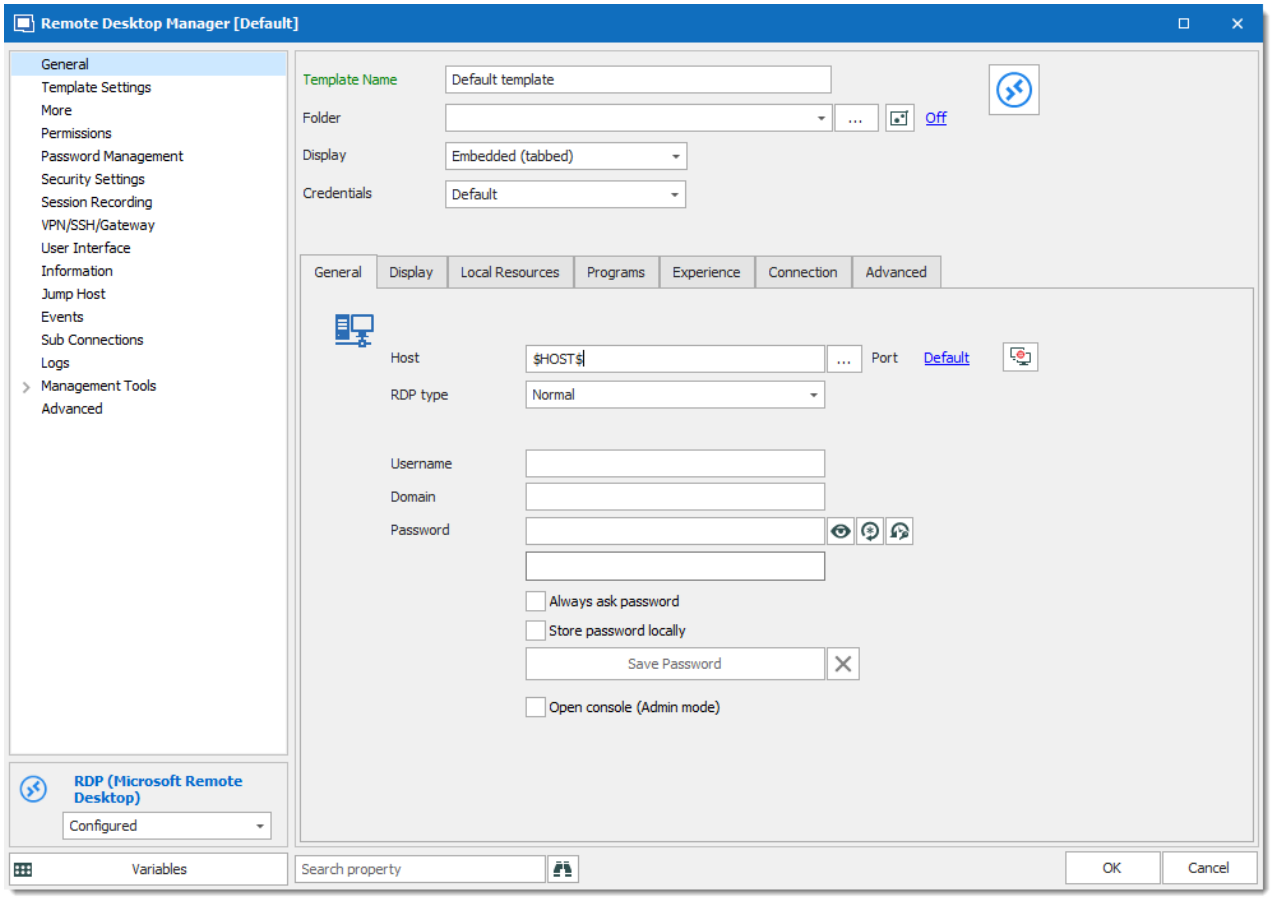
Templates



Do you want to create a Database or Local template?

Create Template

2. In the computer field, use the **$HOST$** variable and click on **OK.**



Template Name: Default template

Folder: Off

Display: Embedded (tabbed)

Credentials: Default

Host: $HOST$ Port: Default

RDP type: Normal

Username:

Domain:

Password:

□ Always ask password

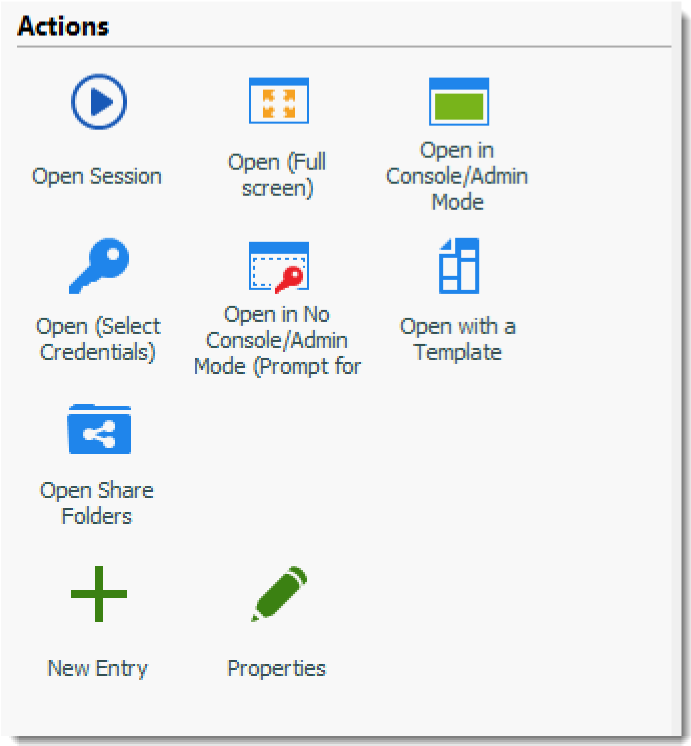
□ Store password locally

□ Open console (Admin mode)

RDP (Microsoft Remote Desktop): Configured

Default Template

3. In the case that you need to launch a session using a template, click on **Open with a Template** in the **Dashboard** and select the appropriate template



Open with a Template

11.1.1.5.2 Folders and Dynamic Variables

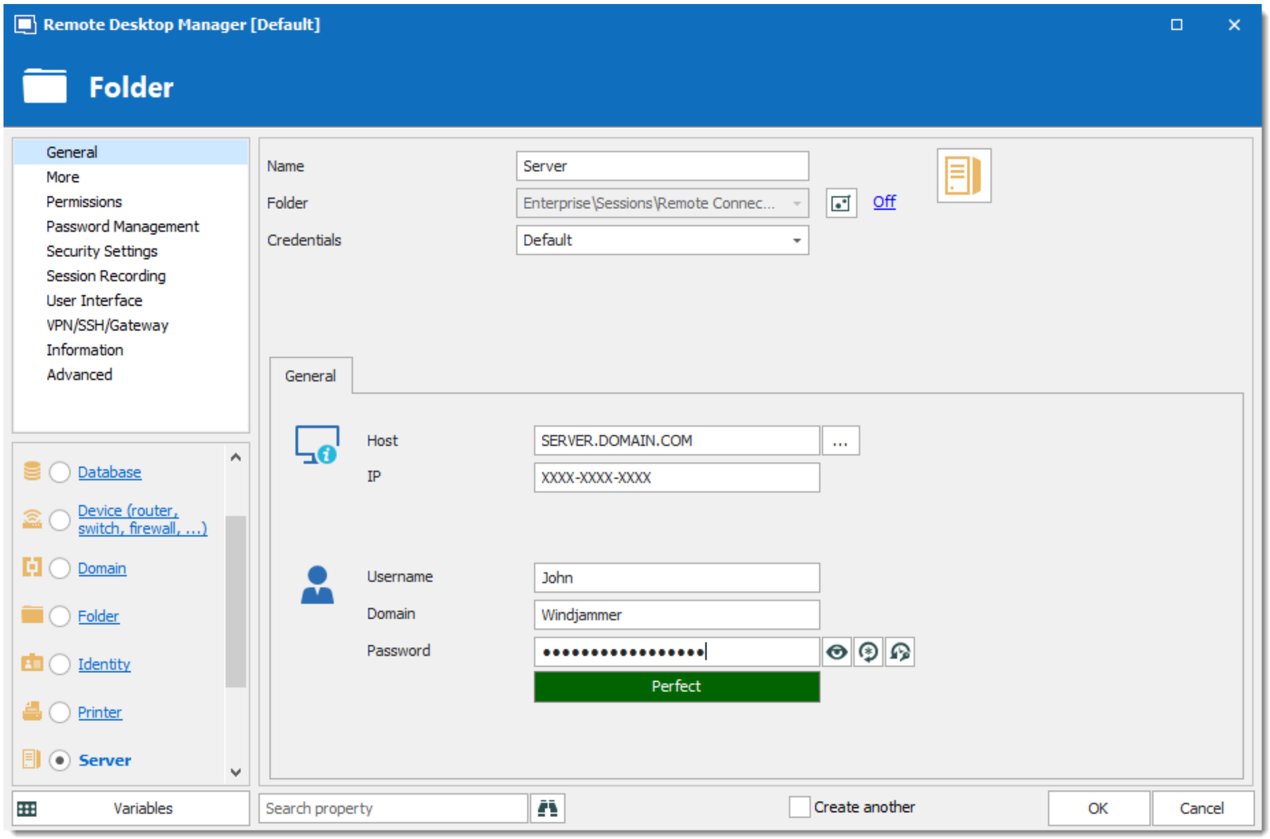
DESCRIPTION

In Remote Desktop Manager, you can use Folder entries to organize your sessions in the application. It is possible to store information at the top level folder and use Variables in the child entries to resolve information that you have saved in the parent folder.

SETTINGS

1. Create a Company, Database, Device, Domain, Identity, Printer, Server, Site, Software or Workstation folder in the Navigation Pane.

2. Enter information in Folder properties. Only include a password if you want to put password protection on the folder.



Remote Desktop Manager [Default]

Folder

Name: Server

Folder: Enterprise\Sessions\Remote Connec...

Credentials: Default

Host: SERVER.DOMAIN.COM

IP: XXXX-XXXX-XXXX

Username: John

Domain: Windjammer

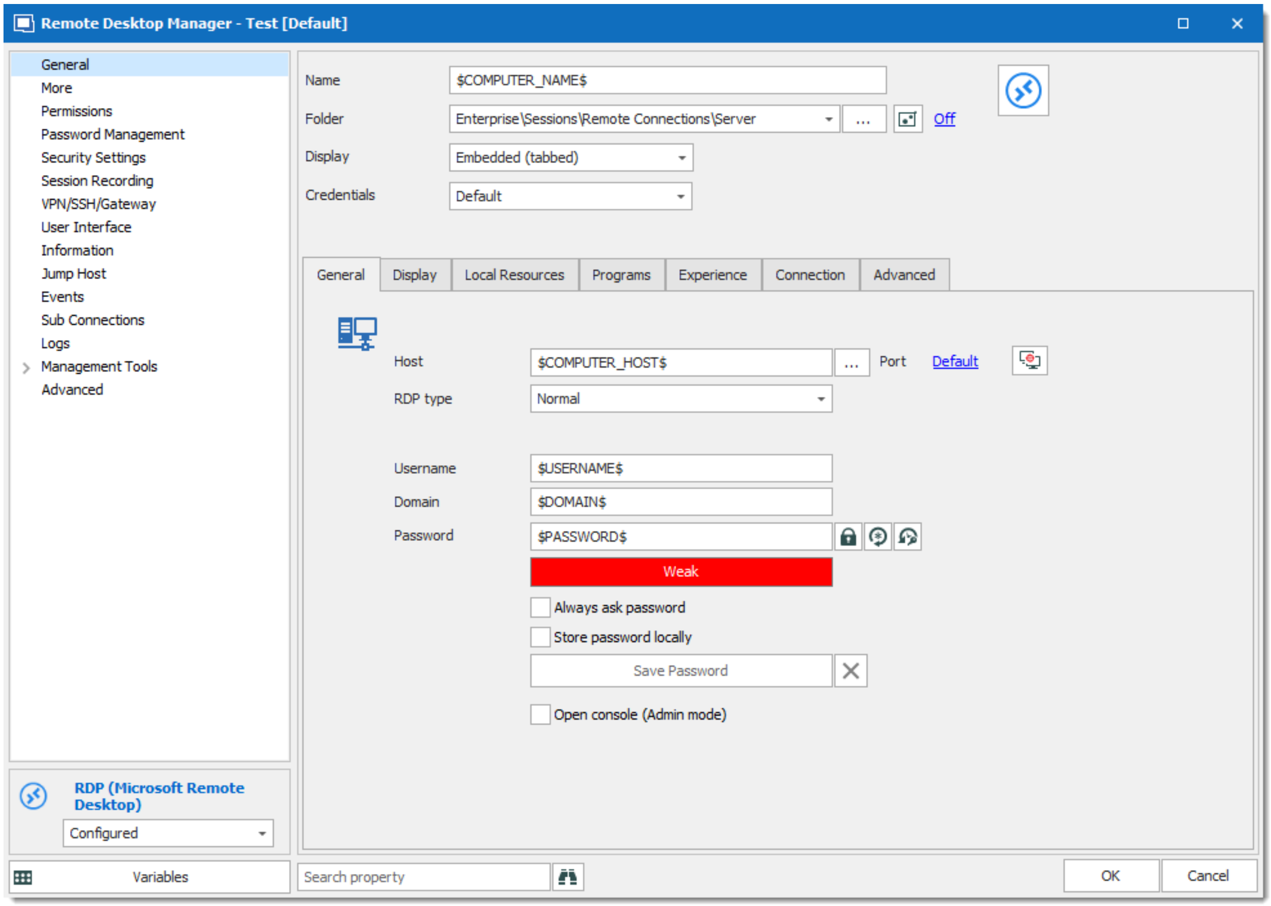
Password: ••••••••••••••••••

Perfect

☐ Create another

Folder Properties

3. In the child sessions, use the appropriate Variables to retrieve the information that is saved at the folder level



Name: $COMPUTER_NAME$
Folder: Enterprise\Sessions\Remote Connections\Server ... Off
Display: Embedded (tabbed)
Credentials: Default

Host: $COMPUTER_HOST$ ... Port Default
RDP type: Normal
Username: $USERNAME$
Domain: $DOMAIN$
Password: $PASSWORD$
Weak
□ Always ask password
□ Store password locally
Save Password
□ Open console (Admin mode)

RDP (Microsoft Remote Desktop): Configured

Variables

11.1.1.5.3 Host w ith Templates

DESCRIPTION

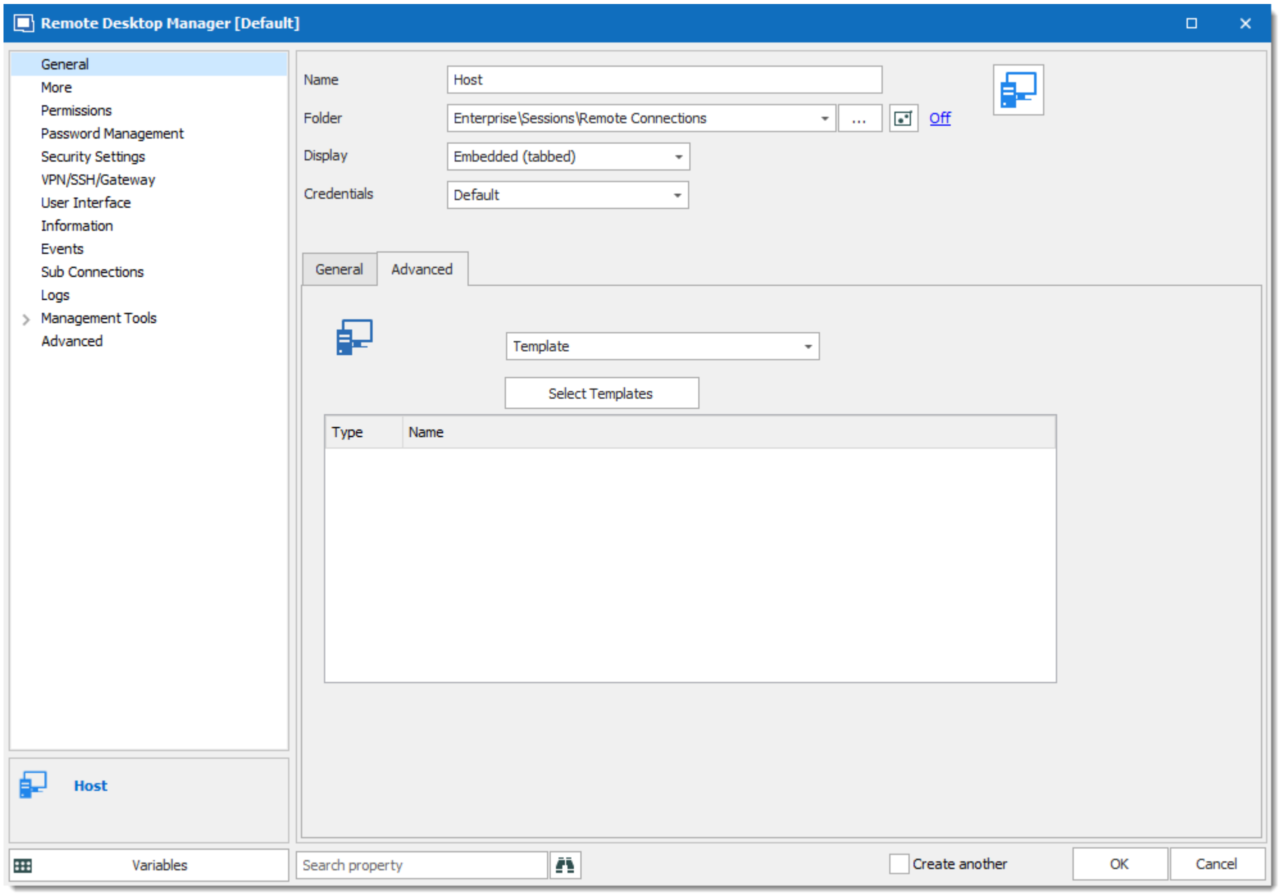
A Host entry will let you use templates in order to connect to the host. It will prompt you to choose which template to use to launch the host.

SETTINGS

Watch Video

1. Create one or multiple Templates via the ***File – Templates – Templates menu***. You may need to use Variables like **$HOST$** for the host name as well as **$USERNAME$** or **$PASSWORD$** for the username and password.

2. Create a host entry and click on the **Action** tab



Name: Host

Folder: Enterprise\Sessions\Remote Connections

Display: Embedded (tabbed)

Credentials: Default

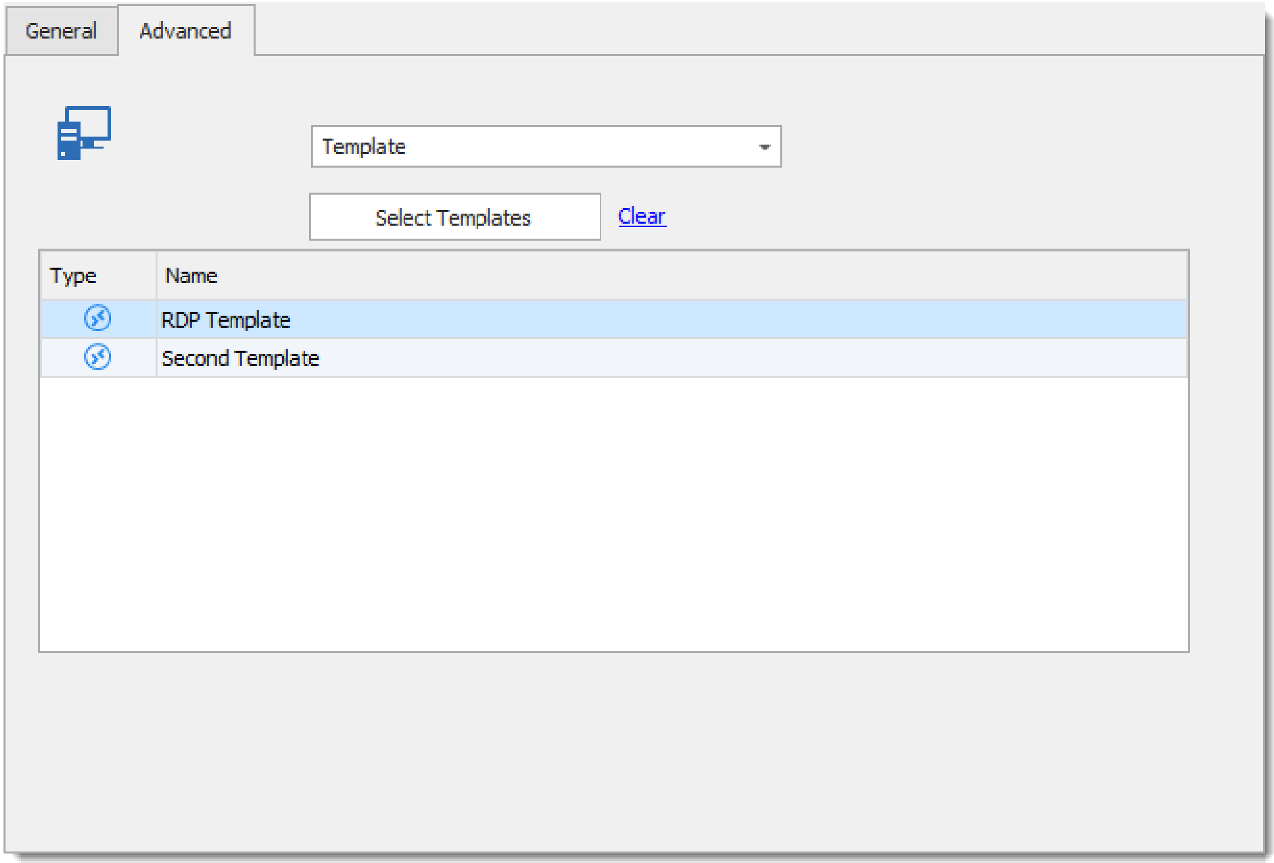
Template

Type	Name

Host Entry

3. Press the **Select Templates** button and select the templates that you would like to add to your Host session

4. The templates will now be added to your host session

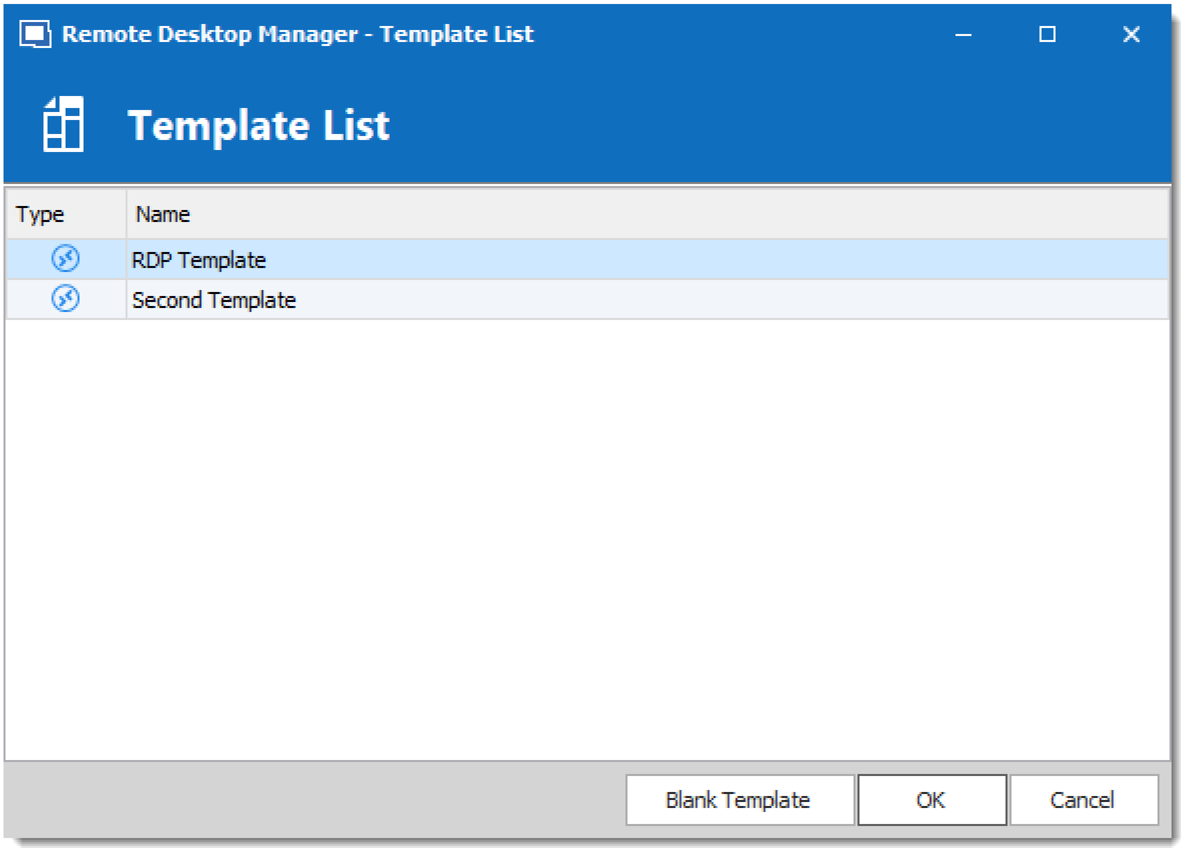


Template

Type	Name
	RDP Template
	Second Template

Select Templates

5. Launch your **Host** session. You will be prompt to select the appropriate template to launch the session



Type	Name
	RDP Template
	Second Template

Open Host Session

11.1.1.6 Pwned Password Check

DESCRIPTION

In the InfoSec world, a pwned password is a password that has been exposed in data breaches (i.e. they are owned/pwned by hackers).

Using a pwned password significantly increases the chances of being the victim of a data breach. **Pwned Check** leverages Troy Hunt's Pnwed Passwords API and automatically checks to see if a password that you're using (or are thinking of using) has been pwned by hackers. If it has, you will be notifiied and can be proactive and choose something else to stay out of harm's way. There are over half a billion passwords in the Pwned Passwords database.

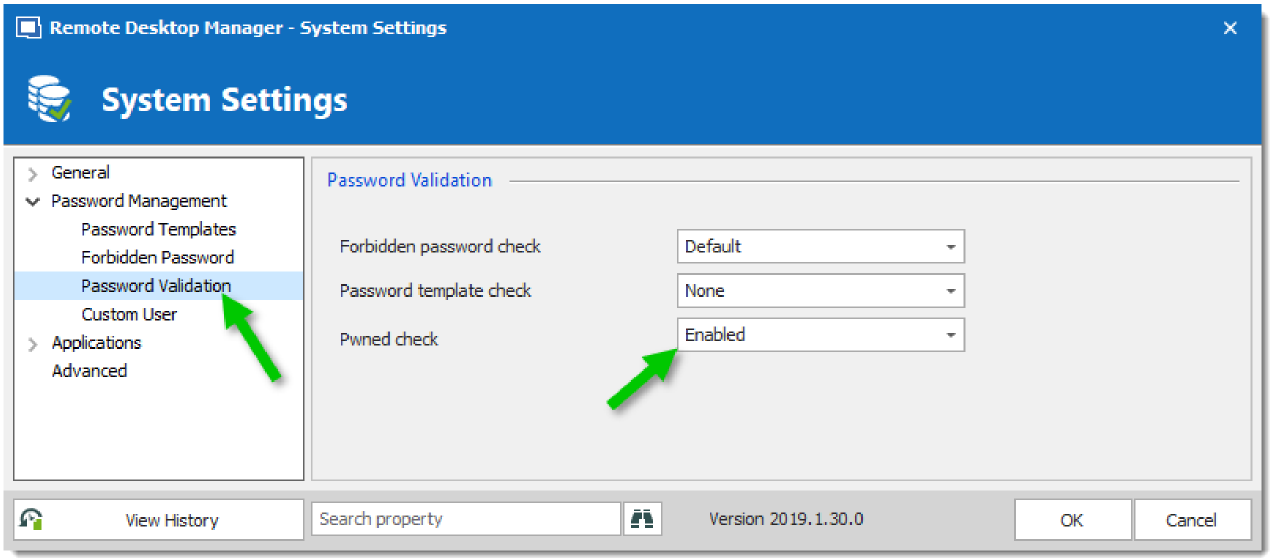
PWNED PASSWORD CHECK EXPLAINER VIDEO

HOW TO SET UP THE PWNED PASSWORD CHECK

In existing databases, Pwned check is not turned on automatically.

1. On the Administration tab, open ***Data Source Settings (System Settings) – Password Validation***.

2. Choose **Enabled** from the list.



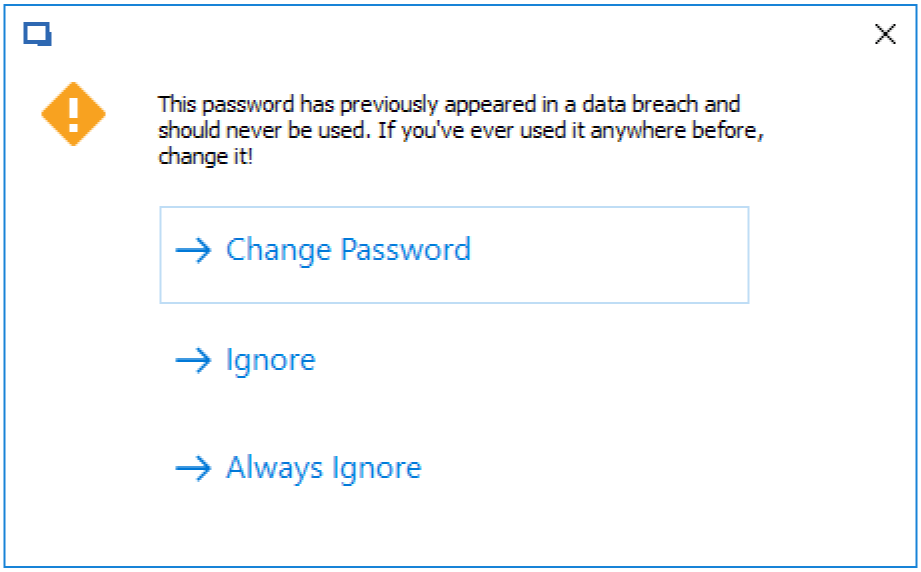
Forbidden password check: Default

Password template check: None

Pwned check: Enabled

Administration - System Settings - Password Validation

Remote Desktop Manager analyzes a password when you save an entry. A message is displayed when a password is found in the Pwned Passwords database. If you see this window you should change your password immediately. Remember to change it in Remote Desktop Manager and the actual account.


This password has previously appeared in a data breach and should never be used. If you've ever used it anywhere before, change it!

Warning to change a password that was included in a data breach

THE BACK END

Rest assured Remote Desktop Manager does NOT send your passwords to Pwned Passwords.

Here is how it works:

Pwned Password Check uses k-Anonymity.

Remote Desktop Manager only sends the first five characters of the SHA-1 password hast to the API.

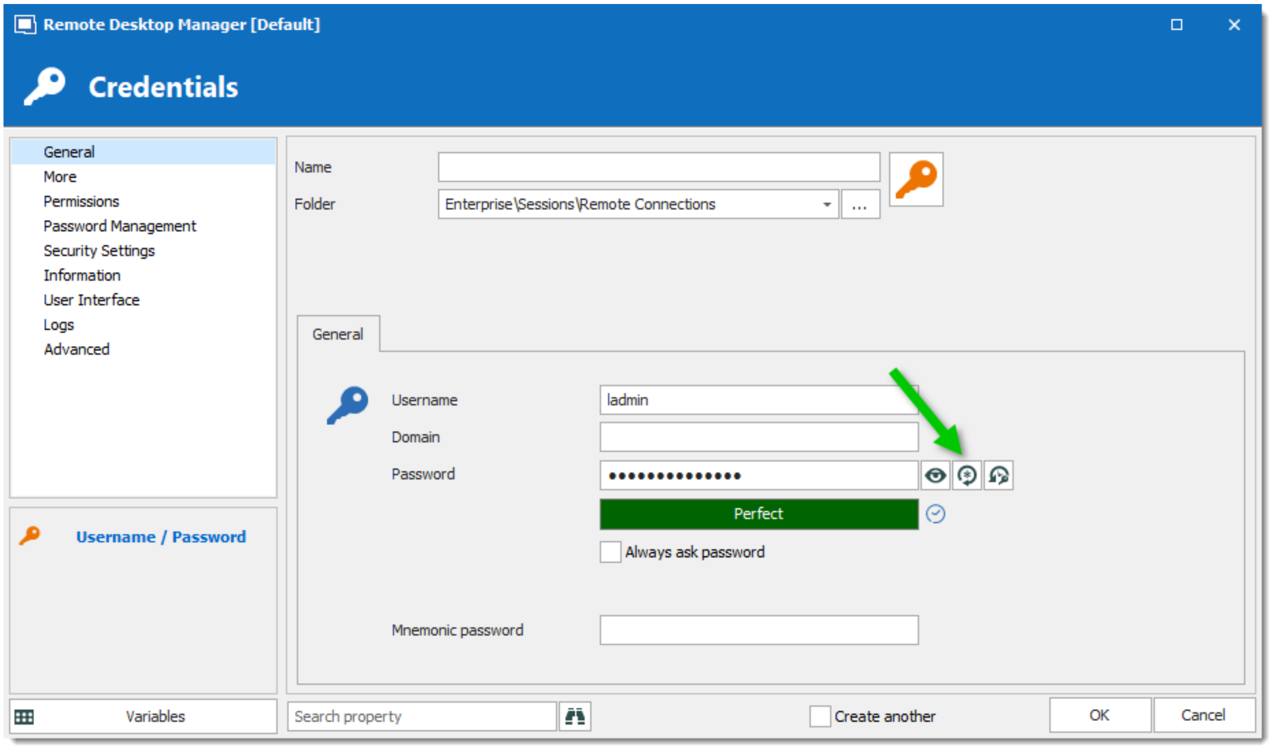
The API sends back a list of every password hash that matches the first five characters of the hash. The API only sends back the second part of the hash.

Remote Desktop Manager compares the hashes on the list to the password hash for the password you want to use.

If there is a match you receive a warning.

CHOOSE STRONGER PASSWORDS

Remote Desktop Manager makes it easy to make strong passwords. The built-in Password Generator creates secure passwords, following your specifications for password length and complexity. The password generator is available on every entry beside the field where you enter a password.



Name

Folder: Enterprise\Sessions\Remote Connections

Username: ladmin

Domain

Password: ••••••••••••••

Perfect

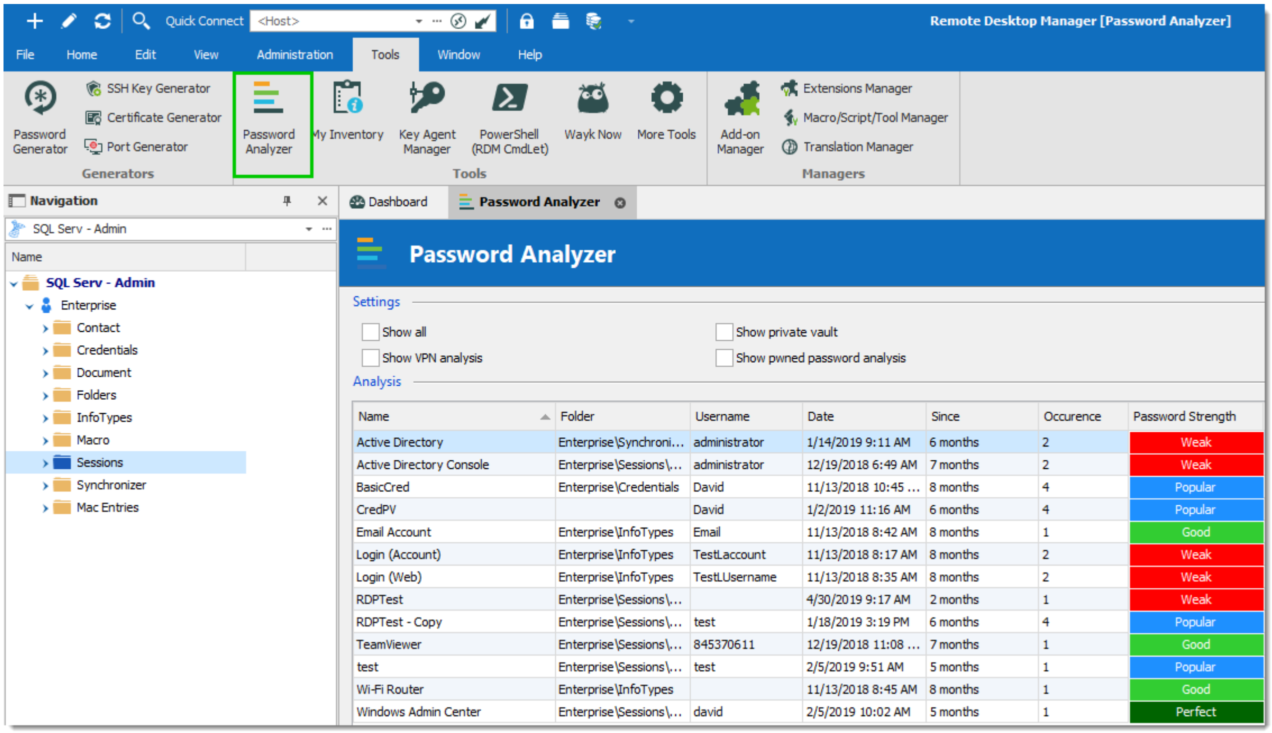
□ Always ask password

Mnemonic password

Password Generator is found on most entry where you include a password

Remote Desktop Manager also has a Password Analyzer that provides feedback on all your passwords. A rating is included on the entry. It uses Zxcvbn to evaluate passwords.

You can also create a report of all your passwords by using the P**assword Analyzer** in the **Tools** tab.



Password Analyzer

Settings

□ Show all
□ Show VPN analysis
□ Show private vault
□ Show pwned password analysis

Analysis

Name	Folder	Username	Date	Since	Occurence	Password Strength
Active Directory	Enterprise\Synchroni…	administrator	1/14/2019 9:11 AM	6 months	2	Weak
Active Directory Console	Enterprise\Sessions\…	administrator	12/19/2018 6:49 AM	7 months	2	Weak
BasicCred	Enterprise\Credentials	David	11/13/2018 10:45 …	8 months	4	Popular
CredPV		David	1/2/2019 11:16 AM	6 months	4	Popular
Email Account	Enterprise\InfoTypes	Email	11/13/2018 8:42 AM	8 months	1	Good
Login (Account)	Enterprise\InfoTypes	TestLaccount	11/13/2018 8:17 AM	8 months	2	Weak
Login (Web)	Enterprise\InfoTypes	TestLUsername	11/13/2018 8:35 AM	8 months	2	Weak
RDPTest	Enterprise\Sessions\…		4/30/2019 9:17 AM	2 months	1	Weak
RDPTest - Copy	Enterprise\Sessions\…	test	1/18/2019 3:19 PM	6 months	4	Popular
TeamViewer	Enterprise\Sessions\…	845370611	12/19/2018 11:08 …	7 months	1	Good
test	Enterprise\Sessions\…	test	2/5/2019 9:51 AM	5 months	1	Popular
Wi-Fi Router	Enterprise\InfoTypes		11/13/2018 8:45 AM	8 months	1	Good
Windows Admin Center	Enterprise\Sessions\…	david	2/5/2019 10:02 AM	5 months	1	Perfect

Tools - Password Analyzer

11.1.1.7 Vaults Overview

Vaults are containers that divide the data source into multiple compartments.

We recommend using Vaults for improved organization and security.Vaults also help performance as they limit the amount of entries that load at once.

Vaults are available with Advanced Data Sources: Devolutions Password Server, SQL Azure, Maria DB, MySQL and SQL server.

> This feature underwent a change of name, as **Vaults** were called **Repositories** before **Remote Desktop Manager 2019**.

This article covers:

- Create Vaults
- Move entries to different Vaults
- Navigate between Vaults
- Role-based security with Vaults
- Vaults shortcuts

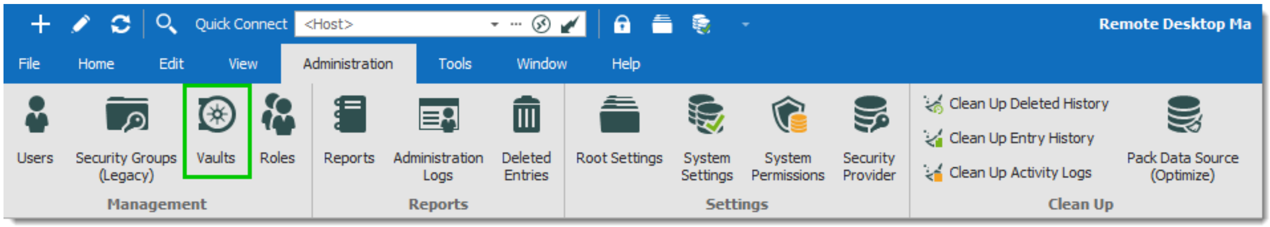
SETUP AND USE VAULTS IN REMOTE DESKTOP MANAGER

Get started with Vaults: create, manage, make shortcuts

CREATE A VAULT

We recommend creating a different **Vault** for each customer or department.

1. On the **Administration** tab, click **Vaults**.



Administration –Vaults

2. Click **Add Vault**.

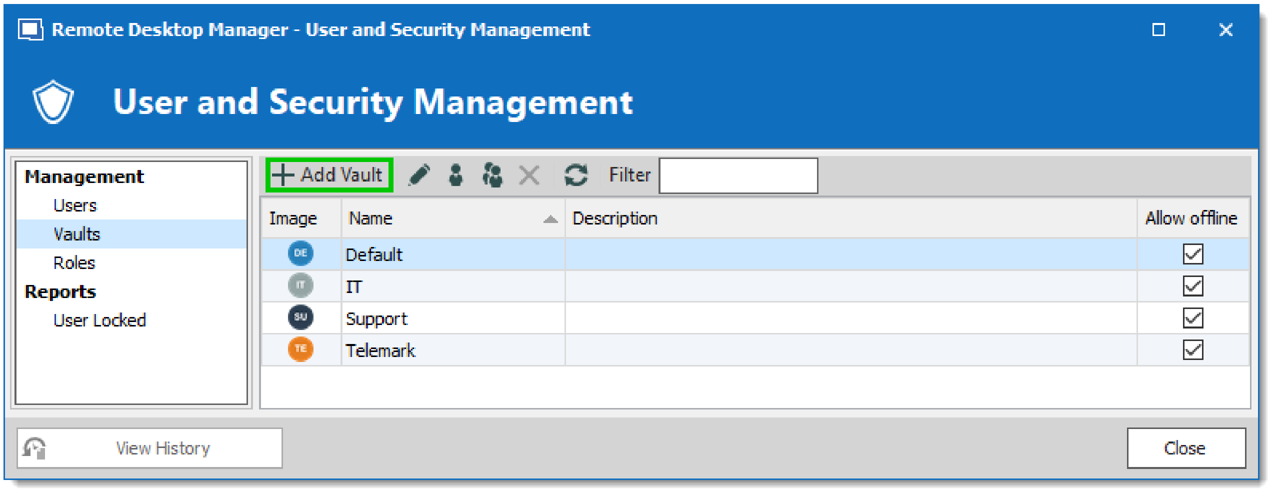
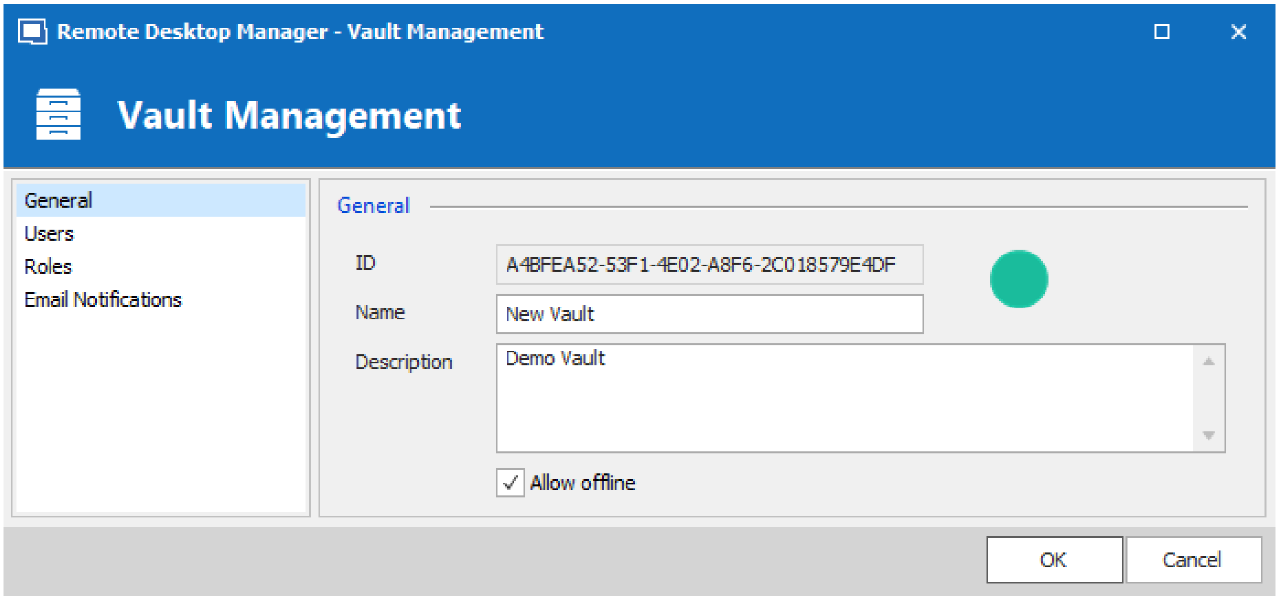

Remote Desktop Manager - User and Security Management
User and Security Management
Management
Users
Vaults
Roles
Reports
User Locked
Add Vault
Filter
View History
Close

Image	Name	Description	Allow offline
DE	Default		☑
IT	IT		☑
SU	Support		☑
TE	Telemark		☑

Vaults – Add Vault

3. Enter a **Name** and **Description** (optional). The ID is generated automatically.



ID: A4BFEA52-53F1-4E02-A8F6-2C018579E4DF

Name: New Vault

Description: Demo Vault

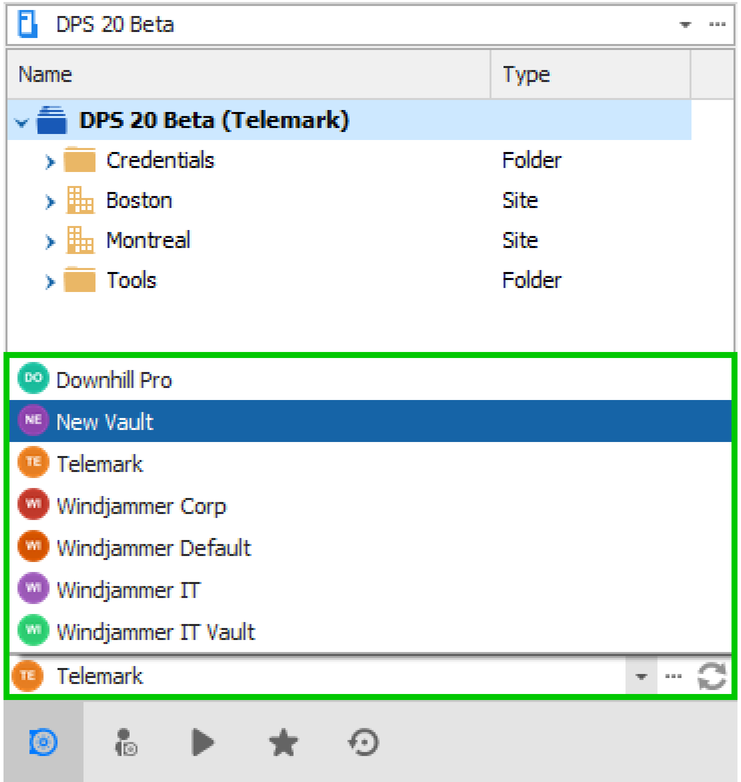
☑ Allow offline

Vault Management

Navigate between Vaults

MOVE BETWEEN VAULTS

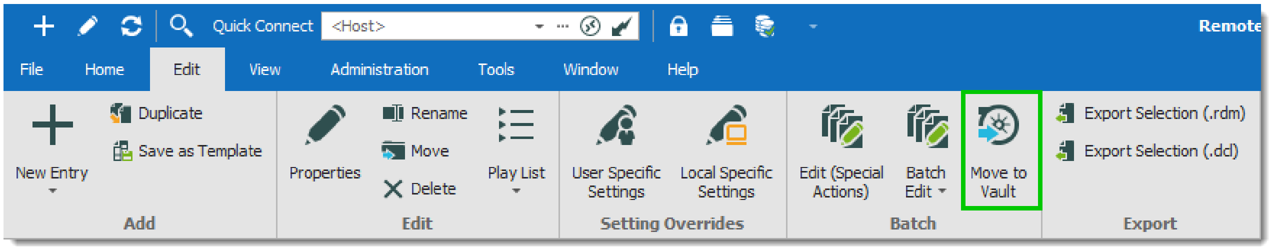
1. In the Navigation Pane, use the Vault list to move between Vaults. Change the location of the Vault list in ***File – Options – User Interface – Vault Location***.



Navigation Pane – Vault selector

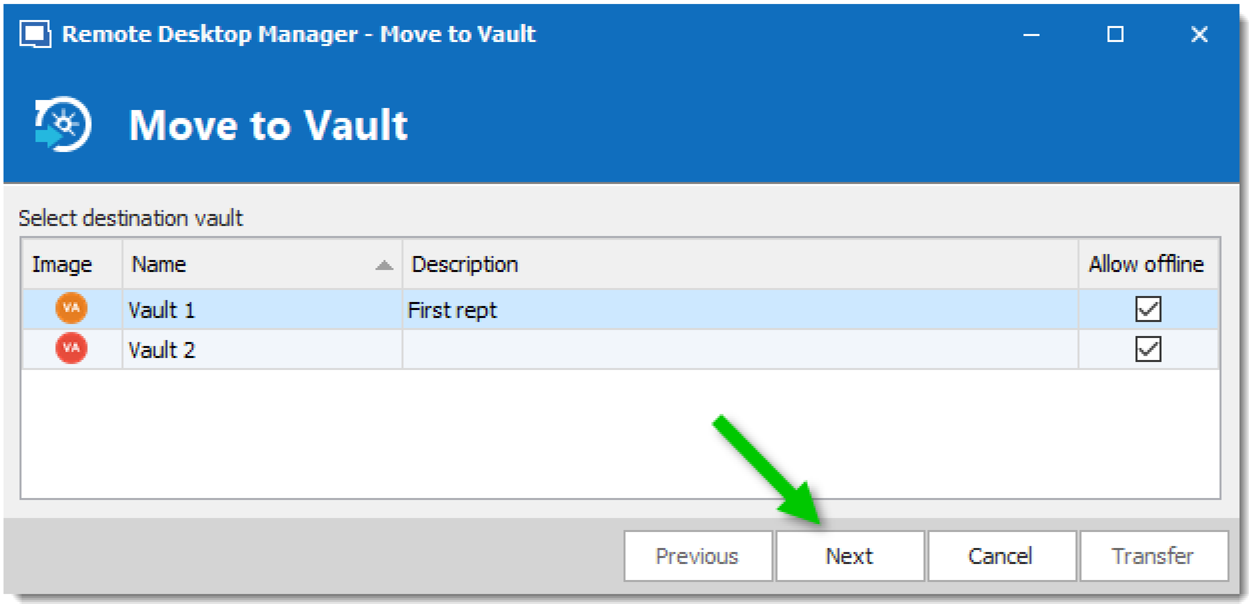
MOVE ENTRIES TO A DIFFERENT VAULT

1. Start in the Vaults you want to transfer repositories out of.
2. On the **Edit** tab, click **Move to Vault**.



Edit - Move to Vaults

3. Select the repository you want to move the entries to, and click **Next**.



Remote Desktop Manager - Move to Vault

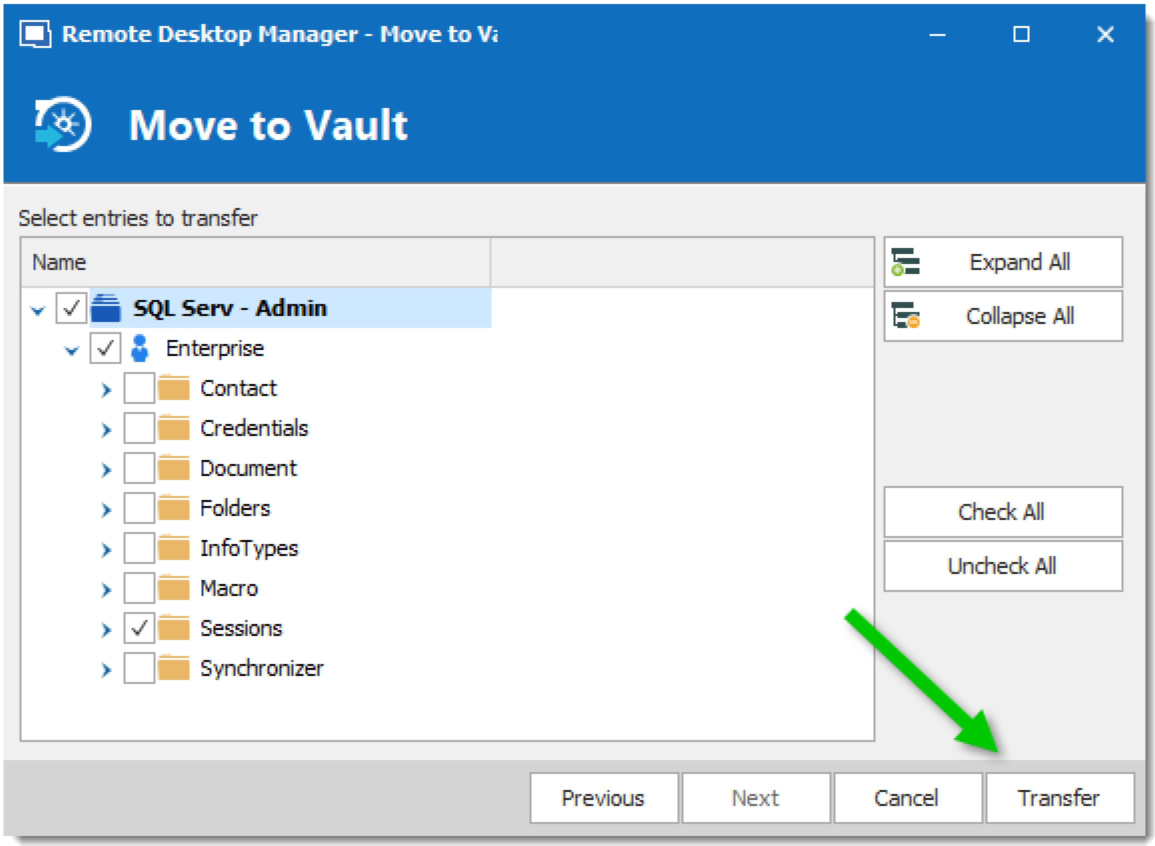
Move to Vault

Select destination vault

Image	Name	Description	Allow offline
VA	Vault 1	First rept	☑
VA	Vault 2		☑

Move to Vaults

4. Choose the entries you want to transfer to the new repository, and click **Transfer**.



Remote Desktop Manager - Move to Va

Move to Vault

Select entries to transfer

Name

- ☑ SQL Serv - Admin
  - ☑ Enterprise
    - □ Contact
    - □ Credentials
    - □ Document
    - □ Folders
    - □ InfoTypes
    - □ Macro
    - ☑ Sessions
    - □ Synchronizer

Select the entries you want to transfer

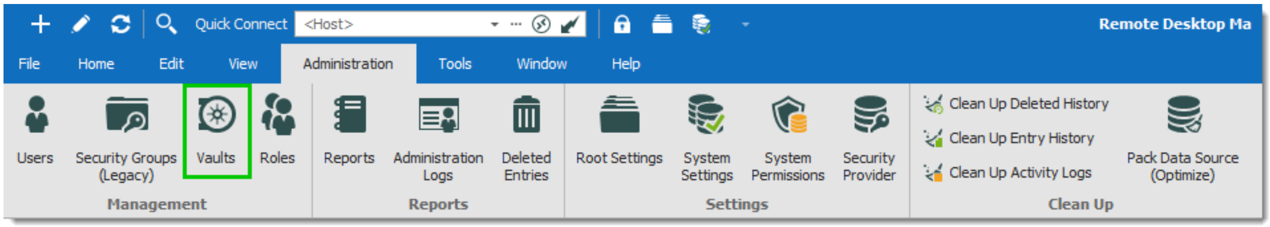
MANAGE ROLE-BASED SECURITY BY VAULT

Vaults simplify user management because Active Directory groups define who has access to a Vaults. These Active Directory groups are known as **Roles** in Remote Desktop Manager. In general, most roles have access to a couple Vaults, while some groups will only have access to one Vaults. Limiting access to Vaults minimizes the need to set permissions on lower-level folders.

How to assign roles to a Vault and the permissions you need to keep in mind

GIVING ROLES ACCESS TO A VAULT

1. On the **Administration** tab, then click **Vaults**.



Administration –Vaults

2. On the **User and Security Management** window, choose the Vaults, then click **Assign Roles**.

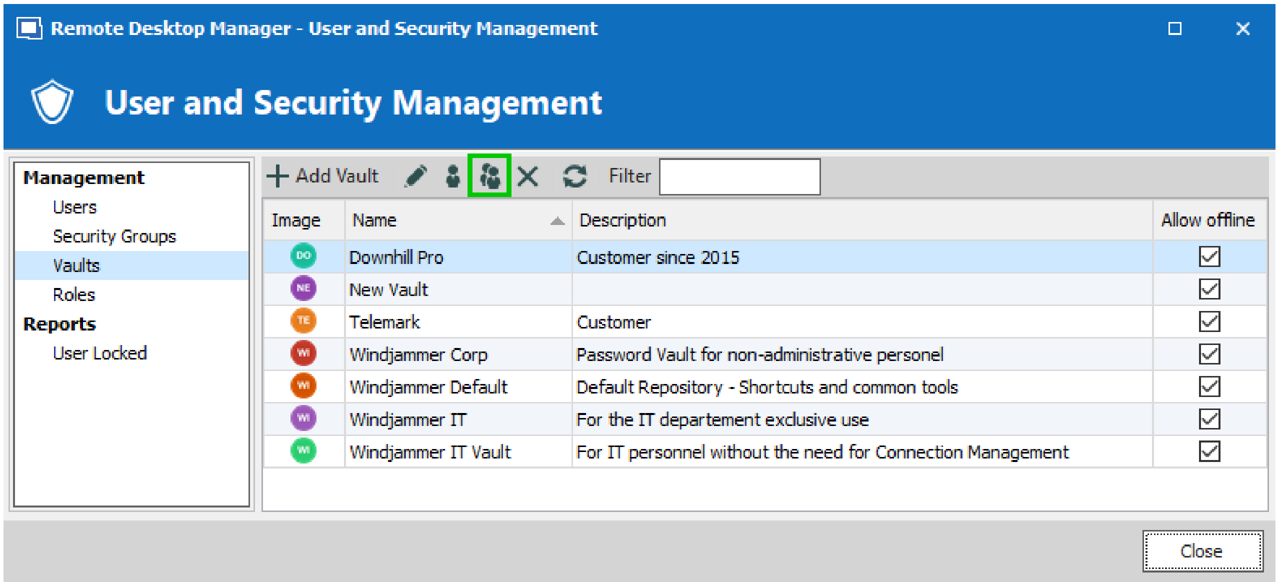
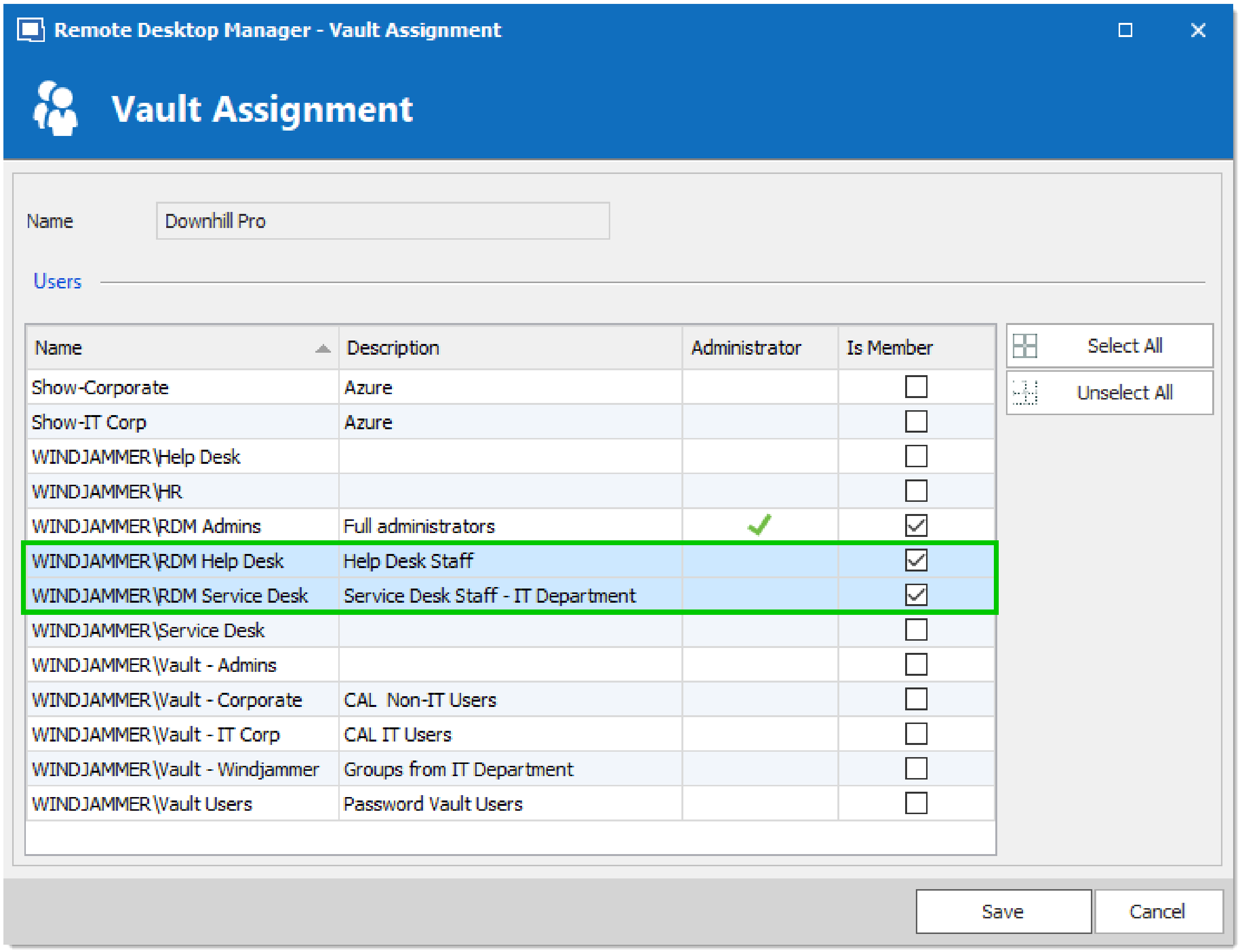

Remote Desktop Manager - User and Security Management
User and Security Management
Management
Users
Security Groups
Vaults
Roles
Reports
User Locked
Add Vault
Filter
Close

Image	Name	Description	Allow offline
DO	Downhill Pro	Customer since 2015	☑
NE	New Vault		☑
TE	Telemark	Customer	☑
WI	Windjammer Corp	Password Vault for non-administrative personel	☑
WI	Windjammer Default	Default Repository - Shortcuts and common tools	☑
WI	Windjammer IT	For the IT departement exclusive use	☑
WI	Windjammer IT Vault	For IT personnel without the need for Connection Management	☑

User and Security Management - Vaults - Assign Roles

3. Choose which roles have access to the Vaults: select the **Is Member** box.



Name: Downhill Pro

Users

Name	Description	Administrator	Is Member
Show-Corporate	Azure		☐
Show-IT Corp	Azure		☐
WINDJAMMER\Help Desk			☐
WINDJAMMER\HR			☐
WINDJAMMER\RDM Admins	Full administrators	✓	☑
WINDJAMMER\RDM Help Desk	Help Desk Staff		☑
WINDJAMMER\RDM Service Desk	Service Desk Staff - IT Department		☑
WINDJAMMER\Service Desk			☐
WINDJAMMER\Vault - Admins			☐
WINDJAMMER\Vault - Corporate	CAL Non-IT Users		☐
WINDJAMMER\Vault - IT Corp	CAL IT Users		☐
WINDJAMMER\Vault - Windjammer	Groups from IT Department		☐
WINDJAMMER\Vault Users	Password Vault Users		☐

Repository Assignment

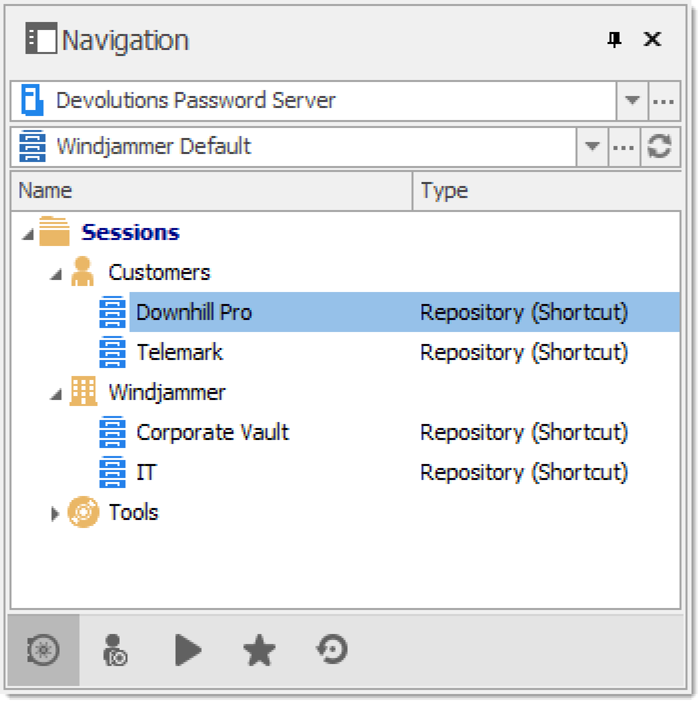
VAULTS SHORTCUTS

Navigate between vaults with the Vault List or vaults shortcuts.

We recommend administrators and users who have access to multiple vaults create vaults shortcuts to navigate between vaults.

If you use vaults shortcuts, the vault root should only contain folders. Do not save entries at the vault root.

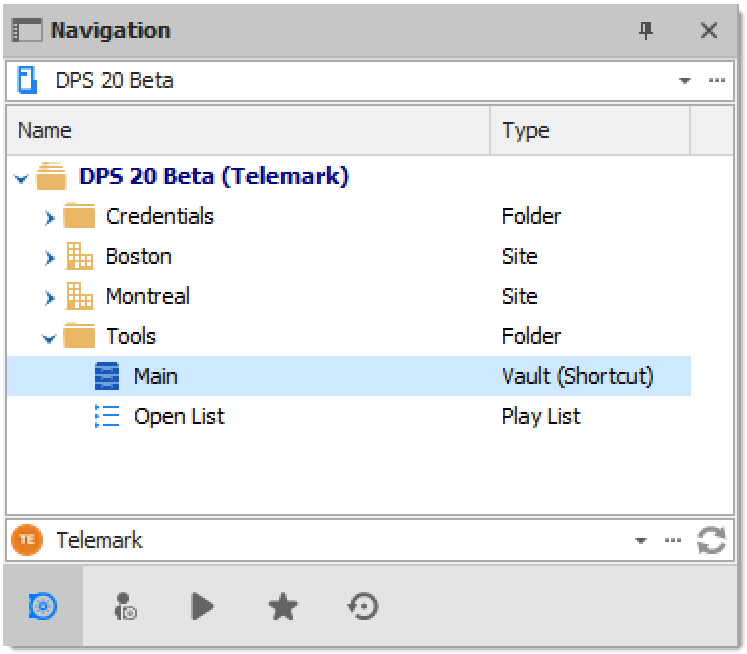
The main (default) vault contains shortcuts to other vaults.



Name	Type
Sessions	
Customers	
Downhill Pro	Repository (Shortcut)
Telemark	Repository (Shortcut)
Windjammer	
Corporate Vault	Repository (Shortcut)
IT	Repository (Shortcut)
Tools	

Main (Default) Vaults with Vaults Shortcuts

Each Vault contains a shortcut that returns the user to the main Vault.



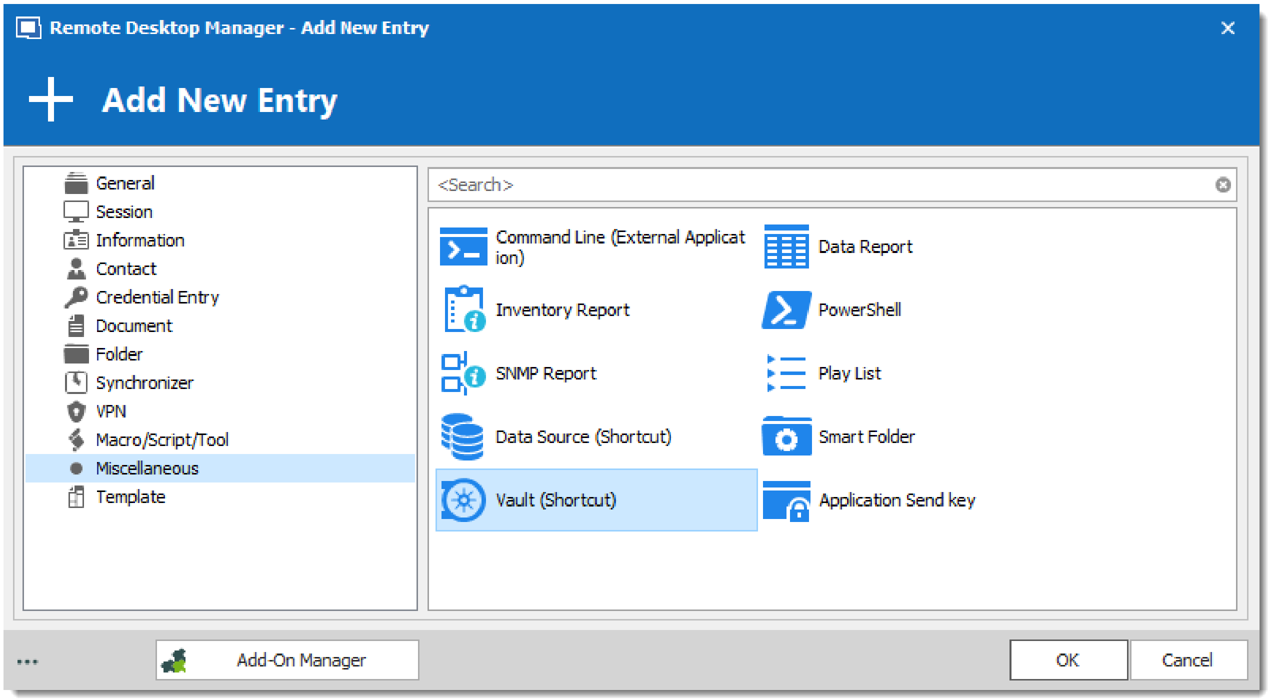
Name	Type
DPS 20 Beta (Telemark)	
Credentials	Folder
Boston	Site
Montreal	Site
Tools	Folder
Main	Vault (Shortcut)
Open List	Play List

Downhill Pro Vault with Shortcut Back to Main Vault

CREATE A VAULT SHORTCUT

1. On the **Edit** tab, click **New Entry**.

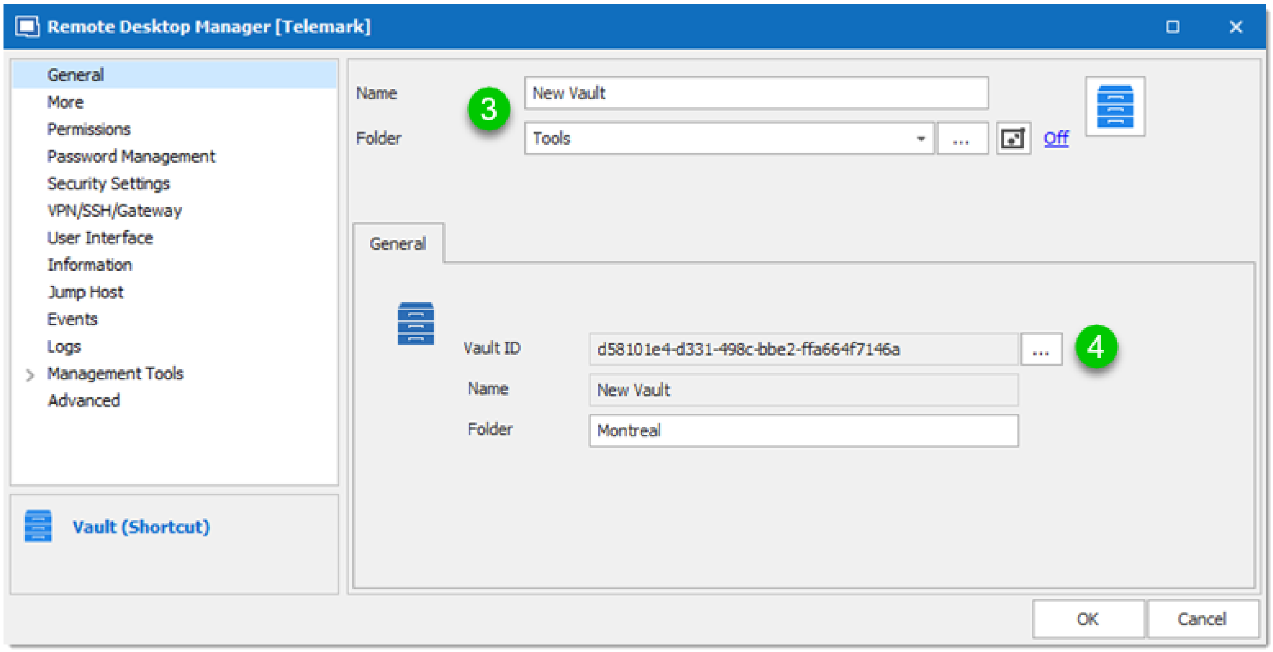
2. Click **Miscellaneous** and then select **Vault (Shortcut).**



Add New Entry - Miscellaneous - Vault (Shortcut)

3. In the **Name** box, enter the name of the Vault you are creating a shortcut to. Save the shortcut in a folder.

4. To find the **Vaults ID**, click the ellipses button. Enter a folder name (case sensitive) to create a shortcut to a specific folder.

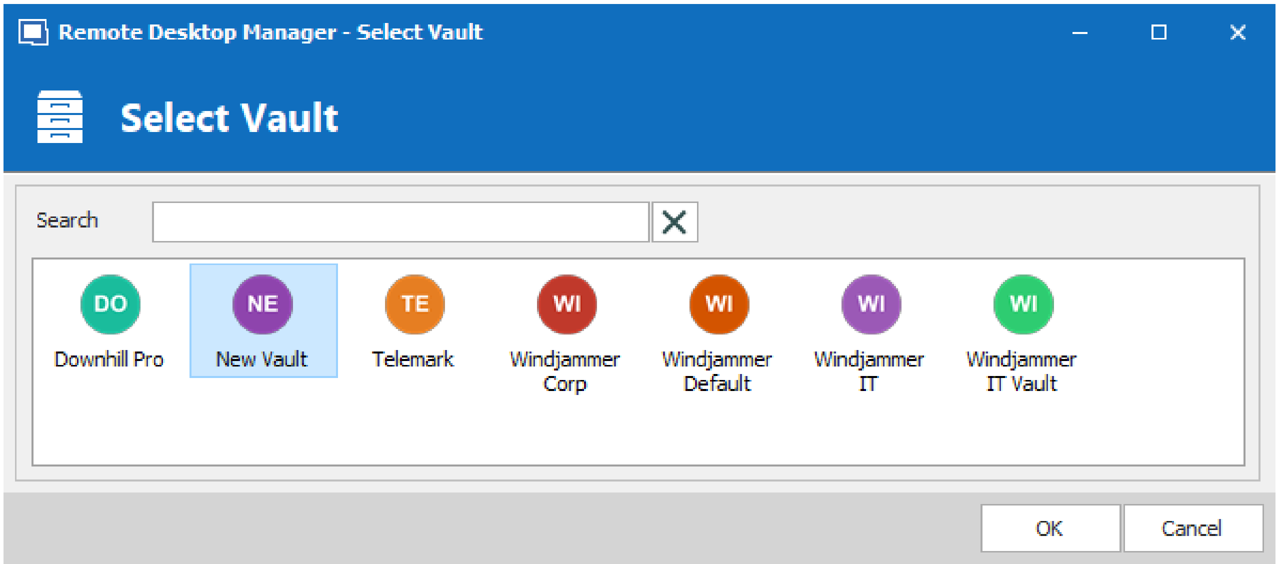


Name: New Vault
Folder: Tools

Vault ID: d58101e4-d331-498c-bbe2-ffa664f7146a
Name: New Vault
Folder: Montreal

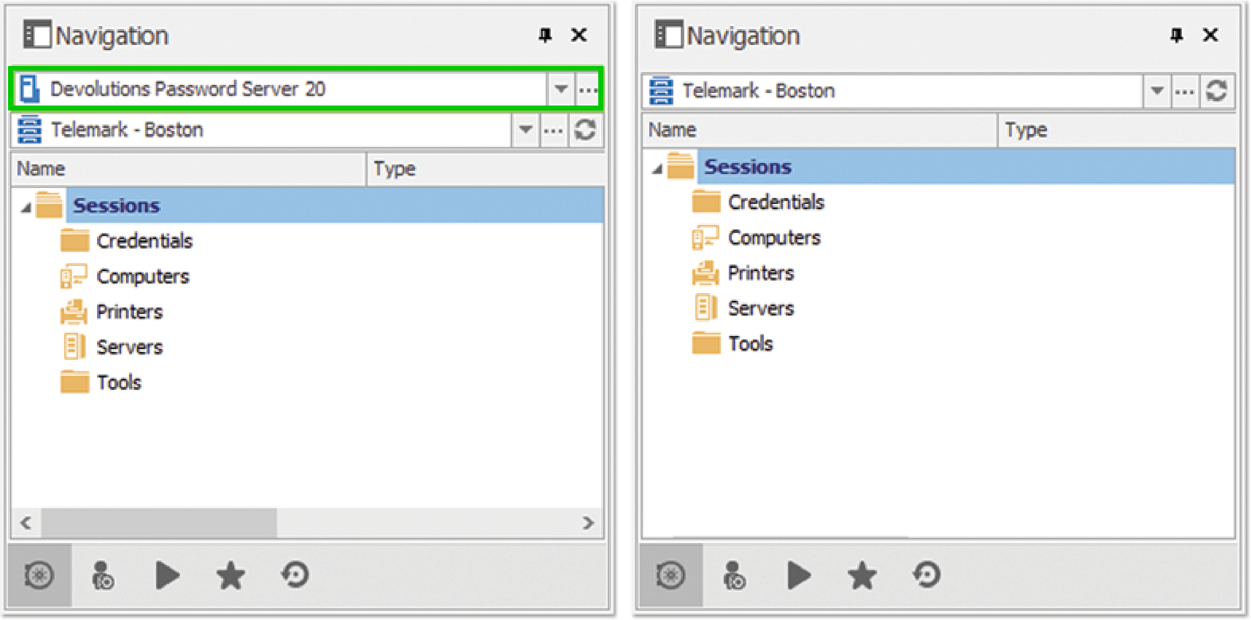
Vault (Shortcut) - Properties

5. Select the destination Vault.



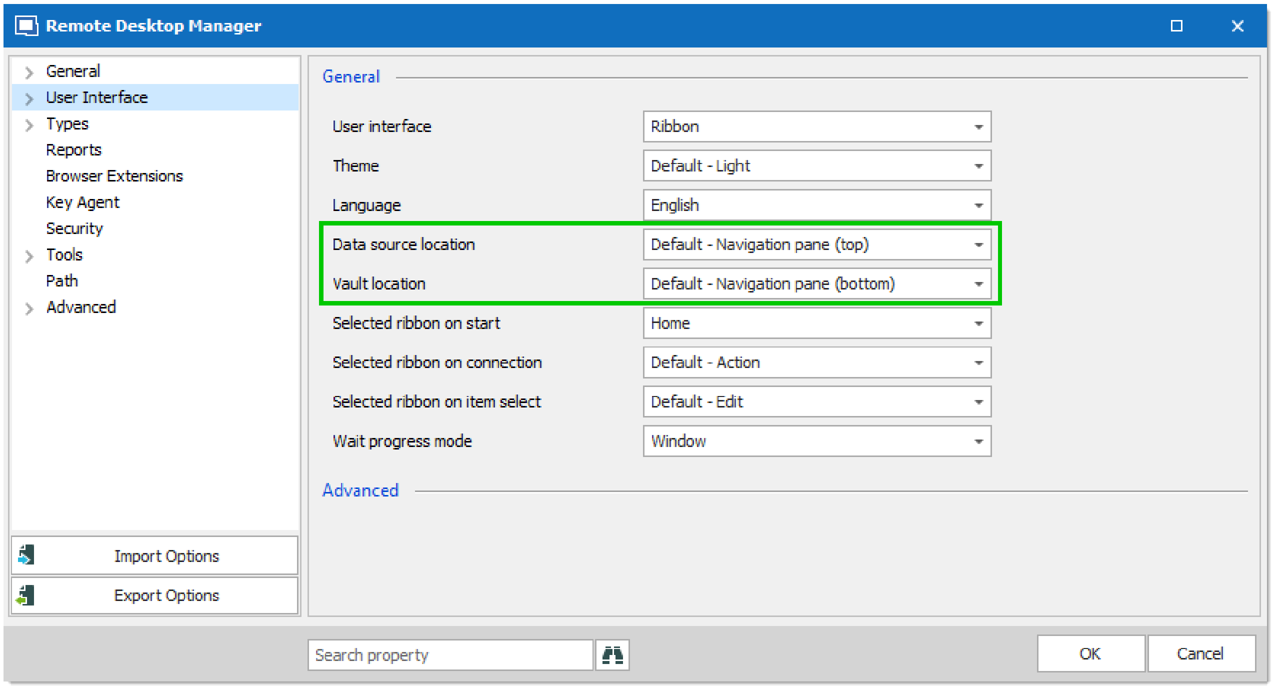
Select Vault

We recommend removing the data source drop-down list when using Vault shortcuts. Then the Vaults list can be moved above the Navigation Pane.



Remove Data Source Box and Options

Both options are configured in ***File – Options – User Interface***.



General

User interface	Ribbon
Theme	Default - Light
Language	English
Data source location	Default - Navigation pane (top)
Vault location	Default - Navigation pane (bottom)
Selected ribbon on start	Home
Selected ribbon on connection	Default - Action
Selected ribbon on item select	Default - Edit
Wait progress mode	Window

Advanced

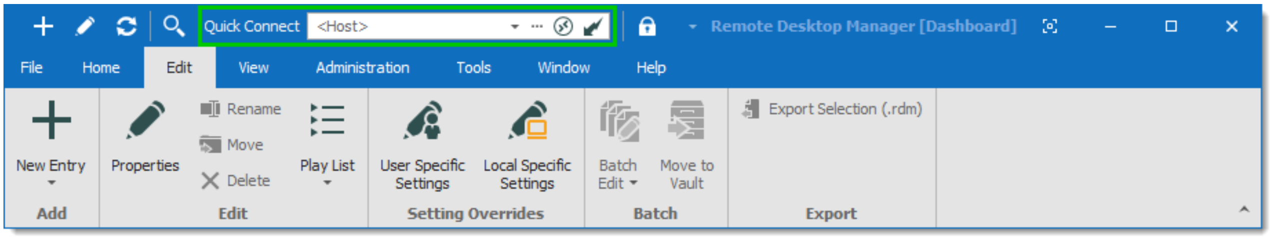
File - Options - User Interface

11.1.1.8 Quick Connect

Via the quick connect toolbar, you can open an **ad-hoc** session by specifying the host and session type. It's also possible to create a template and establish the connection with your template. Configure the settings in the template, Remote Desktop Manager will apply them when connecting to the specified host.

SETTINGS

The control is composed of multiple sub controls.

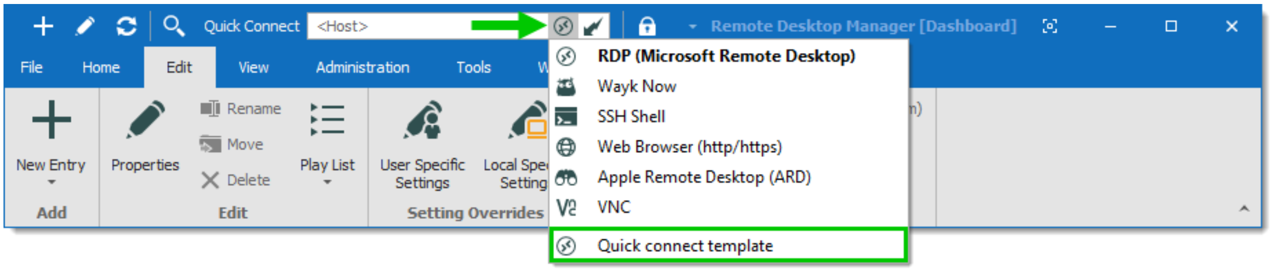


Quick Connect Toolbar

Listing network discoverable devices is a lengthy operation.

The ellipsis button will list network discoverable computer to allow you to select computer from the list.

USING TEMPLATES



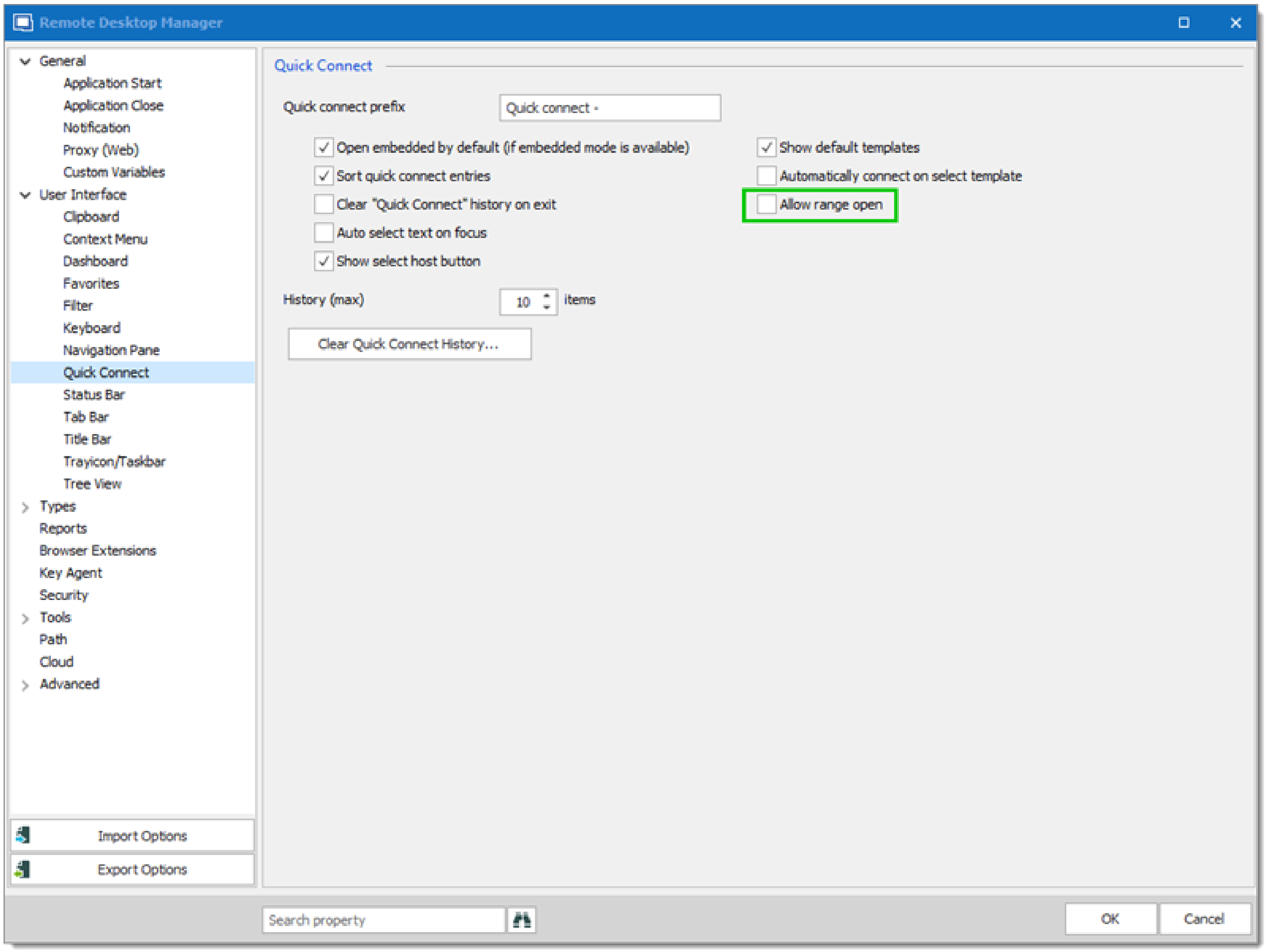
Quick Connect Type Selection

Remote Desktop Manager offers default templates to connect with the Quick Connect feature, but it is possible to use custom templates. In that case, the ***host*** field in the template must be set to the **$QUICK_CONNECT$** variable. When they are created, custom templates are automatically added at the bottom of the type list.

11.1.1.8.1 Allow Range Open

This feature allows to open multiple machine with the quick connect in Remote Desktop Manager

Check the option Allow range open in ***File-Options-User Interface-Quick Connect***



Quick Connect

Quick connect prefix: Quick connect -

☑ Open embedded by default (if embedded mode is available)

☑ Sort quick connect entries

☐ Clear "Quick Connect" history on exit

☐ Auto select text on focus

☑ Show select host button

☑ Show default templates

☐ Automatically connect on select template

☐ Allow range open

History (max) 10 items

Allow Range Open

This range function requires that a sequenced number is at the end of the same name for all the machine like this list: devolutions08, devolutions09, devolutions10.

Use this syntax in Quick Connect: **MachineNameX~Y**

For example: to open the machines devolutions3, devolutions4 and devolutions5 you would write **devolutions3~5**.

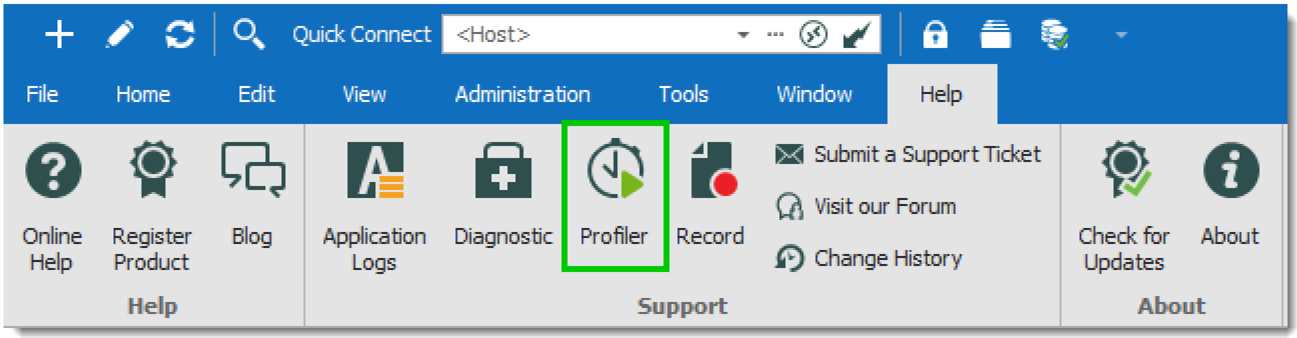
11.1.1.9 Send application logs

DESCRIPTION

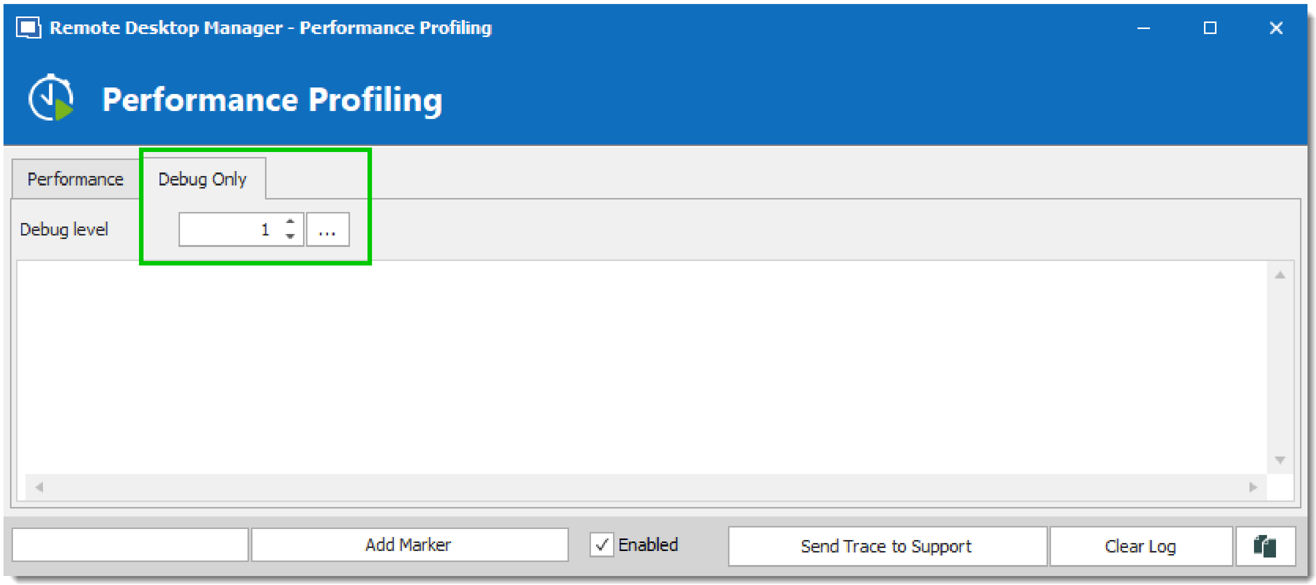
The Devolutions team will need your application logs in some cases to help recreate a specific issue.

SENDING YOUR APPLICATION LOGS

1. Before sending them, please set the **Debug Level to 1** by clicking on the **Profiler** in the **Help** tab.



Profiler


Remote Desktop Manager - Performance Profiling

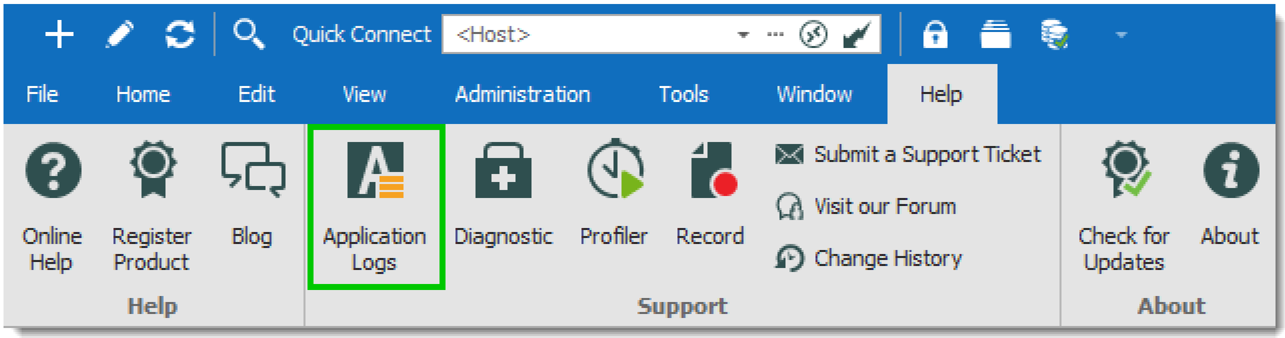
Performance Profiling

Debug level: 1

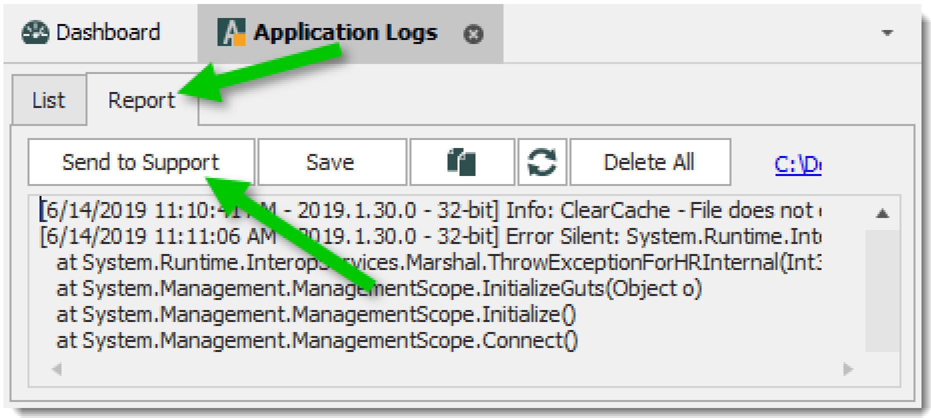
Profiler- Debug Only

2. After, click on **Application Logs**.

3.

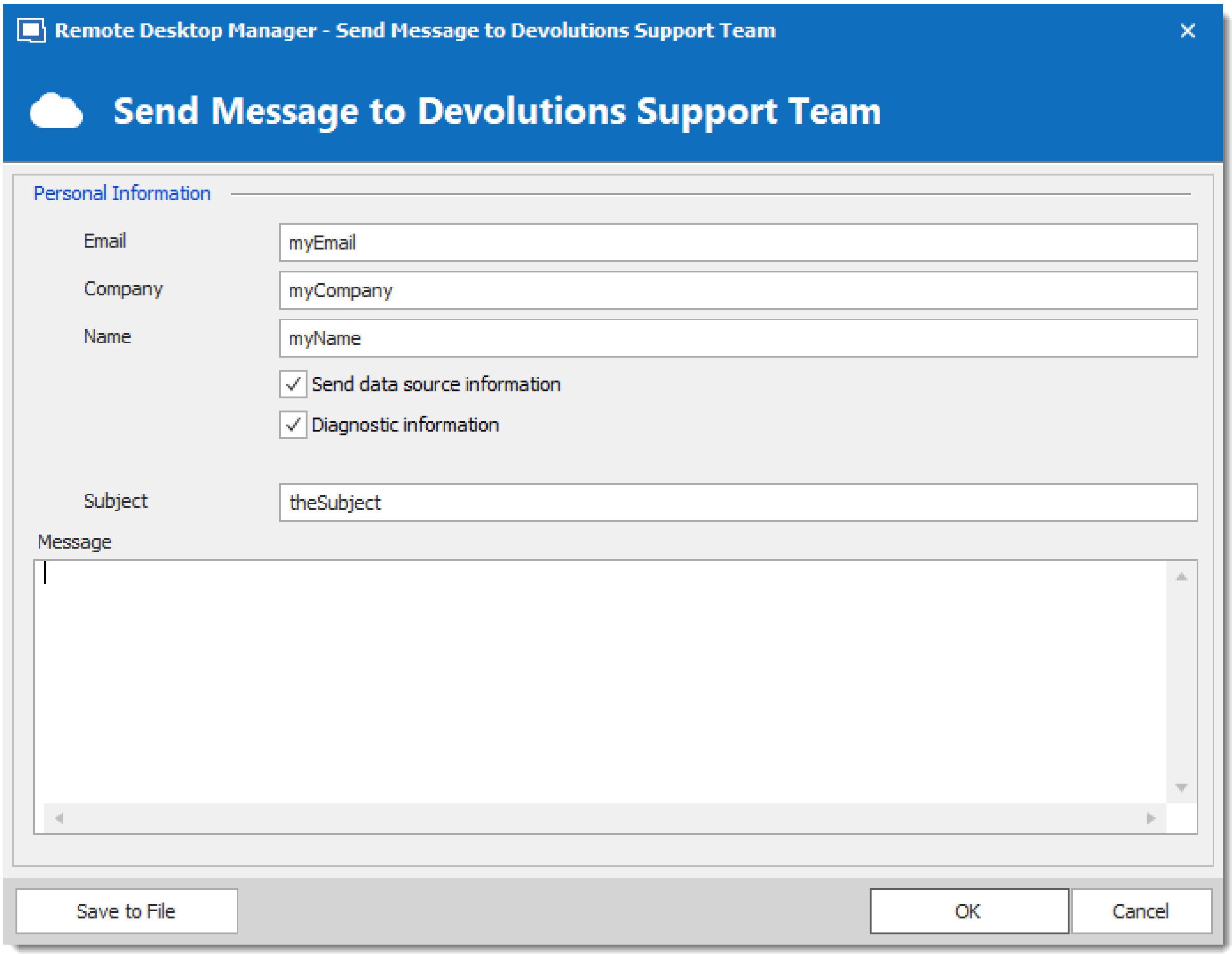


3. Go to the Report tab, and click on Send to Support.



```
[6/14/2019 11:10:4  M - 2019.1.30.0 - 32-bit] Info: ClearCache - File does not
[6/14/2019 11:11:06 AM  019.1.30.0 - 32-bit] Error Silent: System.Runtime.Int
  at System.Runtime.Interop   vices.Marshal.ThrowExceptionForHRInternal(Int3
  at System.Management.Manage  entScope.InitializeGuts(Object o)
  at System.Management.ManagementScope.Initialize()
  at System.Management.ManagementScope.Connect()
```

4. Fill your contact information along with a complete explanation on the issue and press **OK**.


Remote Desktop Manager - Send Message to Devolutions Support Team

Send Message to Devolutions Support Team

Personal Information

Email: myEmail

Company: myCompany

Name: myName

☑ Send data source information

☑ Diagnostic information

Subject: theSubject

Message

11.1.1.10 Send error report

DESCRIPTION

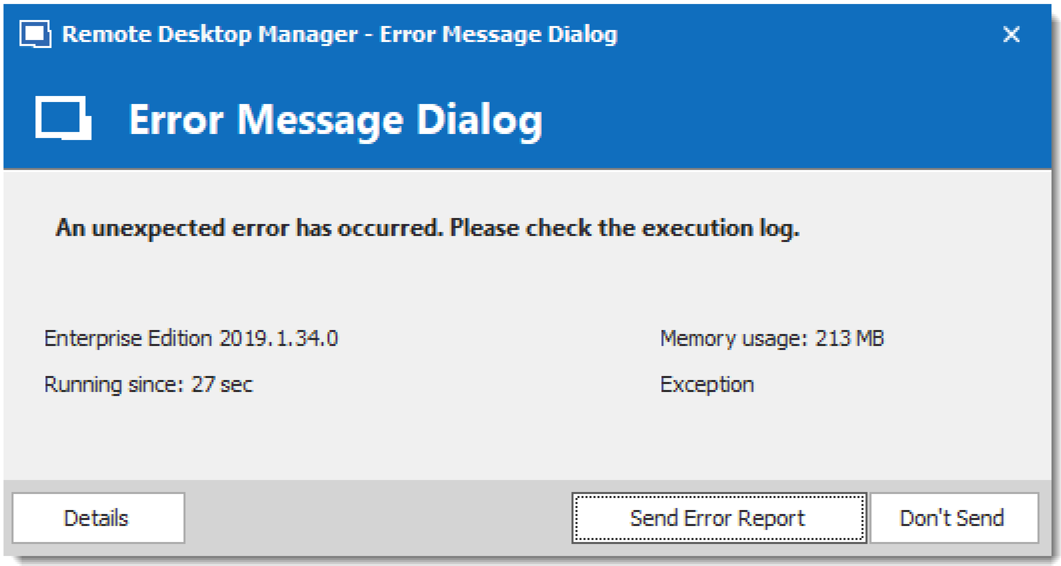
An error report is created when an application error occurs in Remote Desktop Manager. You can send that error report to the Devolutions support team to help reproduce the issue more easily.

> ✓ When sending your error report please make sure to include as many details as possible in the message section to ensure that our support team reproduces the issue with ease.

SEND AN ERROR REPORT

When an error dialog appear in Remote Desktop Manager follow these steps to send it to the support team.

1. Press the **Send Error Report** button.



Remote Desktop Manager - Error Message Dialog

Error Message Dialog

An unexpected error has occurred. Please check the execution log.

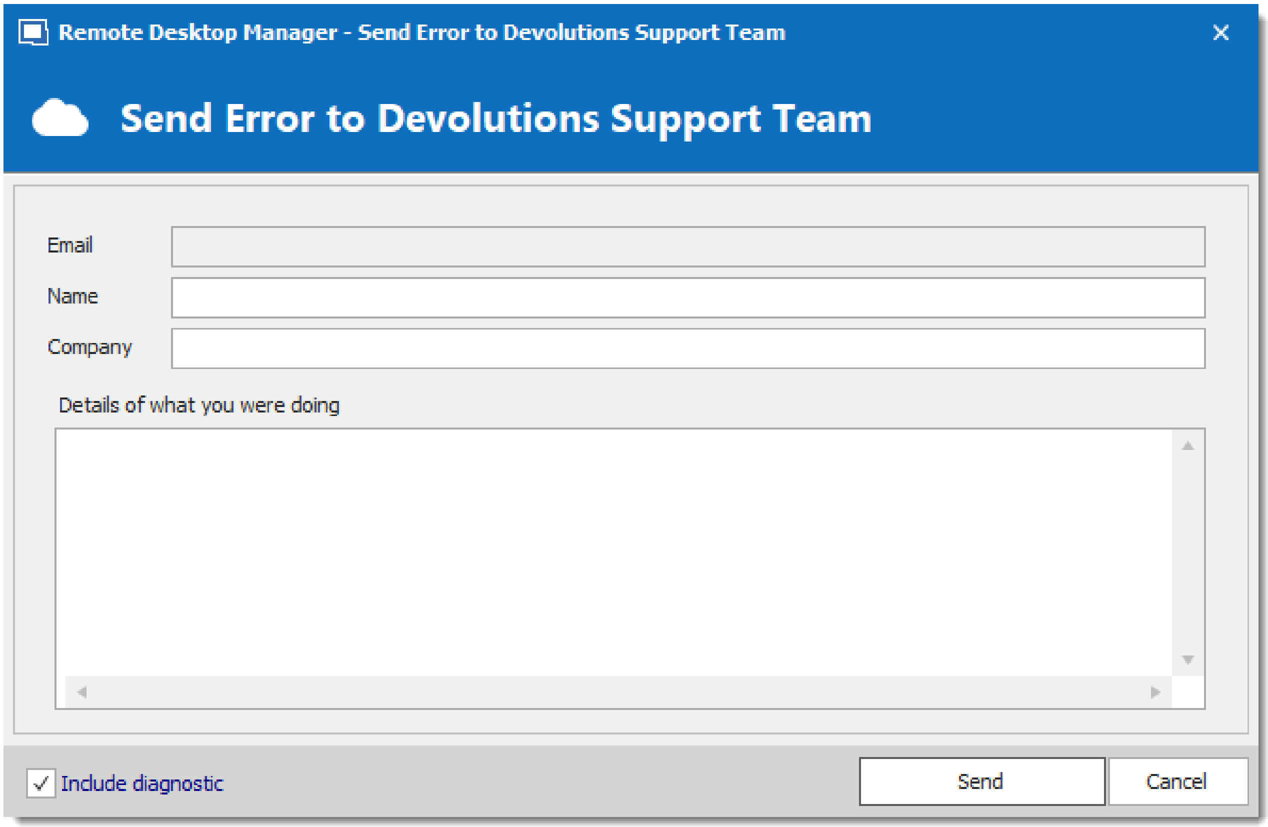
Enterprise Edition 2019.1.34.0

Running since: 27 sec

Memory usage: 213 MB

Exception

2. Fill in your contact information along with a detailed explanation on the issue and press OK.


Remote Desktop Manager - Send Error to Devolutions Support Team
Send Error to Devolutions Support Team
Email
Name
Company
Details of what you were doing
☑ Include diagnostic
Send
Cancel

11.1.1.10.1 Send configuration file

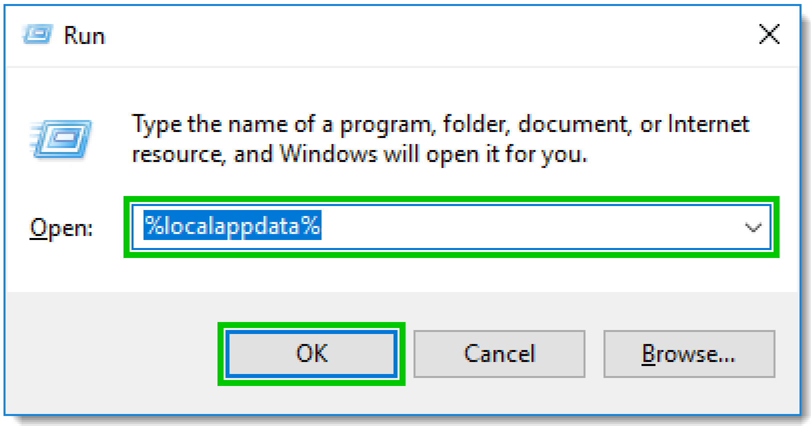
DESCRIPTION

In some cases, the Devolutions team will need your configuration file to help reproduce a particular issue.

SEND YOUR CONFIGURATION FILE

1. Press the **Windows key + R**.

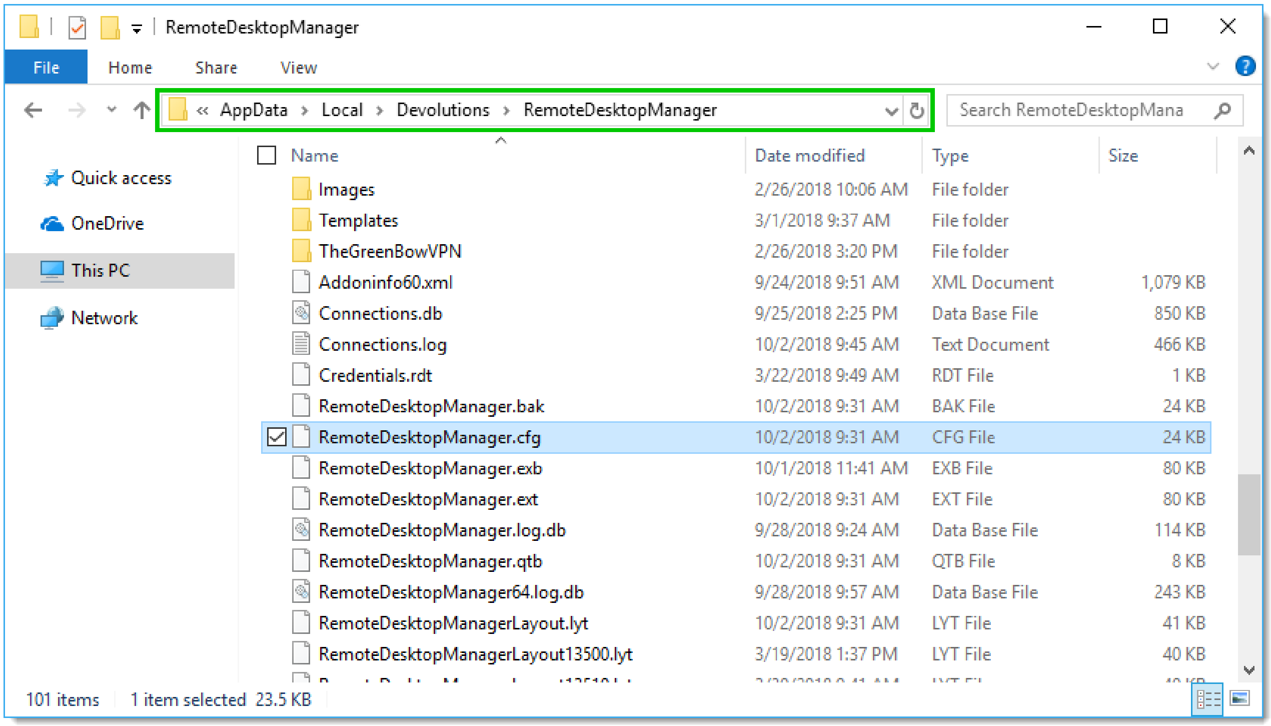
2. Type **"%localappdata%"** in the **Run** window and press **OK**.



Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.

Open: %localappdata%

3. *In the folder, locate the RemoteDesktopManager.cfg file.*



« AppData › Local › Devolutions › RemoteDesktopManager

Name	Date modified	Type	Size
Images	2/26/2018 10:06 AM	File folder	
Templates	3/1/2018 9:37 AM	File folder	
TheGreenBowVPN	2/26/2018 3:20 PM	File folder	
Addoninfo60.xml	9/24/2018 9:51 AM	XML Document	1,079 KB
Connections.db	9/25/2018 2:25 PM	Data Base File	850 KB
Connections.log	10/2/2018 9:45 AM	Text Document	466 KB
Credentials.rdt	3/22/2018 9:49 AM	RDT File	1 KB
RemoteDesktopManager.bak	10/2/2018 9:31 AM	BAK File	24 KB
☑ RemoteDesktopManager.cfg	10/2/2018 9:31 AM	CFG File	24 KB
RemoteDesktopManager.exb	10/1/2018 11:41 AM	EXB File	80 KB
RemoteDesktopManager.ext	10/2/2018 9:31 AM	EXT File	80 KB
RemoteDesktopManager.log.db	9/28/2018 9:24 AM	Data Base File	114 KB
RemoteDesktopManager.qtb	10/2/2018 9:31 AM	QTB File	8 KB
RemoteDesktopManager64.log.db	9/28/2018 9:57 AM	Data Base File	243 KB
RemoteDesktopManagerLayout.lyt	10/2/2018 9:31 AM	LYT File	41 KB
RemoteDesktopManagerLayout13500.lyt	3/19/2018 1:37 PM	LYT File	40 KB

101 items 1 item selected 23.5 KB

4. *Please send us the file securely via ShareFile.*

11.1.1.11 Upgrade from Free Edition to Enterprise Edition

DESCRIPTION

These steps will help you get through the process of upgrading from the Free Edition of Remote Desktop Manager to the Enterprise Edition.

STEPS

✓ The Enterprise edition allows for a 30-day trial. Since both editions are **totally independent** from each other and can be operated side-by-side, this means that you can perform this procedure and still benefit of a trial for the Enterprise Edition features prior to making your decision.

☒ File based data sources (XML, SQLite, etc) are by default stored in the configuration folder. As a precaution, go through each data source in ***File - Data sources*** and have a look at the local path (if any). Any file that is in the configuration folder must be copied manually.

☒ The paths mentioned in this topic are for those that have installed using the default settings. The best way to locate your configuration folder is to use ***File - Options - Advanced***, in this form you will find an hyperlink near the bottom. This opens your configuration folder. Please ensure you close the application before going further.

1. Install Remote Desktop Manager Enterprise edition. The download location is http://remotedesktopmanager.com/Home/Download.

2. Launch the Enterprise Edition once to have its own configuration folder initialized, then close it.

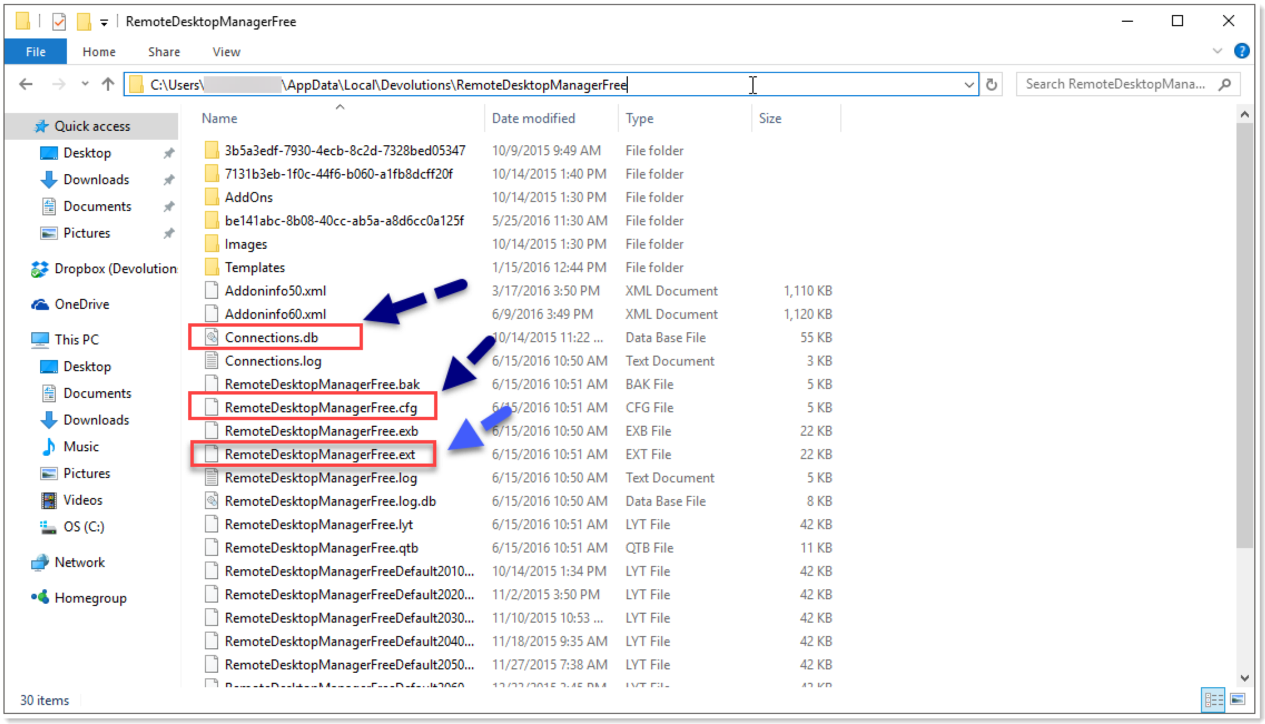
3. Open ***%localappdata%\Devolutions\RemoteDesktopManagerFree.*** You will copy files to ***%localappdata%\Devolutions\RemoteDesktopManager*** so you may wish to open another explorer window to that location.

4. Copy the following files to the RemoteDesktopManager folder:

   RemoteDesktopManagerFree.cfg
   RemoteDesktopManagerFree.ext
   Connections.db. (default name of the Local Data Source)
   Any and ALL other data source files identified in the Data sources list

5. Rename the copied file to remove the ***Free*** suffix.:

   RemoteDesktopManagerFree.cfg to ***RemoteDesktopManager.cfg***
   RemoteDesktopManagerFree.ext to ***RemoteDesktopManager.ext***



C:\Users\[redacted]\AppData\Local\Devolutions\RemoteDesktopManagerFree

Name	Date modified	Type	Size
3b5a3edf-7930-4ecb-8c2d-7328bed05347	10/9/2015 9:49 AM	File folder	
7131b3eb-1f0c-44f6-b060-a1fb8dcff20f	10/14/2015 1:40 PM	File folder	
AddOns	10/14/2015 1:30 PM	File folder	
be141abc-8b08-40cc-ab5a-a8d6cc0a125f	5/25/2016 11:30 AM	File folder	
Images	10/14/2015 1:30 PM	File folder	
Templates	1/15/2016 12:44 PM	File folder	
Addoninfo50.xml	3/17/2016 3:50 PM	XML Document	1,110 KB
Addoninfo60.xml	6/9/2016 3:49 PM	XML Document	1,120 KB
Connections.db	10/14/2015 11:22 ...	Data Base File	55 KB
Connections.log	6/15/2016 10:50 AM	Text Document	3 KB
RemoteDesktopManagerFree.bak	6/15/2016 10:51 AM	BAK File	5 KB
RemoteDesktopManagerFree.cfg	6/15/2016 10:51 AM	CFG File	5 KB
RemoteDesktopManagerFree.exb	6/15/2016 10:50 AM	EXB File	22 KB
RemoteDesktopManagerFree.ext	6/15/2016 10:51 AM	EXT File	22 KB
RemoteDesktopManagerFree.log	6/15/2016 10:50 AM	Text Document	5 KB
RemoteDesktopManagerFree.log.db	6/15/2016 10:50 AM	Data Base File	8 KB
RemoteDesktopManagerFree.lyt	6/15/2016 10:51 AM	LYT File	42 KB
RemoteDesktopManagerFree.qtb	6/15/2016 10:51 AM	QTB File	11 KB
RemoteDesktopManagerFreeDefault2010...	10/14/2015 1:34 PM	LYT File	42 KB
RemoteDesktopManagerFreeDefault2020...	11/2/2015 3:50 PM	LYT File	42 KB
RemoteDesktopManagerFreeDefault2030...	11/10/2015 10:53 ...	LYT File	42 KB
RemoteDesktopManagerFreeDefault2040...	11/18/2015 9:35 AM	LYT File	42 KB
RemoteDesktopManagerFreeDefault2050...	11/27/2015 7:38 AM	LYT File	42 KB

AppData Folder

Run the Enterprise edition and ensure all of your data sources are available.

Uninstall the Free edition **when you are sure** that everything is working as expected.

11.1.1.12 Understand Remote Desktop Manager licensing

DESCRIPTION

In the context of licensing, a user is an individual that uses Remote Desktop Manager. Credentials that are stored within Remote Desktop Manager have no impact on licensing.

Licenses are calculated **per user**, not per installation. There is no limitation on installing Remote Desktop Manager (laptop, desktop, home computer, etc), as long as you hold the proper number of licenses for each individual that connect to your system.

> The licenses are for use by the customer that appears on the invoice. You cannot share your license with a sub-contractor or, in the case of a service provider, to one's customers. This applies even if you grant them access to a shared data source.

Four types of licenses are available to purchase, depending on the number of users:

- User license
- Site license
- Country license
- Global license

USER LICENSE

These licenses are purchased individually. There must be a separate license for each individual who will have access to the software. This is akin to a **named user license**.

SITE LICENSE

This license offers unlimited users on the same site (location). Remote workers who are based in another office are NOT included. A location is a workplace. If a user must work from another address, they need another another license. Please contact sales@devolutions.net to describe your scenario and get help on which license to purchase.

COUNTRY LICENSE

This license offers unlimited uses within a specified country. One license serial is delivered, which allows unlimited users at unlimited locations within the same country. Please contact sales@devolutions.net to get a quote.

GLOBAL LICENSE

This license offers unlimited uses, worldwide. One license is delivered, which can be used for an unlimited amount of users at unlimited location around the world. Please contact sales@devolutions.net to get a quote.

11.1.1.13 Web protocol handler

DESCRIPTION

A **Web Protocol Handler** (also called **URL Protocol Handler**) has been implemented in Remote Desktop Manager to be able to launch a session directly from HTML content. This can be very useful to call Remote Desktop Manager from a Configuration Management Database (CMDB) or even a Document Management System (DMS).

Internet Explorer and Mozilla Firefox execute the URL by clicking on it or by pressing Enter. However, with some other web browser such as Google Chrome, executing the URL normally results in a web search. These browsers may require to do **Ctrl + Click** or **Ctrl + Enter** to execute the URL.

SCENARIOS

There are two ways of using the handler:

1. Generate a URL for a session (basically every entry type that connects to a remote device using a protocol).

2. Generate a URL for a template, this will allow you to specify the host name of the device you wish to connect to, but it will take the settings of the template.

PARAMETERS

Here are the parameters used to build a protocol handler URL. These are for advanced scenarios. Only the **DataSource** and **Session** IDs are enough to open a connection.

Please note that the **DataSource** parameter overrides the data source which the application connects to at start-up. This applies even if the user is prompted for a data source to connect to when the application starts.

PARAMETER	DESCRIPTION
DataSource	Indicate the data source or the database ID. Find them in the **IDs** section of the **Advanced properties** of an entry.

PARAMETER	DESCRIPTION
	A data source ID is unique per installation, which makes the URL usable only by the workstation where the data source has been created. By default Remote Desktop Manager generates the URL with the database ID.
Session	Indicate the ID of a session. Find it in the **Session ID** field in the **Advanced properties** of a session.
Template	Indicate the ID of the template of an entry. The **template** parameter retrieves some properties of a template and uses them against the **session** parameter. The **host** parameter is required when using the **template** parameter.
Host	Indicate the hostname or IP address of the remote device. Used along with the **template** parameter, or to override the **host** property of the **session** parameter.
Port	Indicate the port to use. Used to override the **port** property of the **session** or **template** parameter.
Username	Indicate the username to use. Used to override the **username** property of the **session** or **template** parameter.
Password	Indicate the password to use. Used to override the **password** property of the **session** or **template** parameter.
Domain	Indicate the domain to use. Used to override the **domain** property of the **session** or **template** parameter.
Title	Indicate the title of the tab when a session is launched using the Embedded (tabbed) display mode. This can be very useful when several sessions are launched at the same time.
Filter	Populate the Search field.

PARAMETER	DESCRIPTION
Tabpage	Give the focus to a tab in the dashboard after the application has completed the startup procedure. Available only with the **Select** action. The possible tabs are: • **Overview** • **Documentation** • **Macros/Scripts/Tools** • **Management Tools** • **Information** • **Attachments** • **Logs** • **Recordings**

ACTIONS

- **Open**: open the specified connection.
- **Find**: find sessions by host.
- **Edit**: edit the specified connection.
- **View**: view the password of the specified entry.
- **OpenWithMacro**: open the specified with a macro.
- **Select**: select a connection in the Navigation Pane (allows to select a tab in the dashboard as well).

SYNTAX

Syntax:

```
rdm://<action>?<parameter1>=<value>[&<parameter2>=<value>]
```

The base syntax of the protocol handler requires the **application protocol**, an **action** and **at least one parameter** to work with.

There are three rules to follow when constructing an URL for the protocol handler:

- The action is separated from the parameters with a question mark (?).
- Each parameter is assigned a value by using an equal sign (=).
- Parameter/Value pairs are separated with an ampersand (&).

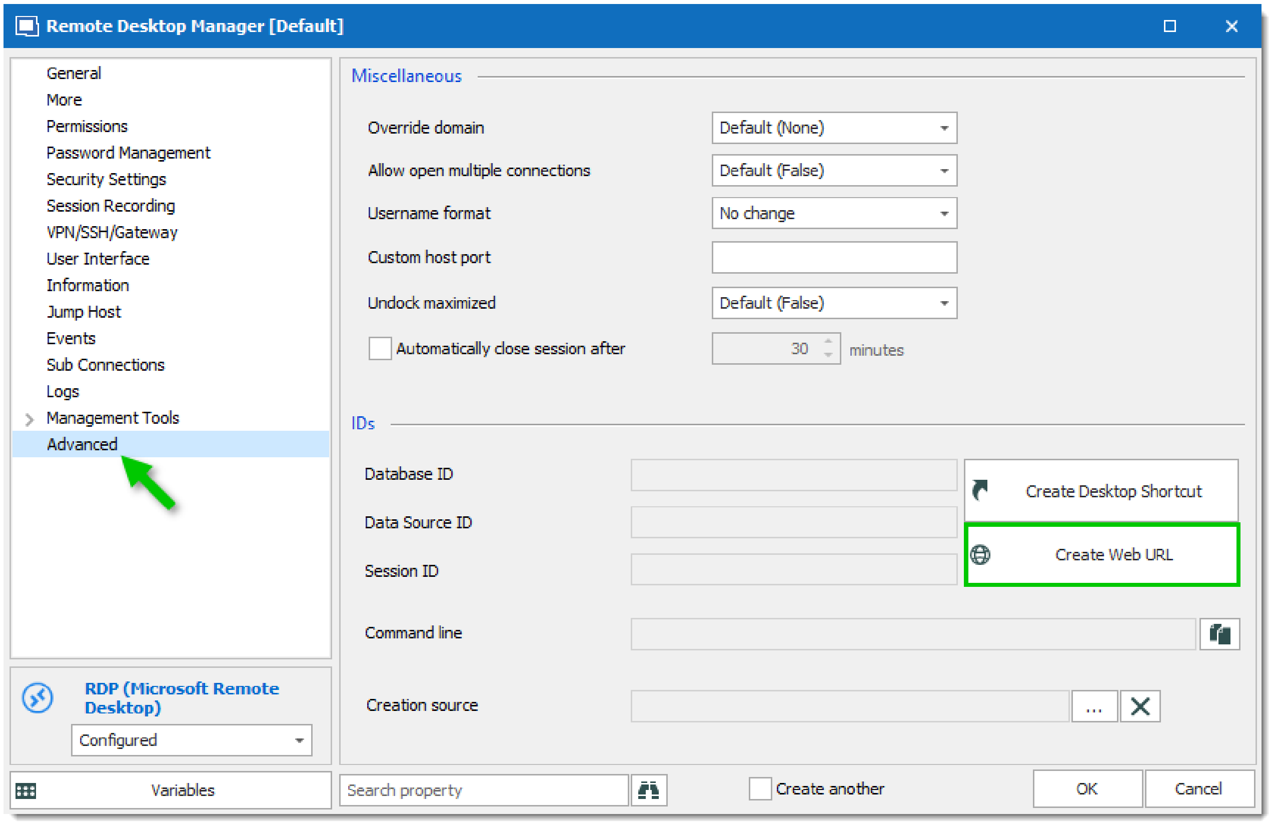
EXAMPLES

OPEN REMOTE DESKTOP MANAGER WITH THE SEARCH/FILTER FIELD POPULATED AND THE FOCUS ON THE DASHBOARD

```
rdm://open?Filter=RDP&Tabpage=Dashboard
```

OPEN AN RDP SESSION

1. In the **Advanced** section of an entry properties, click on the **Create Web Url** button.



Remote Desktop Manager [Default]

Miscellaneous

Override domain: Default (None)

Allow open multiple connections: Default (False)

Username format: No change

Custom host port:

Undock maximized: Default (False)

□ Automatically close session after 30 minutes

IDs

Database ID:

Data Source ID:

Session ID:

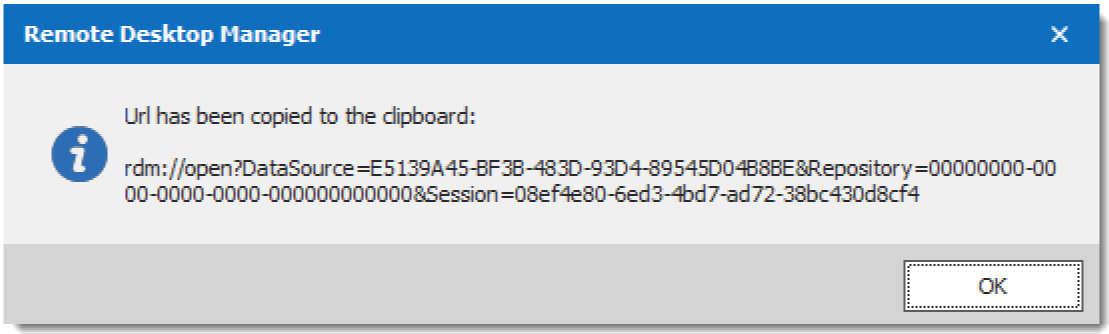
Command line:

Creation source:

RDP (Microsoft Remote Desktop): Configured

Create Web Url

2. The Url is stored in the clipboard.



Url has been copied to the clipboard:

rdm://open?DataSource=E5139A45-BF3B-483D-93D4-89545D04B8BE&Repository=00000000-00
00-0000-0000-000000000000&Session=08ef4e80-6ed3-4bd7-ad72-38bc430d8cf4

Url copied to clipboard

3. Paste (**Ctrl+V**) this Url in any application able to handle application protocols. It can be in a web page, a web browser address bar, or even a supported chat application. The protocol handler launches Remote Desktop Manager if it is closed, then perform the requested action with the provided parameters.

11.1.1.14 Create a saved search with Smart Folders

DESCRIPTION

Smart folders are saved searches. You can search by entry name and/or tag. The smart folder lists search results in the dashboard. You can open and edit entries directly from the smart folder. The folder updates dynamically; each time you open the folder it searches.

ADD A SMART FOLDER

1. Click **New Entry**.

2. Click **Miscellaneous**, then select **Smart Folder**.

3. Enter the name for the smart folder. This is how the smart folder name will appear in the Navigation Pane. It is not for the search terms.

4. Choose the location.

5. Enter a search term and/or a tag.

To search for multiple terms, use:
"&&" for "and"
"||" for "or"

To select tags, click more options and a tag.

USE A SMART FOLDER

1. Select the folder in the Navigation Pane.

2. You can work with an entry directly from the search results.
Double-click to open an entry.
Right-click to access actions in the context menu (e.g. View password or Select in dashboard).

The smart folder can be edited. It has the same settings as other entries.

11.1.1.15 Add an RDP entry

DESCRIPTION

RDP (Microsoft Remote Desktop) and other tools that open remote connections are saved as **Session** entries Remote Desktop Manager. The entries store information about the host, credentials, local resources, and VPN, so users can open a session with one click. You can also set permissions, configure security settings and customize logs.

Here are the basics to get you started.

1. On the **Edit** tab, click **New Entry**.
2. Choose **RDP (Microsoft Remote Desktop)**.

3. Enter a **Name** for the session.
4. Choose a **Display** mode, the most common are:
   - **Embedded (tabbed)** opens a new tab in Remote Desktop Manager.
   - **External** opens in the external application.
5. Choose the credentials to use.
   To use credentials you have saved as a separate entry, choose **Credential repository** and select the entry from the list.
   Select **Default** if you want to enter the credentials directly in the entry.
6. Enter the **Host** address.

OPEN A RDP SESSION

Click **Open Session** on the **Home tab** or **Dashboard**

You can open more than one session at once. With embedded sessions you can switch between the tabs or monitor connections simultaneously: use thumbnail view or rearrange open sessions with split screen.

11.1.1.16 Quick Start

DESCRIPTION

Welcome to Remote Desktop Manager! Here are three steps to quickly set up Remote Desktop Manager and start testing the features.

- About the data source
- Import credentials from Keepass (or other sources)
- Save a RDP session

If you want to learn more, see our online help.

11.1.1.16.1 About the data source

DESCRIPTION

Remote Desktop Manager comes with a local SQL Lite data source. It is enough to quickly test out remote connections (e.g. SSH or Microsoft Remote Desktop) and other types of entries.

To try role-based access control, you need to add an advanced source.

To add a new data source, click ***File – Data Sources***.

LEARN MORE

Choose a data source

11.1.1.16.2 Import credentials

DESCRIPTION

Remote Desktop Manager imports credentials from 16 third-party applications. It is an efficient way to build your data. The imported information can be converted into different types of entry (e.g. username/password, Login (account), and Website).

You can use credential entries to open remote connections, saved as sessions in Remote Desktop Manager. Credential repositories link one credential or a list of credentials with a session.

To see the types of information you can import, go to ***File – Import***.

LEARN MORE

Watch this video for step-by-step instructions: Import credentials from KeePass.

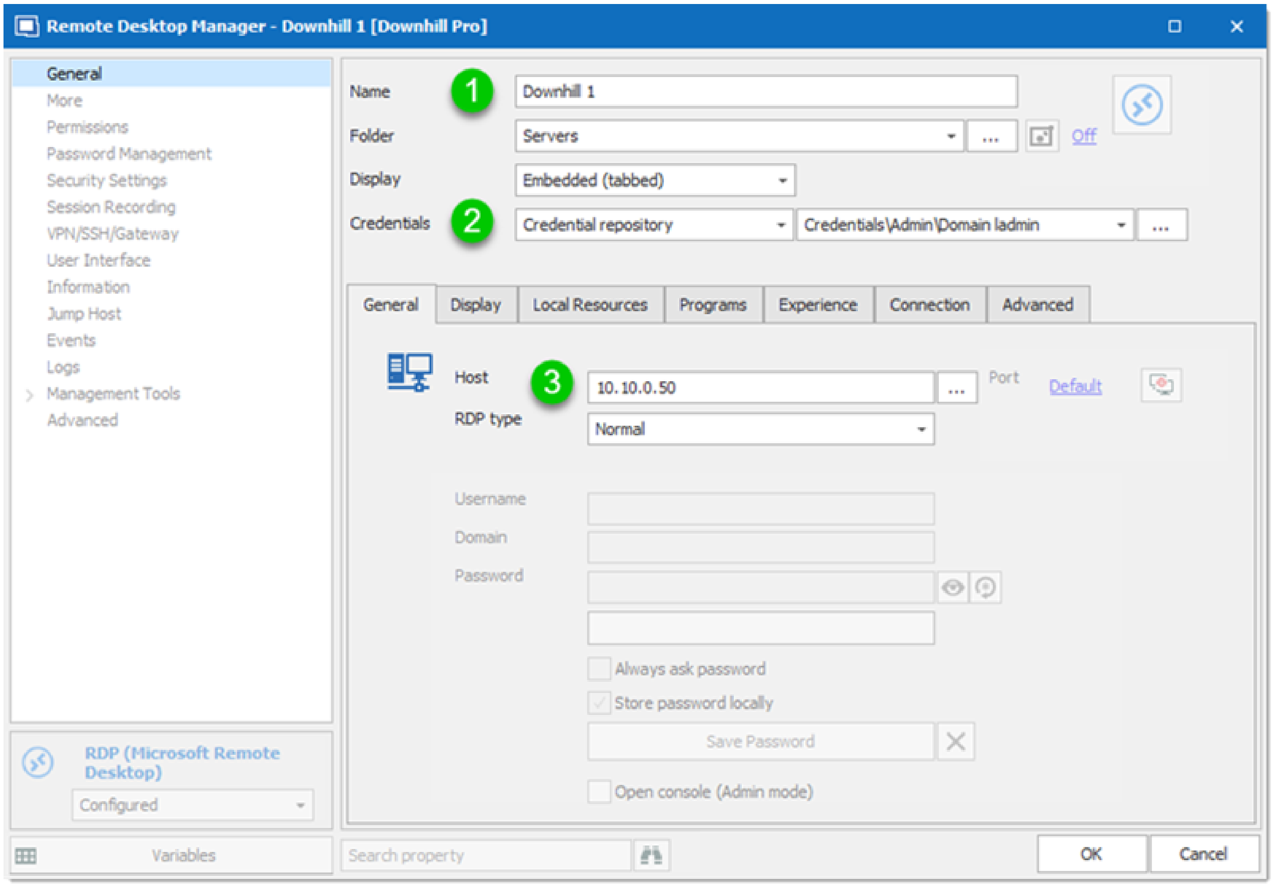
Read how to import credentials in the online help.

11.1.1.16.3 Create a RDP session

DESCRIPTION

When it comes to entries, there are a lot of different options. Here's a quick way to set up an **RDP (Microsoft Remote Desktop)** entry:

1. Name the entry
2. Enter the **Host** address
3. Choose **Credential repository** and link a credential entry with this session. You can also enter the username and password directly in the entry by choosing **Default**.



Name: Downhill 1

Folder: Servers

Display: Embedded (tabbed)

Credentials: Credential repository | Credentials\Admin\Domain ladmin

Host: 10.10.0.50

RDP type: Normal

☐ Always ask password

☑ Store password locally

☐ Open console (Admin mode)

RDP (Microsoft Remote Desktop) Entry Properties

Then, you can open the session with one click.

Click **Open Session** on the Home tab.

LEARN MORE

More information about RDP entries

How to set up a VPN with a session

11.1.2 Remote Desktop Manager Jump

11.1.2.1 Configure Remote Desktop Manager Jump

DESCRIPTION

Please note that if your windows profile is corrupted Remote Desktop Manager Agent and Remote Desktop Manager Jump might not work.

Remote Desktop Manager Jump is built in Remote Desktop Manager desktop application (Windows only). This feature relies on the **Remote Desktop Manager Agent** and a full installation of Remote Desktop Manager on the local machine and the jump host.

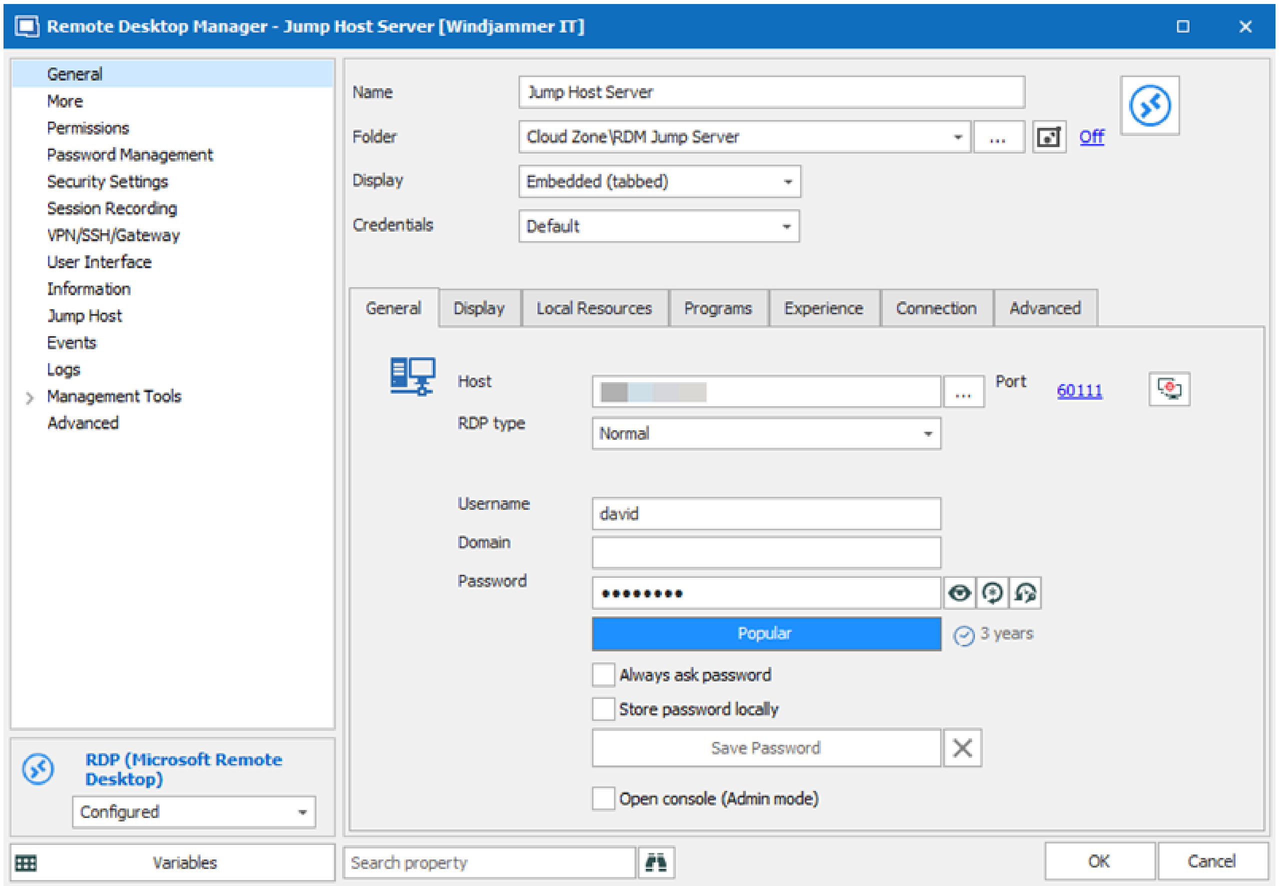
For an introduction on Remote Desktop Manager Jump, please consult the Remote Desktop Manager Jump topic.

GETTING STARTED WITH REMOTE DESKTOP MANAGER JUMP

PROCEDURE

SET UP THE JUMP HOST

1. Add an RDP entry for the jump host. Enter a **name** for the session, **host** name and include **credentials**.



Remote Desktop Manager - Jump Host Server [Windjammer IT]

Name: Jump Host Server

Folder: Cloud Zone\RDM Jump Server

Display: Embedded (tabbed)

Credentials: Default

Host:

Port: 60111

RDP type: Normal

Username: david

Domain:

Password: ••••••••

□ Always ask password

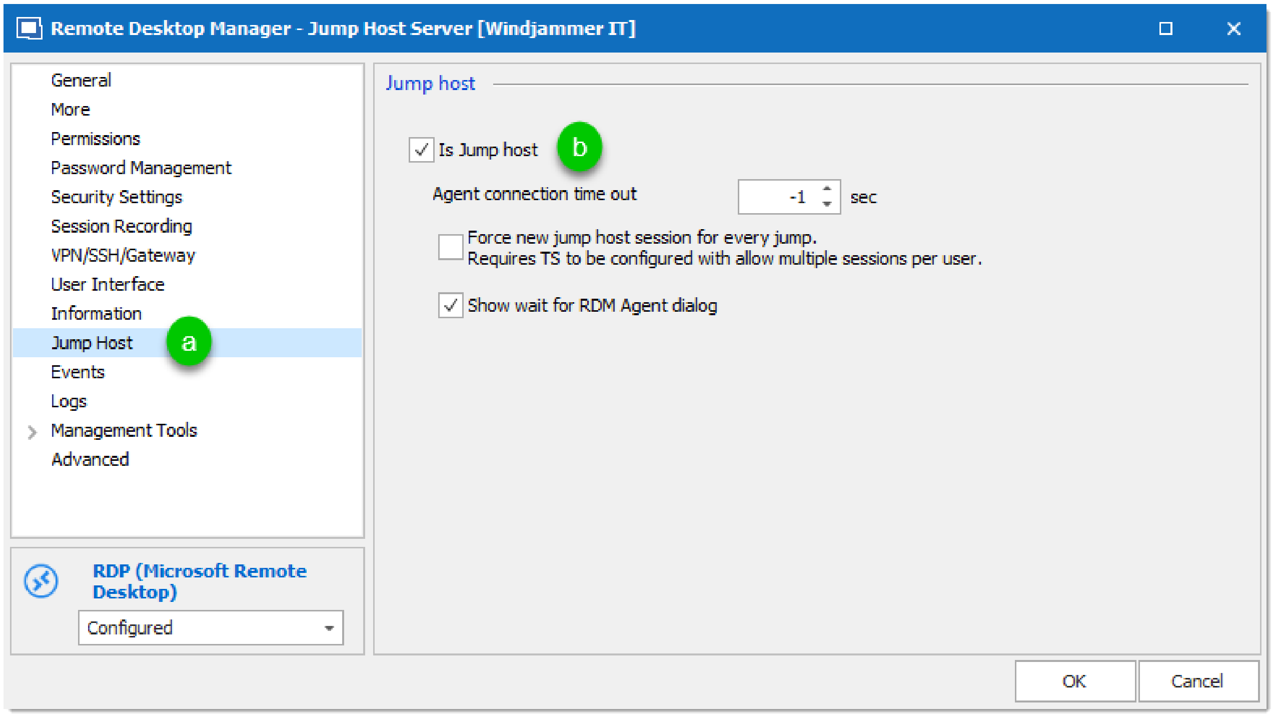
□ Store password locally

□ Open console (Admin mode)

RDP (Microsoft Remote Desktop): Configured

Jump Host RDP entry properties

2. Click **Jump Host** and check **Is Jump Host**.



Remote Desktop Manager - Jump Host Server [Windjammer IT]

Jump host

☑ Is Jump host

Agent connection time out -1 sec

□ Force new jump host session for every jump.
Requires TS to be configured with allow multiple sessions per user.

☑ Show wait for RDM Agent dialog

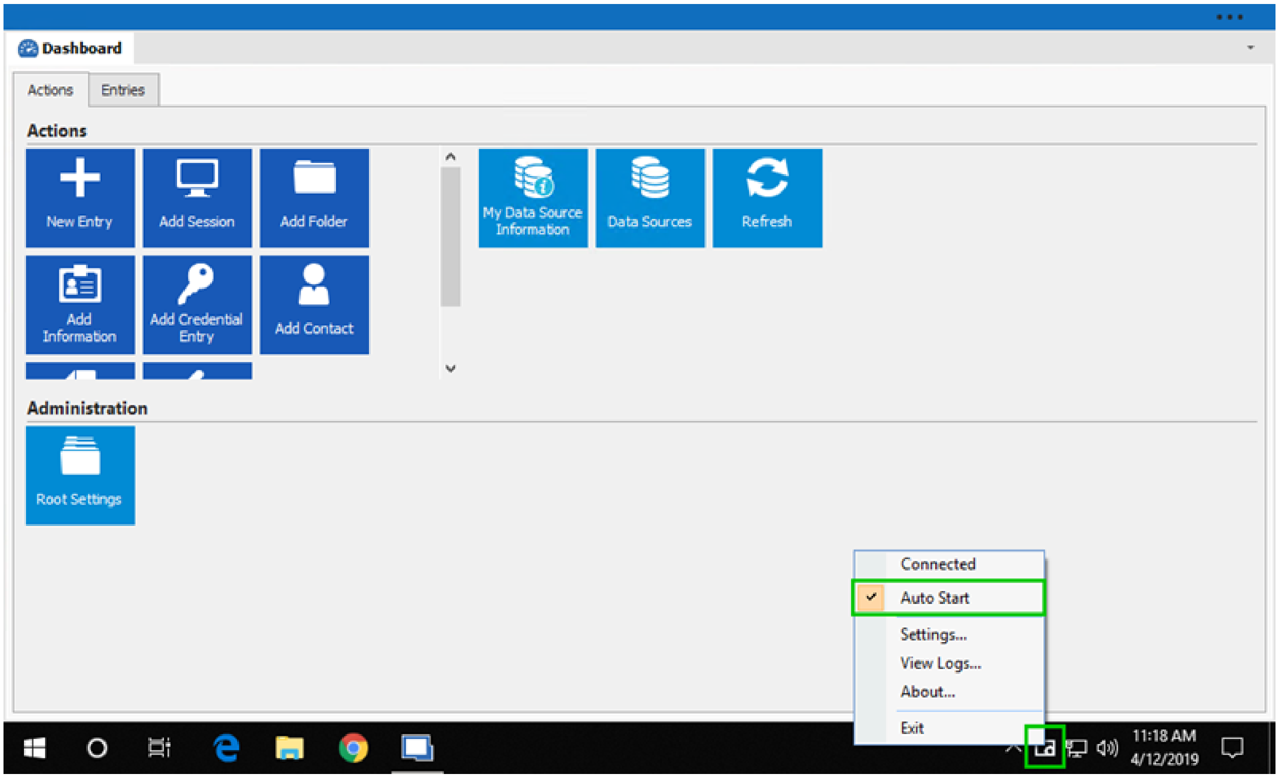
Check Is Jump Host – Jump Host properties

3. Open the Jump Host session.

- Install Remote Desktop Manager on the jump host. You can use the same license as your local instance.
- The application is installed with a local data source (SQL Lite). There is no need to add a data source because the jump host is only an intermediary between the local and remote hosts.

4. Confirm Remote Desktop Manager Agent is set to **auto-start**. Go to ***Tools – More Tools*** and select Remote Desktop Manager Agent. Click **Yes** to start the agent.

5. Right-click the Remote Desktop Manager Agent in the taskbar. Check **Auto Start.**



Confirm Auto Start for Remote Desktop Manager Agent

6. Adjust the user interface on the jump host to maximize the area to display remote sessions.

- Make the application full screen.
- Remove the Navigation Pane. Go to **View** and click **Navigation**.
- Hide the ribbon. On the **View** tab, click **Top Pane**.

To show the ribbon again, click the blue bar at the top of the jump host instance of Remote Desktop Manager. To reset the layout, on the **Window** tab, click **Reset Layout**.

The jump host is ready to use.

THREE THINGS TO REMEMBER:

Hide the **Ribbon** and **Navigation Pane;** it will make it easier to work. The menus are not needed. Hiding them provides more space in the dashboard.

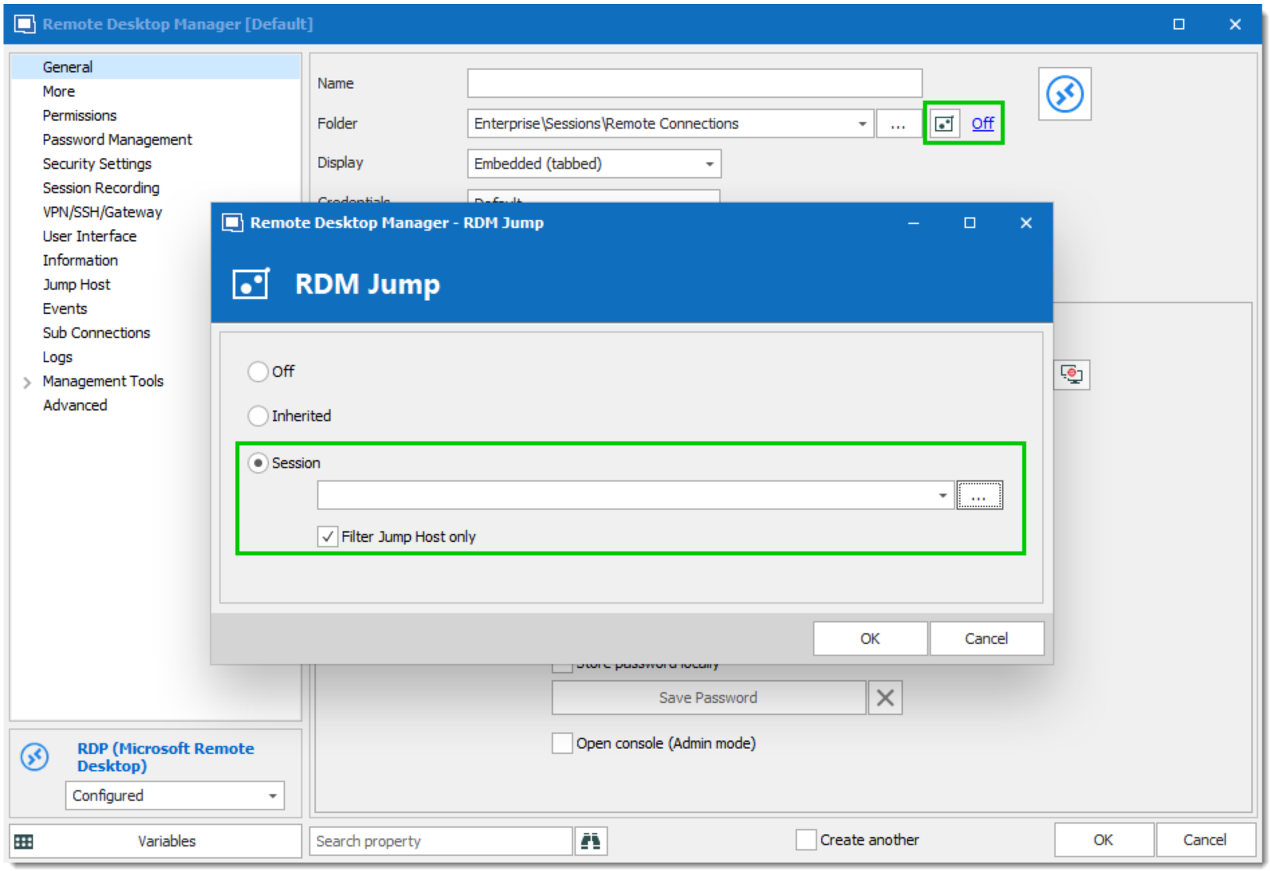
✓ Use the same **Remote Desktop Manager license** on the local and remote instances.

The jump host acts as a relay between the local and the remote systems, it is possible to use the Remote Desktop Manager license serial that has been used on the local workstation to register the application on the jump host.

✓ There is no need to add a data source on the jump host. Remote Desktop Manager opens for first time with a default **Local Data Source**. This is sufficient because the application on the jump host only acts as an intermediate between the local and the remote hosts.

CONFIGURE A SESSION TO USE THE JUMP HOST

1. On the local Remote Desktop Manager instance, create a session entry as usual. Set the jump host by clicking on the **RDM Jump settings** button. The jump host can be **Inherited** if the jump host is defined in the parent folder, or choose a specific **Session.**



Name

Folder: Enterprise\Sessions\Remote Connections

Display: Embedded (tabbed)

Off

RDP (Microsoft Remote Desktop): Configured

○ Off

○ Inherited

● Session

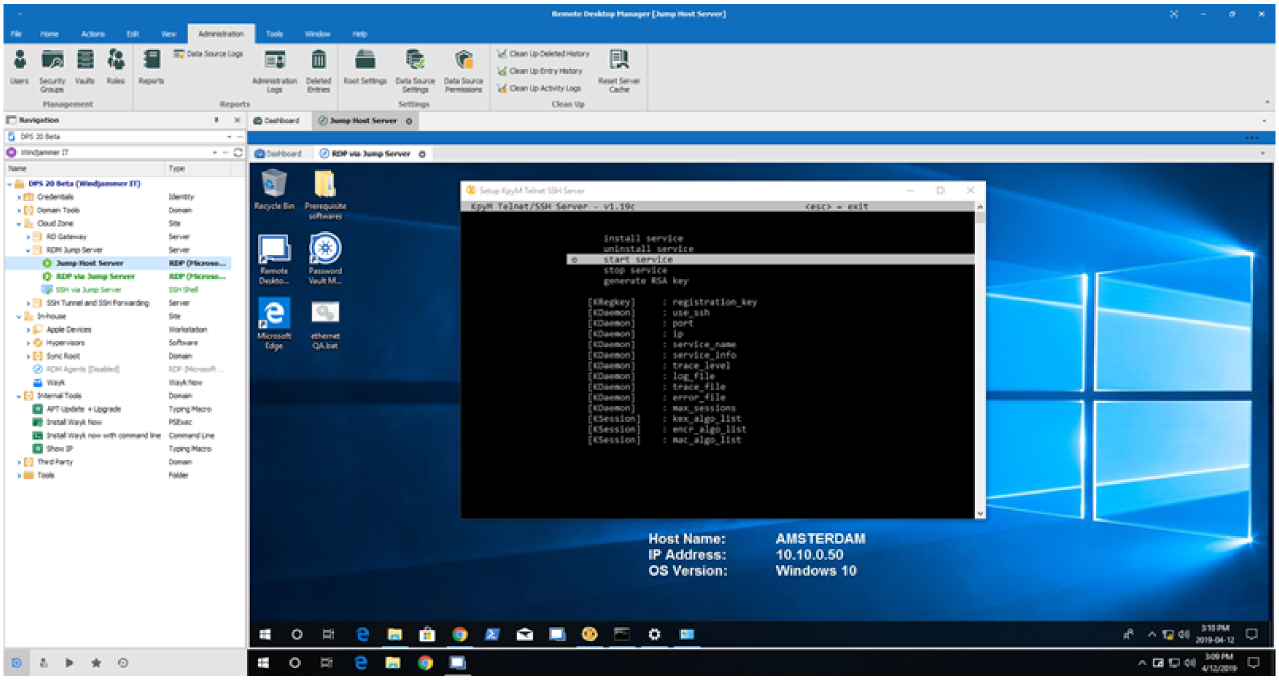
☑ Filter Jump Host only

□ Open console (Admin mode)

□ Create another

Jump host selection

2. Click **Open Session**. The Remote Desktop Manager Jump opens automatically. It looks like a session in a session.



```
KpyM Telnet/SSH Server - v1.19c                         <esc> = exit

               install service
               uninstall service
  ⊙            start service
               stop service
               generate RSA key

             [KRegkey]      : registration_key
             [KDaemon]      : use_ssh
             [KDaemon]      : port
             [KDaemon]      : ip
             [KDaemon]      : service_name
             [KDaemon]      : service_info
             [KDaemon]      : trace_level
             [KDaemon]      : log_file
             [KDaemon]      : trace_file
             [KDaemon]      : error_file
             [KDaemon]      : max_sessions
             [KSession]     : kex_algo_list
             [KSession]     : encr_algo_list
             [KSession]     : mac_algo_list
```

Host Name: AMSTERDAM
IP Address: 10.10.0.50
OS Version: Windows 10

RDP Session open with Jump Host

11.1.3 RDP

11.1.3.1 Restoring the rdp file association with mstsc.exe

DESCRIPTION

If you have elected to do so during the installation, the ***.rdp** file extension has been associated with Remote Desktop Manager, this means that is does not use the ***mstsc.exe*** client from Microsoft anymore.

SOLUTION

From an elevated command prompt (run as administrator), run the following command:

```
ftype RDP.File="%systemroot%\system32\mstsc.exe" "%1"
```

TIP

Add the command above to the domain logon script to fix all of your users at once.

11.1.4 SSH

11.1.4.1 Configure an SSH Tunnel

DESCRIPTION

SSH tunneling is used to establish an encrypted connection over an untrusted network. It consists of an encrypted tunnel created through the SSH protocol, between an SSH client and an SSH server, providing a secure connection for data transfer. The SSH Tunnel can also be used to establish sort of a virtual private network (VPN) to access services across firewalls.

11.1.5 VMware

11.1.5.1 Configuring VMware's PowerCLI for use by Remote Desktop Manager

DESCRIPTION

The VMware PowerCLI is used by Remote Desktop Manager to interact with vSphere/vCenter in three distinct cases:

1. Getting the list of virtual machines from a vSphere/vCenter;
2. Performing operations on these virtual machines (start, stop, etc); and
3. Launching a VMware Remote Console.

> ! Some operations are not allowed on the Free edition of VMware Esxi. All operations acting on the state of the virtual machine need the vSphere API license.

As a service to our community, we will provide the procedure to get the PowerCLI up and running. Please remember that this is not a product of Devolutions and that we have no control over breaking changes that may occur between versions of the PowerCLI. You should always refer to the manufacturer's documentation.

PROCEDURE

> i This procedure is valid for version 6.5 of VMware's PowerCLI.

> ❗ The bitness of both Remote Desktop Manager and the PowerCLI must be taken into account for this procedure. Since these steps are performed only once, we would recommend that you follow the procedure for BOTH the 32 bit and 64 bit editions of the PowerCLI.

1. Ensure that PowerShell's script execution policy is configured. Please refer to Script Execution Policy.

2. Launch VMware vSphere PowerCLI using the shortcut on your system, this is the 64 bit version (using **Run As Administrator**).

3. Launch VMware vSphere PowerCLI (32-Bit), adjust both windows side by side (using **Run As Administrator**).

4. In both windows, set the SSL certificate setting of your choice. Obviously deploying a valid certificate on the vSphere server and trusting the Certification Authority is the most secure route. In secure environments or in a low-risk setting, we simply set to ignore.

   ```
   set-PowerCLIConfiguration -invalidCertificateAction "ignore" -confirm:$false
   ```

5. Connect to a vSphere/vCenter server. If there are prompts by the PowerCLI, respond accordingly.

   ```
   Connect-VIServer {your server}
   ```

6. Run the following command to see if there are error messages:

   Get-View -ViewType VirtualMachine | select -Property Name, {$_.Moref.Value};

If you see no error messages, you can close both PowerCLIs and you are now ready to test it using Remote Desktop Manager.

11.1.6 Tips and tricks

11.1.6.1 Use Multiple Versions of a Third Party Application

DESCRIPTION

You have 2 different versions of an application installed on your workstation and you want to be able to use both versions within Remote Desktop Manager.

SETTINGS

When you configure your **Application Installation Path** in ***File – Options – Path***, separate the 2 paths by a semi-colon (;).

Remote Desktop Manager will prompt you with the selection list and you will be able to pick the one that you want to use.

EXAMPLE

```
C:\Program Files\Appsv1;D:\Program Files\Appsv2
```

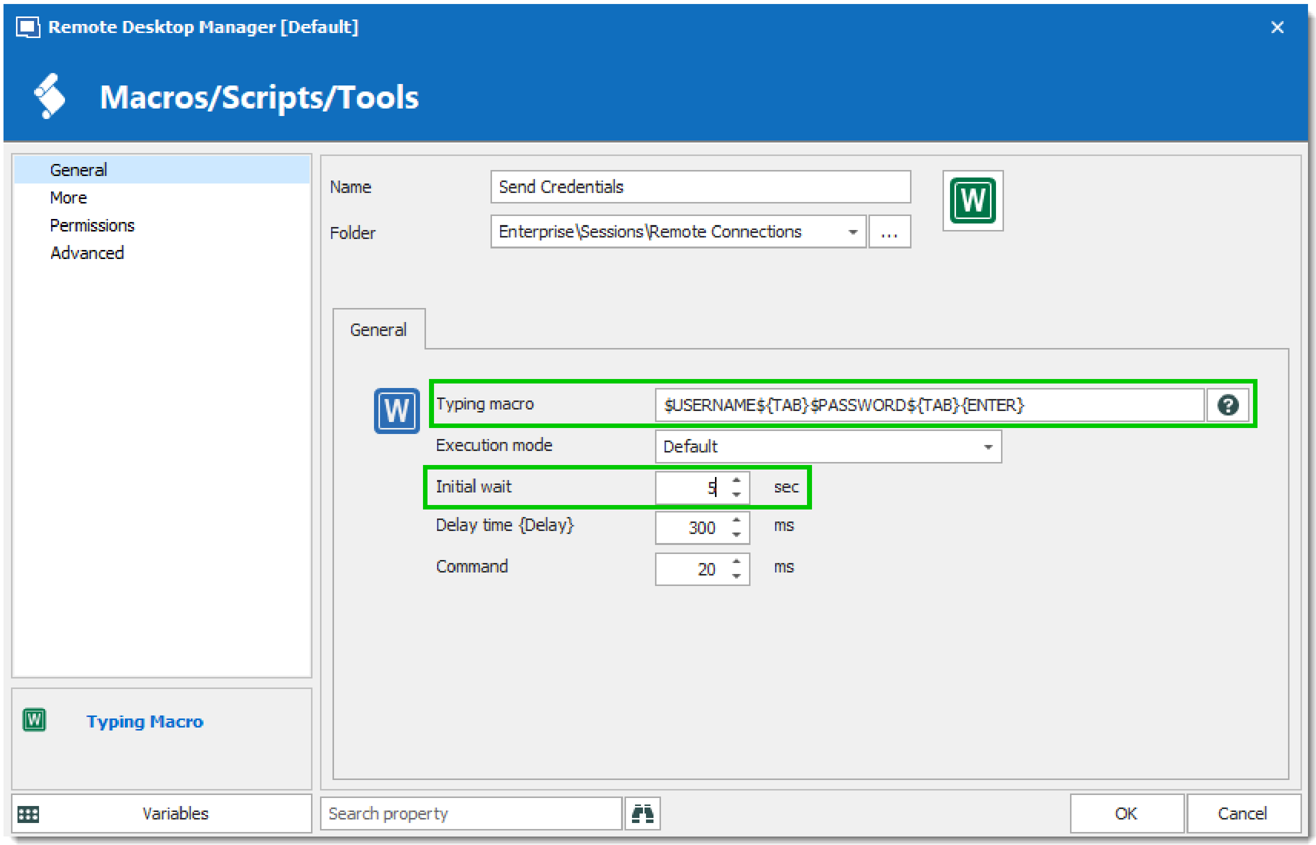
11.1.6.2 Sending Windows Credentials inside TeamViewer

DESCRIPTION

Many users have requested the ability to automate the login process on a Windows system through TeamViewer.

Since we are not able to send the password automatically inside the TeamViewer session, you would need to accomplish this with a typing macro.

First, the typing macro session should look like the following;



Name: Send Credentials

Folder: Enterprise\Sessions\Remote Connections

General

Typing macro: $USERNAME${TAB}$PASSWORD${TAB}{ENTER}

Execution mode: Default

Initial wait: 5 sec

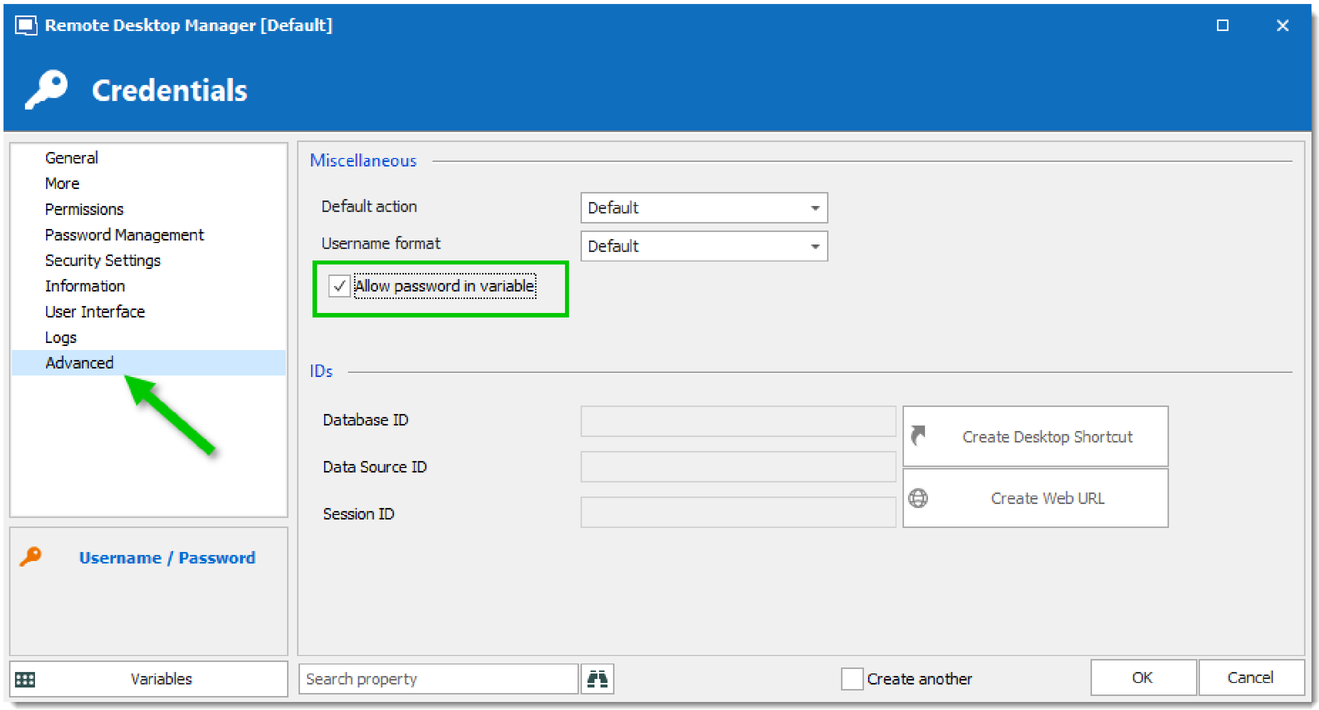
Delay time {Delay}: 300 ms

Command: 20 ms

Macro Entry Details

Please note that the initial wait has been configured to 5 seconds, this varies depending on each user system.

Now, in the properties of your Credential entry, you will enable the **Allow password in variable in** the **Advanced** section.



Remote Desktop Manager [Default]

Credentials

Miscellaneous

Default action: Default

Username format: Default

☑ Allow password in variable

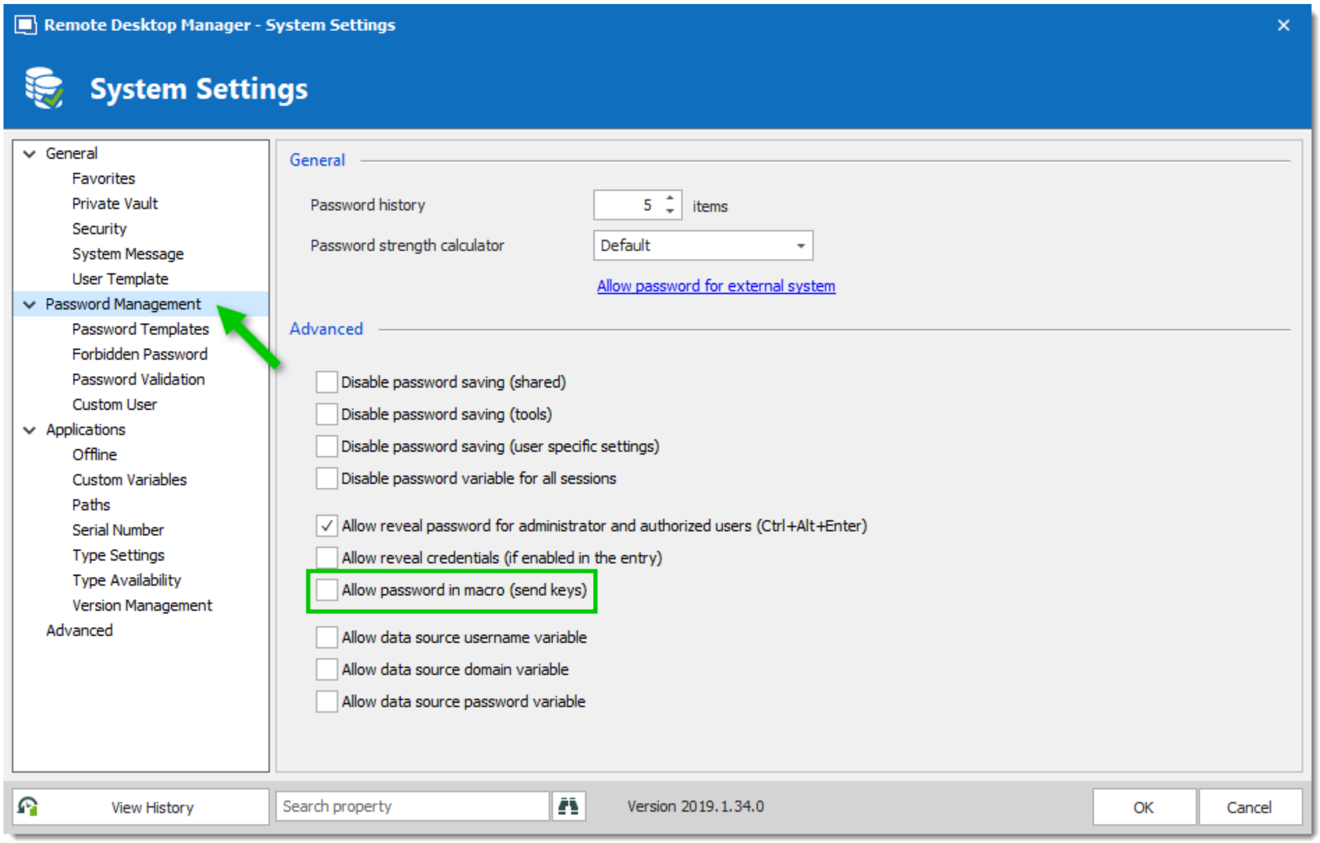
IDs

Database ID

Data Source ID

Session ID

If you have an Advanced Data Source, in ***Administration – Data Sources Settings (System Settings) – Password Management***, you will need to enable the **Allow password in macro (send keys)** option.



General

Password history: 5 items

Password strength calculator: Default

Allow password for external system

Advanced

□ Disable password saving (shared)

□ Disable password saving (tools)

□ Disable password saving (user specific settings)

□ Disable password variable for all sessions

☑ Allow reveal password for administrator and authorized users (Ctrl+Alt+Enter)

□ Allow reveal credentials (if enabled in the entry)

□ Allow password in macro (send keys)

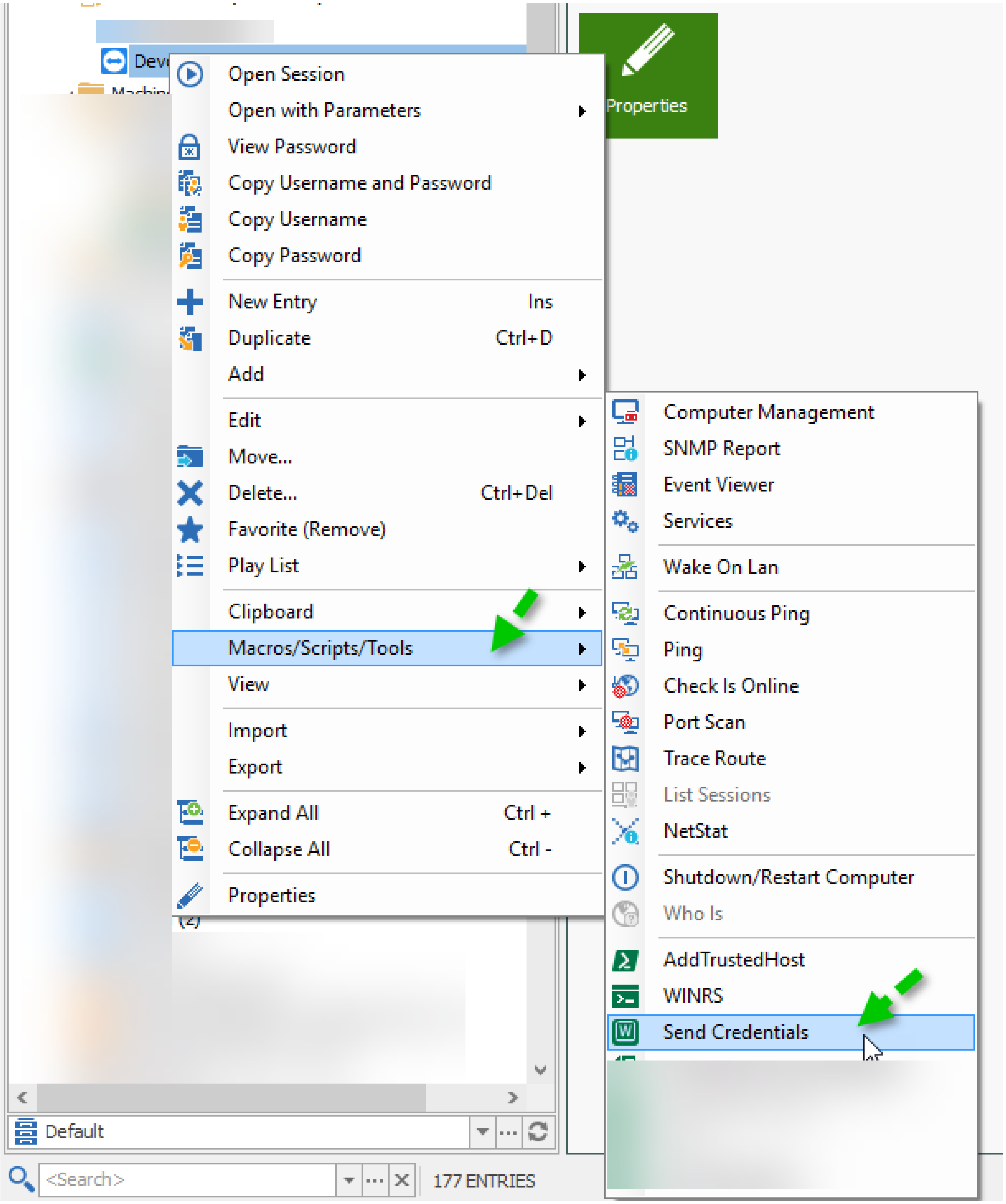
□ Allow data source username variable

□ Allow data source domain variable

□ Allow data source password variable

Version 2019.1.34.0

The next step happens when the TeamViewer session is opened and credentials are ready to be entered. Right-click on your credential entry and select **Macros/Scripts/Tools** -> **Send Credentials** (or whatever name you gave your entry).



In conclusion, put the mouse cursor in the appropriate login field and the typing macro will do the rest.

11.2 Performance

11.2.1 Memory Tuning Of RDP Sessions

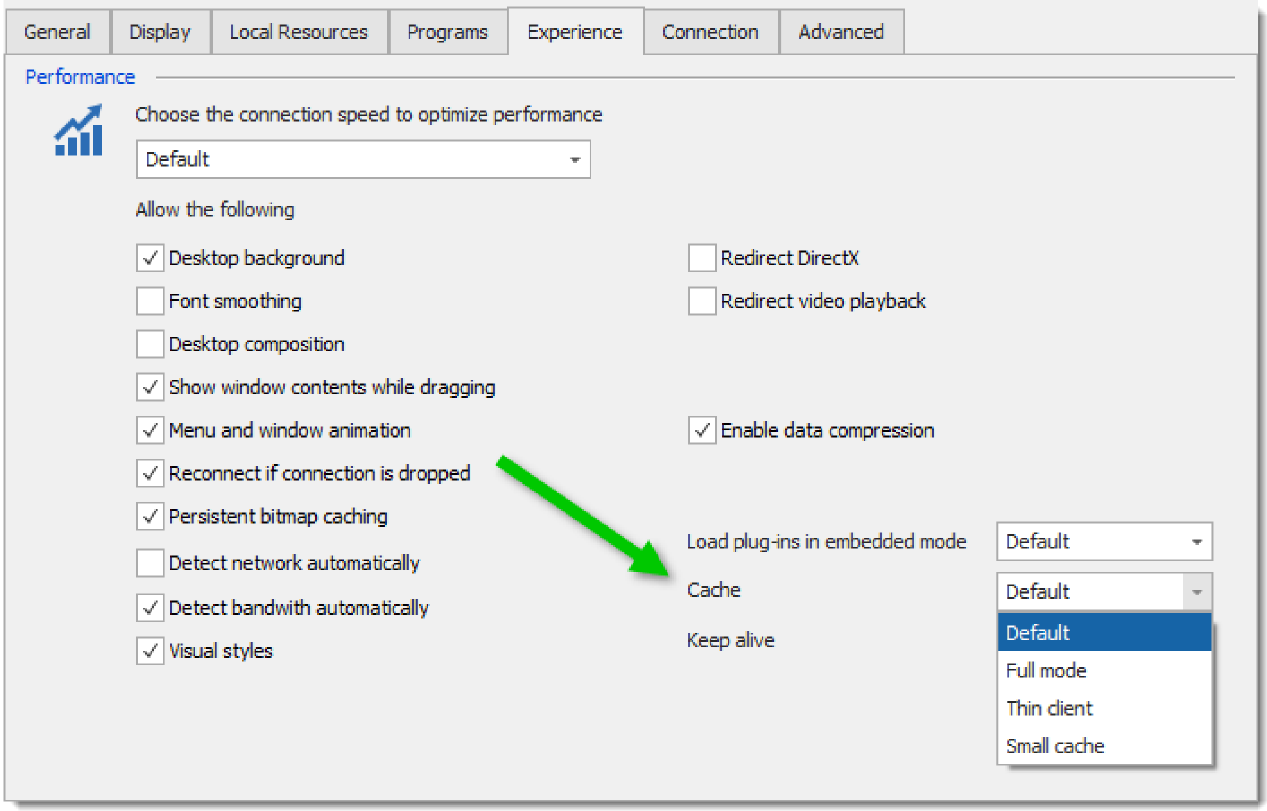
DESCRIPTION

RDP sessions using version 8 of the protocol, namely Windows 8 and Windows 2012, consume more memory than previous versions of the protocol. For those of you that open many sessions concurrently, this sometimes forced you into using the 64 bit version of Remote Desktop Manager.

By default, the RDP protocol will reserve a sizable chunk of memory right from the start of a session for caching purposes, but we have some level of control over that. In the **Experience** tab of the RDP session, there is a **Cache** setting that you can use to control the behavior. It's values are as follows:

VALUE	DESCRIPTION
Default	Uses the value set in ***File – Options – Types – RDP – Cache***.
Full Mode	The protocol is full Windows 8 Remote Desktop Protocol cache.
Thin client	The protocol is limited to using the Windows 7 with SP1 RemoteFX codec and a smaller cache. All other codecs are disabled. **This protocol has the smallest memory footprint**.
Small cache	The protocol is the same as **Full mode**, except it uses a smaller cache.

Choosing **Thin client** is therefore the choice that limits memory consumption the most, but will downgrade to the previous version of the protocol. The **Small Cache** mode may be sufficient for your needs if you need the newer features of the RDP protocol.



Choose the connection speed to optimize performance: Default

Allow the following

- ☑ Desktop background
- □ Font smoothing
- □ Desktop composition
- ☑ Show window contents while dragging
- ☑ Menu and window animation
- ☑ Reconnect if connection is dropped
- ☑ Persistent bitmap caching
- □ Detect network automatically
- ☑ Detect bandwidth automatically
- ☑ Visual styles
- □ Redirect DirectX
- □ Redirect video playback
- ☑ Enable data compression

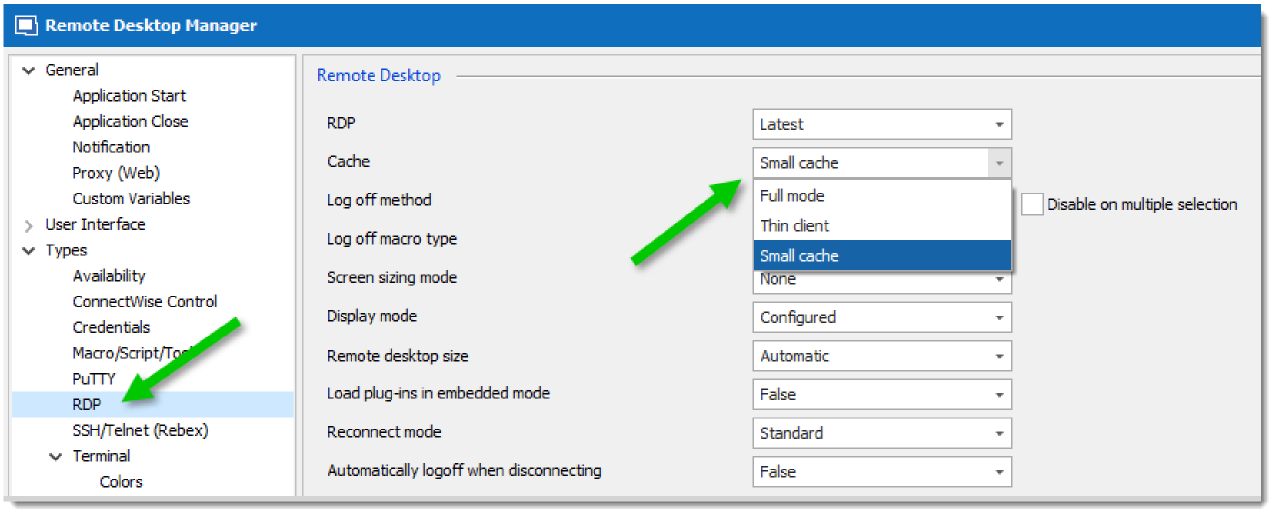
Load plug-ins in embedded mode: Default

Cache: Default

Keep alive

RDP Type cache settings

You might wish to set this for all sessions. In this case, go to ***File – Options – Types – RDP*** to assign the default value, then in all of your sessions use **Default**.



RDP	Latest
Cache	Small cache
Log off method	
Log off macro type	
Screen sizing mode	None
Display mode	Configured
Remote desktop size	Automatic
Load plug-ins in embedded mode	False
Reconnect mode	Standard
Automatically logoff when disconnecting	False

□ Disable on multiple selection

Details of the RDP global options

11.3 Security

11.3.1 Blocking MS RDP to Only Use Remote Desktop Manager

DESCRIPTION

Some organizations want to centralize their Remote Desktop connections to be established from Remote Desktop Manager only. A few things need to be considered to implement this in your organization.

SOLUTION

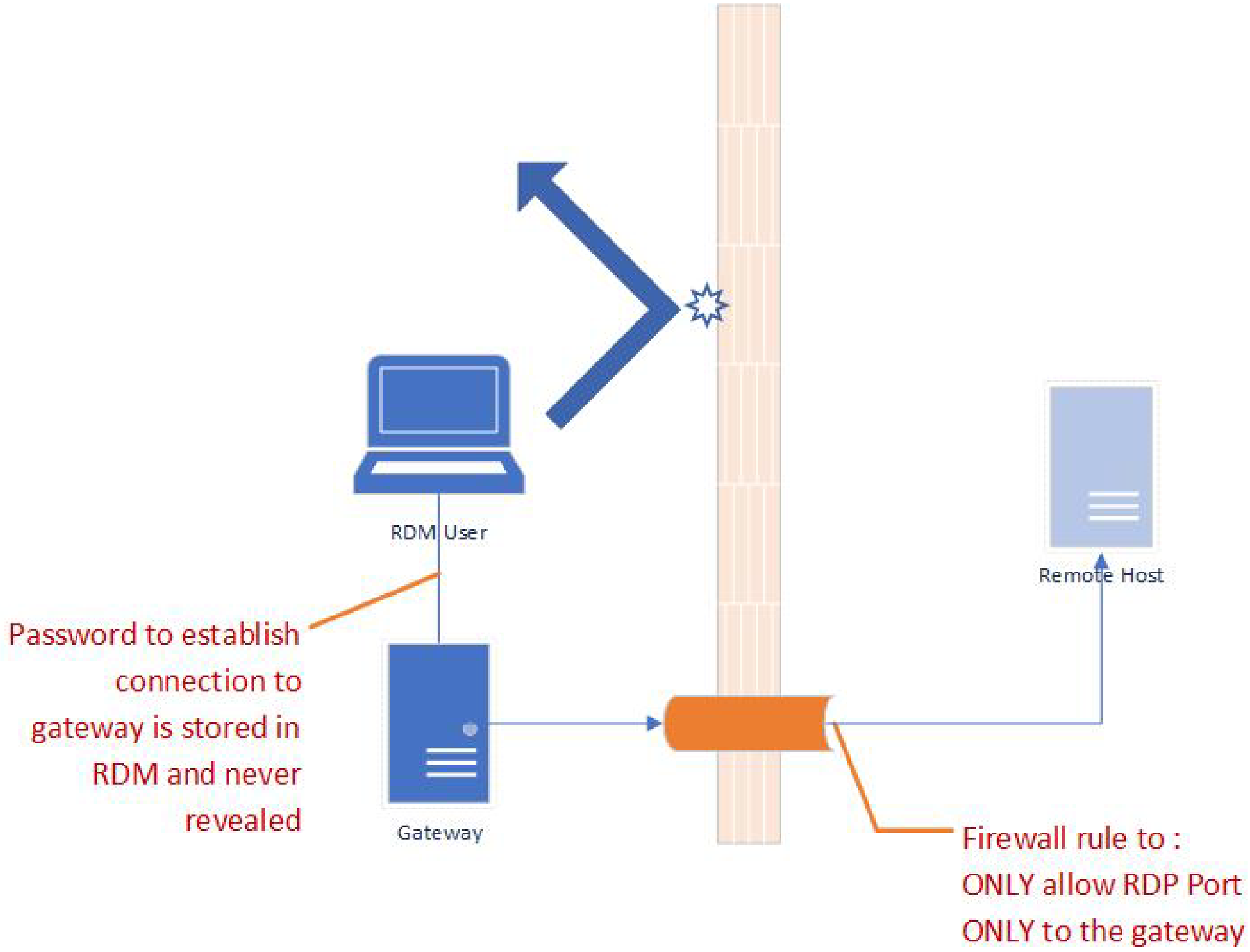
Just blocking Microsoft RDP (***mstsc.exe***) is still leaving other "surfaces" open for getting access. One could imagine installing Microsoft RDC Manager or even another copy of Remote Desktop Manager which would connect with settings that you do not approve.

Indeed, you can force your users to use Remote Desktop Manager by hiding the session credentials in the application. This will results in the users able to establish the remote connection without knowing the credentials.

If you feel that disabling Microsoft RDP (***mstsc.exe***) is sufficient for your needs, it is documented on

https://social.technet.microsoft.com/wiki/contents/articles/4980.how-to-enable-or-disable-remote-desktop-via-group-policy-windows-2008.aspx

Our best solution involves going through a gateway that is protected by a password unknown from the end user. One can achieve this by using a SSH Tunnel or our own Jump feature. The second step is to adjust the firewalls on the remote hosts to disable connections from IP addresses other than those use by your approved gateways.



Gateways

SSH tunnels are a very good approaches since they can run on a VM using any *nix distribution and require limited ram and hdd space.

This will also force your user to use Remote Desktop Manager because the credentials to use a SSH Tunnel cannot be a domain credential and the information to authenticate will be saved in Remote Desktop Manager.

For more information, please consult How to Setup a SSH Tunnel

11.3.2 Certificate validation

DESCRIPTION

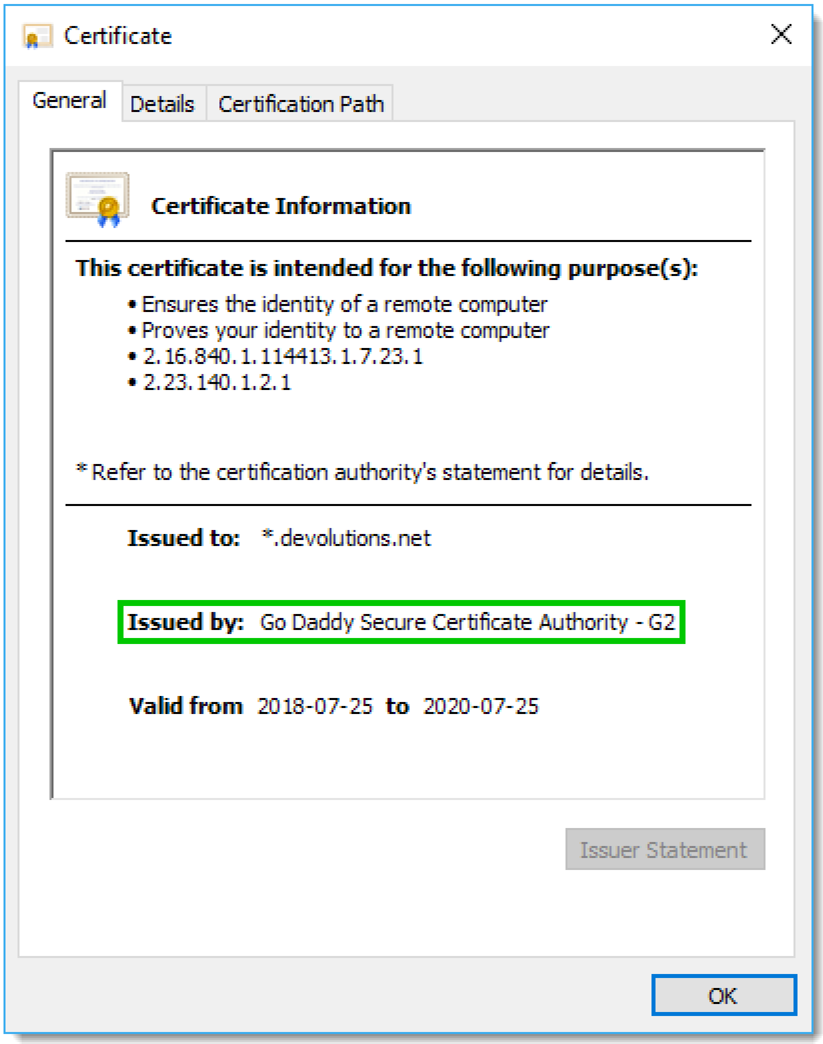
Remote Desktop Manager can validate certificates against the certificate store. However, ensure to only validate certificates from a trusted certification authority.

This topic covers:

- Verifying the Certification Authority (CA).
- Remember a certificate.
- Certificate options.
- Troubleshooting steps for certificate errors.

VERIFY THE CERTIFICATION AUTHORITY (CA)

1. Open the certificate, then verify by which Certification Authority the certificate has been **issued by**, in the **General** tab.



This certificate is intended for the following purpose(s):

- Ensures the identity of a remote computer
- Proves your identity to a remote computer
- 2.16.840.1.114413.1.7.23.1
- 2.23.140.1.2.1

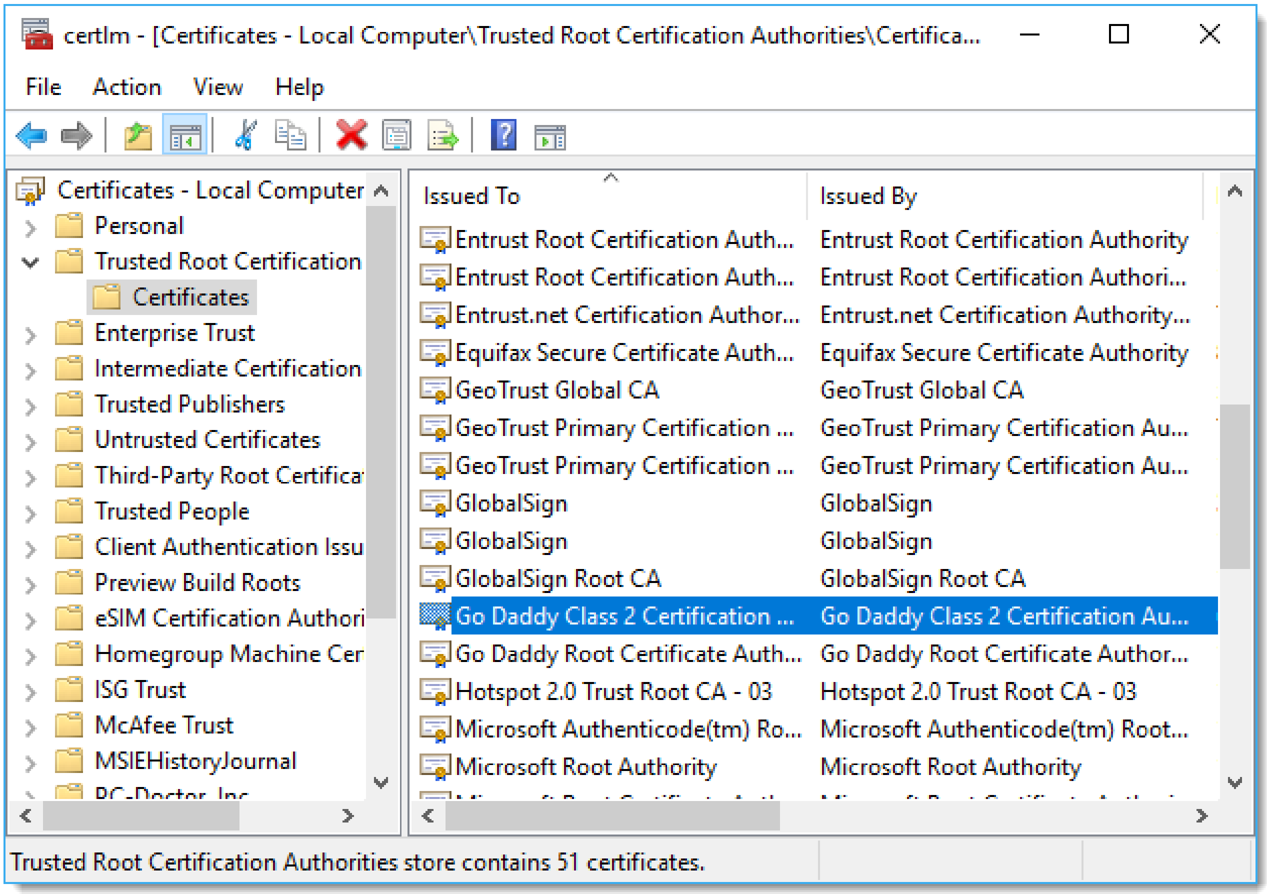
* Refer to the certification authority's statement for details.

Issued to: *.devolutions.net

Issued by: Go Daddy Secure Certificate Authority - G2

Valid from 2018-07-25 **to** 2020-07-25

2. Verify that the Certification Authority is properly installed in the certificate store.

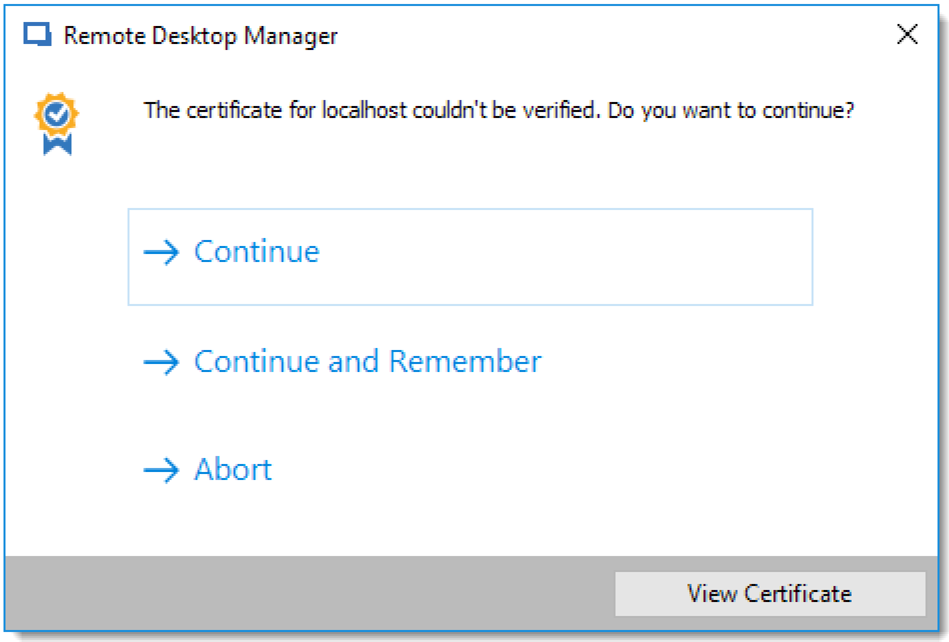

certlm - [Certificates - Local Computer\Trusted Root Certification Authorities\Certifica...
File
Action
View
Help
Certificates - Local Computer
Personal
Trusted Root Certification
Certificates
Enterprise Trust
Intermediate Certification
Trusted Publishers
Untrusted Certificates
Third-Party Root Certifica
Trusted People
Client Authentication Issu
Preview Build Roots
eSIM Certification Authori
Homegroup Machine Cer
ISG Trust
McAfee Trust
MSIEHistoryJournal
PC-Doctor, Inc

Issued To	Issued By
Entrust Root Certification Auth...	Entrust Root Certification Authority
Entrust Root Certification Auth...	Entrust Root Certification Authori...
Entrust.net Certification Author...	Entrust.net Certification Authority...
Equifax Secure Certificate Auth...	Equifax Secure Certificate Authority
GeoTrust Global CA	GeoTrust Global CA
GeoTrust Primary Certification ...	GeoTrust Primary Certification Au...
GeoTrust Primary Certification ...	GeoTrust Primary Certification Au...
GlobalSign	GlobalSign
GlobalSign	GlobalSign
GlobalSign Root CA	GlobalSign Root CA
Go Daddy Class 2 Certification ...	Go Daddy Class 2 Certification Au...
Go Daddy Root Certificate Auth...	Go Daddy Root Certificate Author...
Hotspot 2.0 Trust Root CA - 03	Hotspot 2.0 Trust Root CA - 03
Microsoft Authenticode(tm) Ro...	Microsoft Authenticode(tm) Root...
Microsoft Root Authority	Microsoft Root Authority

Trusted Root Certification Authorities store contains 51 certificates.

REMEMBER A CERTIFICATE

It is possible for Remote Desktop Manager to remember a certificate when prompted to verify it.



Remote Desktop Manager

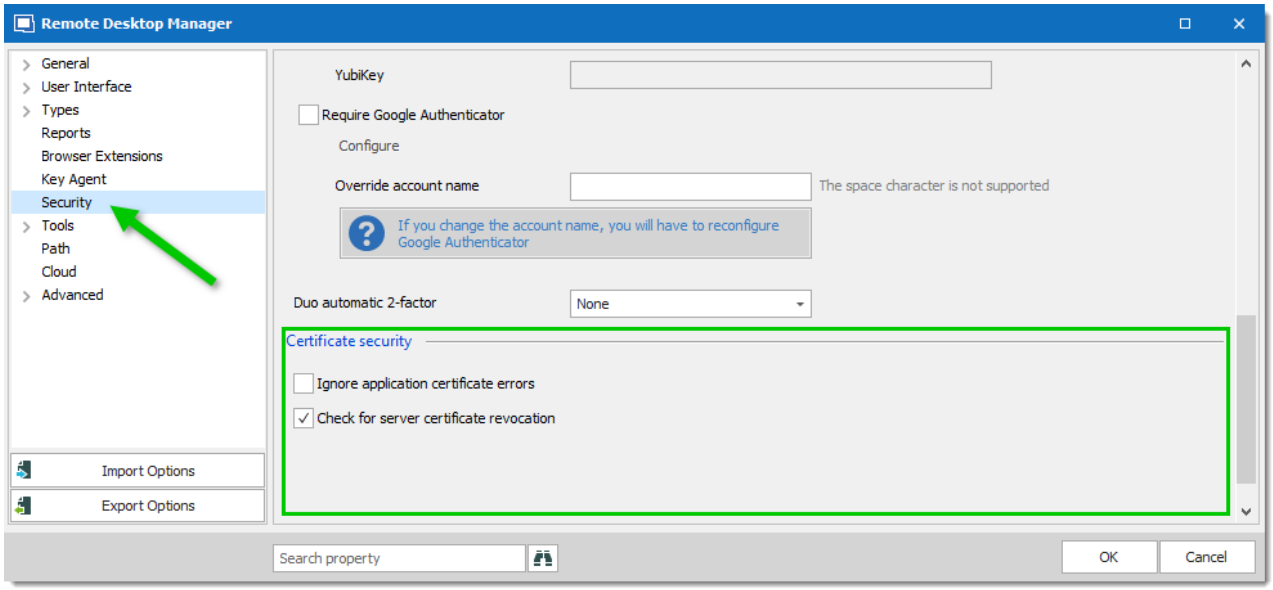
The certificate for localhost couldn't be verified. Do you want to continue?

- For the current session only: click **Continue**.
- Until the cache is cleared: click **Continue and Remember**.

Always make sure that the certificate is valid before clicking on any of those choices. Verify the certificate by clicking **View Certificate**.

CERTIFICATE OPTIONS

Navigate to ***File – Options – Security – Certificate security*** to manage options related to certificates.



□ Require Google Authenticator

Override account name — The space character is not supported

If you change the account name, you will have to reconfigure Google Authenticator

Duo automatic 2-factor: None

Certificate security

□ Ignore application certificate errors

☑ Check for server certificate revocation

IGNORE APPLICATION CERTIFICATE ERRORS

Enable this option to disable the application certificate validation. This is not recommended, as it would compromise confidentiality and integrity of communications between the client and the server and could expose the application to potential threats.

RESET KNOWN CERTIFICATES

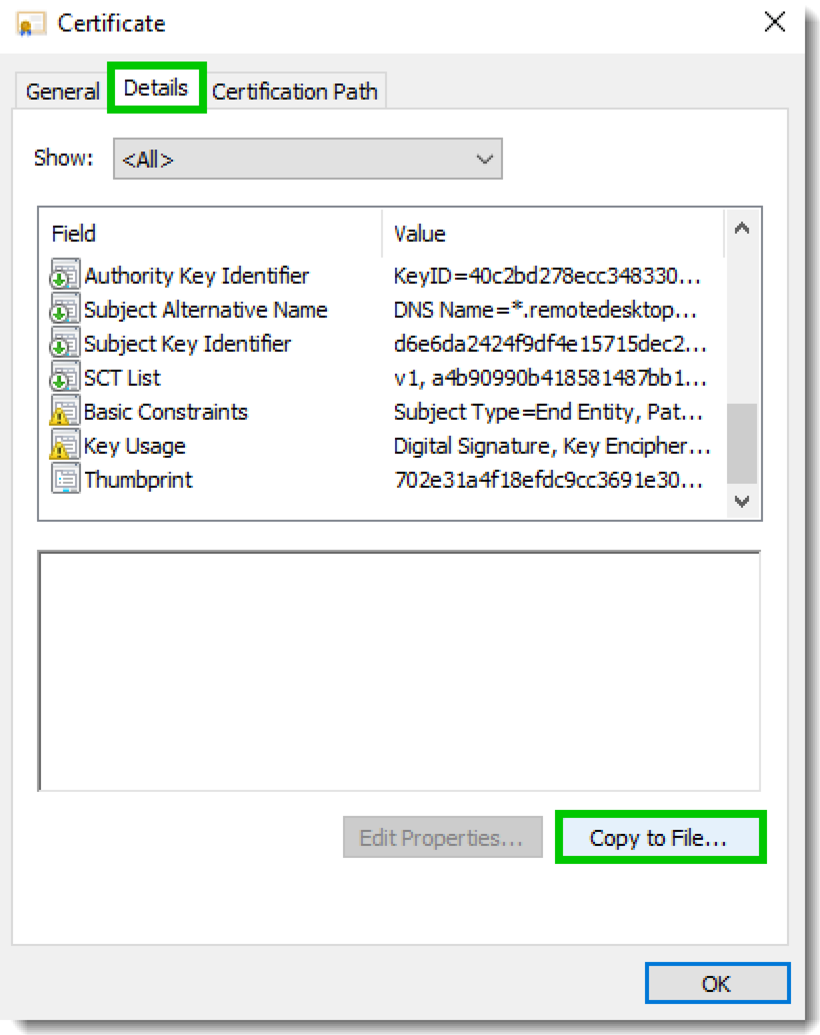
Use this option to clear the cached certificates. All certificates would need to be validated again.

TROUBLESHOOTING

To find out more about why the certificate validation failed, you can use some tools, but you need to export the certificate first.

To export the certificate, follow these steps:

1. Click **View certificate** in the Remote Desktop Manager prompt.
2. Click on the **Details** tab of the Windows certificate prompt.
3. Click **Copy to File...** and proceed to export the certificate as a ***.cer*** file.



Field	Value
Authority Key Identifier	KeyID=40c2bd278ecc348330...
Subject Alternative Name	DNS Name=*.remotedesktop...
Subject Key Identifier	d6e6da2424f9df4e15715dec2...
SCT List	v1, a4b90990b418581487bb1...
Basic Constraints	Subject Type=End Entity, Pat...
Key Usage	Digital Signature, Key Encipher...
Thumbprint	702e31a4f18efdc9cc3691e30...

Certificate Window

TOOLS

Here are some tools that can be used to verify the newly exported certificate:

1. Using PowerShell (requires PowerShell v4):

   1.1 In a PowerShell console, replace the path below with the path of your certificate, then run:

```
$cert=New-Object System.Security.Cryptography.X509Certificates.X509Certificate2("C:\
```

   1.2 Then, run the following command:

```
Test-Certificate -Cert $cert
```

2. Using CMD:

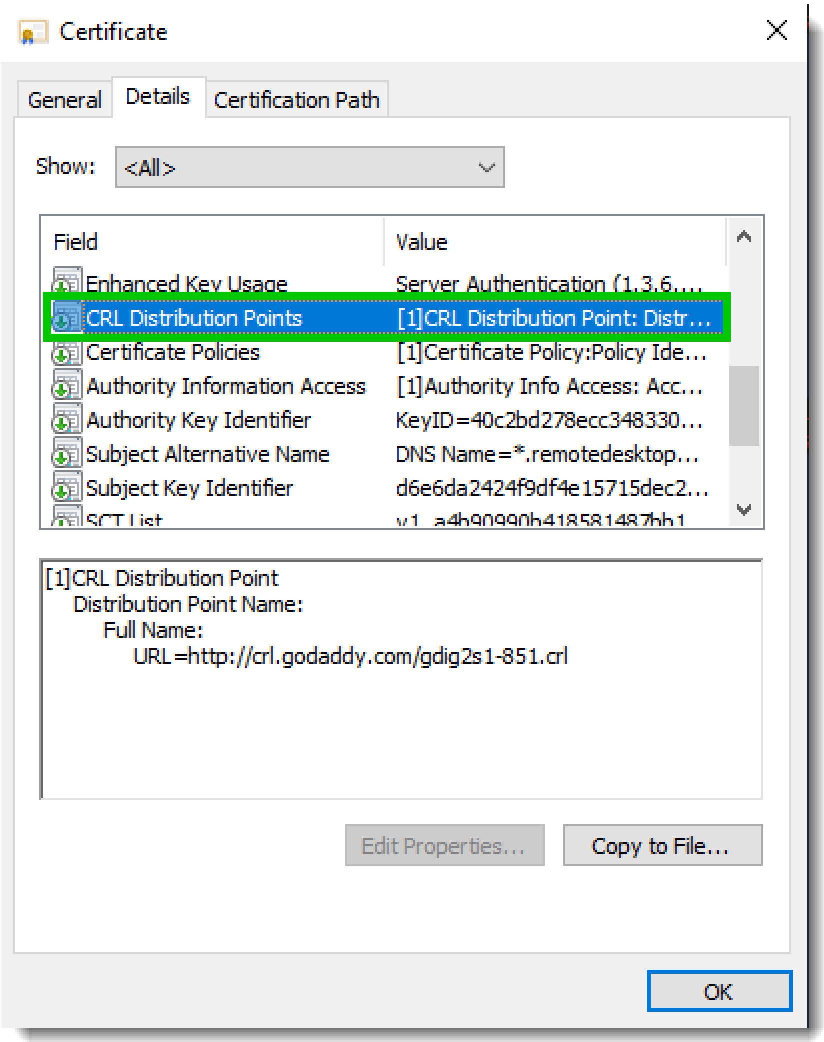
Run the following command (replace the path below with the path of your certificate):

```
certutil -verify "C:\Users\mmorrissette\Desktop\cert.cer"
```

The resulting output from those tools can be used to obtain more information about the encountered issue.

COMMON ISSUES

- Root and Intermediate certificate authority are not properly installed in the Windows certificate store.
- Ensure that the proxy server blocks do not block the **CRL** (Certificate Revocation List) server as it is required to validate a certificate.



Field	Value
Enhanced Key Usage	Server Authentication (1.3.6....
CRL Distribution Points	[1]CRL Distribution Point: Distr...
Certificate Policies	[1]Certificate Policy:Policy Ide...
Authority Information Access	[1]Authority Info Access: Acc...
Authority Key Identifier	KeyID=40c2bd278ecc348330...
Subject Alternative Name	DNS Name=*.remotedesktop...
Subject Key Identifier	d6e6da2424f9df4e15715dec2...
SCT List	v1, a4b90990b418581487bb1

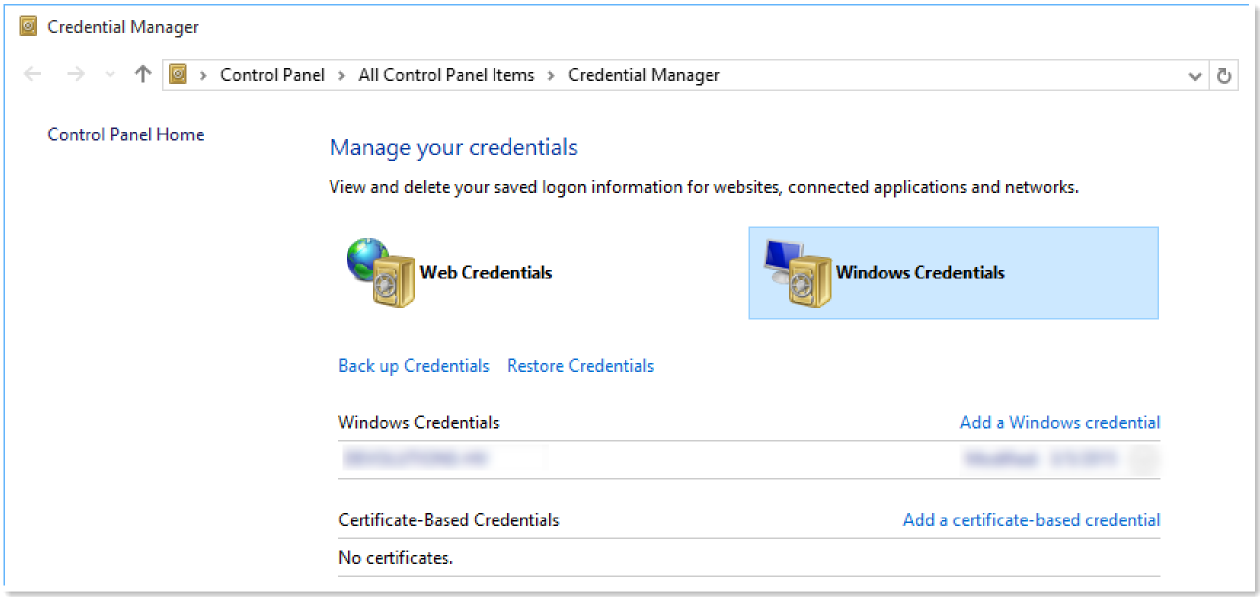
```
[1]CRL Distribution Point
     Distribution Point Name:
          Full Name:
               URL=http://crl.godaddy.com/gdig2s1-851.crl
```

Certificate - CRL server

11.3.3 Windows Credential Manager

DESCRIPTION

The Windows Credential Manager allows you to store credentials, such as usernames and passwords, which you can use to log on to websites or other computers on a network. By storing your credentials, Windows can automatically log you on to websites or other computers. Credentials are saved in special folders on your computer called Vaults. Windows and other programs (such as web browsers) can securely give the credentials in these Vaults to other computers and websites.



Manage your credentials

View and delete your saved logon information for websites, connected applications and networks.

Windows Credentials

[redacted]

Certificate-Based Credentials

No certificates.

Windows Credentials

For information about saving credentials in Windows, see Credentials Overview. You can also learn more in the Windows Credential Manager section.

Technical Support

Part XII

12 Technical Support

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Support/Resources

Part XIII

13 Support/Resources

13.1 Keyboard Shortcuts

DESCRIPTION

Here are the default keyboard shortcuts for various commands. These can be modified in ***File – Options – User Interface – Keyboard***.

GENERAL

ACTION	SHORTCUT
Filter	Ctrl+F
Force Refresh	Ctrl+F5
Online Help	F1
Quick Connect	Ctrl+Alt+Q
Refresh	F5

EDIT

ACTION	SHORTCUT
Add Credential Entry	Alt+Shift+N
Add Folder	Ctrl+Shift+N
Add Information	Ctrl+Alt+N

ACTION	SHORTCUT
Add Session	Ctrl+N
Delete	Ctrl+Del
Duplicate	Ctrl+D
Edit Entry	Ctrl+E
Local Specific Settings	Ctrl+Alt+E
New Entry	Ins
Rename Entry	F2
User Specific Settings	Ctrl+Shift+E

ACTIONS

ACTION	SHORTCUT
Clipboard - Copy Connection String	Ctrl+Alt+H
Clipboard - Copy Domain	Ctrl+Alt+B
Clipboard - Copy Host Name	Ctrl+H
Clipboard - Copy Password	Ctrl+Shift+B

ACTION	SHORTCUT
Clipboard - Copy Url	Ctrl+Shift+H
Clipboard - Copy Username	Ctrl+B
Execute Typing Macro	Ctrl+Shift+A
Navigate URL	Enter
Open (Embedded/Tabbed)	Ctrl+Enter
Open (External)	Shift+Enter
Open (Full screen)	Alt+Enter
View Password	Ctrl+P

VIEW

ACTION	SHORTCUT
Dashboard	Alt+F6
Details	F12
Favorites	F10
Grouped Tab Pane	Ctrl+Alt+F9
Header Pane	Alt+Shift+F6

ACTION	SHORTCUT
Large Icons	F6
Navigation Pane	Alt+F8
Opened Sessions	F8
Play List Management	Ctrl+G
RDP Toggle View Only	Shift+F3
Recent (Recent Used Entries)	F9
Status Bar	Alt+F7
Tabbed Entries Pane	Alt+F9
Tiles	F3
Top Pane	Alt+F11
Tree View	F7

NAVIGATION

ACTION	SHORTCUT
Change Data Source	Ctrl+Shift+D
File	Ctrl+Shift+F

ACTION	SHORTCUT
Focus Dashboard	Ctrl+Shift+L
Focus Tab	Ctrl+Shift+Up
Focus Tree/List	Ctrl+L
Goto Bookmark 1	Ctrl+1
Goto Bookmark 2	Ctrl+2
Goto Bookmark 3	Ctrl+3
Goto Bookmark 4	Ctrl+4
Goto Bookmark 5	Ctrl+5
Goto Bookmark 6	Ctrl+6
Goto Bookmark 7	Ctrl+7
Goto Bookmark 8	Ctrl+8
Goto Bookmark 9	Ctrl+9
Select Next Tab	Ctrl+Shift+Right
Select Previous Tab	Ctrl+Shift+Left
Set Bookmark 1	Ctrl+Shift+1
Set Bookmark 2	Ctrl+Shift+2

ACTION	SHORTCUT
Set Bookmark 3	Ctrl+Shift+3
Set Bookmark 4	Ctrl+Shift+4
Set Bookmark 5	Ctrl+Shift+5
Set Bookmark 6	Ctrl+Shift+6
Set Bookmark 7	Ctrl+Shift+7
Set Bookmark 8	Ctrl+Shift+8
Set Bookmark 9	Ctrl+Shift+9
Switch Vault	Ctrl+Shift+R

IMPORT/EXPORT

ACTION	SHORTCUT
Import Entries (.rdm, .pvm, .vnc, .rdp)	Ctrl+Shift+I

13.2 Command Line Arguments

DESCRIPTION

Remote Desktop Manager can be launched using a command line.

Some features are only available in the Enterprise edition.

Remote Desktop Manager also offers a Web Protocol Handler.

Usage: RemoteDesktopManager.exe [parameters]

PARAMETERS	DESCRIPTION
{filename [*.rdm]}	Open in embedded or external mode the connection from file name.
/Silent	Execute the application minimized in a system tray icon. This option cannot be combined with other parameters.
/Datasource:{datasource id}	Specify the data source ID (available in the Advanced Tab of the session).

/Session:{session ID};{session ID}...
/UserName:{username}
/Domain:{domain}
/Password:{password}
	Specify one or more session IDs (available in the Advanced Tab of the session).

/ChangePassword:{new password}	Change the session password. Only available for Remote Desktop sessions and embedded passwords. The data source ID and the session ID are required.
/RegisterUser:"{registration user}"	Change the Remote Desktop Manager registration name. The value must be in double quotes.

PARAMETERS	DESCRIPTION
/RegisterSerial:"{serial number}"	Change the Remote Desktop Manager serial number. The value must be in double quotes.

/Template:{template ID}
/Host:{host name}
/UserName:{username}
/Domain:{domain}
/Password:{password}
	Open the template ID with the specified host name and an optional username/password.
	The template ID is the **Session ID** of the template (available in the Advanced Tab of the template).

/Profiler	Starts the profiler at start of application. Good for profiling the start process.
/Title:"{title}"	Specify a tab title when using an embedded session.
/Filter:{filter}	Execute the application with the filter filled with a parameter.
/TabPage: Dashboard	The Dashboard is selected at startup of the application.

USAGE

EXAMPLE #1 - OPEN A TEMPLATE AND CONNECT TO A HOST

```
RemoteDesktopManager.exe /DataSource:178c2fda-dab4-4f41-98df-6e3205c0a011 /Template:a666b
```

EXAMPLE #2 - OPEN A SESSION

```
RemoteDesktopManager.exe /DataSource:178c2fda-dab4-4f41-98df-6e3205c0a011 /Session:474bcb
```

EXAMPLE #3 - REGISTER THE APPLICATION

```
RemoteDesktopManager.exe /RegisterUser:"First name, Last name" /RegisterSerial:"xxxxx-xxx
```

13.3 Lexicon

DESCRIPTION

Remote Desktop Manager is a feature-rich software that has an extensive set of functionality. Here are the major concepts that are important to understand in order to use the program to its full potential.

DATA SOURCE

A container for entries. It can be a local file or a database (either local or shared). You can use multiple distinct data sources in the application, although only one is considered active at one point in time. See data source Overview for more information.

ENTRY

All items in your data source are entries. There are multiple types. The entry is an abstract concept that serves as a container for all specific types.

CREDENTIAL ENTRY

A credential is used to control access to a resource by identifying the user. It can be a classic username/password pair held by the application or even by an external source.

INFORMATION ENTRY

An information entry can contain various information like account information, emails, serial numbers. Unlike credential entries, information entries are meant to be shared. Therefore, the data in the information entries is not encrypted. It's principal use in Remote Desktop Manager is to hold Web site information, from the URL to the credentials. This allows auto log in on the specified web site.

CONNECTION

Any type of entry that allows you to connect to a remote host, service or device is a connection. An IP address or host name is normally used, as well as credentials.

SESSION

In Remote Desktop Manager infancy, it was mainly aimed at managing Microsoft Remote Desktop. A **Session** was a term that was in use back then to describe a connection to Microsoft Remote Desktop Services. It appears widely in our documentation. Any technology that connects to something and that needs to use authentication is a **Session**.

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OVERVIEW

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This is not a marketing newsletter. We focus on the issues that matter to you, whether you're looking for up-to-the-minute software tutorials, additional outside resources or a peek at how others are using our products.

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13.5 Add-on Documentation

DESCRIPTION

This section contains the documentation of the Add-ons for Remote Desktop Manager. Not all Add-ons are provided by Devolutions but we'll do our best to cover what we host in our add-on repository.

See Add-on Manager for more details on how to install or manage Add-ons.

See topics below for more information about more complex Add-ons:

- Bomgar Representative Console Add-on
- DbVisualizer Add-on
- NoMachine Add-on
- PenguiNet SSH Client Add-on
- SAP Frontend Server (SAP GUI) Add-On
- Shutdown Application Tool Add-on
- SQL Server Management Studio Add-On

See VPN Add-ons for all the VPN Add-on.

13.5.1 Bomgar Representative Console Add-on

DESCRIPTION

This entry is used to define and configure a "Bomgar Representative Console" session.

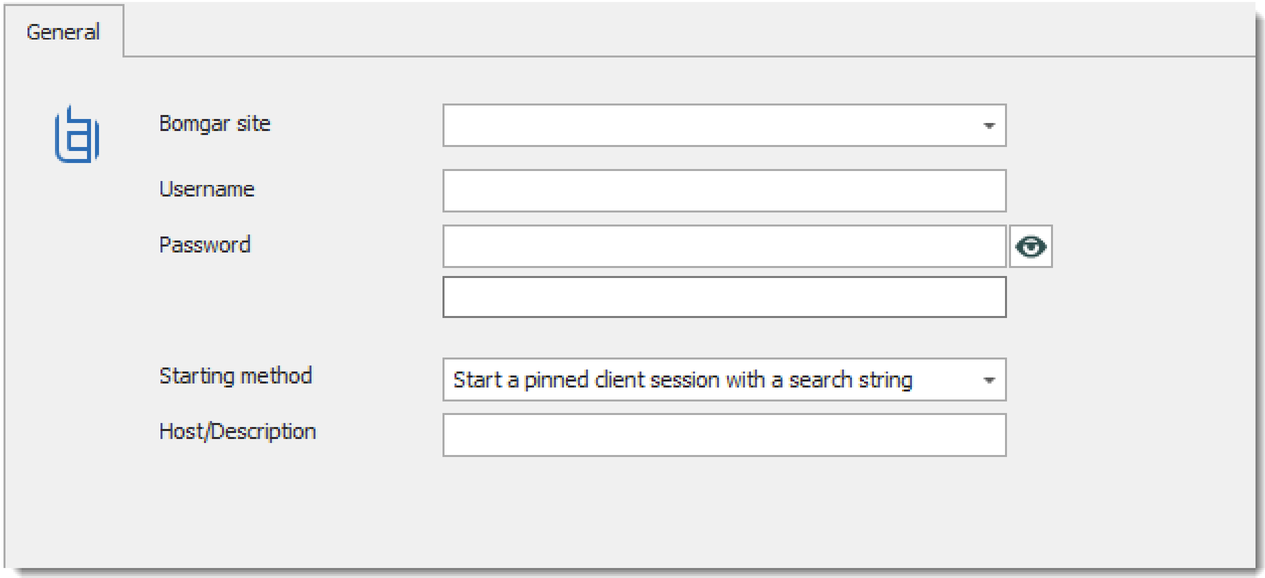
With this Add-on you will be able to define a session that will can automatically:

- **Login**
- **Start a session with a search string (host/description)**
- **Start a script from disk**
- **Save a script within the session data to be able to start it on another workstation.**

The Bomgar Representative Console entry type is available when the Bomgar Representative Console Add-on is installed.

Make sure that you have a ***bomgar-rep.exe*** file in the installation folder of Bomgar. You need the same file to be present in each site that you will create. Then, go in ***File – Options – Path – Bomgar Representative*** and configure Remote Desktop Manager to point on the appropriate installation folder.

SETTINGS



Bomgar site

Username

Password

Starting method: Start a pinned client session with a search string

Host/Description

Bomgar Representative Console

OPTION	DESCRIPTION
Bomgar site	Select the Bomgar site to login. To create the Bomgar site properly, you need to create a folder for each of your sites. In each folder, make sure that bomgar-rep.exe is also present. Example: • ***C:\Program Files\Bomgar\Representative\Site1*** • ***C:\Program Files\Bomgar\Representative\Site2***
Username	Enter the username to access the Bomgar site.
Password	Enter the password to access the Bomgar site.
Starting method	**Start a pinned client session with a search string**: Start a client session with a search string. Indicate the Host/Description in the appropriate field. **Start a script file name on local disk**: Start a script from disk. Indicate the script in the Script Filename field.

OPTION	DESCRIPTION
	Start a stored script in session: Save a script within the session data to be able to start it on another workstation. Indicate the script in the Script Filename field.
Host/Description or Script Filename	See **Starting method** option.

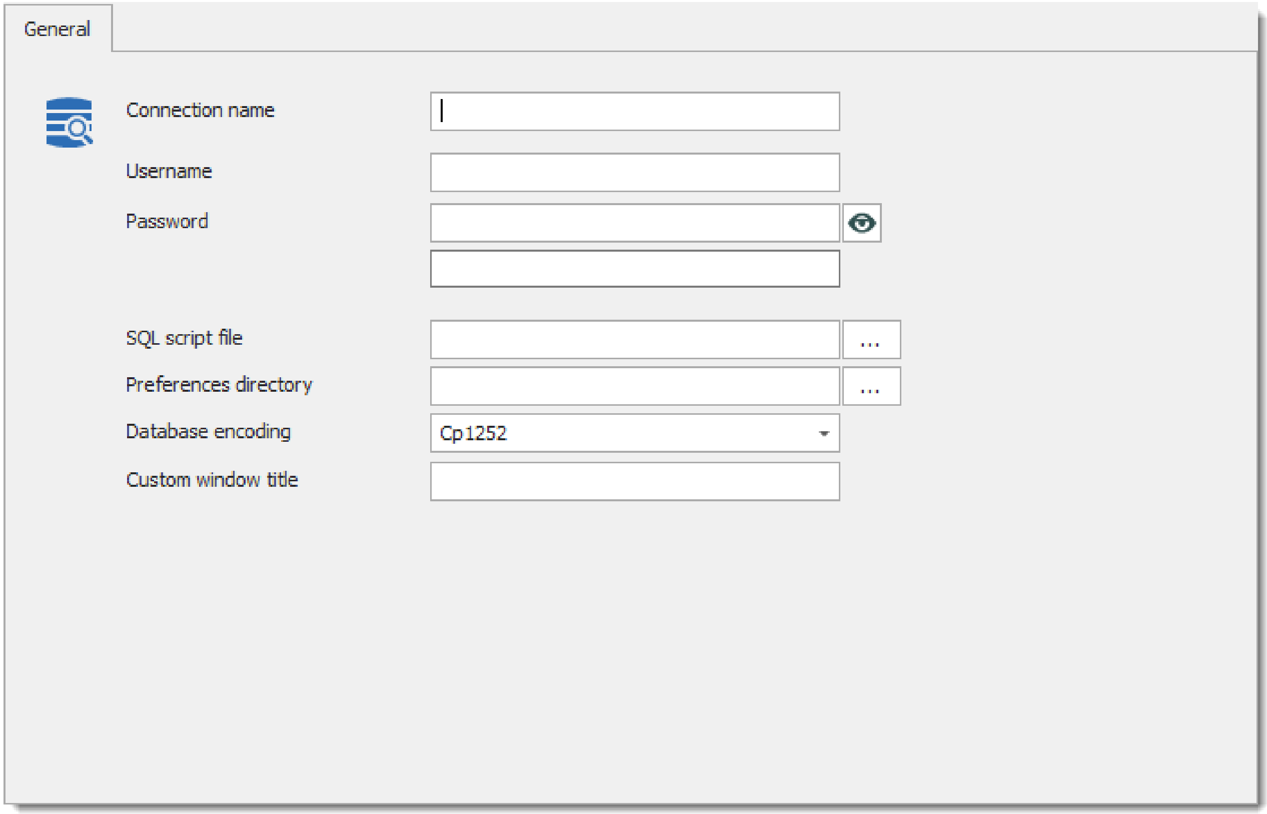
13.5.2 DbVisualizer Add-on

DESCRIPTION

This entry is used to define and configure a "DbVisualizer" session. DbVisualizer is a universal database tool used by developers, DBAs and analysts. It can be used on all major operating systems to access a wide range of databases.

The DbVisualizer entry type is available when the DbVisualizer Add-on is installed.

SETTINGS



Connection name

Username

Password

SQL script file

Preferences directory

Database encoding: Cp1252

Custom window title

Db Visualizer

OPTION	DESCRIPTION
Connection name	Enter the name of the connection.
Username	Enter the username to connect on the database.
Password	Enter the password to connect on the database.
SQL script file	Select the SQL script file (***.sql***).
Preferences directory	Select the preferences directory on the computer.
Database encoding	Select the prefer database encoding.

OPTION	DESCRIPTION
Custom window title	Indicate the window title that you want to be display.

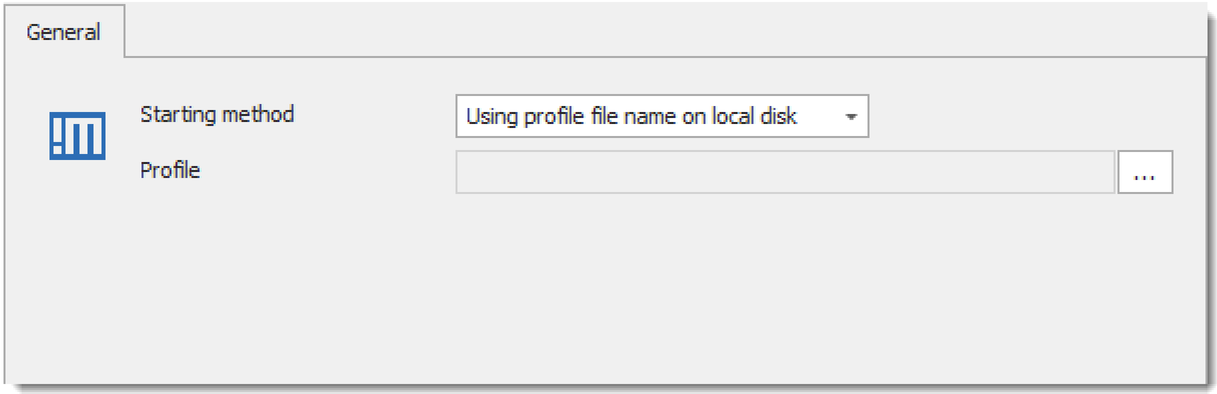
13.5.3 NoMachine Add-on

DESCRIPTION

This entry is used to define and configure a "NoMachine" session. This allows you to store in Remote Desktop Manager each NoMachine profile as a distinct session, so that you can connect automatically to different computers (exactly like RDP sessions).

The NoMachine entry type is available when the NoMachine Add-on is installed.

SETTINGS



General

Starting method: Using profile file name on local disk

Profile:

NoMachine entry

OPTION	DESCRIPTION
Starting method	**Using profile file name on local disk**: The session will be linked to an existing profile (file) on a computer and it will be dependent on it. **Using stored profile in session**: The data of an existing profile (file) will be stored directly in the session and it will be usable on any other computer that shares the data source.
Profile	Select the NoMachine profile to use for the connection.

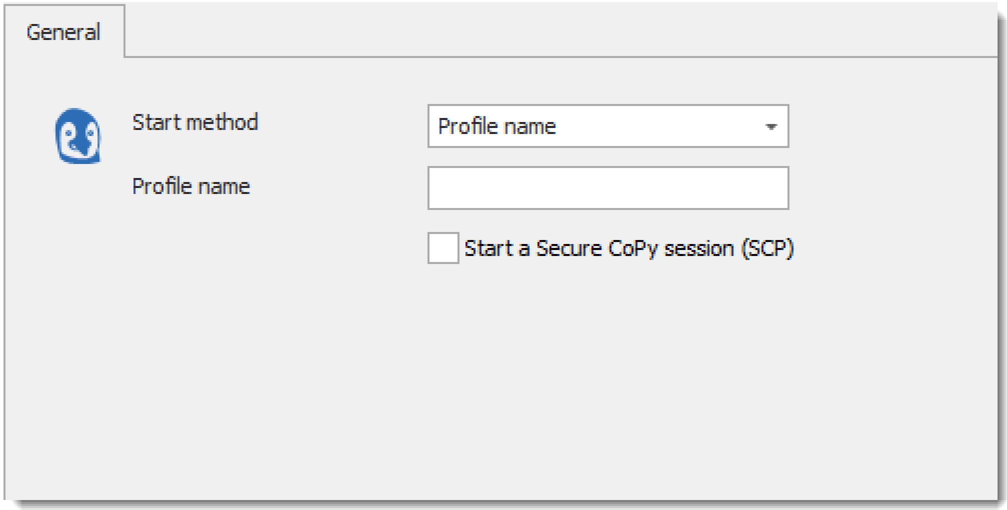
13.5.4 PenguiNet SSH Client Add-on

DESCRIPTION

This entry is used to define and configure a "PenguiNet SSH Client" session. PenguiNet is a simple all-in-one SSH client for Windows. It also includes an SCP browser so that you can easily transfer files with just a few mouse clicks.

> The PenguiNet SSH Client entry type is available when the PenguiNet SSH Client Add-on is installed.

SETTINGS



Start method: Profile name

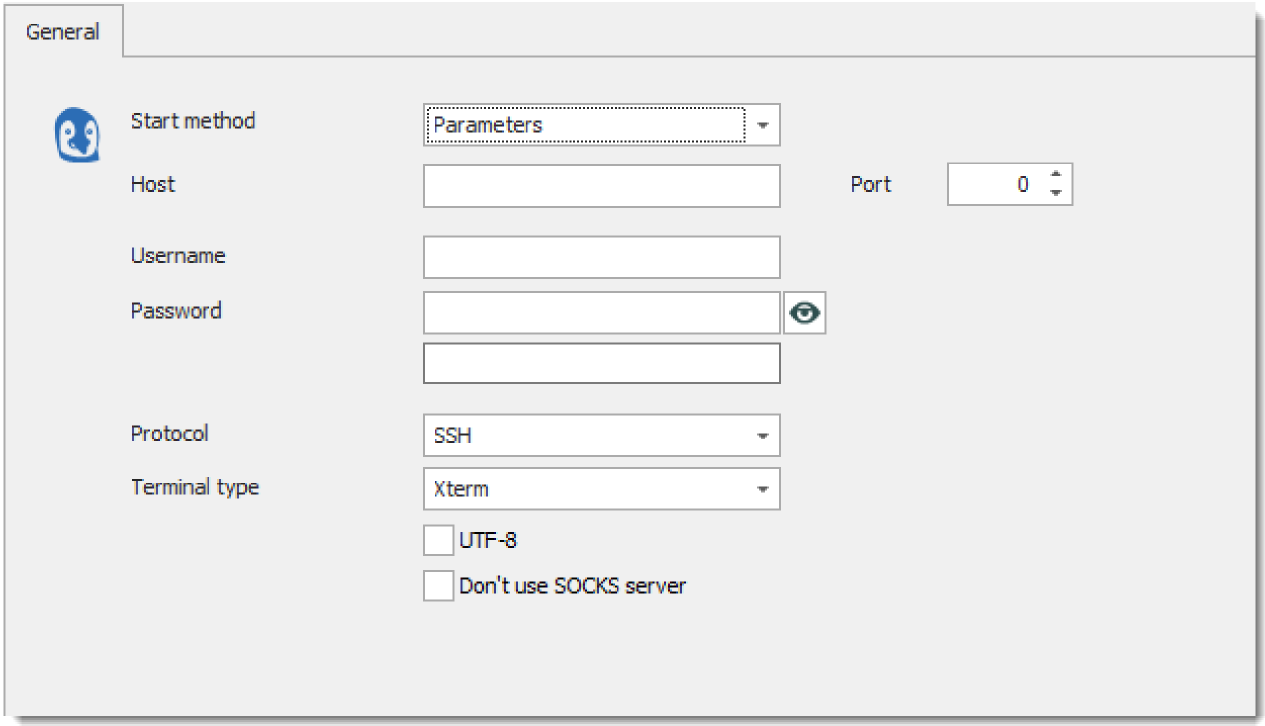
Profile name:

□ Start a Secure CoPy session (SCP)

PeguiNet SSH Client - Profile name

START METHOD - PROFILE NAME

OPTION	DESCRIPTION
Profile name	Enter the profile name to connect on PenguiNet.
Start a Secure CoPy session (SCP)	Allow to start a Secure CoPy session (SCP). Secure CoPy or SCP is a means of securely transferring computer files between a local host and a remote host or between two remote hosts.



Start method: Parameters

Host:

Port: 0

Username:

Password:

Protocol: SSH

Terminal type: Xterm

□ UTF-8

□ Don't use SOCKS server

PeguiNet SSH Client - Parameters

START METHOD - PARAMETERS

OPTION	DESCRIPTION
Host	Indicate the name of the host to connect.
Port	Indicate the port that you may use to connect.
Username	Enter the username to connect with PenguiNet.
Password	Enter the password to connect with PenguiNet.
Protocol	Determinate the protocol that you want to use. Select between: • **Telnet** • **SSH**

OPTION	DESCRIPTION
	• **SCP**
Terminal type	Determinate the terminal type that you want to use. Select between: • **Linux** • **VT100** • **Xterm**
UTF-8	Allow you to use the UTF-8. The UTF-8 is a variable-width encoding that can represent every character in the Unicode character set.
Don't use SOCKS Server	Disallow the use of a SOCKS Server to connect with PenguiNet.

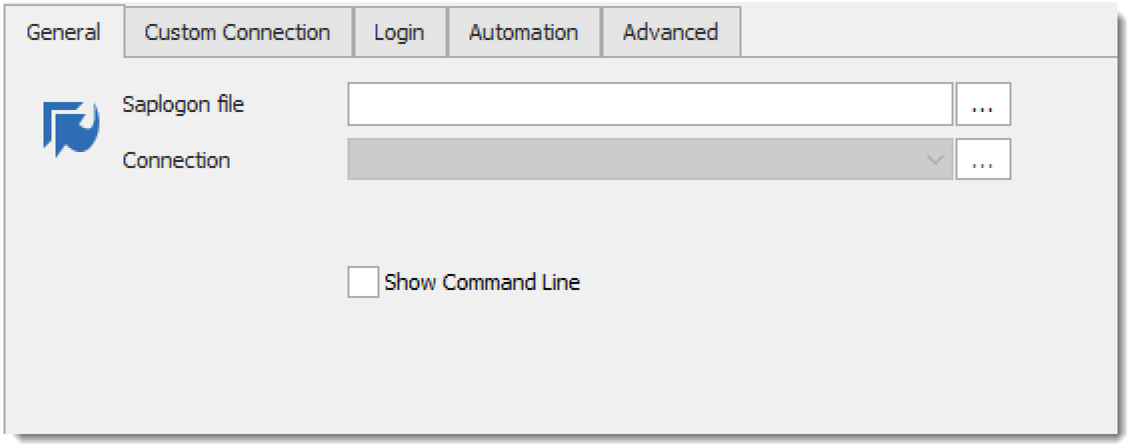
13.5.5 SAP Frontend Server (SAP GUI) Add-on

DESCRIPTION

This entry is used to define and configure an "SAP Frontend Server (SAP GUI)" session. This allows you to start sessions selected from your ***saplogon.ini*** files located anywhere on your computer.

The SAP GUI entry type is available when the SAP Frontend Server (SAP GUI) Add-on is installed.

SETTINGS



Saplogon file

Connection

□ Show Command Line

SAP GUI

The SAP Frontend Server (SAP GUI) add-on does not allow you to insert connection information manually without selecting a ***saplogon.ini*** file first.

FEATURES

- Possibility to copy/create ***saplogon.ini*** independent sessions. If you're working in a not editable ***saplogon.ini*** environment (or daily refreshed due GroupPolicies from your Client-Team).
- Automatic logon and execute Transaction/Reports.
- Support for Secure Network Connect (SNC).
- Connections over saprouter(s), handles Loadbalancing (Logongroups), etc.

REQUIREMENTS

Installation of SAP Frontend Server (SAP GUI) on Client required.

LIMITATIONS

Only external Sessions are possible.

13.5.6 Shutdown Application Tool Add-on

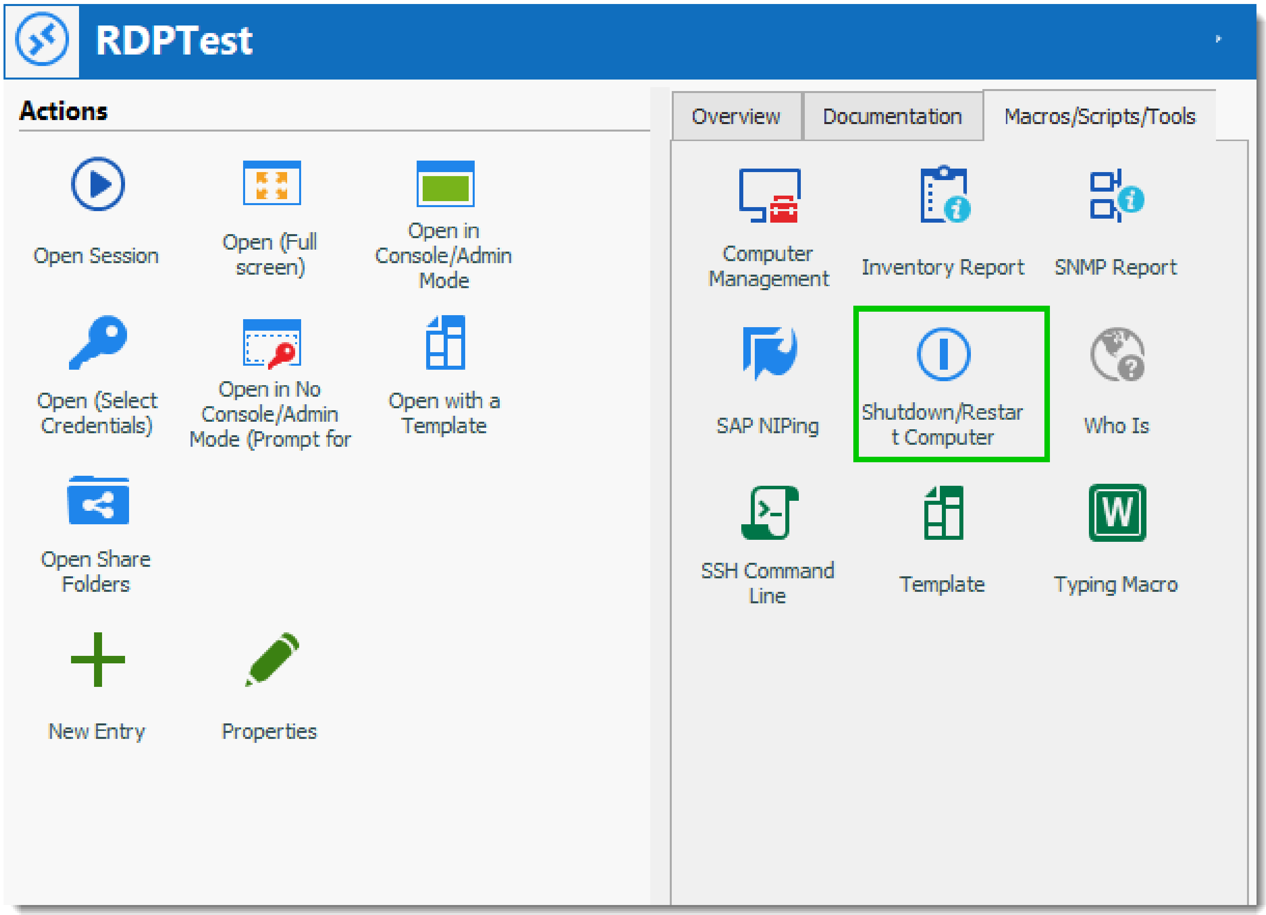
DESCRIPTION

The Shutdown Application Tool allows you to shutdown or restart one or many computers at the same time.

The Shutdown Application Tool is available when the Shutdown Application Tool Add-on is installed.

SETTINGS

The **Shutdown Application Tool** is accessible from the Dashboard under the **Macros/Scripts/Tools** section.

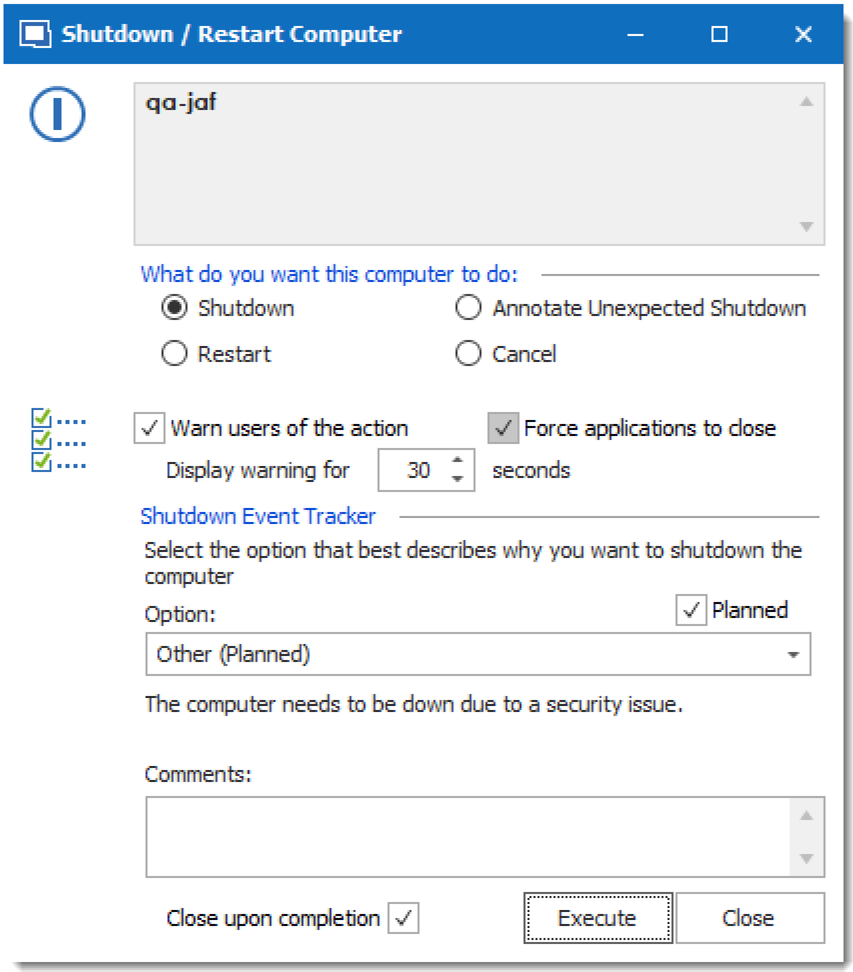


Shutdown/Restart Computer in Dashboard

USAGE

Select one or several computers that you want to restart or shutdown in the Navigation Pane and click on **Shutdown/Restart Computer** in the Dashboard.

Select the option that want those computer(s) to do, enter a comment and click on **Execute**.


Shutdown / Restart Computer

qa-jaf

What do you want this computer to do:

● Shutdown ○ Annotate Unexpected Shutdown

○ Restart ○ Cancel

☑ Warn users of the action ☑ Force applications to close

Display warning for 30 seconds

Shutdown Event Tracker

Select the option that best describes why you want to shutdown the computer

Option: ☑ Planned

Other (Planned)

The computer needs to be down due to a security issue.

Comments:

Close upon completion ☑

Shutdown / Restart Computer

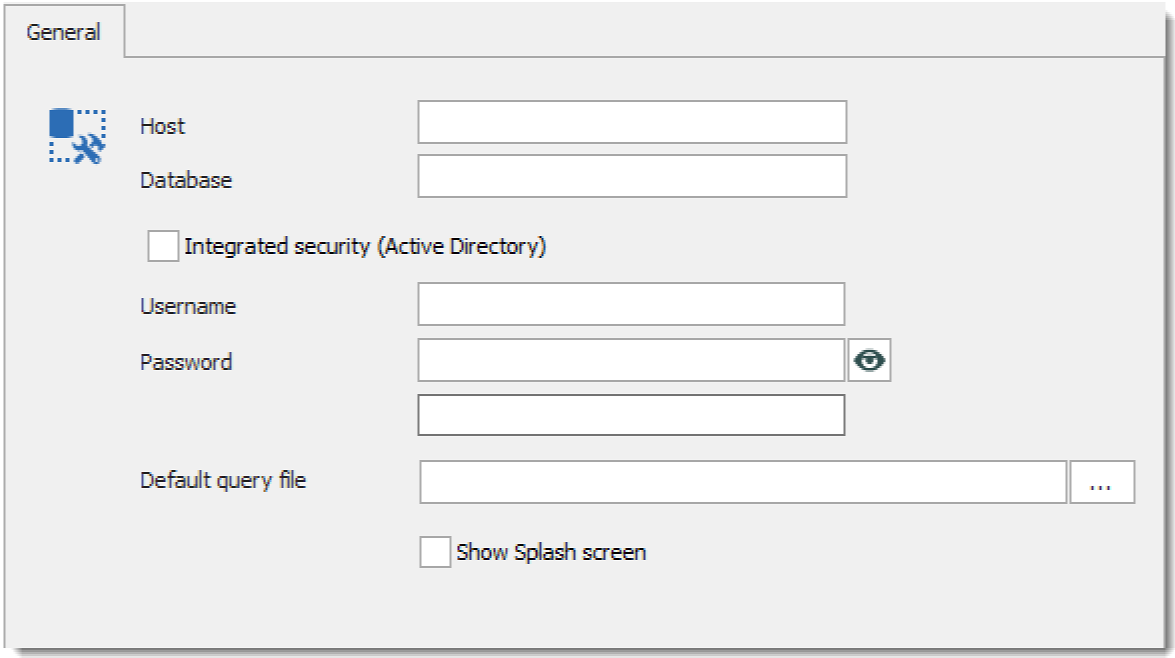
13.5.7 SQL Server Management Studio Add-On

DESCRIPTION

This entry is used to define and configure an "SQL Server Management Studio" session. This allows you to launch and perform authentication to an instance. Optionally you can select a database, as well as open a script in the editor. SQL Server Management Studio is primarily a GUI tool, if you need to run commands and exit automatically, you should look at the SQLCMD tool that comes with the Sql Server utilities.

The SQL Server Management Studio entry type is available when the SQL Server Management Studio Add-on is installed.

SETTINGS



General

Host

Database

□ Integrated security (Active Directory)

Username

Password

Default query file

□ Show Splash screen

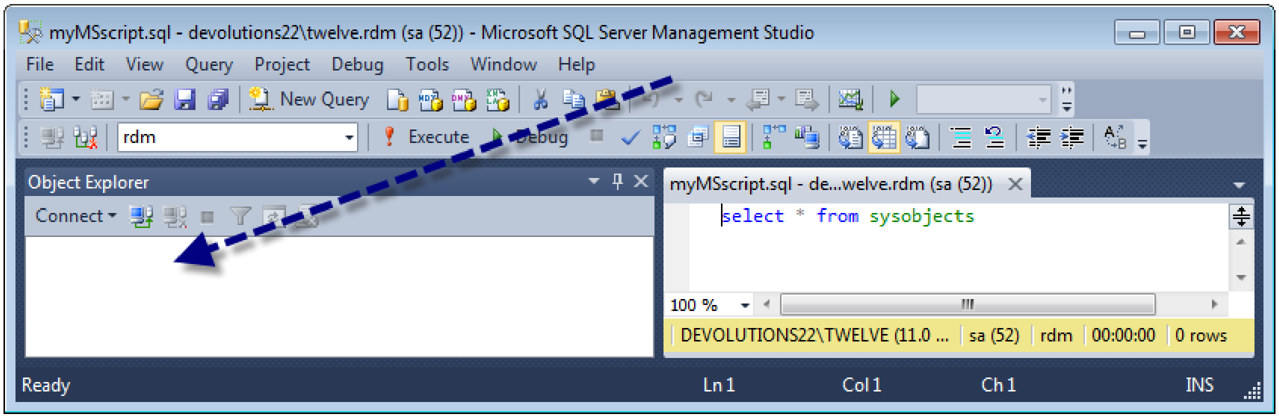
SQL Server Management Studio

OPTION	DESCRIPTION
Host	Indicate the full instance name. When a default instance as been used, normally you can put only the server name here
Database	Used to indicate to select a database upon login.

OPTION	DESCRIPTION
Integrated Security (Active Directory)	Indicates to use your windows credentials to authenticate on the server.
Run as different user (Integrated security only)	Use a different user to authenticate on the server.
Net Only (Integrated security only)	Use to make connections that are made from computers that are not on the customer's domain.
Username	When using Sql Server authentication, username to use.
Password	When using Sql Server authentication, password to use.
Default query file (Optional)	Specifies a file that will be opened in the editor. Please see note below
Show splash screen	Indicates to let Sql Server Management Studio display its splash screen.

NOTE

On some systems, specifying a file to open in the editor has the side effect of preventing the Object Explorer from being connected. This renders the add-on useful only for when you want to run the script and exit soon after. If you need to use the Object Explorer do not specify a script file.


myMSscript.sql - devolutions22\twelve.rdm (sa (52)) - Microsoft SQL Server Management Studio
File
Edit
View
Query
Project
Debug
Tools
Window
Help
New Query
rdm
Execute
Debug
Object Explorer
Connect
myMSscript.sql - de...welve.rdm (sa (52))
100 %
DEVOLUTIONS22\TWELVE (11.0 ...
sa (52)
rdm
00:00:00
0 rows
Ready
Ln 1
Col 1
Ch 1
INS

```
select * from sysobjects
```

SQL Server Management Studio

13.5.8 VPN Add-ons

DESCRIPTION

Multiple VPN Add-ons can be installed using Remote Desktop Manager Add-on Manager.

We support a very wide variety of VPN Add-ons, explore them to your heart's content.

Consult the three topics below for examples on what our VPN Add-ons look like:
- Cisco AnyConnect
- Generic VPN
- OpenVPN

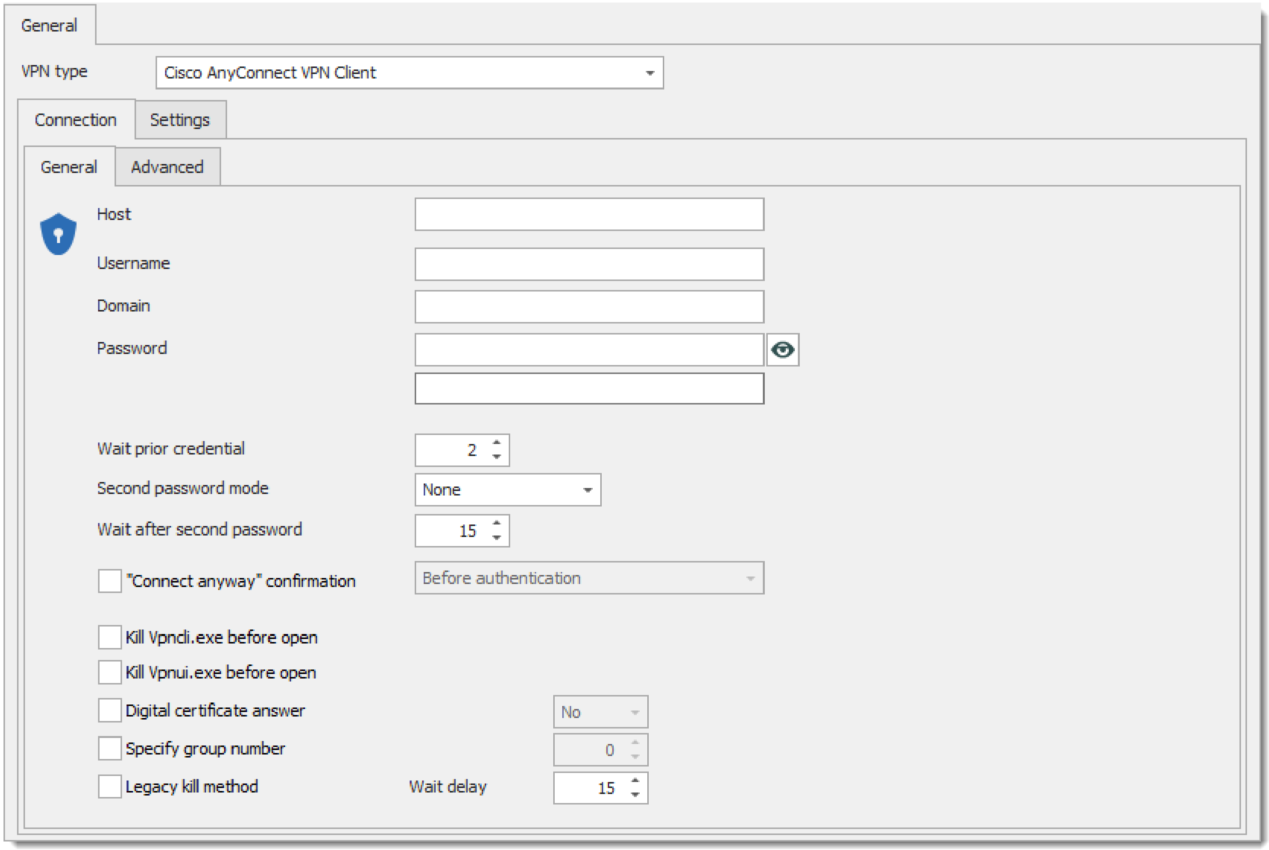
13.5.8.1 Cisco AnyConnect

DESCRIPTION

Cisco AnyConnect VPN Client Add-on can be used to connect to your Cisco AnyConnect VPN session.

This Add-on can be installed using the Add-on Manager.

The Cisco AnyConnect will not be able to see if the VPN is already open on its own.



General

VPN type: Cisco AnyConnect VPN Client

Connection | Settings

General | Advanced

Host

Username

Domain

Password

Wait prior credential: 2

Second password mode: None

Wait after second password: 15

□ "Connect anyway" confirmation: Before authentication

□ Kill Vpncli.exe before open

□ Kill Vpnui.exe before open

□ Digital certificate answer: No

□ Specify group number: 0

□ Legacy kill method — Wait delay: 15

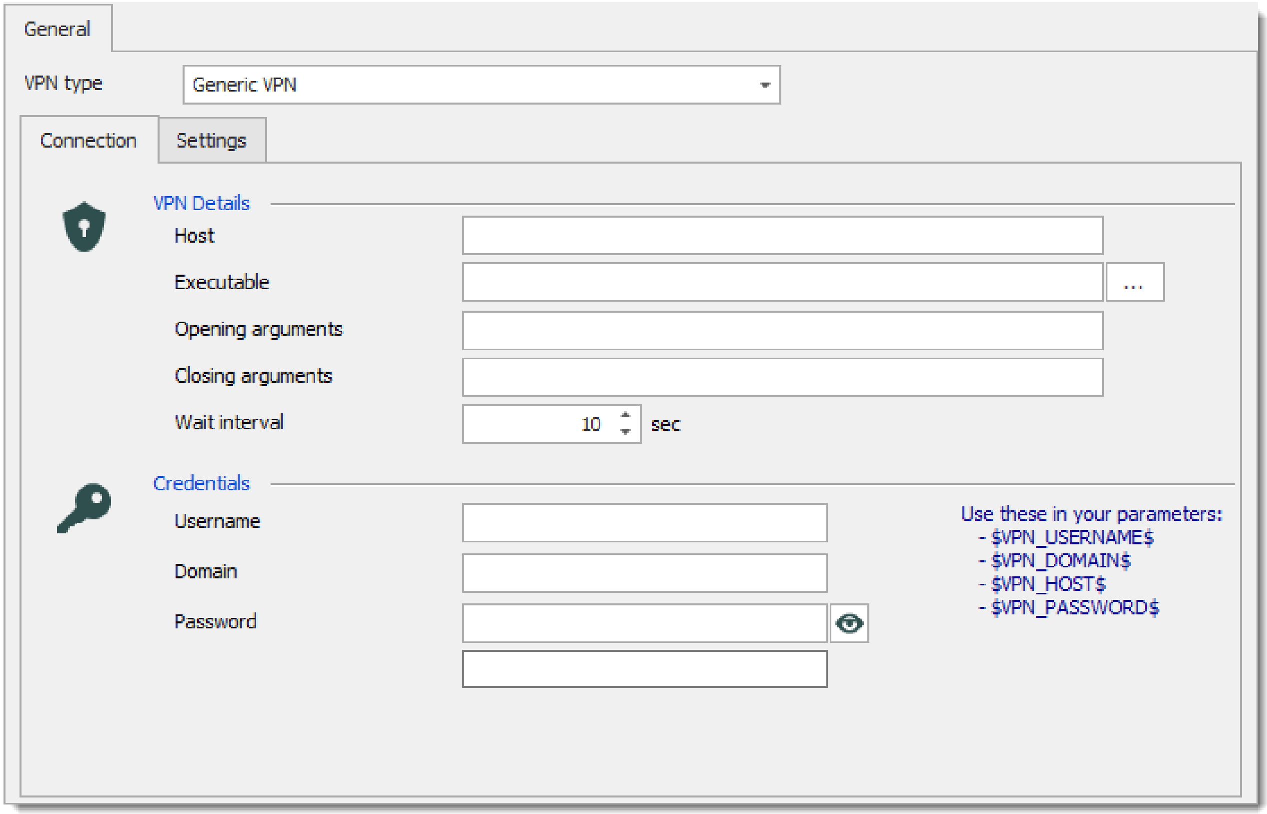
Cisco AnyConnect VPN Client

13.5.8.2 Generic VPN

DESCRIPTION

Generic VPN Add-on can be used to connect to your Generic VPN session.

This Add-on can be installed using the Add-on Manager.



General

VPN type: Generic VPN

Connection | Settings

VPN Details

Host

Executable

Opening arguments

Closing arguments

Wait interval 10 sec

Credentials

Username

Domain

Password

Use these in your parameters:
- $VPN_USERNAME$
- VPN_DOMAIN
- VPN_HOST
- $VPN_PASSWORD$

Generic VPN

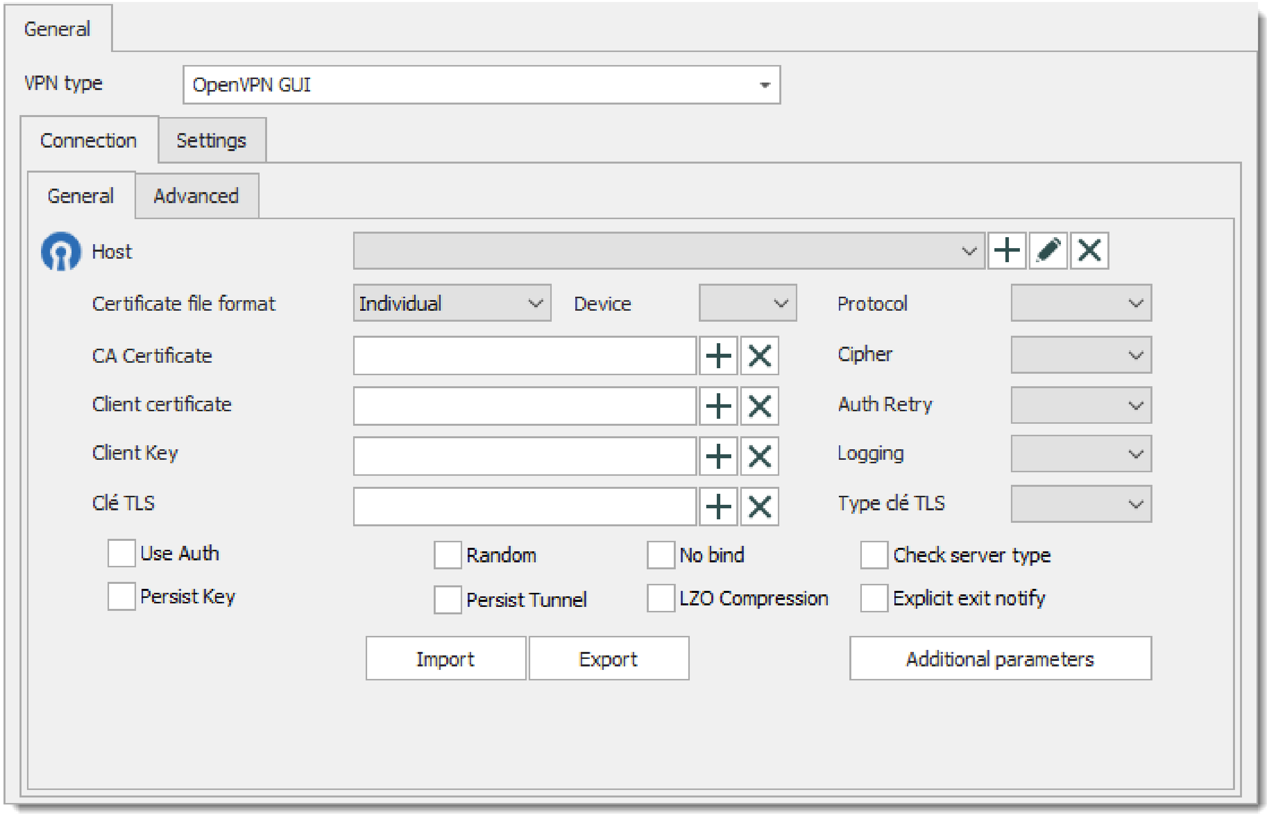
13.5.8.3 OpenVPN

DESCRIPTION

OpenVPN Add-on can be used to connect to your OpenVPN VPN session.

> This add-on requires Remote Desktop Manager to be runned with elevated privileges (run as administrator).

This Add-on can be installed using the Add-on Manager.



General

VPN type: OpenVPN GUI

Connection | Settings

General | Advanced

Host

Certificate file format: Individual

Device

Protocol

CA Certificate

Cipher

Client certificate

Auth Retry

Client Key

Logging

Clé TLS

Type clé TLS

□ Use Auth

□ Persist Key

□ Random

□ Persist Tunnel

□ No bind

□ LZO Compression

□ Check server type

□ Explicit exit notify

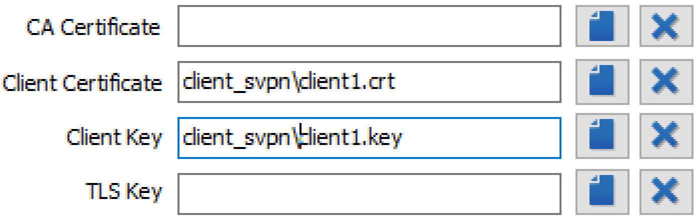
Import | Export | Additional parameters

OpenVPN

INFORMATION

For the Certificate and Key fields it's important that your files are into the same folder as the ***.ovpn** files.

You **cannot** use a configuration as below.



CA Certificate:

Client Certificate: client_svpn\client1.crt

Client Key: client_svpn\client1.key

TLS Key:

13.6 Best Practices

DESCRIPTION

The following recommendations are provided for new and experienced users alike. Remote Desktop Manager has a lot of flexibility and sometimes we are faced with so many choices that we aren't sure of the proper decision to make or its impacts. Read below to find out what our own AND the community's experience has shown is the preferred way of operating Remote Desktop Manager in various scenarios.

Most of these recommendations apply to the Enterprise Edition because the range of options is so much greater then the Free Edition.

13.6.1 Data Backups

DESCRIPTION

It is recommended to always have a current backup of your data source. Since we support a wide range of data stores, you should use the best solution for you chosen data source.

AMAZON S3

Please consult Amazon website for their backup policy.

DEVOLUTIONS PASSWORD SERVER

Devolutions Password Server use a SQL Server database to store the data. We recommend creating a maintenance plan to perform automatic backups regularly. This topic is a good start on the subject: Setting up a Maintenance Plan to Backup Databases.

DROPBOX

Please consult Dropbox website for their backup policy.

FTP

We recommend creating a maintenance plan to perform automatic backups regularly.

MARIADB

We recommend creating a maintenance plan to perform automatic backups regularly.

MICROSOFT ACCESS

Our recommended backup solution is to use our free Online Backup Service.

MICROSOFT SQL AZURE

We recommend creating a maintenance plan to perform automatic backups regularly.

MICROSOFT SQL SERVER

We recommend creating a maintenance plan to perform automatic backups regularly. This topic is a good start on the subject: Setting up a Maintenance Plan to Backup Databases.

MYSQL

We recommend creating a maintenance plan to perform automatic backups regularly. The following link is a good start on the subject: http://dev.mysql.com/doc/refman/5.7/en/backup-methods.html.

ONLINE DATABASE

The protection offered by Online Database is for Disaster recovery only, for instance a hardware failure. Note that we cannot restore a backup of a single database. Using our Entry History and our View Deleted features, you can revert any change on specific sessions.

ONLINE DRIVE

Our recommended backup solution is to use our free Online Backup Service.

SFTP

We recommend creating a maintenance plan to perform automatic backups regularly.

SQLITE

Our recommended backup solution is to use our free Online Backup Service.

WEB

We recommend creating a maintenance plan to perform automatic backups regularly.

XML

Our recommended backup solution is to use our free Online Backup Service.

13.6.2 Credential Management For Teams

DESCRIPTION

Remote Desktop Manager allows to handle credentials in multiple ways for a team environment. This brings flexibility, but at the cost of creating difficulty when you need to choose an implementation for a particular requirement.

Below are multiple methods to handle credentials. You may choose one or many depending on your requirements. We often see scenarios where our clients manage their own infrastructure, as well as their customers. Group entries in folders depending on the kind of credential management that you must use. Each of these folders could use a different scheme.

PREAMBLE

Here are a few notions to know prior to getting to the scenarios, as they are at the core of the usage of Remote Desktop Manager:

INHERITED CREDENTIALS

Credentials can be set at different levels, such on the entries themselves or on their parent folders. The latter enables entries to inherit credentials from a parent folder. Whenever using inherited credentials, the credential resolver will go up a level and use the credentials set on the parent folder. If the inheritance is set on a folder, the resolver simply continues up to the next parent.

PRIVATE VAULT

The Private Vault, available for Advanced Data Sources, allows to create entries available only to their owner. In the cases where a user must use a credential that is exclusive to them, using the Private Vault is the logical choice.

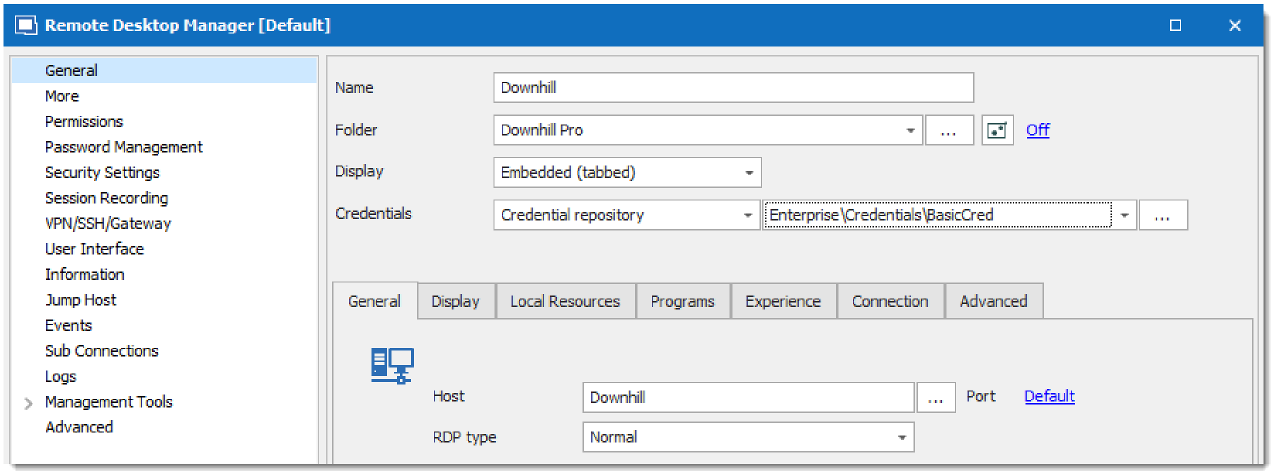
SPECIFIC SETTINGS

Specific Settings allow you to override some settings of the entries in the data source. One of the most typical use for this is to override the credentials of the entry for a specific user. Specific settings can override credentials, session types, folders, etc.

SCENARIOS

ALL USERS SHARE THE SAME SET OF CREDENTIALS

The credential entries are referenced directly in the properties of sessions. Select **Credential repository**, then select the existing credential entry from the data source.



Remote Desktop Manager [Default]

Name: Downhill

Folder: Downhill Pro

Display: Embedded (tabbed)

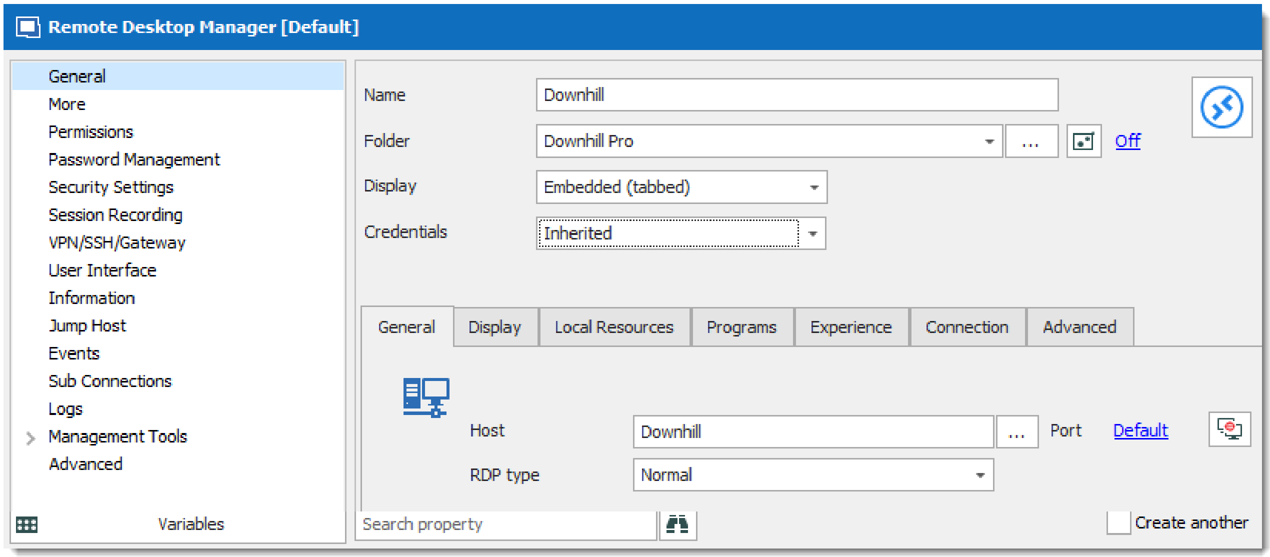
Credentials: Credential repository — Enterprise\Credentials\BasicCred

Host: Downhill

Port: Default

RDP type: Normal

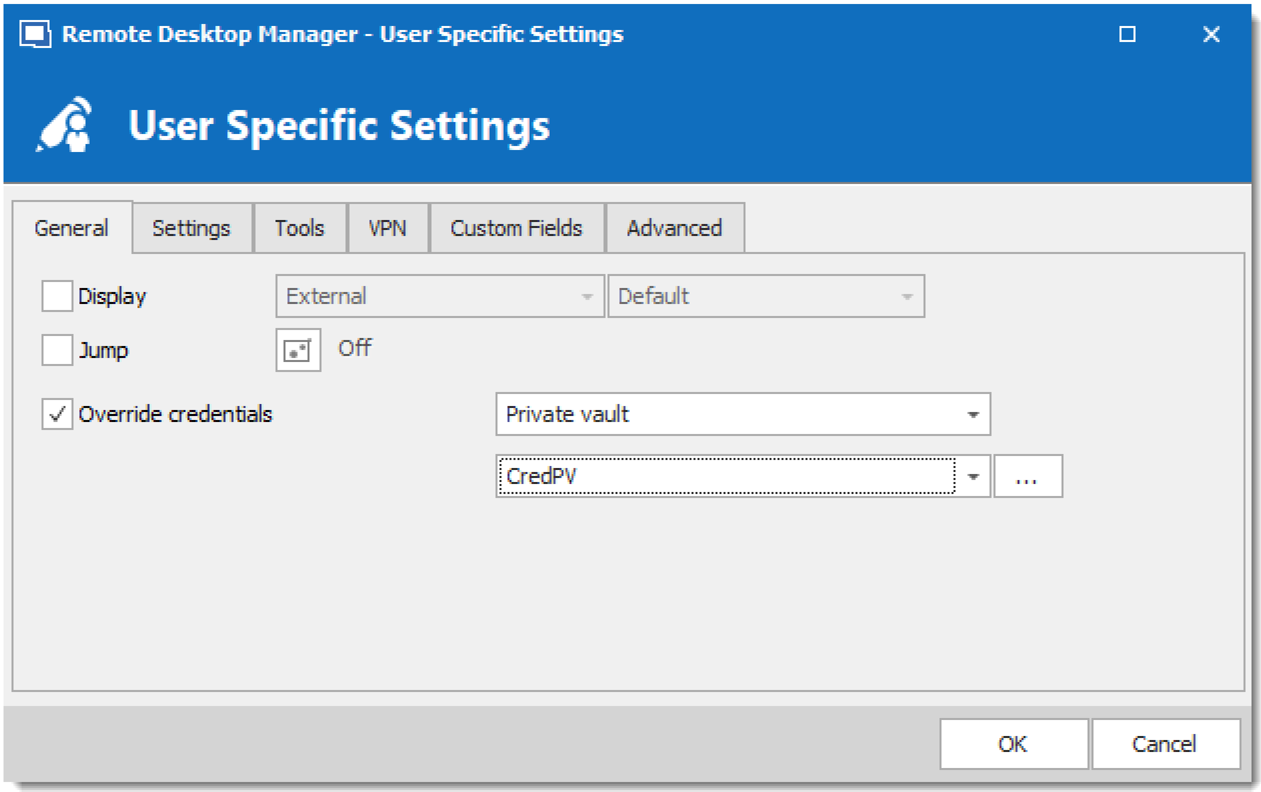
If the credentials are the same for more than one device, store the sessions in a folder which the credential entry is assigned to, and set the sessions to use the **inherited** credential mode.



Name: Downhill
Folder: Downhill Pro
Off
Display: Embedded (tabbed)
Credentials: Inherited
Host: Downhill
Port: Default
RDP type: Normal

EVERY USER HAVE THEIR OWN SET OF CREDENTIALS

Use the **User Specific Settings**. Type the credentials directly or refer a credential entry in the Private Vault (recommended).



□ Display: External / Default

□ Jump: Off

☑ Override credentials: Private vault

CredPV

USERS SHARE A SET OF CREDENTIALS WHILE ADMINS USE DIFFERENT CREDENTIALS

The shared credential entries are referenced directly in the properties of sessions. Admins use **User Specific Settings** to override the credentials, usually to refer a credential entry in the Private Vault.

REFACTOR MULTIPLE ENTRIES AT ONCE

To change the credentials of multiple entries at once, the following features might help you out:

BATCH EDIT

The Batch Edit feature allows to modify multiple entries at once. This feature can be used to apply a set of credentials on multiple entries.

POWERSHELL

The PowerShell CmdLet of Remote Desktop Manager allows to massively update entries. The script below will set all folders to use the **inherited** credential mode.

Always have a backup of the data source before running a PowerShell script.

```
cls
Write-Host "Fixing Groups...`n"
$entries = Get-RDMSession | where {$_.Kind -eq "Group"}

foreach ($entry in $entries)
{
  Write-Host ("   Processing : " + $entry.Name)
  $entry.CredentialConnectionId = "<Credential entry ID>"
  Set-RDMSession $entry
}

Write-Host "`nDONE!"
```

13.6.3 Use Credential Entries

DESCRIPTION

Credentials management is one of the main strengths of Remote Desktop Manager. Although you can specify the credentials directly in the properties of entries, we recommend linking credentials to entries. This has the following advantages:

- Credential entries can be linked to multiple entries.
- The linked credential entry is the only one requiring modifications if necessary, rather than change every entry affected by it.
- When necessary, Permissions can be customized for an entry to better suit your needs (when an Advanced Data Source is used).

13.6.4 Use VPN Entries

DESCRIPTION

Although you can specify VPN details directly in the entry's settings, using a VPN entry should provide better results. This has the following advantages.

- VPN entries can be used in multiple sessions.
- Only that specific VPN entry requires maintenance when modifications are necessary.
- When necessary, Permissions can be customized for an entry to better suit your needs (when an Advanced Data Source is used).

For more information, please consult VPN Overview.

13.7 How-To

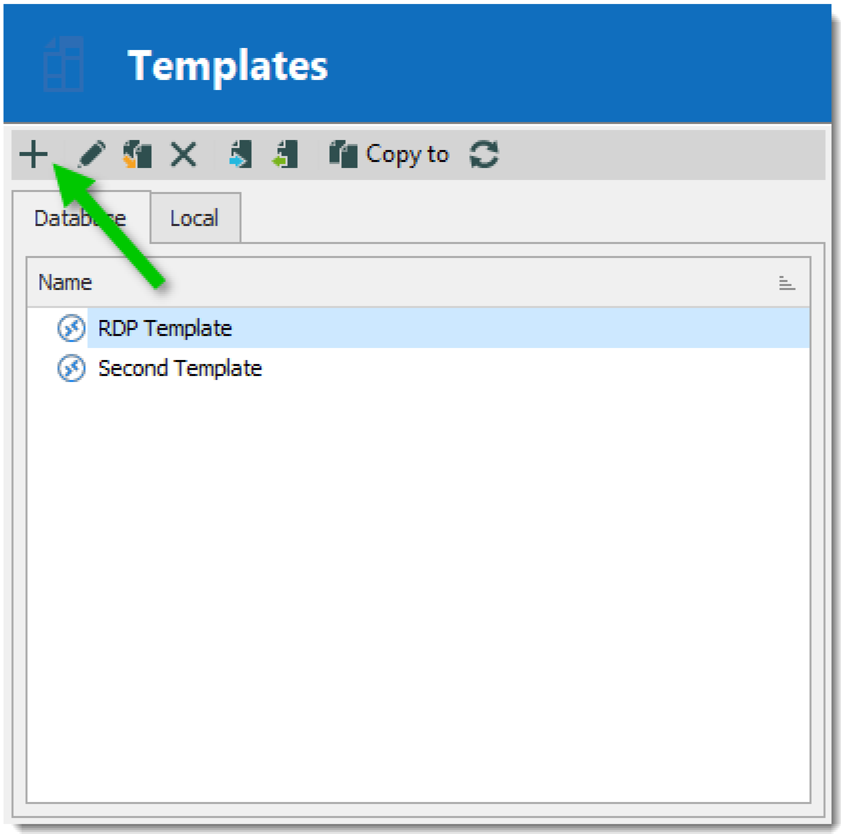
13.7.1 How to Add a Web Link in Macros/Scripts/Tools Session

DESCRIPTION

It's possible to create a **Macros/Scripts/Tools** session that contain a web link. This **Macros/Scripts/Tools** can be launched from the dashboard.

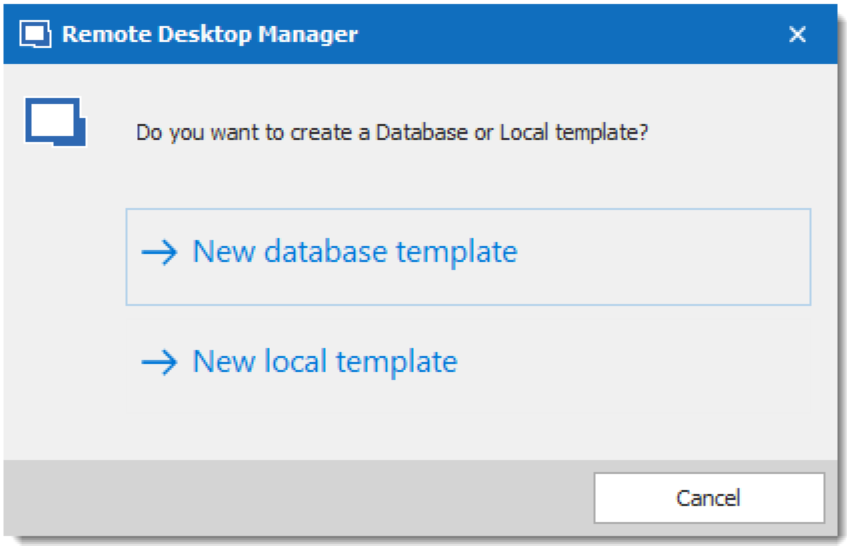
SETTINGS

1. Create a database Template by clicking on ***File — Templates — Templates — Add template***.



Add a Template

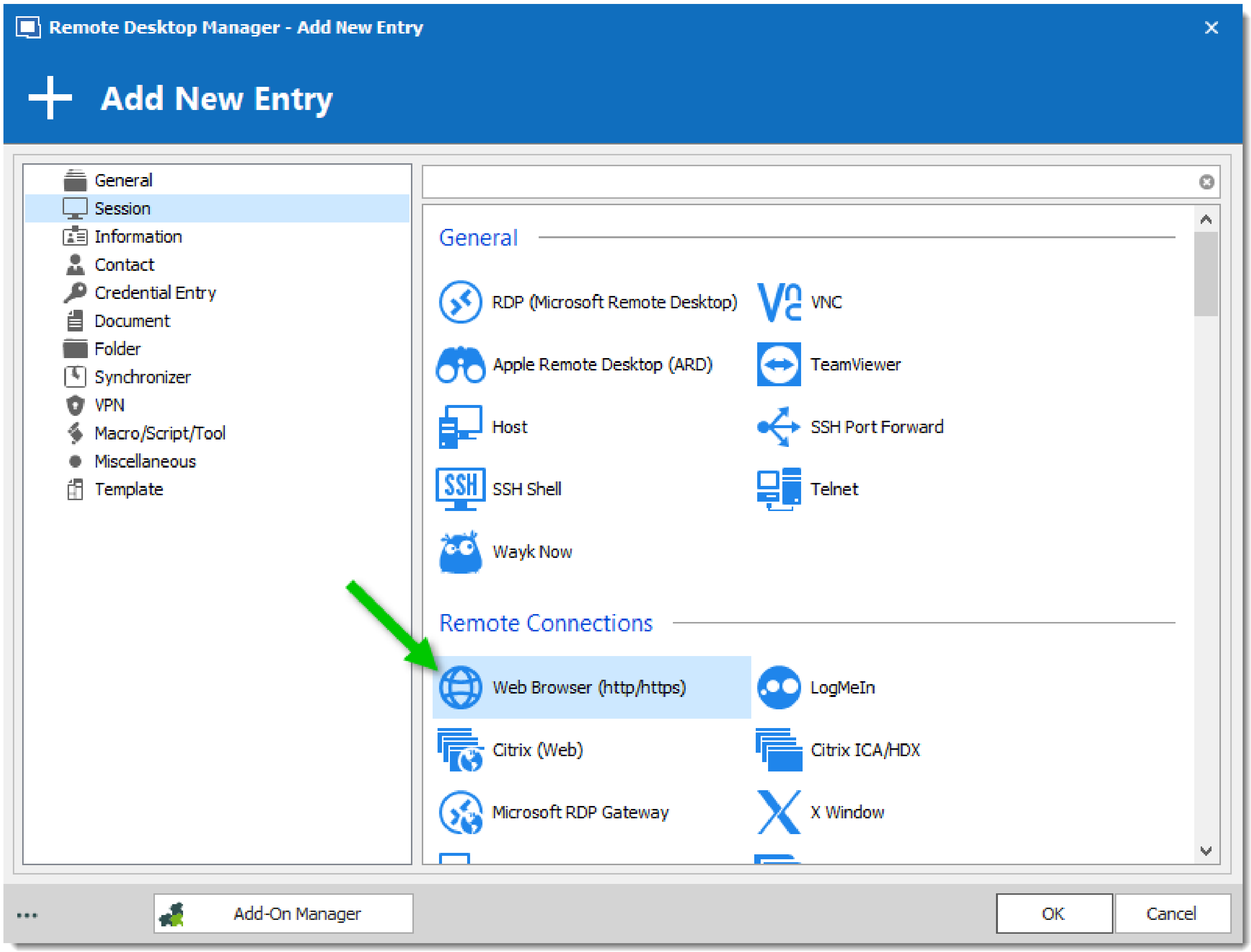
2. Select ***Create a database template***



Do you want to create a Database or Local template?

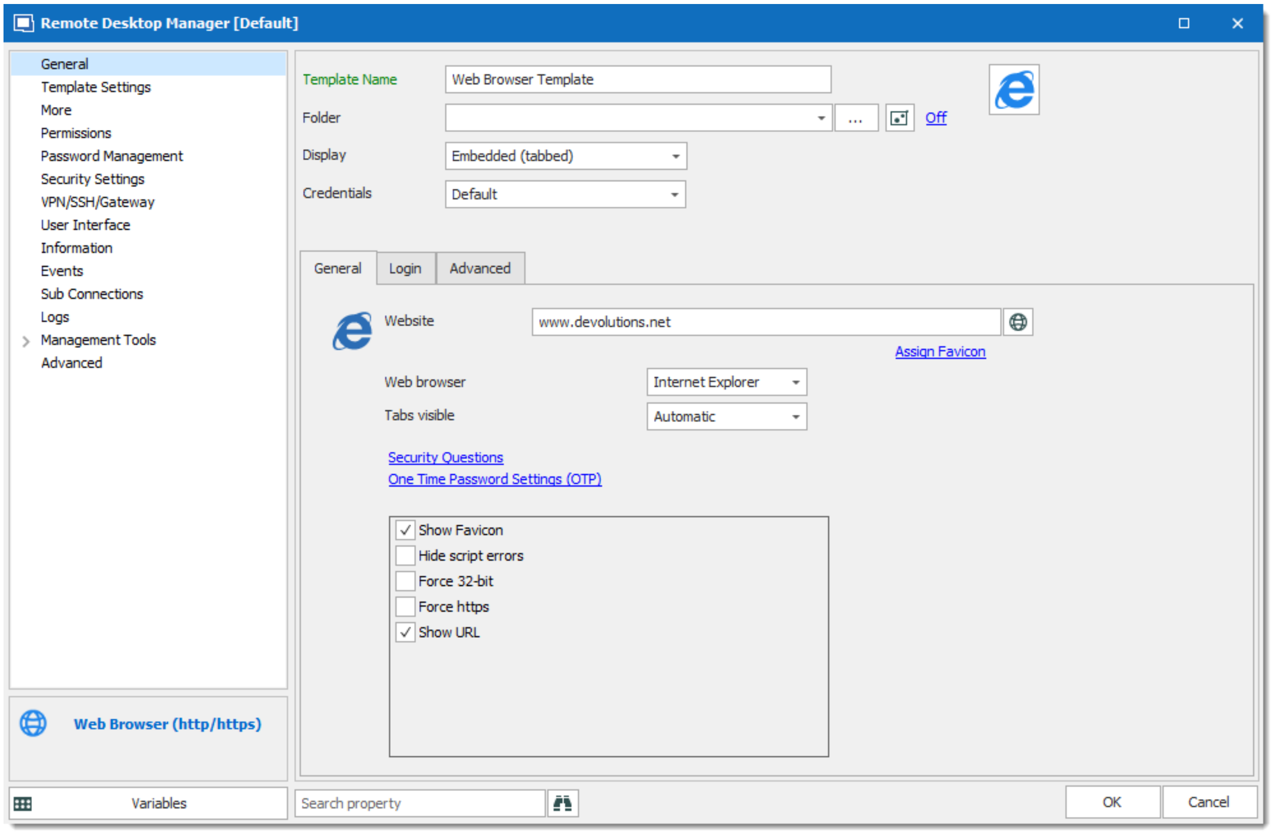
Create a shared template

3. Select the **Web Browser (http/https)** session type.



Web Browser session

4. Indicate the proper information in the template and click on **OK**.



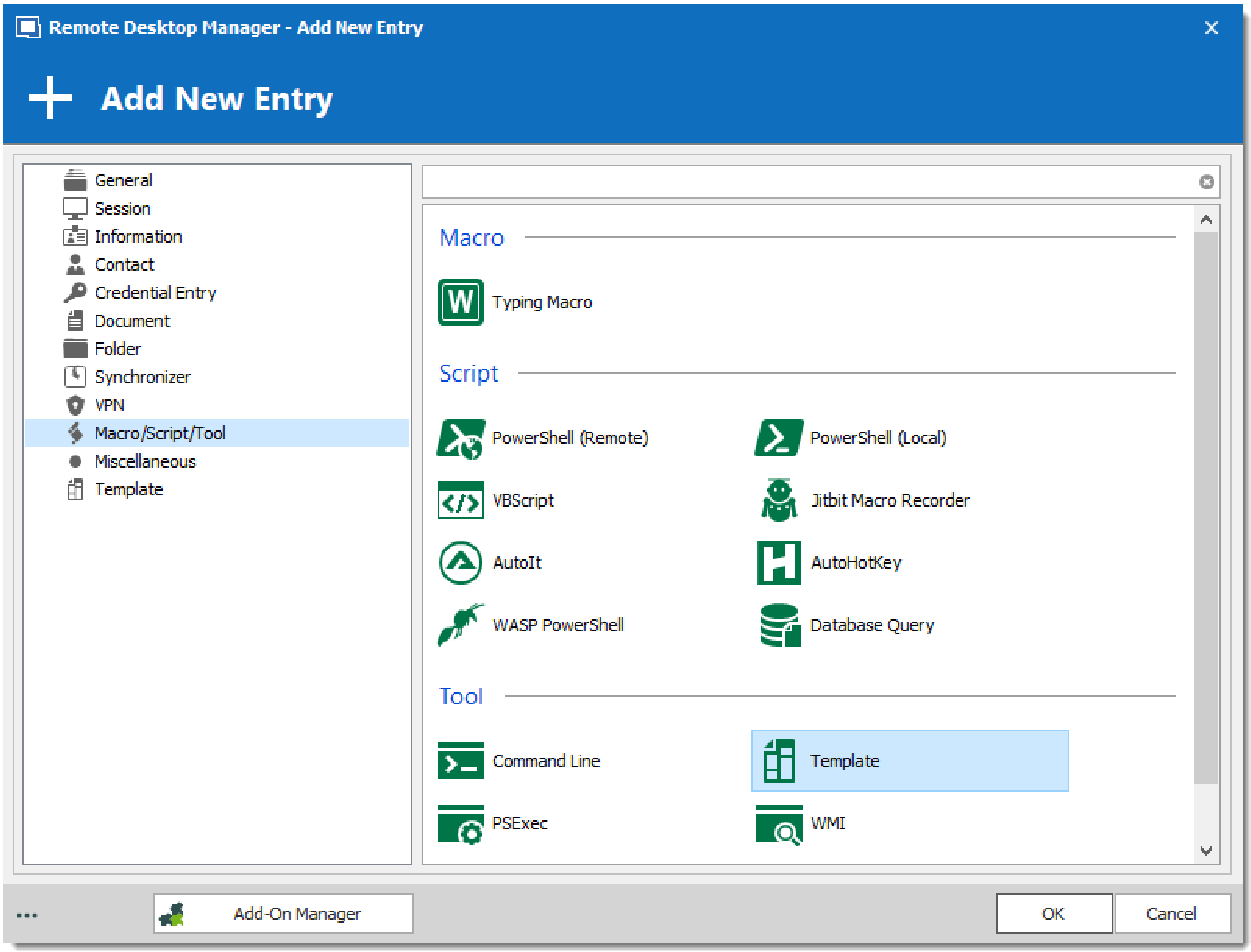
Template Name: Web Browser Template
Folder:
Display: Embedded (tabbed)
Credentials: Default

Website: www.devolutions.net
Web browser: Internet Explorer
Tabs visible: Automatic

☑ Show Favicon
☐ Hide script errors
☐ Force 32-bit
☐ Force https
☑ Show URL

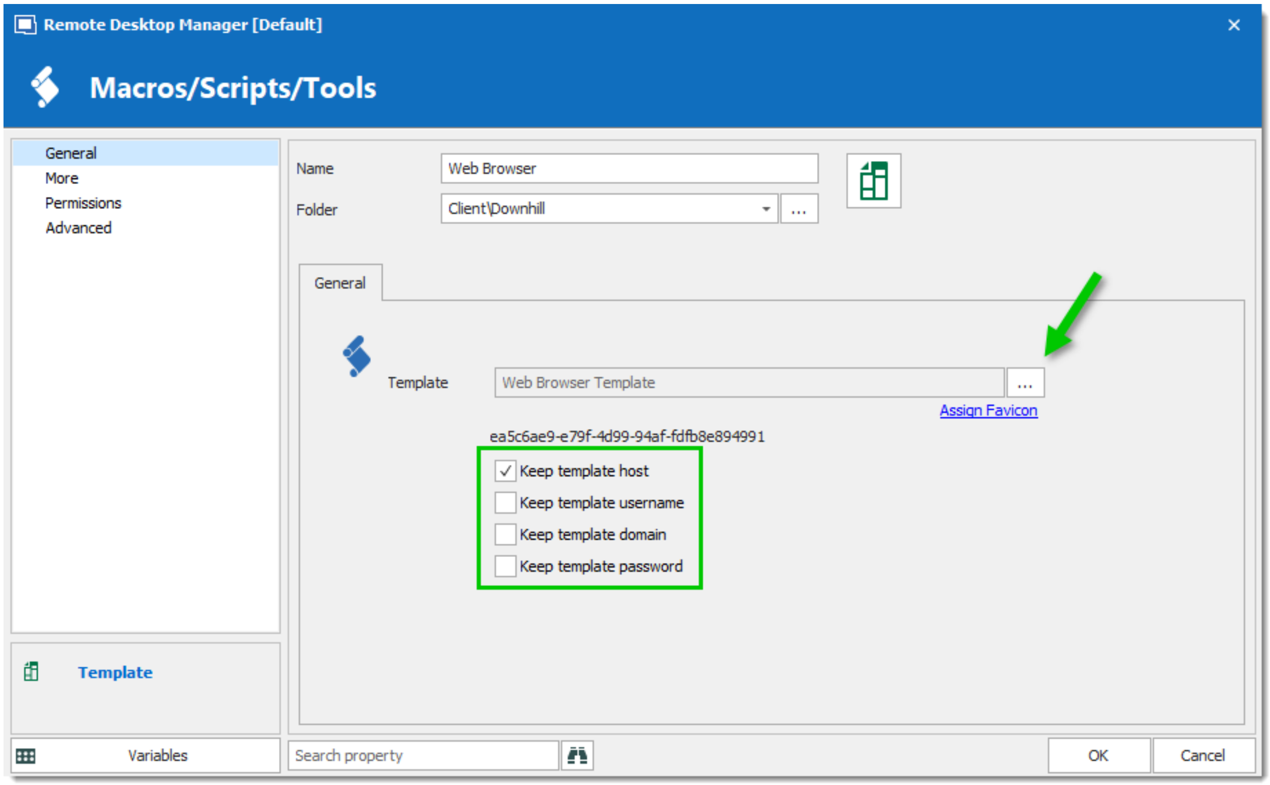
Template Creation

5. After the creation of the template, create a new entry **Macros/Scripts/Tools - Template**. This isn't done through the Template menu from step 1 - 4, use the **Add Entry** feature to locate a **Template** in the **Macros/Scripts/Tools**.



Macro/Script Tool - Template

6. Click on the ellipsis to select your newly created template and check the box **Keep template host.** You can also opt to keep whichever part of the credentials you would want.



Name: Web Browser

Folder: Client\Downhill

General

Template: Web Browser Template

ea5c6ae9-e79f-4d99-94af-fdfb8e894991

☑ Keep template host
☐ Keep template username
☐ Keep template domain
☐ Keep template password

Macros/Scripts/Tools template creation

7. You can now launch the web link (website) from the Tree View.

13.7.2 How to apply policies

DESCRIPTION

Administrative Templates facilitates the management of registry-based policy settings that can be applied on the computer and/or the user configuration. Group policy (GPO) is a tool for organizations to enforce settings on their computers and allows to harden Remote Desktop Manager security.

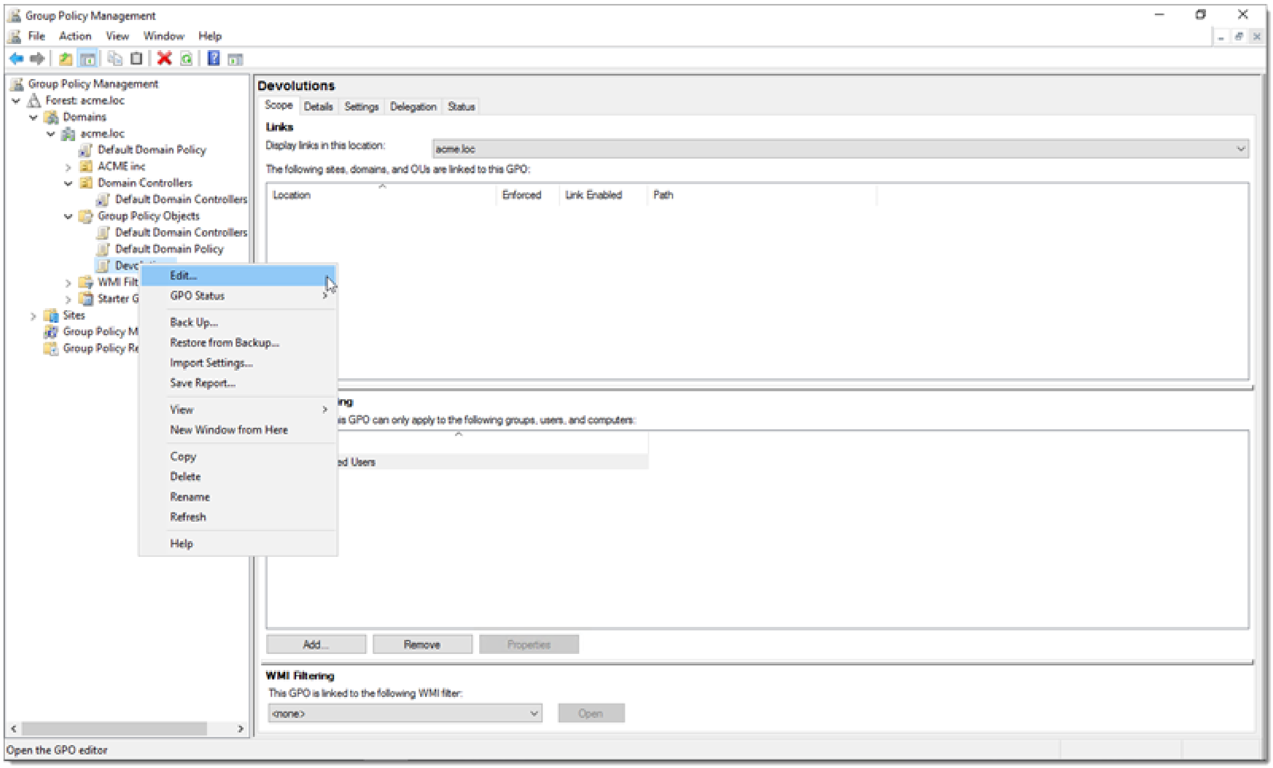
> The Administrative Templates are simply registry settings that are enforced by domains. They contain registry keys that can also be set on computers that are not joined to domains. Proper Access Control Lists (ACL) must be put in place to prevent users from modifying registry settings in this case. Refer to the tables below to find the registry key for each policy setting.

To learn more on how to deploy the Remote Desktop Manager Administrative Templates on your domain please refer to the Microsoft Online Help.

The admx file is distributed with Remote Desktop Manager, you will find it in a **Policies** sub-folder. By default the path is ***C:\Program Files (x86)\Devolutions\Remote Desktop Manager\Policies***.

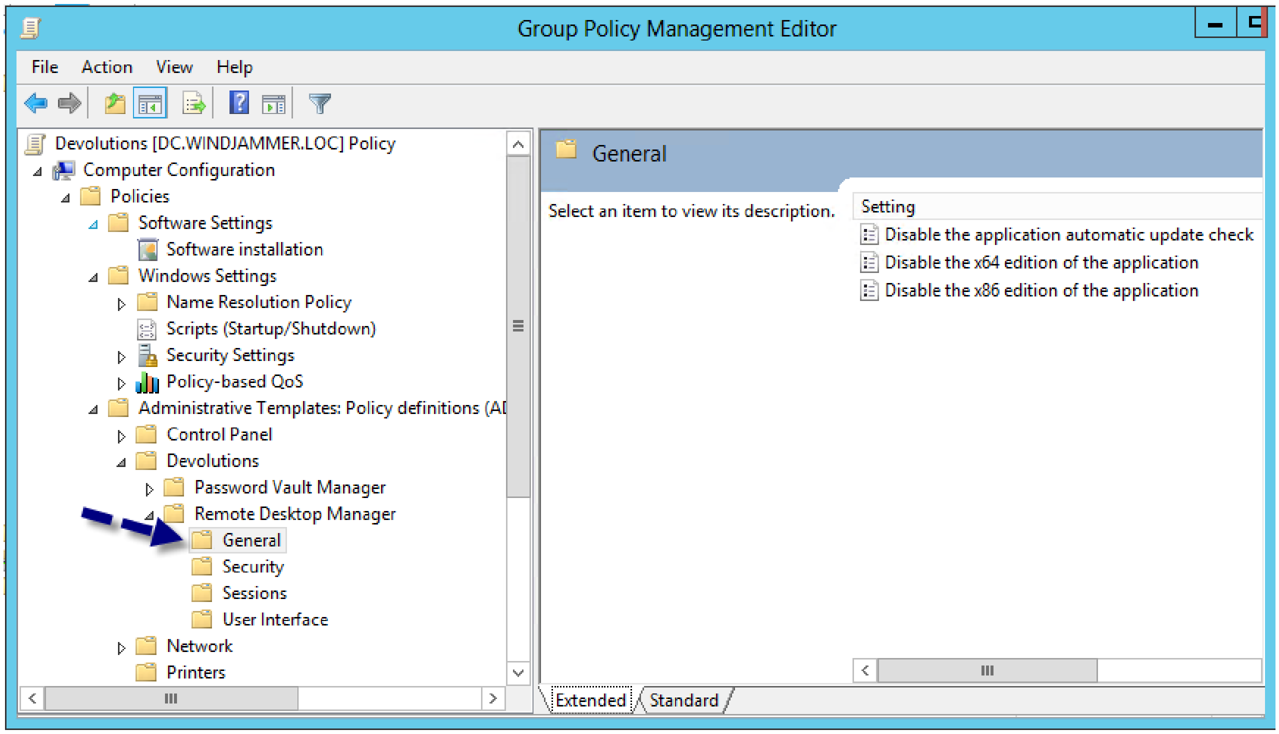
SETTINGS

RemoteDesktopManager includes an Administrative templates file (.admx), which describes the policies that are offered.



Group Policy Management Folder

In the console tree, click the folder under Administrative Templates that contains the policy settings you want to configure.



Select an item to view its description.

Setting
- Disable the application automatic update check
- Disable the x64 edition of the application
- Disable the x86 edition of the application

GENERAL

POLICY NAME	REGISTRY KEY (PLEASE SEE NOTE 1)
Disable the telemetry data collection	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableAnalytics
Disable the application automatic update check	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableAutoUpdate
Disable the Help - Check Version button	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableUpdate
Disable the x64 edition of the application	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableX64

POLICY NAME	REGISTRY KEY (PLEASE SEE NOTE 1)
Disable the x86 of the application	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableX86
Force the loading of the default.cfg file	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\ForceDefaultConfigurationLoading

SECURITY

POLICY NAME	REGISTRY KEY (PLEASE SEE NOTE 1)
Force the user to always be prompted for the passphrase while connecting to a data source that is protected by a Passphrase Security Provider	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\AlwaysPromptForPassphrase
Disable the caching mode	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableCaching
Disable the offline mode	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableOffline
Disable the tools of the password generator	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisablePasswordGenerator
Disable the override hard drive specific settings for the RDP entries	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableRDPHardDrivesSpecificSettings

POLICY NAME	REGISTRY KEY (PLEASE SEE NOTE 1)
Disable the read/write in offline mode	%Root%\SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableReadWriteOffline
Force the user to always be prompted for his credentials when opening the application	%Root%\SOFTWARE\Policies\Devolutions\RemoteDesktopManager\ForceLogin

SESSIONS

POLICY NAME	REGISTRY KEY (PLEASE SEE NOTE 1)
Disable the add-on creation and the Add-on Manager	%Root%\SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableAddOn
Disable the Add-on creation of entries	%Root%\SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableAddOnEntries
Disable the Add-on Manager	%Root%\SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableAddOnManager
Disable the custom image edition in the session configuration	%Root%\SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableCustomImage
Disable import in private vault	%Root%\SOFTWARE\Policies\Devolutions\RemoteDesktopManagerDisableImportInPrivateVault
Disable the reveal password command	%Root%\SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableRevealPassword

POLICY NAME	REGISTRY KEY (PLEASE SEE NOTE 1)
Allow the user to connect even after the entry has expired	%Root%\SOFTWARE\Policies\Devolutions\RemoteDesktopManager\EnableConnectionAfterExpiration
Inside the private vault, allows only credentials entries	%Root%\SOFTWARE\Policies\Devolutions\RemoteDesktopManager\OnlyAllowCredentialsInPrivateVault

USER INTERFACE

POLICY NAME	REGISTRY KEY (PLEASE SEE NOTE 1)
Disable the menu Help - About	%Root%\SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableAbout
Disable all the local application tools like the Event Viewer or IIS	%Root%\SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableApplicationTools
Disable the possibility to drag and drop sessions	%Root%\SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableDragAndDrop
Disable the menu File - Data Sources	%Root%\SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableFileDataSources
Disable the menu File - Options	%Root%\SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableFileOptions
Disable the import and the export of the Configuration File in File -	%Root%\SOFTWARE\Policies\Devolutions\RemoteDes

POLICY NAME	REGISTRY KEY (PLEASE SEE NOTE 1)
Options	ktopManager\DisableImportExportOptions
Disable the My Personal Credential feature	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableMyPersonalCredentials
Disable the Devolutions Account usage	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableOnlineAccount
Disable the option to open with parameter	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableOpenWithParameters
Disable the error report prompt	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableSendErrorReportDialog
Disable the Add-On Manager in the Tools menu	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableToolsAddOnManager
Disable the Chocolatey Console in the Tools menu	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableToolsChocolateyConsole
Disable the Devolutions Password Server Console in the Tools menu (Deprecated 12.6.8)	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableToolsDevolutionsServerConsole
Disable the Extension Manager in the Tools menu	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableToolsExtensionManager

POLICY NAME	REGISTRY KEY (PLEASE SEE NOTE 1)
Disable the Local RDP/RemoteApp Manager in the Tools menu	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableToolsLocalRDPRemoteAppManager
Disable the Macro/Script/Tool Manager in the Tools menu	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableToolsMacroScriptToolManager
Disable the Tools ribbon tab and menu	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableToolsMenu
Disable the Open New Remote Desktop option in the Tools menu	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableToolsOpenNewRemoteDesktop
Disable the Powershell RDM Cmdlet in the Tools menu	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableToolsPowershellRDMCmdlet
Disable the RDM Agent in the Tools menu	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableToolsRDMAgent
Disable the Translation Manager in the Tools menu	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableToolsTranslationManager
Disable the Top Pane (Ribbon/Menubar)	%Root% \SOFTWARE\Policies\Devolutions\RemoteDesktopManager\DisableTopPane
Force the Merge credential list with sessions option	%Root% \SOFTWARE\Policies\Devolutions\RemoteDes

POLICY NAME	REGISTRY KEY (PLEASE SEE NOTE 1)
	ktopManager\EnableMergeCredentialListWithSessions
Force the merging of the session toll list with sessions	%Root%\SOFTWARE\Policies\Devolutions\RemoteDesktopManager\EnableMergeSessionToolListWithSessions

NOTES

%Root% can either be HKEY_LOCAL_MACHINE or HKEY_CURRENT_USER depending on how you want to enforce the policy. Please refer to Microsoft's documentation to make the best choice for your situation.

13.7.3 How to Backup Remote Desktop Manager

DESCRIPTION

Backups are important in case of hardware failure.

A proper backup will cover both your **data** and your **settings**.

BACKUP

DATA

Your data is stored in your data source. Please consult Data Source Backups for more details.

SETTINGS

You can export your settings via the Export Options wizard of Remote Desktop Manager.

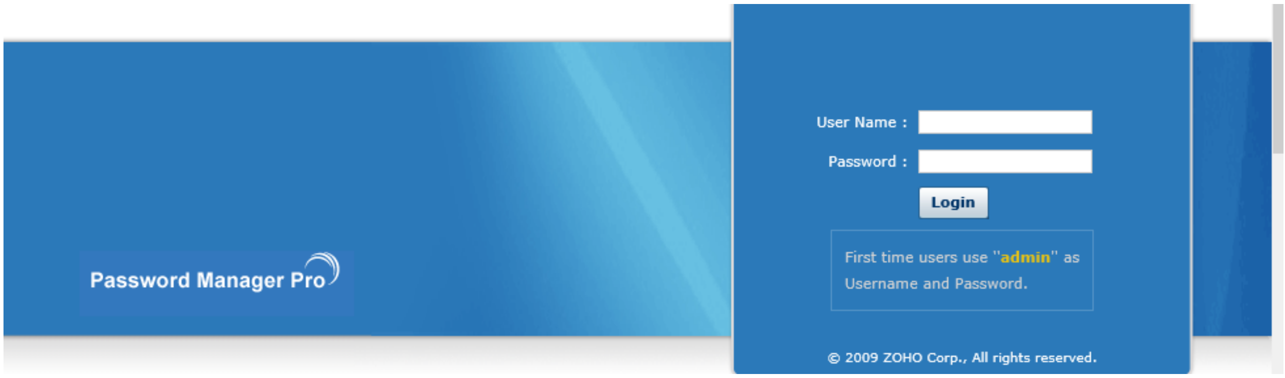
13.7.4 How to Configure Password Manager Pro in Remote Desktop Manager

DESCRIPTION

You can create Password Manager Pro credential entries in Remote Desktop Manager, however a Password Manager Pro account needs to be created and configured in the application prior to the utilization.

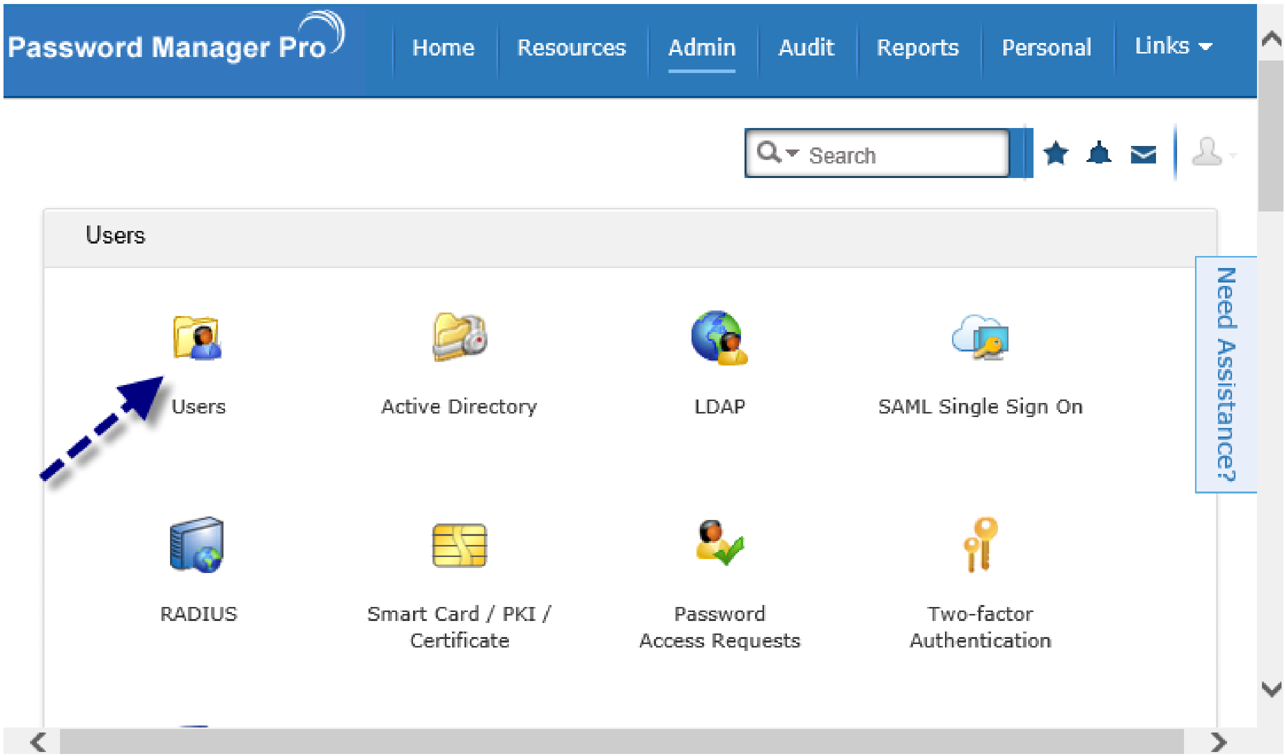
SETTINGS

1. Connect to your Password Manager Pro server (https://localhost:7272) using your admin account.


Password Manager Pro
User Name :
Password :
Login
First time users use "admin" as Username and Password.
© 2009 ZOHO Corp., All rights reserved.

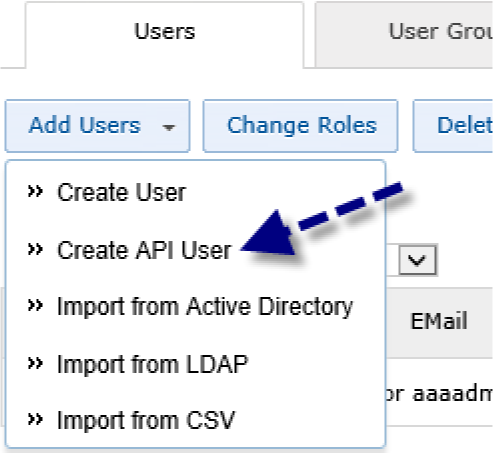
Password Manager Pro

2. Inside Password Manager Pro, click on Admin and select Users.



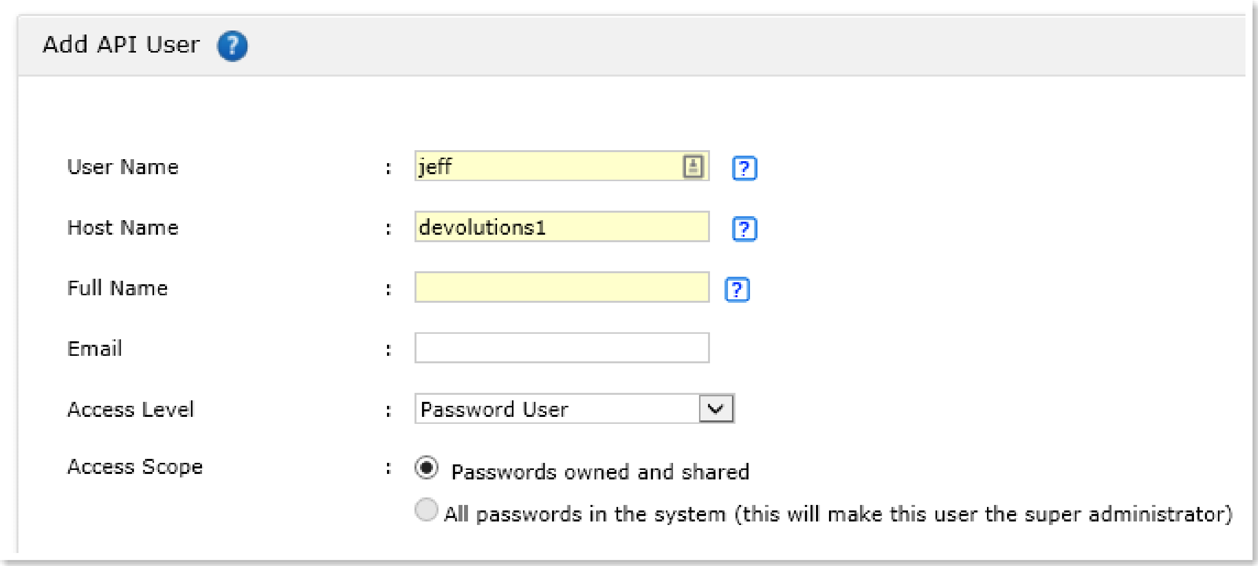
Users

3. Create a new API user.



Create API User

4. In the Host Name field, enter the name of the computer where the API user will be use.

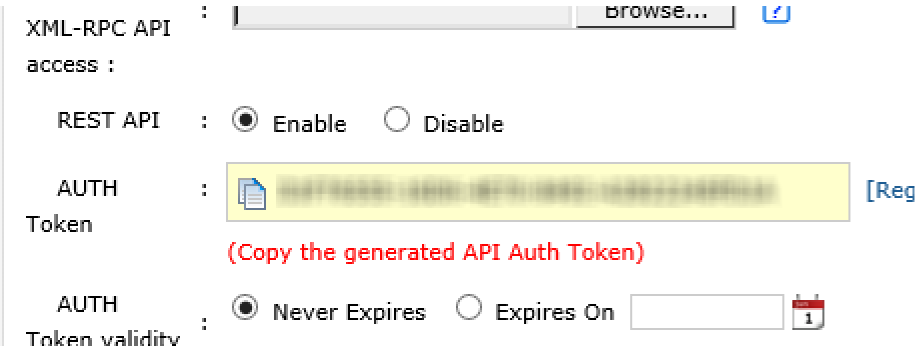


Add API User

User Name	:	jeff
Host Name	:	devolutions1
Full Name	:	
Email	:	
Access Level	:	Password User
Access Scope	:	● Passwords owned and shared ○ All passwords in the system (this will make this user the super administrator)

Add API User

5. Enable the REST API to have a API Auth Token key generated

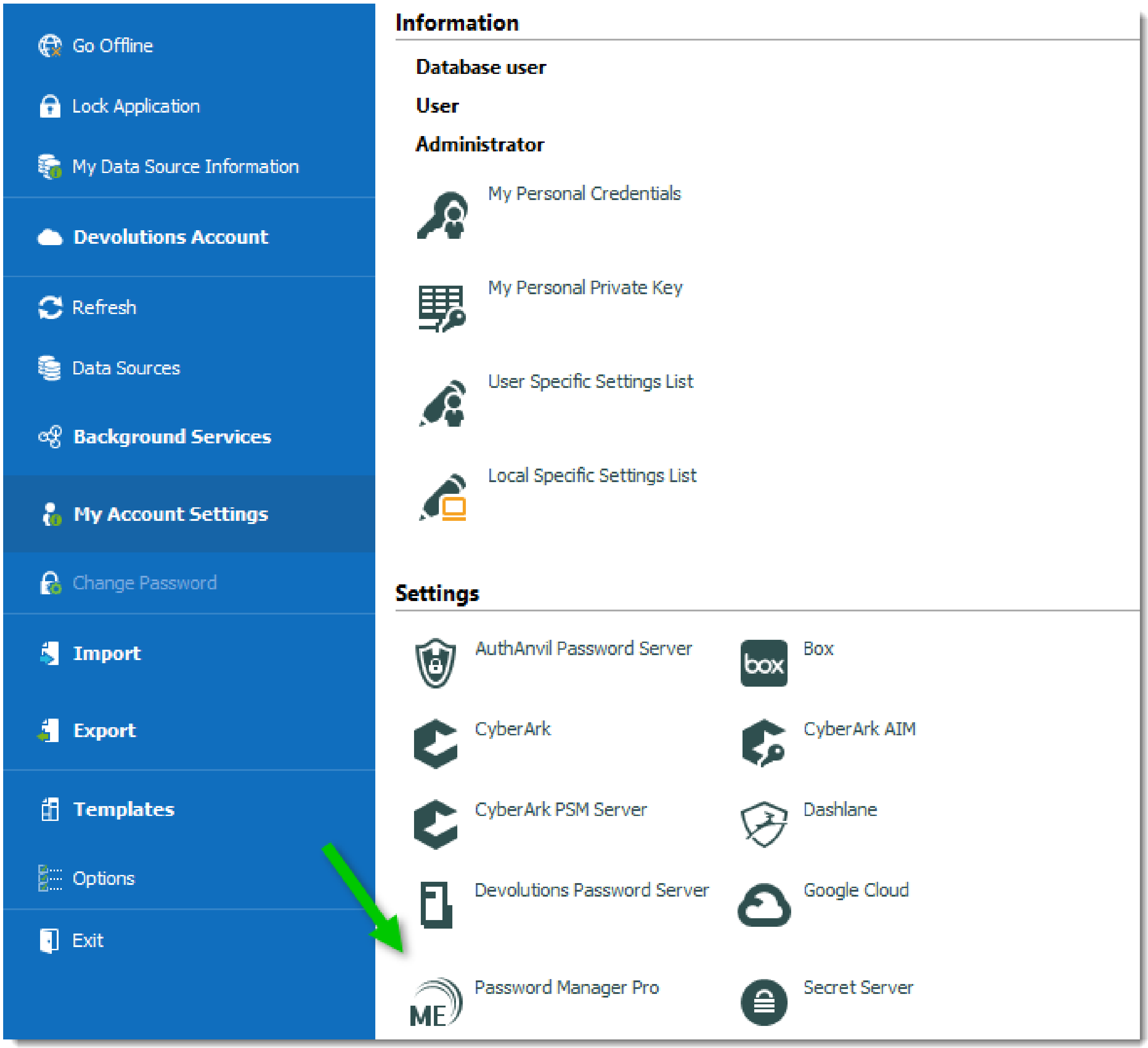


XML-RPC API access :	:	
REST API	:	● Enable ○ Disable
AUTH Token	:	[redacted] [Reg (Copy the generated API Auth Token)
AUTH Token validity	:	● Never Expires ○ Expires On

Auth Token

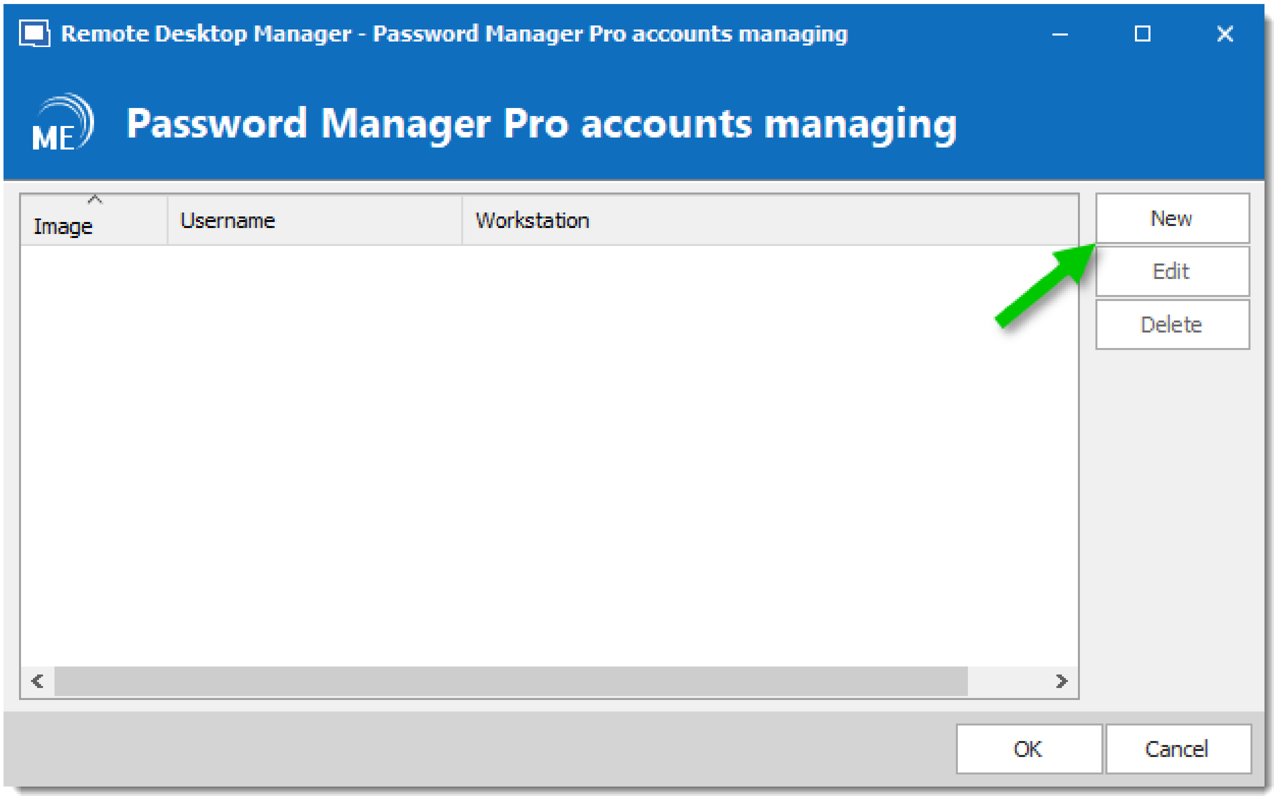
Copy the Auth token key in your clipboard. You will need it to configure Password Manager Pro in Remote Desktop Manager.

6. Now, go inside Remote Desktop Manager and click on ***File – My Account Settings – Password Manager Pro.***



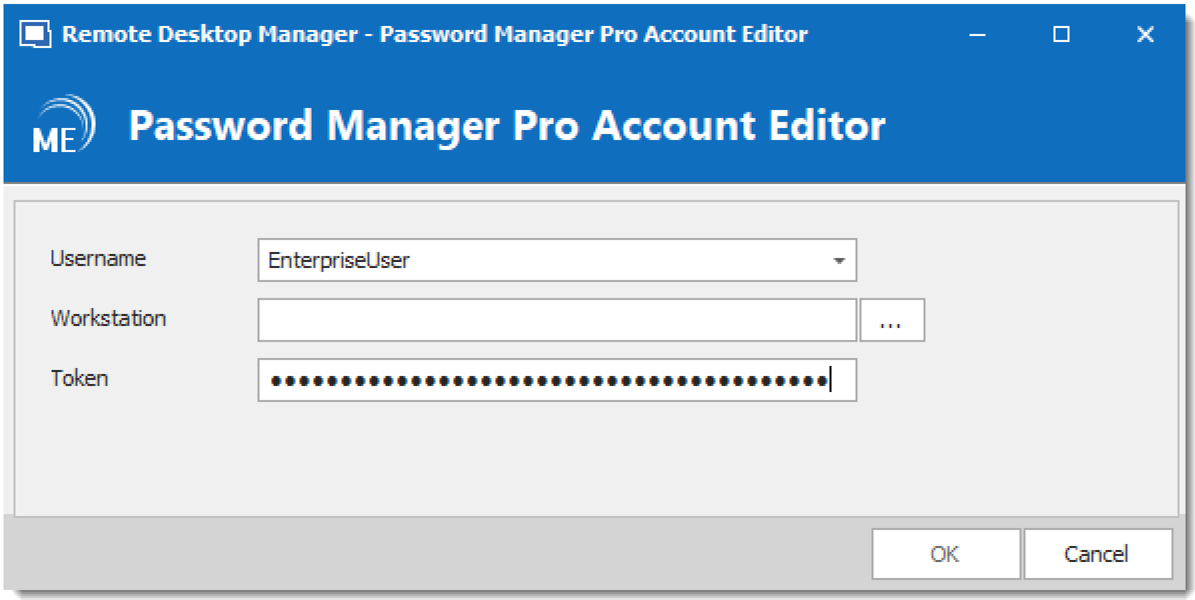
Password Manager Pro Account Settings

7. Click on **New** to create a Password Manager Pro account


Remote Desktop Manager - Password Manager Pro accounts managing
Password Manager Pro accounts managing
Image
Username
Workstation
New
Edit
Delete
OK
Cancel

New User

8. Enter the username of the API User that you have created in Password Manager Pro in the **Username** field, enter the appropriate computer name in the **Workstation** field and paste the Auth Token key that you have copied on step 5 in the **Token** field and click on **OK.**



Remote Desktop Manager - Password Manager Pro Account Editor

Password Manager Pro Account Editor

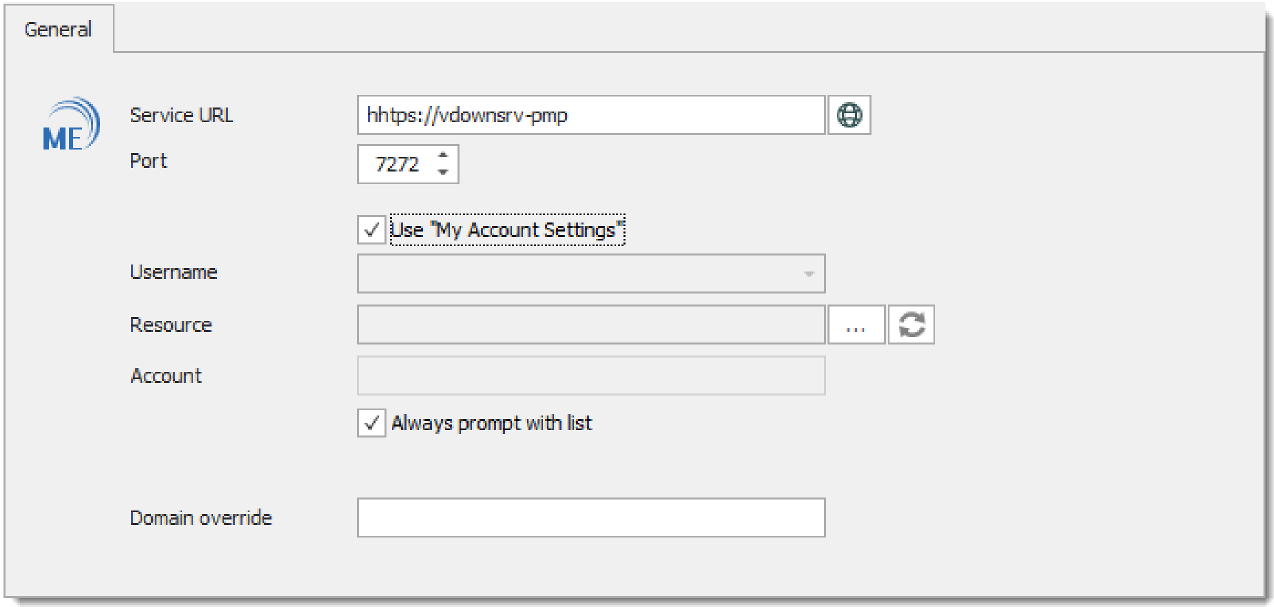
Username: EnterpriseUser

Workstation:

Token: ●●

New User

9. You can now create a Password Manager Pro credential entry in Remote Desktop Manager



General

Service URL: hhtps://vdownsrv-pmp

Port: 7272

☑ Use "My Account Settings"

Username:

Resource:

Account:

☑ Always prompt with list

Domain override:

Credential Entry

13.7.5 How to Configure ConnectWise (ScreenConnect) 5 in Remote Desktop Manager

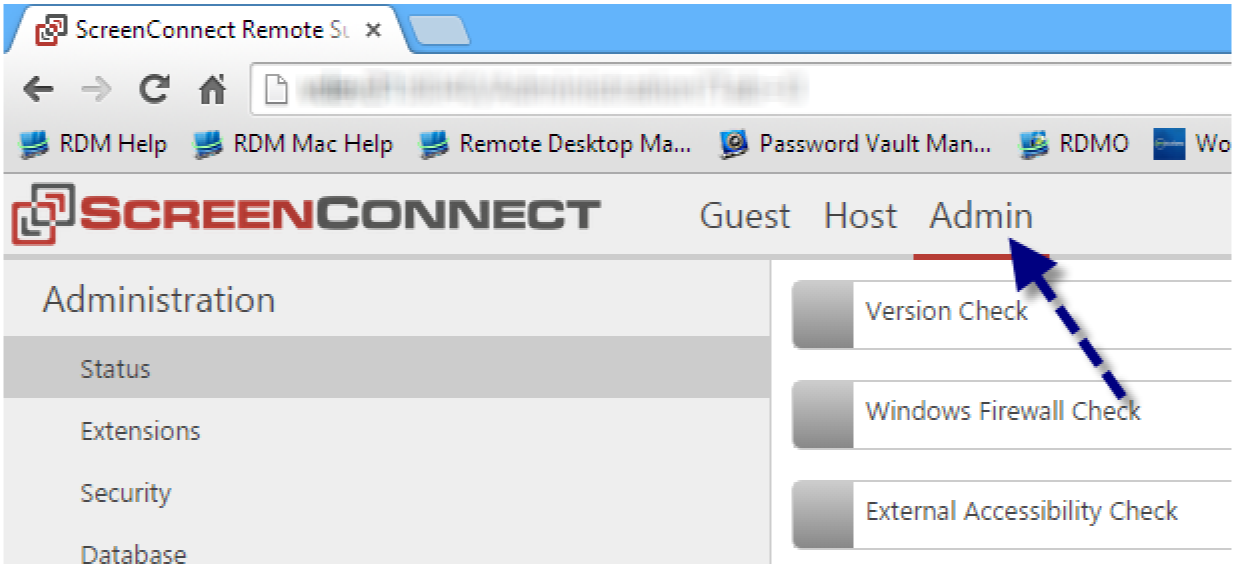
DESCRIPTION

It's possible to use ConnectWise (ScreenConnect) in Remote Desktop Manager, however a ConnectWise (ScreenConnect) extension needs to be installed prior to the utilization. After the extension installation, you can configure ConnectWise (ScreenConnect) 5 in Remote Desktop Manager.

> The Remote Desktop Manager extension needs to be installed on your ConnectWise (ScreenConnect) server.

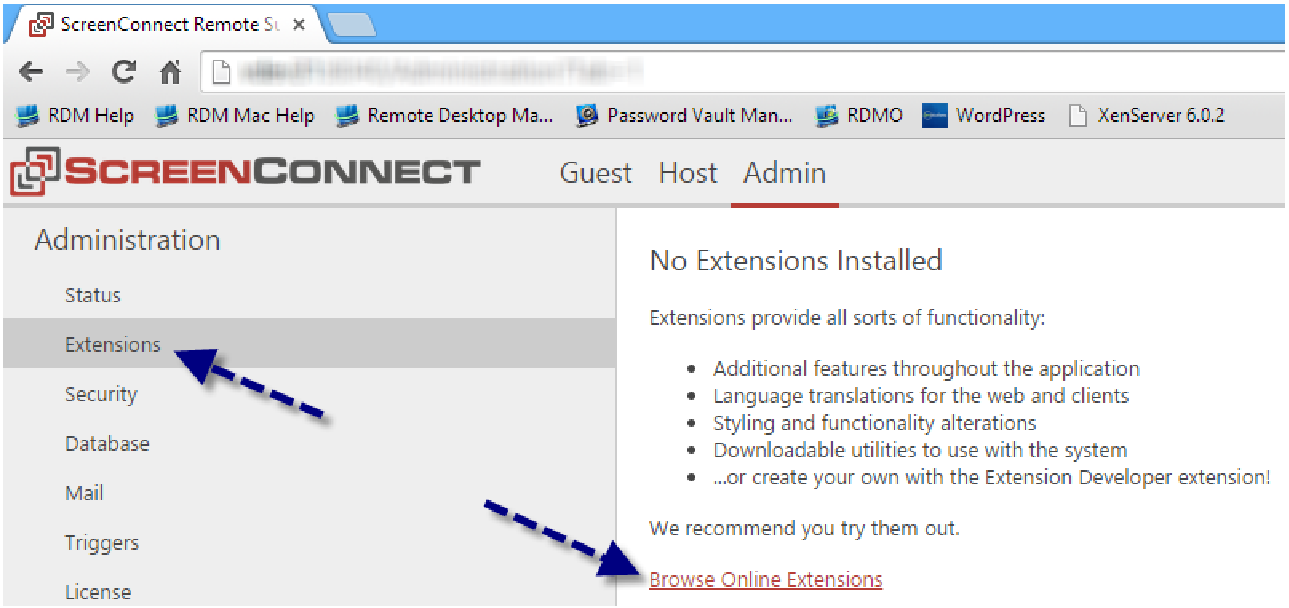
SETTINGS

1. Connect on ConnectWise (ScreenConnect) server and click on **Admin**.



Admin Tab

2. Click on **Extensions** in the Administration section and select **Browse Online Extensions.**



No Extensions Installed

Extensions provide all sorts of functionality:

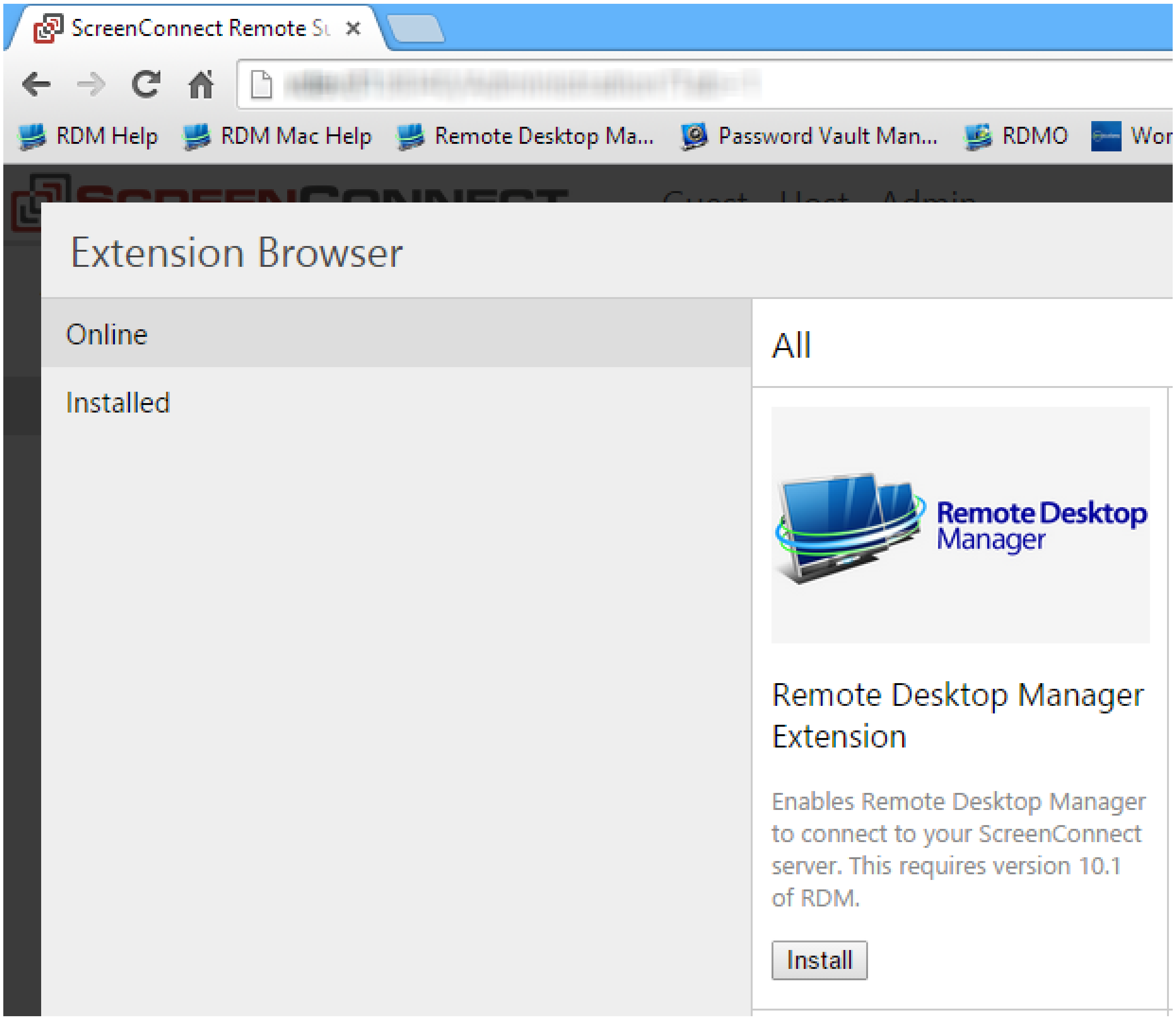
- Additional features throughout the application
- Language translations for the web and clients
- Styling and functionality alterations
- Downloadable utilities to use with the system
- ...or create your own with the Extension Developer extension!

We recommend you try them out.

Browse Online Extensions

Extensions

3. Install Remote Desktop Manager Extension.



Extension Browser

Online

Installed

All

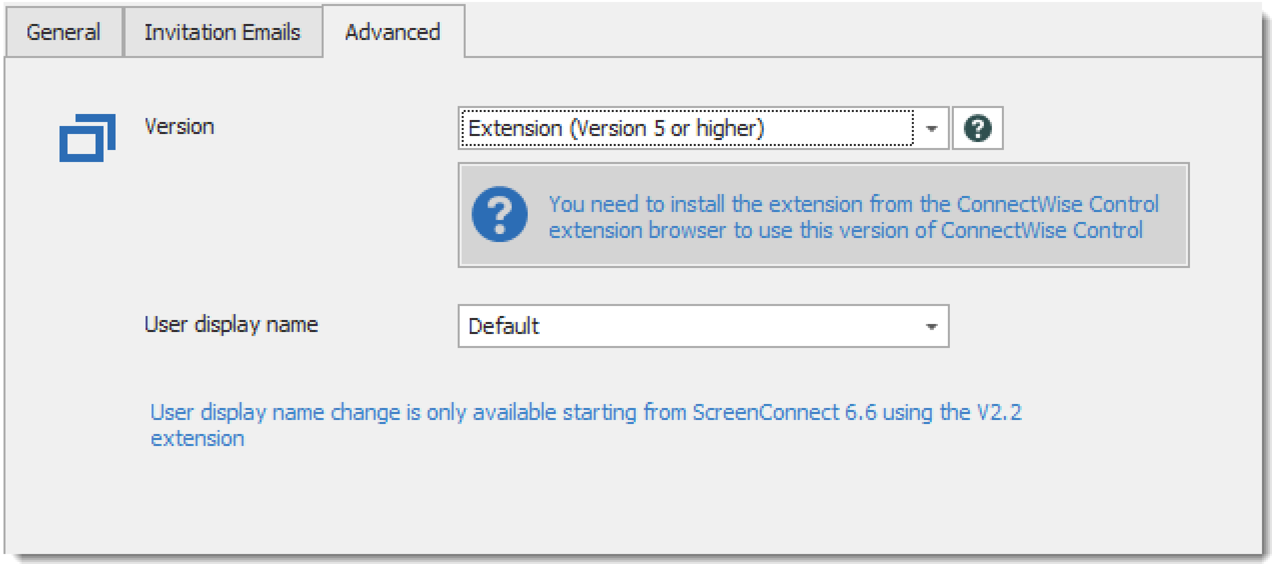
Remote Desktop Manager Extension

Enables Remote Desktop Manager to connect to your ScreenConnect server. This requires version 10.1 of RDM.

Install

Remote Desktop Manager Extension

4. Now that the extension is installed, you can create your ScreenConnect session. In the **Advanced** tab, change the version for **Extension (Version 5 or higher).**



Version: Extension (Version 5 or higher)

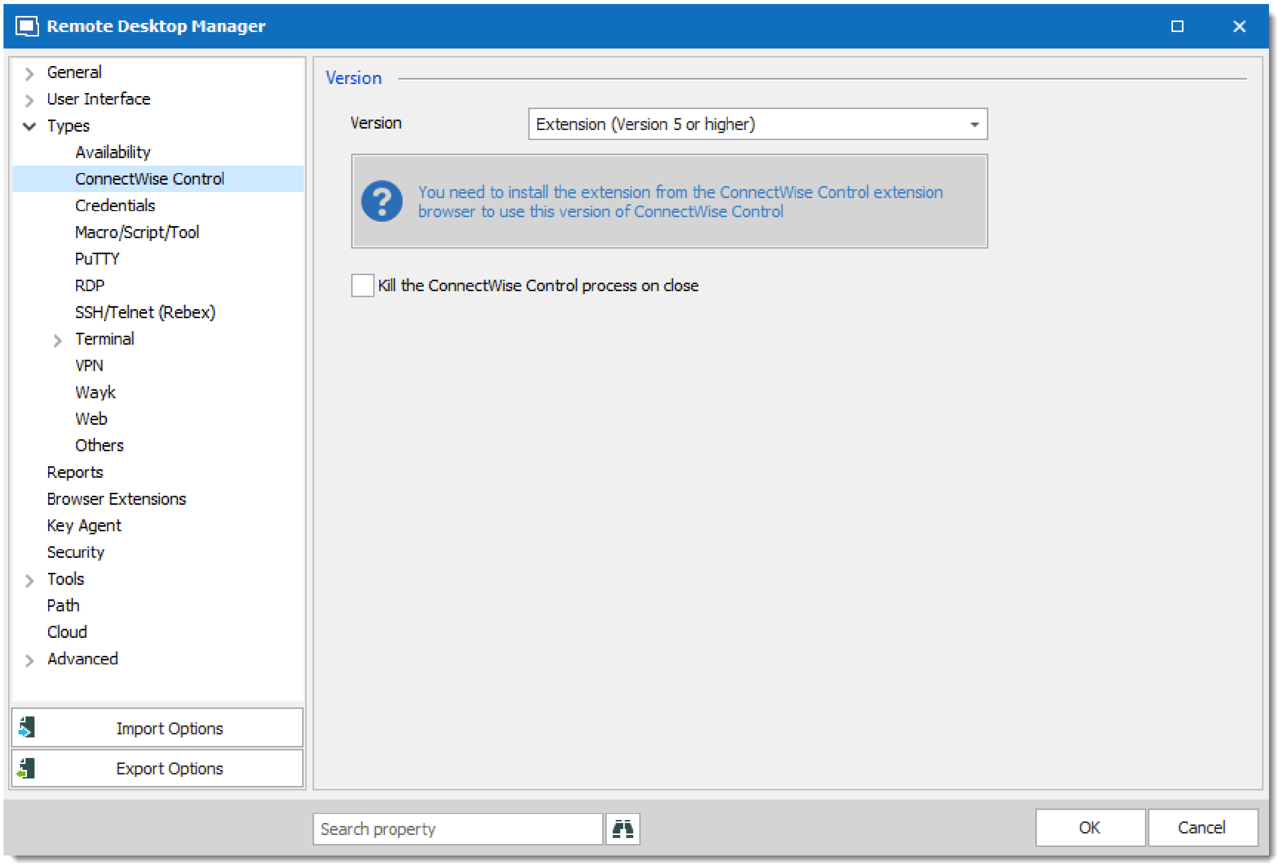
You need to install the extension from the ConnectWise Control extension browser to use this version of ConnectWise Control

User display name: Default

User display name change is only available starting from ScreenConnect 6.6 using the V2.2 extension

ConnectWise Control (ScreenConnect) - Advanced

5. You can also select **Default** in the drop down list instead of **Extension (Version 5 or higher).** If you select **Default**, you'll need to configure the ScreenConnect version that you wish to use in ***File – Options – Types – ConnectWise Control.***



Version

Version: Extension (Version 5 or higher)

You need to install the extension from the ConnectWise Control extension browser to use this version of ConnectWise Control

□ Kill the ConnectWise Control process on close

File - Options - Types - ConnectWise (ScreenConnect)

13.7.6 How to Configure the Google Authenticator 2-Factor Authentication

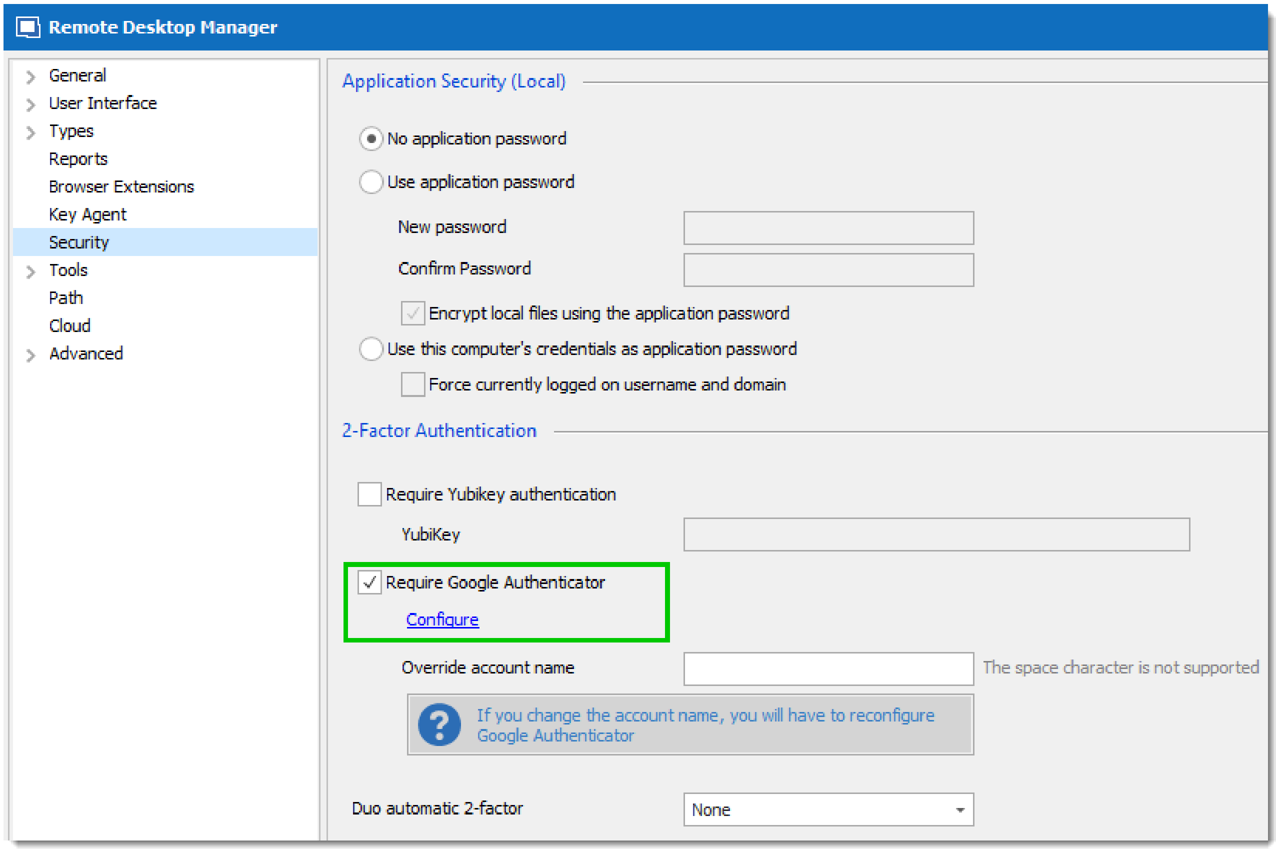
DESCRIPTION

Remote Desktop Manager has the option to use Google Authenticator to provide an additional security layer when the application starts.

SETTINGS

✓ Before you start the configuration, make sure you have installed the Google Authenticator application on your Android device, Blackberry or on your Apple product.

1. Click on ***File – Options – Security*** and select **Require Google Authenticator** in the 2-Factor Authentication section. Then click on **Configure** to set up your Google Authentication.



Application Security (Local)

● No application password

○ Use application password

New password

Confirm Password

☑ Encrypt local files using the application password

○ Use this computer's credentials as application password

□ Force currently logged on username and domain

2-Factor Authentication

□ Require Yubikey authentication

YubiKey

☑ Require Google Authenticator

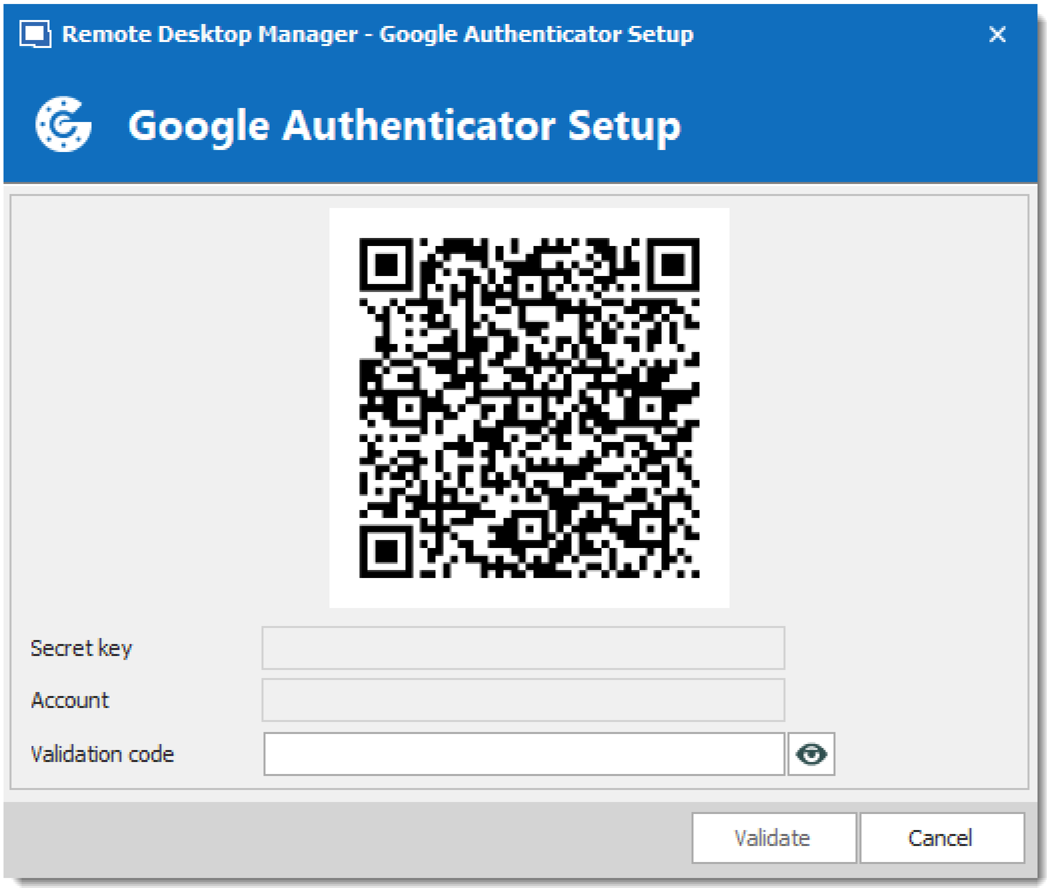
Override account name — The space character is not supported

If you change the account name, you will have to reconfigure Google Authenticator

Duo automatic 2-factor: None

Google Authenticator

2. Scan the QR code on your screen with the Google Authenticator application to setup Remote Desktop Manager in Google Authenticator.
   When Remote Desktop Manager is configured in Google Authenticator, enter the Validation code provided by Google Authenticator in Remote Desktop Manager.


Remote Desktop Manager - Google Authenticator Setup
Google Authenticator Setup
Secret key
Account
Validation code
Validate
Cancel

Google Authenticator Setup

3. When the Validation code is entered, click on **Validate,** then **OK**.

4. Relaunch Remote Desktop Manager to be prompted for the Google Authenticator code.

> Google Authenticator generates a new validation code every 30 seconds. There will be a color indicating the end of the time window is approaching, please consult the application documentation of your device for complete information.

13.7.7 How to Configure the Yubikey 2-Factor Authentication

DESCRIPTION

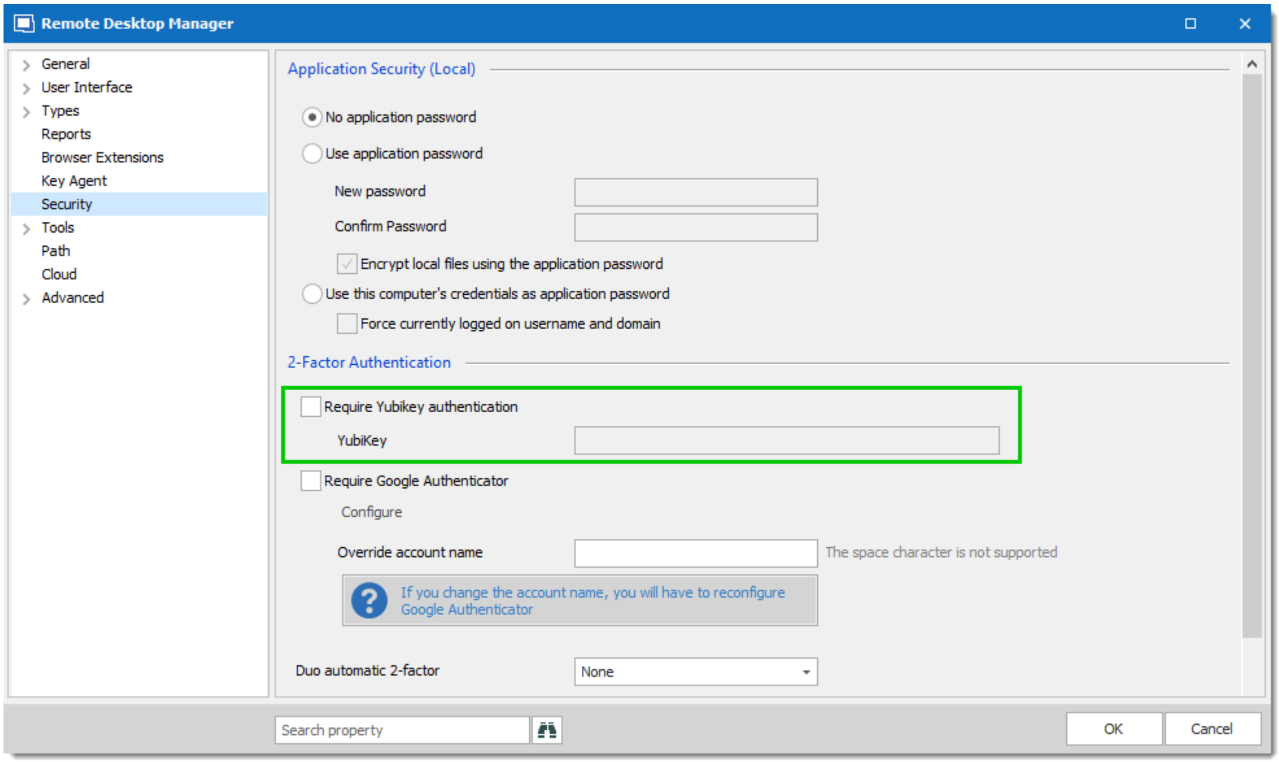
Remote Desktop Manager allows you to configure a Yubikey to provide an additional security layer when the application starts.

SETTINGS

Before starting the configuration, make sure you have a Yubikey in your possession.

1. Insert the Yubikey into a USB port of your computer.

2. Click on ***File – Options – Security*** and select **Require Yubikey authentication** in the 2-Factor authentication section. Press and hold the gold button on the Yubikey to have the code in Remote Desktop Manager and click **OK**.



Application Security (Local)

● No application password

○ Use application password

New password

Confirm Password

☑ Encrypt local files using the application password

○ Use this computer's credentials as application password

□ Force currently logged on username and domain

2-Factor Authentication

□ Require Yubikey authentication

YubiKey

□ Require Google Authenticator

Configure

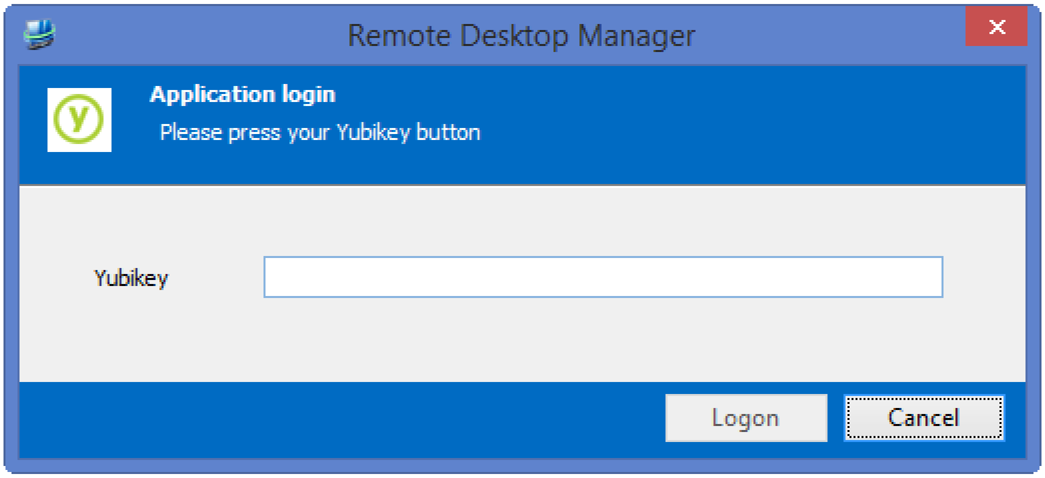
Override account name — The space character is not supported

If you change the account name, you will have to reconfigure Google Authenticator

Duo automatic 2-factor: None

Yubikey Authentication

3. Relaunch Remote Desktop Manager to be prompted for a Yubikey code.



Yubikey Authentication request

4. Press and hold the gold button on the Yubikey and access will be granted.

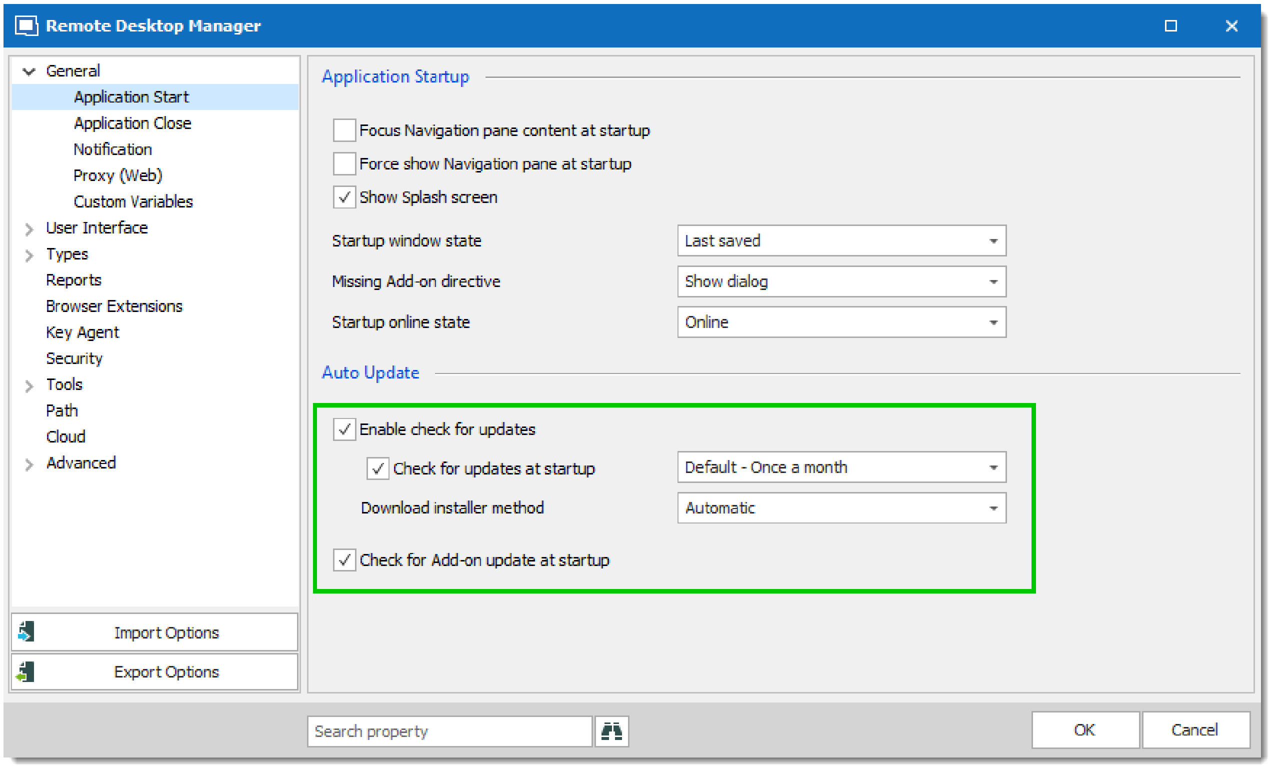
13.7.8 How to Disable Remote Desktop Manager Auto Update

DESCRIPTION

Remote Desktop Manager frequently offers new updates to release new features, improvements as well as fixes. If you don't want to receive the update notifications, you can disable it in the options.

SETTINGS

In Remote Desktop Manager, uncheck both options **“Check for update at startup”** and **“Includes Beta versions”** in ***File – Options – General – Application Start***.



Application Startup

☐ Focus Navigation pane content at startup

☐ Force show Navigation pane at startup

☑ Show Splash screen

Startup window state: Last saved

Missing Add-on directive: Show dialog

Startup online state: Online

Auto Update

☑ Enable check for updates

☑ Check for updates at startup: Default - Once a month

Download installer method: Automatic

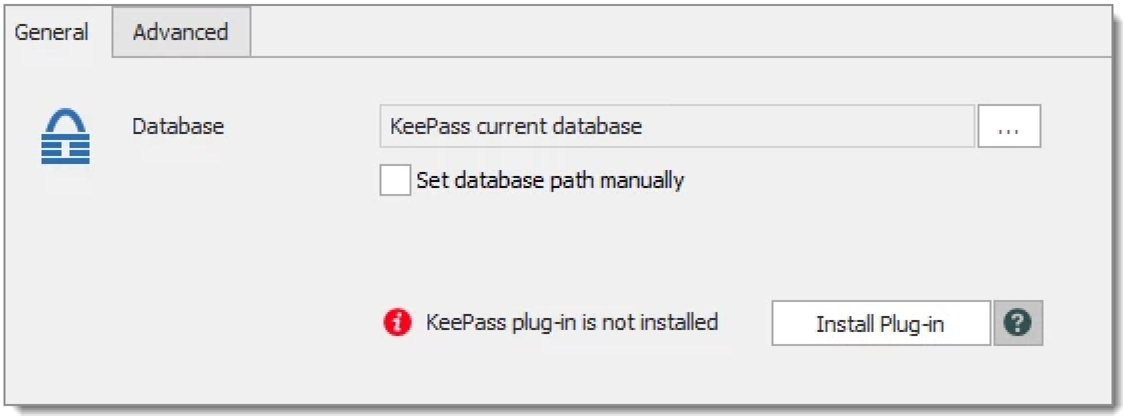
☑ Check for Add-on update at startup

Application Start - Auto Update

13.7.9 How to Download the Keepass Plugin

DESCRIPTION

You need the KeePass plug-in to send the credential to Remote Desktop Manager (RDM).



Database: KeePass current database

☐ Set database path manually

KeePass plug-in is not installed

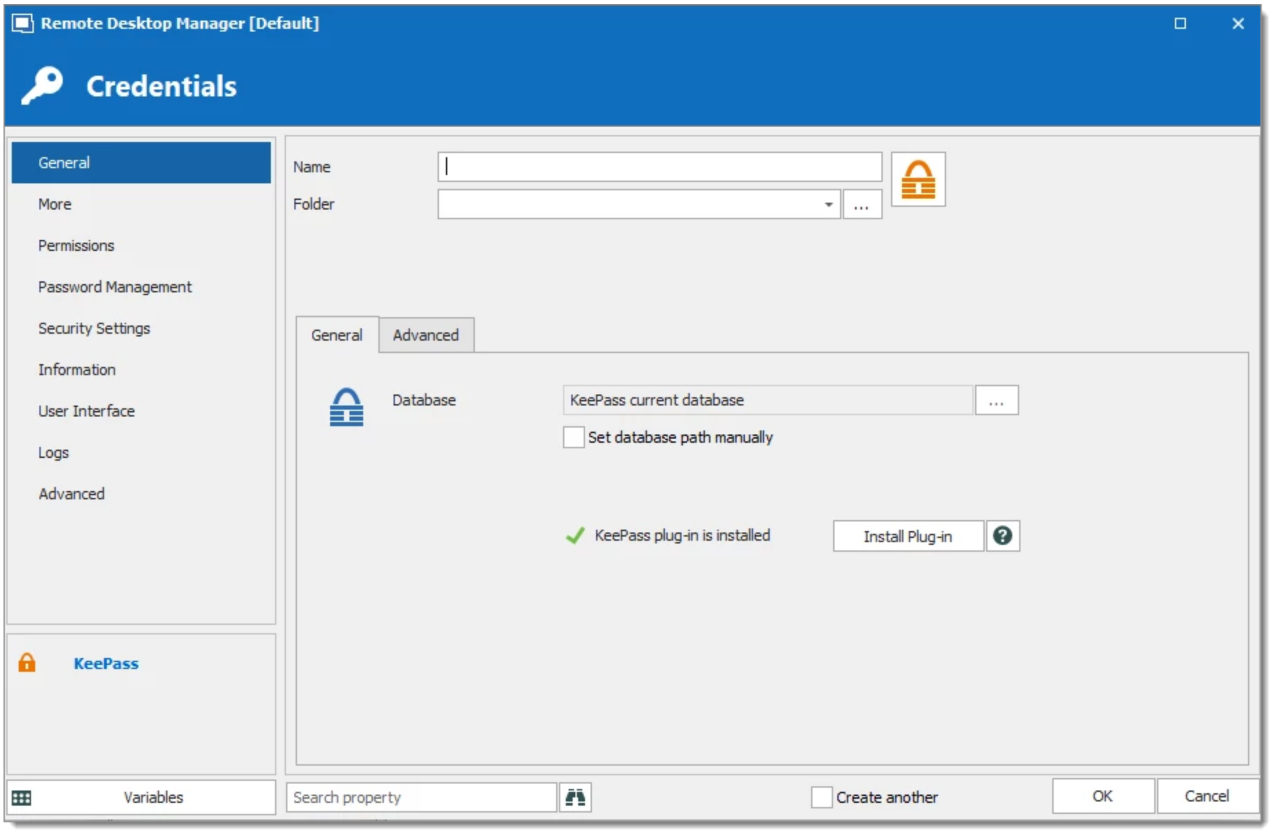
KeePass 1.X is not supported.

1. Due to the changes made in RDM with add-on, you will need to download the Keepass plugin manually using this link : https://remotedesktopmanager.com/download/Devolutions.RemoteDesktopManager.KeePassPlugin.2.1.2.0.zip.

2. When the download is finished, copy the .dll files in the Keepass installation folder (you can locate your KeePass installation folder with the help of the Keepass Help Center).

The KeePass application must be running and the database must be opened

3. In RDM create a KeePass entry. You can validate that the KeePass plug-in is now installed.



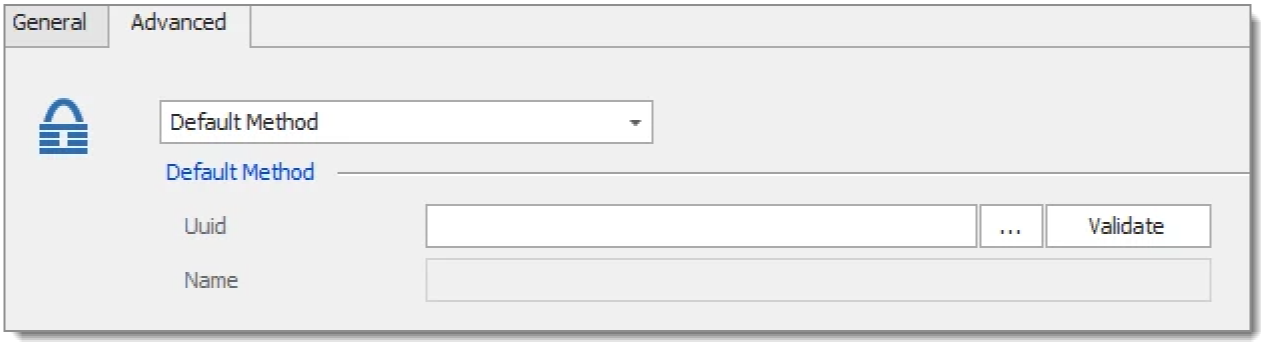
Database: KeePass current database

☐ Set database path manually

✓ KeePass plug-in is installed

Remote Desktop Manager will by default select the database; this option can be overridden by manually entering the path. RDM also can support linking to multiple KeePass databases simultaneously. Add all the paths separated by semicolons.

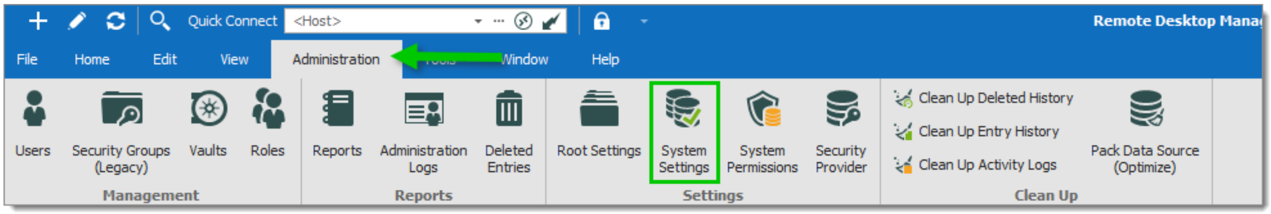
4. In the Advanced tab choose your preferred method. It is where you can enter your Universal Unique Identifier (Uuid) and the name of the entry in the database, or to always be prompt with a list.



13.7.10 How to Register Licenses in Older Version

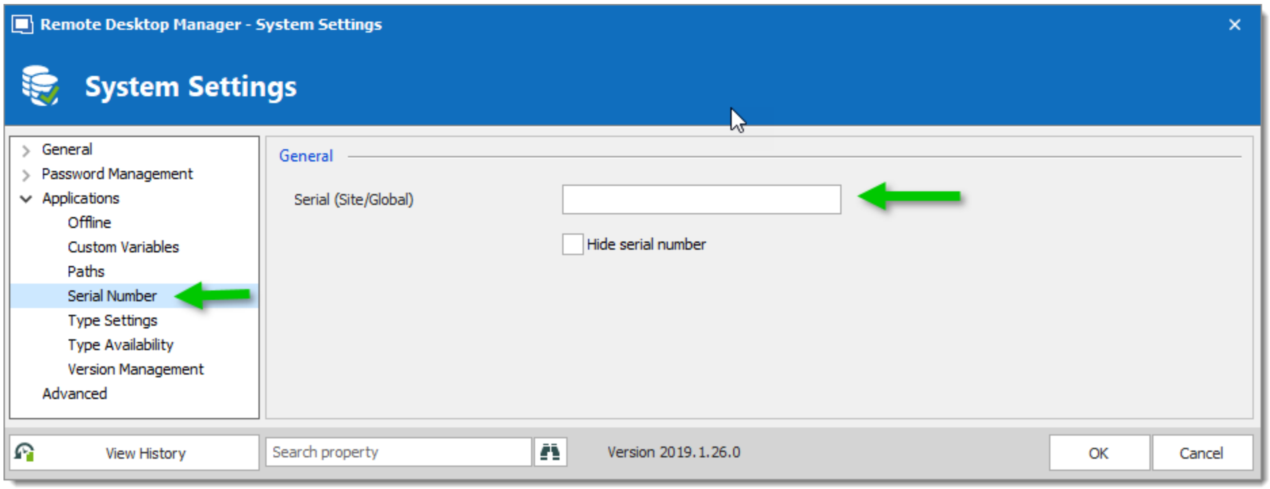
DESCRIPTION

To register the license serial of Remote Desktop Manager in the data source in a version prior to 2019.2.24, go to ***Administration - System Settings***.



Administration - System Settings

In the System Settings window, go in the ***Serial Number*** section. Enter the license serial and click ***OK***.



Serial (Site/Global)

□ Hide serial number

System Settings - Serial Number

13.7.11 How to Reinstall Remote Desktop Manager

DESCRIPTION

> ✓ Before reinstalling Remote Desktop Manager, a backup will be required. Please consult How-to Backup topic.

Refer to the Installation Overview topic for details on the installation of Remote Desktop Manager.

SETTINGS

After Remote Desktop Manager has been reinstalled on your computer, you need to copy your RemoteDesktopManager.cfg (that you had backed up) to the ***%LocalAppData%\Devolutions\RemoteDesktopManager folder.* This is the default path.** If you have not installed with the default settings, please consult Configuration File Location for instructions on locating your configuration folder.

DATA

If you have moved the file based data source to another relative path, you will have to edit the data source definitions to fix the paths.

13.7.12 How to Send an Error Report

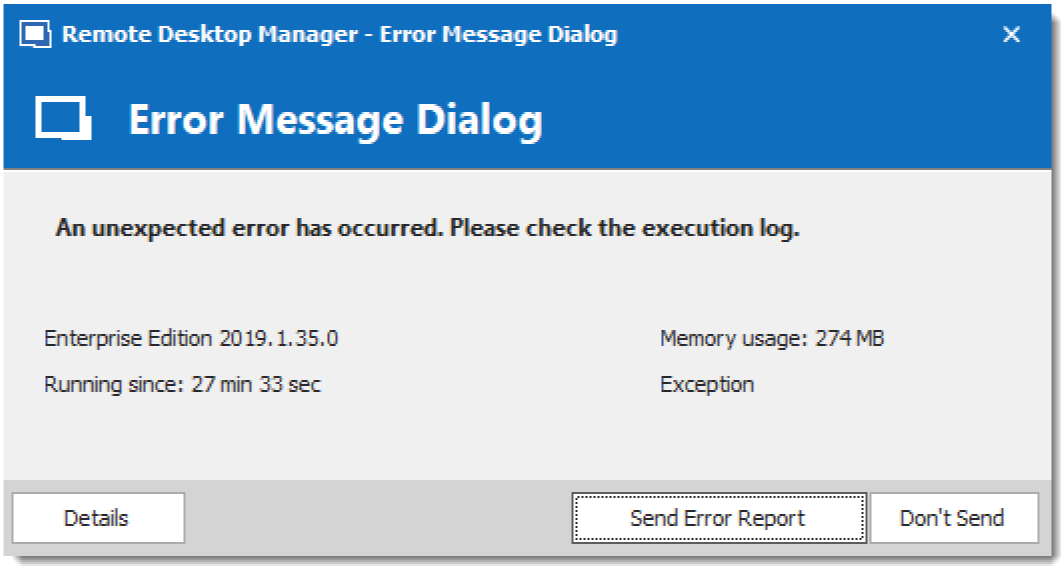
DESCRIPTION

When an application error occurs in Remote Desktop Manager, you can send the error report to the Devolutions' support team.

> The strength of Remote Desktop Manager comes in great part from its community of users and we depend on you to not only send in those reports, but to do it with as much information as possible. We often already have the solution, so please use your real email address.

WORKFLOW

1. An error dialog appears in Remote Desktop Manager.



An unexpected error has occurred. Please check the execution log.

Enterprise Edition 2019.1.35.0

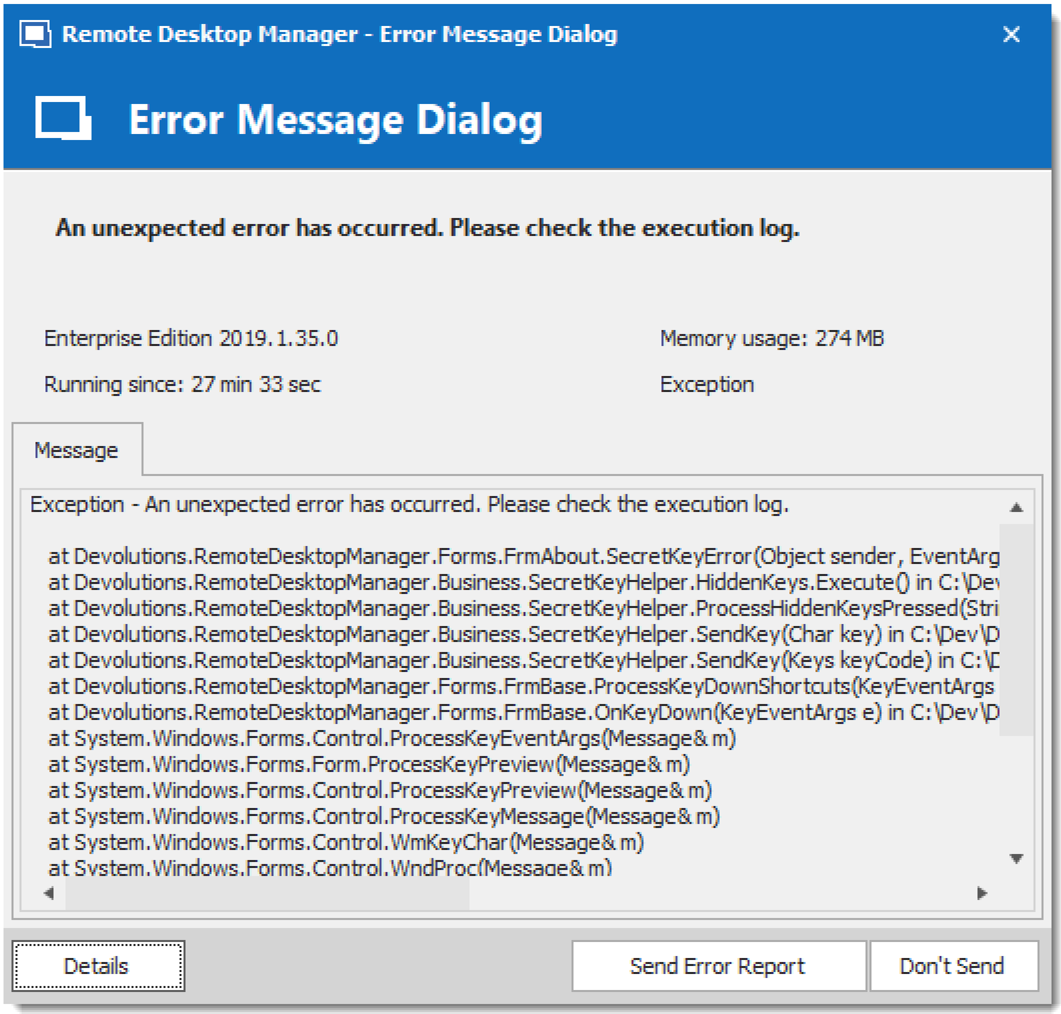
Running since: 27 min 33 sec

Memory usage: 274 MB

Exception

Error Message dialog

2. To see more information regarding the error click on **Details**.



An unexpected error has occurred. Please check the execution log.

Enterprise Edition 2019.1.35.0

Memory usage: 274 MB

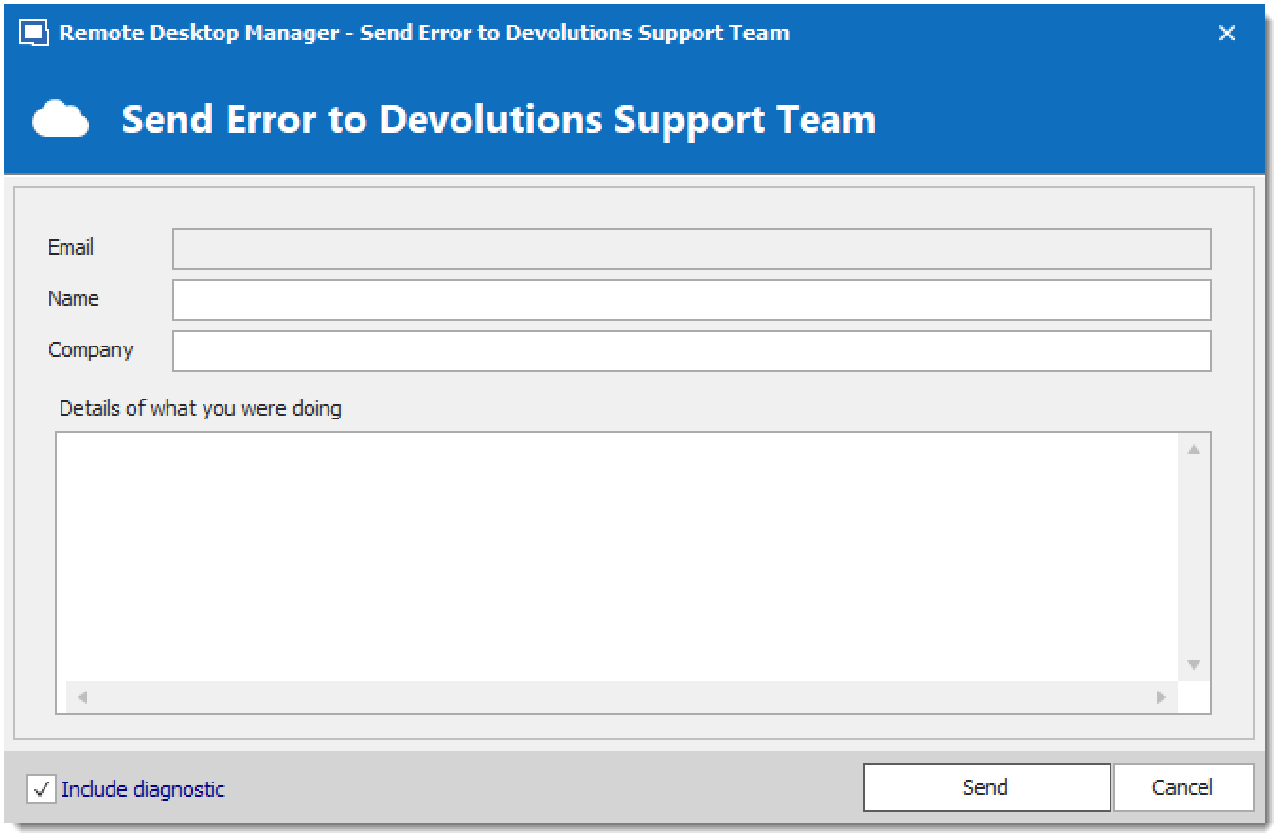
Running since: 27 min 33 sec

Exception

```
Exception - An unexpected error has occurred. Please check the execution log.

  at Devolutions.RemoteDesktopManager.Forms.FrmAbout.SecretKeyError(Object sender, EventArg
  at Devolutions.RemoteDesktopManager.Business.SecretKeyHelper.HiddenKeys.Execute() in C:\Dev
  at Devolutions.RemoteDesktopManager.Business.SecretKeyHelper.ProcessHiddenKeysPressed(Stri
  at Devolutions.RemoteDesktopManager.Business.SecretKeyHelper.SendKey(Char key) in C:\Dev\D
  at Devolutions.RemoteDesktopManager.Business.SecretKeyHelper.SendKey(Keys keyCode) in C:\D
  at Devolutions.RemoteDesktopManager.Forms.FrmBase.ProcessKeyDownShortcuts(KeyEventArgs
  at Devolutions.RemoteDesktopManager.Forms.FrmBase.OnKeyDown(KeyEventArgs e) in C:\Dev\D
  at System.Windows.Forms.Control.ProcessKeyEventArgs(Message& m)
  at System.Windows.Forms.Form.ProcessKeyPreview(Message& m)
  at System.Windows.Forms.Control.ProcessKeyPreview(Message& m)
  at System.Windows.Forms.Control.ProcessKeyMessage(Message& m)
  at System.Windows.Forms.Control.WmKeyChar(Message& m)
  at System.Windows.Forms.Control.WndProc(Message& m)
```

Details

3. To send in the report, press **Send Error Report**



Remote Desktop Manager - Send Error to Devolutions Support Team

Send Error to Devolutions Support Team

Email

Name

Company

Details of what you were doing

☑ Include diagnostic

Send Error Report

4. Fill in your information and add as many details as you can before pressing **Send** such as:

It's really important that you enter your email address, name and company name before you send the report, so that the Devolutions support team can contact you.

- The feature that you were using;
- The steps that you performed to get the error;
- Has this error occurred more than once;
- Are you the only one in your team to have the error; etc.

13.7.13 How to Send a File Securely

DESCRIPTION

The Support team, QA department or engineering department may request some file(s) for investigation on a specific scenario or to troubleshoot a certain issue.

SOLUTION

Devolutions has a secure way to transfer file(s) between a customer and us. We use ShareFile to transfer the data securely.

The file(s) can be sent to us securely via this link https://devolutions.sharefile.com/filedrop.

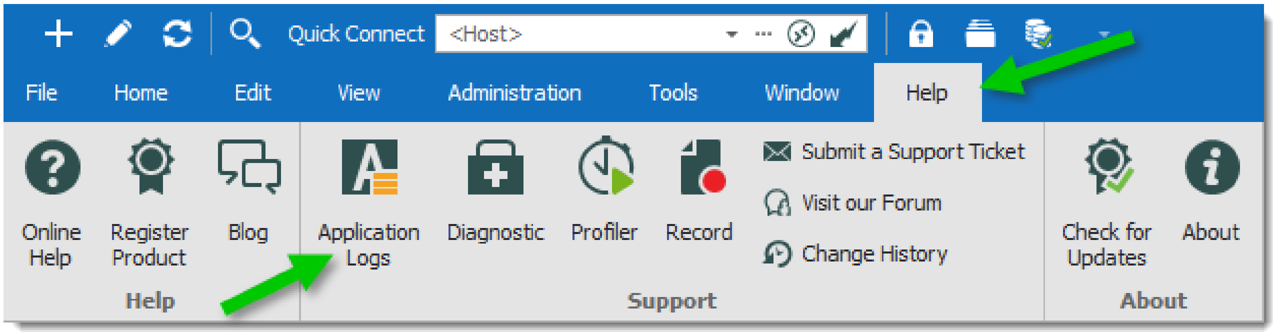
13.7.14 How to Send the Application Logs Report

DESCRIPTION

The Devolutions support team may ask for the application logs to help you in certain situation. Here is how to send it to the support team.

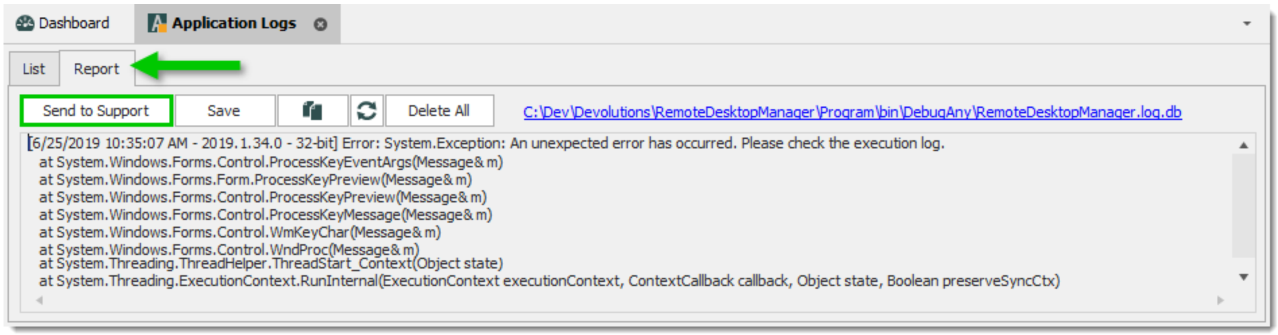
WORKFLOW

1. Click on ***Help – Application Logs.***



View Application Log

2. Select the **Report** tab. Then click on the **Send to Support** button.

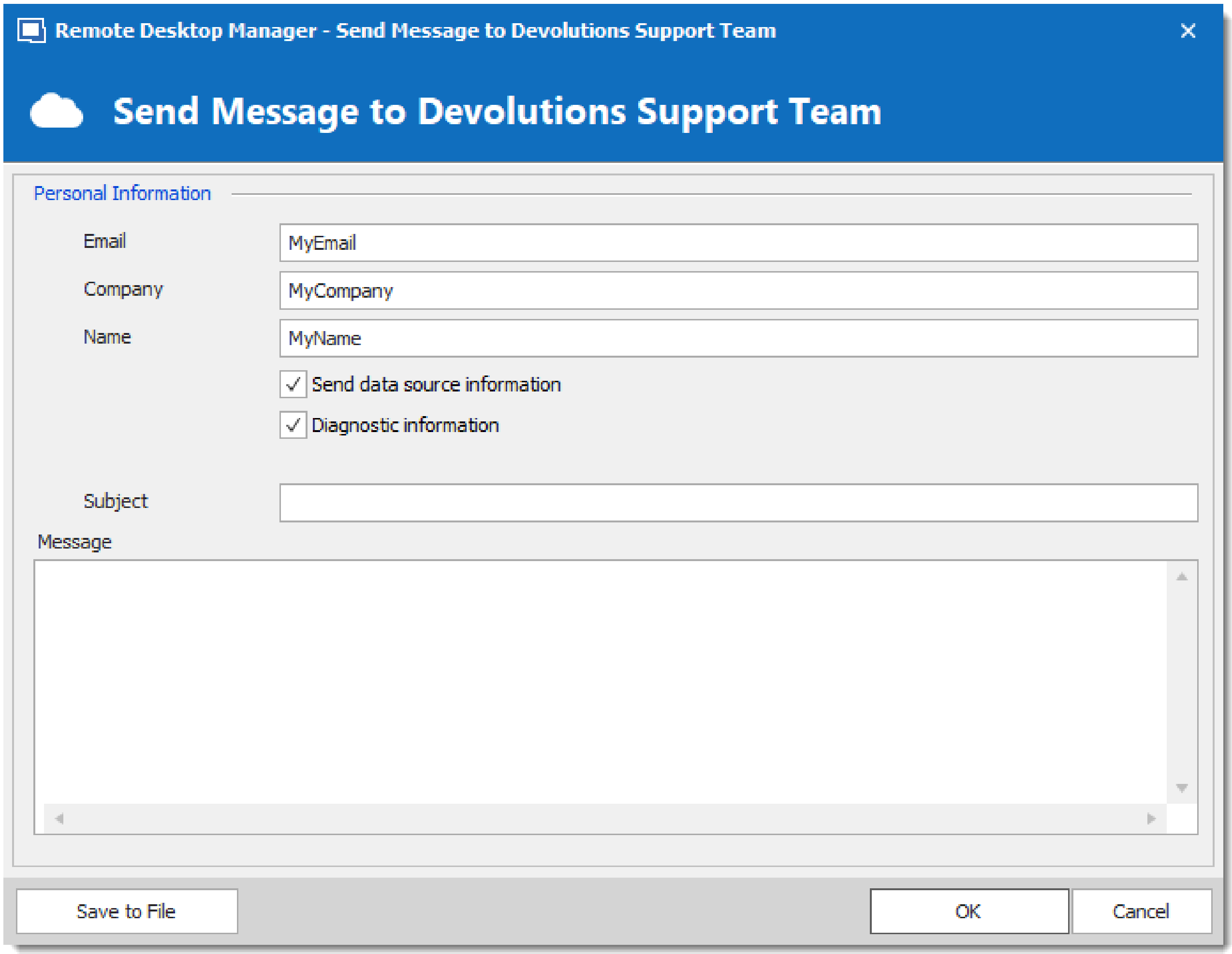


C:\Dev\Devolutions\RemoteDesktopManager\Program\bin\DebugAny\RemoteDesktopManager.log.db

```
[6/25/2019 10:35:07 AM - 2019.1.34.0 - 32-bit] Error: System.Exception: An unexpected error has occurred. Please check the execution log.
  at System.Windows.Forms.Control.ProcessKeyEventArgs(Message& m)
  at System.Windows.Forms.Form.ProcessKeyPreview(Message& m)
  at System.Windows.Forms.Control.ProcessKeyPreview(Message& m)
  at System.Windows.Forms.Control.ProcessKeyMessage(Message& m)
  at System.Windows.Forms.Control.WmKeyChar(Message& m)
  at System.Windows.Forms.Control.WndProc(Message& m)
  at System.Threading.ThreadHelper.ThreadStart_Context(Object state)
  at System.Threading.ExecutionContext.RunInternal(ExecutionContext executionContext, ContextCallback callback, Object state, Boolean preserveSyncCtx)
```

Report Tab

3. Fill the **Email**, **Company** and **Name** field with your information (your email address, your Company name and your name) and click on **OK** to send the report.


Remote Desktop Manager - Send Message to Devolutions Support Team
Send Message to Devolutions Support Team
Personal Information
Save to File
OK
Cancel

Email: MyEmail

Company: MyCompany

Name: MyName

☑ Send data source information

☑ Diagnostic information

Subject:

Message:

Send message to Support

13.7.15 How to Send your Configuration File

The Devolutions support team may ask for your configuration file to help you in certain situations. Here's how to send a clean configuration file to the support team.

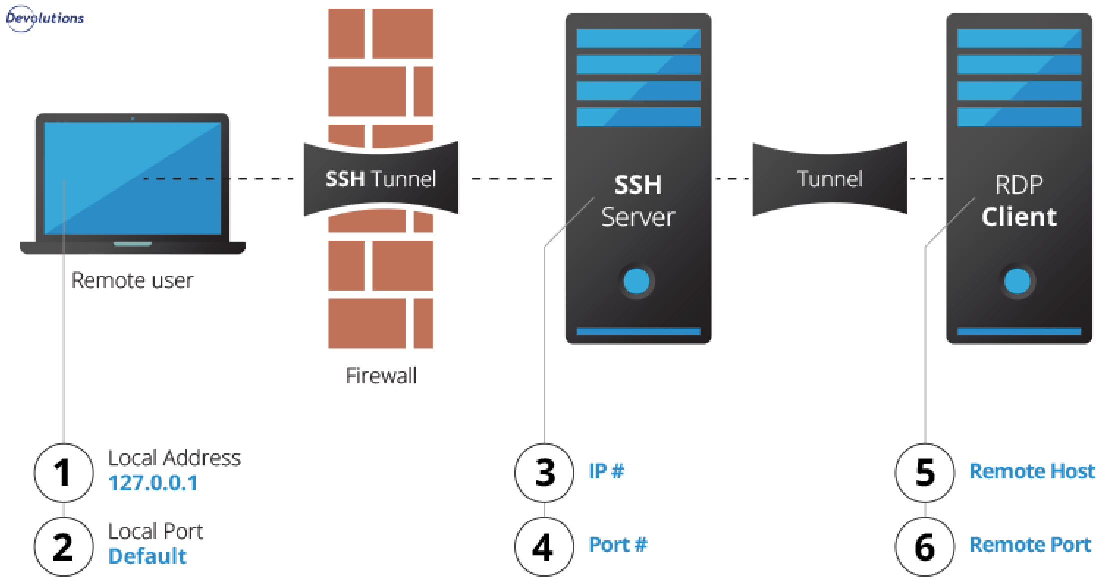
1. Go in ***File – Options*** and press the **Export Options** button.
2. Remove any sensitive information's and **save** the file on your computer. The file name will be RemoteDesktopManager.cfg.
3. In order for us to provide you a secure link to share your file, send an email to ticket@devolutions.net.

13.7.16 How to Setup a SSH Tunnel

DESCRIPTION

SSH tunneling is used to create an encrypted connection over an untrusted network. It consists of an encrypted tunnel created through an SSH protocol, providing secure connections for data transfer. The SSH Tunnel can be used to establish sort of a virtual private network (VPN) to access services across firewalls.

This is the procedure to establish a basic SSH Tunnel to reach a remote machine.



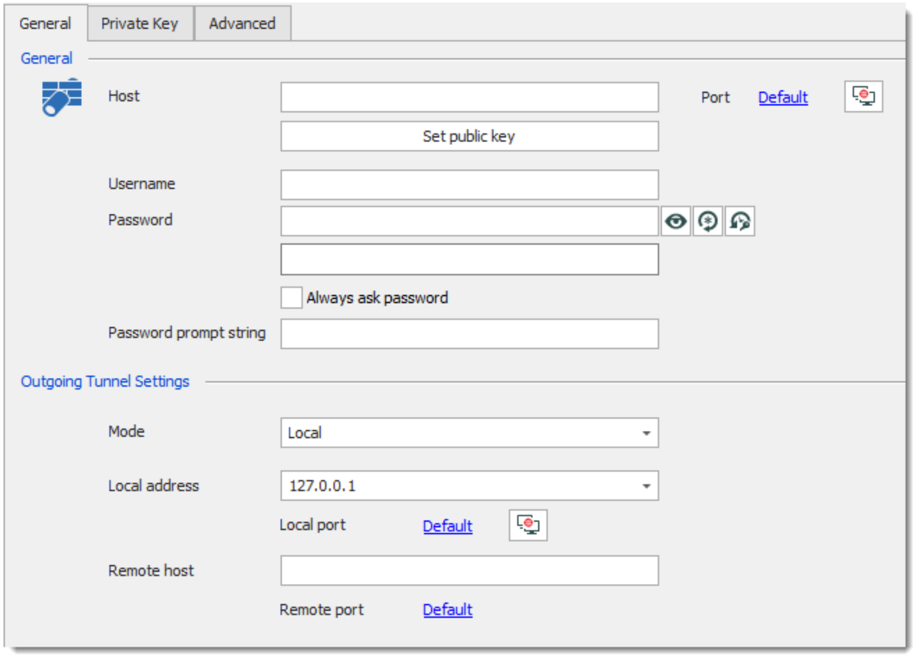
SSH Tunnel Diagram

CREATE AN SSH TUNNEL

To create an SSH tunnel, local connections through a specified port must be forwarded to an SSH server.

To create an SSH tunnel a given port of one machine needs to be forwarded to a port on the other machine which will be the other end of the tunnel. Once the SSH tunnel has been established, the user can connect to earlier specified port at first machine to access the network service.

1. Create an **SSH Tunnel** entry.



Mode: Local

Local address: 127.0.0.1

SSH Tunnel entry

Set up the properties as follows:

SSH SERVER SETTINGS

OPTION	DESCRIPTION
Host	Set the IP address of the SSH Server. (please refer to **1** in the Tunnel diagram)
Port	Set the port of the SSH Server. The default port is 22. (please refer to in the Tunnel diagram)
Set public key	Setup the public key
Username	Enter the SSH server username to connect.
Password	Enter the SSH server password to connect.

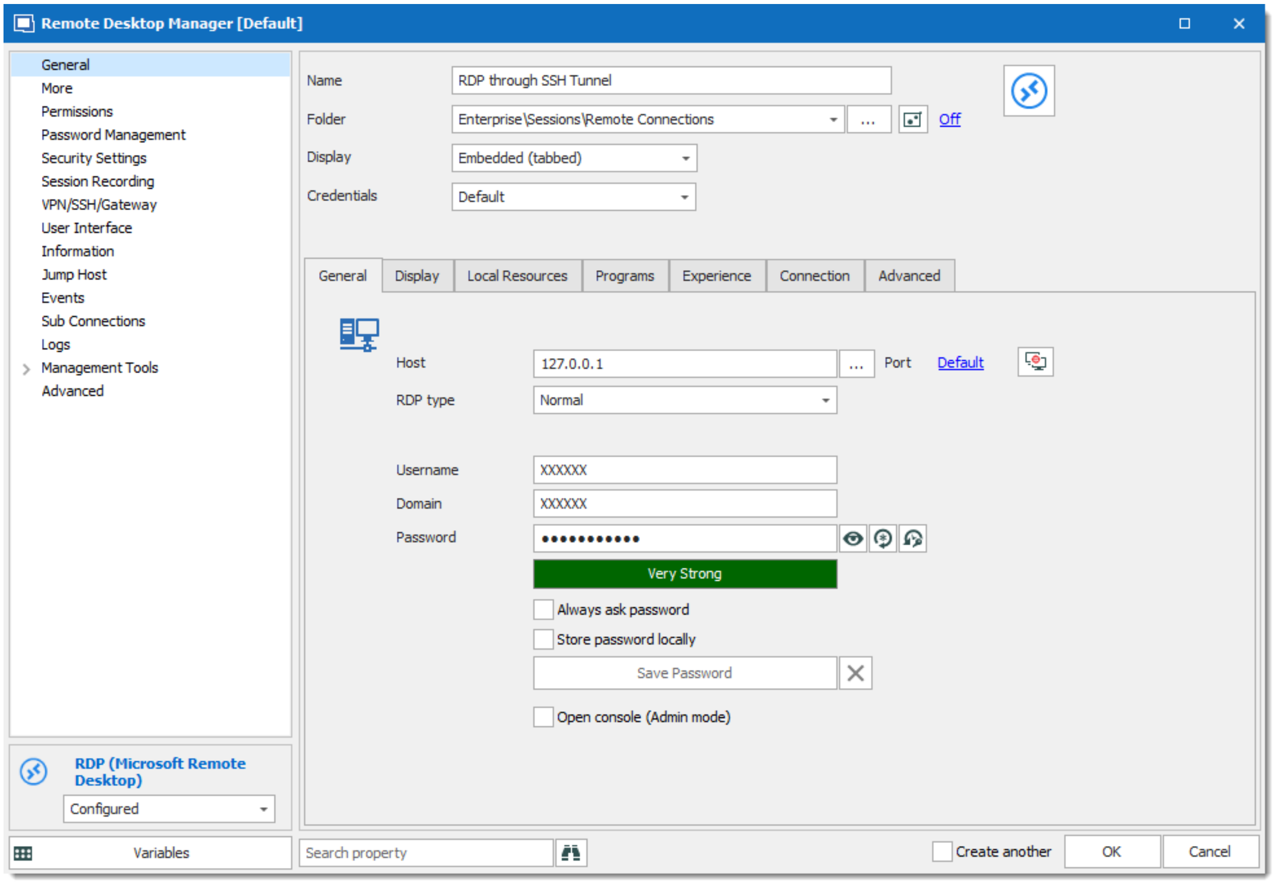
OUTGOING TUNNEL SETTINGS

OPTION	DESCRIPTION
Mode	Select between: **Local**, **Remote** or **Dynamic**.
Local address	The local address must be left to 127.0.0.1. (please refer to ① in the Tunnel diagram)
Local port	In most cases leave the local port to its default value 3390. (please refer to ② in the Tunnel diagram)
Remote host	Enter the host or IP address of your remote client. (please refer to ⑤ in the Tunnel diagram)
Remote port	Set the final port that you must reach, in most cases leave it to it's default value 3389. (please refer to ⑥ in the Tunnel diagram)

At this time, you can launch your entry to see if indeed the tunnel has been opened successfully. Close the session.

CREATE YOUR REMOTE SESSION

Create an RDP session.



Name: RDP through SSH Tunnel

Folder: Enterprise\Sessions\Remote Connections

Display: Embedded (tabbed)

Credentials: Default

Host: 127.0.0.1

Port: Default

RDP type: Normal

Username: XXXXXX

Domain: XXXXXX

Password: ●●●●●●●●●●●

Very Strong

□ Always ask password

□ Store password locally

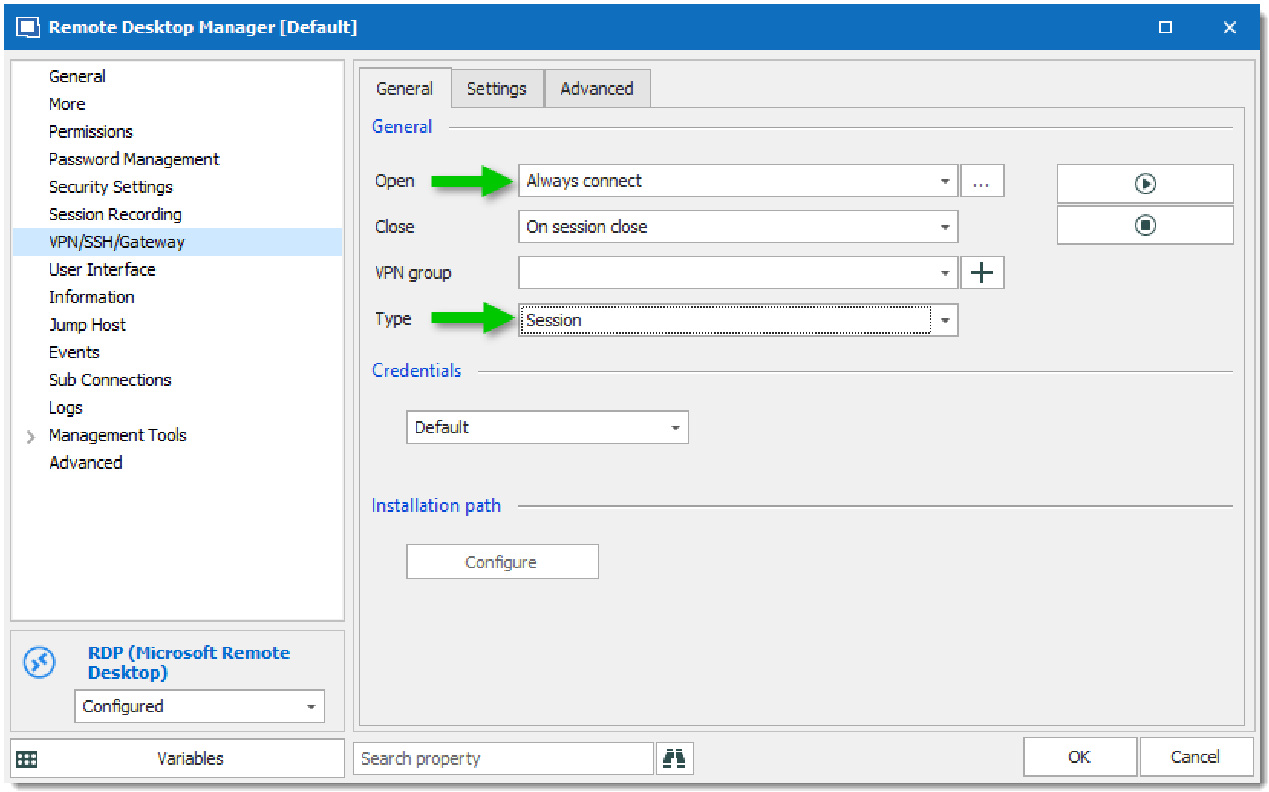
□ Open console (Admin mode)

Configured

RDP entry

OPTION	DESCRIPTION
Host	Enter your **Local address** which is 127.0.0.1. (please refer to ① in the Tunnel diagram)
Port	Enter your **Local port** which is 3390. (please refer to ② in the Tunnel diagram)
RDP type	Leave the RDP type to Normal.
Username	Enter the username of your Remote Host.
Domain	Enter the domain of your Remote Host.
Password	Enter the password of your Remote Host.

In the **VPN/SSH/Gateway** side menu of your RDP session select **Always connect** in the **Open** field and **Session** in the **Type** field.



Open: Always connect

Close: On session close

VPN group:

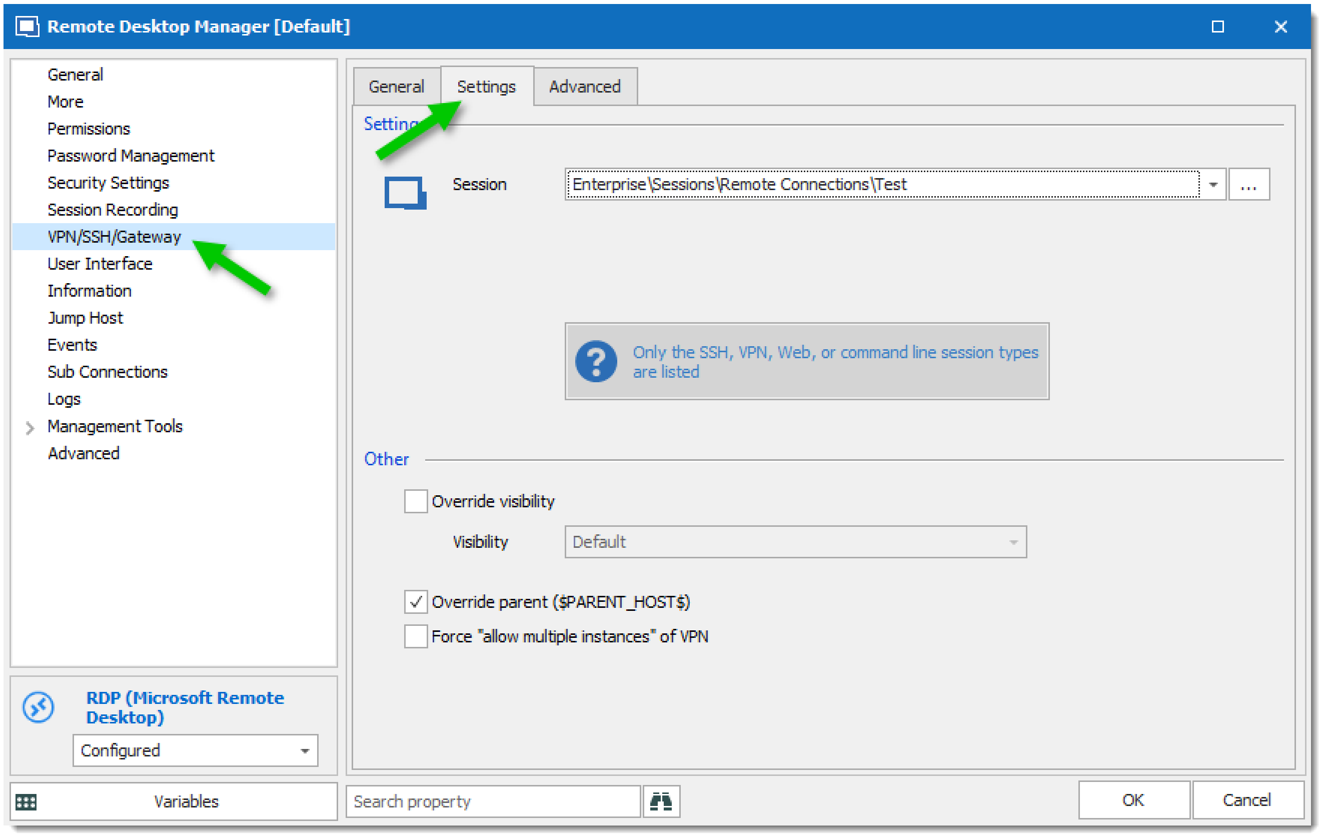
Type: Session

Credentials: Default

RDP (Microsoft Remote Desktop): Configured

RDP session - VPN side menu

In the ***VPN – Settings*** tab, click on the drop down list next to **Session** and select your **SSH Tunnel** entry previously created.



Session: Enterprise\Sessions\Remote Connections\Test

Only the SSH, VPN, Web, or command line session types are listed

□ Override visibility

Visibility: Default

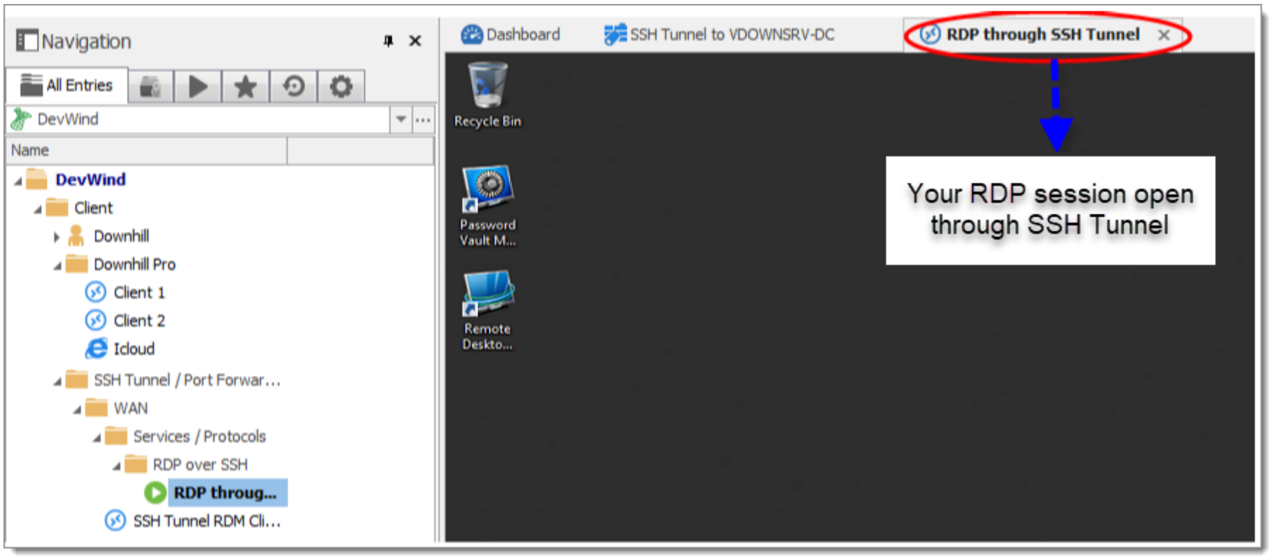
☑ Override parent ($PARENT_HOST$)

□ Force "allow multiple instances" of VPN

RDP session - VPN - Settings

You now have configured your session with the following rule: for each connection that comes on interface 127.0.0.1 and port 3390, forward that connection to the SSH server and request the server to forward that connection to your Remote host.

You can now launch your RDP session, your SSH Tunnel will open, establish the connection and then launch and open your RDP session.



RDP session open through an SSH Tunnel

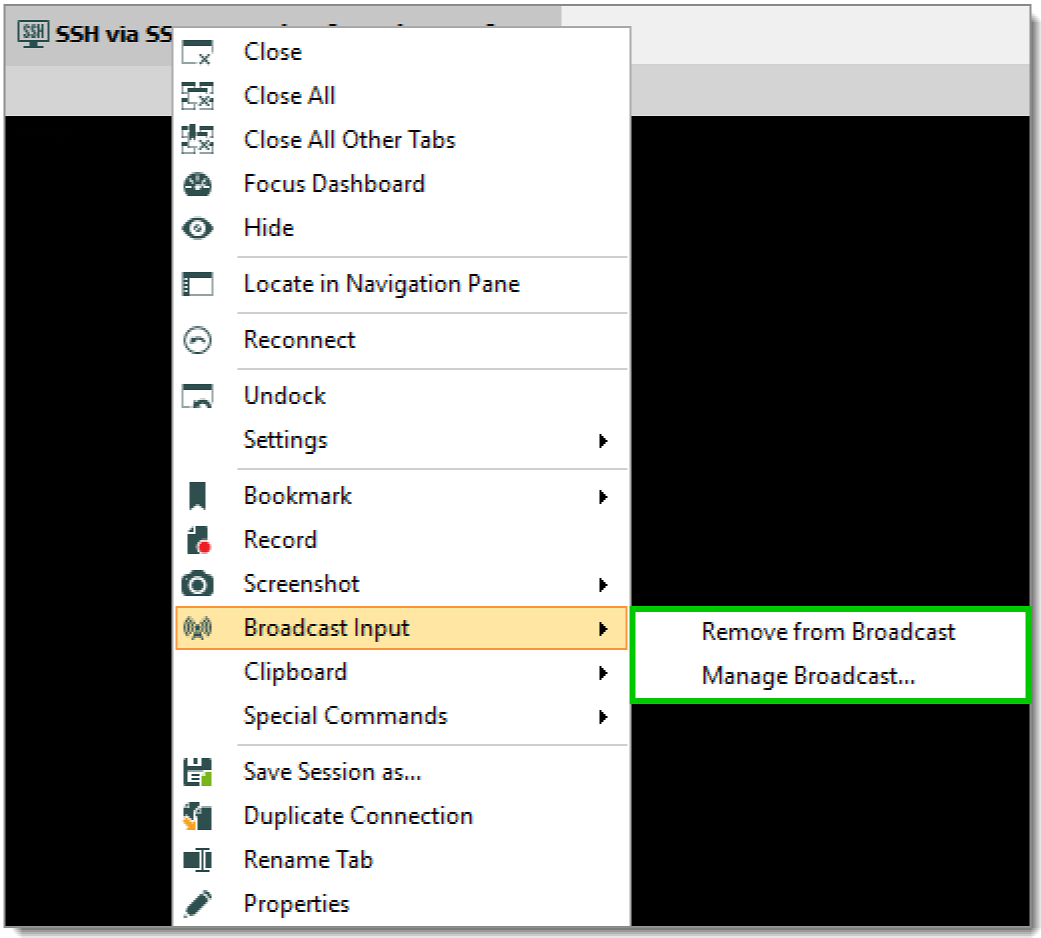
13.7.16.1 How to Broadcast Action in SSH

DESCRIPTION

In Remote Desktop Manager you can manage two or more active SSH session with Broadcast actions.

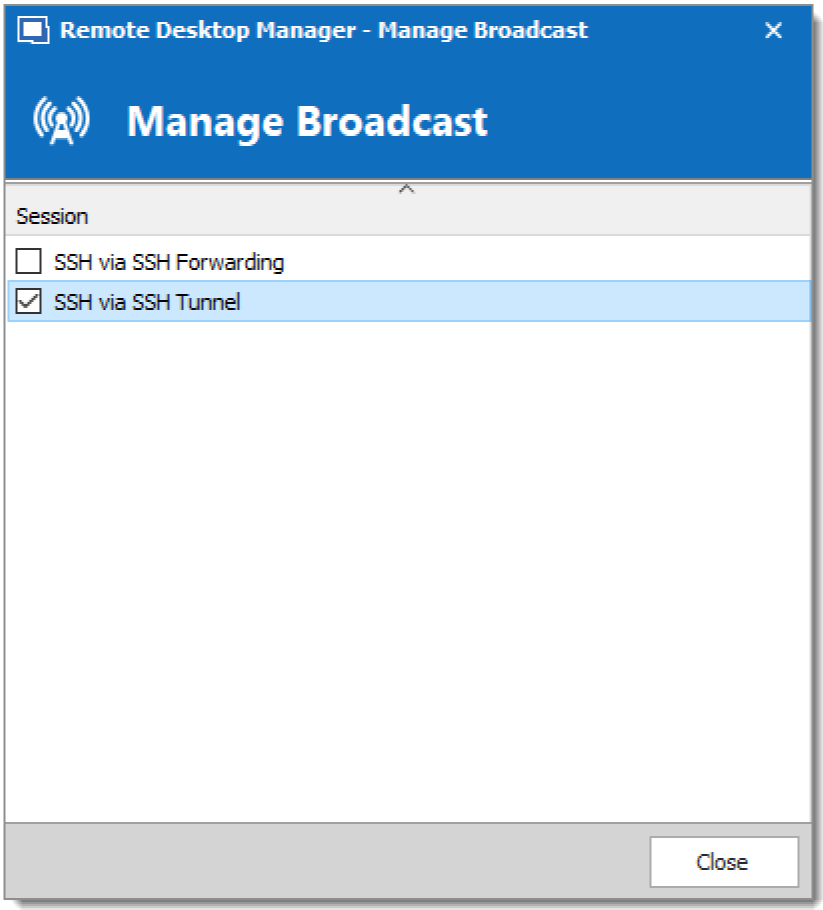
> An upgraded database, by an administrator, might be required.

1. Open at least two SSH sessions.
2. Right-click on an SSH tab, click ***Broadcast Input***, then ***Manage Broadcast***.



Broadcast Input Menu

3. Select all the required session in the list and close the window.



Session

- □ SSH via SSH Forwarding
- ☑ SSH via SSH Tunnel

Manage Broadcast List

You can now broadcast commands on all the sessions at the same time.

To remove a session from the broadcast, you can either bring the ***Manage Broadcast*** window to uncheck the session, or on the specific SSH tab, right-click to bring the menu, click ***Broadcast Input***, then ***Remove from Broadcast***.

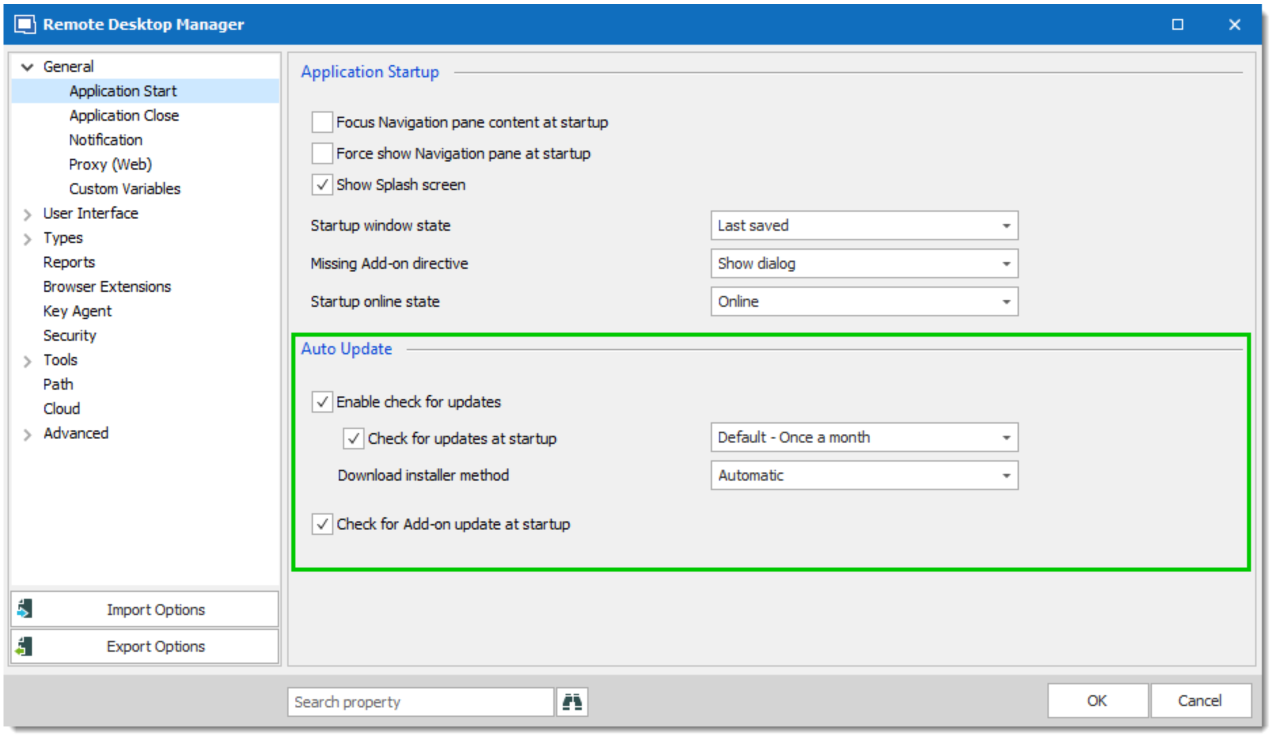
13.7.17 How to Setup Remote Desktop Manager to Receive New Update

DESCRIPTION

Remote Desktop Manager frequently offers new updates to release new features, improvements, as well as fixes. If you always want to use the latest version of Remote Desktop Manager, follow the steps below.

SETTINGS

1. In the application, check both options **“Check for update at startup”** and **“All updates including beta”** in ***File – Options – General – Application Start***.



Application Startup

□ Focus Navigation pane content at startup

□ Force show Navigation pane at startup

☑ Show Splash screen

Startup window state: Last saved

Missing Add-on directive: Show dialog

Startup online state: Online

Auto Update

☑ Enable check for updates

☑ Check for updates at startup: Default - Once a month

Download installer method: Automatic

☑ Check for Add-on update at startup

General - Application Start - Auto Update

2. Subscribe to the Announcements Forums to be aware of all the latest announcements on our products.

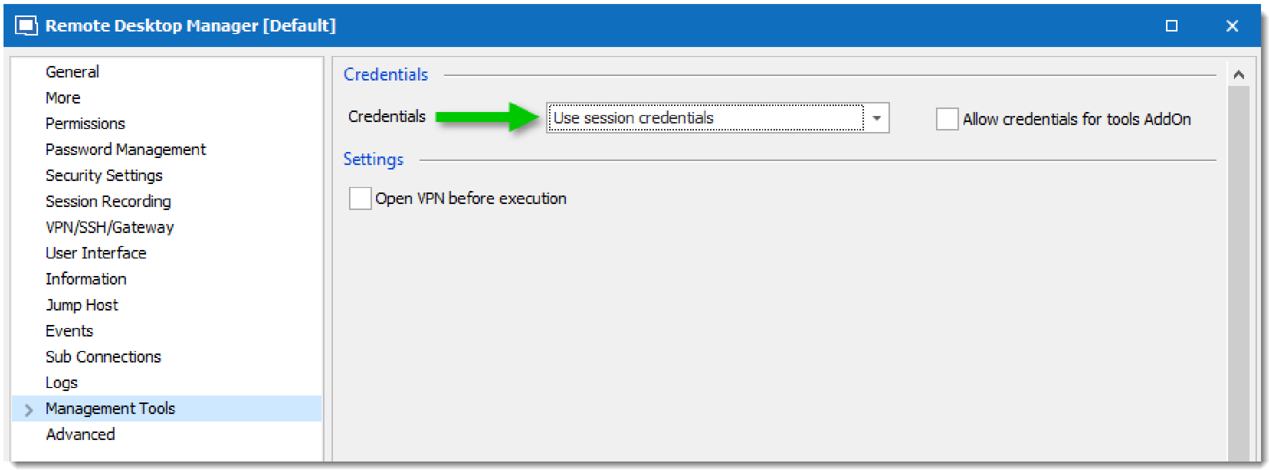
13.7.18 How to Setup the Usage of the Session Credentials to Launch a Tool

DESCRIPTION

To run some tools, specific credentials needs to be sent through the remote session. By default, the credential used by a tool are the one from the Windows session. Sometime with those credentials you will not have enough privileges to run the tool. This is why you need to use the credential of the session instead.

SETTINGS

You can specify the usage of the session credentials for a session in ***Management Tools – Credentials – Use session credentials***.



Credentials

Credentials: Use session credentials

□ Allow credentials for tools AddOn

Settings

□ Open VPN before execution

Use session credentials

We also recommend that you configure your Default Settings of the entry type that need this setting by default.

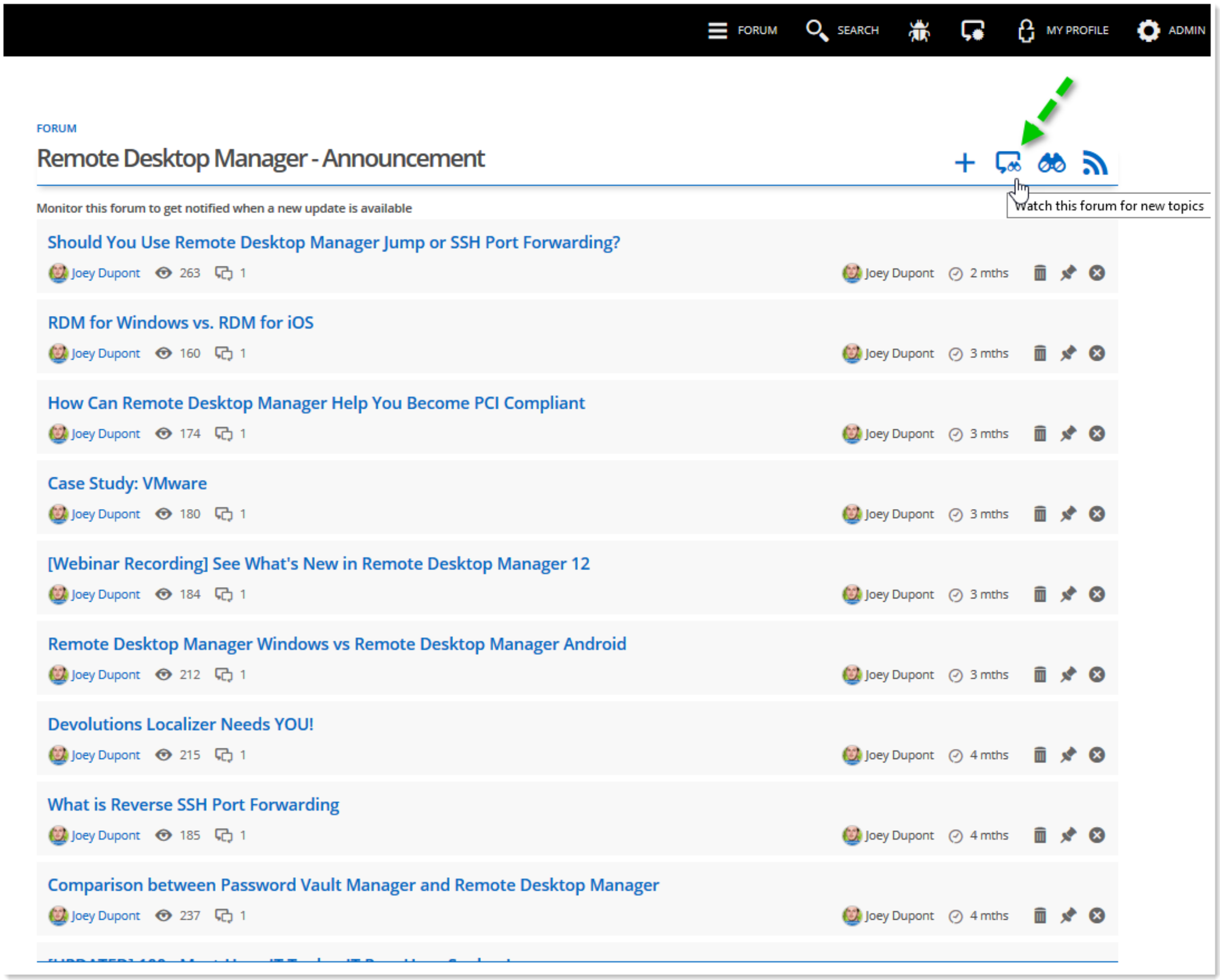
13.7.19 How to Subscribe to the Announcements Forums

DESCRIPTION

You can be notified when new product updates are available by subscribing to announcements on our forum at https://forum.devolutions.net/

If you wish to subscribe to the announcements for Remote Desktop Manager, click on the following link : https://forum.devolutions.net/forum20-remote-desktop-manager--announcements.aspx

After, click on **Watch this forum for new topics**.



FORUM

Remote Desktop Manager - Announcement

Watch this forum for new topics

Monitor this forum to get notified when a new update is available

Should You Use Remote Desktop Manager Jump or SSH Port Forwarding?	Joey Dupont	263	1	Joey Dupont	2 mths
RDM for Windows vs. RDM for iOS	Joey Dupont	160	1	Joey Dupont	3 mths
How Can Remote Desktop Manager Help You Become PCI Compliant	Joey Dupont	174	1	Joey Dupont	3 mths
Case Study: VMware	Joey Dupont	180	1	Joey Dupont	3 mths
[Webinar Recording] See What's New in Remote Desktop Manager 12	Joey Dupont	184	1	Joey Dupont	3 mths
Remote Desktop Manager Windows vs Remote Desktop Manager Android	Joey Dupont	212	1	Joey Dupont	3 mths
Devolutions Localizer Needs YOU!	Joey Dupont	215	1	Joey Dupont	4 mths
What is Reverse SSH Port Forwarding	Joey Dupont	185	1	Joey Dupont	4 mths
Comparison between Password Vault Manager and Remote Desktop Manager	Joey Dupont	237	1	Joey Dupont	4 mths

Devolutions Forum

The procedure is the same for all forums, below are the Announcement forums that exist at this time for our various products.

- Remote Desktop Manager MAC:

https://forum.devolutions.net/forum43-remote-desktop-manager-mac--announcements.aspx

- Devolutions Account:

https://forum.devolutions.net/forum31-remote-desktop-manager-online--announcements.aspx

- Devolutions Password Server:

https://forum.devolutions.net/forum32-remote-desktop-manager-server--announcements.aspx

- Wayk Now:

https://forum.devolutions.net/forum68-wayk-now--announcement.aspx

13.7.20 How to Use a Typing Macro to Perform Authentication

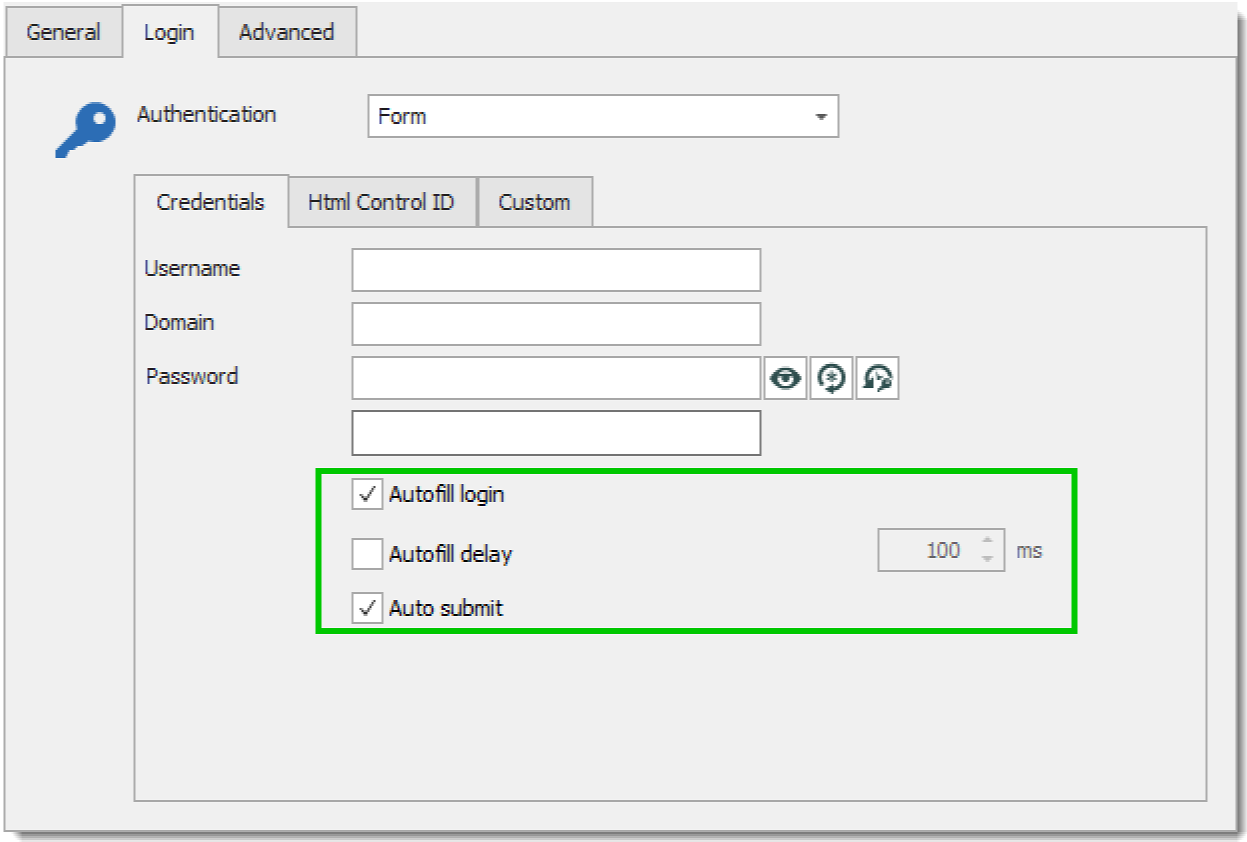
DESCRIPTION

Sometimes it can be difficult to perform authentication on certain websites. With Remote Desktop Manager, it's possible to send the credential through a typing macro using variables.

> This feature simply uses a basic mechanism offered by the .net framework of sending keystrokes, much like if a person was using the keyboard. It sends the keystrokes to the operating system itself, they will be handled by WHATEVER application has the focus at the time that the message is received. If the focus is switched to another window, the credentials will most likely be revealed by being typed in a text area.
>
> DO NOT USE THIS FEATURE in an environment where passwords MUST be hidden from the user.

SETTINGS

1. Edit your **Web Browser (http/https)** entry, click on the **Login** tab, and unchecked the **Auto submit** and **Auto fill login** option.



Authentication: Form

Username:

Domain:

Password:

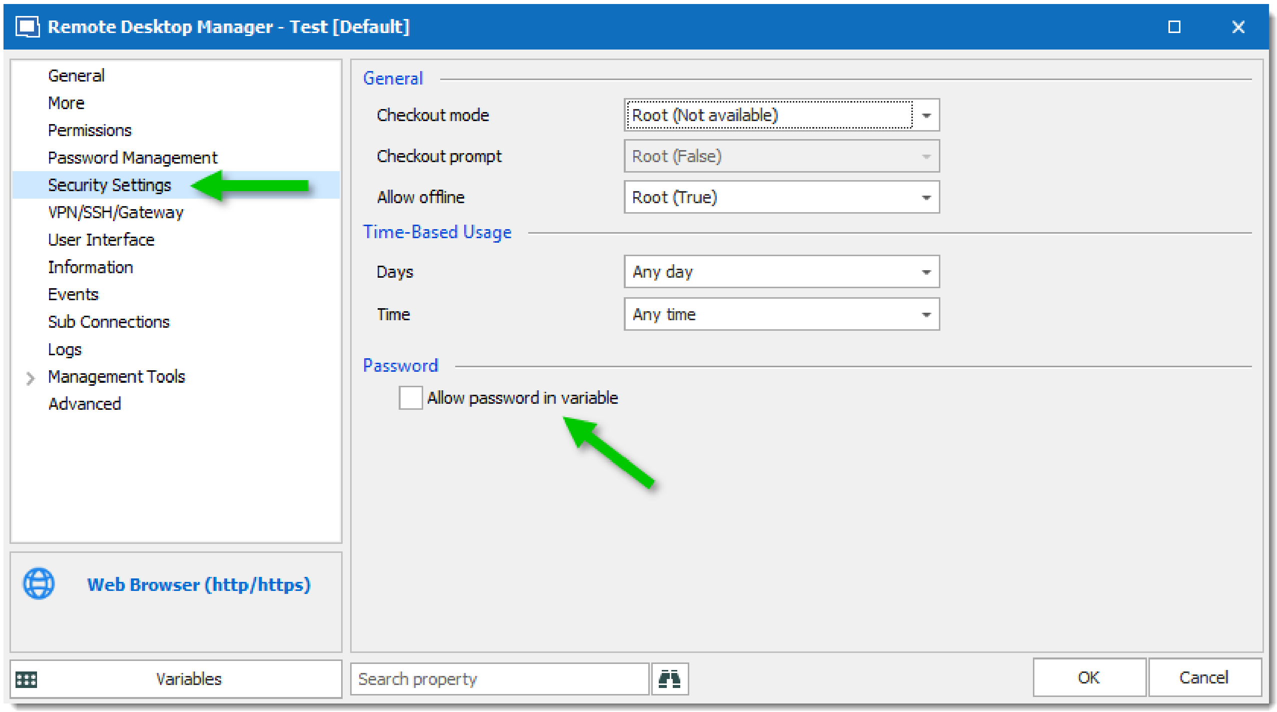
☑ Autofill login

□ Autofill delay 100 ms

☑ Auto submit

Autofill

2. In the **Security Settings** section, check the **Allow password in variable** option. This option need to be checked so that the typing macro can send the password to the remote session.



General

Checkout mode: Root (Not available)

Checkout prompt: Root (False)

Allow offline: Root (True)

Time-Based Usage

Days: Any day

Time: Any time

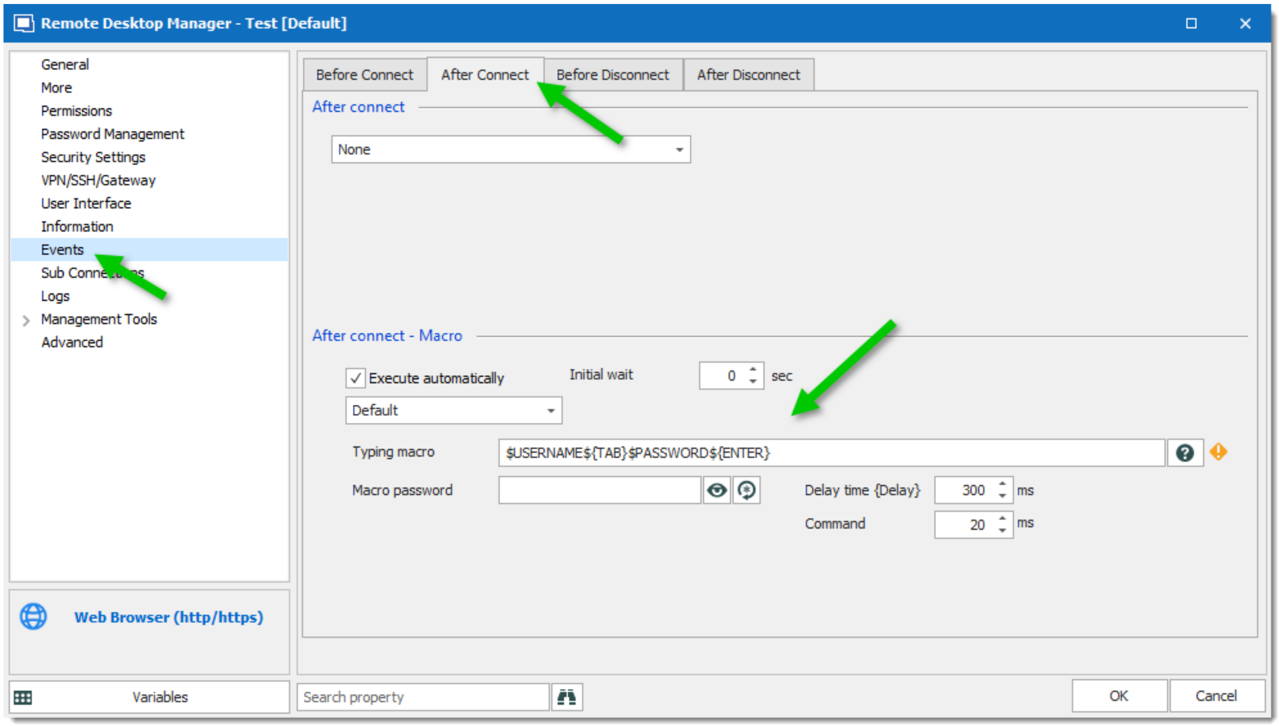
Password

☐ Allow password in variable

Allow password in variable

Using an Advanced Data Sources, the option **Allow password in macro (send keys)** in Administration - Data Source Settings (System Settings) - Password Management also needs to be enabled.

3. In the **Events** section, click on the **After Connect** tab and add the following macro in the **Typing Macro** section: $USERNAME${TAB}$PASSWORD${ENTER}. You may have to adjust the **Initial wait** to leave time for the page to load.



After connect

None

After connect - Macro

☑ Execute automatically

Initial wait 0 sec

Default

Typing macro $USERNAME${TAB}$PASSWORD${ENTER}

Macro password

Delay time {Delay} 300 ms

Command 20 ms

Typing macro

Make sure that the cursor is in the appropriate field prior to the macro execution so that the username and password can be sent properly to the website.

13.7.21 How to use the Theme system

DESCRIPTION

The "Theme system" of Remote Desktop Manager is still in its infancy and will evolve in future releases. You can override most images used by Remote Desktop Manager simply by providing an image in the Theme folder, the only requirement is that the file uses a specific name. Most images come in pair, a small one and a large one. You must override both in order to be consistent.

FOLDER LOCATION

The **Theme** folder can be found in your local configuration folder, under the **Images** folder.

IMAGE FILE SPECIFICATIONS

TRAY ICON

It must be a standard ***.ico*** file containing at least a 16*16 image. The name must be **Trayicon.ico**.

SMALL IMAGES

Png file, 16*16 pixels.

LARGE IMAGES

Png file, 32*32 pixels.

IMAGE FILE NAMES

The file name is standardized as: {EntryType}{Size}.png

For instance for the Folder type, the image names are: ***GroupFolderLarge.png*** and ***GroupFolderSmall.png***. Another example is for RDP sessions, their name is RDPConfigured, resulting in ***SessionRDPConfiguredLarge.png*** and ***SessionRDPConfiguredSmall.png.***

Please consult Image List to see a list of most images.

13.7.21.1 Image List

DESCRIPTION

Here is a partial list of images that are possible to override using the theme folder.

IMAGES

Trayicon.ico

2XClientLarge.png

2XClientSmall.png

AmmyyAdminLarge.png

AmmyyAdminSmall.png

AnydeskLarge.png

AnydeskSmall.png

AnyplaceControlLarge.png

AnyplaceControlSmall.png

AwrcProLarge.png

AwrcProSmall.png

AxelViewerLarge.png

AxelViewerSmall.png

AzureStorageExplorerLarge.png

AzureStorageExplorerSmall.png

BarracudaNgFirewallLarge.png

BarracudaNgFirewallSmall.png

BitviseSshClientLarge.png

BitviseSshClientSmall.png

BomgarRepresentativeConsoleLarge.png

BomgarRepresentativeConsoleSmall.png

CiscoAsdmLarge.png

CiscoAsdmSmall.png

CitrixNetscalerLarge.png

CitrixNetscalerSmall.png

ContactCompanyLarge.png

CredentialKeePassLarge.png

CredentialKeePassSmall.png

CredentialLastPassLarge.png

CredentialLastPassSmall.png

CredentialOnePasswordLarge.png

CredentialOnePasswordSmall.png

CredentialPMProLarge.png

CredentialPMProSmall.png

CredentialPasswordBoxLarge.png

CredentialPasswordBoxSmall.png

CredentialPasswordSafeLarge.png

CredentialPasswordSafeSmall.png

CredentialPasswordVaultManagerLarge.png

CredentialPasswordVaultManagerSmall.png

CredentialPasswordstateLarge.png

CredentialPasswordstateSmall.png

CredentialPleasantPasswordServerLarge.png

CredentialPleasantPasswordServerSmall.png

CredentialPrivateKeyLarge.png

CredentialPrivateKeySmall.png

CredentialSecretServerLarge.png

CredentialSecretServerSmall.png

CredentialWindowsVaultLarge.png

CredentialWindowsVaultsmall.png

DataEntryAlarmLarge.png

DbVisualizerLarge.png

DbVisualizerSmall.png

DocumentCertificateLarge.png

DocumentCertificateSmall.png

DocumentDefaultLarge.png

DocumentDefaultSmall.png

DocumentExcelLarge.png

DocumentExcelSmall.png

DocumentImageLarge.png

DocumentImageSmall.png

DocumentOneNoteLarge.png

DocumentOneNoteSmall.png

DocumentPDFLarge.png

DocumentPDFSmall.png

DocumentPhoneBookLarge.png

DocumentPhoneBookSmall.png

DocumentPowerPointLarge.png

DocumentPowerPointSmall.png

DocumentTextLarge.png

DocumentTextSmall.png

DocumentVisioLarge.png

DocumentVisioSmall.png

DocumentWordLarge.png

DocumentWordSmall.png

EricomBlazeClientLarge.png

GroupServerLarge.png

GroupServerSmall.png

GroupSiteLarge.png

GroupSiteSmall.png

GroupSoftwareLarge.png

GroupSoftwareSmall.png

GroupWorkstationLarge.png

GroupWorkstationSmall.png

HeidisqlLarge.png

HeidisqlSmall.png

HpIntegratedLightsOutLarge.png

HpIntegratedLightsOutSmall.png

IbmPersonalCommunicationsLarge.png

IbmPersonalCommunicationsSmall.png

IslLightDeskLarge.png

IslLightDeskSmall.png

JavaWebStartLarge.png

JavaWebStartSmall.png

MacroScriptAppleScriptLarge.png

MacroScriptAppleScriptSmall.png

MacroScriptAutoHotKeyLarge.png

MacroScriptAutoHotKeySmall.png

MacroScriptAutoITLarge.png

MacroScriptAutoITSmall.png

MacroScriptCommandLineLarge.png

MacroScriptCommandLineSmall.png

MacroScriptDatabaseQueryLarge.png

MacroScriptDatabaseQuerySmall.png

MacroScriptJitBitLarge.png

MacroScriptJitBitSmall.png

MacroScriptMacroLarge.png

MacroScriptMacroSmall.png

MacroScriptPSExecLarge.png

MacroScriptPSExecSmall.png

MacroScriptPowerShellLarge.png

MacroScriptPowerShellLocalLarge.png

MacroScriptPowerShellLocalSmall.png

MacroScriptPowerShellSmall.png

MacroScriptTemplateLarge.png

MacroScriptTemplateSmall.png

MacroScriptVBScriptLarge.png

MacroScriptVBScriptSmall.png

MacroScriptWASPPowerShellLarge.png

MacroScriptWASPPowerShellSmall.png

MacroScriptWMILarge.png

MacroScriptWMISmall.png

MobaxtermLarge.png

MobaxtermSmall.png

MysqlGuiToolsLarge.png

MysqlGuiToolsSmall.png

MysqlworkbenchLarge.png

MysqlworkbenchSmall.png

NavicatPremiumLarge.png

NavicatPremiumSmall.png

NetopGuestLarge.png

NetopGuestSmall.png

NetsupportManagerLarge.png

NetsupportManagerSmall.png

NomachineLarge.png

NomachineSmall.png

NxClientLarge.png

NxClientSmall.png

OfficeWord,ExcelAndPowerPointLarge.png

OfficeWord,ExcelAndPowerPointSmall.png

PdfLarge.png

PdfSmall.png

PenguinetSshClientLarge.png

PenguinetSshClientSmall.png

PgadminIiiLarge.png

PgadminIiiSmall.png

PowertermProLarge.png

PowertermProSmall.png

ProxyNetworks-ProxyMasterLarge.png

ProxyNetworks-ProxyMasterSmall.png

RemoteUtilities-ViewerLarge.png

SessionAzureLarge.png

SessionAzureSmall.png

SessionAzureTableStorageLarge.png

SessionAzureTableStorageSmall.png

SessionCitrixWebLarge.png

SessionCitrixWebSmall.png

SessionCommandLineLarge.png

SessionCommandLineSmall.png

SessionComputerLarge.png

SessionComputerSmall.png

SessionContactLarge.png

SessionContactSmall.png

SessionCredentialLarge.png

SessionCredentialSmall.png

SessionDamewareLarge.png

SessionDamewareSmall.png

SessionDataEntryLarge.png

SessionDataEntrySmall.png

SessionDataReportLarge.png

SessionDataReportSmall.png

SessionDatabaseLarge.png

SessionDatabaseSmall.png

SessionDeskRollLarge.png

SessionDeskRollSmall.png

SessionDocumentLarge.png

SessionPCAnywhereLarge.png

SessionPCAnywhereSmall.png

SessionPlayListLarge.png

SessionPlayListSmall.png

SessionPowerShellLarge.png

SessionPowerShellSmall.png

SessionPuttyLarge.png

SessionPuttySmall.png

SessionRDPConfiguredLarge.png

SessionRDPConfiguredSmall.png

SessionRadminLarge.png

SessionRadminSmall.png

SessionRemoteAssistanceLarge.png

SessionRemoteAssistanceSmall.png

SessionS3Large.png

SessionS3Small.png

SessionSNMPReportLarge.png

SessionSNMPReportSmall.png

SessionScreenConnectLarge.png

SessionScreenConnectSmall.png

SessionSessionToolLarge.png

SessionSessionToolSmall.png

SessionSkyDriveLarge.png

SessionSkyDriveSmall.png

SessionSpiceworksLarge.png

SessionXWindowLarge.png

SessionXWindowSmall.png

SessionXenServerLarge.png

SessionXenServerSmall.png

SmartftpLarge.png

SmartftpSmall.png

SqlServerManagementStudioLarge.png

SqlServerManagementStudioSmall.png

StatusAddOnMissingLarge.png

StatusAddOnMissingSmall.png

StatusConnectedLarge.png

StatusConnectedSmall.png

SupermicroIpmiUtilitiesLarge.png

SupermicroIpmiUtilitiesSmall.png

SyncActiveDirectoryLarge.png

SyncActiveDirectorySmall.png

SyncCSVLarge.png

SyncCSVSmall.png

TeraTermProLarge.png

TeraTermProSmall.png

TextLarge.png

TextSmall.png

ToadLarge.png

ToadSmall.png

VisioLarge.png

VisioSmall.png

VmwareHorizonViewClientLarge.png

VmwareHorizonViewClientSmall.png

VmwareRemoteConsoleLarge.png

VmwareRemoteConsoleSmall.png

WinboxLarge.png

WinboxSmall.png

XmailManagerLarge.png

XmailManagerSmall.png

XmanagerLarge.png

XmanagerSmall.png

XshellLarge.png

XshellSmall.png

ZocLarge.png

ZocSmall.png

SPLASHSCREEN

It is possible to personalize the splashscreen by adding a splashscreen.png file in ***Images\Themes***. The recommended size is 520 by 320 but the window will automatically adapt to the image.

13.7.22 PowerShell

DESCRIPTION

Remote PowerShell allows you to run scripts on remote computers. This is an extremely powerful tool that can be used to extract a ton of information as well as modify the remote computer's settings.

SETTINGS

Please consult the following topics for some PowerShell How-to:

- Extract TeamViewer ID
- Custom Export to CSV
- Remote Management
- Script Execution Policy
- Change your Synchronize source

REFERENCES

http://technet.microsoft.com/en-us/library/ee176949.aspx

http://www.howtogeek.com/117192/how-to-run-powershell-commands-on-remote-computers/

13.7.22.1 Extract TeamViewer ID

DESCRIPTION

You can use Powershell to extract the TeamViewer ID from a session.

SETTINGS

Here a script to extract the TeamViewer ID from a session:

```
$sessions = Get-RDM-Session | where {$_.Session.Kind -eq "TeamViewer"}
```

```
$sessions[0].Session.GetProperty("TeamViewer", "ID")
```

13.7.22.2 Custom Export to CSV

DESCRIPTION

Many customers ask for a special export that would contain specific fields.

SETTINGS

Here is a small script that can be used to generate URLs for our new web protocol handler. We generate a csv file that contains the name and the URL.

```
## get the data source ID, note that the "Create Web Url" button generates a different ID
$dsid = Get-RDM-DataSource | where {$_.IsCurrent -eq "X"} | select -expand "ID"
## get the RDP sessions, create a new object with the desired fields.
## Simply append "add-member" commands to include a new field
$s = Get-RDM-Session |
 where {$_.Session.Kind -eq "RDPConfigured"} |
 foreach {
  new-Object Object |
      Add-Member NoteProperty Name $_.Name -PassThru |
      Add-Member NoteProperty URL "rdm://open?DataSource=$dsid&Session=$($_.ID)" -PassThr
 };
## save to csv, the field names are used as column headers.
$s | export-csv c:\temp\sessions.csv -notypeinformation;
```

13.7.22.3 Remote Management

DESCRIPTION

Default settings disallow remote management calls, there is also the firewall that is blocking requests on the associated ports. Luckily a single PowerShell command will perform all the necessary adjustments without prompting you for each step.

SETTINGS

In an elevated privileges PowerShell session, run the command below:

```
Enable-PSRemoting -Force
```

13.7.22.4 Script Execution Policy

DESCRIPTION

By default, no scripts can be run on a new installations. Not only must you enable script execution, but you must choose if you require scripts to have a digital signature.

SETTINGS

In a PowerShell command window, type `Get-Help About_Signing` to see what is best for your scenario.

If you are satisfied by **RemoteSigned**, simply type in `Set-ExecutionPolicy RemoteSigned` in an PowerShell se

13.7.22.5 Change your Synchronizer source

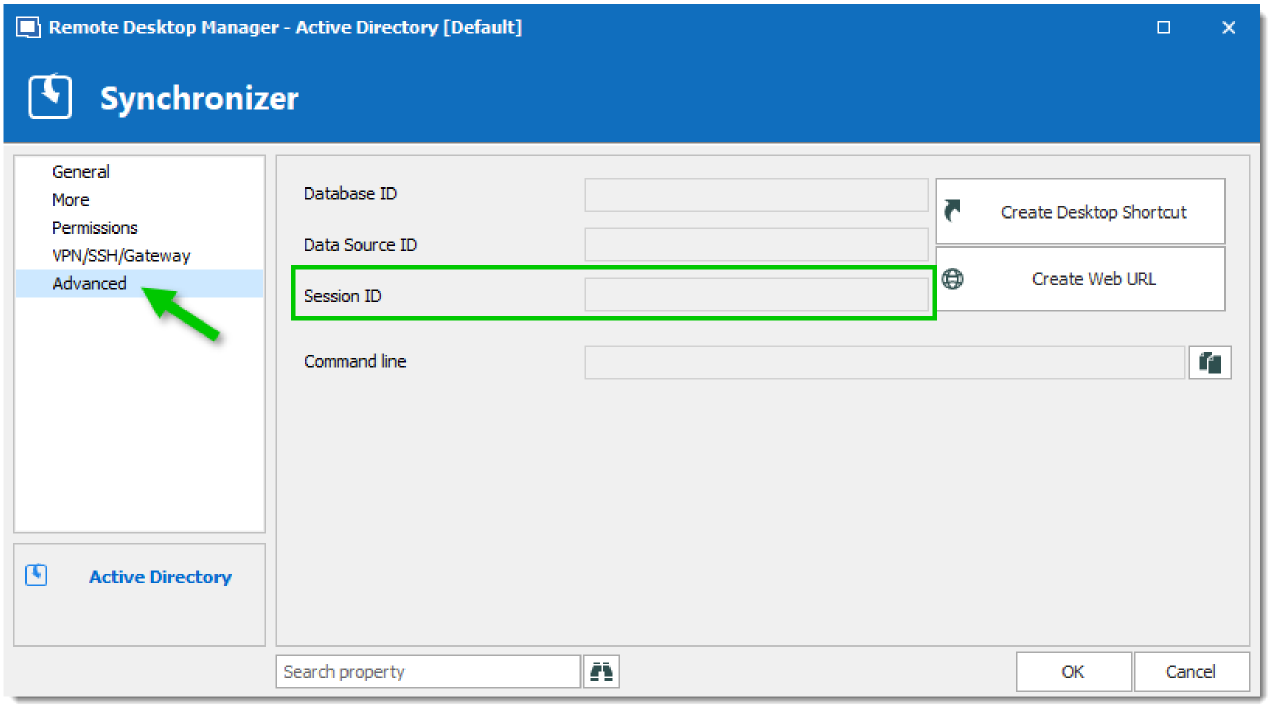
DESCRIPTION

If you have been using the Remote Desktop Manager version with the Synchronizer **Action on Entry Mismatch** feature, the following steps will allow you to easily change your source with a Powershell Command without having to recreate all your sessions, thus marking all selected entries as created by the synchronizer.

SETTINGS

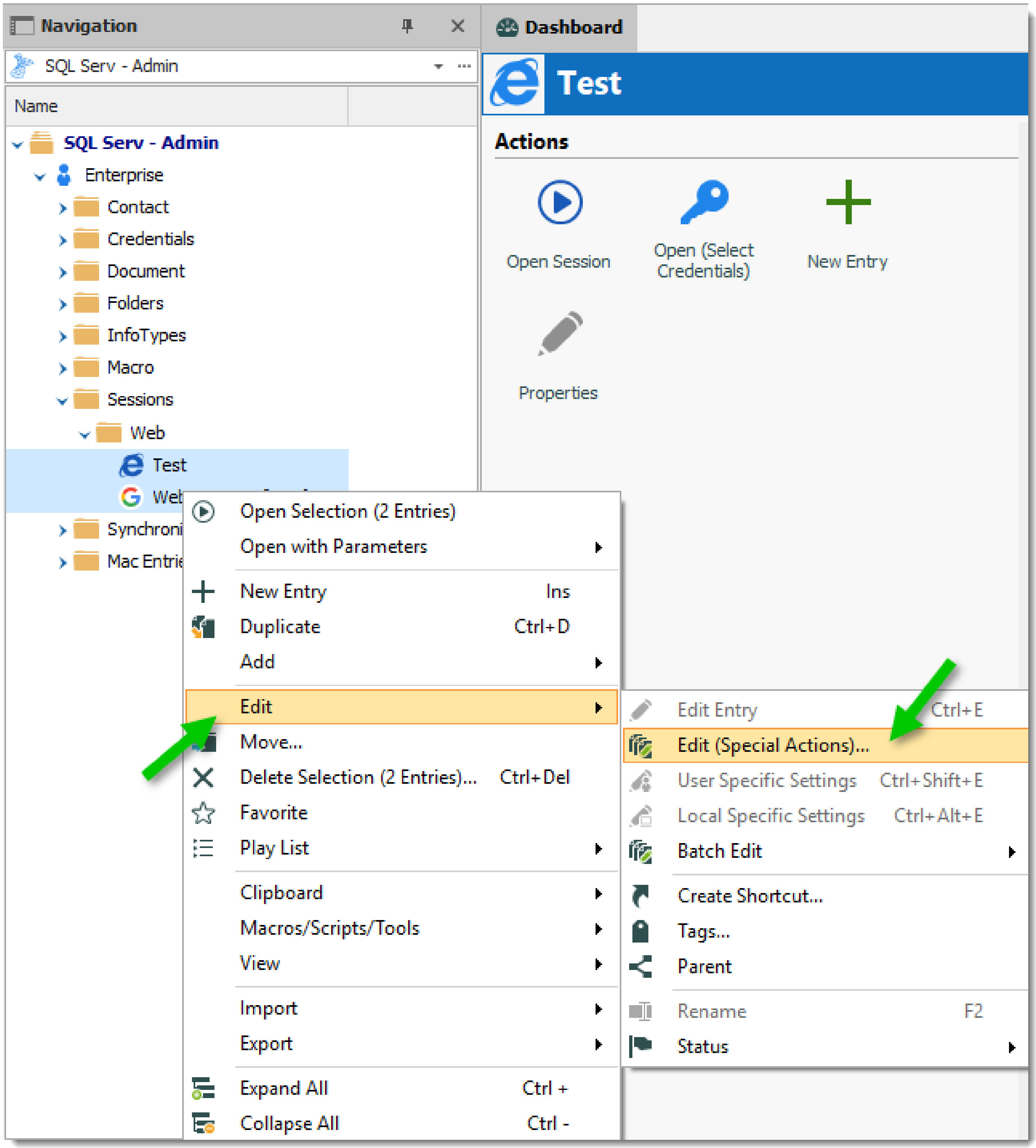
1. Select your Synchronizer entry in your Tree view, right click and select **Properties**.

2. In the **Advanced** side menu of the **Properties**, copy the **Session ID** (you will then need that ID number to insert in your Powershell Command).



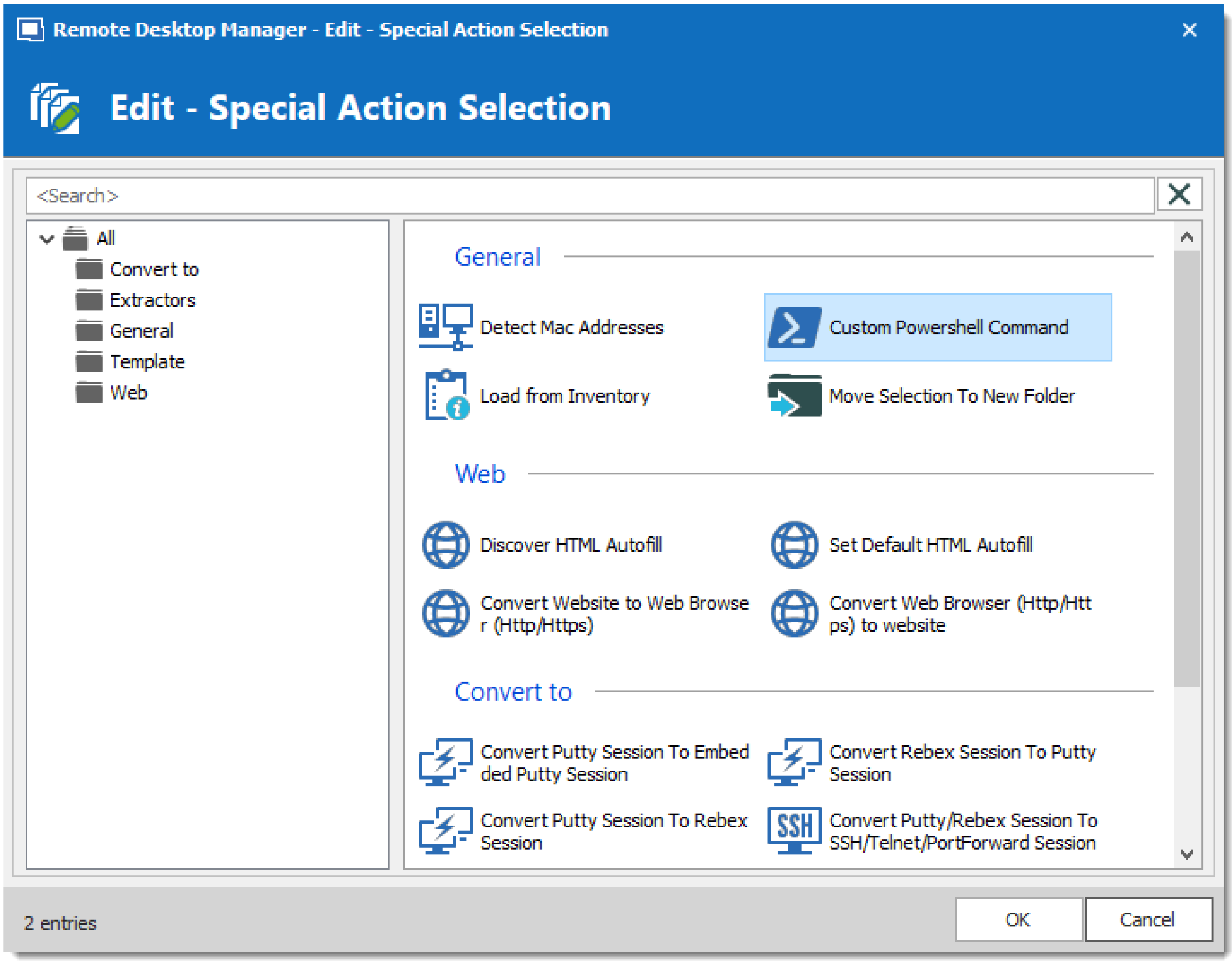
Advanced - Session ID

3. In your Tree view select the entries (ctrl+click) you wish to mark as created by the synchronizer. Then, right-click and go in ***Edit – Edit (Special Actions)***.



Selected entries - Edit (Special Actions)

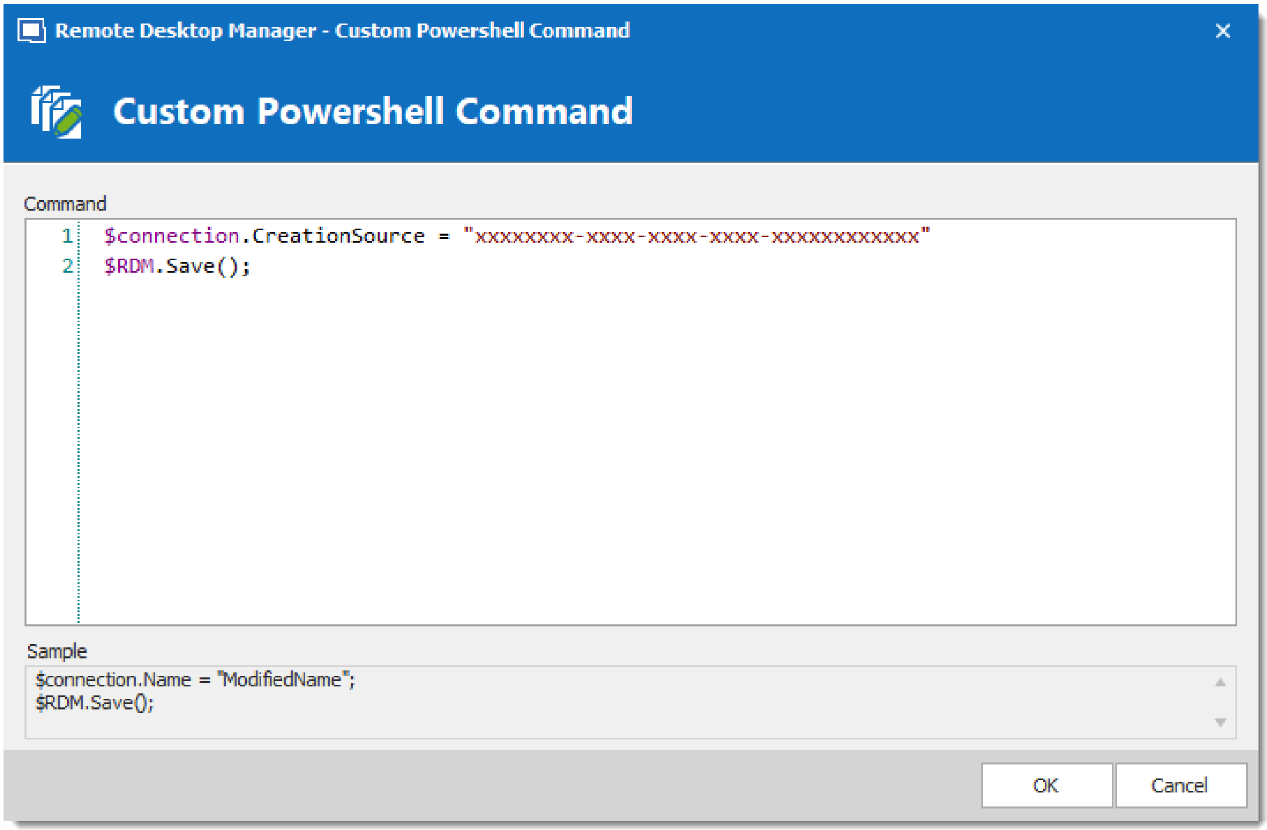
4. Select the **Custom Powershell Command**.


Remote Desktop Manager - Edit - Special Action Selection
Edit - Special Action Selection
<Search>
All
Convert to
Extractors
General
Template
Web
General
Detect Mac Addresses
Custom Powershell Command
Load from Inventory
Move Selection To New Folder
Web
Discover HTML Autofill
Set Default HTML Autofill
Convert Website to Web Browser (Http/Https)
Convert Web Browser (Http/Https) to website
Convert to
Convert Putty Session To Embedded Putty Session
Convert Rebex Session To Putty Session
Convert Putty Session To Rebex Session
Convert Putty/Rebex Session To SSH/Telnet/PortForward Session
2 entries
OK
Cancel

Edit (Special Actions)

5. Write the following line for your Powershell Command:

```
$connection.CreationSource = "enter synchronizer ID number"
$RDM.Save();
```


Remote Desktop Manager - Custom Powershell Command
Custom Powershell Command
Command

```
$connection.CreationSource = "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"
$RDM.Save();
```

```
$connection.Name = "ModifiedName";
$RDM.Save();
```

Custom Powershell Command

13.8 Tips And Tricks

DESCRIPTION

Our favorite tips and tricks are in this section.

If you have a suggestion for improving an existing tip or even to suggest a new one, please send a note to ticket@devolutions.net.

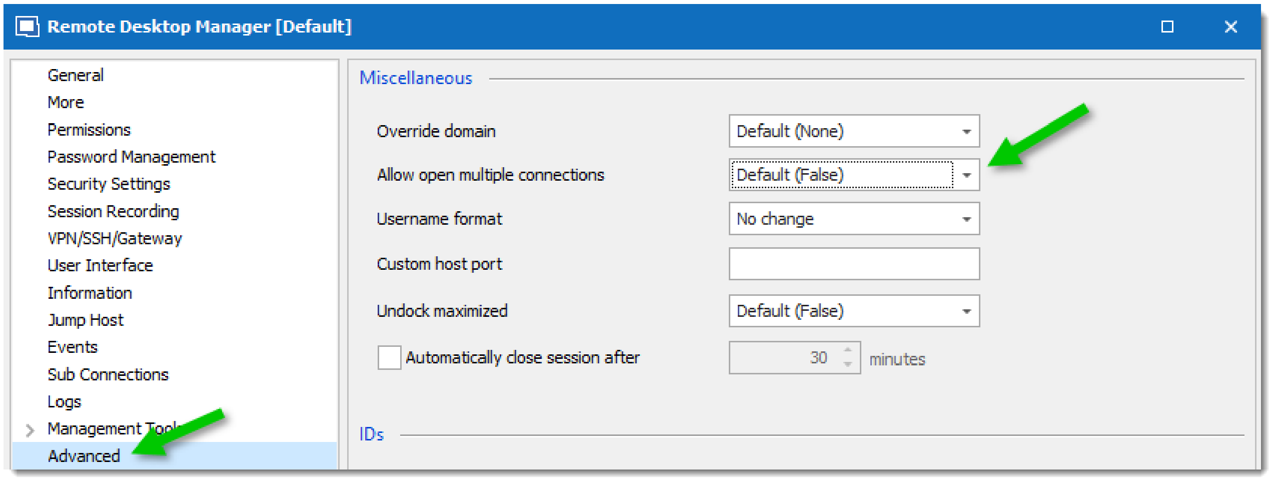
13.8.1 Allow Open Multiple Connections

DESCRIPTION

Remote Desktop Manager allows you to open multiple connections on the same host.

SOLUTION

You can enable the "Allow open multiple connections" option in the **Advanced Tab** of an entry.



Override domain: Default (None)

Allow open multiple connections: Default (False)

Username format: No change

Custom host port:

Undock maximized: Default (False)

□ Automatically close session after 30 minutes

Advanced Tab

OPTION	DESCRIPTION
True	**Allow open multiple connections** will be active for this entry only.
False	**Allow open multiple connections** will be disabled for this entry only.

13.8.2 Automating Remote Microsoft Management Console (MMC)

DESCRIPTION

You can configure a MMC Snap-In console to run on any of your servers. The Snap-In need to support remote access.

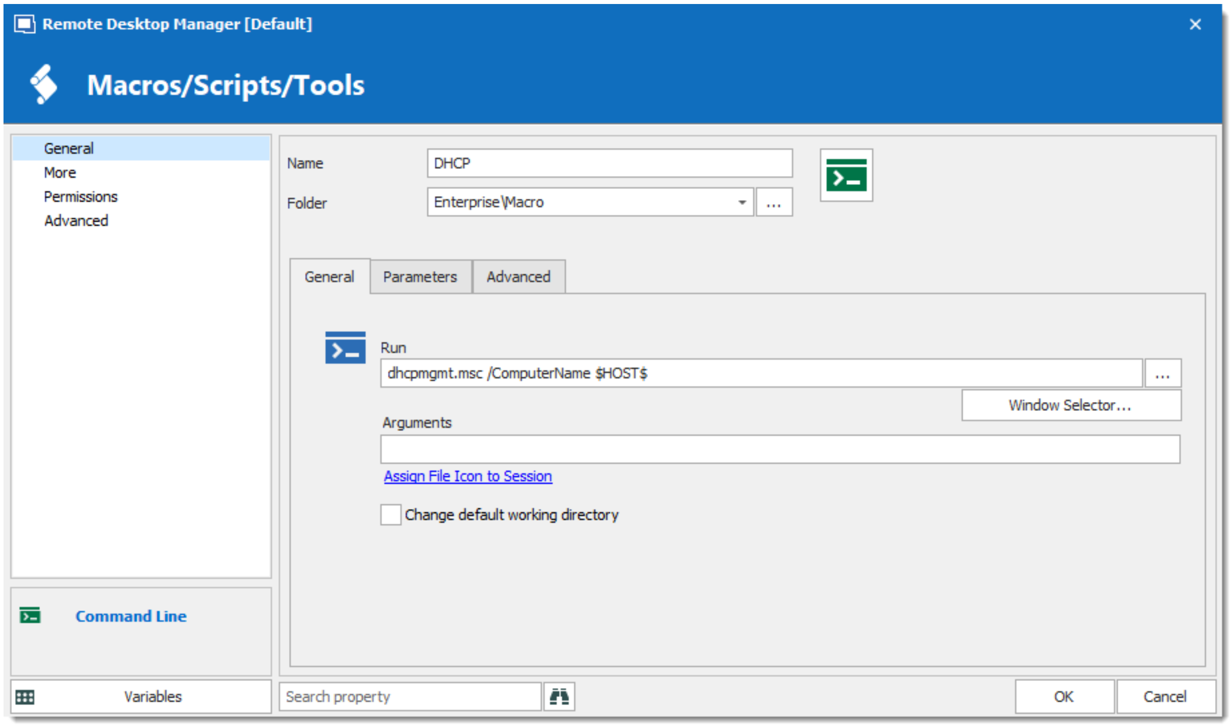
SETTINGS

1. Create the session tool via ***New Entry – Add Macros/Scripts/Tools.***

2. Select **Command Line.**

3. Name the session DHCP.

4. Type the following in the Run field: ***dhcpmgmt.msc /ComputerName $HOST$*** ($HOST$ is the variable that will be replaced by the server name or IP address).



Name: DHCP

Folder: Enterprise\Macro

Run: dhcpmgmt.msc /ComputerName $HOST$

Arguments:

□ Change default working directory

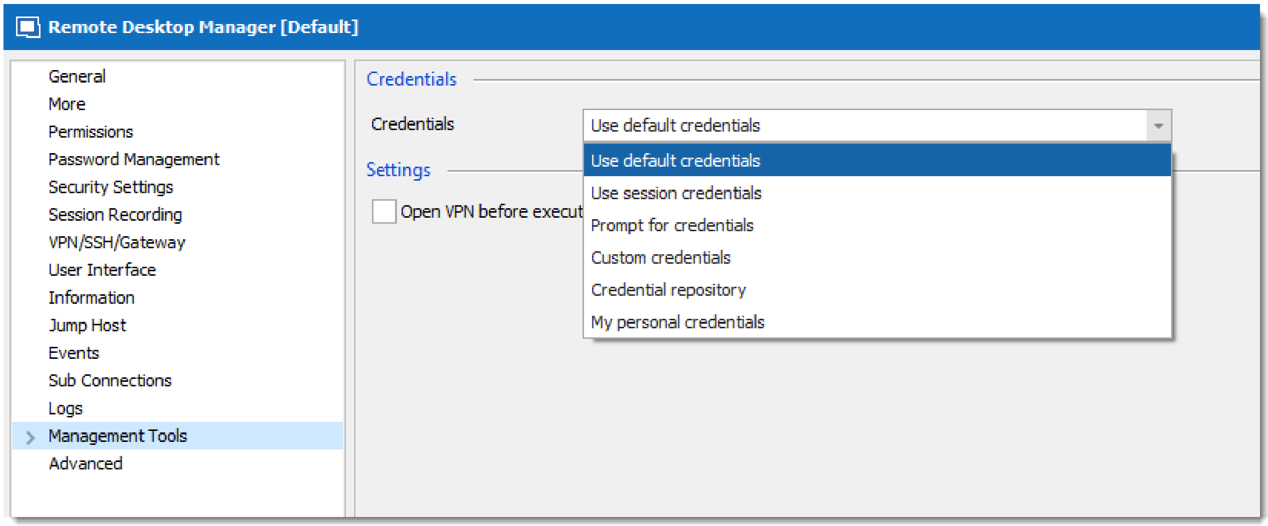
DHCP Macros/Scripts/Tools

5. Select **Run as Administrator** in the **Execution Mode** tab.

If you are running a Windows 64bit edition, you would need to enable the **Run in 64-bit mode** option in the **Execution Mode** tab.

6. Click **OK** to save your entry.

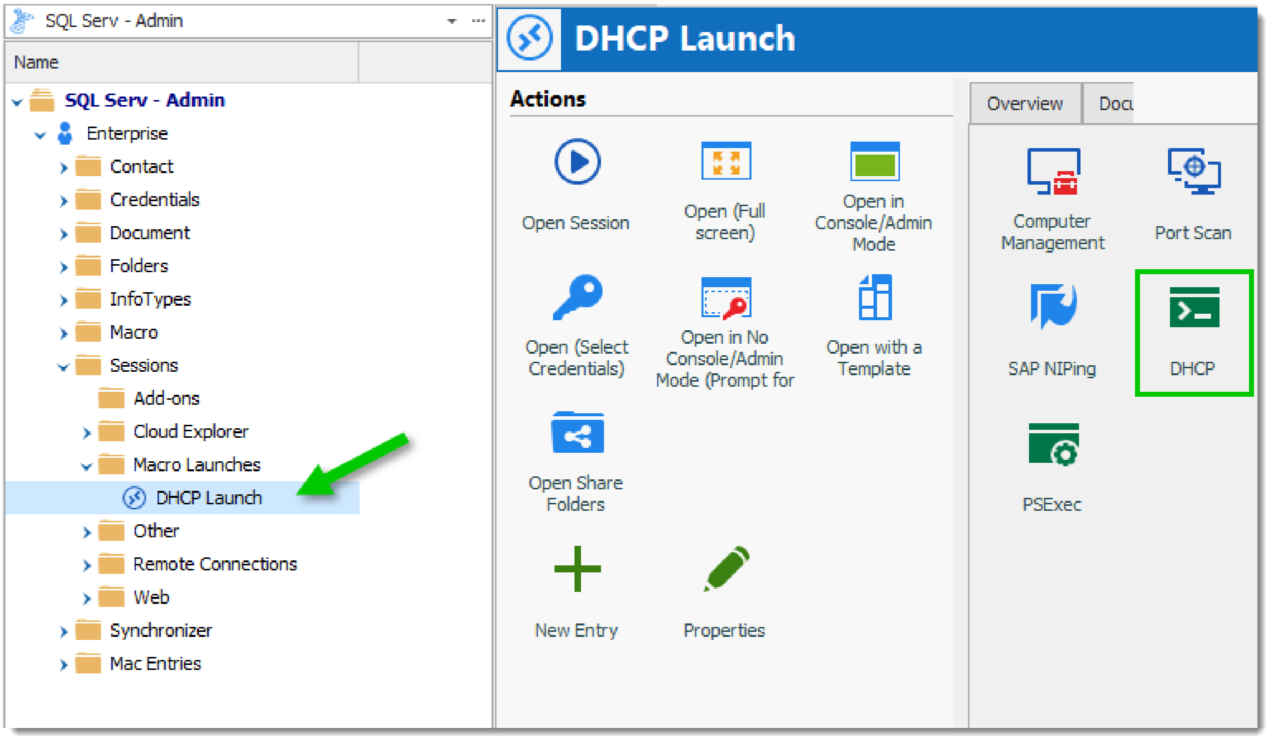
7. Now, you would need to verify that your sessions use the appropriate credential to run the tool. In the **Management Tools** section of each sessions, make sure you've selected the proper credentials to be supplied:



Tools section

OPTION	DESCRIPTION
Use default credentials	Use the credentials from the Windows session
Use session credentials	Use the same credentials as the session
Prompt for credentials	Prompts for the credentials on use.
Custom credentials	Use the Username, Password and Domain specify
Credential repository	Specify a set of credentials from the repository
Use my personal credentials	Use My Personal Credentials

To run the Snap-In, select your session and execute the tool from the dashboard.



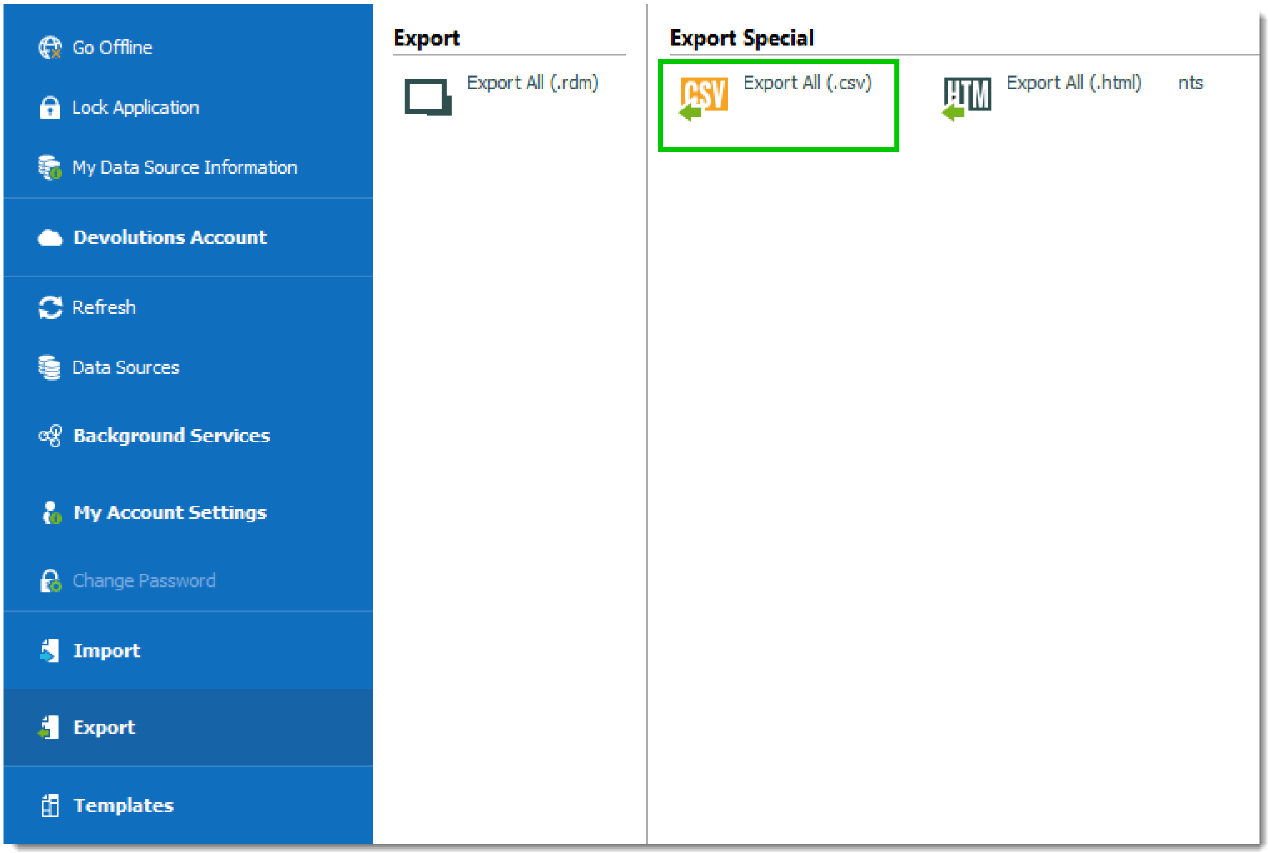
Dashboard

13.8.3 Create a list of credentials

DESCRIPTION

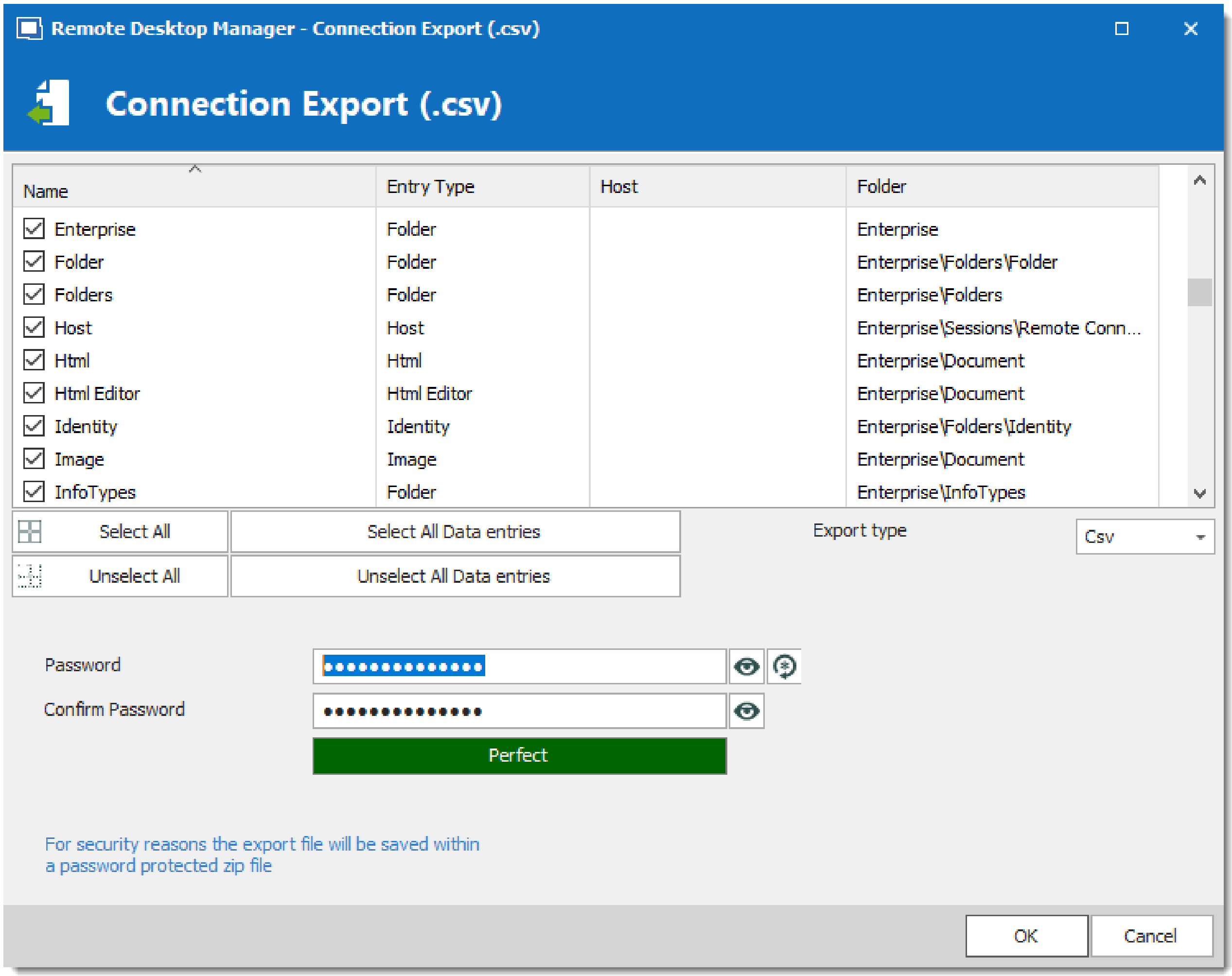
If you wish to create a report containing a full list of all your credentials here are the steps to follow:

1. In the menu ***File – Export – Export Special***, select the option **Export All (.csv)**.



File - Export

2. Enter a password to create a password protected zip file.



Remote Desktop Manager - Connection Export (.csv)

Connection Export (.csv)

Name	Entry Type	Host	Folder
☑ Enterprise	Folder		Enterprise
☑ Folder	Folder		Enterprise\Folders\Folder
☑ Folders	Folder		Enterprise\Folders
☑ Host	Host		Enterprise\Sessions\Remote Conn...
☑ Html	Html		Enterprise\Document
☑ Html Editor	Html Editor		Enterprise\Document
☑ Identity	Identity		Enterprise\Folders\Identity
☑ Image	Image		Enterprise\Document
☑ InfoTypes	Folder		Enterprise\InfoTypes

Export type: Csv

Password: ••••••••••••••

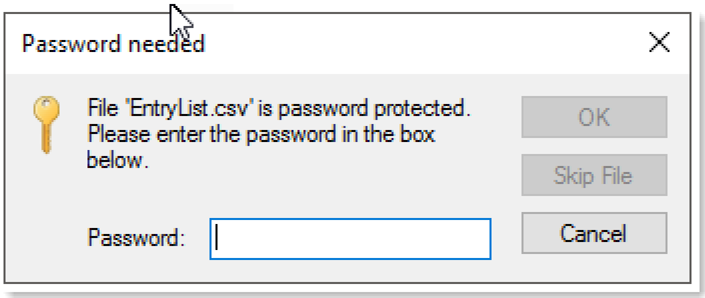
Confirm Password: ••••••••••••••

Perfect

For security reasons the export file will be saved within a password protected zip file

Connection Export

3. When you try to open your Zip file, it will prompt you for your password.



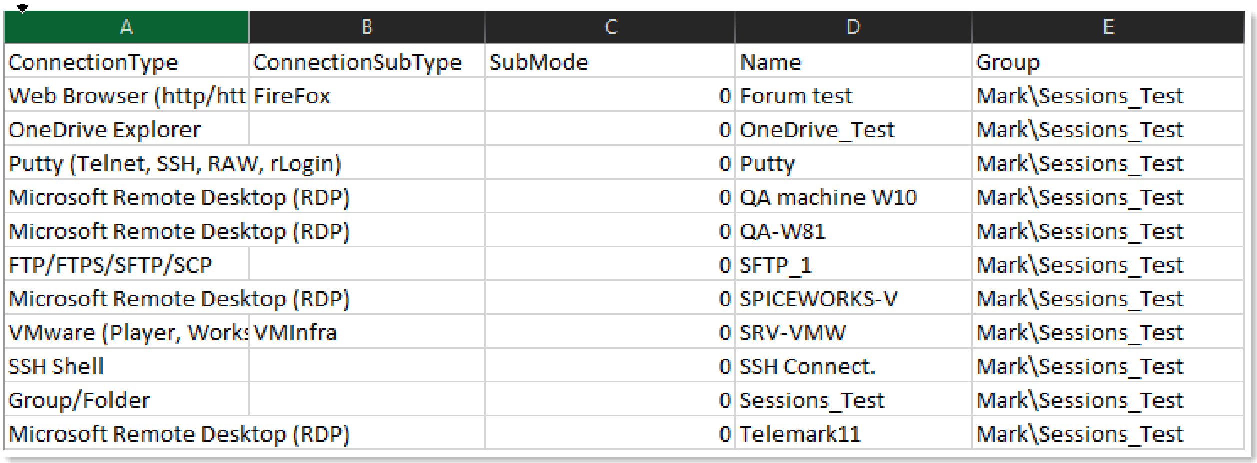
Password needed

File 'EntryList.csv' is password protected. Please enter the password in the box below.

Password:

Password

4. Once your password entered and your file unzipped, you will have your full list of credentials with all your information in a ***.csv** file format.



ConnectionType	ConnectionSubType	SubMode	Name	Group
Web Browser (http/htt	FireFox	0	Forum test	Mark\Sessions_Test
OneDrive Explorer		0	OneDrive_Test	Mark\Sessions_Test
Putty (Telnet, SSH, RAW, rLogin)		0	Putty	Mark\Sessions_Test
Microsoft Remote Desktop (RDP)		0	QA machine W10	Mark\Sessions_Test
Microsoft Remote Desktop (RDP)		0	QA-W81	Mark\Sessions_Test
FTP/FTPS/SFTP/SCP		0	SFTP_1	Mark\Sessions_Test
Microsoft Remote Desktop (RDP)		0	SPICEWORKS-V	Mark\Sessions_Test
VMware (Player, Work:	VMInfra	0	SRV-VMW	Mark\Sessions_Test
SSH Shell		0	SSH Connect.	Mark\Sessions_Test
Group/Folder		0	Sessions_Test	Mark\Sessions_Test
Microsoft Remote Desktop (RDP)		0	Telemark11	Mark\Sessions_Test

Excel Sheet

13.8.4 Creating Shortcuts

OVERVIEW

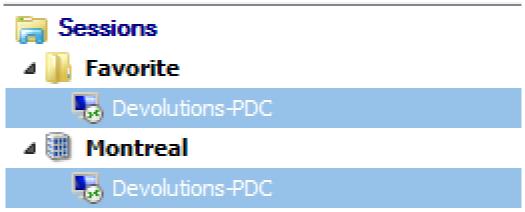
There are a many scenarios where it makes sense for an entry to appear more than once in the UI. For example, you might want to:

- Assign different access rights to the folder.
- Create a favorite folder with everything centralized.
- Reuse a document for different scenarios.

However, doing this manually is time consuming, tedious and prone to error. But no longer!

SOLUTION

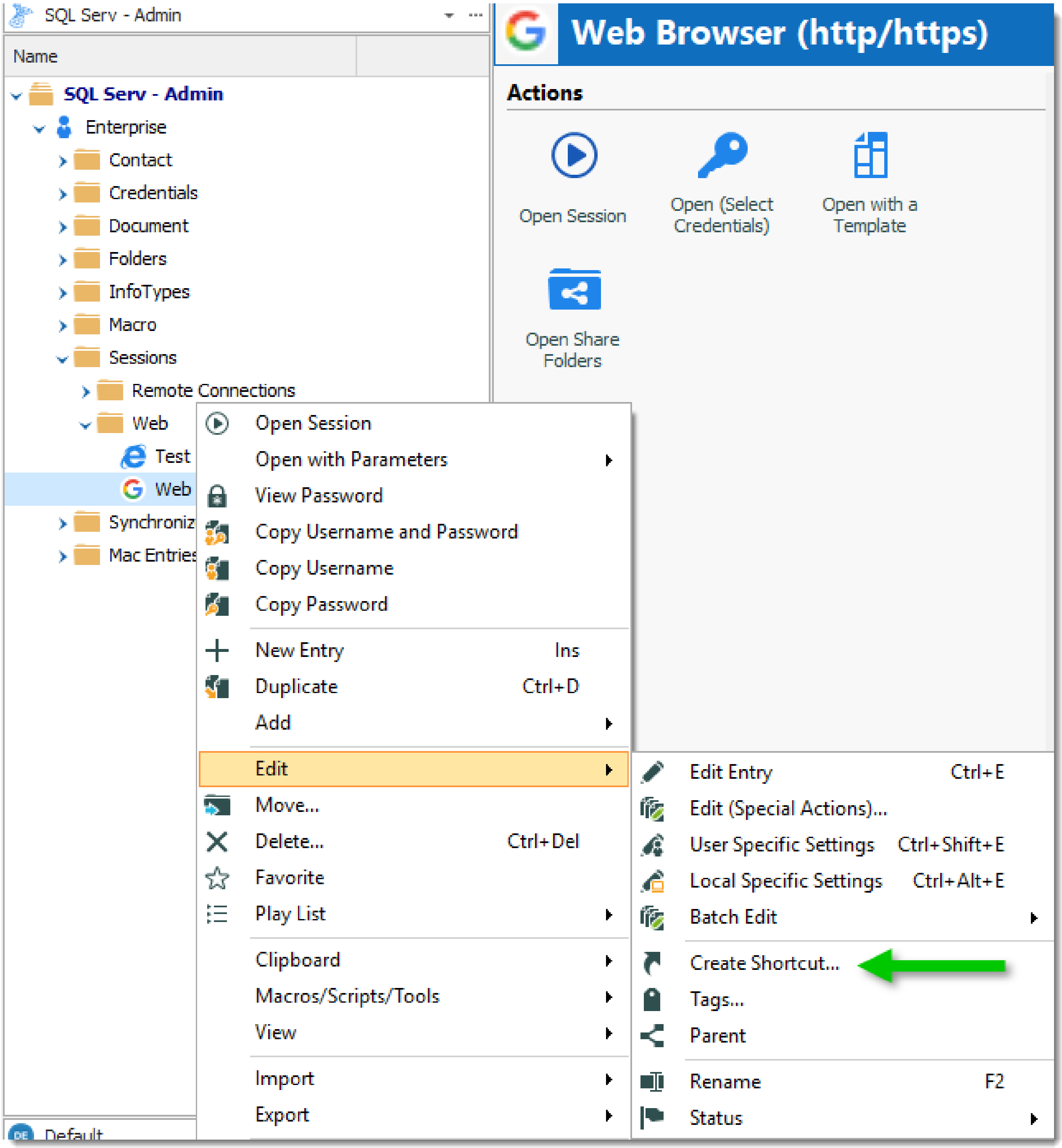
Fortunately, Remote Desktop Manager makes creating shortcuts simple and quick! It works by saving the entry once in the database, while linking it to more than one group. So when Remote Desktop Manager loads the data, it automatically creates a link to the original entry. You don’t have to lift a finger – everything is done for you, to save your time and simplify your life.



Same Entry in Two Groups

CREATING A SHORTCUT: OPTION 1

One way to create a shortcut is by using the menu **Edit -> Create Shortcut...**



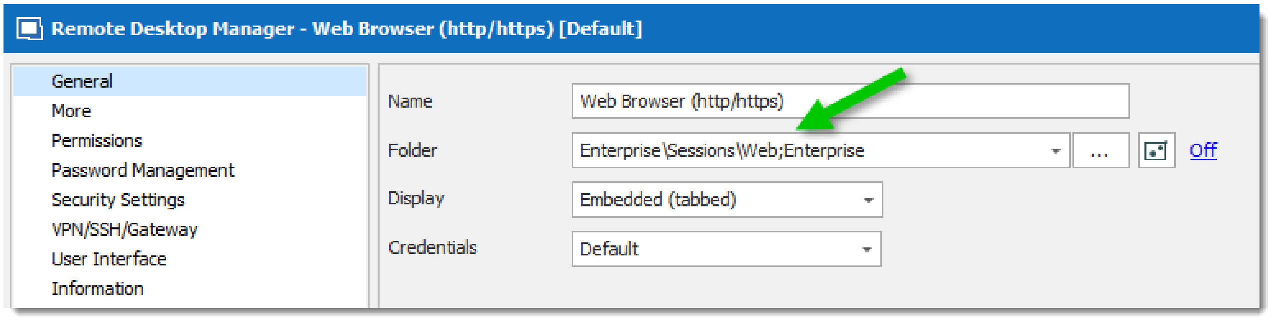
Create Shortcut Command

Simply choose the destination folder for the shortcut. Remote Desktop Manager will automatically refresh and display the new shortcut in the list.

There is no visual difference between the shortcut and the original entry. Therefore, you'll need to delete all entries to completely remove them.

CREATING A SHORTCUT: OPTION 2

A second way to create a shortcut is via the session properties. Since the shortcut is based on a group list, simply add a session in multiple groups by setting two or more destinations, which are separated by semicolons ";". You can also use the browse button (…) and select more than one group by holding the Ctrl key while clicking on the tree node.


Remote Desktop Manager - Web Browser (http/https) [Default]

Name: Web Browser (http/https)

Folder: Enterprise\Sessions\Web;Enterprise

Display: Embedded (tabbed)

Credentials: Default

Folder Example

13.8.5 Data Migration

DESCRIPTION

Here are the steps to follow when copying data from one data source to another.

If you have used the **Document** entries in the **Stored in database** mode or used **attachments**, the binary content of the documents is NOT exported in any of our export formats. These documents/attachments MUST be handled manually.

If you are using a self-managed RDBMS (SQL Server, MySQL, MariaDB), you can use their management tools to move the database to another server. Please follow their respective documentation on how to successfully transfer not only that data, but also the user accounts.

SQL Server: MSDN Article on how to move databases

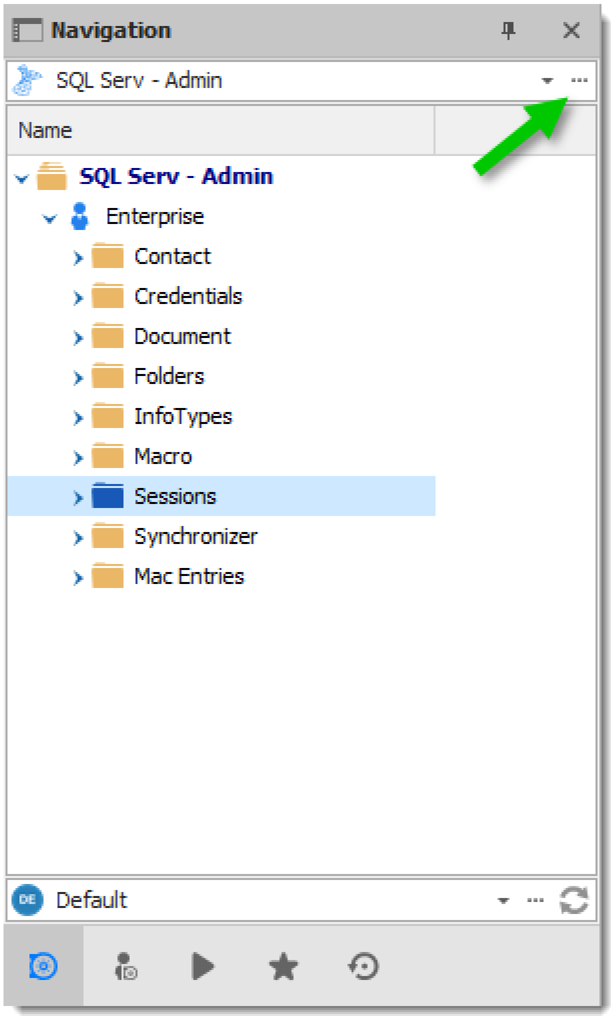
MySQL: MySQL Copying databases

MariaDB: MySQLDump

The migration is simply an export of your original data source followed by an import in the new destination data source.

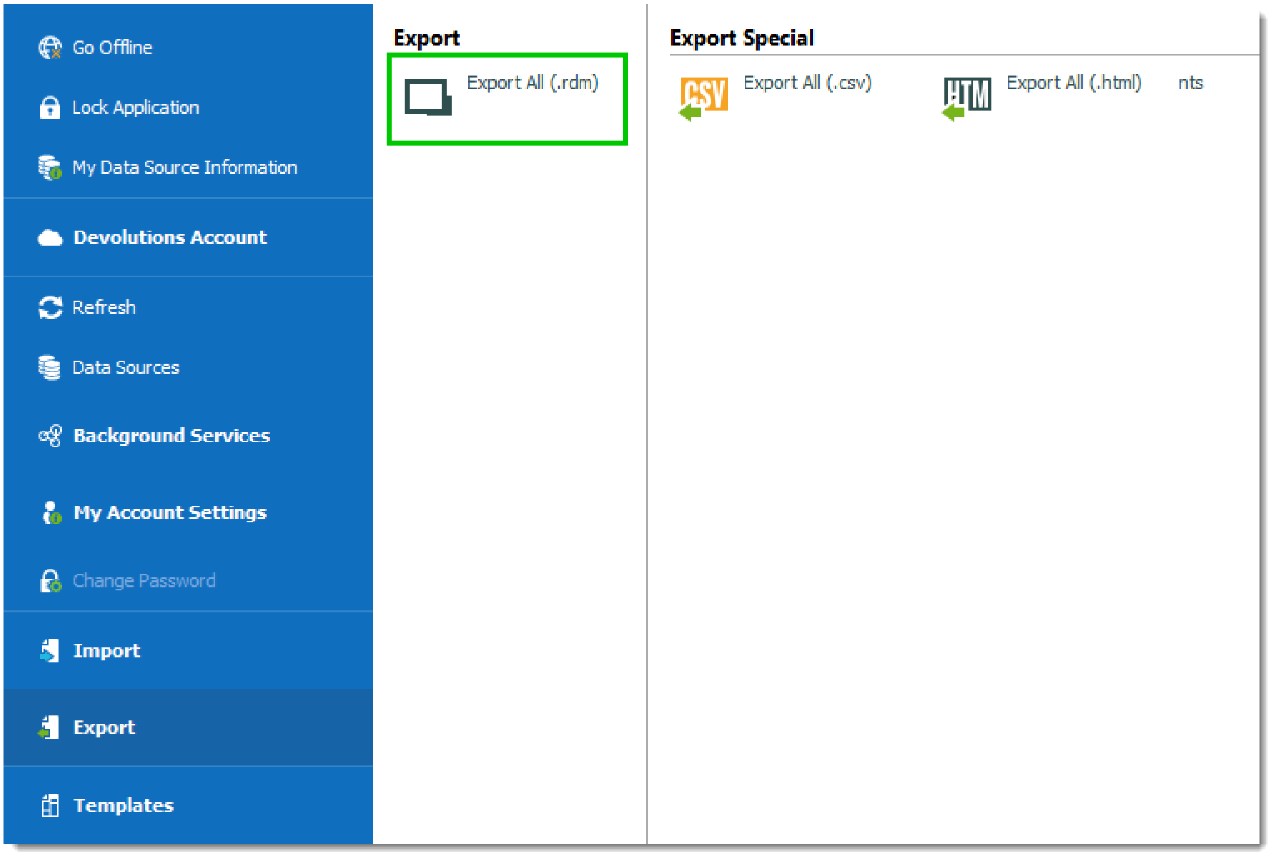
EXPORT

1. Select your data source in the data source selection drop down list.



Data Source drop down menu

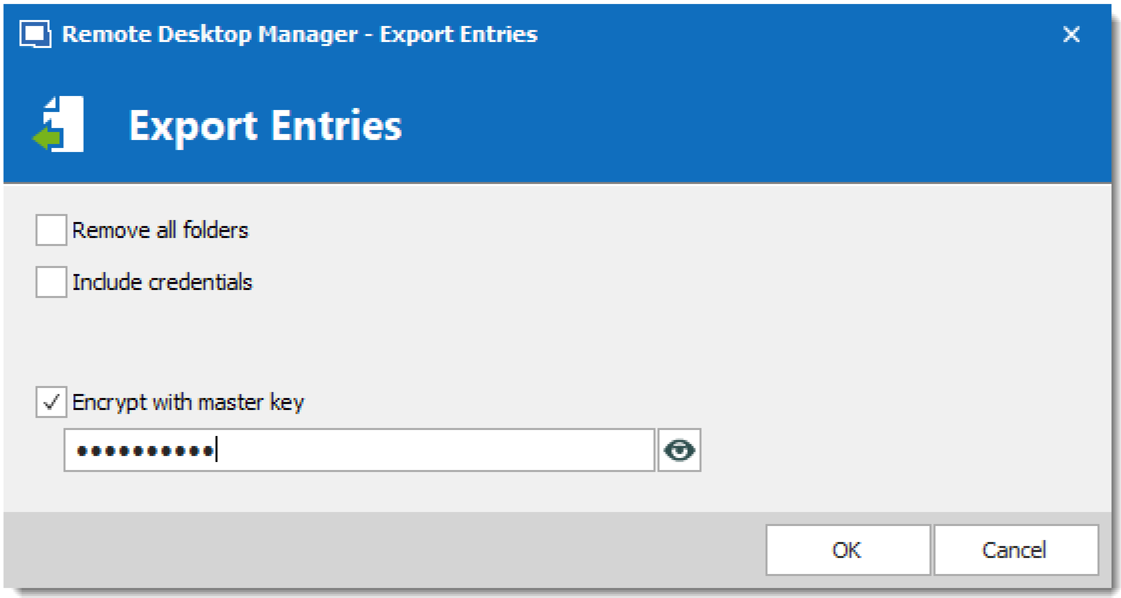
2. Select ***File – Export – Export All (.rdm)***.



Export menu

3. Select your export entries options. You can choose to export your credentials and may also choose to use a Master Key as an added security layer. For a typical migration you would check those options.

> ✖ Ensure that you do not forget the Master Key as you will not be able to decrypt the data without it.



□ Remove all folders

□ Include credentials

☑ Encrypt with master key

••••••••••

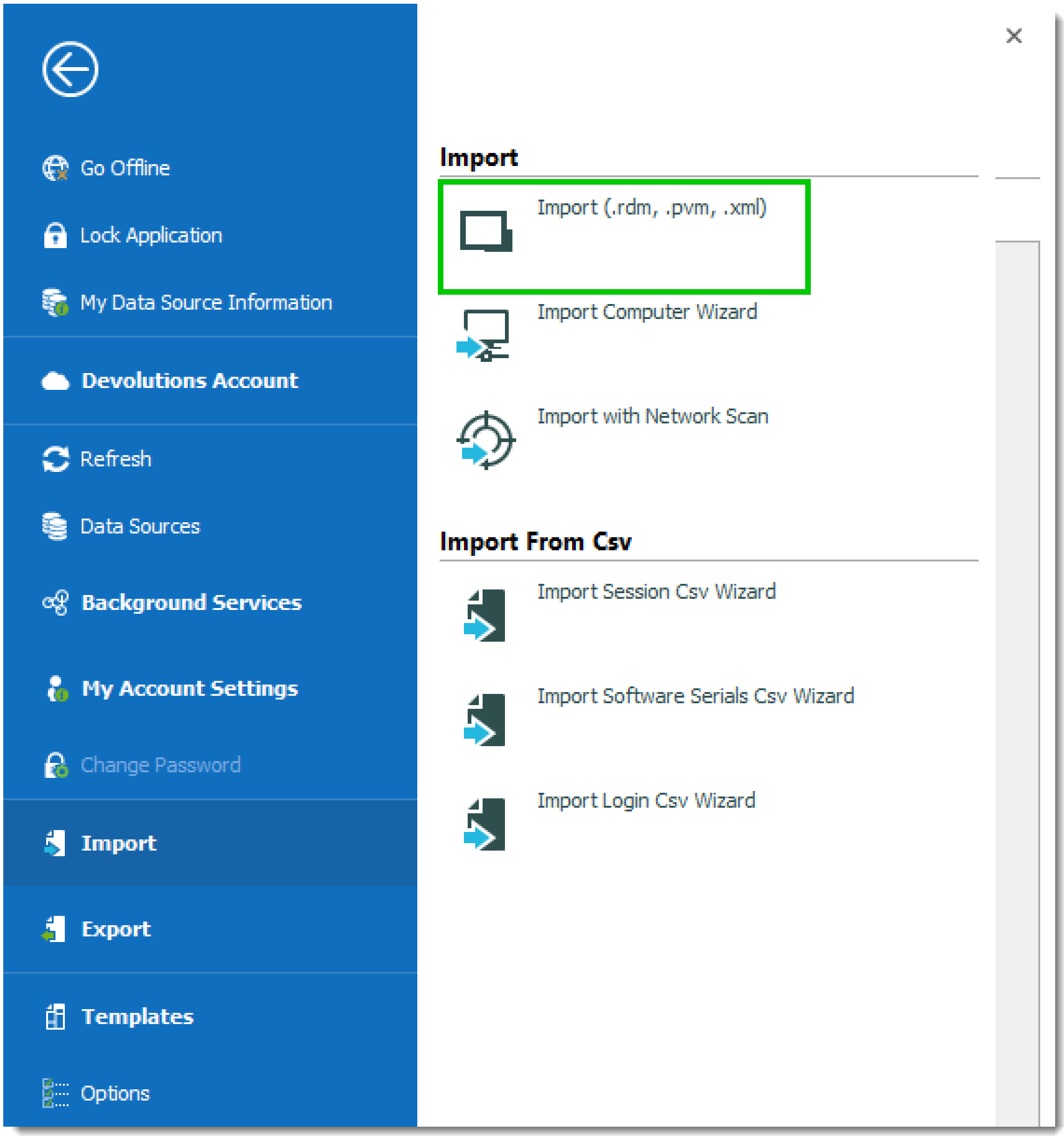
Export Entries Option

4. Save the file with the name and location of your choice.

IMPORT

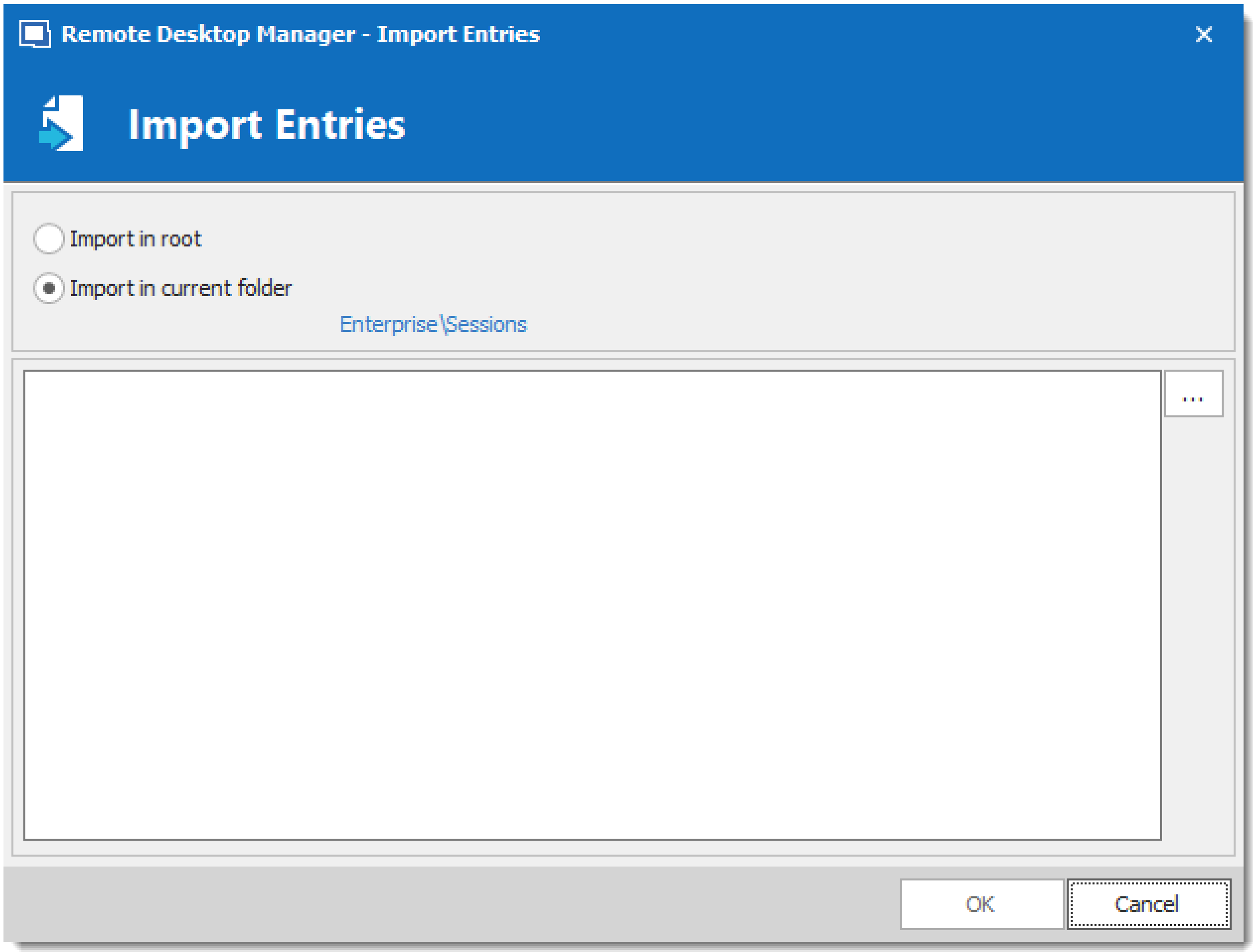
1. Select the destination data source in the data source selection drop down list.

2. Select ***File – Import – Import (*.rdm, *.pvm, *xml)***.



Import menu

3. In the **Import Entries** dialog use the ellipsis button to browse for the data file exported in the previous section.

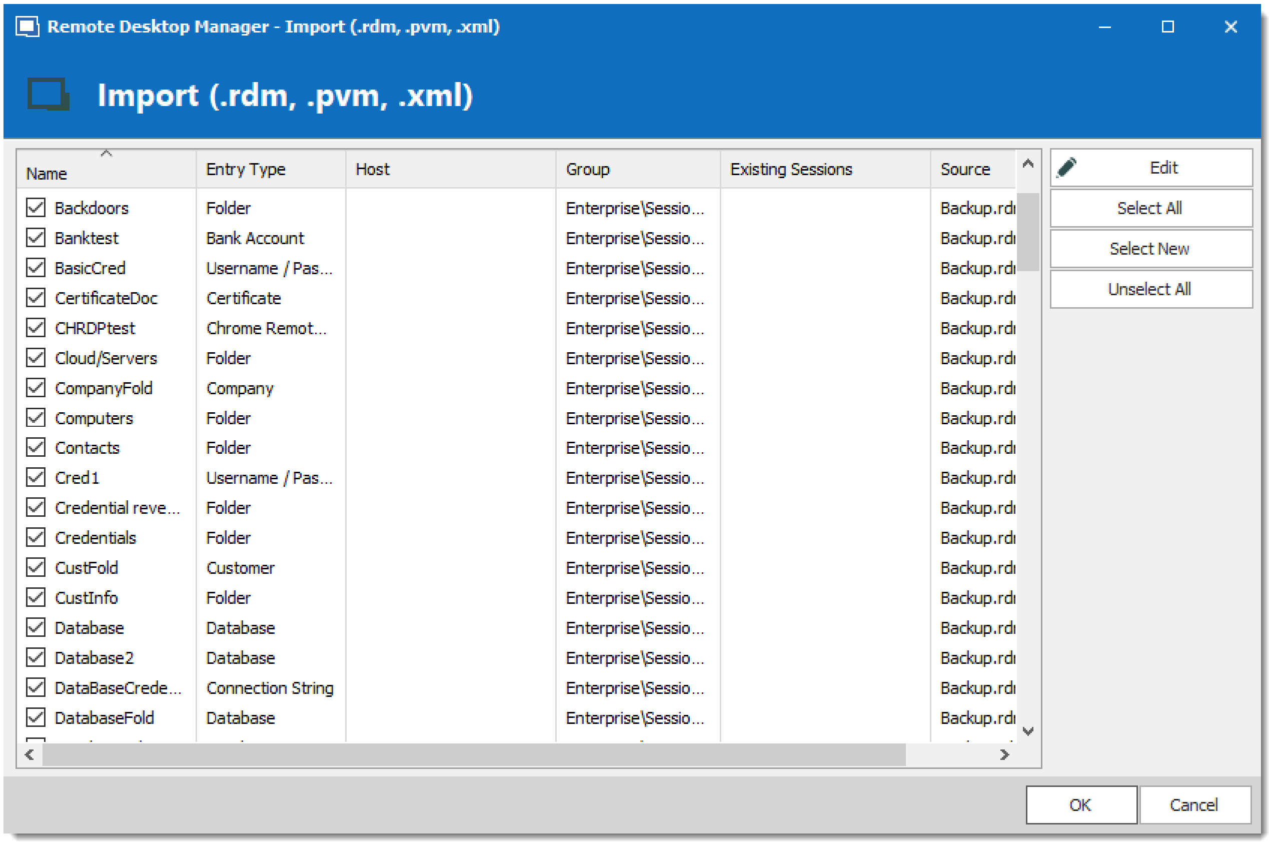


○ Import in root
● Import in current folder
Enterprise\Sessions

Import Entries

OPTION	DESCRIPTION
Import in root	Import your entries in the root of your data source, meaning it will keep the exact same structure (group, folder, credentials) as the one you've exported. It is the suggested method of import.
Import in current folder	Import all your entries under the selected folder of the data source.

4. In the next dialog you'll be presented with a list of all entries that are in the data file. You can select which entry you wish to import or you can **Select All** to import all of your entries. Simply press **OK** to complete the process


Remote Desktop Manager - Import (.rdm, .pvm, .xml)
Import (.rdm, .pvm, .xml)
Edit
Select All
Select New
Unselect All
OK
Cancel

Name	Entry Type	Host	Group	Existing Sessions	Source
☑ Backdoors	Folder		Enterprise\Sessio...		Backup.rd
☑ Banktest	Bank Account		Enterprise\Sessio...		Backup.rd
☑ BasicCred	Username / Pas...		Enterprise\Sessio...		Backup.rd
☑ CertificateDoc	Certificate		Enterprise\Sessio...		Backup.rd
☑ CHRDPtest	Chrome Remot...		Enterprise\Sessio...		Backup.rd
☑ Cloud/Servers	Folder		Enterprise\Sessio...		Backup.rd
☑ CompanyFold	Company		Enterprise\Sessio...		Backup.rd
☑ Computers	Folder		Enterprise\Sessio...		Backup.rd
☑ Contacts	Folder		Enterprise\Sessio...		Backup.rd
☑ Cred1	Username / Pas...		Enterprise\Sessio...		Backup.rd
☑ Credential reve...	Folder		Enterprise\Sessio...		Backup.rd
☑ Credentials	Folder		Enterprise\Sessio...		Backup.rd
☑ CustFold	Customer		Enterprise\Sessio...		Backup.rd
☑ CustInfo	Folder		Enterprise\Sessio...		Backup.rd
☑ Database	Database		Enterprise\Sessio...		Backup.rd
☑ Database2	Database		Enterprise\Sessio...		Backup.rd
☑ DataBaseCrede...	Connection String		Enterprise\Sessio...		Backup.rd
☑ DatabaseFold	Database		Enterprise\Sessio...		Backup.rd

Import Entries - Session selection

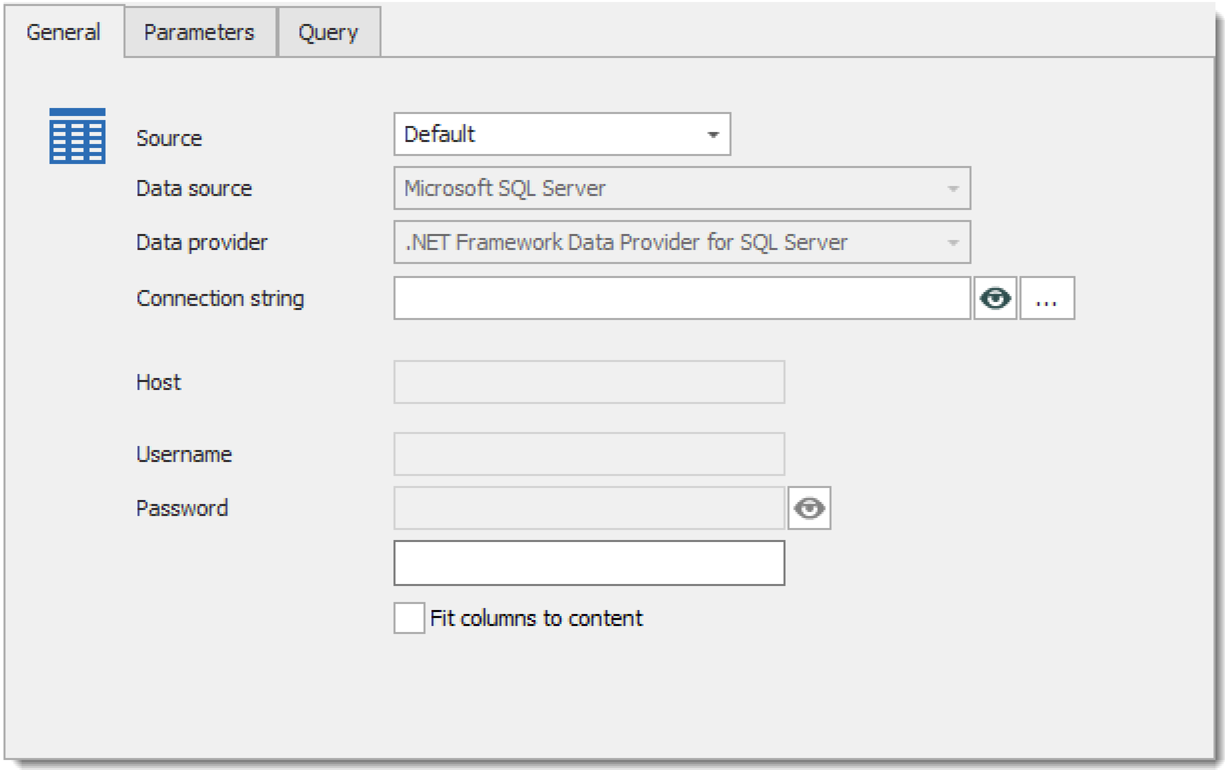
13.8.6 Data Report

DESCRIPTION

The Data Report session type can be use to empower any/all users to generate reports, without having to grant them access to the actual server.

SETTINGS

GENERAL



Source: Default

Data source: Microsoft SQL Server

Data provider: .NET Framework Data Provider for SQL Server

Connection string

Host

Username

Password

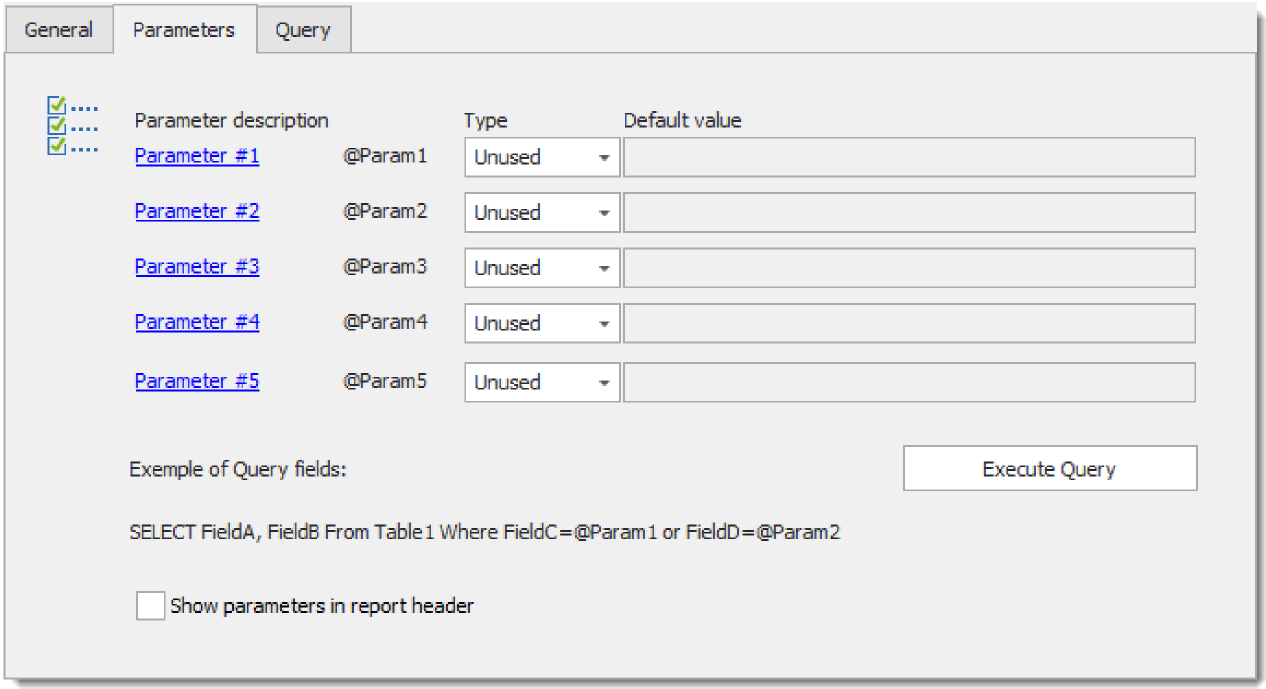
□ Fit columns to content

Data Report Session

Create a Data Report entry and define the connection string by either:

- Specify the connection in the entry itself.
- Use a credential entry.
- Inherited from a parent.
- Prompt for credentials.

PARAMETERS



Parameter description		Type	Default value
Parameter #1	@Param1	Unused	
Parameter #2	@Param2	Unused	
Parameter #3	@Param3	Unused	
Parameter #4	@Param4	Unused	
Parameter #5	@Param5	Unused	

Exemple of Query fields:

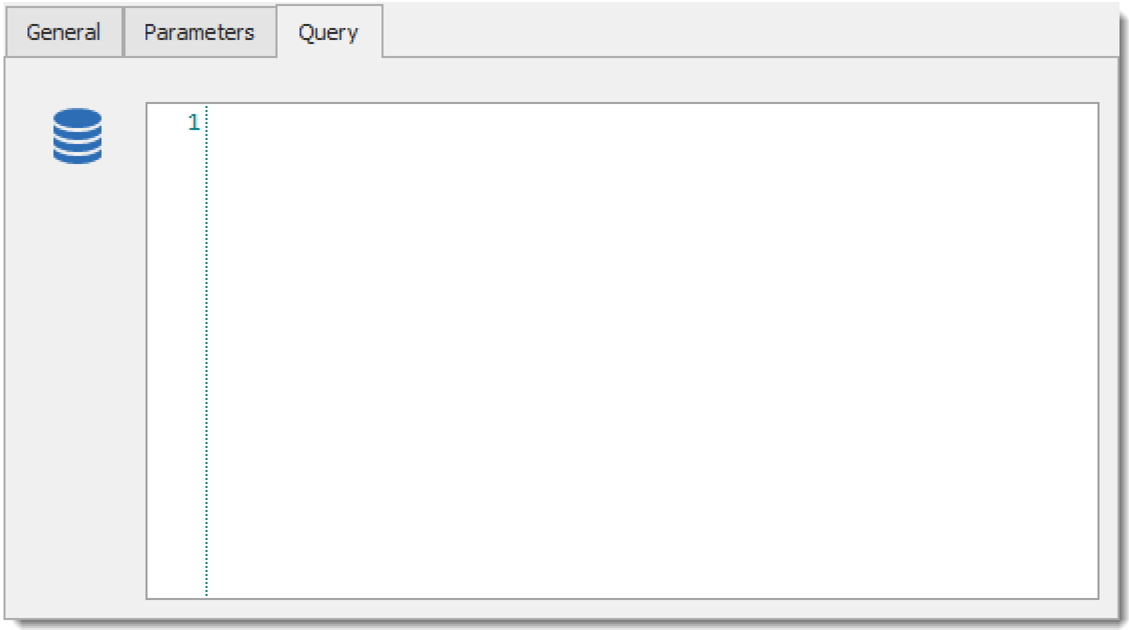
SELECT FieldA, FieldB From Table1 Where FieldC=@Param1 or FieldD=@Param2

□ Show parameters in report header

Data Report Session - Parameters Tab

Specify the parameters by setting the name, type and default value of all parameters.

QUERY



Data Report Session - Query Tab

Enter the query in the Query tab, which features a SQL syntax-highlighted text box with line numbers.

> Ensure that your DBA sets the proper security groups, and that each specific user(s) has access to it.

13.8.7 Edit Hosts File

DESCRIPTION

IT technicians, as well as web developers, often need to edit the Windows hosts file. This requires starting your favorite editor using elevated privileges (obviously only if UAC is active), browsing for the hosts file which is deep in the windows folder and enclosed in a hidden folder on top of that.

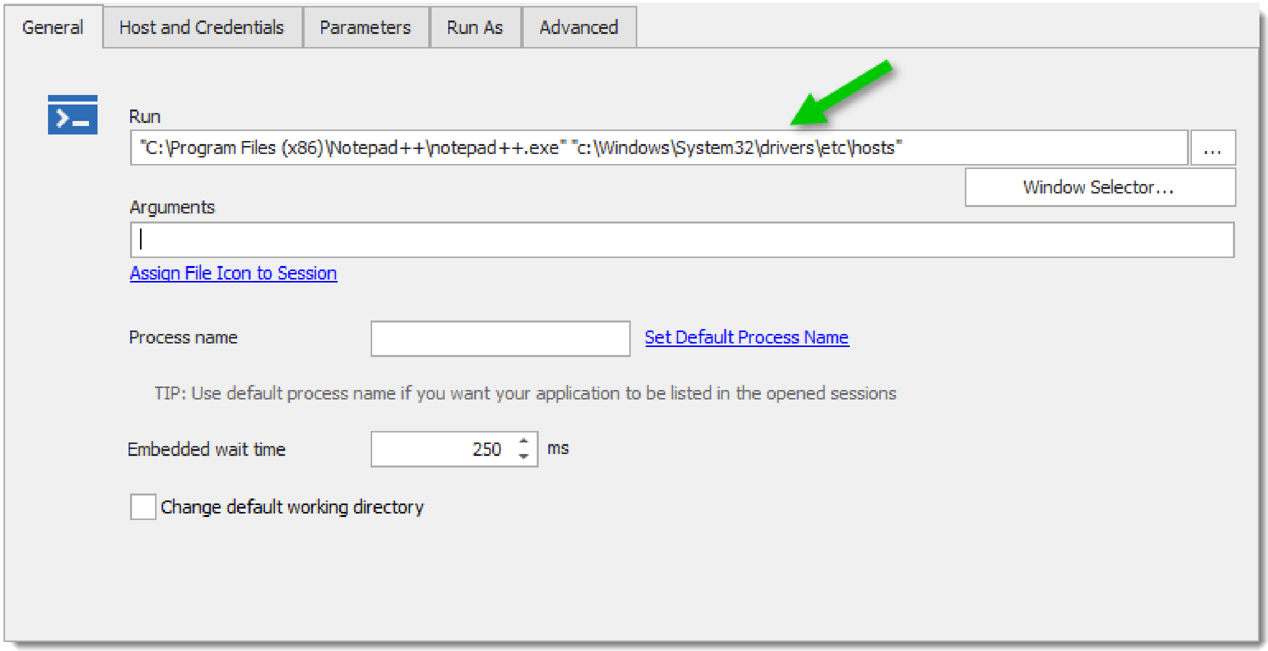
For your own machine you can create a shortcut to achieve this goal, but experience tells us that most people don't bother with it, ending up losing precious time when they must modify the hosts file.

What better tool then one that you use every day, which is already running in the notification area, to implement a solution with. If the machines you work on have the same setup, this will work for all of them.

Simply create a session with the proper settings.

STEPS

1. Create a new **Command Line (External Application)** session and enter a session name. In the **General** tab,click on the ellipsis button and select your editor of choice in the **Run** text box. Then, paste the following after the name of the program: "c:\Windows\System32\drivers\etc\hosts". Ensure a blank space separates the two and include the double quotes.



General | Host and Credentials | Parameters | Run As | Advanced

Run

"C:\Program Files (x86)\Notepad++\notepad++.exe" "c:\Windows\System32\drivers\etc\hosts"

Arguments

Assign File Icon to Session

Process name

Set Default Process Name

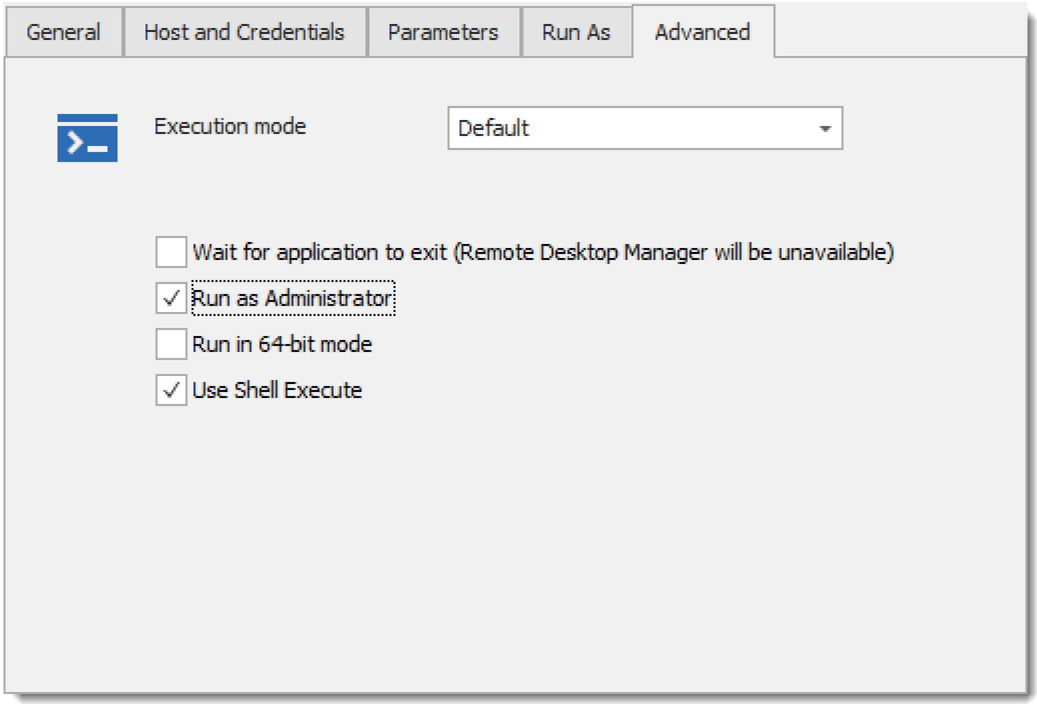
TIP: Use default process name if you want your application to be listed in the opened sessions

Embedded wait time 250 ms

□ Change default working directory

Command Line (External Application) - General Tab

2. In the **Advanced** tab, check the **Run as Administrator** option.



General | Host and Credentials | Parameters | Run As | Advanced

Execution mode: Default

□ Wait for application to exit (Remote Desktop Manager will be unavailable)

☑ Run as Administrator

□ Run in 64-bit mode

☑ Use Shell Execute

Command Line (External Application) - Advanced Tab

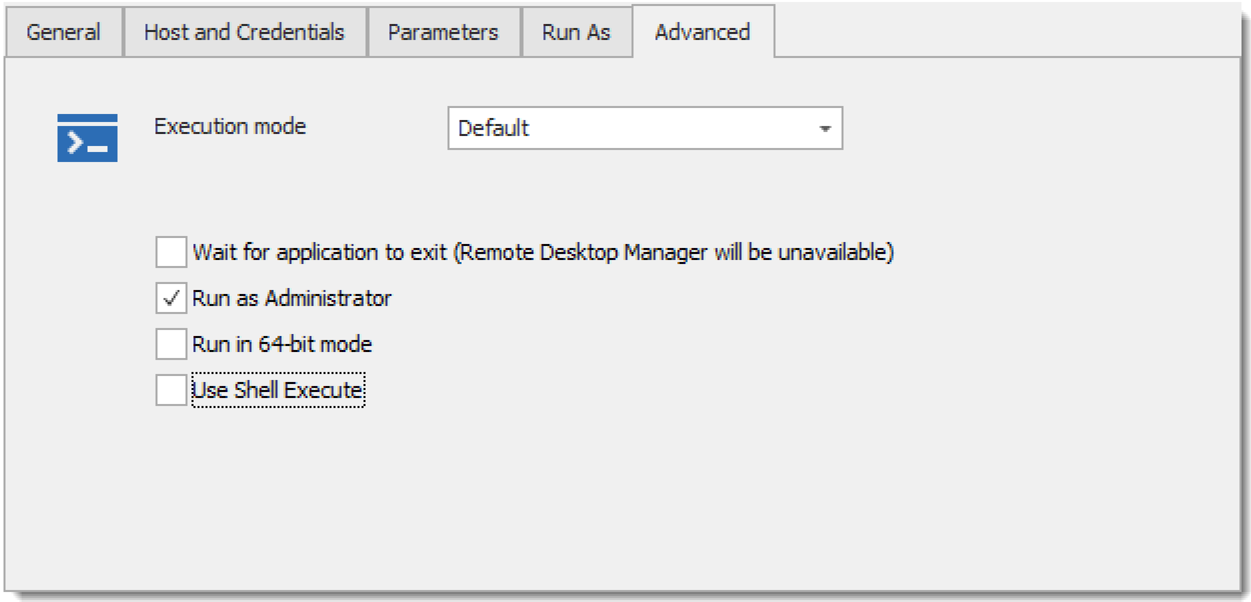
Close your editor before proceeding with those steps. If your editor is already running, it will not elevate the privileges. We have implemented an AutoHotKey script that closes the editor of choice, but being that it shuts off without saving pending changes, it is not a risk-free solution. It will all depend on your chosen editor's reaction to the WM_QUIT message.

It is a simple and efficient solution. You can use this for any tool you use regularly. Paired with shared data source it makes for a powerful library of tools for your team.

ALTERNATIVE IF YOU WANT TO USE THE PARAMETERS TAB

Some people wish to use the parameters tab because, upon launching, it will display a dialog where you can confirm the value of the parameters and even allows you to change them for whole new values.

1. Create a new Command Line session and in the **Advanced** tab, check the **Run as Administrator** and disable the **Use Shell Execute** option.



Execution mode: Default

□ Wait for application to exit (Remote Desktop Manager will be unavailable)

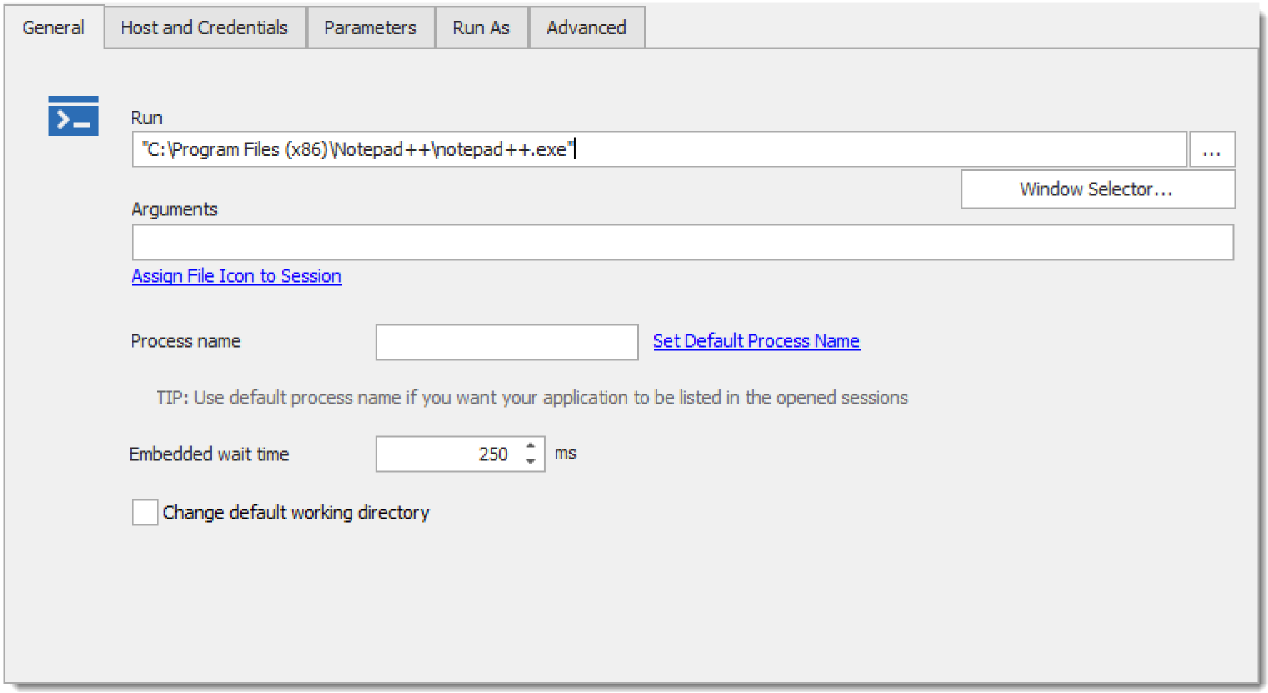
☑ Run as Administrator

□ Run in 64-bit mode

□ Use Shell Execute

Command Line (External Application) - Advanced Tab

2. In the **General** tab,click on the ellipsis button and select your editor of choice in the **Run** text box. Then enter **"{1}"** after the name of the executable, keeping a space between the two values and including the quotes.



Run: "C:\Program Files (x86)\Notepad++\notepad++.exe"

Arguments:

Process name:

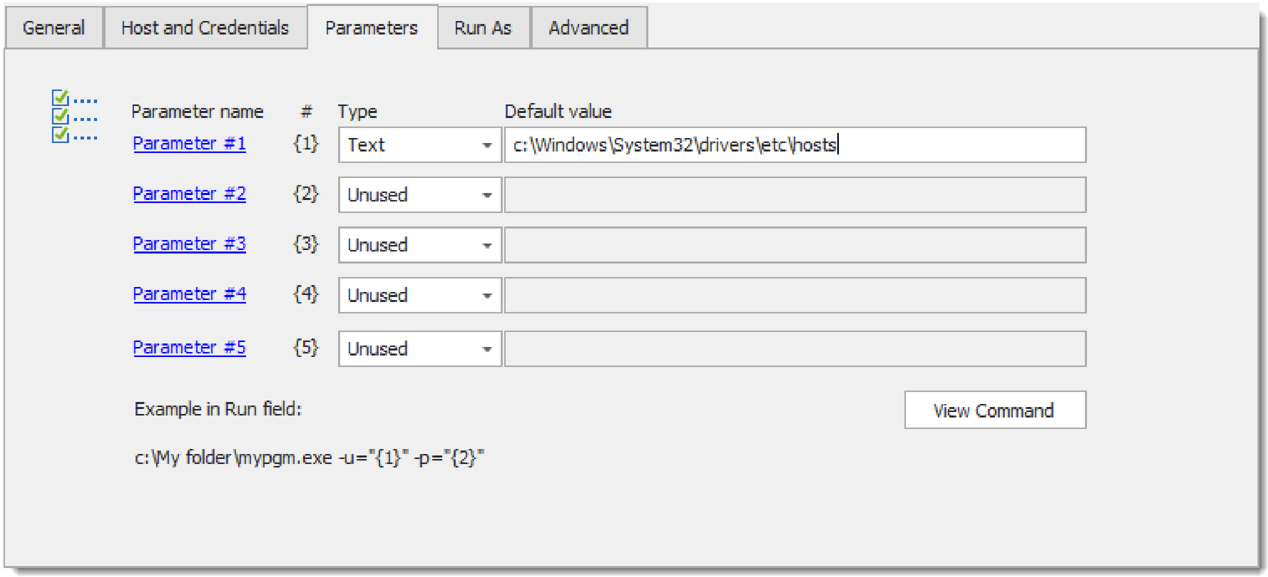
TIP: Use default process name if you want your application to be listed in the opened sessions

Embedded wait time: 250 ms

□ Change default working directory

Command Line (External Application) - General Tab

3. In the **Parameters** tab, set Parameter # 1 type to **Text** and then enter the following in the Default Value: ***c:\Windows\System32\drivers\etc\hosts***



Parameter name	#	Type	Default value
Parameter #1	{1}	Text	c:\Windows\System32\drivers\etc\hosts
Parameter #2	{2}	Unused	
Parameter #3	{3}	Unused	
Parameter #4	{4}	Unused	
Parameter #5	{5}	Unused	

Example in Run field:

```
c:\My folder\mypgm.exe -u="{1}" -p="{2}"
```

Command Line (External Application) - Parameters Tab

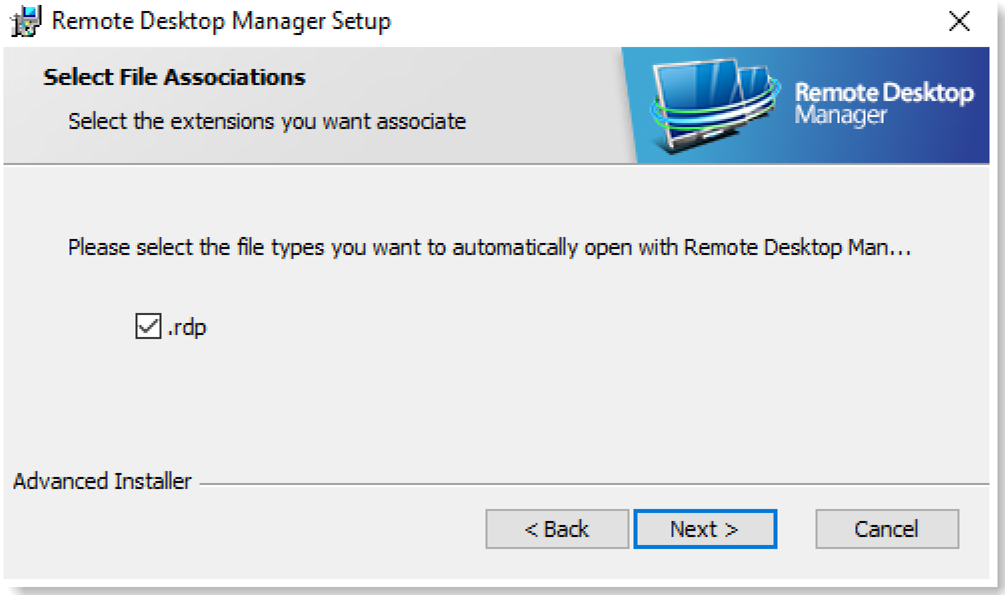
This is helpful when mostly using the tool with a certain file, but occasionally need to edit another file. You could have separate entry for each file you commonly edit, but this shows how flexible Remote Desktop Manager can be.

13.8.8 Handling RDP Connections

DESCRIPTION

Remote Desktop Manager can manage ***.rdp** file to open and connect sessions immediately. Even if your application is closed, you can open a ***.rdp** file. The application will open and start your connection.

SETTINGS



Remote Desktop Manager Setup

Select File Associations

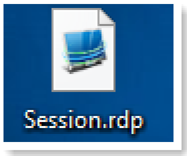
Select the extensions you want associate

Please select the file types you want to automatically open with Remote Desktop Man...

☑ .rdp

Remote Desktop Manager installation wizard

When deploying an installation of Remote Desktop Manager, you will be able to associate your ***.rdp** file to the application, allowing you to start an ***.rdp** file from your computer to be opened inside Remote Desktop Manager.



.rdp File

If an ***.rdp** file is launched, the session will start in Remote Desktop Manager. You can then create a new entry with this session by simply clicking on **save session as** from the edit section of the Actions tab.

13.8.9 HTML Export Using Symmetric Encryption

OVERVIEW

As we all know, email isn't secure. But it’s convenient, fast and free – and so many of us ignore the security risks.

Yet when you step back and think about it, ask yourself: Would you ever think of sending cash through the regular mail? Even sending it through a courier is risky! But if you send sensitive information via email, that’s pretty much what you’re doing.

Fortunately, there’s a solution!

We've developed a feature that allows for symmetric encryption of sensitive information, so that it can then be securely sent via email (or any other protocol) while keeping the data safe.

This feature can also be used to save/export/backup sensitive information to disk.

HOW IT WORKS

The feature is simple and easy to use:

- Select one or multiple data entries.
- Right-click ***Import/Export – Export Data Entry – Export Data Entry (.html).***
- When prompted, enter a password.
- Save the file to disk.

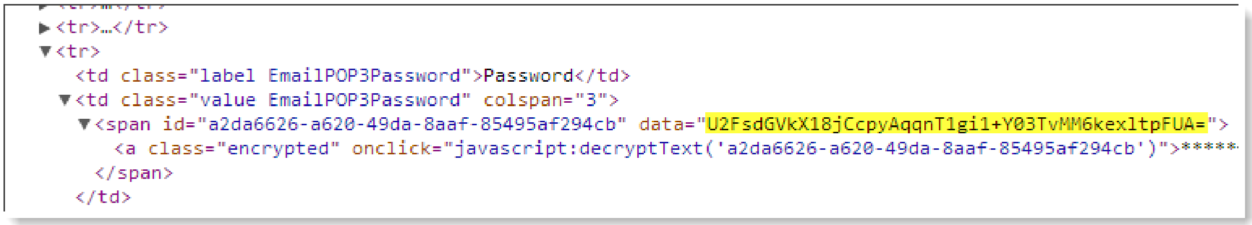
And that’s it! Your document is ready to be securely sent via email or any other protocol.

EXPORT MULTIPLE ENTRIES

And what if you’re exporting multiple data entries? To prevent prying eyes from seeing more than they should, each secured string must be individually decrypted. Someone is walking by your desk, simply hit F5 or close the file, and the information is secure again.

A WORD ABOUT AES-256

We use AES-256 to encrypt/decrypt your sensitive data. Since the decryption is done entirely in the browser, there's no need for external tools, downloads or installs. Here's a snapshot of the encrypted values:



```
▶<tr>…</tr>
▼<tr>
   <td class="label EmailPOP3Password">Password</td>
  ▼<td class="value EmailPOP3Password" colspan="3">
    ▼<span id="a2da6626-a620-49da-8aaf-85495af294cb" data="U2FsdGVkX18jCcpyAqqnT1gi1+Y03TvMM6kex1tpFUA=">
       <a class="encrypted" onclick="javascript:decryptText('a2da6626-a620-49da-8aaf-85495af294cb')">*****
     </span>
   </td>
```

Html File Content

SAFE & SMART VIRTUAL BACKUP

In addition, HTML Export using symmetric encryption is a great way to securely – and virtually – backup your passwords and other sensitive information. It allows you to share information via email, or simply send the file to your personal email account as a backup. The possibilities are endless, and it's just another way that we're working hard to help you centralize it, secure it and simplify IT!

PRINTING

Sorry, decryption of the printed document isn't supported. We have yet to figure out a way to do this. If someone ever does please let us know.

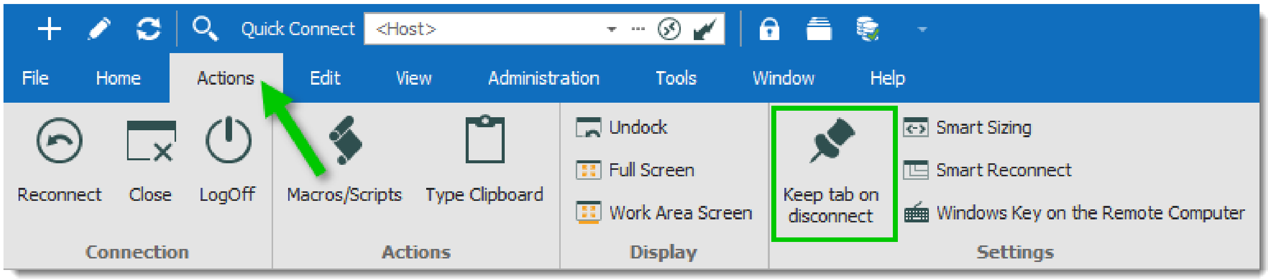
13.8.10 Keep Tabs Opened

DESCRIPTION

Remote Desktop Manager offers you the possibility of keeping a tab open even when disconnected, thus allowing you to restart a remote device or simply keep your work area set up to quickly resume after a work interruption.

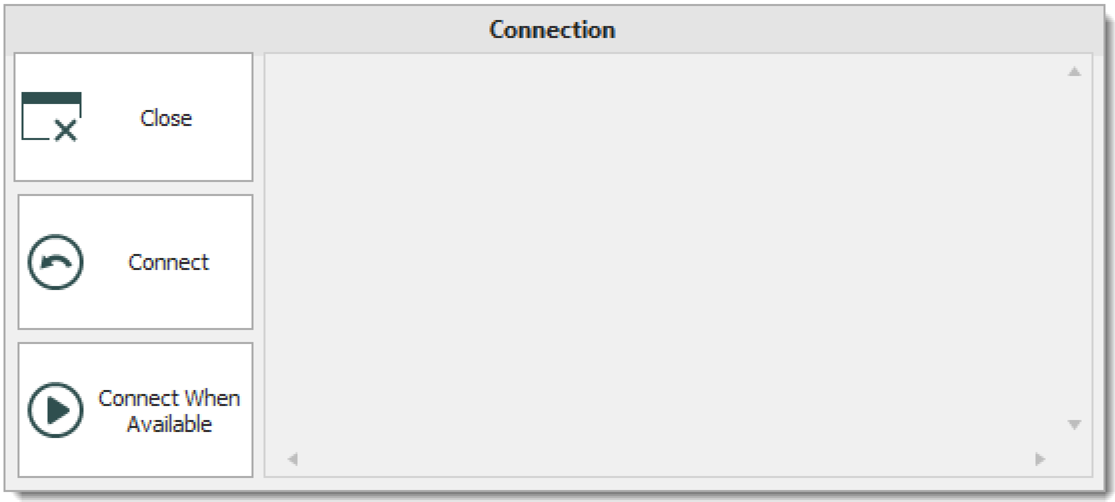
WORKFLOW

Your session must be running in embedded mode. Once your session is open, you'll notice the **Keep tab on disconnect** option in your **Action** ribbon.



Actions Ribbon

Enable the **Keep tab on disconnect** to be able to perform a logoff or restart while keeping the tab present. A panel will replace the content of the session.

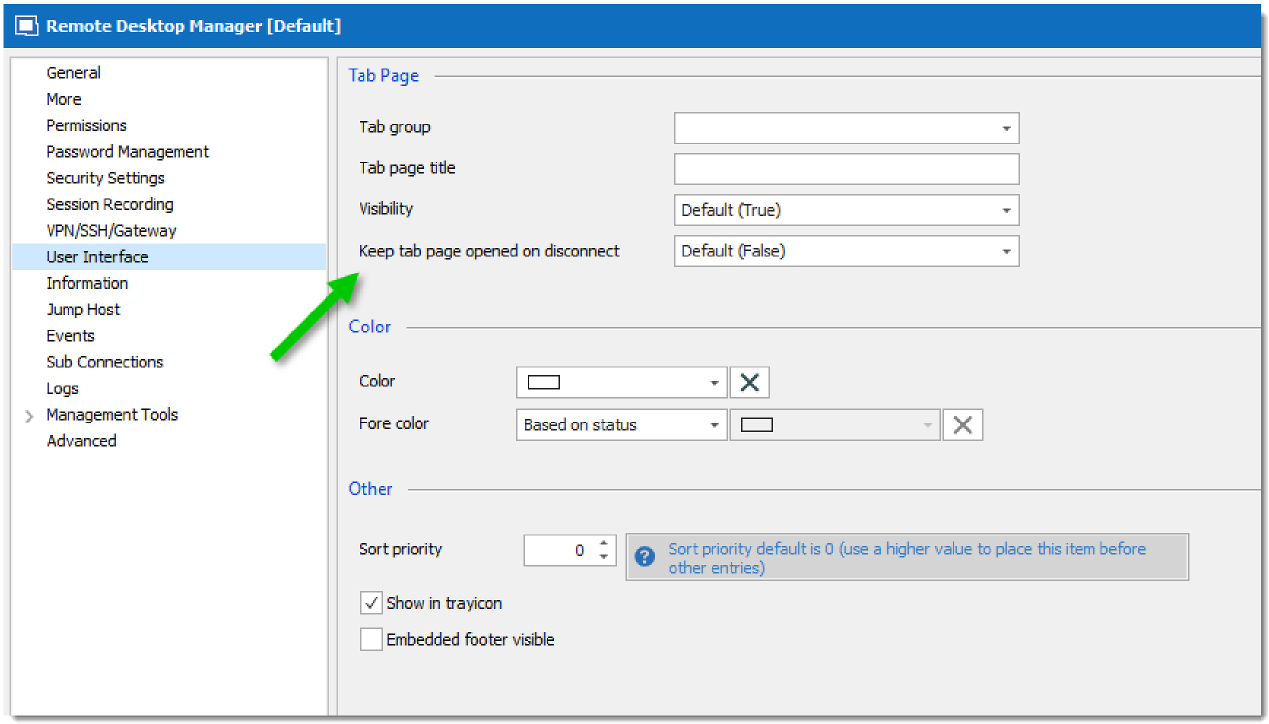


Connection panel

This panel offers three actions:

- **Close**: You changed your mind and want to close the tab
- **Connect**: Connect the session
- **Connect When Available**: Pings the host until it becomes available, then connects the session.

If you wish to have the option enabled by default, edit your session and in the User Interface tab enabled the **Keep tab page opened on disconnect** option.



Remote Desktop Manager [Default]

- General
- More
- Permissions
- Password Management
- Security Settings
- Session Recording
- VPN/SSH/Gateway
- User Interface
- Information
- Jump Host
- Events
- Sub Connections
- Logs
- Management Tools
- Advanced

Tab Page

Tab group	
Tab page title	
Visibility	Default (True)
Keep tab page opened on disconnect	Default (False)

Color

Color	▭
Fore color	Based on status ▭

Other

Sort priority 0

Sort priority default is 0 (use a higher value to place this item before other entries)

☑ Show in trayicon

□ Embedded footer visible

RDP session - User Interface

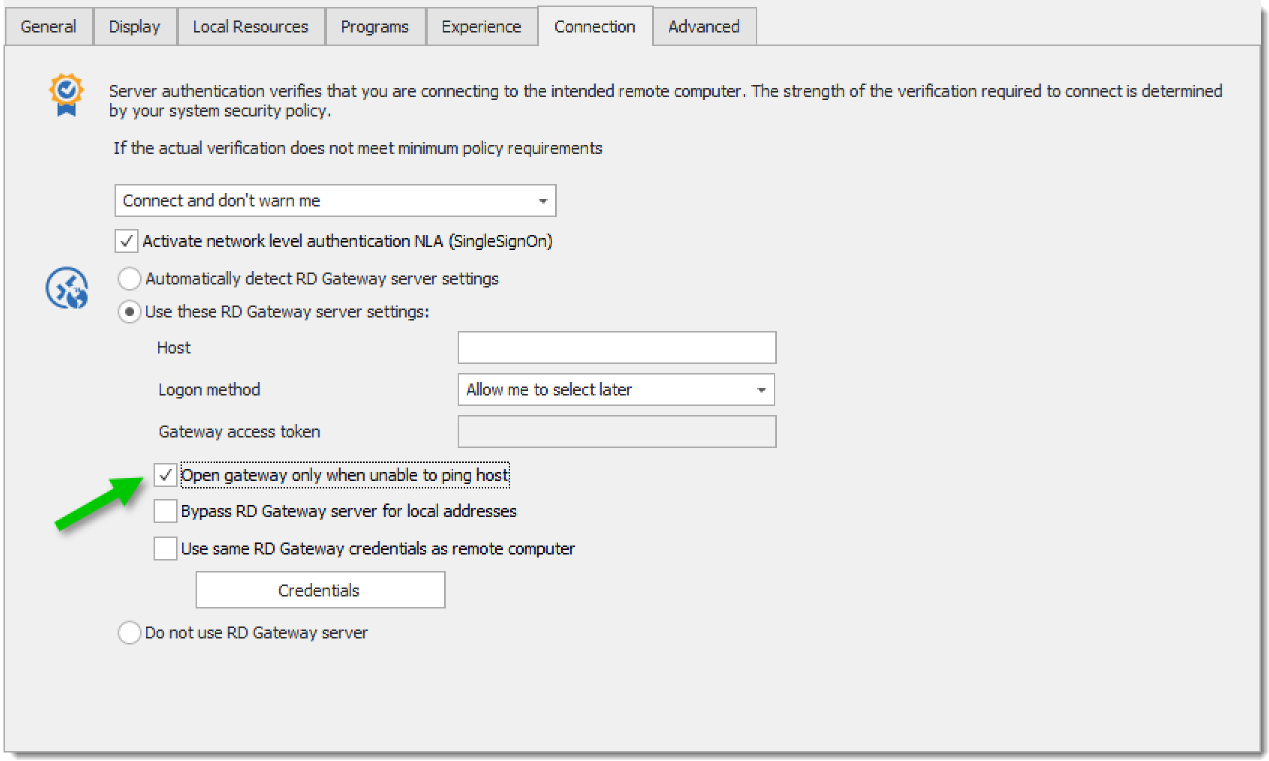
13.8.11 Open RD Gateway Only when Unable to Ping Host

DESCRIPTION

Use your RD Gateway only when your host is unreachable.

SETTINGS

In your Microsoft Remote Desktop (RDP) entry, under Connection, you can enable **Open gateway only when unable to ping host,** connectivity with the remote host will be tested to see if its reachable, if not, the RD Gateway will be used.



Server authentication verifies that you are connecting to the intended remote computer. The strength of the verification required to connect is determined by your system security policy.

If the actual verification does not meet minimum policy requirements

Connect and don't warn me

☑ Activate network level authentication NLA (SingleSignOn)

○ Automatically detect RD Gateway server settings

● Use these RD Gateway server settings:

Host

Logon method: Allow me to select later

Gateway access token

☑ Open gateway only when unable to ping host

☐ Bypass RD Gateway server for local addresses

☐ Use same RD Gateway credentials as remote computer

○ Do not use RD Gateway server

Connection Tab

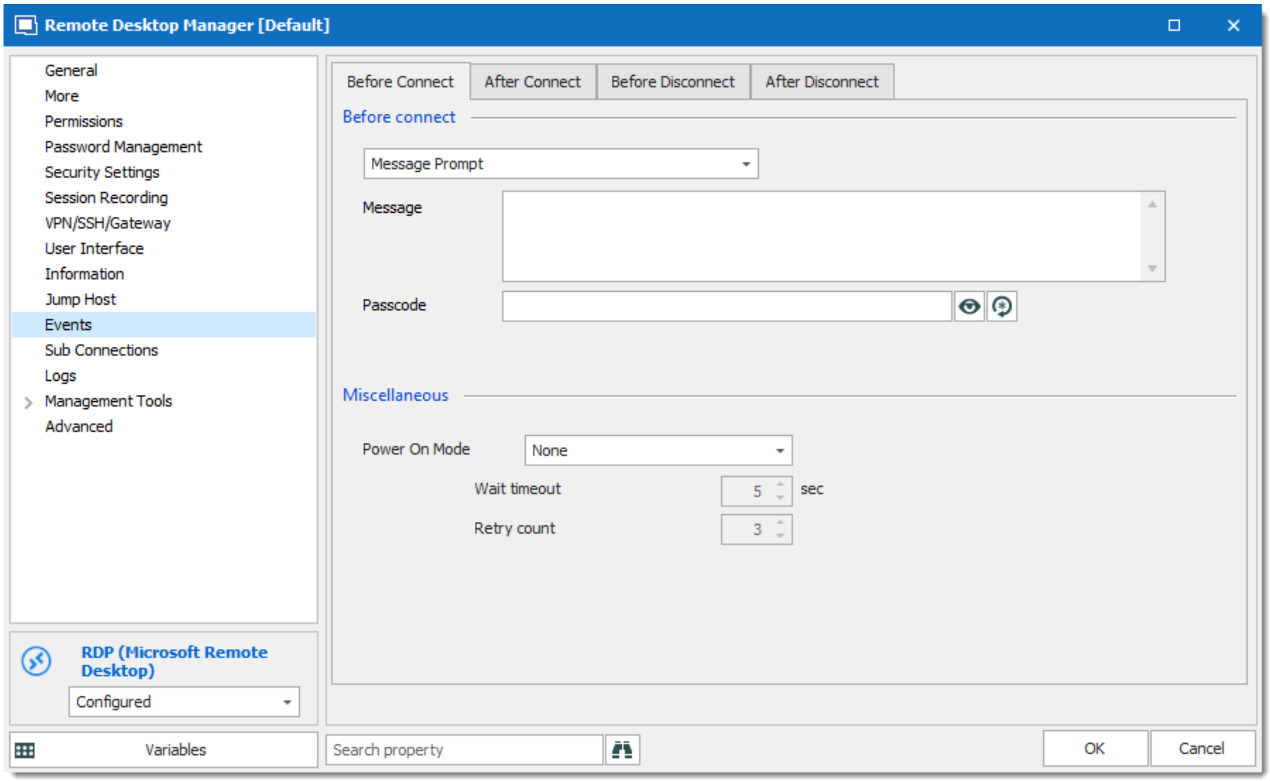
13.8.12 Passcode Prompt When Opening an Entry

DESCRIPTION

Sometimes you want to ensure that your users are really opening the right session.

WORKFLOW

In the Events tab, in the Before Connection section, when you select **Message Prompt**, you will notice a Passcode field.



Before connect

Message Prompt

Message

Passcode

Miscellaneous

Power On Mode: None

Wait timeout: 5 sec

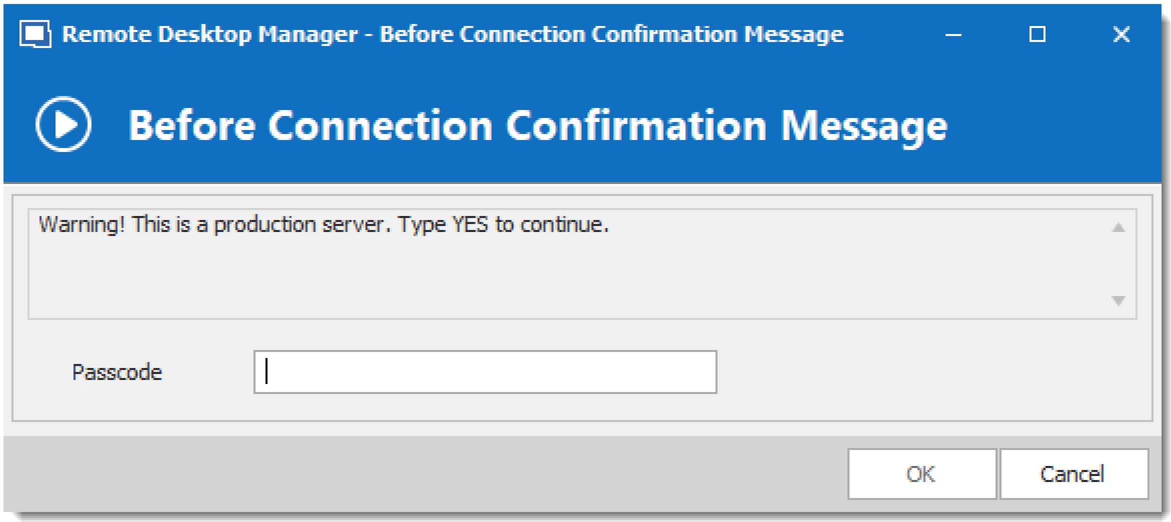
Retry count: 3

Configured

Events Tab

There is a field to enter a **Message** and another one for a **Passcode**. The idea is not to add another password to launch the session, but rather to act as a safeguard. For example, you could set the message to “Warning! This is a production server. Type YES to continue.” and set the Passcode to YES.

This allows you to give just a little jolt when you attempt to launch the session!


Remote Desktop Manager - Before Connection Confirmation Message
Before Connection Confirmation Message
OK
Cancel

Warning! This is a production server. Type YES to continue.

Passcode

Passcode In Action

13.8.13 RDP Session Time Limits

DESCRIPTION

When you close you RDP sessions, you may inadvertently (or willfully) leave your session running on the remote host. Depending on the programs you have left running, this can consume excessive resources and can be even interpreted as a security risk.

Windows allows you to control how **Remote Desktop Services** handle sessions through Group Policies. This can be administered on the host computer itself, or be pushed at the domain level for multiple hosts.

What follows is the procedure to perform on a single host computer.

PROCEDURE

1. Launch **Edit group policy**. (Press the windows key, and type "edit group policy", for Windows 8 it is in the **Settings** category).

2. Browse to:

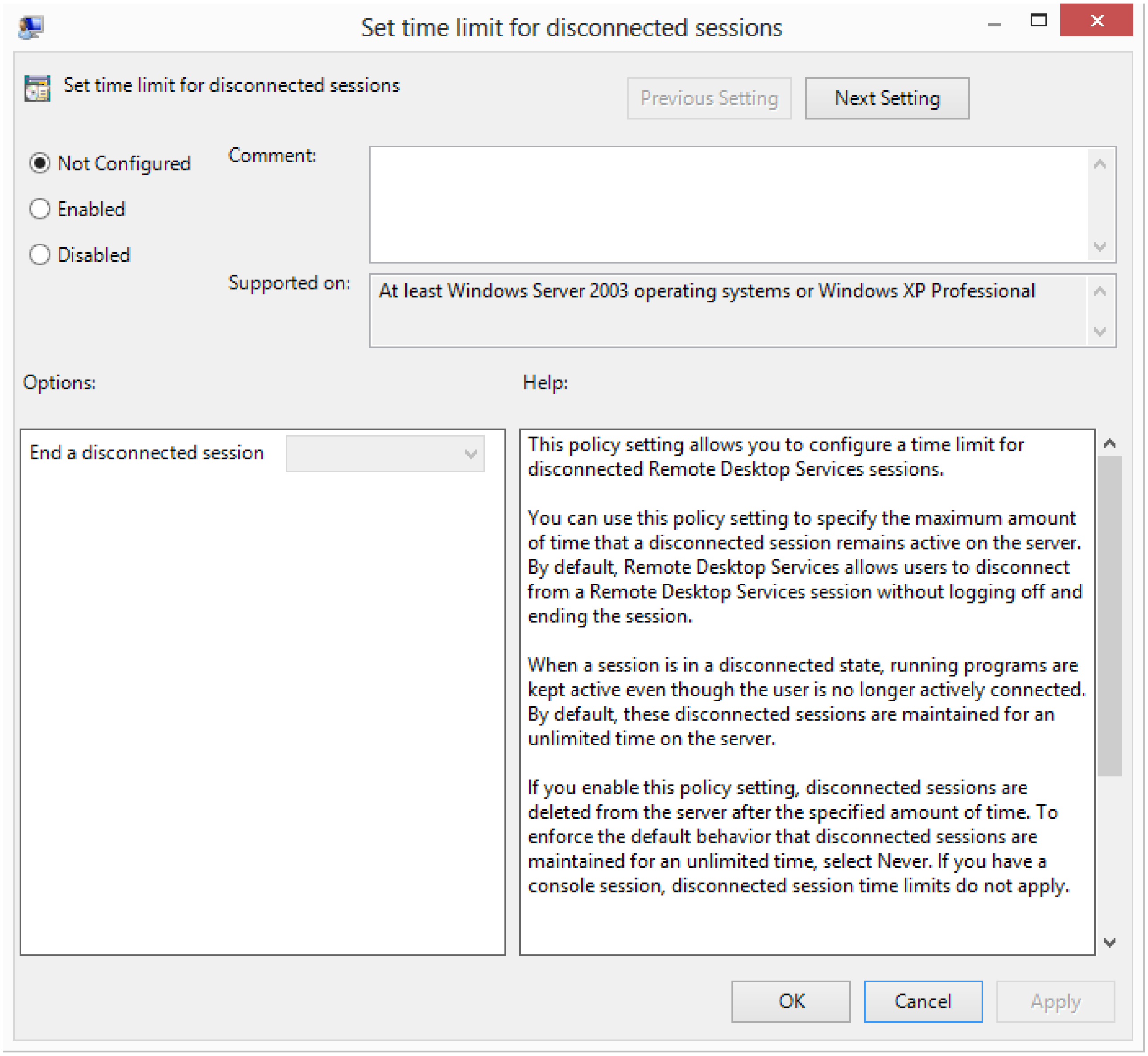
```
Computer Configuration
    Administrative Templates
        Windows Components
            Remote Desktop Services
                Remote Desktop Session Host

                    Session Time limits
```

The settings are described as follows (when you alter the setting using the Group Policy Editor, you will see a detailed description).

Set time limit for disconnected sessions	This policy setting allows you to configure a time limit for disconnected Remote Desktop Services sessions. By default, Remote Desktop Services allows users to disconnect from a Remote Desktop Services session without logging off and ending the session.
Set time limit for active but idle Remote Desktop Services sessions	This policy setting allows you to specify the maximum amount of time that an active Remote Desktop Services

	session can be idle (without user input) before it is automatically disconnected.
Set time limit for active Remote Desktop Services sessions	This policy setting allows you to specify the maximum amount of time that a Remote Desktop Services session can be active before it is automatically disconnected.
End session when time limits are reached	This policy setting specifies whether to end a Remote Desktop Services session that has timed out instead of disconnecting it.

3. Double click on the setting (or right-click, **Edit**), an edition form will appear.



Set time limit for disconnected sessions

● Not Configured

○ Enabled

○ Disabled

Supported on: At least Windows Server 2003 operating systems or Windows XP Professional

End a disconnected session

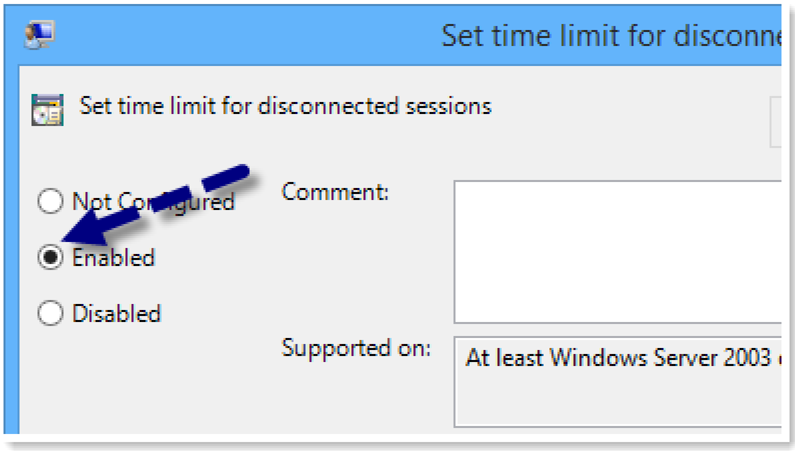
This policy setting allows you to configure a time limit for disconnected Remote Desktop Services sessions.

You can use this policy setting to specify the maximum amount of time that a disconnected session remains active on the server. By default, Remote Desktop Services allows users to disconnect from a Remote Desktop Services session without logging off and ending the session.

When a session is in a disconnected state, running programs are kept active even though the user is no longer actively connected. By default, these disconnected sessions are maintained for an unlimited time on the server.

If you enable this policy setting, disconnected sessions are deleted from the server after the specified amount of time. To enforce the default behavior that disconnected sessions are maintained for an unlimited time, select Never. If you have a console session, disconnected session time limits do not apply.

4. Select **Enabled**, this will enable the control in the lower section.



Set time limit for disconne

Set time limit for disconnected sessions

○ Not Configured

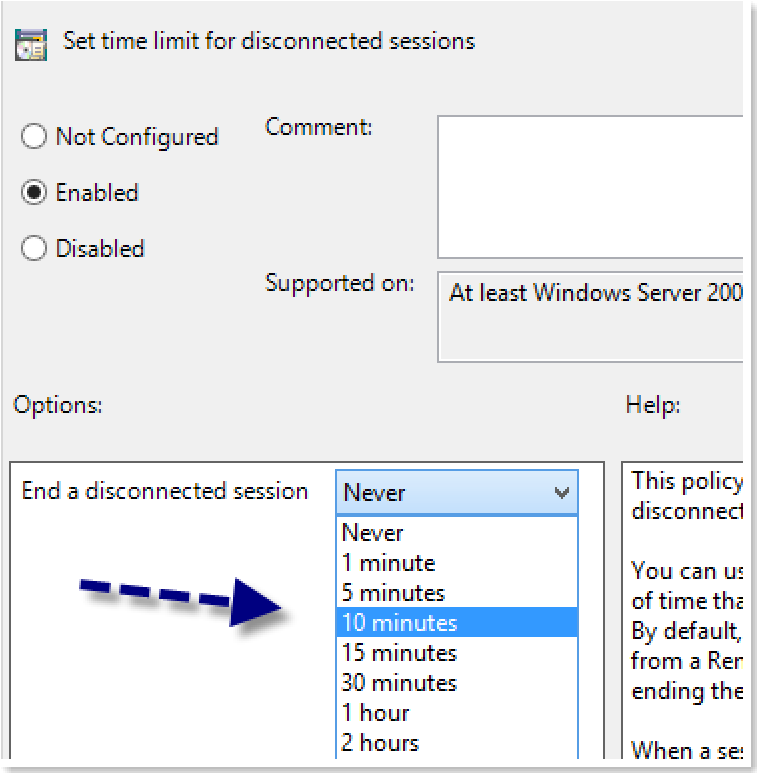
● Enabled

○ Disabled

Comment:

Supported on: At least Windows Server 2003 (

5. Choose your desired value from the list.



Set time limit for disconnected sessions

○ Not Configured

● Enabled

○ Disabled

Comment:

Supported on: At least Windows Server 200

Options:

End a disconnected session: Never

Never
1 minute
5 minutes
10 minutes
15 minutes
30 minutes
1 hour
2 hours

Help:

This policy
disconnect

You can us
of time tha
By default,
from a Rer
ending the

When a se

6. Press Apply.

7. Repeat for other settings as desired. Note that for true/false settings there is no control in the Options area. Just enabling the policy will activate the setting.

From then on, all future sessions established on that host will follow these policy settings.

You may want to explore all the policies below Remote Desktop Services, you may find hidden gems that would help your organization.

13.8.14 Remote Install with PSExec

DESCRIPTION

When you need to perform a remote installation, you have multiple options. Such as a domain policy, a logon script or PSExec.

Depending on the way the security is configured on the remote computer, you may run into issues where even an administrator cannot install an application properly. For these cases, you need to run PSExec in the context of the system account.

First of all, you will need to install the Sysinternals tools from Microsoft, because you will need the help of PSExec.exe in the execution of this script. (https://technet.microsoft.com/en-us/sysinternals/bb842062)

Then, download the ***.msi** or the ***.exe** of the application you wish to install and save the file on a shared drive that is accessible from the remote computer.

> Options exist to copy files remotely, please refer to PSExec documentation for further details.

SETTINGS

1. Create a **Macros/Scripts/Tools** entry, use the **PSExec** type. In the Command line section, add the following (long) line:

```
C:\Tools\Sysinternals\psexec.exe \\$HOST$ -i -u $TOOL_DOMAIN$\$TOOL_USERNAME$ -p $TOOL_PA
k "msiexec /i \\SRV-DEPLOY\msi\Setup.RemoteDesktopManager.10.9.0.0.msi /quiet /passive /n
```

> The full path to the ***.msi** must be entered. A shared network is recommended in this case.

A few notes on that command line:

1. Replace the path to launch PSExec.

2. Add the appropriate credentials in the **Tools** section of your session, if left blank it will use your current Windows session credentials.

3. Indicate the appropriate server shared to get the ***.msi*** or ***.exe.***

4. When you are ready to deploy your application on the remote computer, you just need to select the appropriate session in the Navigation Pane and launch the **Macros/Scripts/Tools** from the Dashboard. The **Macros/Scripts/Tools** entry can also be launch via the RDM Agent.

USAGE

The Macros/Scripts/Tools type are always run in the context of a session. In fact they use the information in the session to identify what host to run the tool against, that is why we used the $HOST$ variable.

For this reason, the first step is to select a session, any type of session will do (RDP, SSH, etc). After selecting the session, the dashboard will display the **Macros/Scripts/Tools**. Simply clicking on the tool will therefore launch it against the host linked to the currently selected session. You can select hosts and install in sequence.

13.8.15 Run as Another User

DESCRIPTION

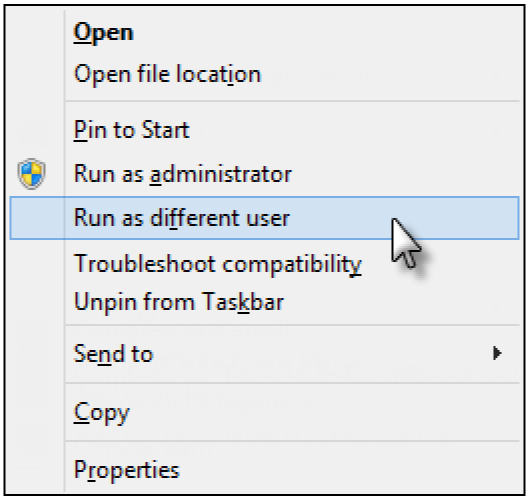
There are many different type of credentials and they are used by a multitude of users. Be it a mobile warrior, a sysadmin that follows best practices and doesn't log on to his computer using his domain admin account or even a safety conscious parent that creates limited accounts for the kids on the family computer. This requires the capability to start an application under a different set of credentials while we are already logged on using our main credentials.

The problem is solved by using the Windows **Run As** command.

> The **Run As** command requires that the **Secondary Logon** service be running.

SETTINGS

In Windows you can manually start any process as a different user using **SHIFT + right-click** to get the context menu.



SHIFT + right-click popup menu

The **Run As** command has many parameters to change its behaviour, we wont cover them all here, but if you have an advanced scenario we suggest you consult the Windows help.

OPTIONS

You have two options when it comes to **Run As**:

BUILT-IN RUN AS

In Remote Desktop Manager, some sessions/tools types support the **Run As** functionality. For a complete list and configuration information see the Built-In Run As help topic.

MANUAL RUN AS

Your session type is not supported and need help to manually configure Run As? See the Manual Run As help topic.

13.8.15.1 Built-in RunAs

DESCRIPTION

This article describes the built in method of using **Run As**. For sessions types that don't yet support the built in method you can follow the manual steps outlined here.

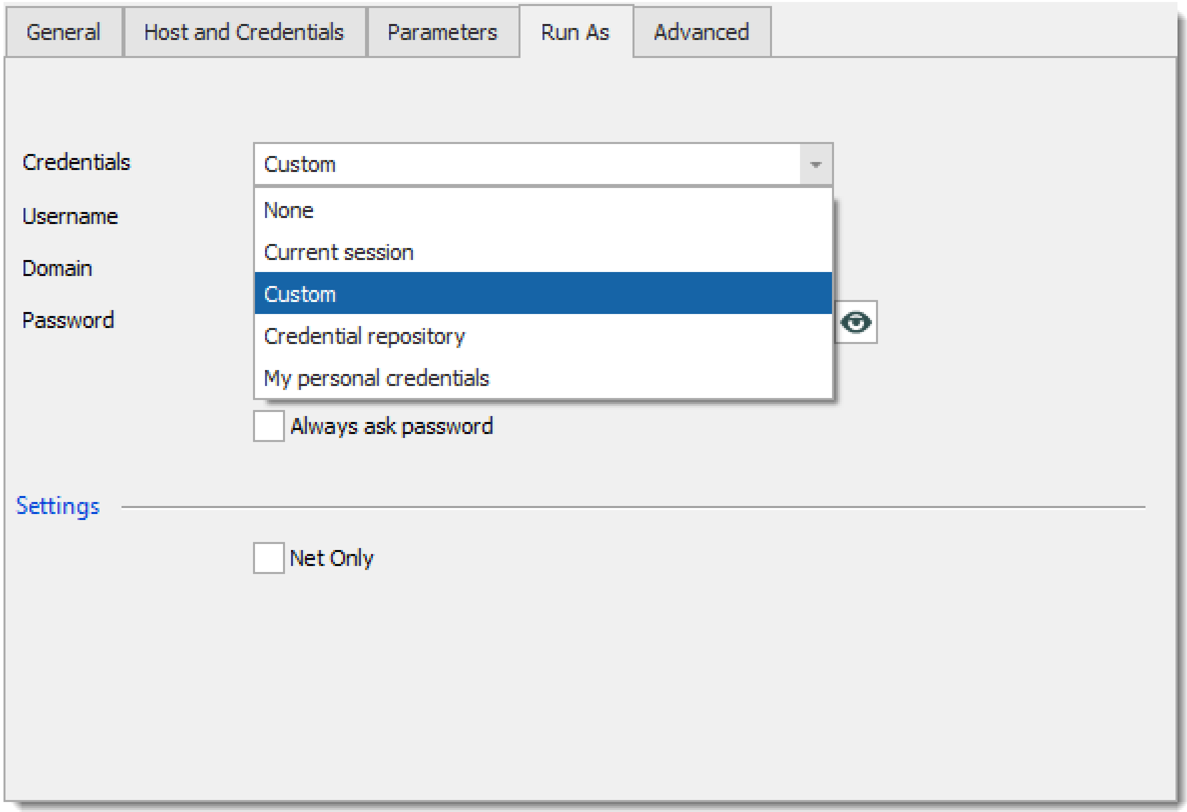
SETTINGS

SUPPORTED TYPES

The following types currently support **Run As**.

OPTION	DESCRIPTION
Session	• Command Line • PowerShell
Macros/Scripts/Tools	• Command Line • PowerShell Local • PowerShell Remote • PSExec
Session Add-on	• SQL Server Management Studio

SESSION



Credentials: Custom

□ Always ask password

□ Net Only

Command Line (External Application) - Run As Tab

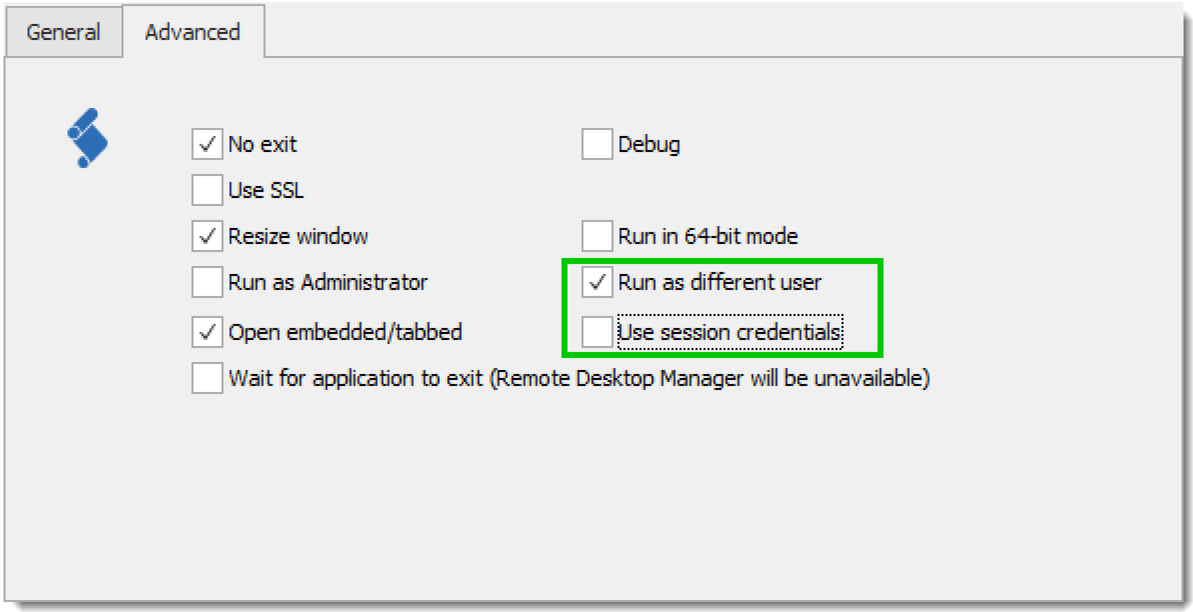
Sessions that support Run As will have a Run As tab where you specify which credentials to use when starting with Run As.

OPTION	DESCRIPTION
None	No Run As is performed.
Current session	Use the same credentials as defined in the session.
Custom credentials	Use specified custom credentials.
Credential repository	Use a link credential entry.

OPTION	DESCRIPTION
Use my personal credentials	Use a link private credential entry.

MACROS/SCRIPTS/TOOLS

With tools session types you only need to specify **Run as different user** in **Advanced** tab. At execution time the credentials will be resolved and used to start the Windows Credentials unless you select Use session credentials, in which case it will use those active for the session.



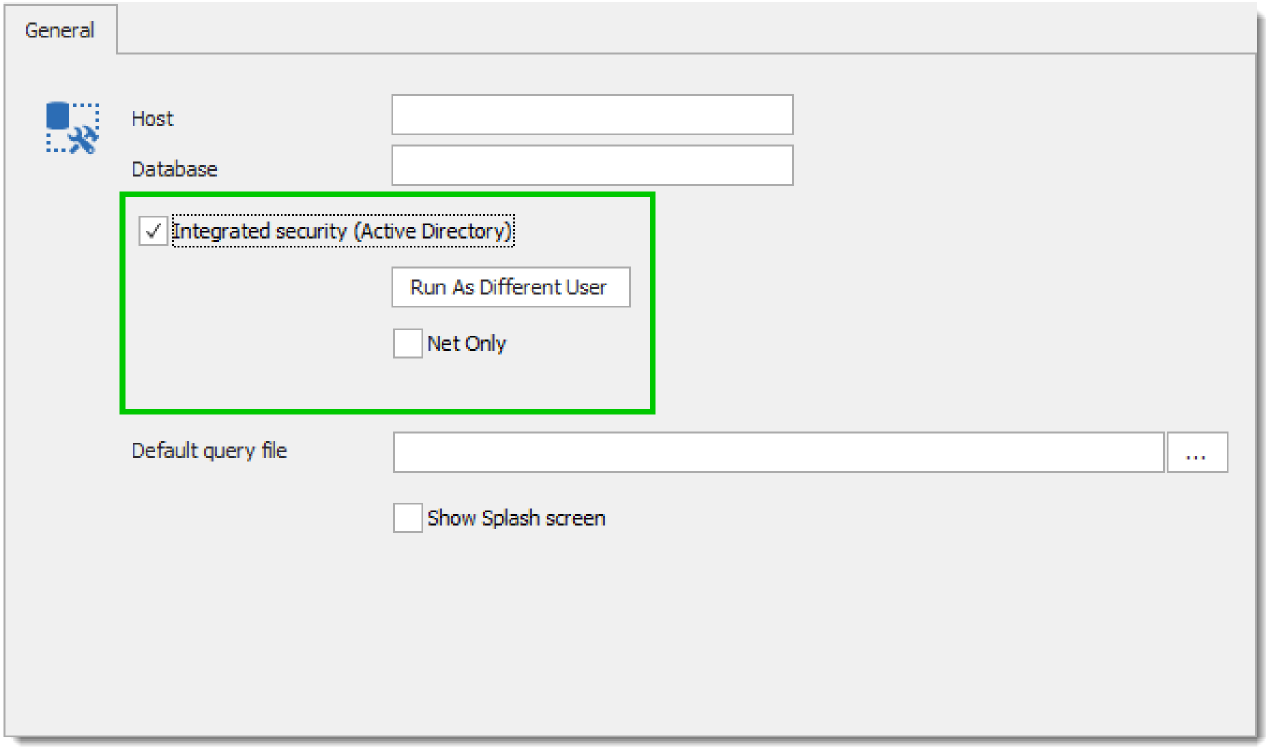
☑ No exit
□ Debug
□ Use SSL
☑ Resize window
□ Run in 64-bit mode
□ Run as Administrator
☑ Run as different user
☑ Open embedded/tabbed
□ Use session credentials
□ Wait for application to exit (Remote Desktop Manager will be unavailable)

Powershell (Remote) - Advanced Tab

With tools session types you only need to specify **Run as different user**. At execution time the credentials will be resolved and used to start the Run As process.

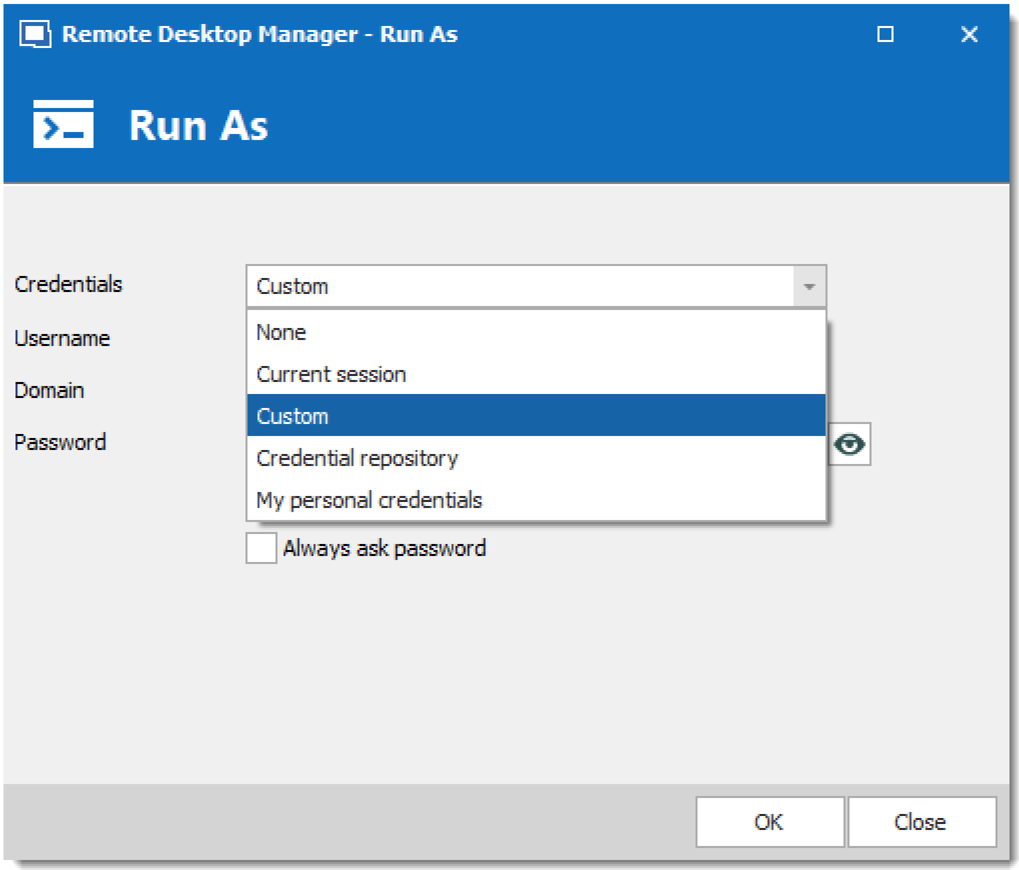
SESSION ADD-ON

SQL Server Management Studio supports Run As. Configure it like you would configure a normal session.



SQL Server Management Studio - General

Click on **Run as different user** to modify the **Run As** settings.



Credentials: Custom

Run As Different User

NOTES

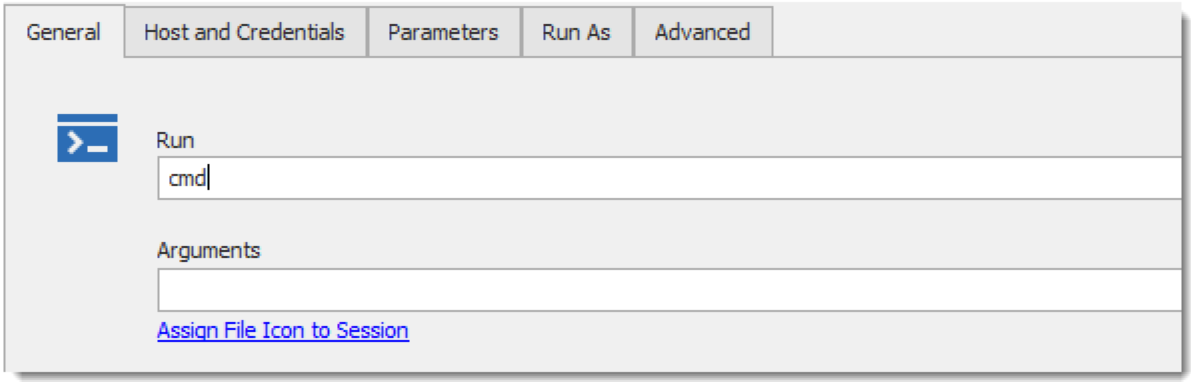
Run as Different User and **Run As Administrator** are mutually exclusive.

Run as Different User doesn't allow for **Shell Execute**.

EXAMPLE: COMMAND LINE SESSION WITH RUN AS DIFFERENT USER ON THE SAME WORKGROUP/DOMAIN

1. Create a new Command Line session.

2. Set the command to **CMD**.



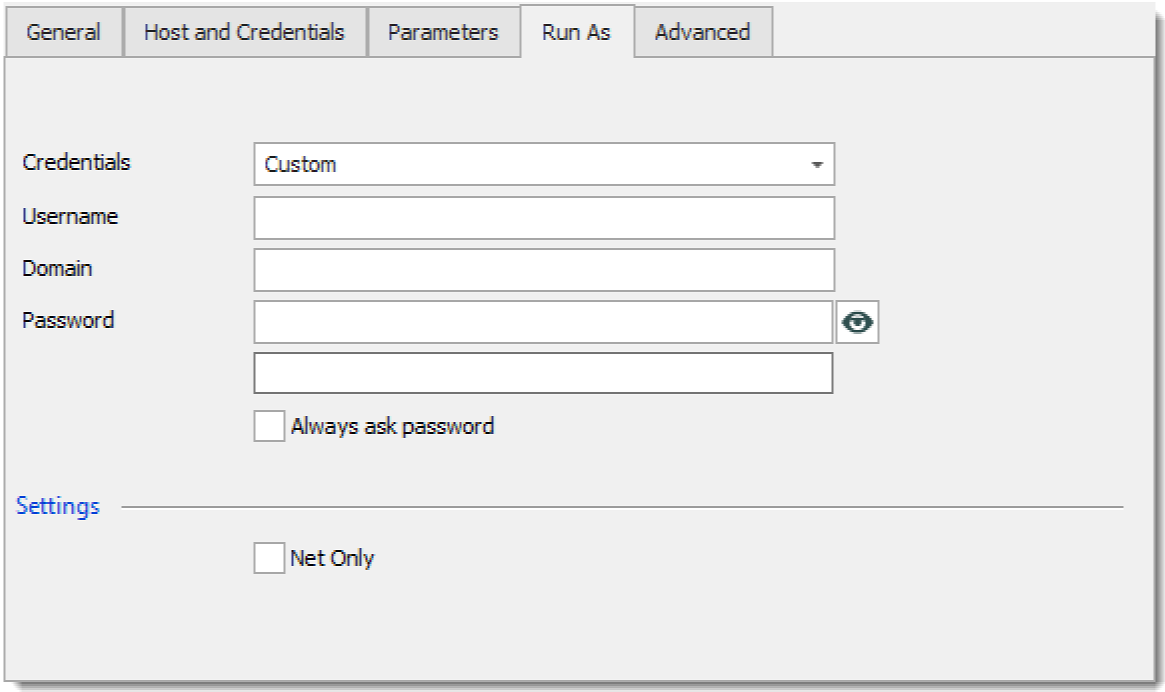
Run: cmd

Arguments:

Assign File Icon to Session

Command Line (External Application) - General Tab

3. Specify the **Run As** credentials.



Credentials: Custom

Username:

Domain:

Password:

□ Always ask password

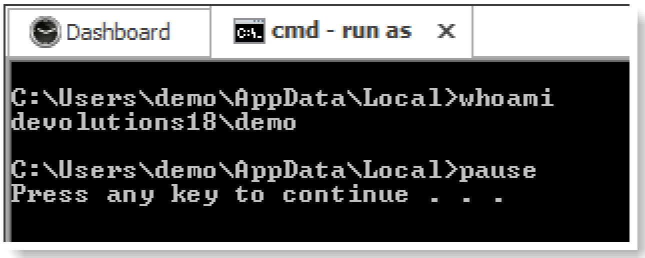
Settings

□ Net Only

Command Line (External Application) - Run As Tab

4. Save your session.

5. Run your Command Line session.



```
C:\Users\demo\AppData\Local>whoami
devolutions18\demo

C:\Users\demo\AppData\Local>pause
Press any key to continue . . .
```

13.8.15.2 Manual RunAs

DESCRIPTION

This article describes the manual method of using RunAs. Some types support built-in RunAs details are available here.

SETTINGS

SCENARIOS

There are two major scenarios when using RunAs: the authentication server is accessible directly from you machine or you need delayed authentication.

- **AUTHENTICATION SERVER IS LOCALLY ACCESSIBLE**

  This scenario is for when you are already authenticated on a domain/workgroup and you need to switch to another account of the same domain/workgroup.

- **DELAYED AUTHENTICATION**

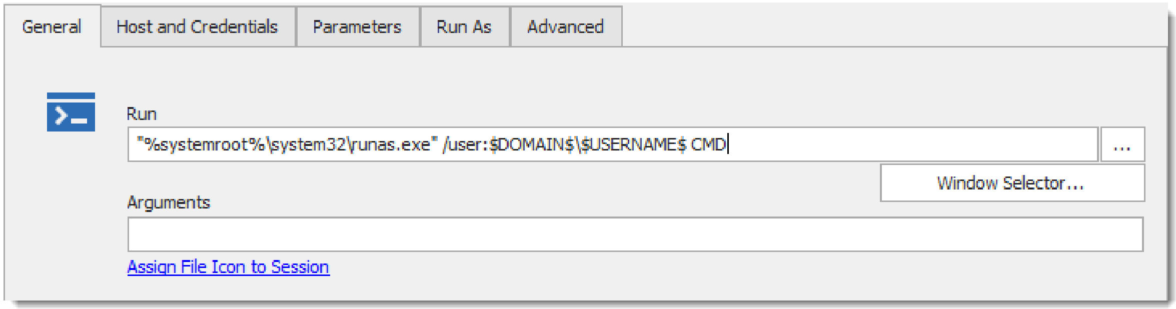
  This scenario is for when it is impossible to log on your machine using the other set of credentials. For example you need to connect to a client's domain using your laptop that is on your company's domain. This will require using the **/NETONLY** parameter of RunAs.

EXAMPLES

The RunAs command is invoked from an entry of the "Command line" type. Create the entry either by pressing the Insert key or by using the menus. Select the "Command line" type and enter a name for it.

EXAMPLE 1: RUNNING A COMMAND PROMPT AS ANOTHER USER OF THE SAME WORKGROUP/DOMAIN

1. You can use the ellipsis button to browse for the ***runas.exe*** command, but if you are in a shared data source and the session is used on various operating systems, it's better to type in ***"%systemroot%\system32\runas.exe"*** because it will work on all of them.
2. Append ***/user:$DOMAIN$\$USERNAME$***, keeping it outside of the quotes. Note the use of two variables that will pull the appropriate value from other fields of the same session. For more information please consult the Variables topic.
3. Append the name of the executable you want to run. Enclose it in quotes if the full path contains spaces. In our case we can simply add ***CMD***,

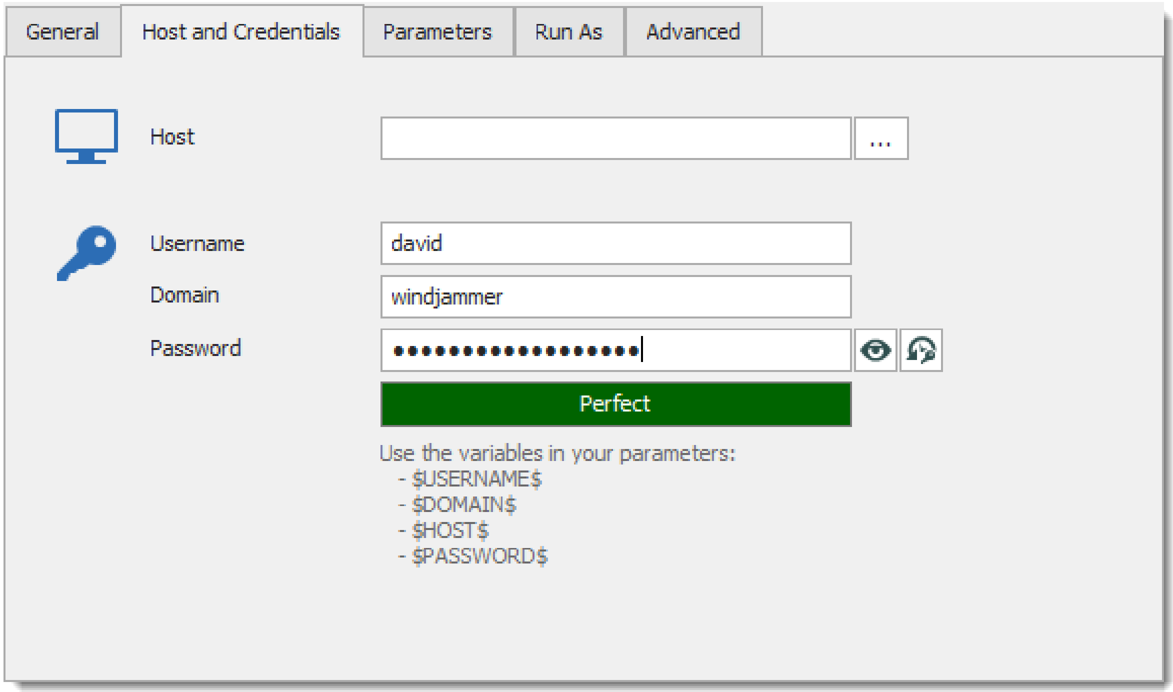


Run: "%systemroot%\system32\runas.exe" /user:$DOMAIN$\$USERNAME$ CMD

Arguments:

Command Line (External Application) - General Tab

4. Specify your credentials in the **Host and Credential** tab. Note that when you are not part of a domain, you should enter the computer name in the domain field.



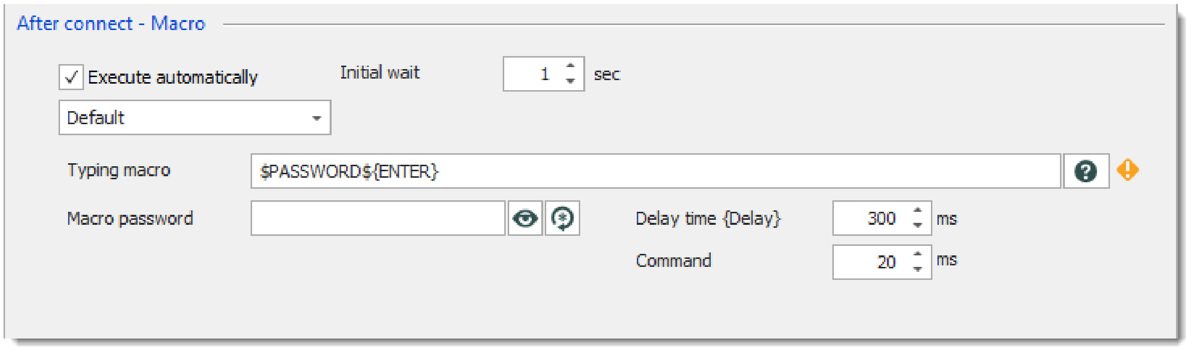
Host:
Username: david
Domain: windjammer
Password: ••••••••••••••••••

Use the variables in your parameters:
- $USERNAME$
- $DOMAIN$
- $HOST$
- $PASSWORD$

5. In the **Events** tab you must define a typing macro

5.1. Set the Initial Delay to the lowest value that will allow the initial prompt to appear. On most systems 1 second is sufficient

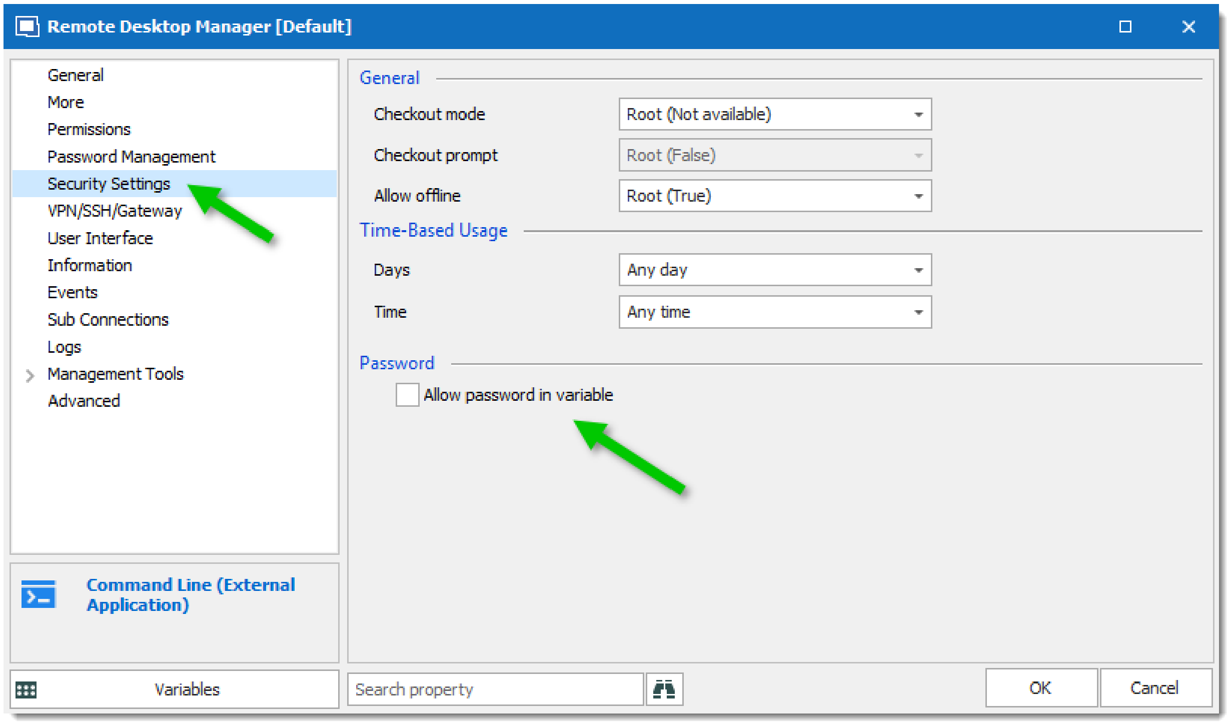
5.2. In the Typing macro field, enter the following: **$PASSWORD${ENTER}**. For more information please consult Auto Typing Macro.



☑ Execute automatically
Initial wait 1 sec
Default
Typing macro $PASSWORD${ENTER}
Macro password
Delay time {Delay} 300 ms
Command 20 ms

Events - After Connect Tab

6. In the **Security Settings** tab, you must check "**Allow password in variable**".



General

Checkout mode: Root (Not available)

Checkout prompt: Root (False)

Allow offline: Root (True)

Time-Based Usage

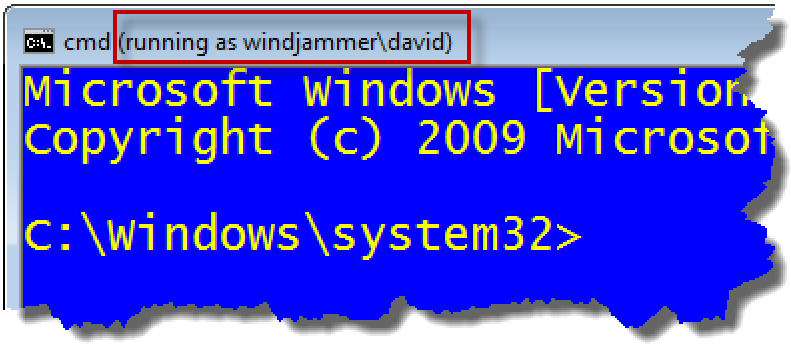
Days: Any day

Time: Any time

Password

☐ Allow password in variable

When you run your session, a command prompt window appears requesting the password for the user. The Typing Macro will fill it in after the 1 second delay. After this, the command window that is running under the different credentials appears. Note that the title indicates the other identity.



cmd (running as windjammer\david)

```
Microsoft Windows [Version
Copyright (c) 2009 Microsoft

C:\Windows\system32>
```

EXAMPLE 2: RUNNING SQL SERVER MANAGEMENT STUDIO AS A USER OF A DIFFERENT DOMAIN/WORKGROUP FOR USING WINDOWS AUTHENTICATION

The are minor differences with Example 1, but here is the full procedure to make it easy to read ℹ Note that most of our entries now support **NetOnly** as a built in feature.

1. You can use the ellipsis button to browse for the runas.exe command, but if you are in a shared data source and the session will be used on various operating systems, it's better to type in ***"%systemroot%\system32\runas.exe"*** because it will work on all of them.

2. Append ***/netonly /user:$DOMAIN$\$USERNAME$***, keeping it outside of the quotes. Note the use of two variables that will pull the appropriate value from other fields of the same session. For more information please consult the Variables topic. Also note the use of the ***NetOnly*** parameter, it signals that the credentials will be used for network access only.

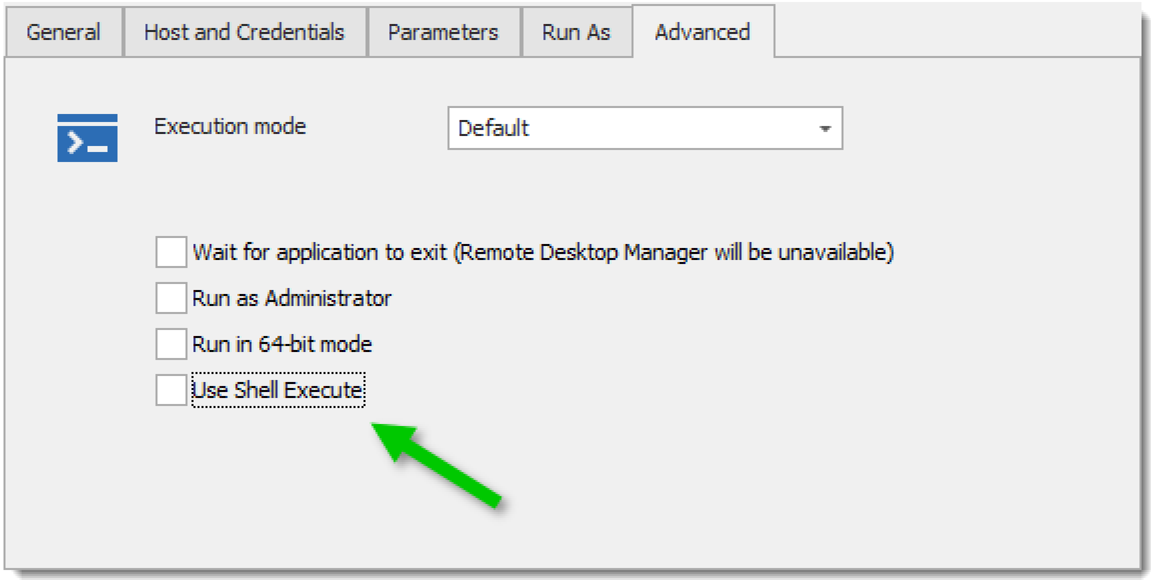
3. Append the name of the Management Studio executable and its parameters. All this needs to be within the same double quotes

   3.1.SQL Server Management studio is located at "C:\Program Files (x86)\Microsoft SQL Server\110\Tools\Binn\ManagementStudio\Ssms.exe" on most machines, adapt to your situation if it's not the same.

   3.2.My parameters look like this: ***-S sql.windjammer.loc -E***. -S is for the server name, -E is to use windows authentication, you can even specify the database using -d __DB_NAME__ (i.e. -d rdm)

   The result is: "C:\Program Files (x86)\Microsoft SQL Server\110\Tools\Binn\ManagementStudio\Ssms.exe -S sql.windjammer.loc -E"

4. Uncheck "**Use Shell Execute**" (this must be done for most Windows Applications)



Execution mode: Default

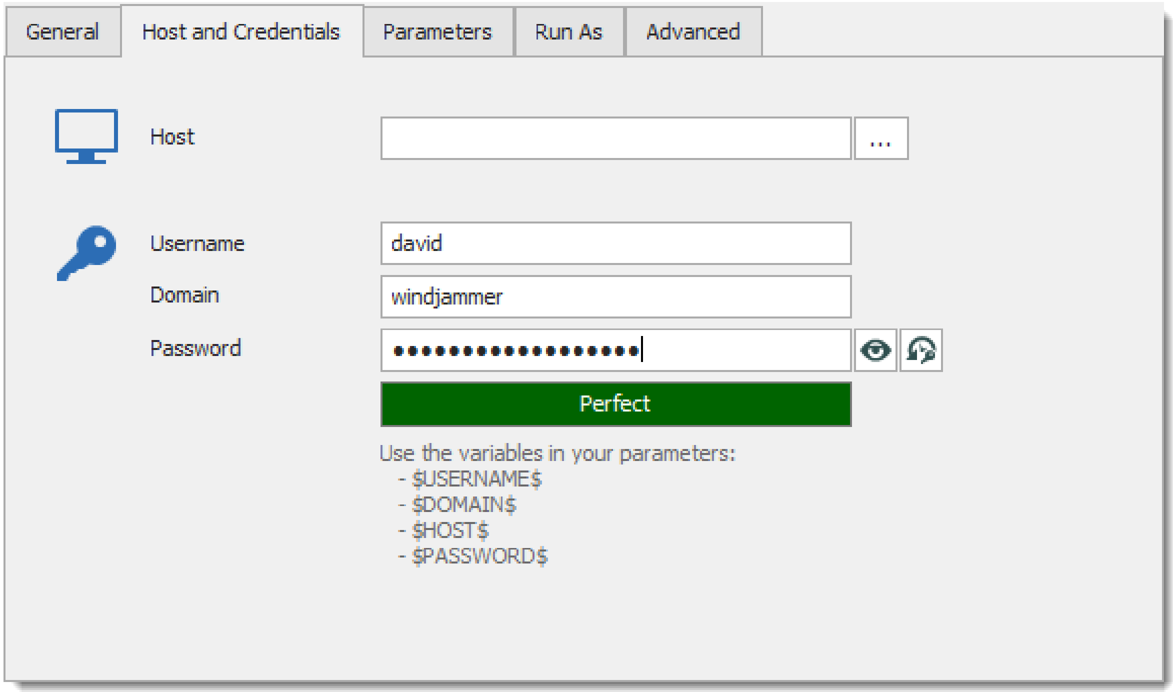
□ Wait for application to exit (Remote Desktop Manager will be unavailable)

□ Run as Administrator

□ Run in 64-bit mode

□ Use Shell Execute

7. Specify your credentials in the **Host and Credential** tab. Note that when you are not part of a domain, you should enter the computer name in the domain field.



Host:

Username: david

Domain: windjammer

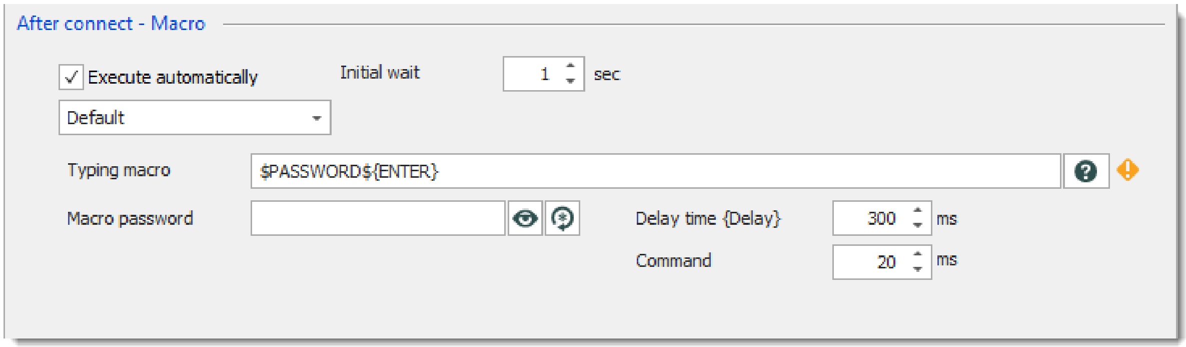
Password: ••••••••••••••••••

Use the variables in your parameters:
- $USERNAME$
- $DOMAIN$
- $HOST$
- $PASSWORD$

8. In the Events tab you must define a typing macro

8.1. Set the Initial Delay to the lowest value that will allow the initial prompt to appear. On most systems 1 second is sufficient

8.2. In the Typing macro field, enter the following: ***$PASSWORD${ENTER}***. For more information please consult Auto Typing Macro.



After connect - Macro

☑ Execute automatically

Initial wait: 1 sec

Default

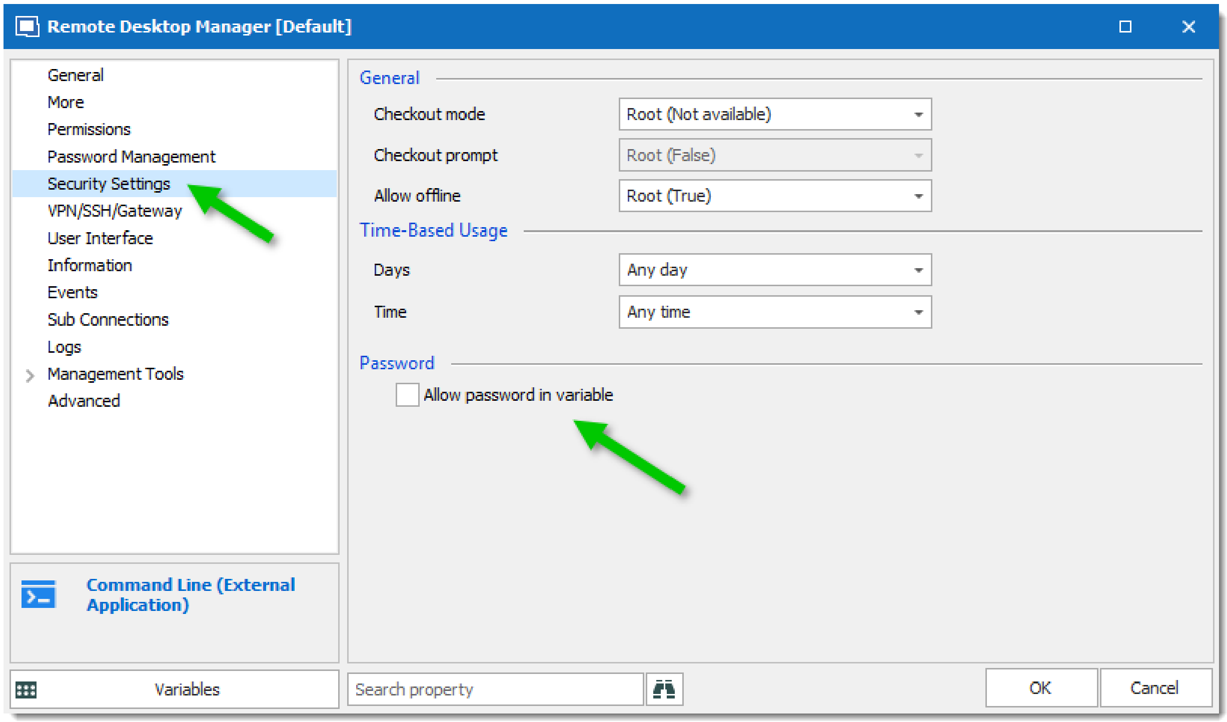
Typing macro: $PASSWORD${ENTER}

Macro password:

Delay time {Delay}: 300 ms

Command: 20 ms

9. In the advanced tab, you must check "***Enable password in variable***".



Remote Desktop Manager [Default]

General

Checkout mode: Root (Not available)

Checkout prompt: Root (False)

Allow offline: Root (True)

Time-Based Usage

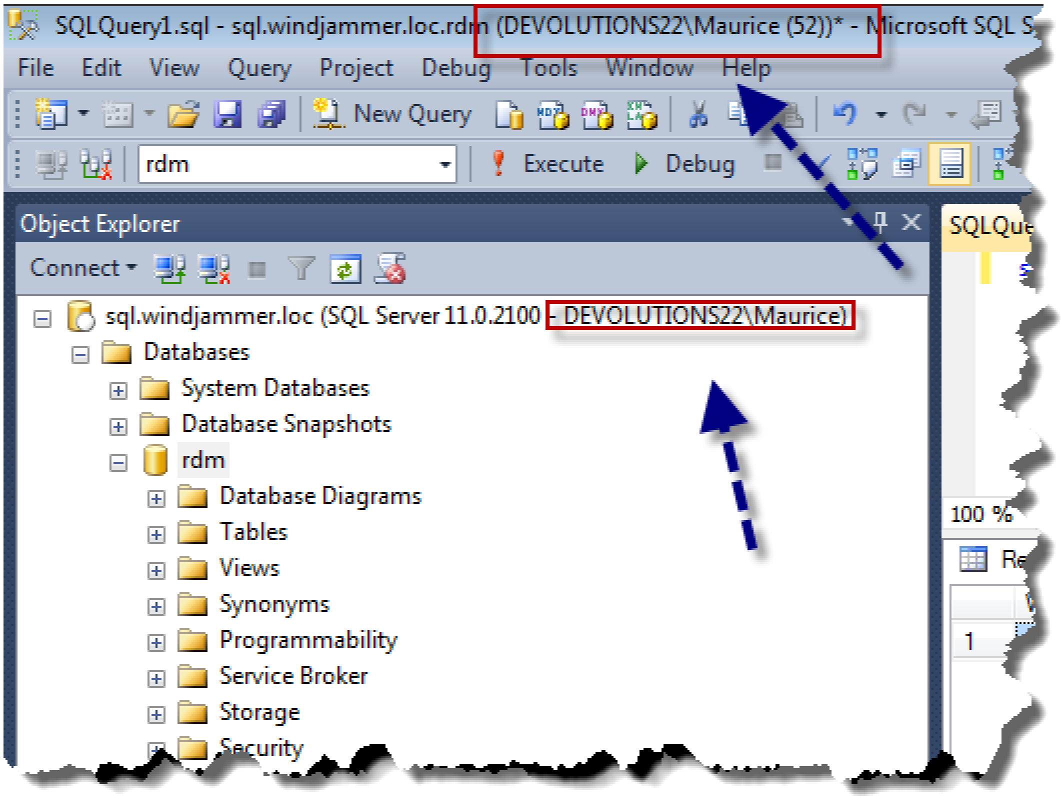
Days: Any day

Time: Any time

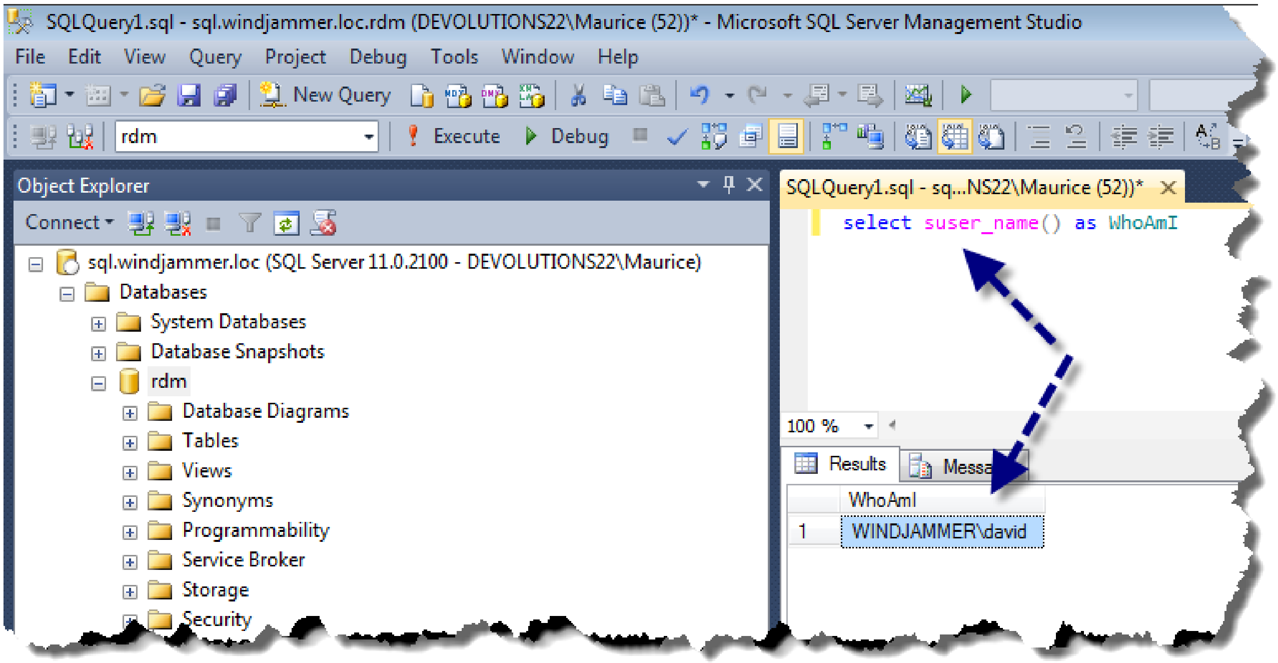
Password

□ Allow password in variable

Run the session and wait for Management studio to appear, attentive users will notice that it looks like you are running under your local credentials because of these...


SQLQuery1.sql - sql.windjammer.loc.rdm (DEVOLUTIONS22\Maurice (52))* - Microsoft SQL S
File Edit View Query Project Debug Tools Window Help
New Query
rdm
Execute
Debug
Object Explorer
Connect
sql.windjammer.loc (SQL Server 11.0.2100 - DEVOLUTIONS22\Maurice)
Databases
System Databases
Database Snapshots
rdm
Database Diagrams
Tables
Views
Synonyms
Programmability
Service Broker
Storage
Security
100 %

A simple query will prove that it worked, perform a ***SELECT SUSER_NAME()*** query.


SQLQuery1.sql - sql.windjammer.loc.rdm (DEVOLUTIONS22\Maurice (52))* - Microsoft SQL Server Management Studio
File Edit View Query Project Debug Tools Window Help
New Query
rdm
Execute
Debug
Object Explorer
Connect
sql.windjammer.loc (SQL Server 11.0.2100 - DEVOLUTIONS22\Maurice)
Databases
System Databases
Database Snapshots
rdm
Database Diagrams
Tables
Views
Synonyms
Programmability
Service Broker
Storage
Security
SQLQuery1.sql - sq...NS22\Maurice (52))*
100 %
Results
Messa

```
select suser_name() as WhoAmI
```

	WhoAmI
1	WINDJAMMER\david

13.8.16 Running Remote Desktop Manager as Another User

DESCRIPTION

There are many different type of credentials and they are used by a multitude of users. On Windows systems, having multiple user accounts enables the ability to launch Remote Desktop Manager under a different set of credentials while we are already logged on using main credentials. This allows for using Integrated security to connect to an Advanced Data Source.

> These solutions require the "Secondary Log-on" service to be running.

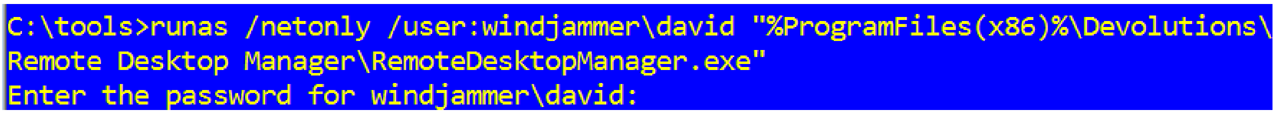
> If the other account belongs to a domain different than the one from your workstation, solution A must be used.

SOLUTION A - RUNAS COMMAND

This solution is ideal if you do this often, you can create a batch file with the command and simply type in your password when prompted.

The RunAs command has many parameters to change its behaviour, we wont cover them all here, but if you have an advanced scenario we suggest you consult the Windows help.

1. Open a command prompt.
2. Type ***runas /netonly /user:{your username here}.*** Usage of the **NetOnly** parameter signals that the credentials will be used for network access only. Ensure you username is entered as your infrastructure requires. Typically its ***{domain}\{user}***, i.e. ***windjammer\david***
3. Append the full path to Remote Desktop Manager, typically ***%ProgramFiles(x86)%\Devolutions\Remote Desktop Manager\RemoteDesktopManager.exe***, but you must ensure this is correct for your machine.
4. When you press enter, you are prompted for the password, then the application will launch.

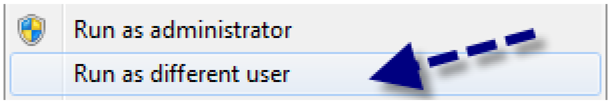


```
C:\tools>runas /netonly /user:windjammer\david "%ProgramFiles(x86)%\Devolutions\
Remote Desktop Manager\RemoteDesktopManager.exe"
Enter the password for windjammer\david:
```

RunAs command example

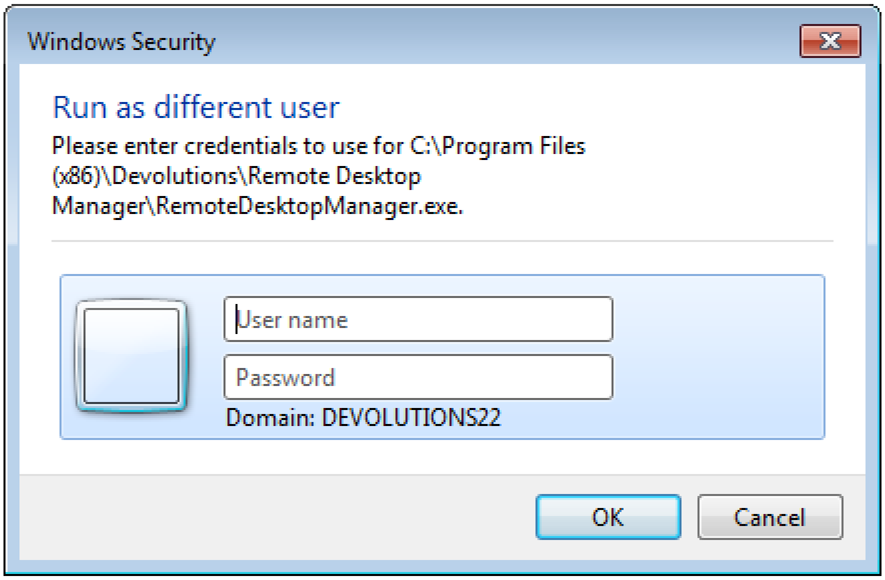
SOLUTION B - SHIFT+RIGHT CLICK ON THE SHORTCUT OR EXECUTABLE TO REMOTE DESKTOP MANAGER

When you press **Shift + Right Click** on an executable, you'll notice an additional menu item for **Run as different user**.



Shift + Right lick contextual menu

You are presented with a logon form in which you must specify the username and password.



Run as different user

Please enter credentials to use for C:\Program Files (x86)\Devolutions\Remote Desktop Manager\RemoteDesktopManager.exe.

User name

Password

Domain: DEVOLUTIONS22

13.8.17 SQL Server Data Source with Integrated Security

OVERVIEW

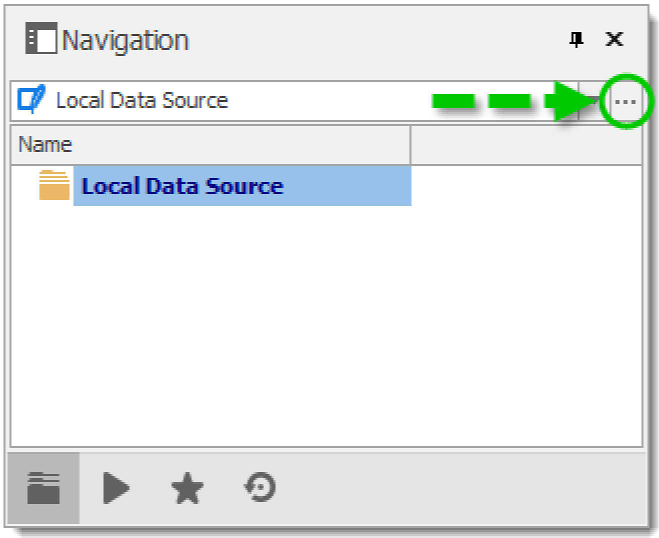
We will take you through a step by step guide to configure and test a Remote Desktop Manager deployment against an SQL Server data source using Integrated Security.

Any user (domain, local machine or SQL user) that has a server role of `sysadmin` is automatically an administrator of Remote Desktop Manager.

CREATE THE DATABASE

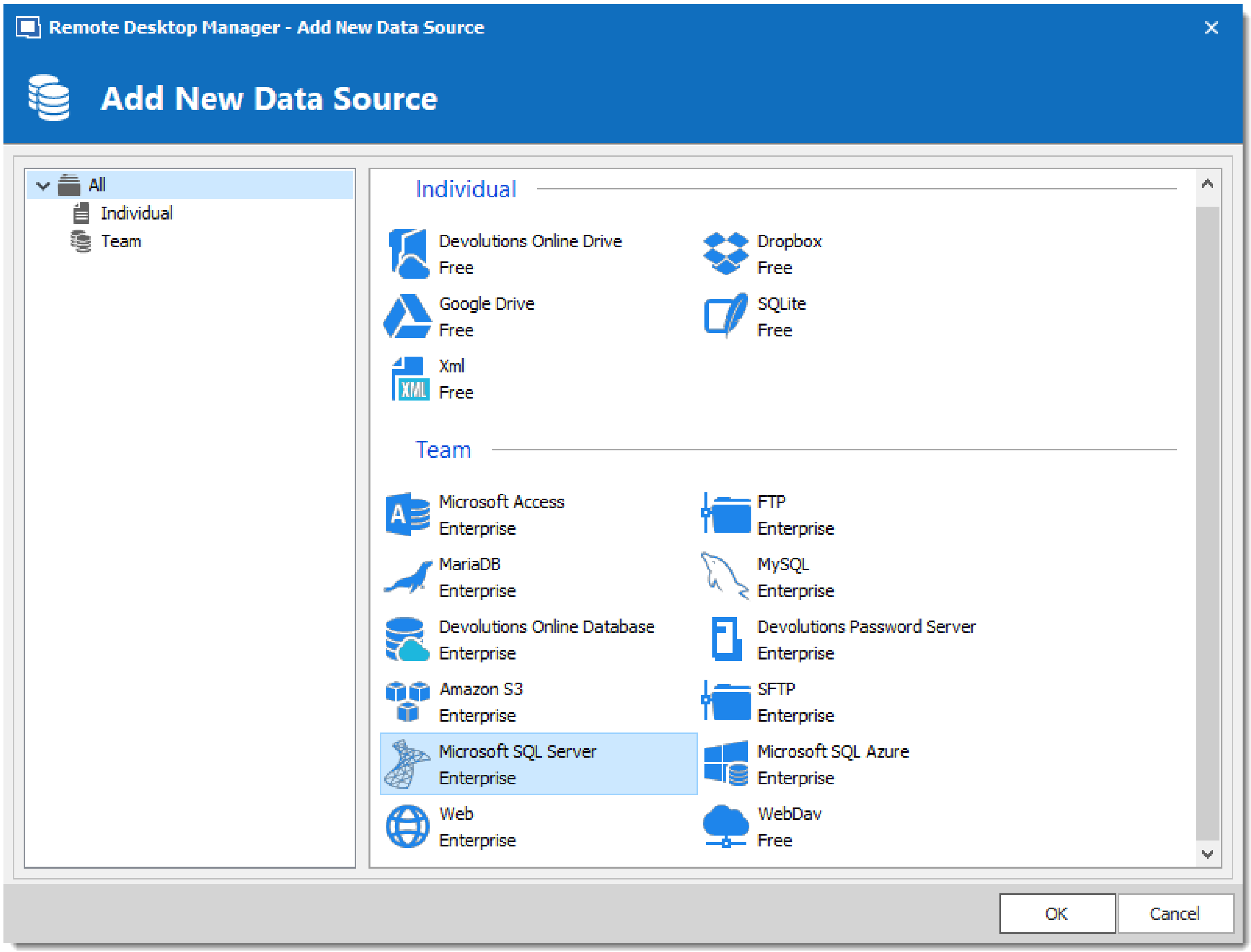
The first step is to create the database that will store all your entries.

Click on the **ellipsis** button in the Navigation Pane, then click on ✚ **Add a new data source**.



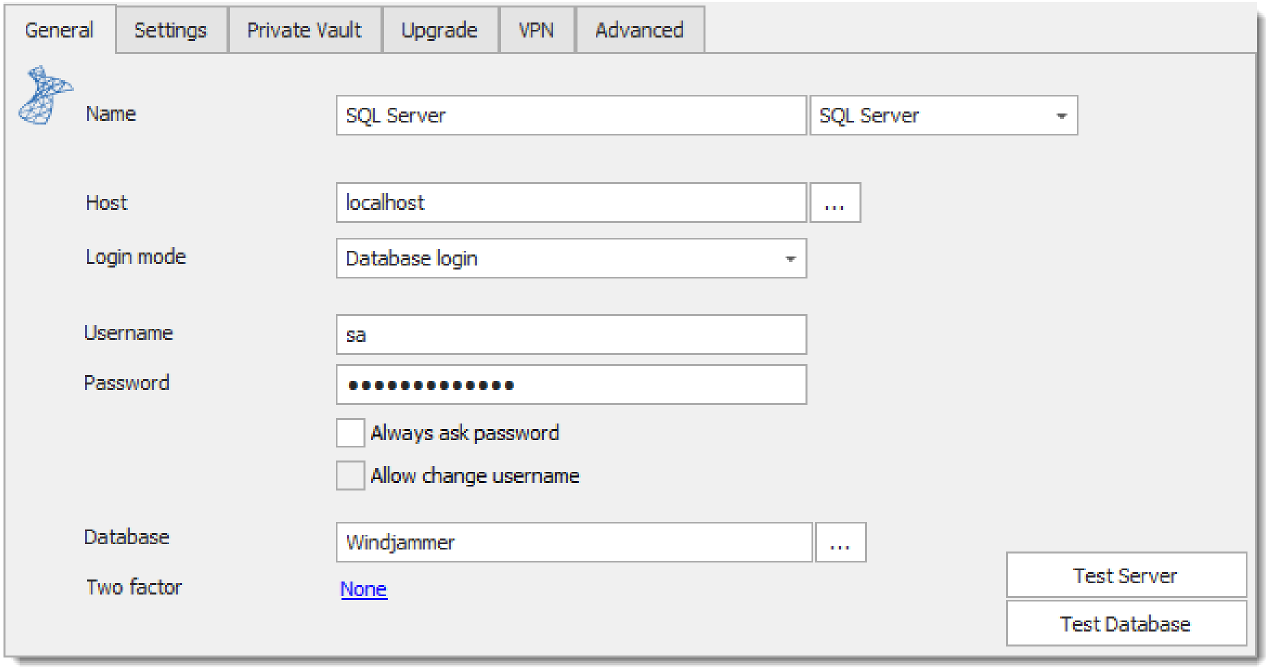
Navigation Pane - Data Sources

Select the **Microsoft SQL Server** data source and click **OK**.



Microsoft SQL Server Data Source

- Specify the **Name**, **Server** and **Database**
- Authenticate with a user that is part of the `sysadmin` role.



Name: SQL Server | SQL Server

Host: localhost

Login mode: Database login

Username: sa

Password: ●●●●●●●●●●●●●

□ Always ask password

□ Allow change username

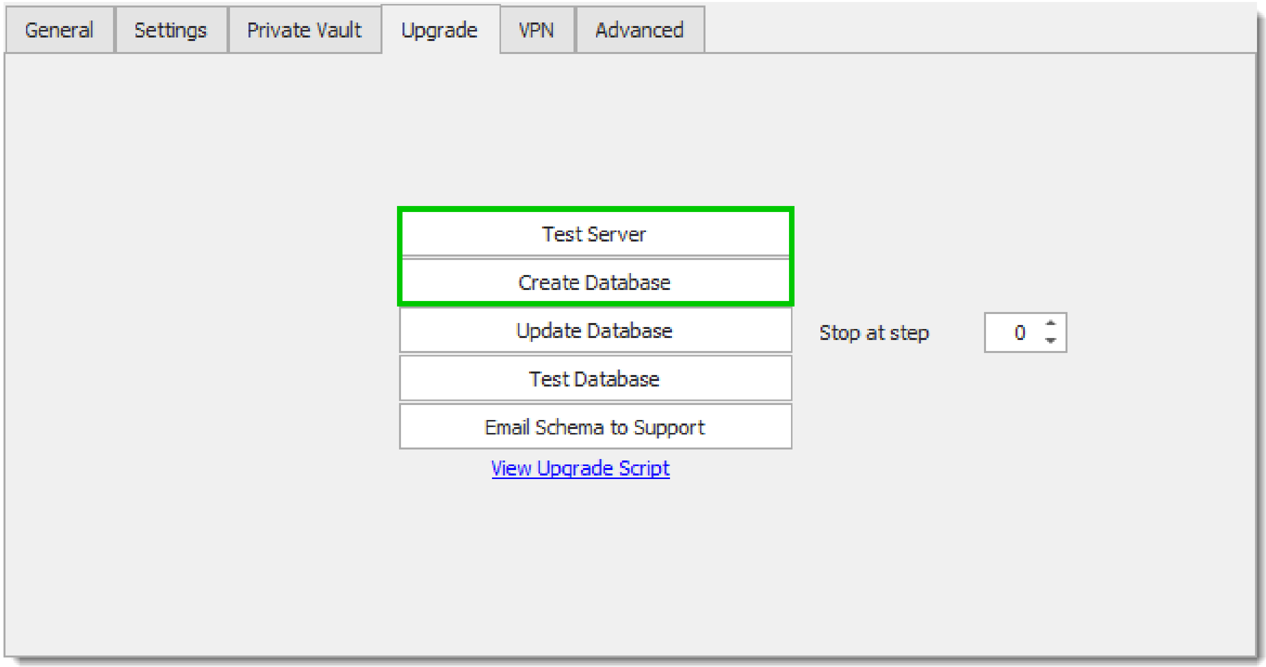
Database: Windjammer

Two factor: None

Create the SQL Server Data Source

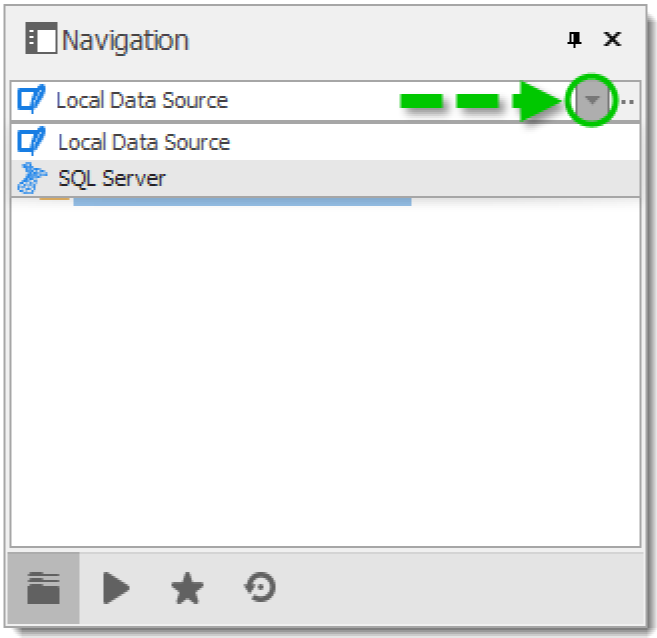
If the logged-on Windows User is not part of the SQL Server `sysadmin` role and you've configured the server to use SQL Server and Windows Authentication Mode, then use a SQL Server user (SA for example) that has the appropriate role assigned. You can then add yourself as a Remote Desktop Manager user later and change the data source to use **Integrated security.**

- From the upgrade tab, click **Test Server** then **Create Database** to create the SQL Server database.



Test the server and create the database

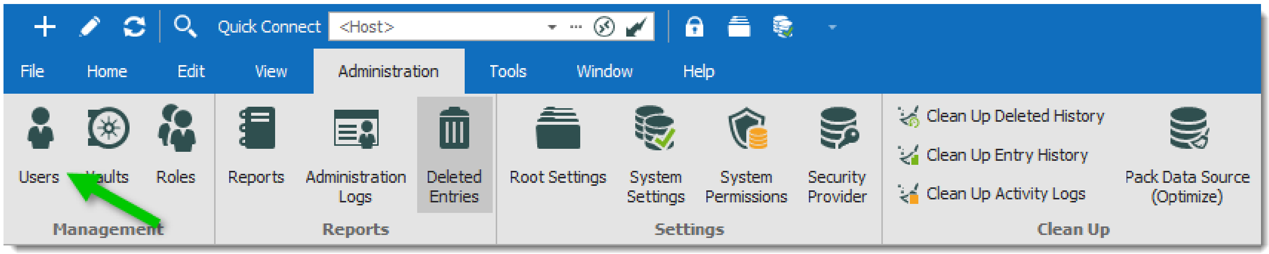
Press **OK** to close the dialogs. In the Navigation Pane, select the newly created data source from the data source drop down list.



Select the Data Source

CREATE USERS

To create users, navigate to ***Administration* – *Users***.



Administration - Users

Click ✚ **Add Users**.

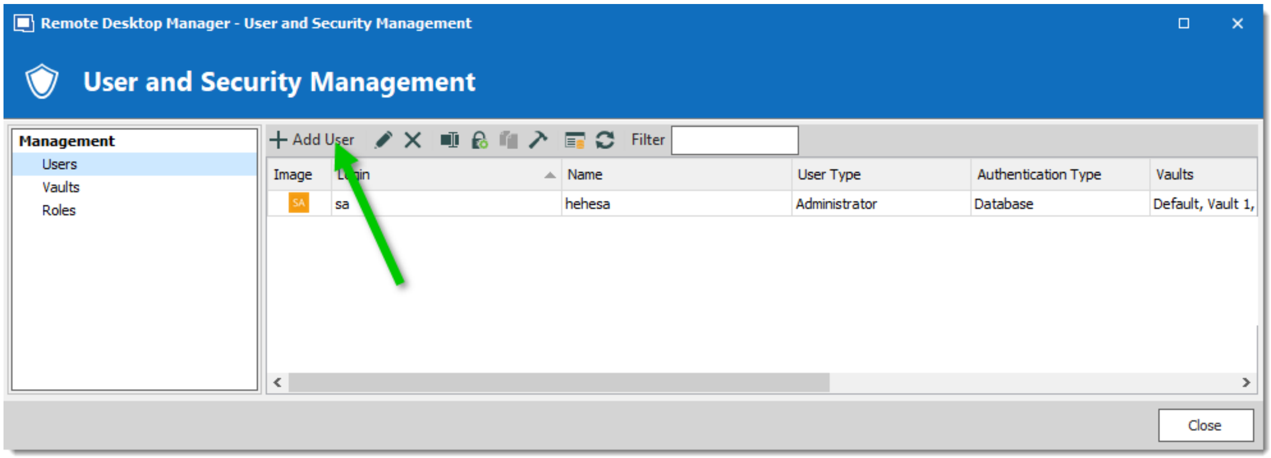
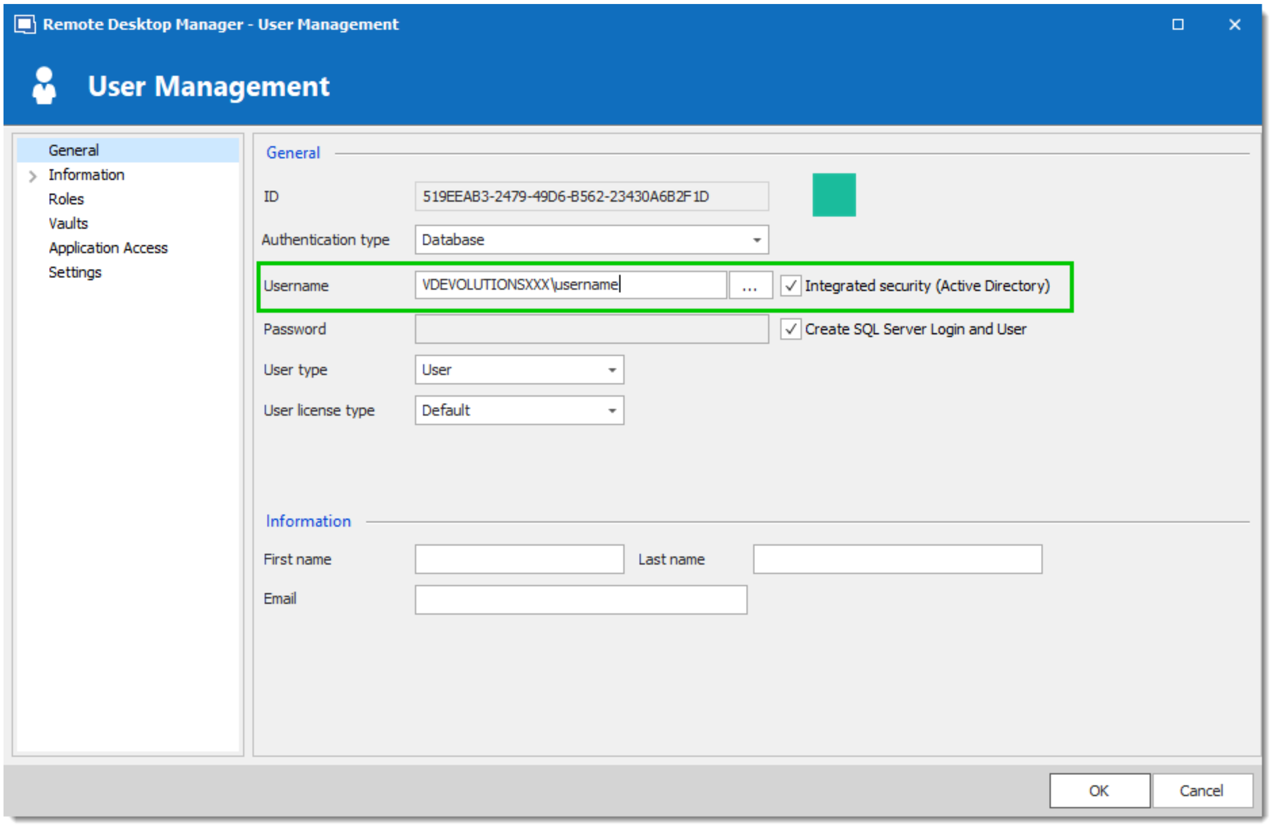

Remote Desktop Manager - User and Security Management
User and Security Management
Management
Users
Vaults
Roles
Add User
Filter
Close

Image	Login	Name	User Type	Authentication Type	Vaults
SA	sa	hehesa	Administrator	Database	Default, Vault 1,

User and security management

Check the **Integrated security (Active Directory)** box and click the ellipsis button to select the domain user to add.



General

ID: 519EEAB3-2479-49D6-B562-23430A6B2F1D

Authentication type: Database

Username: VDEVOLUTIONSXXX\username ... ☑ Integrated security (Active Directory)

Password: ☑ Create SQL Server Login and User

User type: User

User license type: Default

Information

First name: Last name:

Email:

User Management – Integrated Security

Select the **User type**. Grant the **Add**, **Edit**, and **Delete** rights (optional, restricted user only). For more information on user types and rights, please consult the Administration – Users topic.

> Keep the **Create SQL Server Login and User** box checked. This will in effect cause Remote Desktop Manager to map a new login to the domain account and link it to a user.
>
> You can uncheck this in the case where your DBA has created your login already on the SQL Server.

Repeat these steps for each user that needs access to this data source in Remote Desktop Manager.

CONFIGURE REMOTE DESKTOP MANAGER FOR OTHER WORKSTATIONS

To configure the data source on other workstations, three methods are available:

- Create the data source as done previously, making sure to check the **Integrated Security (Active Directory)** box.
- Export the data source from the initial workstation and import it into Remote Desktop Manager on all client workstations.
- Use our Custom Installer Manager service to help distribute the application and personalize the installation process.

TEST THE CONFIGURATION

If you have a second set of domain credentials, you could use this trick to test locally. Running Remote Desktop Manager as Another User

Now in your Remote Desktop Manager with admin rights, create a few roles (Admin, Production, Staging) and assign them users.

13.8.18 SQL Server Maintenance Plans

DESCRIPTION

Sadly, a SQL Server Instance is not something you can simply install and run without proper care. Keeping the default values for new databases will almost certainly cause issues in the long run.

If maintenance is not performed regularly, the database files will grow and grow until the mere size of the files will decrease performance and finally reach a point where the client application appears unusable.

We are **NOT** a DBA shop. Asking the question "What is the best maintenance plan I can implement?" to seasoned DBAs will invariably result in an answer similar to "It depends".

These "pointers" are provided as is and we cannot be held responsible if they don’t meet your requirements. You must consult a qualified database administrator to confirm your needs and how to meet them.

The backup strategy really depends on the amount of data you are comfortable with **losing** in the event of failure, yes... expect to lose data, the cost of a system that does NOT lose **any** data is **quite high** and is not in the scope of this topic.

If you are comfortable with only being able to revert to last night’s backup, you can set the DB to simple recovery model, and take a nightly full backup.

If you want something a little more robust we have seen the following:

- A daily full backup of the DB.
- More frequent backup of the transaction log, lets say every 4 hours starting at 06:00 and ending at 18:01 or 22:01
- A cleanup task to remove older backups.

If you need to be able to recover data that is minutes in the past, then you really need a qualified DBA to help you.

Again, these are examples of how we've seen backups planned for non-critical systems. If it does **not** meet **your** specific requirements. You **must** monitor: the time the backups take to complete; the free space left on the backup device; **and so on and so on!**

Also, a backup strategy involves actually going through the recovery process regularly to prove that it works. Backups usually work fine, it is the restoring process that is difficult, imagine having a boss breathing down your neck while you are searching for the proper sequence of actions because you've never done this before...

If you look at our first ever sysadminotaur, (at http://blog.devolutions.net/2012/08/sysadminotaur.html) you can guess that we've heard of bad backup plans before...

Backup plans must be monitored and Recovery plans must be **enacted** to confirm they actually work!

13.8.19 Tab Groups

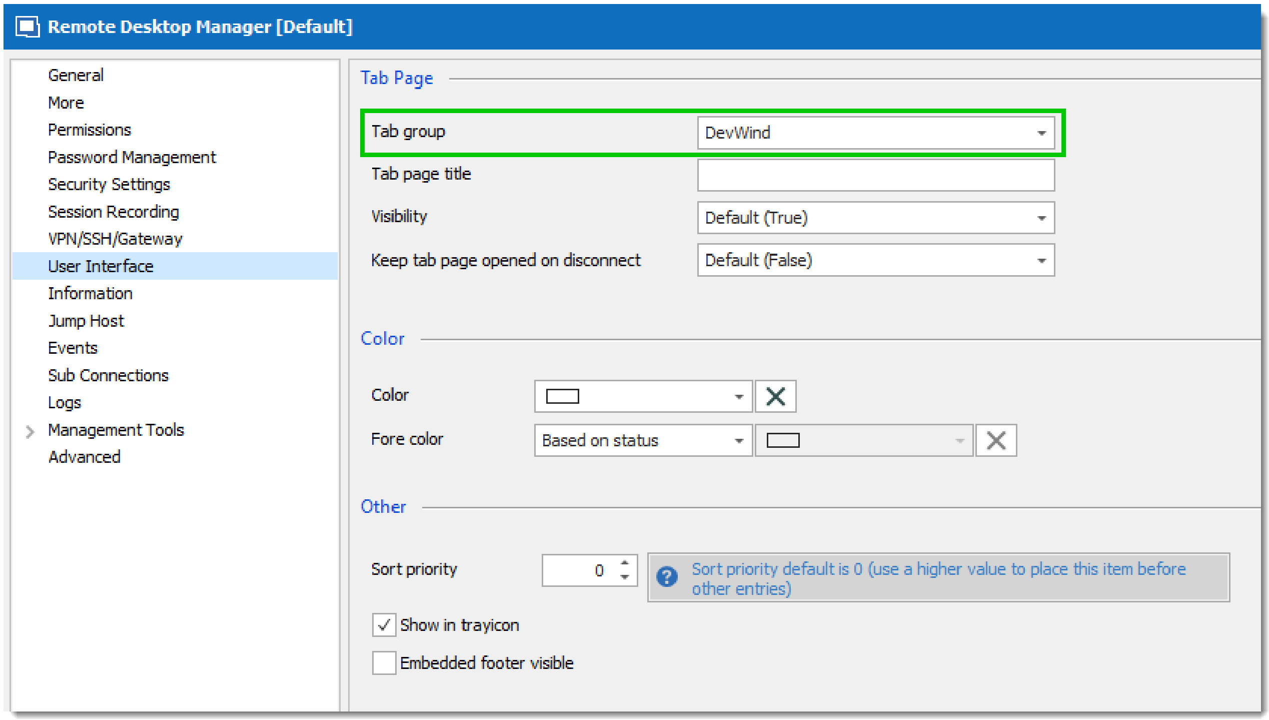
DESCRIPTION

Remote Desktop Manager is great for running many sessions at once by using its **Embedded/Tabbed** display mode. It's especially true when using multiple remote control technologies at the same time. No longer will you have to dig in your task bar to locate the session of interest, you have them all running in tabs within the same tool used to launch them.

But when you reach a certain number of running sessions, it may become difficult to identify them using only their name. To improve user experience for those of us that love embedded sessions, we created a feature to filter the tab pages, it is called the **Tab group**.

SETTINGS

The tab settings are found in the **User Interface** side menu of your session properties.



Remote Desktop Manager [Default]

- General
- More
- Permissions
- Password Management
- Security Settings
- Session Recording
- VPN/SSH/Gateway
- User Interface
- Information
- Jump Host
- Events
- Sub Connections
- Logs
- Management Tools
- Advanced

Tab Page

Tab group	DevWind
Tab page title	
Visibility	Default (True)
Keep tab page opened on disconnect	Default (False)

Color

Color		
Fore color	Based on status	

Other

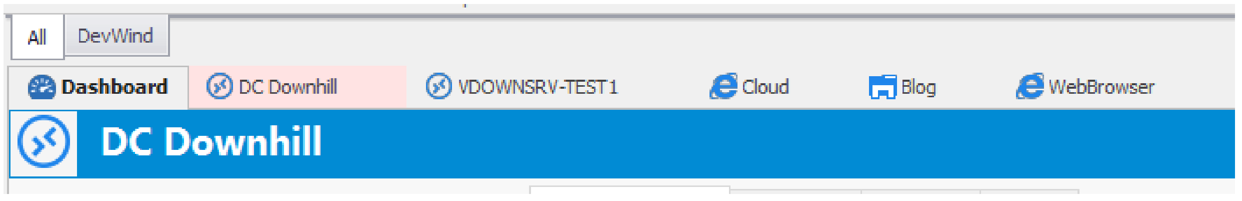
Sort priority 0 — Sort priority default is 0 (use a higher value to place this item before other entries)

☑ Show in trayicon

□ Embedded footer visible

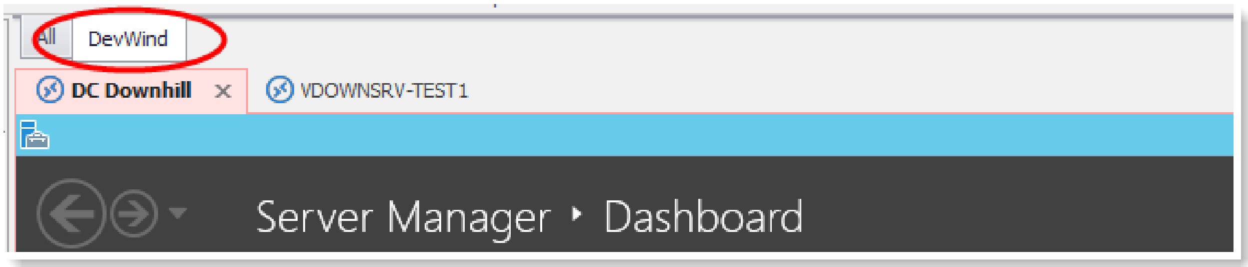
RDP session - User Interface

Simply type a name in the **Tab group** to create a tab group when launching an instance. You can see it in action in the image below



Tab groups displayed - All selected

When the **All** group is selected, it performs no filtering. When you select another group, it hides all the sessions that do not match with the filter. In the example below, I've adjusted two sessions to have the same category.



Specific Tab group selected

13.8.20 Team Tips

OVERVIEW

Here are five RDM team tips.

SECURITY, USERS & ROLES

Sharing session information is great -- but controlling access is bliss.

Through Remote Desktop Manager's Role system, you can control access and user rights for specific sessions and actions.

Start by creating roles and naming them accordingly to what you expect them to be able to view and use. Then assign users to them. Now all you have to do is assign roles to entries and folders according to your wishes.

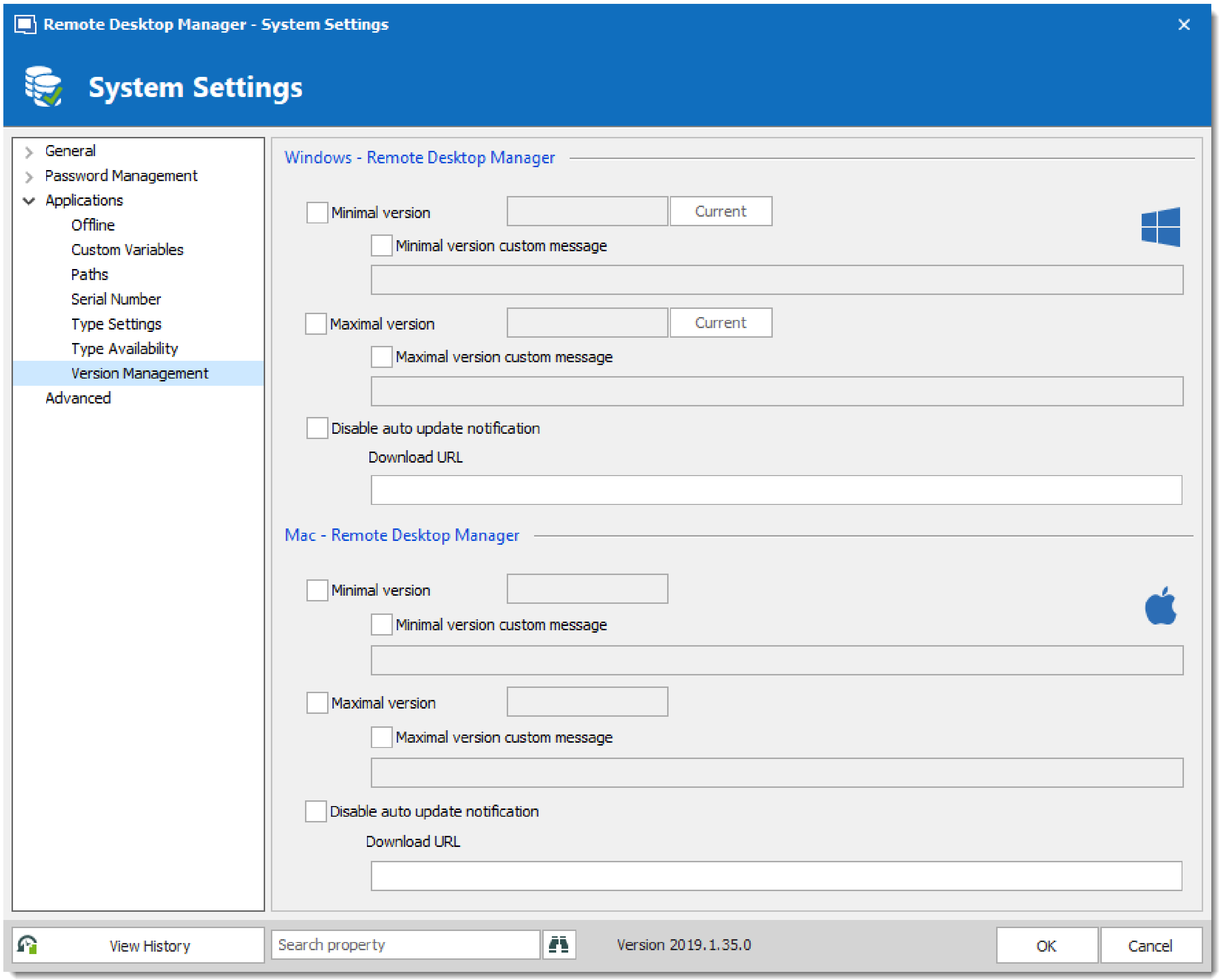
STREAMLINED DEPLOYMENT WITH CUSTOM INSTALLER

Okay: you're ready to deploy Remote Desktop Manager and make everyone see you as the company hero. You've manually configured your data sources, specified your site license, and defined system options. You can feel the excitement coursing through your veins. You are on a mission!

But wait – before you go live, why not have us create a Custom Installer for you? Once we do that, your grateful team will only need to install the resulting MSI file to access their ready-to-use pre-configured Remote Desktop Manager installation. You will be loved by one and all, perhaps with a parade, a state, or an award named after you.

VERSION MANAGEMENT

Here’s a familiar scenario: your team has been using Remote Desktop Manager for months or even years, and all is well. Then along comes a new version full of cool new features, and you think that everyone in your company should upgrade. This window below depicts the different options at your disposal to control client versions.



Remote Desktop Manager - System Settings

System Settings

Windows - Remote Desktop Manager

☐ Minimal version [Current]

☐ Minimal version custom message

☐ Maximal version [Current]

☐ Maximal version custom message

☐ Disable auto update notification

Download URL

Mac - Remote Desktop Manager

☐ Minimal version

☐ Minimal version custom message

☐ Maximal version

☐ Maximal version custom message

☐ Disable auto update notification

Download URL

Version Management

We’ve made this extremely easy. Simply open ***Administration – Data Source Settings (System Settings) – Version Management***. Below, a description of some of the settings;

- **Disable auto update notification** – This will disable the "New version is available" message. (You’re welcome!)
- **Minimal version** – This specifies the minimal acceptable version. If a member of your team runs an RDM version below this level, they’ll be prompted to upgrade.

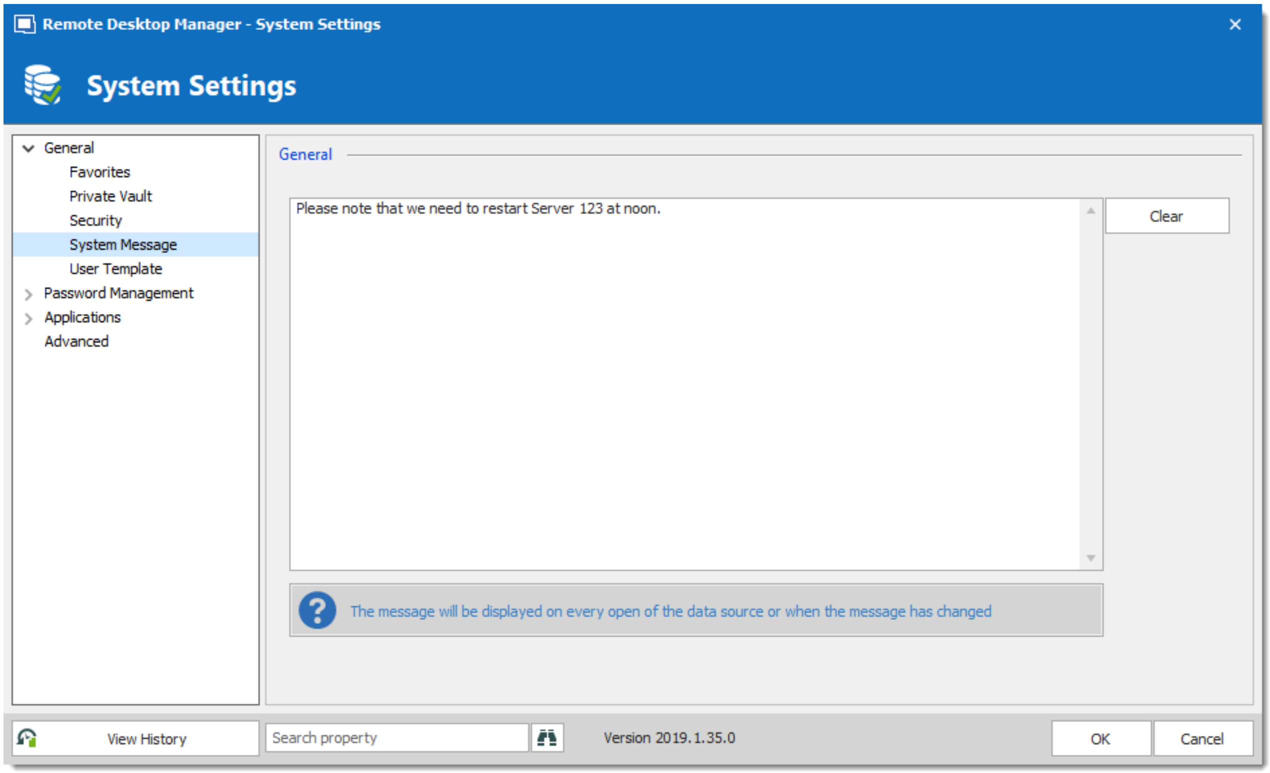
- **Download URL** – This improves install speed by downloading the MSI onto your local network, and lets all of your team members easily upgrade from this path. In short, this saves time and avoids installing the wrong version.

The ***Administration – Data Source Settings (System Settings) – Serial Number*** section is useful if you have a Site or Global License, and keeps you from having to manually set the key on every client.

DATA SOURCE SETTINGS (SYSTEM SETTINGS)

The general tab of the ***Administration – Data Source Settings (System Settings)*** form allows you to easily control security aspects.

A great team feature here is the **System Message**, which allows an administrator to inform users of upcoming system downtime, policy change or anything else. Each user will get the message when they perform the next action (open, edit, refresh…) of the data source. Use it to display company confidentially clauses or, if you wish, create chaos with a message like the one below. A little bit of chaos is good for the soul.



Please note that we need to restart Server 123 at noon.

The message will be displayed on every open of the data source or when the message has changed

Version 2019.1.35.0

System Message

DEVOLUTIONS PASSWORD SERVER

Do you need Active Directory integration? Or perhaps you have off site users who need to access the shared data source, but don't want to use a VPN connection? Maybe you want more security and caching? Devolutions Password Server delivers all that and much more!

You deploy **Devolutions Password Server** on-premises and can decide to publish the instance only on your intranet; or go all the way and offer it online. This allows you to create an enterprise wide high-end data store. Find out more about **Devolutions Password Server** at http://server.devolutions.net/

13.8.21 Testing variables

DESCRIPTION

Remote Desktop Manager's Auto Typing Macro is really helpful to simulate user interaction. It's mostly used to perform automatic logon on web pages, but you can run advanced shell commands on various operating systems.

Sometimes you need to confirm exactly what will be sent when using our Variables.

A simple trick is to create a batch file that just types out whatever is sent on the command line.

Just copy the following in your favorite editor and save it as a command file, I named mine ***parrot.bat***

```
@echo off
echo.
echo.
echo %*
echo.
echo.
pause
```

Now its a simple matter of creating a **Command Line (External Application)** session and set the command line to the path of the ***parrot.bat*** file and add the variables right after.

```
"C:\tools\parrot.bat" $DOMAIN$ $IP$ $USERNAME$
```

Now when you run the entry, you will see exactly what values are sent.

A reminder that for the password to be available as a variable, you must go in the **Security Settings** of the entry and check **Allow password in variable**.

13.8.22 Use Differents Version of Same Application

DESCRIPTION

You have 2 differents version of an application installed on your workstation and you want to be able to use both versions inside Remote Desktop Manager.

SETTINGS

When you configure your application installation path in ***File – Options – Path***, separate the paths by a ;

Remote Desktop Manager will prompt you with the selection list and you will be able to pick the one that you want to use.

EXAMPLE

C:\Program Files\Appsv1;***D:\Program Files\Appsv2***

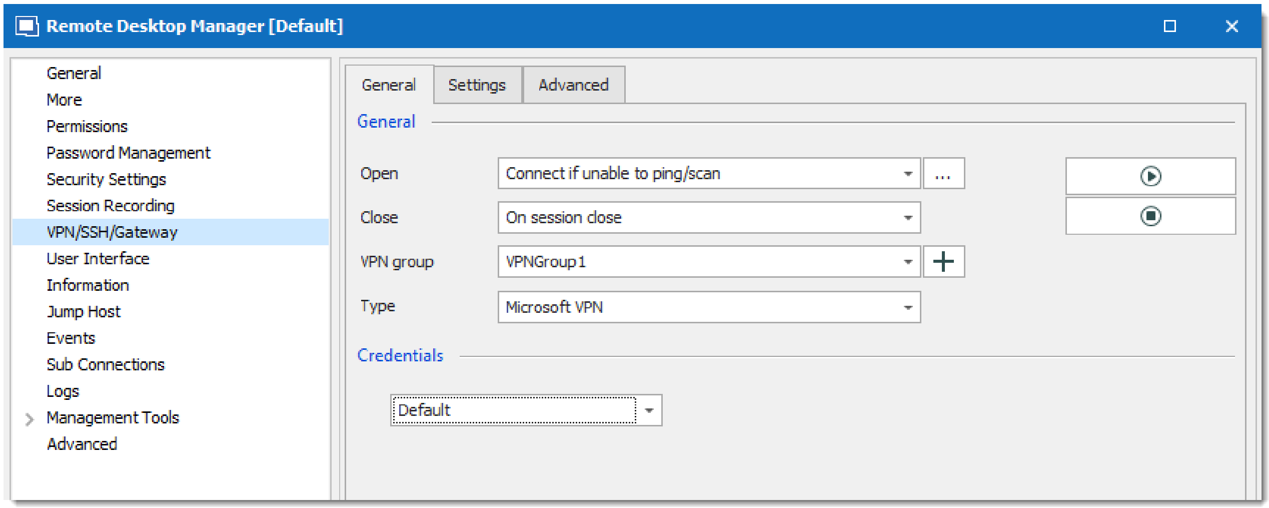
13.8.23 VPN

13.8.23.1 VPN Group

OVERVIEW

> VPN groups are defined inside each individual entries in the VPN/SSH/Gateway section.

When multiple entries are configured to use the same VPN group, the VPN connection will stay active until the last session disconnects.



Open: Connect if unable to ping/scan

Close: On session close

VPN group: VPNGroup1

Type: Microsoft VPN

Credentials: Default

VPN Group

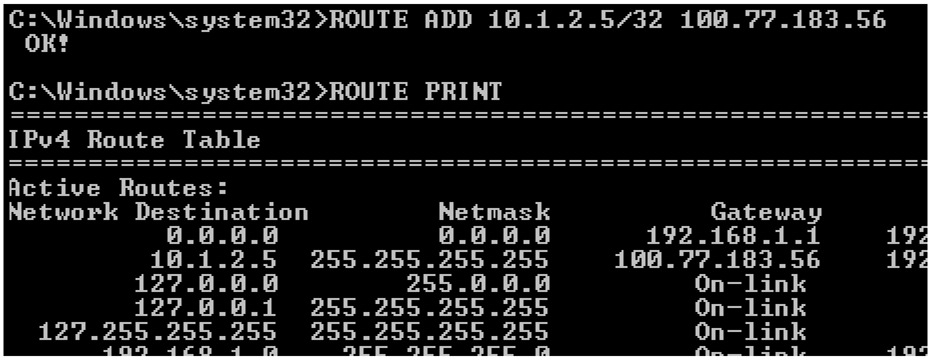
The VPN close mode need to be set to **On sessions close** to use this feature.

The VPN group name needs to be exactly the same to ensure that Remote Desktop Manager increments the usage counter.

13.8.23.2 VPN Routing

OVERVIEW

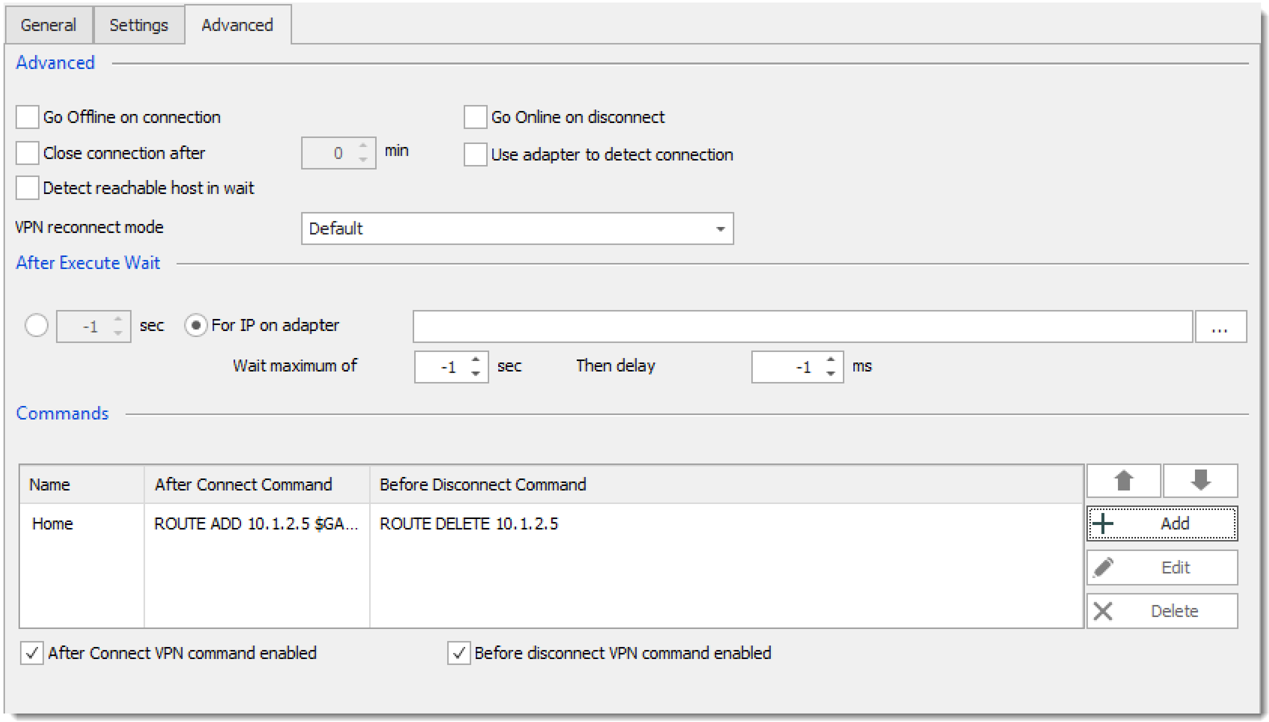
Establishing a VPN connection using Remote Desktop Manager is easy. Unfortunately, adding routes has to be done manually. Wait for the adapter to connect, find the IP and add the desired routes. Even if you use a script (such as a Power Shell script), it's still a redundant time consuming task – and one you can certainly live without.



```
C:\Windows\system32>ROUTE ADD 10.1.2.5/32 100.77.183.56
 OK!

C:\Windows\system32>ROUTE PRINT
==========================================================================
IPv4 Route Table
==========================================================================
Active Routes:
Network Destination        Netmask          Gateway       192
          0.0.0.0          0.0.0.0      192.168.1.1       192
         10.1.2.5  255.255.255.255    100.77.183.56       192
        127.0.0.0        255.0.0.0         On-link
        127.0.0.1  255.255.255.255         On-link
  127.255.255.255  255.255.255.255         On-link
      192.168.1.0    255.255.255.0         On-link        192
```

SOLUTION

This feature is part of a larger concept called VPN Commands, and allows you to run any type of script or executable post-VPN-connect and pre-VPN-disconnect.



Advanced

□ Go Offline on connection
□ Go Online on disconnect
□ Close connection after 0 min
□ Use adapter to detect connection
□ Detect reachable host in wait

VPN reconnect mode: Default

After Execute Wait

○ -1 sec ● For IP on adapter

Wait maximum of -1 sec Then delay -1 ms

Commands

Name	After Connect Command	Before Disconnect Command
Home	ROUTE ADD 10.1.2.5 $GA...	ROUTE DELETE 10.1.2.5

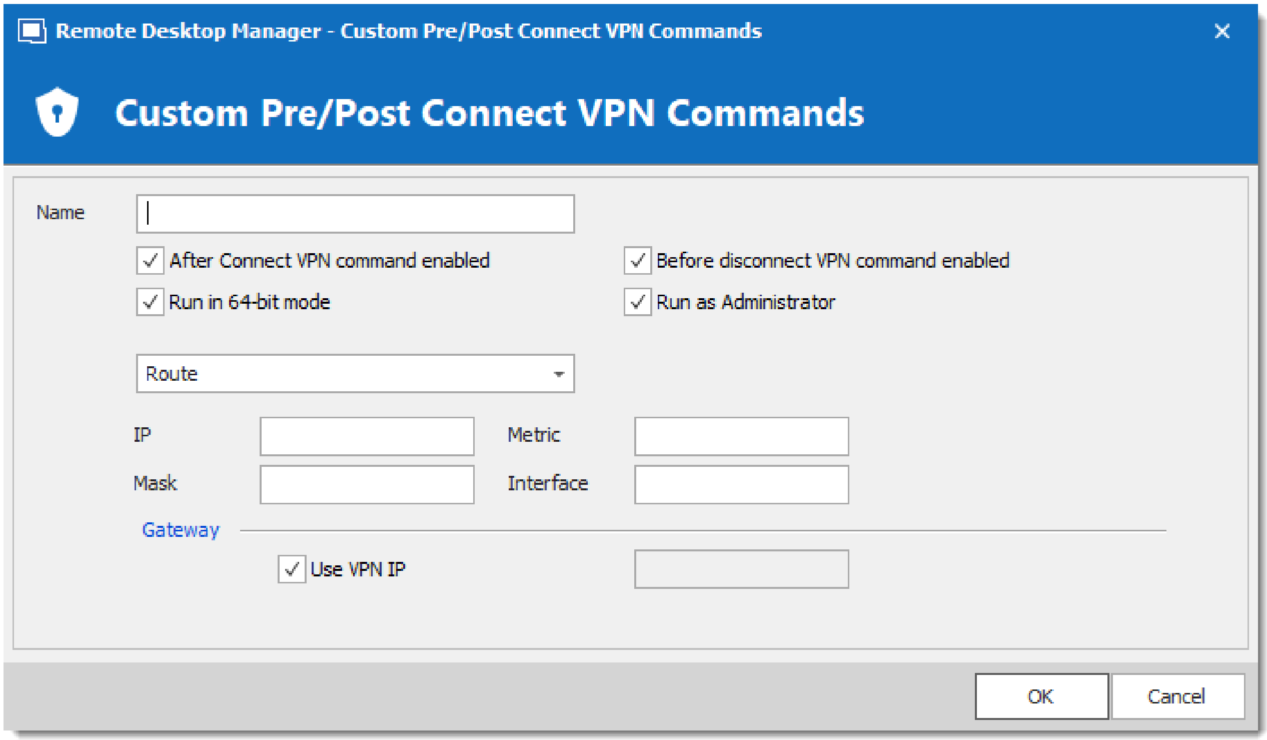
☑ After Connect VPN command enabled
☑ Before disconnect VPN command enabled

WORKFLOW

1. Configure the VPN to wait until the adapter connects and gets assigned an IP (we'll be using the adapter’s IP to define the routes).

2. Click on **Add** to display the **Commands** dialog.

3. Create a route definition by selecting **“Route (Add/Remove)**” radio item. Finally, set the IP and any other required information.



Remote Desktop Manager - Custom Pre/Post Connect VPN Commands

Custom Pre/Post Connect VPN Commands

Name: |

☑ After Connect VPN command enabled
☑ Before disconnect VPN command enabled
☑ Run in 64-bit mode
☑ Run as Administrator

Route

IP:

Metric:

Mask:

Interface:

Gateway

☑ Use VPN IP

13.9 Tools

13.9.1 Devolutions Localizer

WHAT IS DEVOLUTIONS LOCALIZER?

Devolutions Localizer is our custom translation tool for our client applications.

So far, with the help of several generous and talented members of our community, Remote Desktop Manager has been translated from English to the following languages:

- Chinese (Simplified) Legacy
- Chinese (Traditional, Taiwan)
- Dutch
- French
- German
- Italian
- Polish
- Russian
- Swedish
- Ukrainian

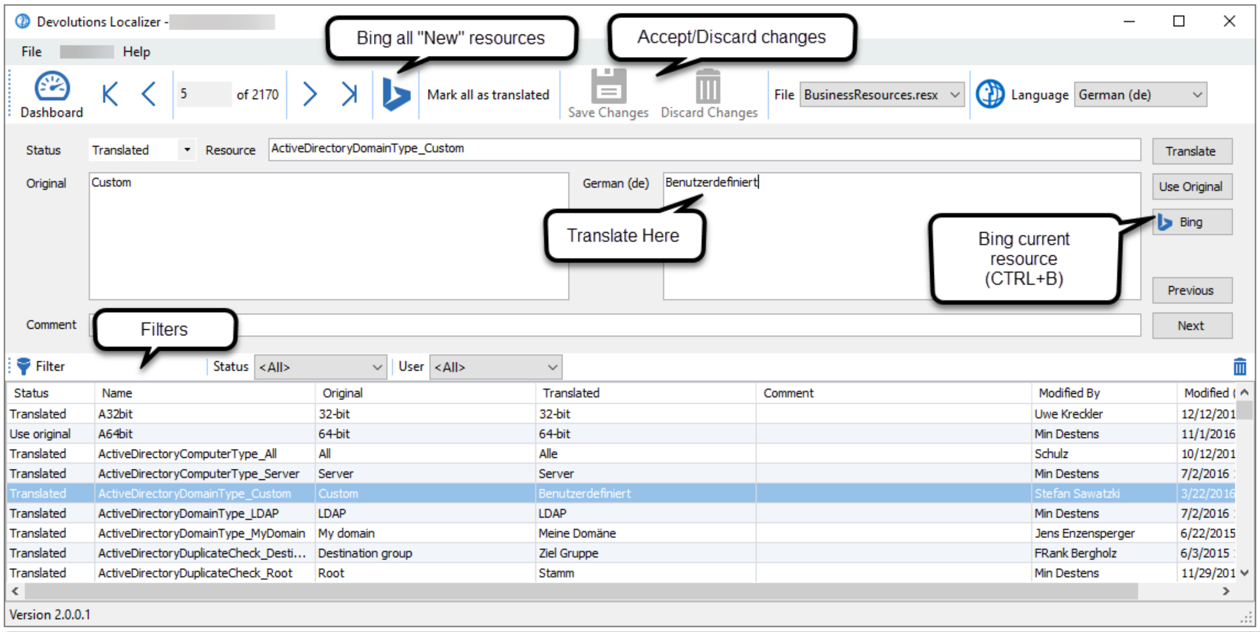
GETTING STARTED

An account is required to use the Devolutions Localizer. You can join our team and get started by signing up here: https://devolutions.net/Home/Contribute.

If you're interested in helping your fellow IT pros around the world, please sign up to be one of our wonderful contributors. Our Localizer app makes the process very efficient, and you can work at your own pace, and whenever you have time!

OVERVIEW

From the **dashboard view** you get a quick progress overview, simply click the "**Translate**" button and start translating.



Page: 5 of 2170

File: BusinessResources.resx

Language: German (de)

Status: Translated

Resource: ActiveDirectoryDomainType_Custom

Original: Custom

German (de): Benutzerdefiniert

Filter Status: <All> User: <All>

Status	Name	Original	Translated	Comment	Modified By	Modified (
Translated	A32bit	32-bit	32-bit		Uwe Kreckler	12/12/201
Use original	A64bit	64-bit	64-bit		Min Destens	11/1/2016
Translated	ActiveDirectoryComputerType_All	All	Alle		Schulz	10/12/201
Translated	ActiveDirectoryComputerType_Server	Server	Server		Min Destens	7/2/2016
Translated	ActiveDirectoryDomainType_Custom	Custom	Benutzerdefiniert		Stefan Sawatzki	3/22/2016
Translated	ActiveDirectoryDomainType_LDAP	LDAP	LDAP		Min Destens	7/2/2016
Translated	ActiveDirectoryDomainType_MyDomain	My domain	Meine Domäne		Jens Enzensperger	6/22/2015
Translated	ActiveDirectoryDuplicateCheck_Desti...	Destination group	Ziel Gruppe		FRank Bergholz	6/3/2015
Translated	ActiveDirectoryDuplicateCheck_Root	Root	Stamm		Min Destens	11/29/201

Devolutions Localizer

KEYBOARD SHORTCUTS

Devolutions Localizer also features several keyboard shortcuts to speed up the translation process:

- **CTRL+D**: Mark current resource as "**Translated**".
- **CTRL+E**: Mark current resource as "**Use original**", this ignores any translation text and will display the original value as is.

- **CTRL+DOWN**: Next resource.
- **CTRL+UP**: Previous resource.
- **CTRL+B**: Request Bing translation for the current string.
- **CTRL+S**: Save all pending changes.
- **CTRL+F**: Enable/disable filtering.

13.10 Troubleshooting

13.10.1 1Password

ERROR

WHEN YOU CREATE A NEW 1PASSWORD CREDENTIAL ENTRY, ONLY THE LATEST ENTRIES ADDED TO 1PASSWORD ARE DISPLAYED.

In 1Password, click on ***File – Repair 1Password Vault***. This should fix the issue.

13.10.2 2-Factor Authentication

ERRORS

WITH GOOGLE AUTHENTICATOR, YOU ARE GETTING AN INVALID PASSWORD ERROR EVEN THOUGH YOU ARE SURE OF ENTERING THE PROPER ONE.

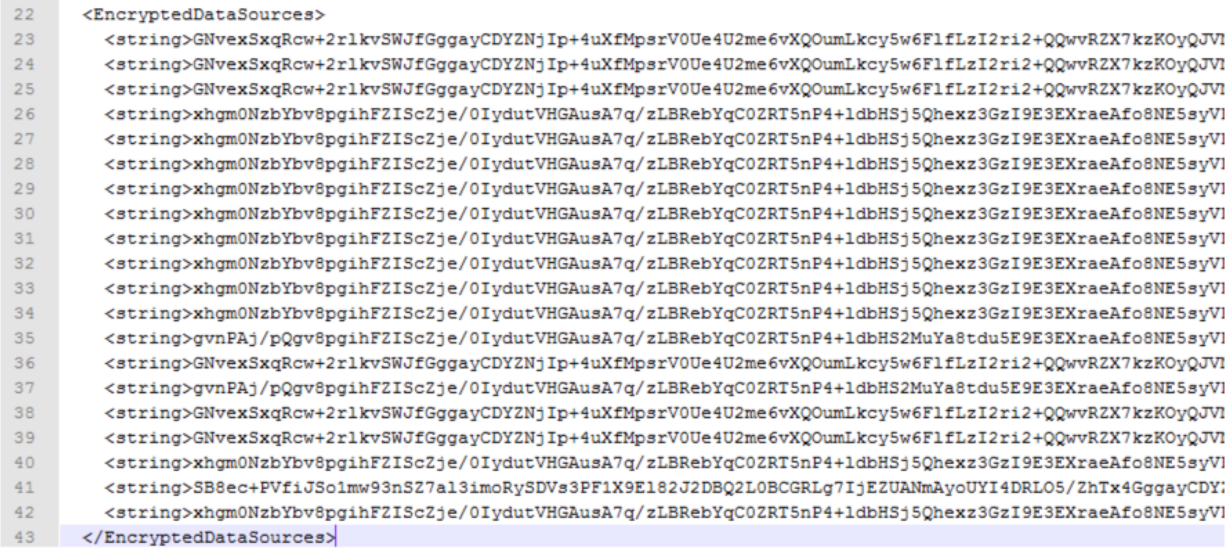
The computer clock must be within a small error margin in order to generate the proper authenticator code. We recommend using a NNTP server in order to keep your computer clock synchronized.

YOU HAVE LOST THE DEVICE

Your Remote Desktop Manager is set to authenticate with Yubikey or Google Authenticator. You no longer have the Yubikey key or the Google Authenticator and you want to turn off this option to connect on Remote Desktop Manager.

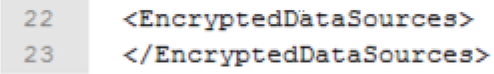
If you had installed using the default settings, the configuration file is ***%localappdata%\Devolutions\RemoteDesktopManager\RemoteDesktopManager.cfg***

You can choose to simply delete it, obviously all of your settings will be lost, alternatively you can open it and remove everything between the ***EncryptedDataSources*** tags. You will have to re-register all of your data sources and point to either the file or database that you were using.



```
<EncryptedDataSources>
  <string>GNvexSxqRcw+2rlkvSWJfGggayCDYZNjIp+4uXfMpsrV0Ue4U2me6vXQOumLkcy5w6FlfLzI2ri2+QQwvRZX7kzKOyQJV
  <string>GNvexSxqRcw+2rlkvSWJfGggayCDYZNjIp+4uXfMpsrV0Ue4U2me6vXQOumLkcy5w6FlfLzI2ri2+QQwvRZX7kzKOyQJV
  <string>GNvexSxqRcw+2rlkvSWJfGggayCDYZNjIp+4uXfMpsrV0Ue4U2me6vXQOumLkcy5w6FlfLzI2ri2+QQwvRZX7kzKOyQJV
  <string>xhgm0NzbYbv8pgihFZIScZje/0IydutVHGAusA7q/zLBRebYqC0ZRT5nP4+ldbHSj5Qhexz3GzI9E3EXraeAfo8NE5syV
  <string>xhgm0NzbYbv8pgihFZIScZje/0IydutVHGAusA7q/zLBRebYqC0ZRT5nP4+ldbHSj5Qhexz3GzI9E3EXraeAfo8NE5syV
  <string>xhgm0NzbYbv8pgihFZIScZje/0IydutVHGAusA7q/zLBRebYqC0ZRT5nP4+ldbHSj5Qhexz3GzI9E3EXraeAfo8NE5syV
  <string>xhgm0NzbYbv8pgihFZIScZje/0IydutVHGAusA7q/zLBRebYqC0ZRT5nP4+ldbHSj5Qhexz3GzI9E3EXraeAfo8NE5syV
  <string>xhgm0NzbYbv8pgihFZIScZje/0IydutVHGAusA7q/zLBRebYqC0ZRT5nP4+ldbHSj5Qhexz3GzI9E3EXraeAfo8NE5syV
  <string>xhgm0NzbYbv8pgihFZIScZje/0IydutVHGAusA7q/zLBRebYqC0ZRT5nP4+ldbHSj5Qhexz3GzI9E3EXraeAfo8NE5syV
  <string>xhgm0NzbYbv8pgihFZIScZje/0IydutVHGAusA7q/zLBRebYqC0ZRT5nP4+ldbHSj5Qhexz3GzI9E3EXraeAfo8NE5syV
  <string>xhgm0NzbYbv8pgihFZIScZje/0IydutVHGAusA7q/zLBRebYqC0ZRT5nP4+ldbHSj5Qhexz3GzI9E3EXraeAfo8NE5syV
  <string>xhgm0NzbYbv8pgihFZIScZje/0IydutVHGAusA7q/zLBRebYqC0ZRT5nP4+ldbHSj5Qhexz3GzI9E3EXraeAfo8NE5syV
  <string>gvnPAj/pQgv8pgihFZIScZje/0IydutVHGAusA7q/zLBRebYqC0ZRT5nP4+ldbHS2MuYa8tdu5E9E3EXraeAfo8NE5syV
  <string>GNvexSxqRcw+2rlkvSWJfGggayCDYZNjIp+4uXfMpsrV0Ue4U2me6vXQOumLkcy5w6FlfLzI2ri2+QQwvRZX7kzKOyQJV
  <string>gvnPAj/pQgv8pgihFZIScZje/0IydutVHGAusA7q/zLBRebYqC0ZRT5nP4+ldbHS2MuYa8tdu5E9E3EXraeAfo8NE5syV
  <string>GNvexSxqRcw+2rlkvSWJfGggayCDYZNjIp+4uXfMpsrV0Ue4U2me6vXQOumLkcy5w6FlfLzI2ri2+QQwvRZX7kzKOyQJV
  <string>GNvexSxqRcw+2rlkvSWJfGggayCDYZNjIp+4uXfMpsrV0Ue4U2me6vXQOumLkcy5w6FlfLzI2ri2+QQwvRZX7kzKOyQJV
  <string>xhgm0NzbYbv8pgihFZIScZje/0IydutVHGAusA7q/zLBRebYqC0ZRT5nP4+ldbHSj5Qhexz3GzI9E3EXraeAfo8NE5syV
  <string>SB8ec+PVfiJSo1mw93nSZ7al3imoRySDVs3PF1X9E182J2DBQ2L0BCGRLg7IjEZUANmAyoUYI4DRLO5/ZhTx4GggayCDY
  <string>xhgm0NzbYbv8pgihFZIScZje/0IydutVHGAusA7q/zLBRebYqC0ZRT5nP4+ldbHSj5Qhexz3GzI9E3EXraeAfo8NE5syV
</EncryptedDataSources>
```

Encrypted DataSources



```
<EncryptedDataSources>
</EncryptedDataSources>
```

Empty Encrypted DataSources

13.10.3 Apple Remote Desktop

ERRORS

NOT ABLE TO ESTABLISH A REMOTE CONNECTION TO A MAC COMPUTER USING APPLE REMOTE DESKTOP (ARD) ENTRY TYPE

Try to restart the Remote Management service on the mac computer. On the mac, go in ***System Preferences – Sharing*** and uncheck/check the Remote Management service.

BLACK SCREEN APPEARS AFTER CONNECTING WITH APPLE REMOTE DESKTOP

Activating the logging on the mac may help the Devolutions support team resolving the issue. In order to activate the logging server side, execute the following command in Terminal:
sudo defaults write /Library/Preferences/com.apple.RemoteManagement ARDCollectLogs -bool YES

Once this is done, you can try to connect normally using Remote Desktop Manager. The log will then be located in the **/tmp** folder of the Mac computer.

To turn off logging, execute this command:
sudo defaults write /Library/Preferences/com.apple.RemoteManagement ARDCollectLogs -bool NO

13.10.4 BeyondTrust

ERRORS

SYSTEM.URIFORMATEXCEPTION: INVALID URI: THE FORMAT OF THE URI COULD NOT BE DETERMINED

In the **Host** field of the BeyondTrust Password Safe Console entry, make sure to enter the server name like https://beyondtserver.
Do not enter the IP address of the server. Entering the IP address instead of the server name will return this error.

SYSTEM.NET.WEBEXCEPTION: THE REMOTE SERVER RETURNED AN ERROR: (404)

In the **Host** field of the BeyondTrust Password Safe Console entry, make sure to enter the server name like https://beyondtserver.
Do not enter the web URL to access the console from a web browser, example https://beyondtserver/eEye.RetinaCS.Server/PasswordSafe.

NOT FOUND SYSTEM.NET.WEBEXCEPTION: THE REMOTE SERVER RETURNED AN ERROR: (500) INTERNAL SERVER ERROR

In the **Host** field of the BeyondTrust Password Safe Console entry, make sure to enter the server name like https://beyondtserver.
Do not enter the web URL to access the console from a web browser, example https://beyondtserver/eEye.RetinaCS.Server/PasswordSafe.

SYSTEM.NET.WEBEXCEPTION: THE REMOTE SERVER RETURNED AN ERROR: (401) UNAUTHORIZED

In the **Application API key** field of the BeyondTrust Password Safe Console entry, make sure that you have entered the appropriate key. Please refer to the BeyondTrust Password Safe Console entry to learn how to obtain the application API key.

BEYOND TRUST PASSWORD SAFE OR BEYOND TRUST PASSWORD SAFE CONSOLE IS EMPTY AND NO ERROR IS RETURNED

Make sure that the **Enable for API access** option is checked for your privileged account in BeyondTrust.

13.10.5 Clipboard

DESCRIPTION

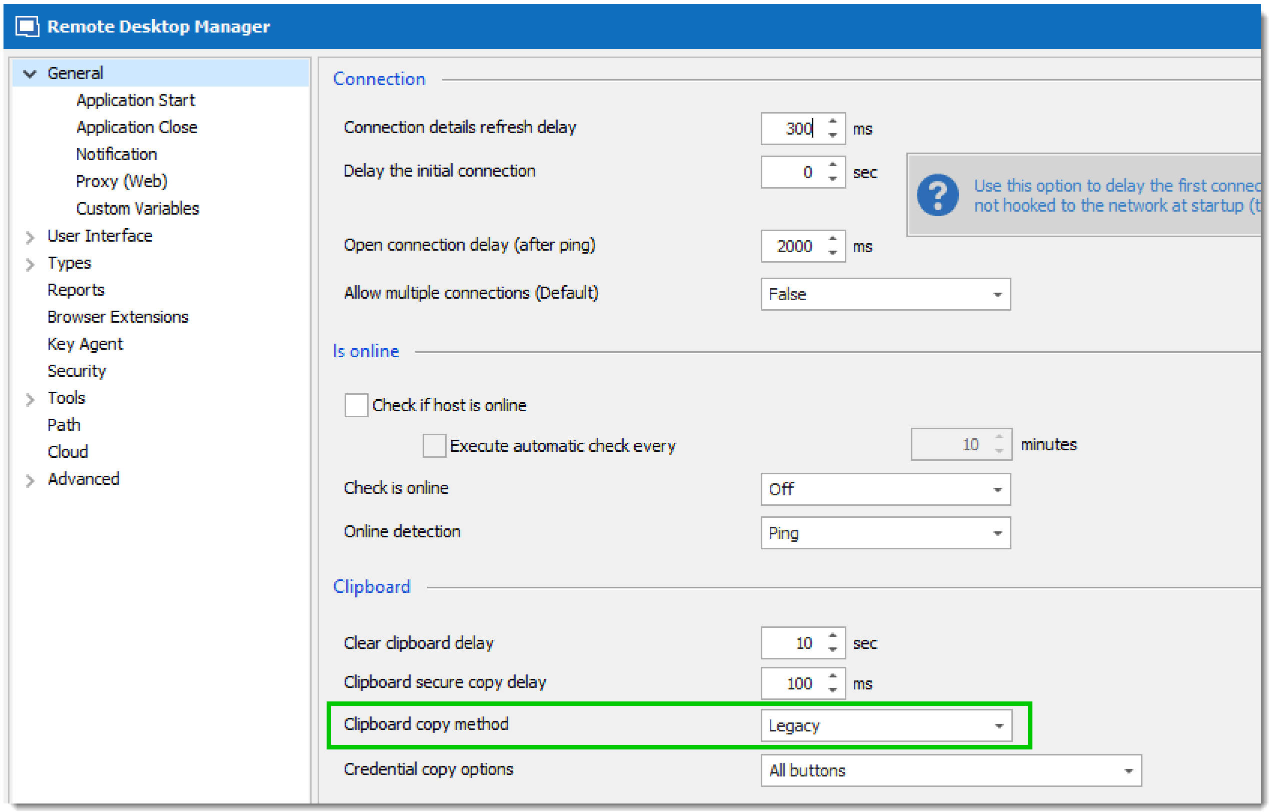
THIRD PARTY APPLICATIONS INTERFERE WITH THE DATA IN THE CLIPBOARD, PREVENTING YOU FROM COPY/PASTING INFORMATION.

Some applications can affect the clipboard. Below is a list of applications that are known to interfere with the clipboard. Please keep in mind that other applications might affect the clipboard.

- Citrix GoToAssist
- Microsoft Garage Mouse without Borders
- TeamViewer 12

An option allows to revert to the legacy copy/paste method.

Navigate to ***File – Options – General,*** in the **Clipboard** section and set the **Clipboard copy method option** to **Legacy**. This should resolve the issue.



Connection

Connection details refresh delay 300 ms

Delay the initial connection 0 sec

Use this option to delay the first connec
not hooked to the network at startup (t

Open connection delay (after ping) 2000 ms

Allow multiple connections (Default) False

Is online

□ Check if host is online

□ Execute automatic check every 10 minutes

Check is online Off

Online detection Ping

Clipboard

Clear clipboard delay 10 sec

Clipboard secure copy delay 100 ms

Clipboard copy method Legacy

Credential copy options All buttons

Clipboard Options

13.10.6 Corrupted System File

DESCRIPTION

The components of the .Net Framework are considered a core Windows feature, therefore there are no facilities to reinstall them. However, there are tools to verify and repair system files.

> Running those tools may take a long time.

1. Run SFC Scannow - https://support.microsoft.com/en-us/kb/929833
2. Run .Net Framework repair tool - https://www.microsoft.com/en-ca/download/details.aspx?id=30135

13.10.7 Data Recovery

DESCRIPTION

In the event of data loss due to hardware failure, it is still possible to recover data from your storage device if it is still useable.

1. On the storage device that failed, navigate to ***C:\Users\%USERNAME%\AppData\Local\Devolutions*** and copy the entire **RemoteDesktopManager** or **RemoteDesktopManagerFree** folder.

2. This folder will contain the local data source (SQLite or XML) as well as your configuration file.

3. Copy/Paste this folder at the same place on your new computer and you should retrieve your data.

> ✖ The path mentioned in this topic are for those that have installed using the default settings. The best way to locate your configuration folder is to use ***File – Options – Advanced***, in this form you will find an hyperlink near the bottom. This opens your configuration folder.

> ✖ File based data sources (XML, SQLite, etc) are by default stored in that configuration folder. As a precaution, go through each data source in ***File – Data sources*** and have a look at the local path (if any). Any file that is in the configuration folder should be copied to ensure full data recovery.

13.10.8 Data Sources

DESCRIPTION

This chapter contains data source related troubleshooting. Since Remote Desktop Manager supports such a wide array of data sources, there can be multiple causes for connectivity issues.

INITIAL TROUBLESHOOTING

THE NAME OF THE DATA SOURCE IS ENTERED INCORRECTLY

For those data source types that need a host name, please ensure it is typed correctly.

THE MACHINE IS UNABLE TO RESOLVE THE NAME OF THE DATA SOURCE HOST USING DNS

For data source types that need a host name, please ensure that the name you have provided does resolve by the DNS server which it is linked to, not only your current network connection, but all connections that you will use Remote Desktop Manager over.

In general, PING is a poor testing tool because the server may have been configured to ignore PING requests. Use NSLOOKUP to help identify the issue.

A common issue in a multi-domain environment is that you must use the Fully Qualified Domain Name (FQDN) of a server in order to reach it. (e.g. ***srvname.domain.loc*** instead of ***srvname***)

Another common issue is that your DNS cache is corrupted, in that case you can open an elevated command prompt and use the following commands.

```
ipconfig /flushdns
ipconfig /registerdns
```

OPENING A VPN HAS DISCONNECTED THE LOCAL LAN OR RENDERED THE DATA SOURCE UNREACHABLE

If the network administrator has deemed necessary to tunnel ALL traffic through the connection when a VPN is active, you will have to resort to using our Offline capabilities, ideally paired with our options to automatically Go offline on connection as can be seen in the Advanced section of the VPN entry type.

For a Web based VPN, ensure the routes are all valid, i.e. the path followed to reach the remote host is indeed going through the proper interface.

AN ANTI-VIRUS OR FIREWALL IS BLOCKING THE APPLICATION

This may be hard to diagnose but sadly the support department can attest that it occurs quite often. Here are some items to monitor.

> If you are in a position to do so, it may help to TEMPORARILY disable the AV and the Firewall. You must make an informed decision as to the risk that is involved in your situation. Always enable all security features as soon as you have ascertained if that component was causing the issue.

ISSUE	RESOLUTION
Anti-Virus	Set the AV to ignore Remote Desktop Manager, you could also exclude our local configuration folder.
Firewall blocks RDM - all the time	Create a rule to allow RDM to communicate with at the very least your data source host. Keep in mind that, if you use embedded browser sessions, Remote Desktop Manager must have access to the remote hosts on which you open pages.
Firewall blocks RDM - specific network	The firewall rules are tied to the category of the network profile (**Public/Private/DomainAuthenticated**), ensure that all your network profiles allow for connectivity. Use

ISSUE	RESOLUTION
	netsh interface ip show interfaces and **Set-NetConnectionProfile** for resolution.

13.10.8.1 Database Schema

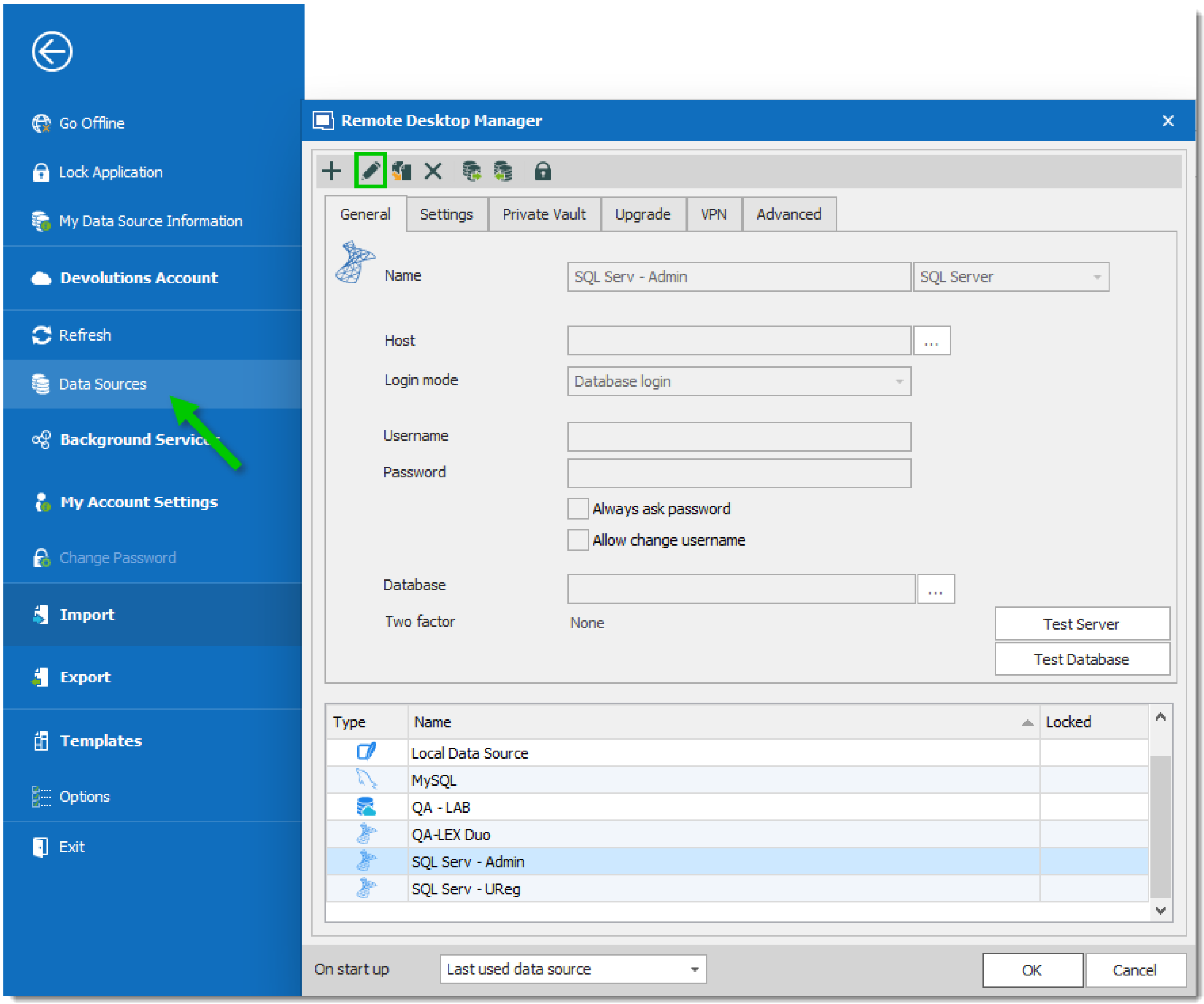
DESCRIPTION

Sometimes the support staff will ask that the database schema.

> ✓ This feature is only available for data sources that are backed by a database management system: MariaDB, SQL Azure, SQL Server and MySQL.

When requested by the Devolutions Support team during a support process, you may be asked to send us your database schema for thorough analysis of your issue.

1. Go in ***File – Data Sources – Edit Data Source.***



Name: SQL Serv - Admin | SQL Server

Host:

Login mode: Database login

Username:

Password:

□ Always ask password

□ Allow change username

Database:

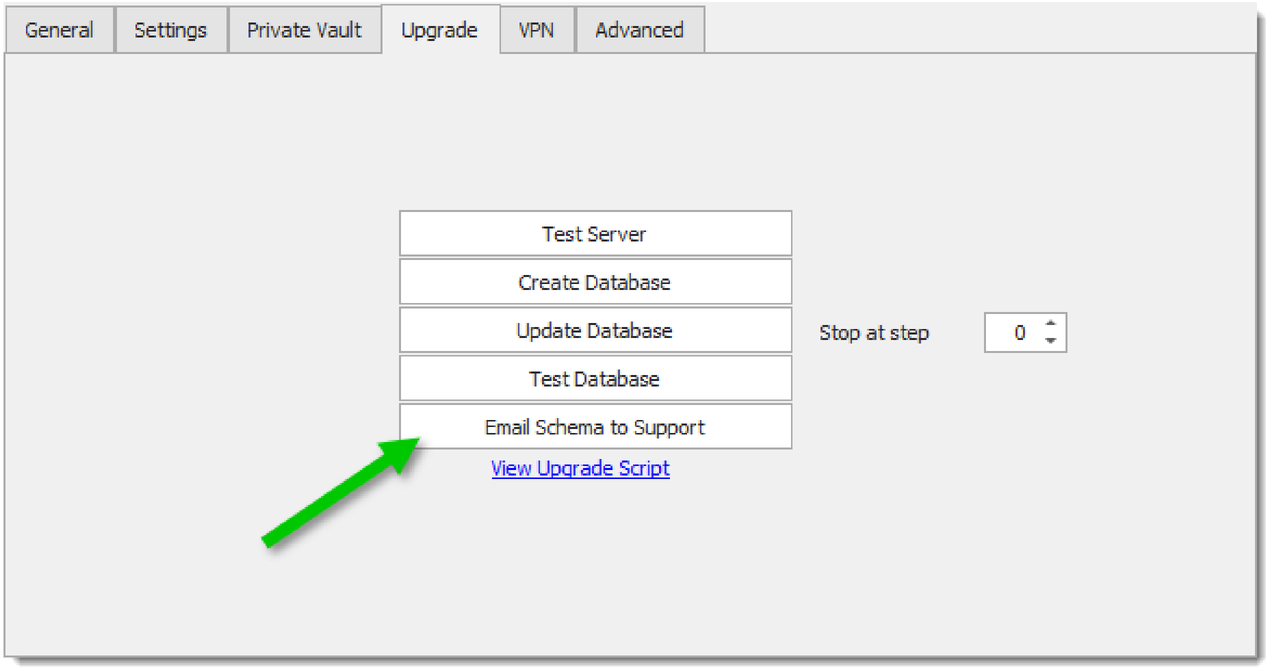
Two factor: None

Type	Name	Locked
	Local Data Source	
	MySQL	
	QA - LAB	
	QA-LEX Duo	
	SQL Serv - Admin	
	SQL Serv - UReg	

On start up: Last used data source

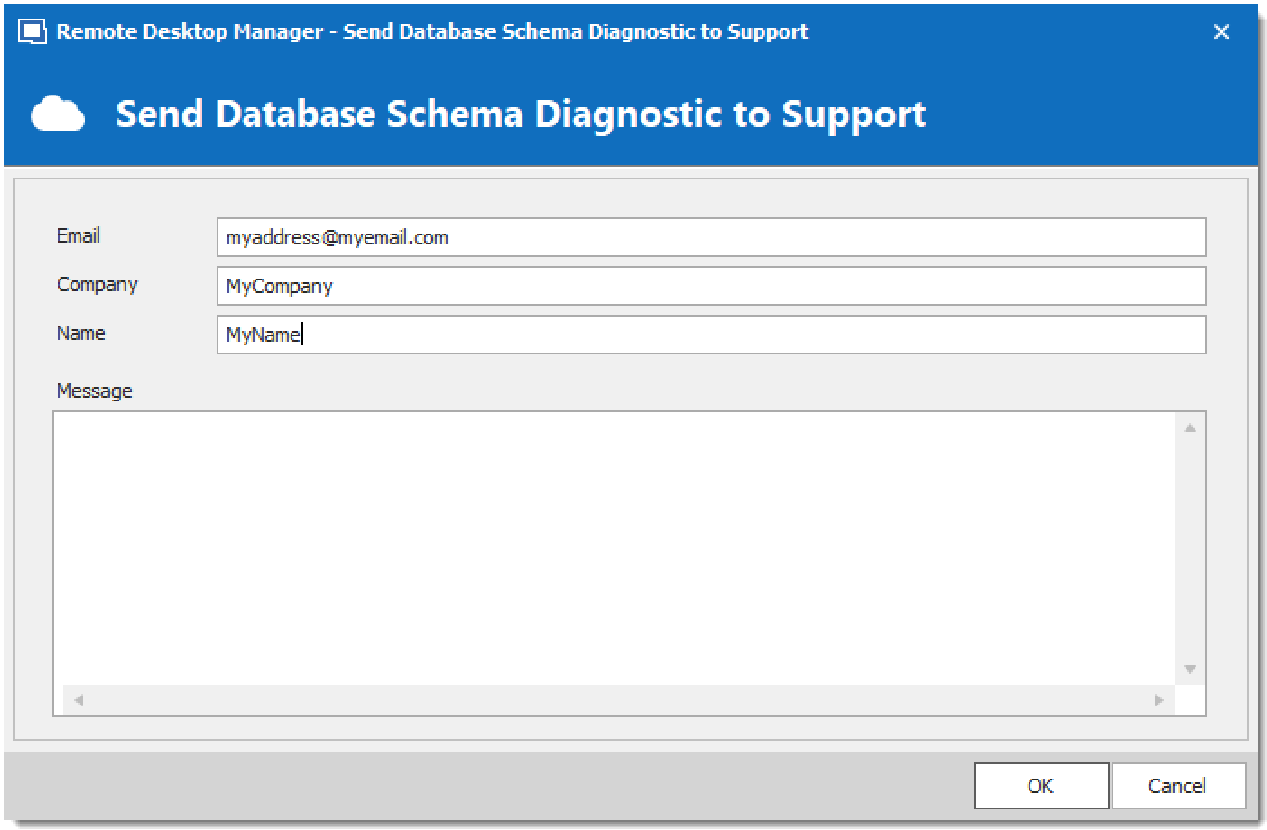
Data Sources

2. In the tab **Upgrade** click on **Email Schema to Support.**



Email Schema To Support

3. Fill in all the requested information and click on **OK**.


Remote Desktop Manager - Send Database Schema Diagnostic to Support
Send Database Schema Diagnostic to Support
Message
OK
Cancel

Email: myaddress@myemail.com

Company: MyCompany

Name: MyName

Database Schema

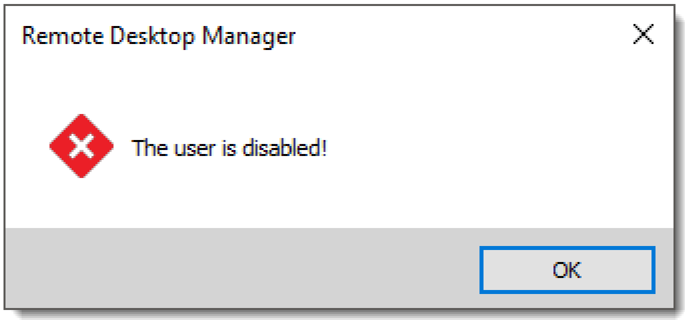
OPTION	DESCRIPTION
Email	Enter **your email address** so that the support team can contact you
Company	Enter your Company name
Name	Use the same title as the one first used to report the issue
Message	If you haven't described your issue before, enter a short description of it

13.10.8.2 Devolutions Online Database

DESCRIPTION

THE USER IS DISABLED!

When attempting to connect to the data source, you receive the error message below;

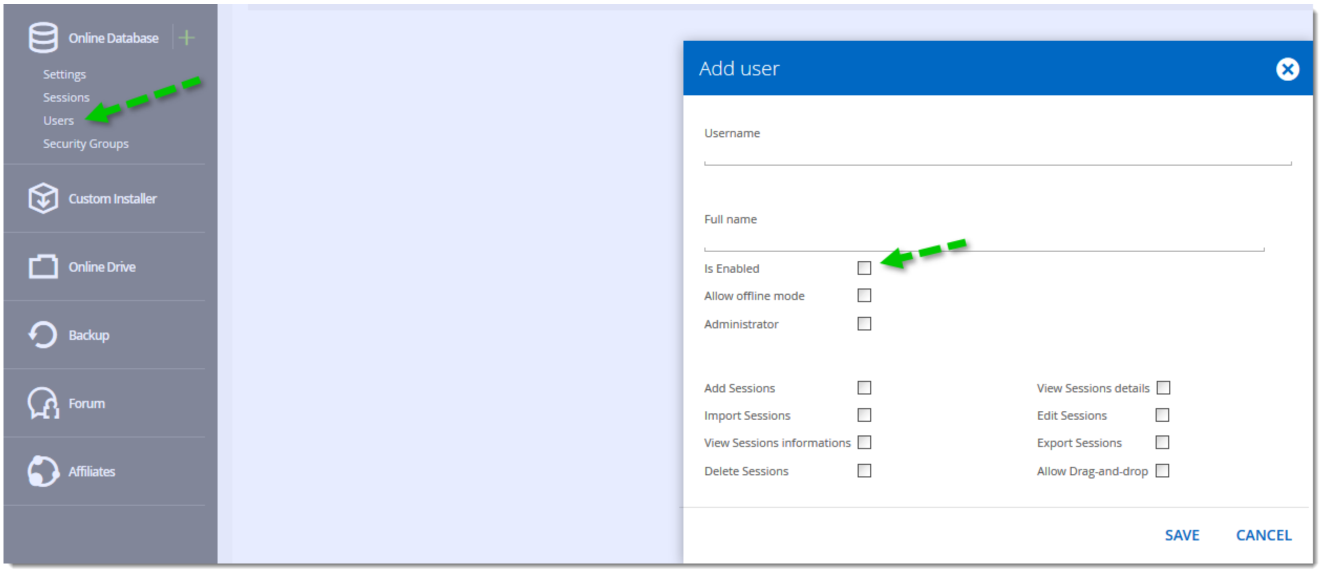


Remote Desktop Manager

The user is disabled!

DODB User Disabled

On Devolutions Customer Portal in the User section, please ensure that the User is indeed Enabled.



Devolutions Customer Portal - Users

13.10.8.3 MySQL

ERRORS

CONNECTING TO MYSQL USING A PRIVATE CERTIFICATE

1. Create SSL keys as described in Creating SSL Certs.

2. Create a client certificate.

   2.1. openssl pkcs12 -export -in client-cert.pem -inkey client-key.pem -certfile cacert.pem -out client.pfx

3. Grant privileges to the user as described in Grant Syntax.

   3.1. GRANT ALL PRIVILEGES ON test.* TO 'root'@'localhost' IDENTIFIED BY 'goodsecret' REQUIRE SSL;

4. Run certmgr.msc and import the client certificate in the user store.

5. In the **Advanced** settings of your MySQL data source set the following values:

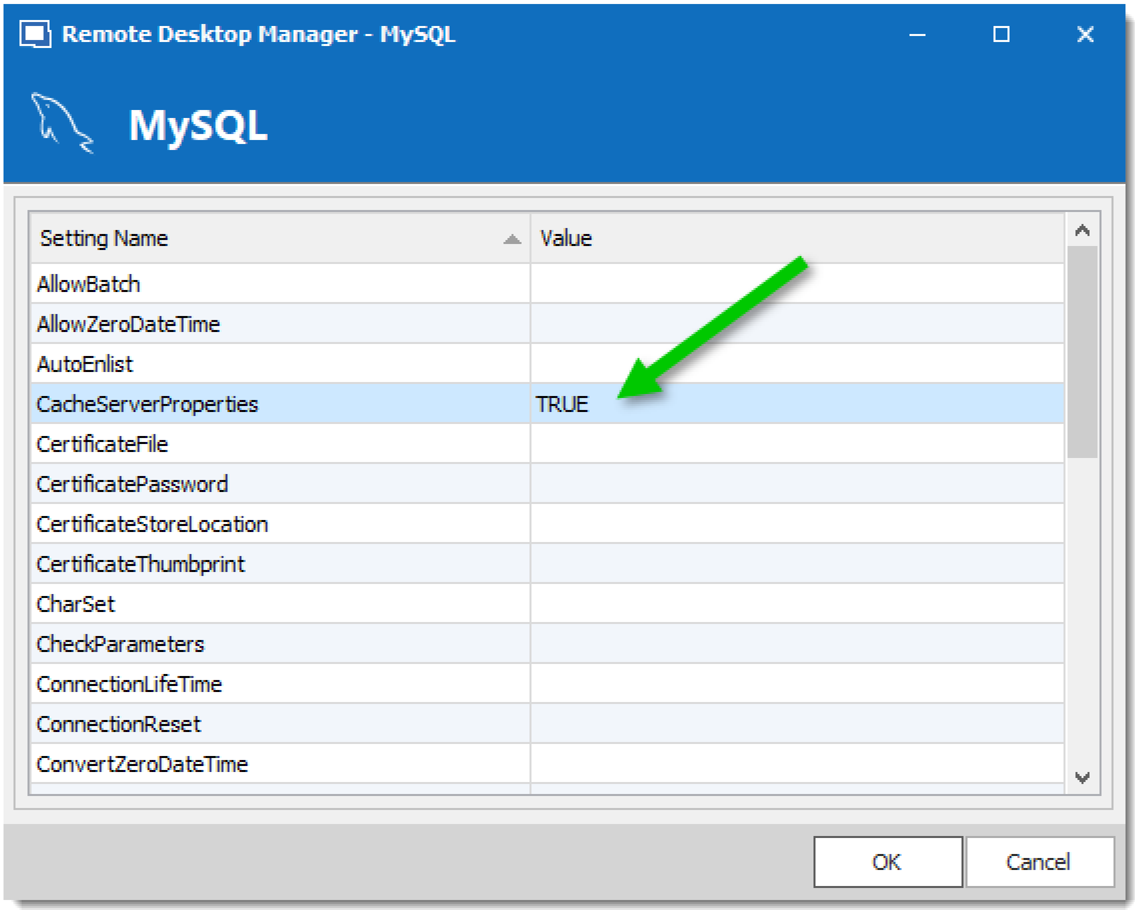
   5.1. Certificate Store Location: CurrentUser

   5.2. SSL Mode: Required

ERROR WHEN EDITING ENTRY "MYSQL.DATA.MYSQLCLIENT.MYSQLEXCEPTION (0X80004005): PACKETS LARGER THAN MAX_ALLOWED_PACKET ARE NOT ALLOWED."

When you have that type of error while attempting to edit or add a new entry on a MySQL database the problem is because your **Advanced** settings have been modified.

The resolution is to **Edit** your database, Select the **Advanced** tab and go to **More Settings**.



Setting Name	Value
AllowBatch	
AllowZeroDateTime	
AutoEnlist	
CacheServerProperties	TRUE
CertificateFile	
CertificatePassword	
CertificateStoreLocation	
CertificateThumbprint	
CharSet	
CheckParameters	
ConnectionLifeTime	
ConnectionReset	
ConvertZeroDateTime	

CacherServerProperties Default Value

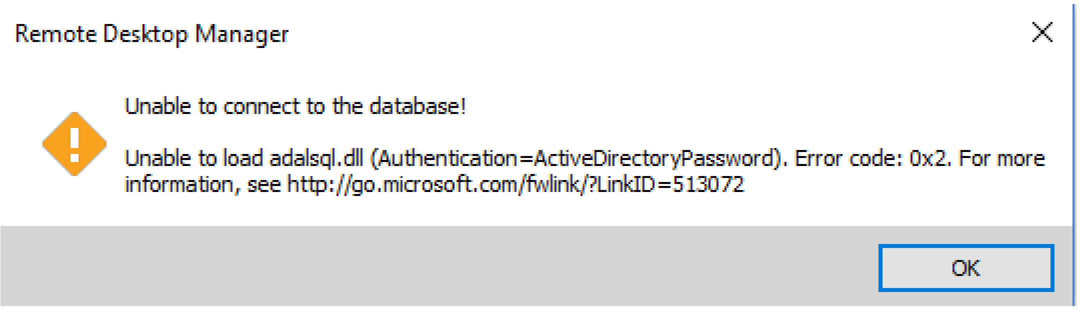
Erase the **Value** of the **CacheServerProperties** field.

13.10.8.4 SQL Azure

ISSUES

"UNABLE TO LOAD ADALSQL.DLL (AUTHENTICATION=ACTIVEDIRECTORYPASSWORD). ERROR CODE: 0X2. FOR MORE INFORMATION, SEE HTTP://GO.MICROSOFT.COM/FWLINK/?LINKID=513072"

When attempting to use a SQL Azure data source, you receive the error message below;



Unable to connect to the database!

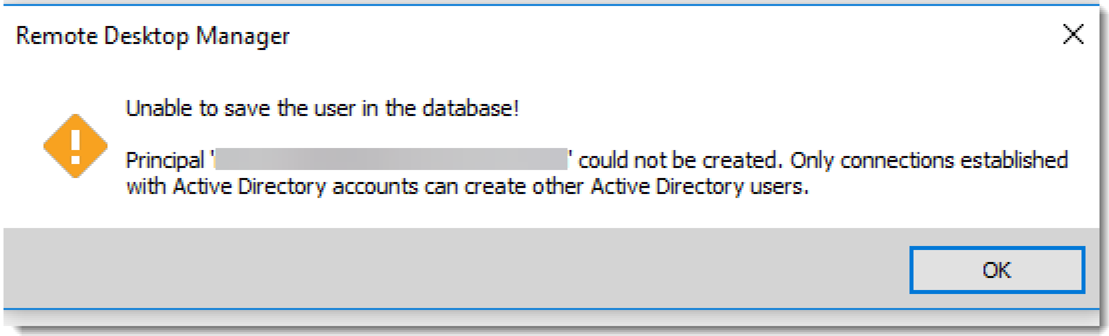
Unable to load adalsql.dll (Authentication=ActiveDirectoryPassword). Error code: 0x2. For more information, see http://go.microsoft.com/fwlink/?LinkID=513072

SQL Azure Error

To resolve this issue, please have a look at the topic on SQL Azure.

"PRINCIPAL ' ' COULD NOT BE CREATED. ONLY CONNECTIONS ESTABLISHED WITH ACTIVE DIRECTORY ACCOUNTS CAN CREATE OTHER ACTIVE DIRECTORY USERS."

When creating a user with azure active directory account authentication, you see the error below;



Unable to save the user in the database!

Principal '[redacted]' could not be created. Only connections established with Active Directory accounts can create other Active Directory users.

Azure AD Error

You must first define your SQL Server Azure AD Admin via the Azure Portal, then login into Remote Desktop Manager using that Azure AD account, from there you will be able to create new Azure AD accounts (admin and non-admin). Those new admins will also be able to do the same.

For more information, please have a look at the topic Configure SQL Azure AD Authentication.

13.10.8.4.1 SQL Azure: One or More Errors Occurred

DESCRIPTION

PROBLEM

After following the steps in Configure Azure Active Directory App Registration, you receive the error message below:

System.AggregateException: One or more errors occurred. ---> System.AggregateException: One or more errors occurred.

SOLUTION

If you get this error, please send us your Azure Active Directory app manifest at ticket@devolutions.net so that we can validate your configuration.

13.10.8.5 SQL Server

DESCRIPTION

SQL Server is surely the most used repository within our community. Even though it is extremely easy to put in place, some decisions have a huge impact on its operation.

We have separated the concerns in two categories:

SQL Server Connectivity

SQL Server Performance

13.10.8.5.1 SQL Server Connectivity

CONTENT

- New SQL Server installation
- Unable to connect to SQL Server
- A network-related or instance-specific error occurred...
- Universal Data Link (.udl) file
- Login failed for user Reason: Token-based server access validation failed
- Login failed. The login is from an untrusted domain and cannot be used with windows authentication

ISSUES

NEW SQL SERVER INSTALLATION

SQL Server installs with limited network connectivity. Therefore, when initially installed, the Database Engine cannot be accessed from another device.

Allow Remote Access

On older versions of SQL Server, remote connections must be allowed manually. Follow these instructions to enable connectivity.

Enable protocols

To connect to the Database Engine from another device, a protocol, such as TCP/IP, must be enabled.

1. In the **SQL Server Configuration Manager**, expand **SQL Server Network Configuration**.
2. Select an instance.
3. Right-click the desired protocol, then select **Enable**.

Open a communication port in the firewall

To connect to an SQL Server from another device, a communication port must be opened in the firewall.

1. In the **Start** menu, type **WF.msc** and press **Enter** to open the **Windows Firewall with Advanced Security**.
2. Select **Inbound Rules** in the left pane.
3. Right-click **Inbound Rules**, then select **New Rule...**.
4. In the **Rule Type** page, select **Port**, then click **Next**.
5. In the **Protocol and Ports** page, select **TCP**. Select **Specific local ports**, then type the port number of the instance of the Database Engine. The SQL Server default instance listens on port **1433**. Click **Next**.
6. In the **Action** page, select **Allow the connection**, then click **Next**.
7. In the **Profile** page, select the profiles that describe the computer connection environment, then click **Next**.
8. In the **Name** page, enter a **Name** and **Description** for the rule, then click **Finish**.

UNABLE TO CONNECT TO SQL SERVER

1. Go in ***Help – Application Logs*** to see if relevant error messages are present. There's a good chance that you will see [A network-related or instance-specific error occurred...]
2. Create a Universal Data Link (***.udl***) file to test your SQL Connection (see [Universal Data Link (.udl) file]).
3. Anti-virus or Firewall is blocking the application.

TEST THE CONNECTION WITH A UNIVERSAL DATA LINK (*.UDL) FILE

This will test that the instance is allowing your **workstation** to connect. **Firewalls and anti-virus** software may still **prevent** Remote Desktop Manager from accessing the network even though the Universal Data Link test is conclusive.

1. Open the **Windows File Explorer**.
2. Navigate to the folder in which the ***.udl*** file will be stored.
3. Select the **Home** tab. Using the **New item** menu, create a **Text Document**.
4. Rename this file and change its file extension to ***.udl***.

   File name extensions might be hidden by the **Windows File Explorer**.
   To show the file name extensions, in the **View** tab of the **File Explorer**, enable the **File name extensions** option.

   Do not include the space characters in the name of the file.

   A warning that changing file extensions can cause files to become unusable might be displayed. Disregard it.
5. Double-click the ***.udl*** file to open the **Data Link Properties** dialog box.
6. In the **Provider** tab, select the **Microsoft OLE DB Provider for ODBC Drivers** provider.
7. In the **Connection** tab, select Use connection string, and enter a custom connection string.

   Example of valid connection string:
   ```
   Driver={SQL Server};Server=myServerAddress;Database=myDataBase;Uid=myUsername;
   ```
8. Use the **Advanced** tab to view and set other initialization properties for your data.

9. Use the **All** tab to review and edit all OLE DB initialization properties available for your OLE DB provider.
10. In the **Connection** tab, use the **Test connection** button to test the SQL Server connectivity.
11. Click **OK** to save the connection string to the Universal Data Link (**.udl**) file.

LOGIN FAILED FOR USER – REASON: TOKEN-BASED SERVER ACCESS VALIDATION FAILED

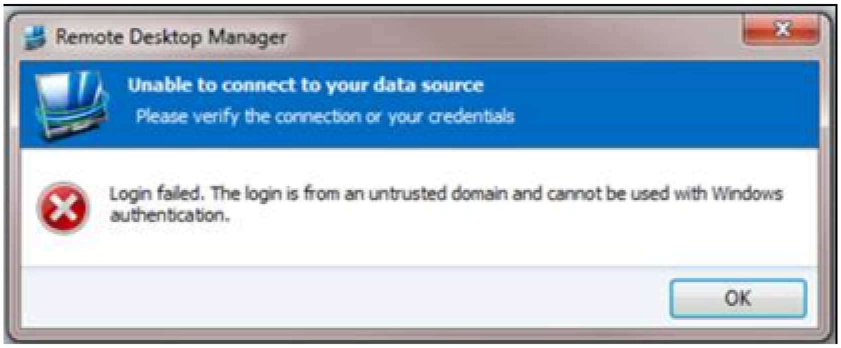
Finding the true reason for this is quite a process. A web search reveals so many solutions to attempt, and it is easy to get lost is all those steps. The thing to keep in mind is that the error message is misleading and the cause is often a simple thing.

The first step is to ensure that the issue is not unique to Remote Desktop Manager. Testing with a Universal Data Link file as shown above will prove that the workstation configuration is not the issue.

When granting rights to the DB using AD group membership and one of your user has that error message, you must check privileges for ALL the AD groups that he belongs too. Anything with an explicit DENY must be evaluated carefully. The query below will help identify these occurrences.

```
select princ.*, perm.* from sys.server_principals princ, sys.server_permissions perm

where perm.grantee_principal_id = princ.principal_id

AND state_desc = 'DENY'
```

LOGIN FAILED. THE LOGIN IS FROM AN UNTRUSTED DOMAIN AND CANNOT BE USED WITH WINDOWS AUTHENTICATION.



Unable to connect to your data source

Please verify the connection or your credentials

Login failed. The login is from an untrusted domain and cannot be used with Windows authentication.

Error Message

The following error message appear when you can't access Remote Desktop Manager data source with Integrated Authentication when connected to a Dialup VPN.

SOLUTION

1. Locate your VPN connections (***.pbk**) file.
2. You can find it here: ***%APPDATA%\Microsoft\Network\Connections\Pbk*** or if you have it set to allow all users to use the connection, you can find it here: ***C:\ProgramData\Microsoft\Network\Connections\Pbk***
3. Edit the ***.pkb** file with a text editor and find the line UseRasCredentials=1
4. Disable this setting by changing the 1 to 0: UseRasCredentials=0

A NETWORK-RELATED OR INSTANCE-SPECIFIC ERROR OCCURRED...

This error message means that the server could not be reached, the possible causes are numerous.

> These steps are for Client side troubleshooting exclusively. For full guidance on this issue please consult this article on Technet

! If the error message indicates that the Named Pipes are in use and you are accessing a remote server, ensure that the TCP IP protocol is used simply by adding **tcp:** in front of the instance name, i.e. **tcp:vmtxg.database.windows.net**

CAUSE	DIAGNOSTIC
Server name mistyped (Known as the Instance name).	Universal Data Link (.udl) file
Only server name is specified when there is no Default instance on that server.	Universal Data Link (.udl) file
Is the SQL Server up and running.	Universal Data Link (.udl) file
SQL Server is listening on a non-standard port.	Universal Data Link (.udl) file
Anti-Virus blocking Remote Desktop Manager.	Check in the Anti-Virus logs to see blocked threats.
Firewall is preventing Remote Desktop Manager to connect.	Adjust your firewall to allow RemoteDesktopManager.exe and RemoteDesktopManager64.exe to communicate with external services.

13.10.8.5.2 SQL Server Performance

DESCRIPTION

Whenever the performance of queries against SQL Server decreases, check on the following:

SIZE OF DATABASE FILES

If you transaction log file is enormous, it may be that the recovery model of the database is set to FULL, which means that it requires regular backups in order to clean up past transactions.

You can confirm this is in the properties of the DB itself.

The most urgent step is to perform a full Backup of the DB.

Run the following statement against the database.

```
exec sp_spaceused
```

13.10.9 DB Upgrades

ERROR

SQLEXCEPTION - TIMEOUT EXPIRED. THE TIMEOUT PERIOD ELAPSED PRIOR TO COMPLETION OF THE OPERATION OR THE SERVER IS NOT RESPONDING.

Presence of sizable **historical** or **log** data in the DB can cause this error to be triggered. Please consult Clean up and prune data as you see fit.

13.10.10 FIPS (Encryption)

ERROR

"SYSTEM.INVALIDOPERATIONEXCEPTION: THIS IMPLEMENTATION IS NOT PART OF THE WINDOWS PLATFORM FIPS VALIDATED CRYPTOGRAPHIC ALGORITHMS":

The problem could be related to the FIPS mode enabled.

Remote Desktop Manager uses the AES/Rijndael encryption and SHA-256 hashing algorithms, which are implemented by the Microsoft .NET Framework. If the local security policy on your system enforces FIPS compliant implementations, Remote Desktop Manager cannot run. As a result, you will receive this error message.

SOLUTION 1

To fix this error, configure the Local Security Policy on your system to allow FIPS non-compliant algorithm implementations. Here are the steps:

1. Go to ***Control Panel > Administrative Tools > Local Security Policy > Open Local Policies > Security Options***
2. Disable the option “System cryptography: Use FIPS compliant algorithms for encryption, hashing, and signing.”

> Some software (i.e. Cisco VPN Anyconnect) requires the use of FIPS. If this is your case, you must implement the alternative solution described below.

SOLUTION 2

Inside Remote Desktop Manager's installation folder, create a text file named ***RemoteDesktopManager.exe.config*** containing the following:

```
<configuration>
  <runtime>
    <enforceFIPSPolicy enabled="false"/>
  </runtime>
</configuration>
```

13.10.11 KeePass

ERRORS

YOU ARE PROMPTED TWICE TO OPEN KEEPASS WHEN CONNECTING TO A SESSION

In KeePass, click on ***Tools -> Options***, go in the Advanced tab and uncheck **Remember and automatically open last used database on startup**.

THE FOLLOWING PLUGIN IS INCOMPATIBLE WITH THE CURRENT KEEPASS VERSION

- Make sure that the installation of KeePass was successful.
- Delete all the ***RemoteDesktopManager.Connector.dll*** and ***RemoteDesktopManagerPlugin.dll*** files that you may have in the installation folder of KeePass. (We have since then modified how Plug In functions, and these files should no longer exist).

13.10.12 LogMeIn

ERRORS

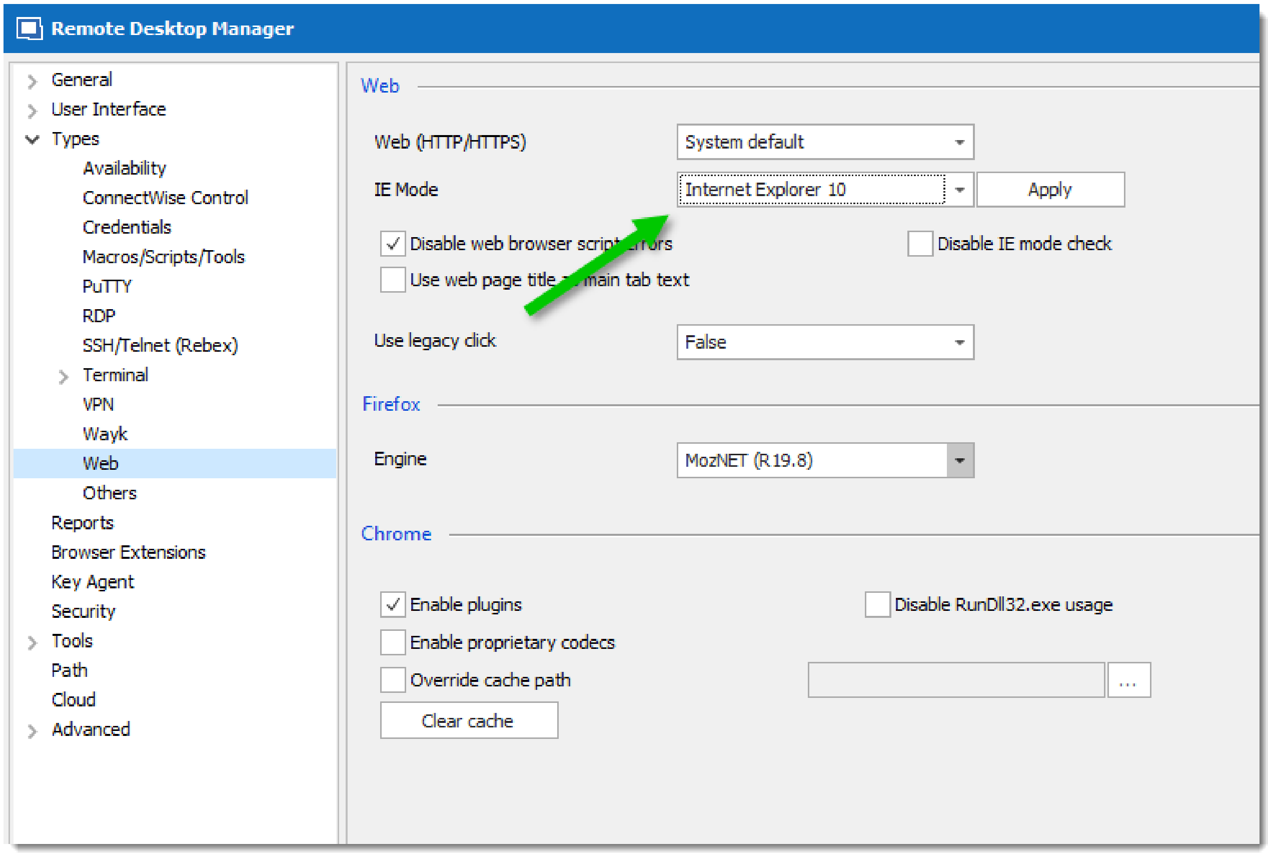
A LOGMEIN PLUGIN MAY BE REQUIRED WHEN LAUNCHING LOGMEIN IN EMBEDDED MODE.

1. Copy the **LogMeIn** portal URL from your **LogMeIn** session.
2. Close Remote Desktop Manager.
3. Open Internet Explorer as an administrator.
4. Paste the LogMeIn portal URL in Internet Explorer and launch it.
5. Internet Explorer should prompt to install the LogMeIn ActiveX.
6. Install the LogMeIn ActiveX.
7. Access the LogMeIn portal URL from your Internet Explorer window to be sure that the ActiveX as been installed properly.
8. Close Internet Explorer.
9. Open Remote Desktop Manager and launch your LogMeIn session.

You should not be prompted for the LogMeIn ActiveX anymore.

COMEXCEPTION - REQUESTED RESOURCE IN USE. (EXCEPTION FROM HRESULT: 0X800700AA)

Change the IE emulation mode in ***File – Options – Types – Web*** to use ***Internet Explorer 10***.



Web

Web (HTTP/HTTPS): System default

IE Mode: Internet Explorer 10

☑ Disable web browser script errors

□ Use web page title as main tab text

□ Disable IE mode check

Use legacy click: False

Firefox

Engine: MozNET (R19.8)

Chrome

☑ Enable plugins

□ Enable proprietary codecs

□ Override cache path

□ Disable RunDll32.exe usage

IE Mode

13.10.13Microsoft Office

ERROR

WHEN THE EMBEDDED MODE IS USED, AN ERROR IS DISPLAYED THAT OFFICE HAS TO BE INSTALLED, YET IT ALREADY IS.

Under certain conditions which we cannot identify, an **Office 2013 32 bit Edition** installation on a **64 bit system** may miss registry keys to allow for hosting Office Documents in ActiveX controls. This can be confirmed by going in ***Help – Application Logs*** to view the full error message. It should be something like `System.Runtime.InteropServices.COMException: The associated COM server does not support ActiveX Document embedding.`

To resolve this, you have to create a reg file with the content below and merge it in your registry. A restart may be required. As a preliminary step you could open the registry to confirm that the **DocObject** keys are indeed missing. The keys below are respectively for : Word, Excel, PowerPoint, Visio, and Project.

```
Windows Registry Editor Version 5.00

[HKEY_CLASSES_ROOT\Wow6432Node\CLSID\{F4754C9B-64F5-4B40-8AF4-679732AC0607}\DocObje
```

```
[HKEY_CLASSES_ROOT\Wow6432Node\CLSID\{00020830-0000-0000-C000-000000000046}\DocObje

[HKEY_CLASSES_ROOT\Wow6432Node\CLSID\{CF4F55F4-8F87-4D47-80BB-5808164BB3F8}\DocObje

[HKEY_CLASSES_ROOT\Wow6432Node\CLSID\{00021A15-0000-0000-C000-000000000046}\DocObje

[HKEY_CLASSES_ROOT\Wow6432Node\CLSID\{74B78F3A-C8C8-11D1-BE11-00C04FB6FAF1}\DocObje
```

13.10.14Microsoft RDP

THE MICROSOFT RDP CLIENT IS NOT WORKING PROPERLY

Please consult our Corrupted System File topic.

AUTOMATIC LOGON

Automatic logon troubleshooting is in the Automatic Logon topic.

SESSIONS WORK USING MSTSC.EXE BUT NOT IN REMOTE DESKTOP MANAGER

Please consult Sessions work using mstsc.exe but not in RDM.

ERRORS

“CANNOT COPY <FILENAME>: WINDOWS CANNOT FIND ‘%1!|S!’. CHECK THE SPELLING AND TRY AGAIN, OR TRY SEARCHING FOR THE ITEM BY CLICKING THE START BUTTON AND CLICKING SEARCH”

This is a bug in the Microsoft Remote Desktop Client. The workaround is to enable the Smart Card even if it's not required for the connection.

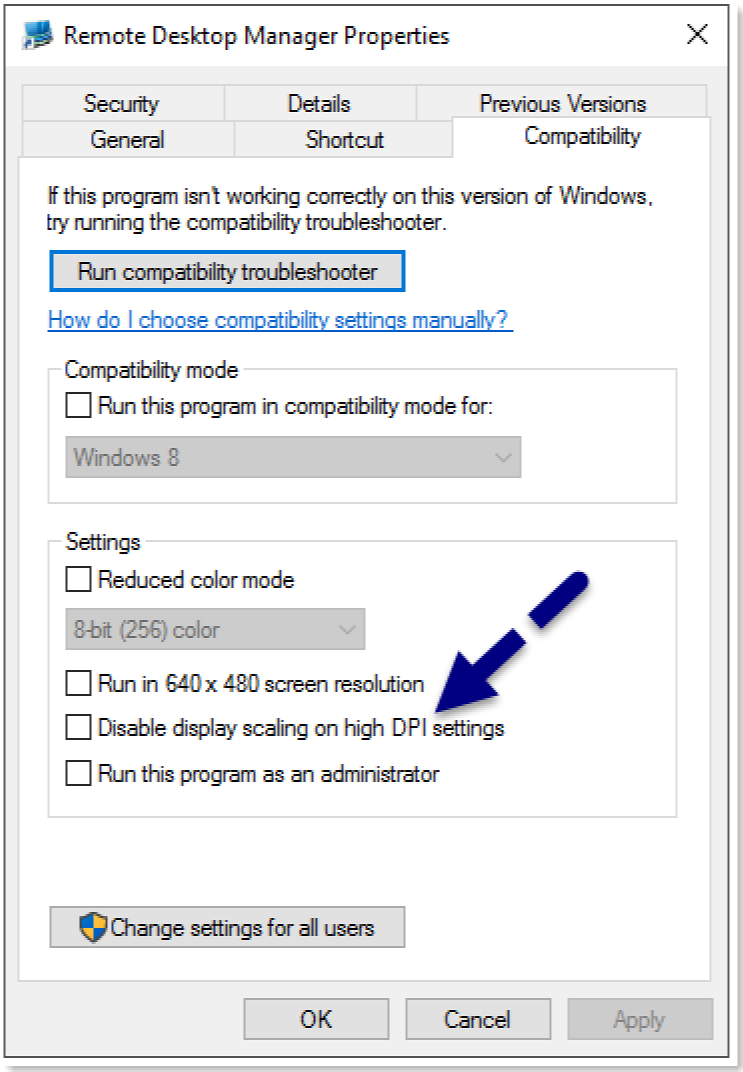
I RECEIVE AN ERROR WHEN I TRY AND GET SESSION DETAILS, OR WHEN I EXECUTE A LOGOFF WITH AN RDP SESSION. HOW DO I FIX THIS?

Please read the information Logoff Access Denied.

SCREEN AREAS UNRESPONSIVE IN EMBEDDED SESSIONS.

This most often occurs on systems that use a DPI setting of more than 100%. To disable scaling in RDM you must adjust the compatibility settings on the Windows shortcut for RDM.

1. Right-click on the shortcut to RDM.
2. Select Properties.
3. Go to the "Compatibility" tab.
4. Check "Disable display scaling on high DPI settings".


Remote Desktop Manager Properties
Security
Details
Previous Versions
General
Shortcut
Compatibility
Run compatibility troubleshooter
How do I choose compatibility settings manually?
Change settings for all users
OK
Cancel
Apply

If this program isn't working correctly on this version of Windows, try running the compatibility troubleshooter.

Compatibility mode

☐ Run this program in compatibility mode for:

Windows 8

Settings

☐ Reduced color mode

8-bit (256) color

☐ Run in 640 x 480 screen resolution

☐ Disable display scaling on high DPI settings

☐ Run this program as an administrator

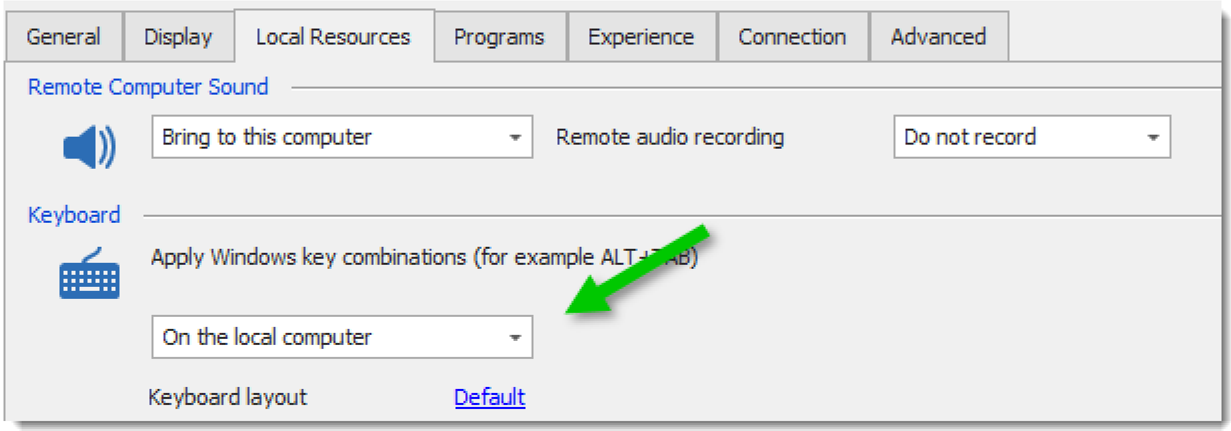
Compatibility Tab

I HAVE MULTIPLE SESSIONS TO THE SAME COMPUTER WITH DIFFERENT CREDENTIALS, BUT IT ALWAYS USES THE LAST ONE I ENTERED.

This issue stems from the fact that the Windows Credential repository holds only one entry per Windows user for a remote computer. If you use the **Embedded (tabbed)** display mode and store the password in the database, you'll be able to work around that limitation.

THE WINDOWS SHORTCUTS ARE BEING PERFORMED IN THE SESSION BUT ALWAYS ON MY COMPUTER.

You must configure the Keyboard setting in the **Local Resources** tab of the session settings. You can select "On the remote computer" or "In full screen only" according to your personal preferences.



Remote Computer Sound

Bring to this computer

Remote audio recording: Do not record

Keyboard

Apply Windows key combinations (for example ALT+TAB)

On the local computer

Keyboard layout: Default

Local Resources Tab

COPY/PASTE BETWEEN A REMOTE SESSION AND MY LOCAL COMPUTER STOPPED WORKING

This issue arises when a program called RDPClip becomes unstable. You can kill its process and launch a new instance.

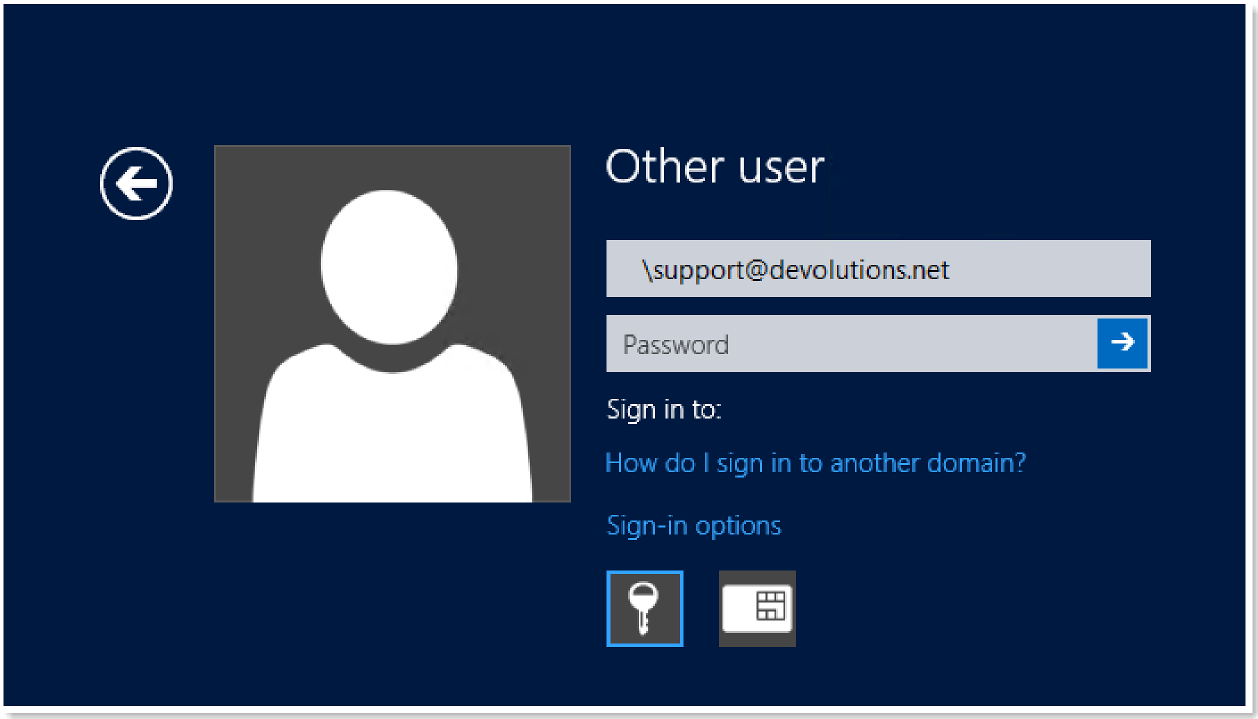
1. On the affected system, load up task manager (right click in taskbar and select Task Manager).
2. Go to the Pr**ocesses Tab**.
3. Select **rdpclip.exe**.
4. Click **End Process**.
5. Go to the **Application Tab**.
6. Click **New Process**.
7. Type **rdpclip**.
8. Click **Ok**.

COPY/PASTE OPERATION WITHIN THE REMOTE HOST ARE EXTREMELY SLOW

As strange as it may seem, we've isolated the issue to "Serial Ports" being enabled. Turn off Serial port sharing and see if the performance is improved.

LOG ON USERNAME ON WINDOWS SERVER 2012 IS SENT INCORRECTLY

When you try to connect to a Windows Server 2012, you see the following result below. There are several spaces that shouldn't be there.

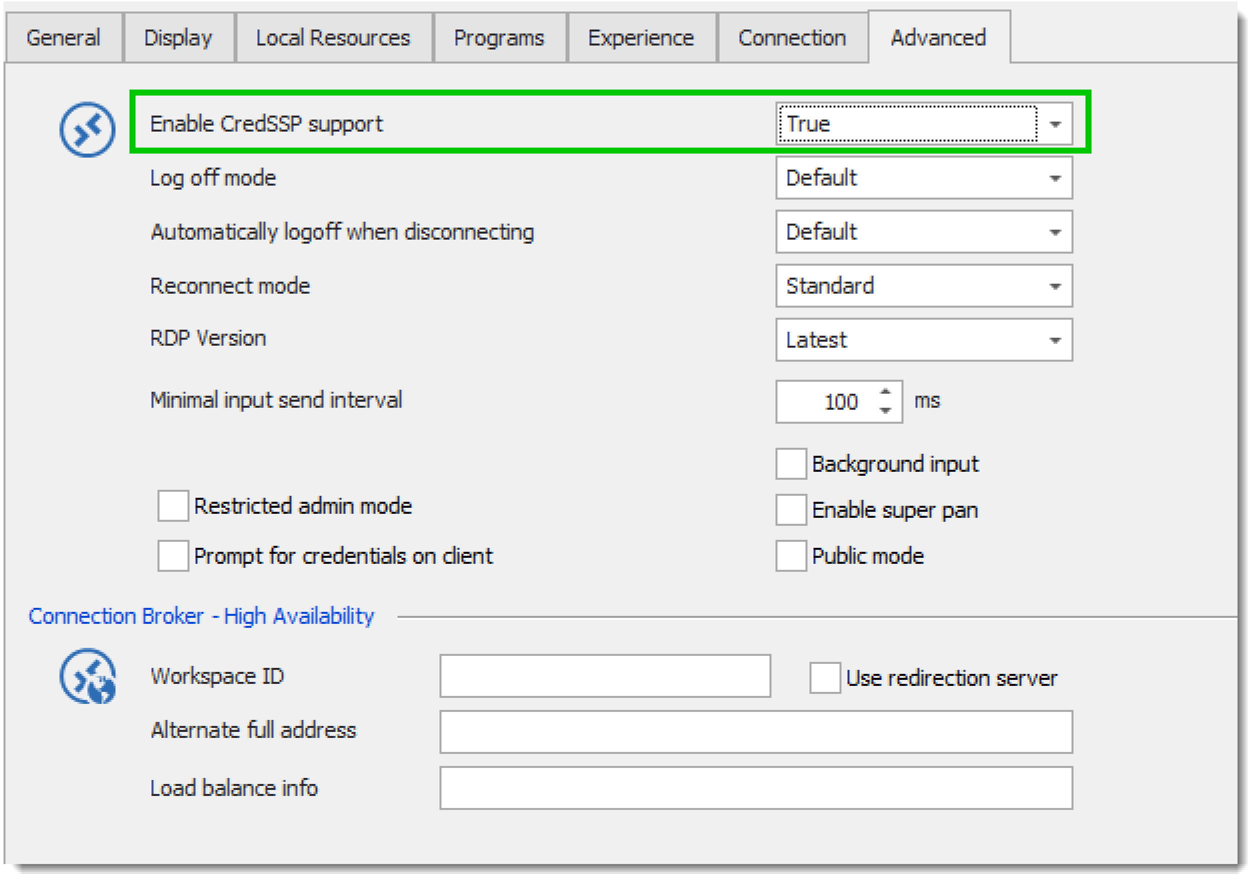


Other user

\support@devolutions.net

Windows Server 2012 Log In

To fix this issue, go in ***Properties – General – Advanced*** and change the option **Enable CredSSP support** to **True.**



Enable CredSSP support: True
Log off mode: Default
Automatically logoff when disconnecting: Default
Reconnect mode: Standard
RDP Version: Latest
Minimal input send interval: 100 ms
□ Background input
□ Restricted admin mode
□ Enable super pan
□ Prompt for credentials on client
□ Public mode

Connection Broker - High Availability

Workspace ID:
□ Use redirection server
Alternate full address:
Load balance info:

RDP Session Advanced Tab

13.10.14.1 Automatic Logon

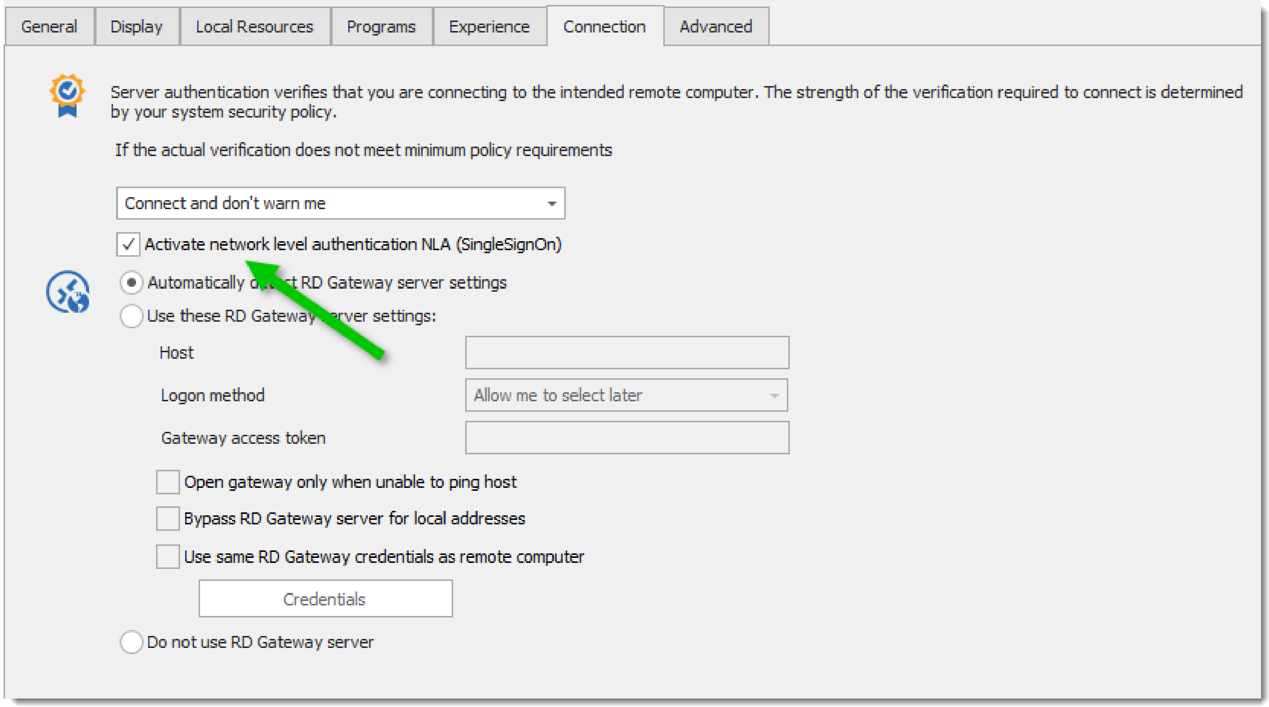
DESCRIPTION

Sometimes the automatic logon does not function and your credentials are requested by the remote system. Here are some steps to help identify the issue. Support for automatic logon was introduced on Windows 2003/XP, so ensure you are trying to connect to these or later versions. Windows 2000 does not support the automatic login.

RDP SESSIONS CONNECT SUCCESSFULLY WHEN IN EXTERNAL MODE, BUT NOT IN EMBEDDED MODE

This issue may be caused by a bad authentication negotiation because in some cases **Single Sign On** (SSO) requires **Network Level Authentication** (NLA). It can happen when prompting for credentials and when using automatic logon. Please activate **Network Level**

Authentication in the **Connection** tab of your session. You might also have to check the **Public Mode** option in the **Advanced** tab to make it work.



Server authentication verifies that you are connecting to the intended remote computer. The strength of the verification required to connect is determined by your system security policy.

If the actual verification does not meet minimum policy requirements

Connect and don't warn me

☑ Activate network level authentication NLA (SingleSignOn)

● Automatically detect RD Gateway server settings

○ Use these RD Gateway server settings:

Host

Logon method: Allow me to select later

Gateway access token

□ Open gateway only when unable to ping host

□ Bypass RD Gateway server for local addresses

□ Use same RD Gateway credentials as remote computer

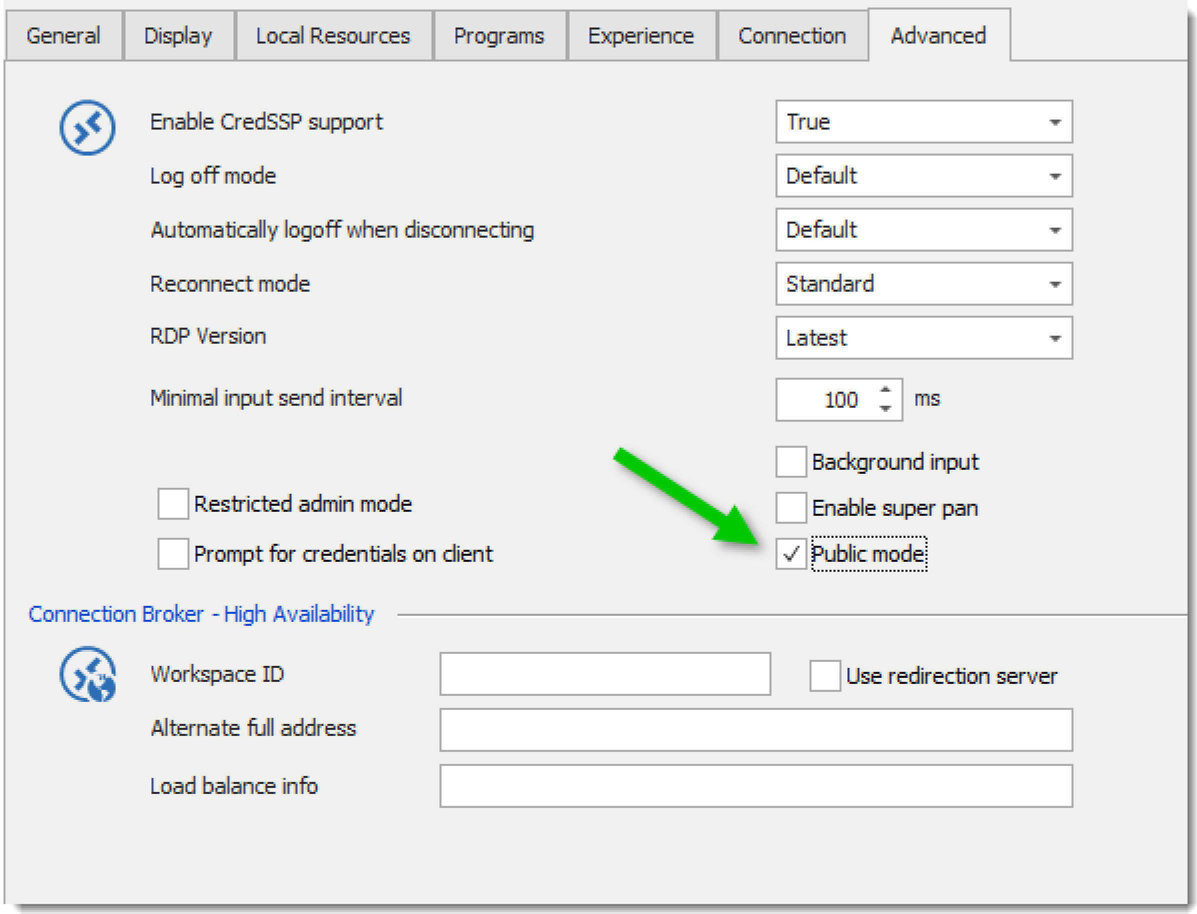
○ Do not use RD Gateway server

Network Level Authentication

See also : Network Level Authentication, Configure NLA for Remote Desktop Services Connections.

THE CONNECTION WAS DENIED BECAUSE THE USER ACCOUNT IS NOT AUTHORIZED FOR REMOTE LOGIN

We have discovered that enabling the **Public Mode** option in the **Advanced** tab resolves the issue.



Enable CredSSP support: True

Log off mode: Default

Automatically logoff when disconnecting: Default

Reconnect mode: Standard

RDP Version: Latest

Minimal input send interval: 100 ms

☐ Background input

☐ Restricted admin mode

☐ Enable super pan

☐ Prompt for credentials on client

☑ Public mode

Connection Broker - High Availability

Workspace ID:

☐ Use redirection server

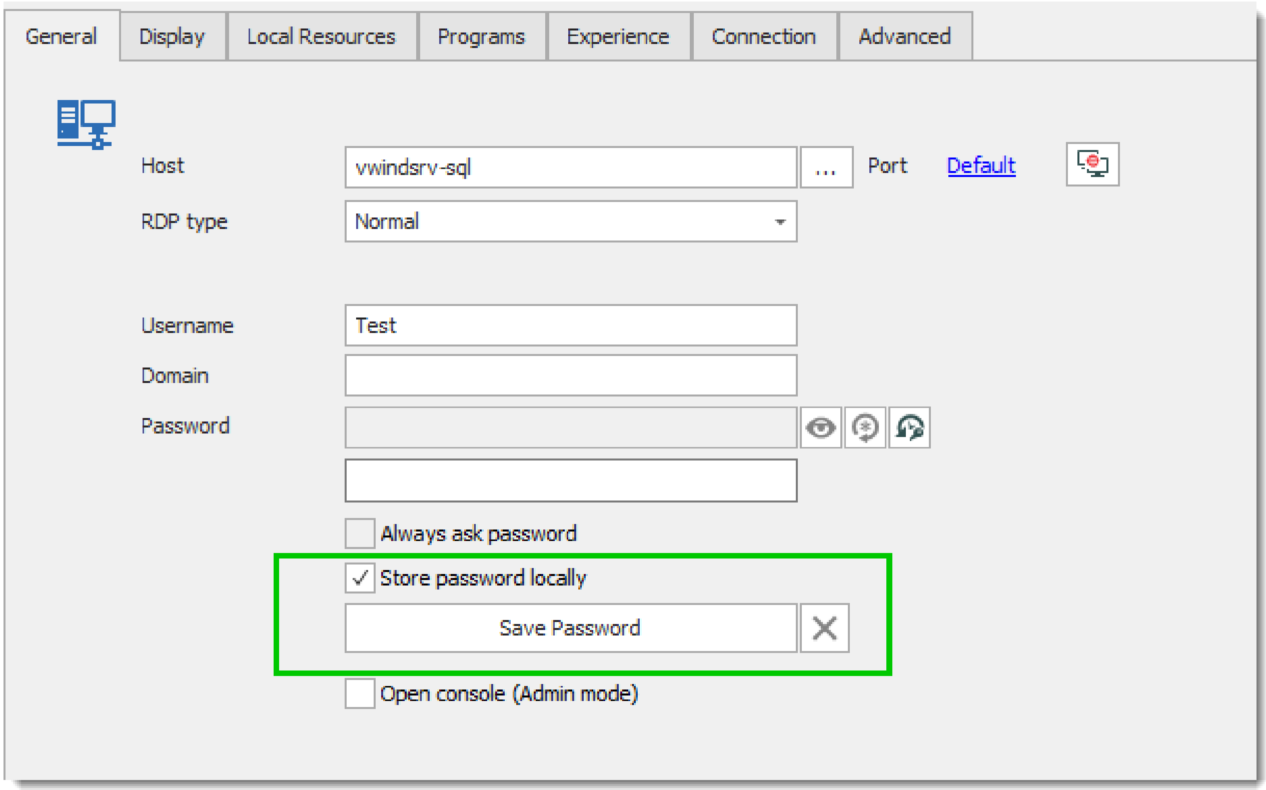
Alternate full address:

Load balance info:

RDP Session - Advanced Tab

ENSURE CREDENTIALS ARE ENTERED PROPERLY.

RDM allows for advanced credential management. Depending on your choice of: **Default, Credential repository, Embedded** or **Inherited** ensure the credentials are properly entered.



Host: vwindsrv-sql

Port: Default

RDP type: Normal

Username: Test

Domain:

Password:

□ Always ask password

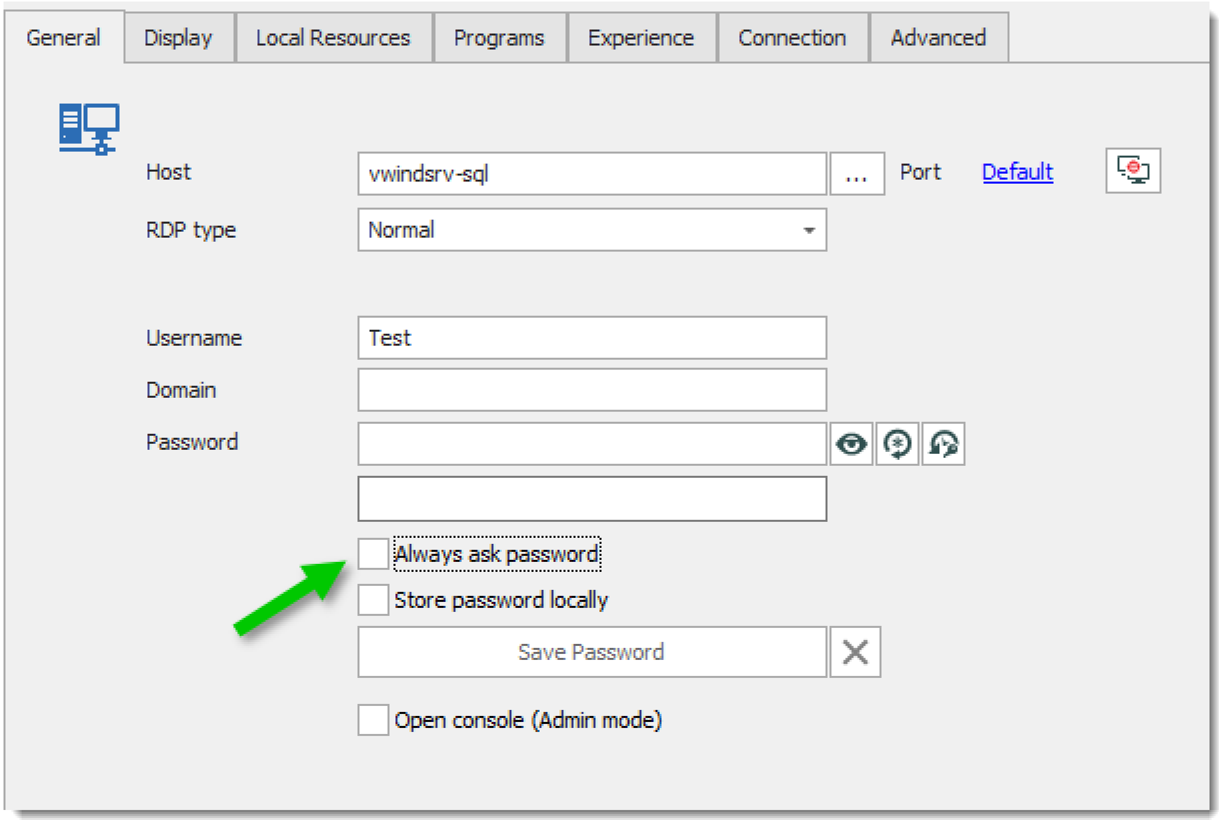
☑ Store password locally

Save Password

□ Open console (Admin mode)

Storing your Password

ENSURE THAT "ALWAYS ASK PASSWORD" IS NOT CHECKED.



Host: vwindsrv-sql

RDP type: Normal

Username: Test

Domain:

Password:

□ Always ask password

□ Store password locally

□ Open console (Admin mode)

Microsoft Remote Desktop - General Tab

ENSURE A SYSTEM POLICY DEFINED ON THE HOST IS NOT REQUIRING EXPLICIT CREDENTIAL ENTRY

The host server can be configured to always require the credentials to be entered in an interactive manner by the user. Ask your system administrator to confirm if this is the case.

Choose the instructions depending on the server operating system. Note that there are often multiple ways to configure the host (WMI, Scripting, etc), but the group policies are the preferred method. Therefore the links are for the articles describing group policy solutions when they are available.

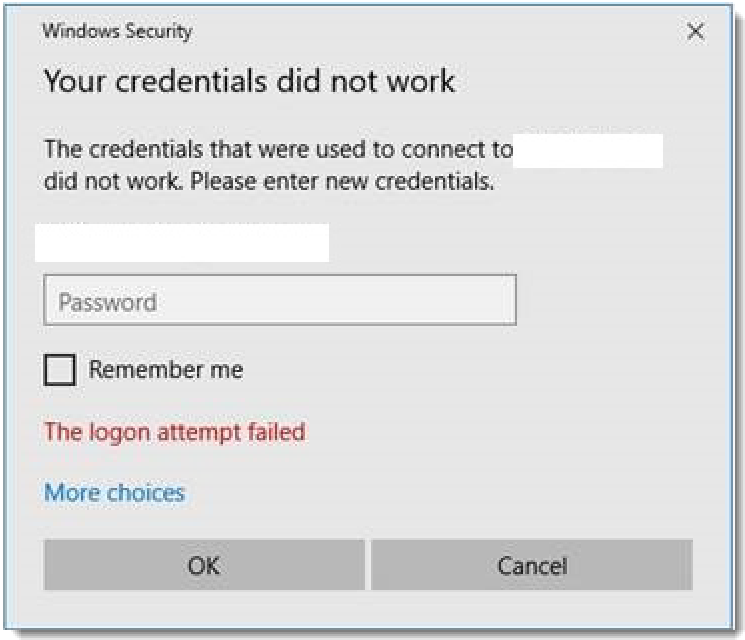
APPLIES TO	LINK
Windows Server 2003, Windows Server 2003 R2, Windows Server 2003 with SP1, Windows Server 2003 with SP2	Microsoft ended support for Windows Server 2003 on July 14, 2015. This change has affected your software updates and security options.
Windows Server 2008	Group Policy Settings for Remote Desktop Services in Windows Server 2008
Windows Server 2008 R2	Group Policy Settings for Remote Desktop Services in Windows Server 2008 R2
Windows 2012	The settings are on the Session Collection Properties. More info on the new Remote Desktop Services: Guide to configure the Quick Deployment: Test Lab Guide: Remote Desktop Services Session Virtualization Quick Start

SINGLE SIGN ON WORKS FOR TS WEB ACCESS, HOWEVER, THEY CANNOT BE SHARED ACROSS TS WEB ACCESS AND TS OR TS GATEWAY.

You must adjust a group policy to allow that. Please follow the directions in http://blogs.msdn.com/b/rds/archive/2007/04/19/how-to-enable-single-sign-on-for-my-terminal-server-connections.aspx

REMOTE DESKTOP MANAGER HANGS WHEN PROMPTED TO ENTER CREDENTIALS.

When you are prompted with this credential box, Remote Desktop Manager hangs.



Windows Security

Your credentials did not work

The credentials that were used to connect to [redacted] did not work. Please enter new credentials.

[redacted]

The logon attempt failed

Windows Security

PROBABLE CAUSE

The issue seems to occur with users using a Wacom Bamboo Fun Pen & Touch tablet. Latest drivers are installed.

When users with a Wacom tablet click on a session with an expired password in the Private Vault or a non domain joint server, forcing Remote Desktop Manager (or in fact RDP) displaying a credential popup, Remote Desktop Manager freezes.

When the user does the very same action with a regular mouse, everything goes fine.

The problem appears to be in the Wacom settings along with some windows settings to use Windows Ink as handwriting.

When Use Windows Ink was disabled, Remote Desktop Manager didn't freeze anymore when displaying a credential box.

It did also solve problems with the focus of other applications.

13.10.14.2Cannot Store Password on Local Computer

DESCRIPTION

IN A MICROSOFT RDP SESSION, YOU WANT TO STORE THE PASSWORD ON THE LOCAL COMPUTER, HOWEVER THE "SAVE PASSWORD" BUTTON IS GRAYED OUT.

> Please note that this setting may have been set by a group policy. If you find the value but do not know the reason why it is set, a Domain Administrator may have set it. We do not condone bypassing corporate policies.

Click on Start \ Run and type regedit to open the registry editor. Navigate to HKEY_LOCAL_MACHINE\Software\Policies\Microsoft\Windows NT\Terminal Services\DisablePasswordSaving key and change the value to 0.

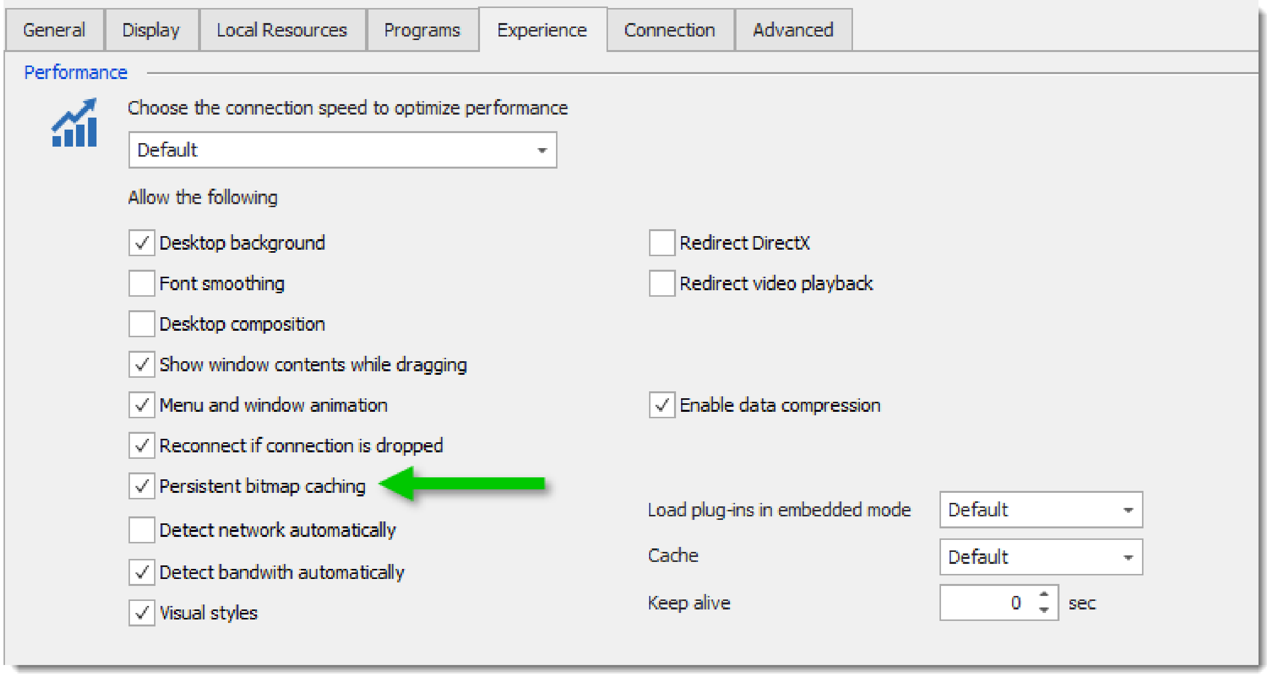
Make sure you've checked the **Store password locally** feature and that you have text in the **Host** field.

13.10.14.3 Display Issues

DESCRIPTION

THE REMOTE SESSION'S CONTENT IS BLURRY

Uncheck **Persistent bitmap caching** under the **Experience** tab in the properties of your RDP session.



Performance

Choose the connection speed to optimize performance

Default

Allow the following

☑ Desktop background
□ Font smoothing
□ Desktop composition
☑ Show window contents while dragging
☑ Menu and window animation
☑ Reconnect if connection is dropped
☑ Persistent bitmap caching
□ Detect network automatically
☑ Detect bandwith automatically
☑ Visual styles

□ Redirect DirectX
□ Redirect video playback
☑ Enable data compression

Load plug-ins in embedded mode: Default

Cache: Default

Keep alive: 0 sec

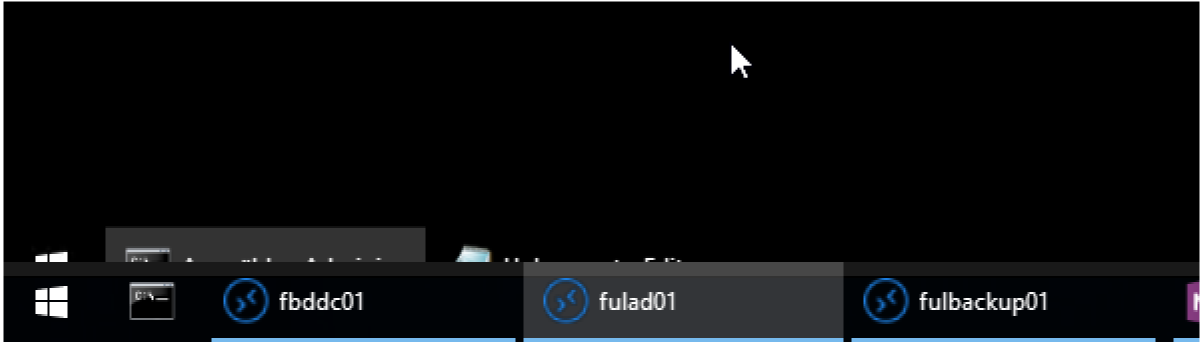
Bitmap Caching

SESSIONS ARE FLICKERING, TURNING BLACK OR RANDOMLY SHUFFLES WHILE WORKING

We have identified the CA DSM Agent Suite for desktop management as being the culprit for those who use this product. The remote control agent from this product seems to interfere with the modern GUI of Remote Desktop Manager. If you stop the agent, the problem should go away.

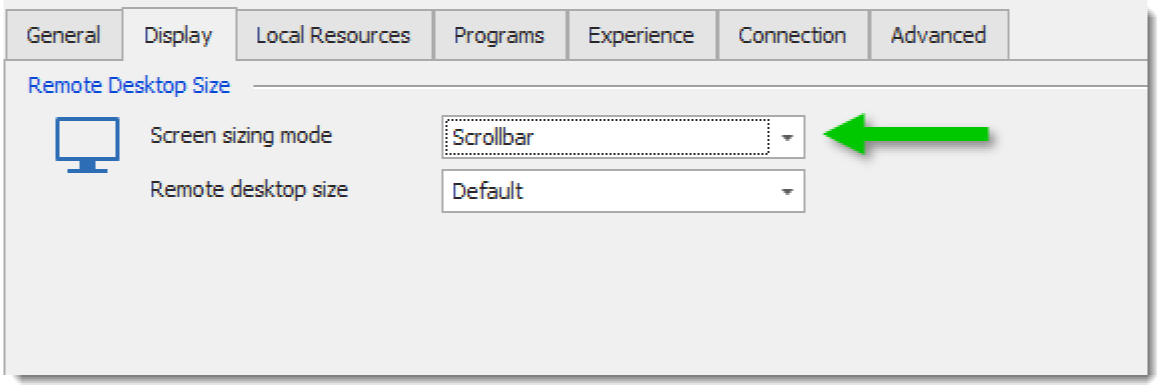
REMOTE TASKBAR IS HIDDEN BY THE ONE OF YOUR LOCAL MACHINE

The taskbar on your remote system is hidden by the one from your local machine as shown below;



Windows Taskbar

Simply set this option as shown below in the properties of your RDP session under the **Display** tab.



Screen sizing mode: Scrollbar

Remote desktop size: Default

RDP Properties

13.10.14.4 Keyboard not working

DESCRIPTION

KEYBOARD NOT WORKING ON A WINDOWS 7 COMPUTER

Some users have experienced issues where their keyboard would not work on the Windows 7 system.

The solution is to update the RDP client on Windows 7.

KB's must be installed in the following order: KB2574819, KB2830477, KB2857650, KB2913751, KB2923545

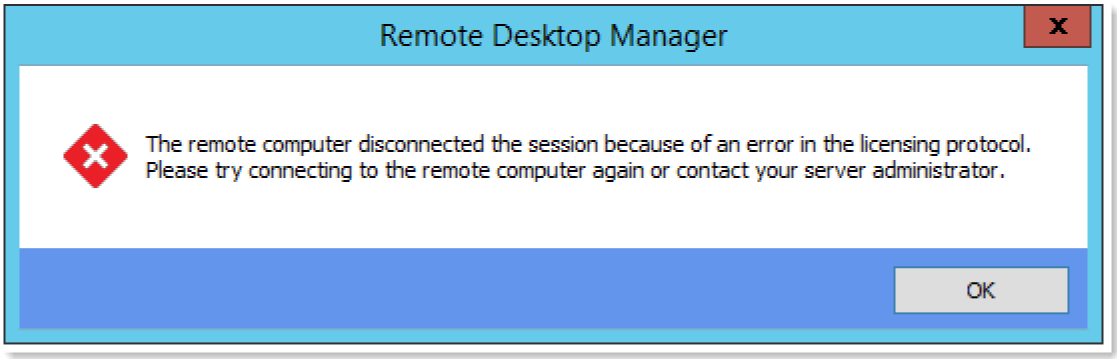
Here's a link to get you there quickly;

https://support.microsoft.com/en-us/help/2923545/update-for-rdp-8-1-is-available-for-windows-7-sp1

13.10.14.5 Licensing Protocol Error

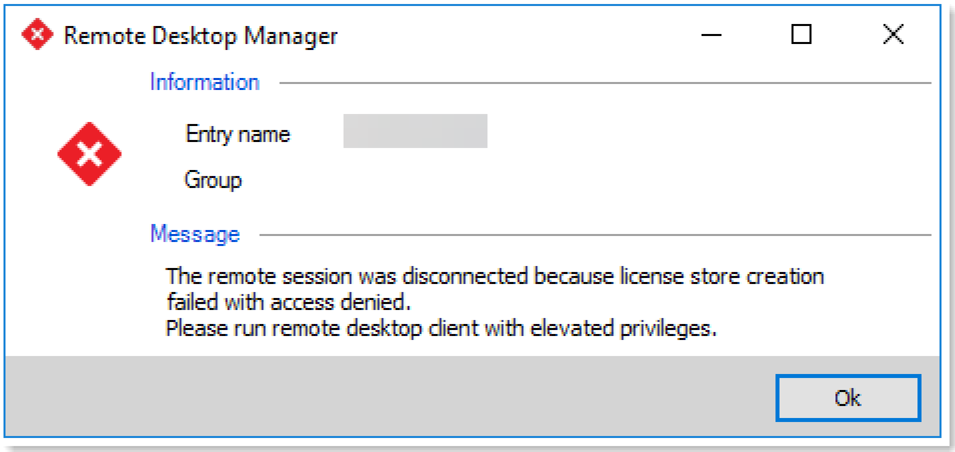
DESCRIPTION

When you connect to a remote workstation, you receive one of the errors below.



The remote computer disconnected the session because of an error in the licensing protocol.
Please try connecting to the remote computer again or contact your server administrator.

Licensing Protocol Error



Entry name

Group

The remote session was disconnected because license store creation failed with access denied.
Please run remote desktop client with elevated privileges.

License Store Creation

SOLUTION

1. Close Remote Desktop Manager.

2. Depending on your Windows architecture (32-bit or 64-bit) delete the specified registry key(s);

WINDOWS	REGISTRY KEY(S)
32-bit	***HKLM\SOFTWARE\Microsoft\MSLicensing***
64-bit	***HKLM\SOFTWARE\Microsoft\MSLicensing*** ***HKLM\SOFTWARE\Wow6432Node\Microsoft\MSLicensing***

3. Run Microsoft RDP (mstsc.exe) as an administrator to recreate the registry key (just once).

4. Restart Remote Desktop Manager.

13.10.14.6Logoff Access Denied

LOGOFF ACCESS DENIED ERROR OR *"UNABLE TO ENUMERATE REMOTE SESSIONS"*

This section describes the solution for the “access denied” error which occurs when using ***qwinsta.exe/rwinsta.exe*** or WTSOpenServer Windows API function to access to a Windows XP SP2 PC.

The same thing happens when trying to connect to a Windows XP SP2 using Remote Desktop Services Manager from a Windows 2003 Server. This is because ***qwinsta.exe*** command calls WTS functions (WTSOpenServer, WTSEnumerateSessions, …), you will encounter the same error when using either the command or the API.

VERIFY THE FOLLOWING:

1. Ensure you have the correct credential.

Although you do not need to provide a username and a password when executing ***qwinsta.exe*** or WTSOpenServer, Windows uses its stored credentials automatically, just like accessing a shared folder.

The easiest way to confirm the credential is to use Explorer to access remote server’s C$ share. Also, you can use “net use” command.

For those who want to connect to a remote server programmatically using WTSOpenServer API, WNetAddConnection2 function should be enough to make sure you got a piece of credential before calling WTSOpenServer function.

It goes without saying that the user in the credentials needs to have enough privilege on the remote server to carry out the operation.

2. Open RPC ports on firewall.

An API call involves connecting to a remote machine using RPC. In most cases, the RPC service is running and you can confirm that from the service management interface. To open RPC ports, simply enable “File and Printer Sharing” in the Windows Firewall setting.

(Generally, if the RPC is blocked by the firewall on the remote machine, the error should be "1722 RPC server is unavailable" rather then "5 Access denied")

3. Disable "Force Guest" log on.

You can change this option from either local security policy or registry.

Local security policy: run ***secpol.msc* > *Secuirty Settings* > *Local Policies* > *Security Options* > *Network access***: Sharing and security model for local accounts, and set to "Classic".

Registry: find "forceguest" item in `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Lsa`, and set it to 0.

Both methods are equivalent. If this option is set to 1, remote logging in user will be impersonated as Guest account (and if Guest account is disabled, login fails). Set it to 0 enables user logging in as themselves.

4. If you still receive “access denied” and it only happens when the remote OS is Windows XP SP2, it is very likely akin to the following case:

To confirm, you need a packet sniffer such as Wireshark (a great freeware).

When you use a sniffer to capture the SMB packets, you can see the authentication is OK (NTLM if workstation, Kerberos if Windows 2003 domain), but the RPC gets nca_s_fault_access_denied (0×00000005) as error code.

This means the remote RPC component failed to execute the requested operation. It is because in Windows XP SP2, it is not allowed to operate on remote desktop service (RDS) through RPC by default. To modify this setting to enable Remote Desktop API through RPC, you need to find the following registry key:

```
HKLM\SYSTEM\CurrentControlSet\Control\Terminal Server
```

Then add a DWORD value named “AllowRemoteRPC” and change its value to 1.

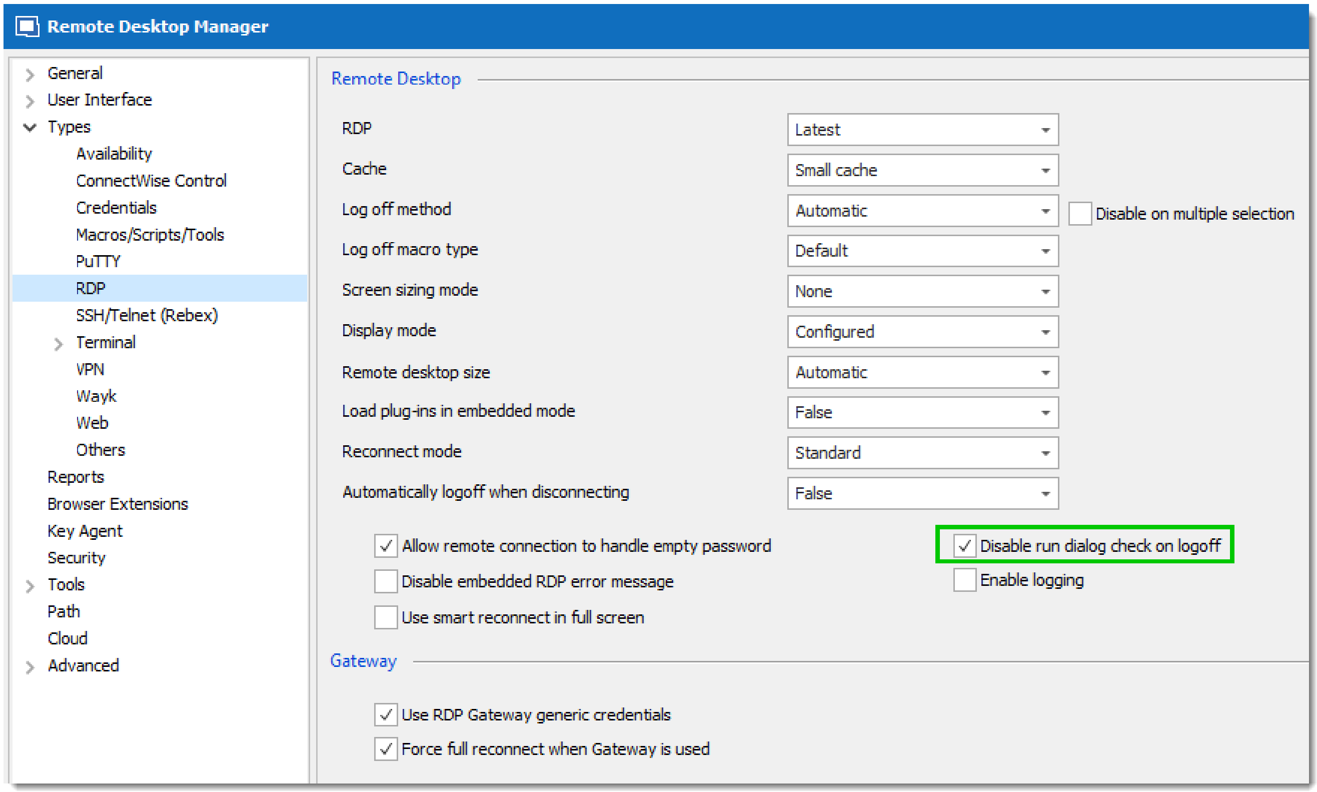
13.10.14.7 Logoff Issue

DESCRIPTION

After creating and connecting to an RDP session, if you hit the 'LogOff' button in the Remote Desktop Manager ribbon, it appears to be sending the wrong command to the RDP session. It's sending 'ashutdown /l' instead of 'shutdown /l'. It does this in both the Free and Enterprise version.

SOLUTION

Simply check this option in ***File -> Options -> Types -> RDP***.



Remote Desktop

RDP: Latest
Cache: Small cache
Log off method: Automatic ☐ Disable on multiple selection
Log off macro type: Default
Screen sizing mode: None
Display mode: Configured
Remote desktop size: Automatic
Load plug-ins in embedded mode: False
Reconnect mode: Standard
Automatically logoff when disconnecting: False

☑ Allow remote connection to handle empty password
☐ Disable embedded RDP error message
☐ Use smart reconnect in full screen
☑ Disable run dialog check on logoff
☐ Enable logging

Gateway

☑ Use RDP Gateway generic credentials
☑ Force full reconnect when Gateway is used

Disable run dialog check

13.10.14.8 Memory and Performance issues

DESCRIPTION

YOU CAN ONLY RUN A FEW RDP SESSIONS AT THE SAME TIME IN REMOTE DESKTOP MANAGER AND YOU WANT TO KNOW HOW TO BE ABLE TO OPEN MORE SESSIONS.

The amount of consumed memory is dictated by the remote technology, and in the case of RDP, by the Operating System of the remote host. Windows 8 / 2012 sessions do take upwards of 150Mb, whereas the previous versions would consume around half of that.

This is something that we have no control over. You can look at Large Memory Aware Application or use the 64bit edition of Remote Desktop Manager.

RDP SESSION INITIATION IS SLOW, WHEN USING REMOTE DESKTOP MANAGER IN A VIRTUAL ENVIRONMENT

This situation is something that we also experience under those conditions (our testing environment is virtualized and has minimal memory for each guests).

In the **Experience** tab of your RDP session, you need to disable everything that is not used. A good method is to select the **Modem** connection speed, this will disable all settings that are related to appearance. You can then turn on a single setting to see if it affects the performance negatively. Repeat until you find the combination that works best for you.

YOU USE RDP IN EMBEDDED MODE AND THE REMOTE SESSION IS EXTREMELY SLOW TO RESPOND. THE SESSION LOADS FINE, BUT WHEN YOU GET LOGGED-IN THE REMOTE COMPUTER, IT BECOMES UNRESPONSIVE. MOUSE CLICKS, KEYBOARD PRESSES AND APPLICATION LOADING ARE EXTREMELY SLOW. IN EXTERNAL MODE, EVERYTHING IS RUNNING FINE.

1. Disable your Anti-virus and test the connection to see of this make a difference. If you use Trend Micro Business Security, add ***RemoteDesktopManager.exe***, ***RemoteDesktopManager64.exe***, and ***Embedded32.exe*** to the Process Exception List under ***Preferences – Global Settings*** and update the Trend client. If you use Symantec Norton Internet Security, ensure you allow Remote Desktop Manager to access the internet in the Program Rules.

2. Uncheck all settings in the **Local Resources** tab.

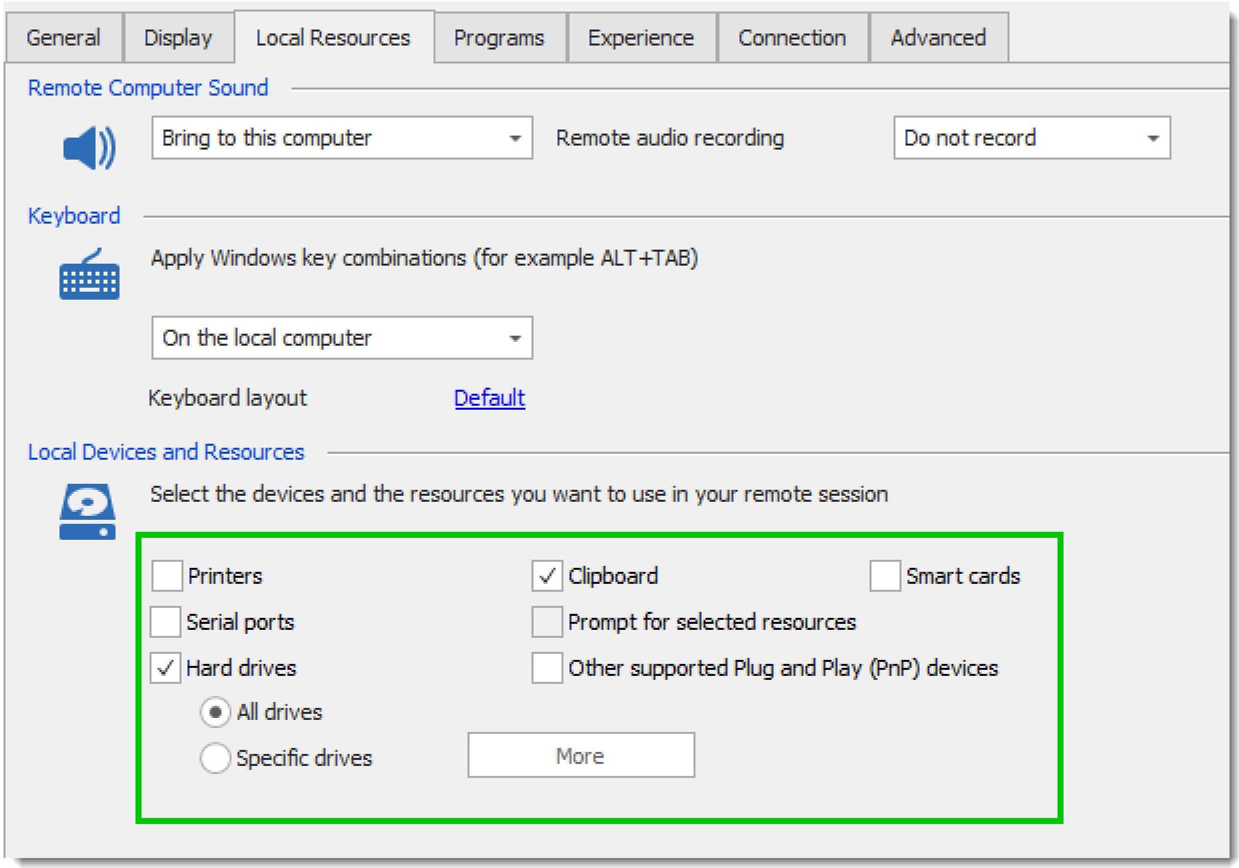
3. Check **Disable display scaling on high DPI settings** in the options. Consult topic Microsoft RDP for more information.

4. Download and install Microsoft RDCMan to see if it's related to the RDP ActiveX. Remote Desktop Manager uses the same technology and this will ensure that your workstation doesn't have configuration issues.

CONNECTIONS FAIL FOR SOME HOSTS

There are known security updates that have broken connectivity to a host, but they have been fixed in ulterior patches. If you keep the hosts updated then it should be something else.

Sometimes the mapping of local devices will cause issues. Uncheck all settings in the **Local Resources** tab.



Remote Computer Sound: Bring to this computer

Remote audio recording: Do not record

Apply Windows key combinations (for example ALT+TAB): On the local computer

Keyboard layout: Default

Select the devices and the resources you want to use in your remote session

□ Printers ☑ Clipboard □ Smart cards

□ Serial ports □ Prompt for selected resources

☑ Hard drives □ Other supported Plug and Play (PnP) devices

● All drives

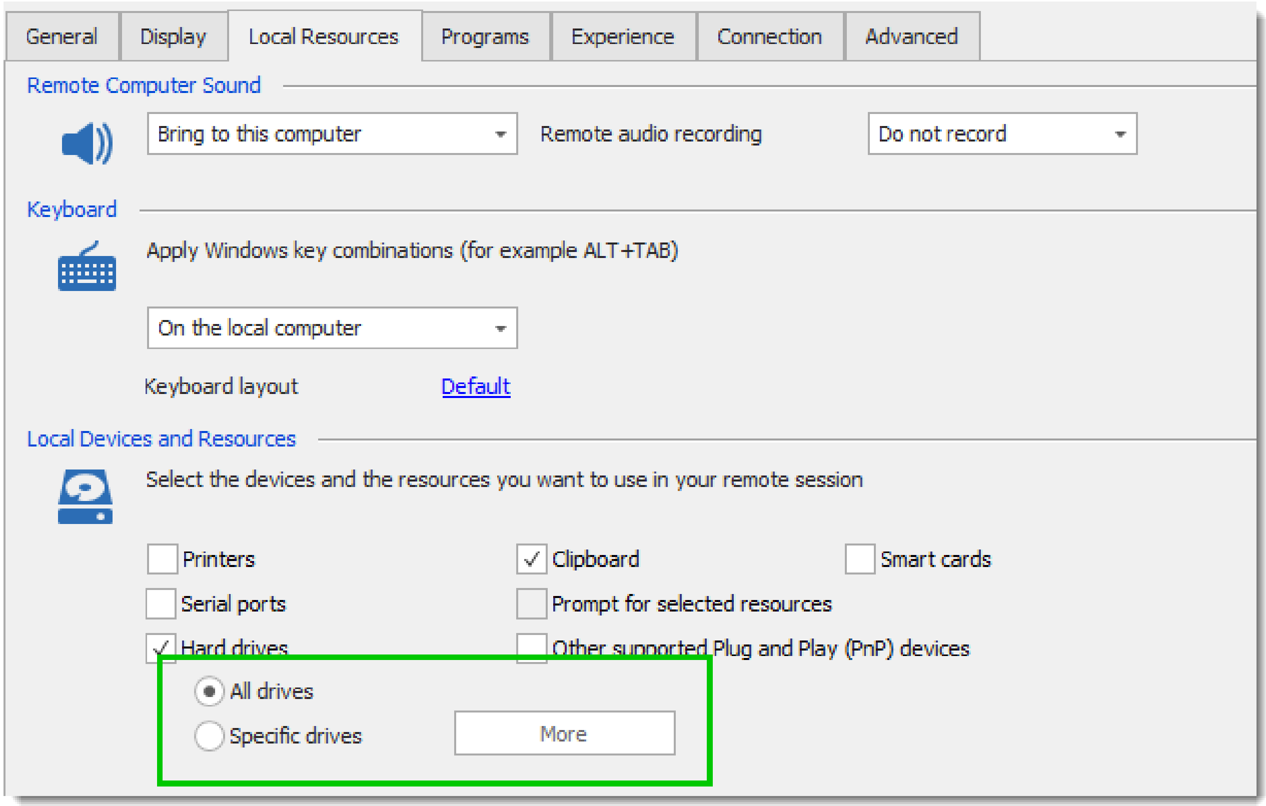
○ Specific drives

Microsoft Remote Desktop (RDP) - Local Resources

13.10.14.9 Missing mapped drives

ERROR

Mapped network drives are not available in RDP sessions even though you have selected All drives; or are not displayed in the dialog when attempting to add **Specific Drives** using the **More** button.



Remote Computer Sound

Bring to this computer

Remote audio recording: Do not record

Keyboard

Apply Windows key combinations (for example ALT+TAB)

On the local computer

Keyboard layout: Default

Local Devices and Resources

Select the devices and the resources you want to use in your remote session

□ Printers
☑ Clipboard
□ Smart cards
□ Serial ports
□ Prompt for selected resources
☑ Hard drives
□ Other supported Plug and Play (PnP) devices

● All drives
○ Specific drives

RDP Local Devices and Resources details

CAUSE

This problem happens when you start Remote Desktop Manager with elevated privileges (Run as administrator). Mapped drives are not available from an elevated prompt when UAC is configured to "Prompt for credentials" in Windows.

This issue is not caused by Remote Desktop Manager, you will need to apply a fix on all workstations from which you must launch Remote Desktop Manager with elevated privileges.

Please follow the steps in one of the following methods:

METHOD 1

Using the Local Group Policy Editor, locate the following Group Policy path:
Local Computer Policy\Windows Settings\Security Settings\Local Policies\Security Options

Configure the following policy to **Prompt for consent**:
User Account Control: Behaviour of the elevation prompt for administrators in Admin Approval Mode

METHOD 2

Map the required drives again in the elevated session. A good solution would be to create a batch/command file that starts by mapping the drives again, then launches Remote Desktop Manager.

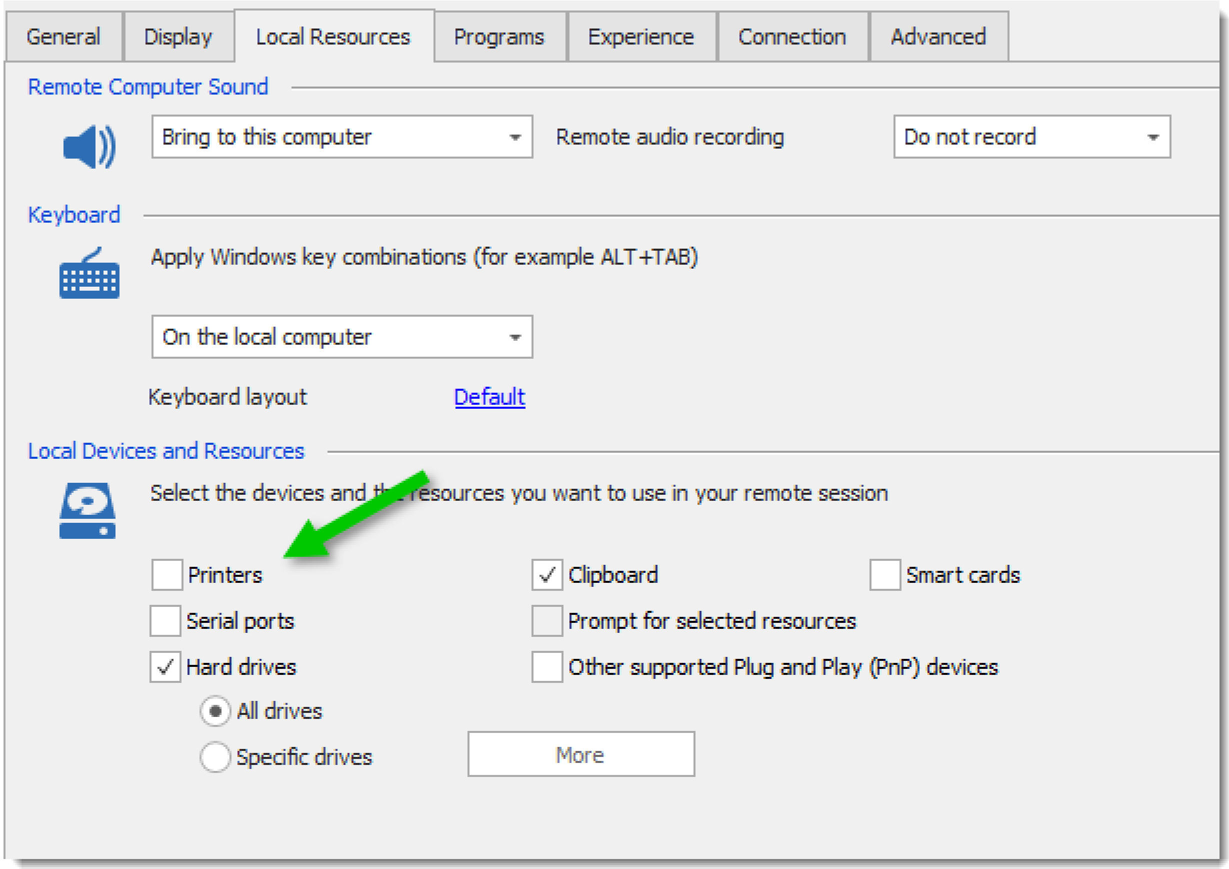
13.10.14.1 Printer Redirection

DESCRIPTION

You are attempting to use printers inside your remote sessions but they seem to be missing.

SOLUTIONS

1. Ensure that the option for **Printers** in the **Local Resources** tab is enabled.



Remote Computer Sound

Bring to this computer

Remote audio recording: Do not record

Keyboard

Apply Windows key combinations (for example ALT+TAB)

On the local computer

Keyboard layout: Default

Local Devices and Resources

Select the devices and the resources you want to use in your remote session

□ Printers
☑ Clipboard
□ Smart cards
□ Serial ports
□ Prompt for selected resources
☑ Hard drives
□ Other supported Plug and Play (PnP) devices

● All drives
○ Specific drives

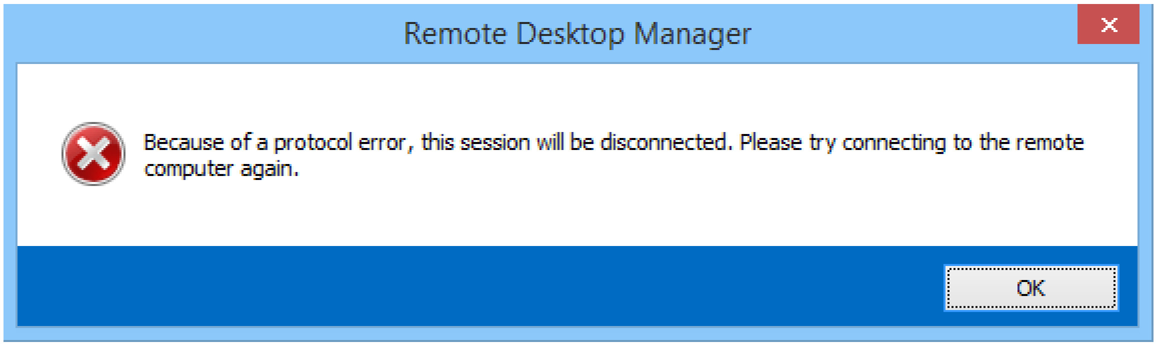
Printers

2. If you have a 64-bit Windows, you must start the Remote Desktop Manager 64-bit launcher. By default, this launcher is located in ***C:\Program Files (x86)\Devolutions\Remote Desktop Manager*** under the name ***remotedesktopmanager64.exe***.

13.10.14.1 Protocol Error

ERRORS

BECAUSE OF A PROTOCOL ERROR, THIS SESSION WILL BE DISCONNECTED. PLEASE TRY CONNECTING TO THE REMOTE COMPUTER AGAIN.


Remote Desktop Manager

Because of a protocol error, this session will be disconnected. Please try connecting to the remote computer again.

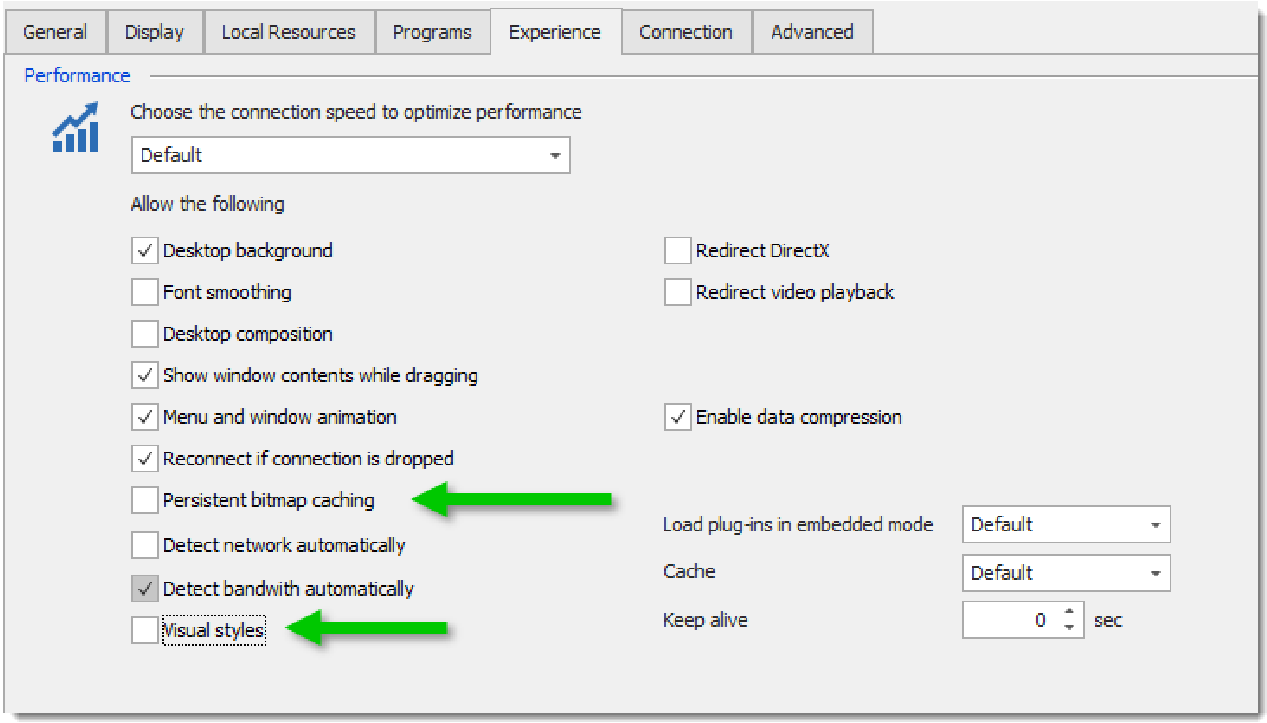
Error message

SOLUTION 1

Try to use Remote Desktop Manager 64bit. To do so, launch Remote Desktop Manager64.exe from the installation folder instead of Remote Desktop Manager.exe.

SOLUTION 2

Uncheck **Persistent bitmap caching** and **Visual styles** under the **Experience** tab in the properties of the RDP session.



Performance

Choose the connection speed to optimize performance

Default

Allow the following

☑ Desktop background
□ Font smoothing
□ Desktop composition
☑ Show window contents while dragging
☑ Menu and window animation
☑ Reconnect if connection is dropped
□ Persistent bitmap caching
□ Detect network automatically
☑ Detect bandwith automatically
□ Visual styles

□ Redirect DirectX
□ Redirect video playback
☑ Enable data compression

Load plug-ins in embedded mode: Default
Cache: Default
Keep alive: 0 sec

Uncheck Visual styles and Persistent bitmap caching

SOLUTION 3

Close Remote Desktop Manager, rename ***default.rdp*** file in My Documents to ***default.old***, restart Remote Desktop Manager and try to connect with RDP.

SOLUTIONS 4

Login in to the target machine by directly going to the console of that server or by any tool like VNC so that we can get access to that machine.

After connecting:
1. Right Click on the Desktop.
2. Select the Properties.
3. There DropDown the Themes and select the theme other than the current one.
4. Click on Apply, OK.

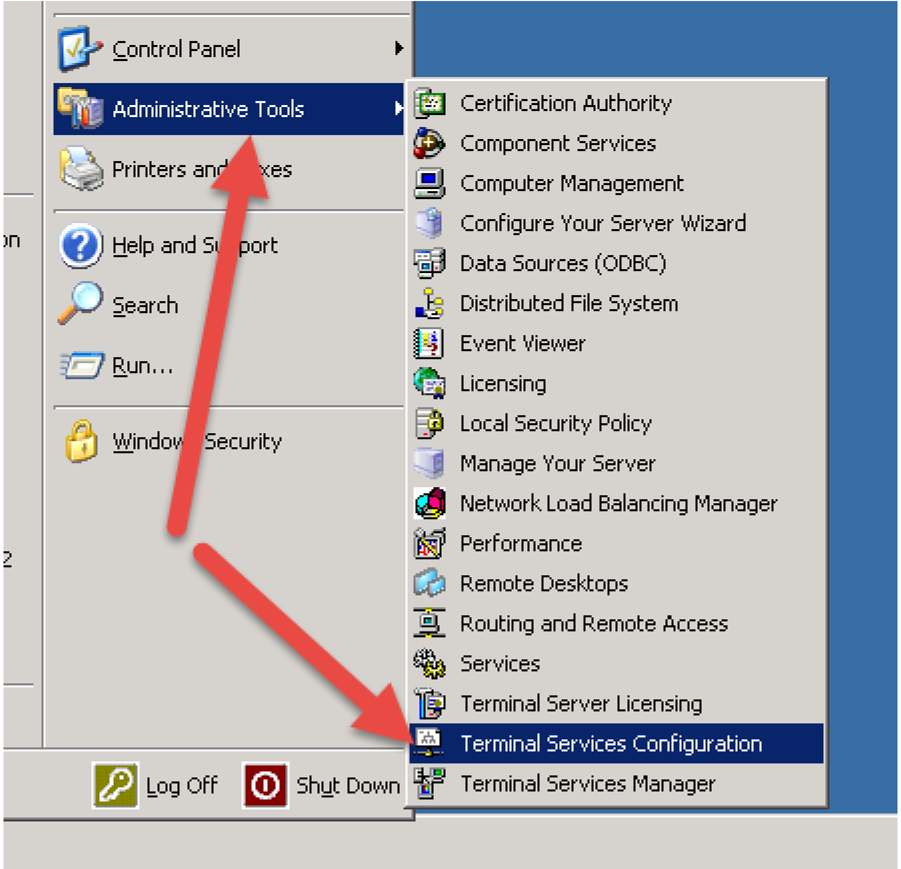
Now try to connect that machine remotely.

13.10.14.1RDP Session Credentials

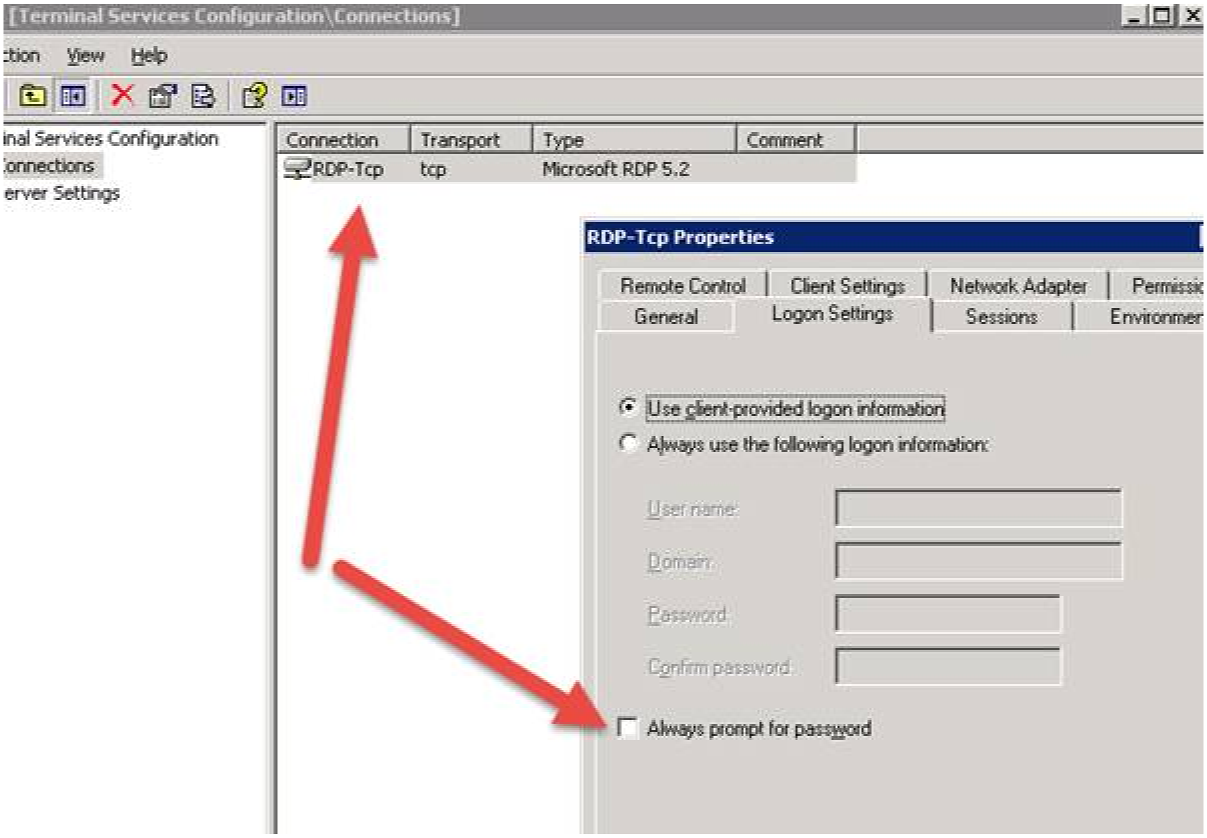
ISSUES

UNABLE TO PASS CREDENTIALS TO A WINDOWS SERVER 2003

The issue resides on the server itself. You simply have to disable the option **Always ask password** and enable the option **Use client-provided logon information** as shown below;



Windows Server 2003



Connection	Transport	Type	Comment
RDP-Tcp	tcp	Microsoft RDP 5.2	

● Use client-provided logon information
○ Always use the following logon information:

User name:
Domain:
Password:
Confirm password:

□ Always prompt for password

Windows Server 2003

13.10.14.1 Remote Computer Requires Authentication to be Enabled Error

ERROR

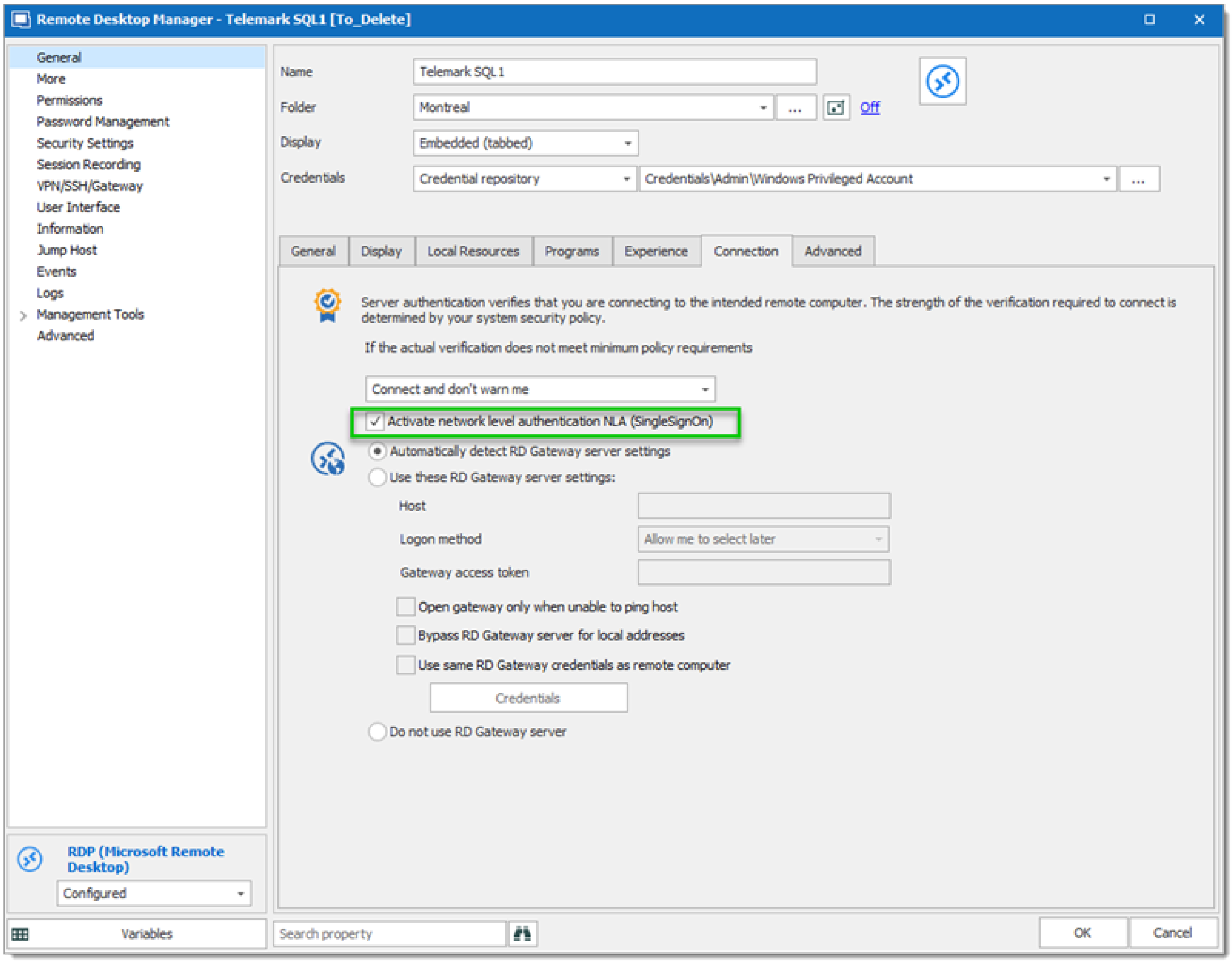
The connection cannot proceed because authentication is not enabled and the remote computer requires that authentication be enabled to connect.

SOLUTION

This error occurs when you try to establish a remote connection from a Windows Server 2008R1 to a Windows Server 2016. In modern versions of Windows, like Windows 10 or Windows Server 2016, the RDP defaults have changed. The default for the Security Layer has changed from 0 to 2.

OPTION 1

In the RDP session check mark **Activate network level authentication** than **OK**.



Remote Desktop Manager - Telemark SQL1 [To_Delete]

Name: Telemark SQL 1

Folder: Montreal ... Off

Display: Embedded (tabbed)

Credentials: Credential repository — Credentials\Admin\Windows Privileged Account ...

Server authentication verifies that you are connecting to the intended remote computer. The strength of the verification required to connect is determined by your system security policy.

If the actual verification does not meet minimum policy requirements

Connect and don't warn me

☑ Activate network level authentication NLA (SingleSignOn)

● Automatically detect RD Gateway server settings

○ Use these RD Gateway server settings:

Host

Logon method: Allow me to select later

Gateway access token

□ Open gateway only when unable to ping host

□ Bypass RD Gateway server for local addresses

□ Use same RD Gateway credentials as remote computer

Credentials

○ Do not use RD Gateway server

Configured

Remote Desktop Manager Activate network level authentication

OPTION 2

To resolve this issue, on the Windows Server 2016, open the registry (regedit.exe) and navigate to: HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\TerminalServer\WinStations\RDP-Tcp. Then, change the SecurityLayer to 0.

13.10.14.1 Reconnect

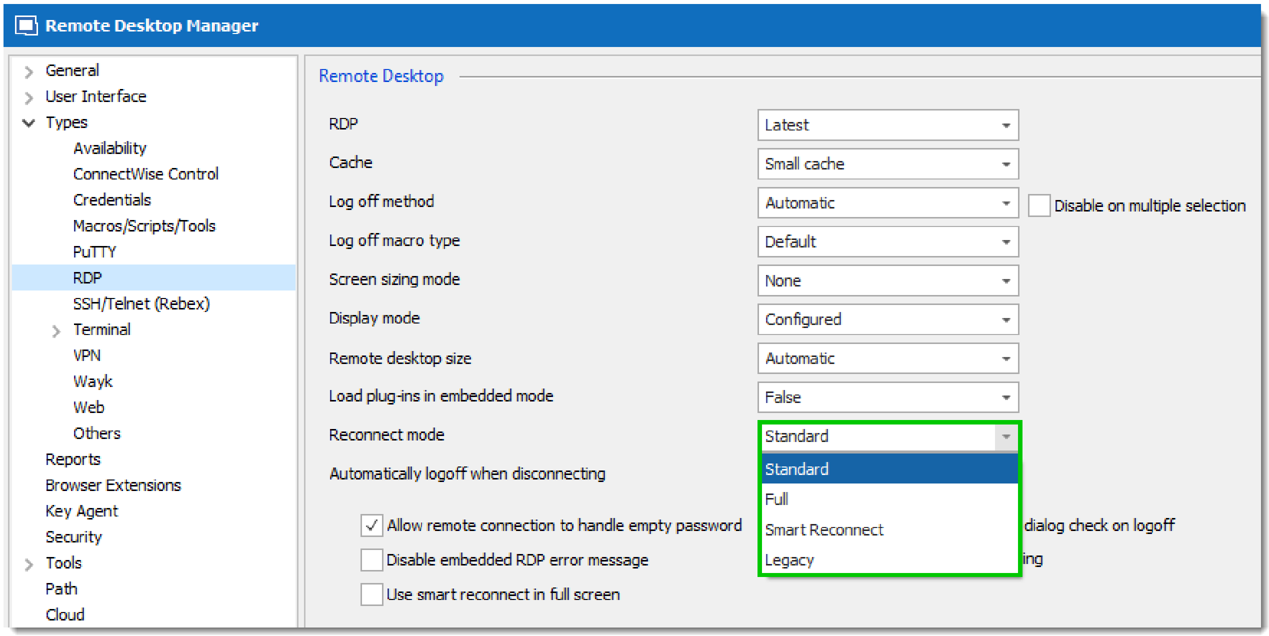
DESCRIPTION

When a remote connection is locked and asks for the username and password to reconnect, instead of closing and relaunching the connection you would typically use the **Reconnect** feature.
However, the session doesn't reconnect properly, because the credentials are not sent to the remote session.

This is an old issue and shouldn't happen unless your selection is currently legacy or your RDM requires updating, however if it happens nonetheless the fix remains the same.

SOLUTION

In ***File -> Options -> Types -> RDP*** in the **Reconnect Mode** dropdown menu, adjust the setting and try again, we recommend trying to set it to **Full**.



RDP: Latest
Cache: Small cache
Log off method: Automatic □ Disable on multiple selection
Log off macro type: Default
Screen sizing mode: None
Display mode: Configured
Remote desktop size: Automatic
Load plug-ins in embedded mode: False
Reconnect mode: Standard
Standard
Full
Smart Reconnect
Legacy
Automatically logoff when disconnecting
☑ Allow remote connection to handle empty password
□ Disable embedded RDP error message
□ Use smart reconnect in full screen
dialog check on logoff
ing

Reconnect Mode

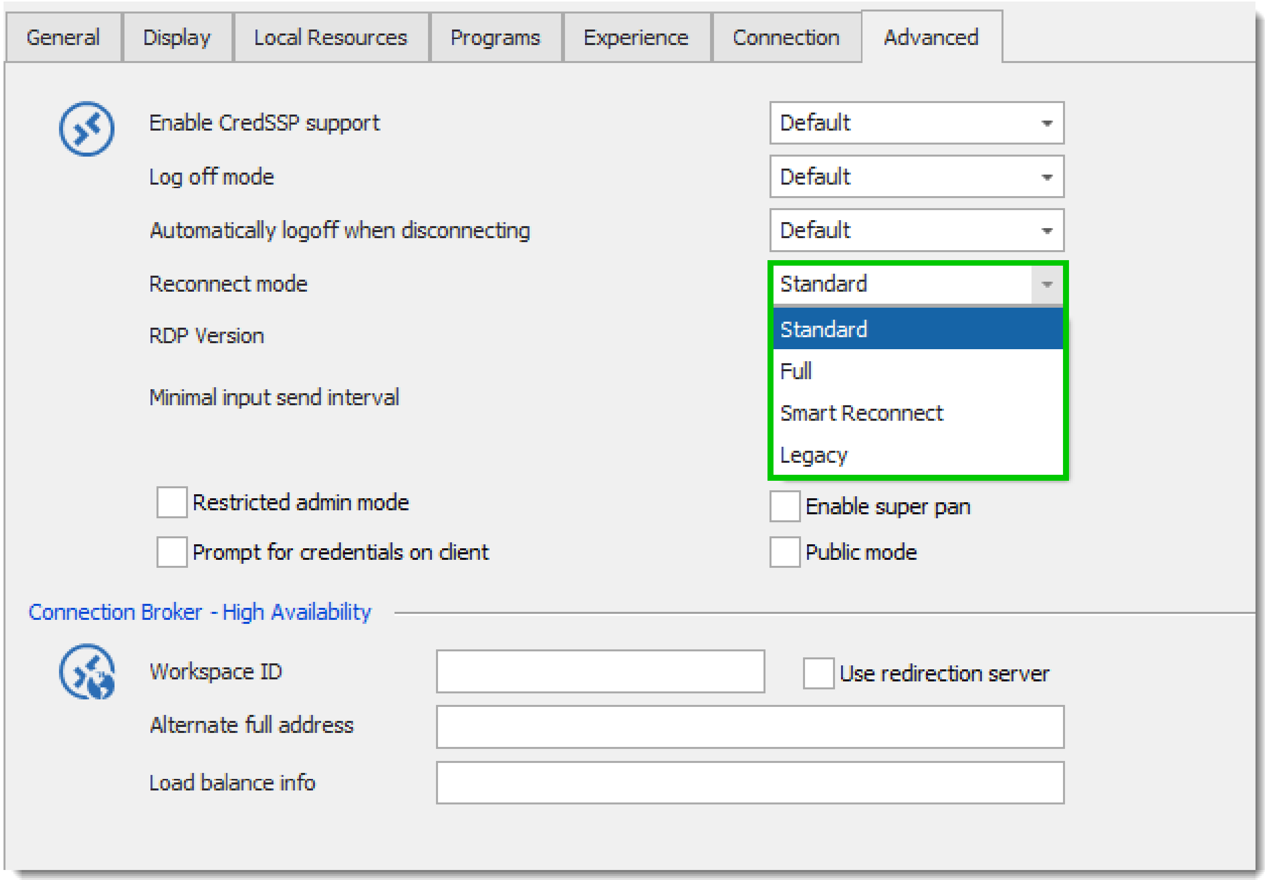
13.10.14.1 RD Gateway Credentials Prompt When Trying To Reconnect

DESCRIPTION

This problem happen when you have RD Gateway configured with some credentials and you use the reconnect action. You get prompted for the RD Gateway credentials and the application does not reuse the existing settings.

SOLUTION

To fix this issue, set the **Reconnect mode** to **Full** in the RDP session **Advanced** settings. This will force the complete disconnect/reconnect and it will resolve the issue.



Enable CredSSP support: Default

Log off mode: Default

Automatically logoff when disconnecting: Default

Reconnect mode: Standard

- Standard
- Full
- Smart Reconnect
- Legacy

RDP Version

Minimal input send interval

□ Restricted admin mode

□ Enable super pan

□ Prompt for credentials on client

□ Public mode

Connection Broker - High Availability

Workspace ID

□ Use redirection server

Alternate full address

Load balance info

Full Reconnect In Advanced Tab

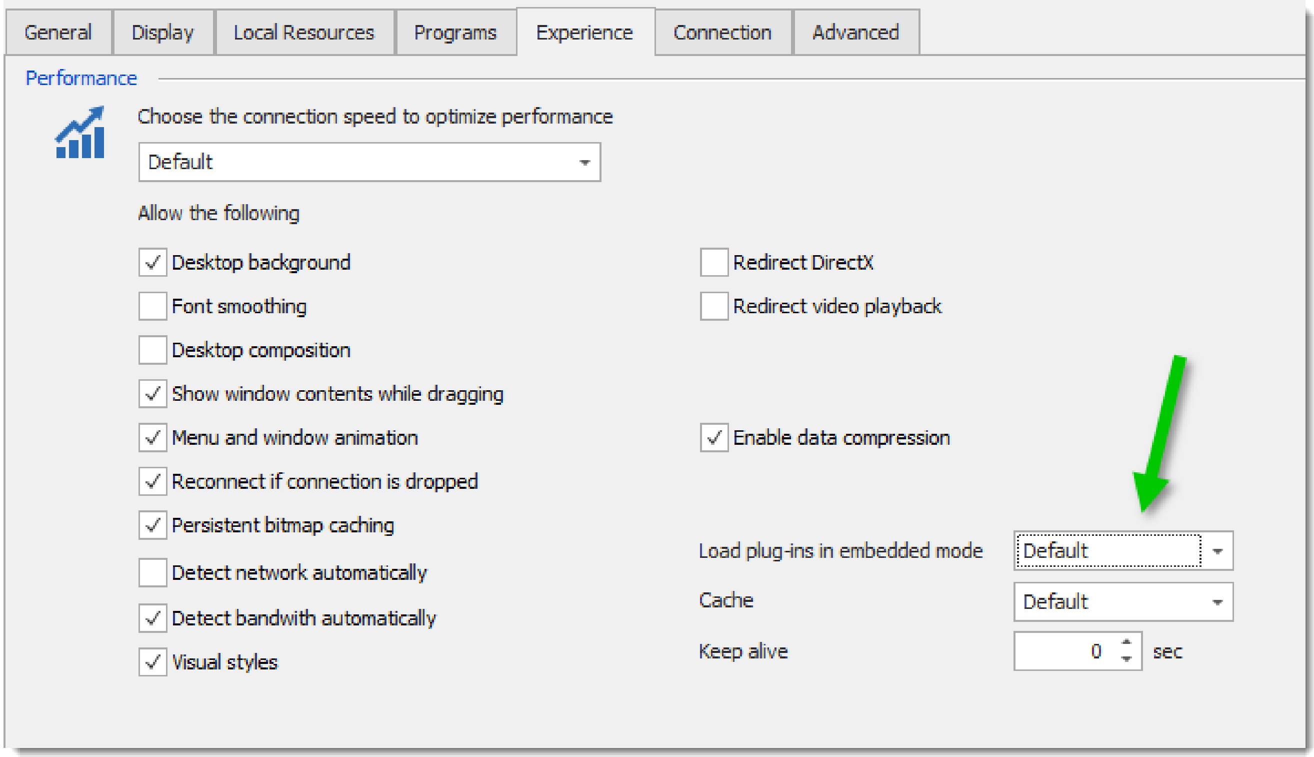
13.10.14.1RDM Hangs when logging off RDP sessions

CAUSES

The two causes are RDP plug-ins and UDP usage under certain conditions.

RDP PLUG-INS

This one is quite easy to test out. You simply go in the **Experience** tab of your RDP sessions and set **Load plug-ins in embedded mode** to **False**. Do this first as it has a really low impact.



Performance

Choose the connection speed to optimize performance

Default

Allow the following

☑ Desktop background

□ Font smoothing

□ Desktop composition

☑ Show window contents while dragging

☑ Menu and window animation

☑ Reconnect if connection is dropped

☑ Persistent bitmap caching

□ Detect network automatically

☑ Detect bandwith automatically

☑ Visual styles

□ Redirect DirectX

□ Redirect video playback

☑ Enable data compression

Load plug-ins in embedded mode: Default

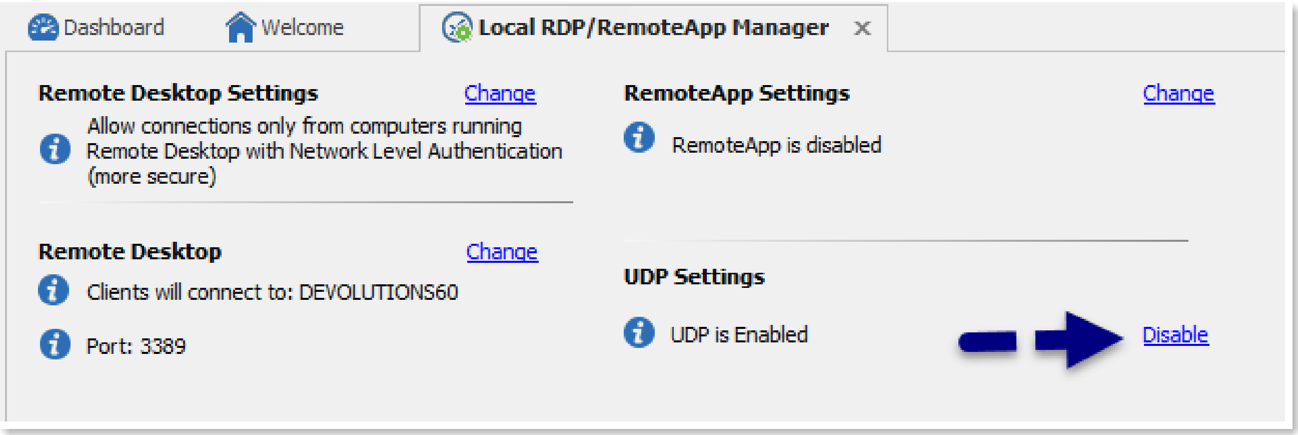
Cache: Default

Keep alive: 0 sec

RDP Experience Tab

UDP USAGE

There's an option in RDM to disable UDP usage. To do so, open Remote Desktop Manager as an administrator and click on ***Tools -> Local RDP/RemoteApp Manager*** and click on **Disable** to disable the **UDP settings**.



Remote Desktop Settings

Allow connections only from computers running Remote Desktop with Network Level Authentication (more secure)

RemoteApp Settings

RemoteApp is disabled

Remote Desktop

Clients will connect to: DEVOLUTIONS60

Port: 3389

UDP Settings

UDP is Enabled

UDP Settings

This one is a bit trickier, some search results hint that this is caused only when going through a VPN, others mention that it occurs only on Windows 8 paired with a Gateway server, but this solution has worked for many of our users, so we suggest you try it.

It requires a registry change, so all the usual warnings and caveats apply here, ***back it up first!*** Consult this Microsoft support article for more information

The fix is to disable UDP on the client workstation using these simple steps:

1. Navigate to `HKLM\SOFTWARE\Policies\Microsoft\Windows NT\Terminal Services\Client`.
2. Create a DWORD named fClientDisableUDP and assign it a value of 1.

13.10.14.1Sessions work using mstsc.exe but not in RDM

DESCRIPTION

This topic describes the troubleshooting steps for when establishing a session to a remote host reacts differently in Remote Desktop Manager than when you are using ***mstsc.exe***.

EMBEDDED MODE ISSUES

Our **Embedded (tabbed) display mode** uses the Microsoft ActiveX and offers the most customization options, but is inherently different than using ***mstsc.exe***. When wanting to ensure the issue is really in Remote Desktop Manager vs being an issue with the ActiveX, the procedure is to try to replicate the scenario with Microsoft's RDCMan. You can obtain that tool from http://www.microsoft.com/en-ca/download/details.aspx?id=44989. Simply install it, create sessions like you have in Remote Desktop Manager, then open them concurrently or in repetition to replicate the issue you think lies in Remote Desktop Manager.

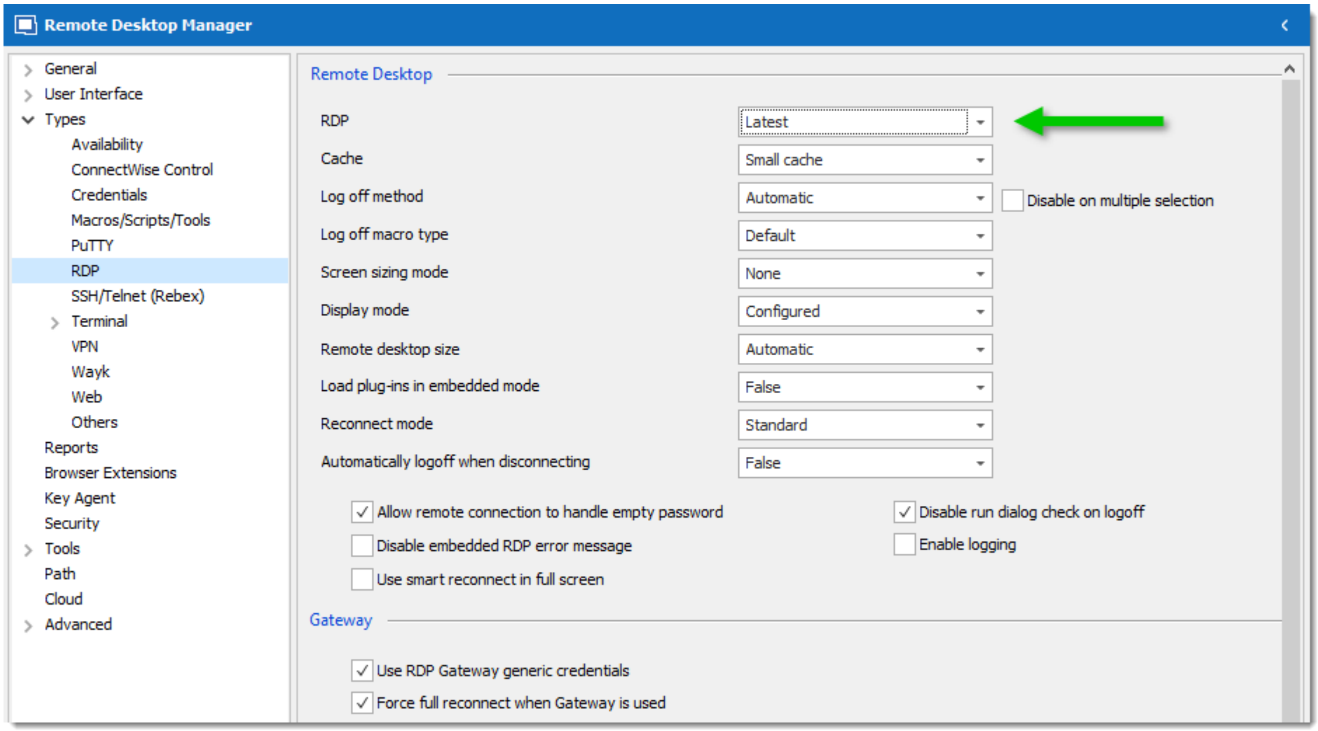
COMPARING OUR SETTINGS TO A NATIVE RDP FILE

When you choose to use the **External display mode**, Remote Desktop Manager will in fact create a temporary RDP file and call ***mstsc.exe*** with the file as a parameter. It can be beneficial to grab that file while it exists and to compare it with one created using ***mstsc.exe***.

1. Create or duplicate a session that you want to diagnose, set the **display mode** to **External**.
2. Launch that session.
3. The file will be deleted when you close Remote Desktop Manager, you need to copy it before then.
4. Open ***%TMP%\RDM***, copy your file in another folder.
5. Open the file in your editor of choice and compare it to a file created using ***mstsc.exe***

STARTING RDP SESSIONS IS SLOW COMPARED TO THE NATIVE RDP

We have isolated the issue and we fixed it by changing your RDP engine version to ***RDP 6.0*** or ***7.0*** in ***File -> Options -> Types -> RDP***



Remote Desktop

RDP	Latest
Cache	Small cache
Log off method	Automatic
Log off macro type	Default
Screen sizing mode	None
Display mode	Configured
Remote desktop size	Automatic
Load plug-ins in embedded mode	False
Reconnect mode	Standard
Automatically logoff when disconnecting	False

□ Disable on multiple selection

☑ Allow remote connection to handle empty password
□ Disable embedded RDP error message
□ Use smart reconnect in full screen
☑ Disable run dialog check on logoff
□ Enable logging

Gateway

☑ Use RDP Gateway generic credentials
☑ Force full reconnect when Gateway is used

RDP Engine

13.10.15 Network Devices

DESCRIPTION

It's possible to manage different devices via a web interface. However, you may have some issues to connect to the web interface using our **Web Browser** in the **Embedded (tabbed)** display mode.

For example, you may encounter issues with the following devices:

- Nagios
- Cisco
- Dell SonicWall

SOLUTION

We use third party libraries for the integration of Firefox and Google Chrome in the **Embedded (tabbed)** display Mode. For Internet Explorer, we use the Microsoft ActiveX that is installed at the same time as the browser.

If none of the web browsers work in **Embedded (tabbed)** display Mode, you would need to launch the website using the **External** display mode and use our Devolutions Web Login to handle the credentials.

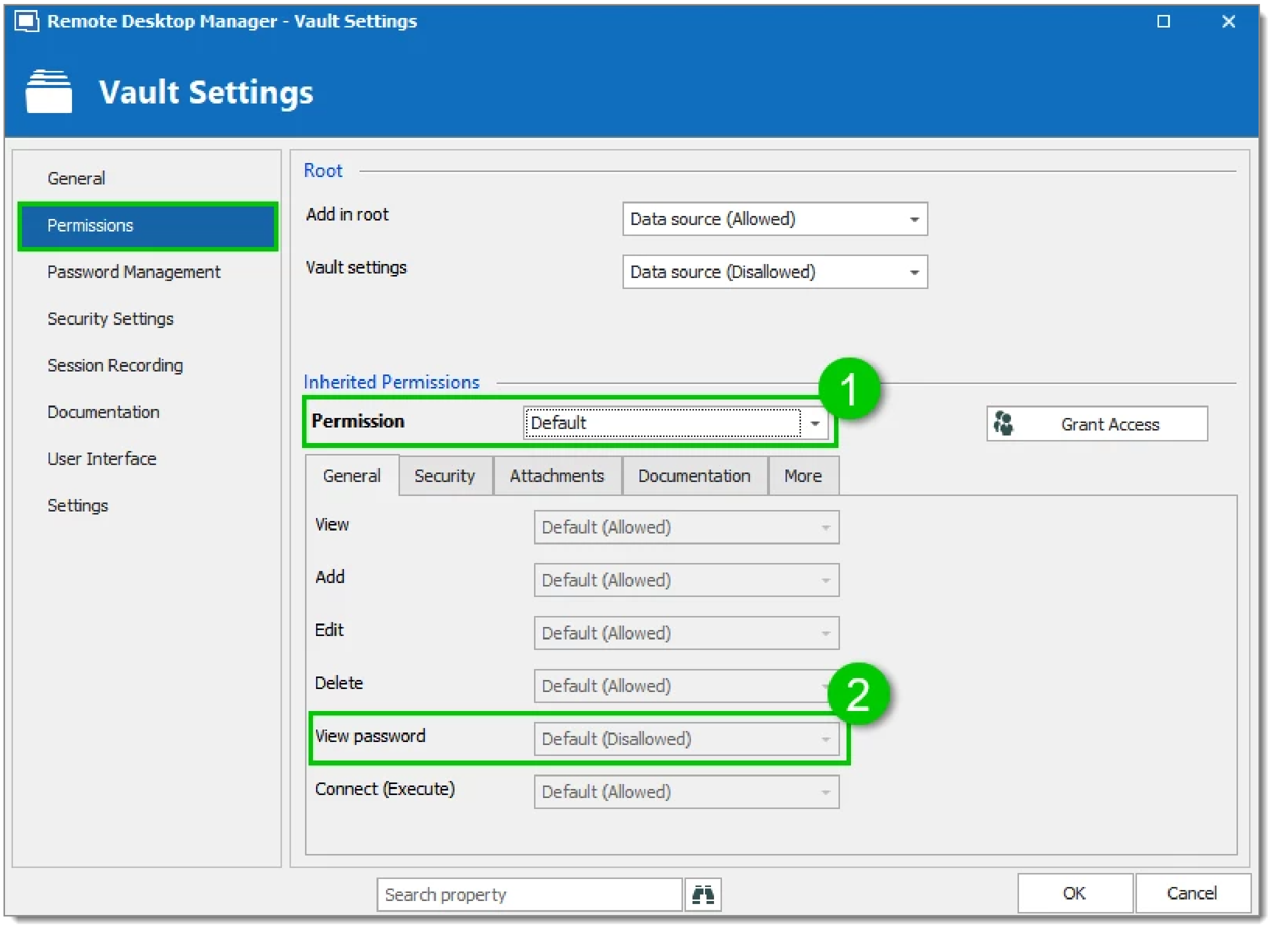
13.10.16 Non-Admin Users Cannot View Passwords

DESCRIPTION

Normal users are no longer able to view or copy password after updating to Remote Desktop Manager 2019+

SOLUTION

If you want to allow Users or specific Roles to be able to view the password from all your sessions, you must configure the ***View Password*** setting found in ***Administration - Vault Settings - Permissions - View Password***.



Add in root: Data source (Allowed)

Vault settings: Data source (Disallowed)

Permission: Default

View: Default (Allowed)

Add: Default (Allowed)

Edit: Default (Allowed)

Delete: Default (Allowed)

View password: Default (Disallowed)

Connect (Execute): Default (Allowed)

Vault Settings - Permission

This setting was changed because of security purposes.

Here the associated line from the Release Notes : https://remotedesktopmanager.com/release-notes#_gac=1.51723355.1554296008.Cj0KCQjws5HlBRDIARIsAOomqA3ywMIfEkq4pM_uVsDLut1r_Ow7RRZKo1D9MrqBBjzyShNd4AoQGBQaAhSiEALw_wcB

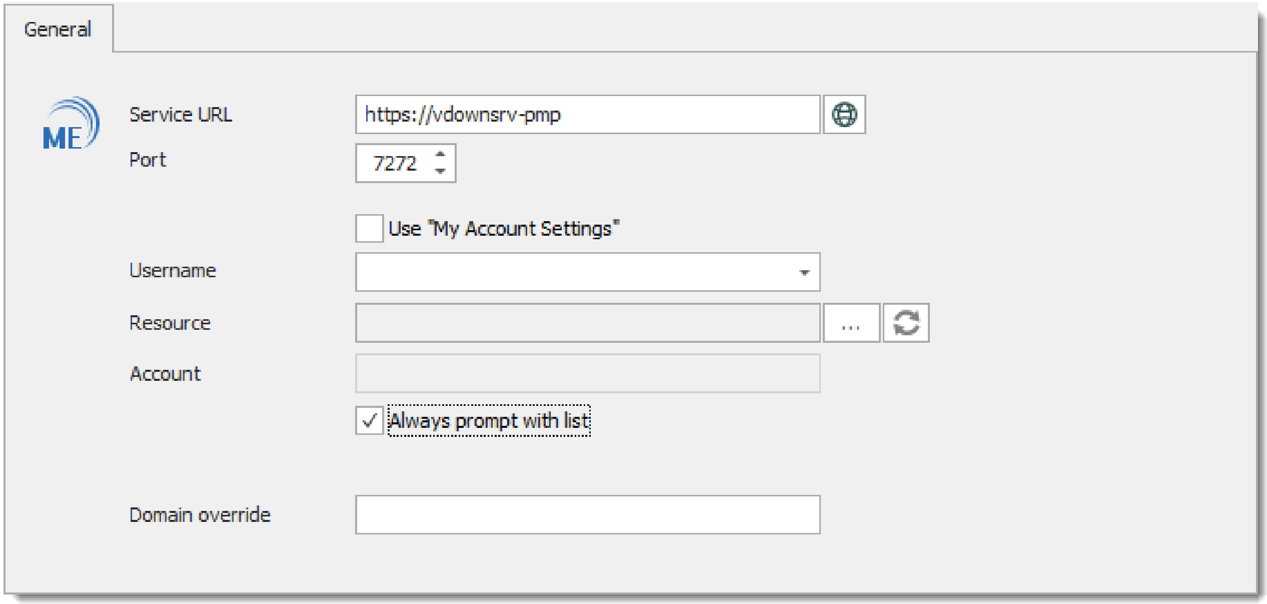
"Changed the View Password to not allowed by default for non administrator"

13.10.17 Password Manager Pro

ERRORS

SYSTEM.NET.WEBEXCEPTION: THE SERVER COMMITTED A PROTOCOL VIOLATION. SECTION=RESPONSESTATUSLINE

During the configuration of your **Password Manager Pro** credential entry, make sure that the **URL** of your server contain **https://** and not **http://**. You absolutely need an **https://** at the beginning of the address to communicate properly with the server.



Service URL: https://vdownsrv-pmp

Port: 7272

☐ Use "My Account Settings"

Username

Resource

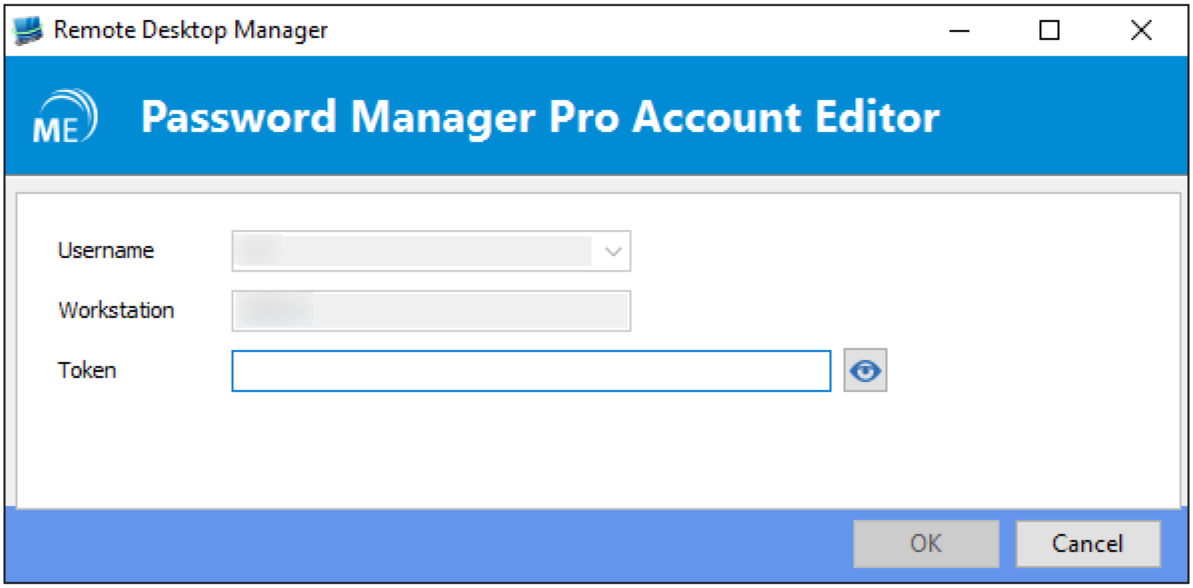
Account

☑ Always prompt with list

Domain override

Service URL

WHEN YOU TRY TO CONNECT ON A REMOTE COMPUTER OR GET THE CREDENTIAL LIST, A WINDOW APPEAR WITH AN EMPTY TOKEN FIELD AND THE USERNAME AND WORKSTATION FIELD GREYED OUT.



Password Manager Pro Account Editor

Username

Workstation

Token

PMP Account Editor

The Host Name configured in your API user in **Password Manager Pro** is not the same that you have configured in Remote Desktop Manager in ***File — My Account Settings — Password Manager Pro***. Please consult the How to Configure Password Manager Pro in Remote Desktop Manager topic for more information on the configuration.

SYSTEM.NET.WEBEXCEPTION: THE REQUEST WAS ABORTED: COULD NOT CREATE SSL/TLS SECURE CHANNEL.

Password Manager Pro can be configured to use SSLv3, TLSv1.0, TLSv1.1 and TLSv1.2. If you have configured your **Password Manager Pro** server to use TLSv1.2 only, you will encounter this error message. You need to configure your **Password Manager Pro** to accept TLSv1.0, TLSv1.1 and TLSv1.2.

API KEY RECEIVED IS NOT ASSOCIATED TO ANY USER. AUTHENTICATION FAILED.

Edit your API user in **Password Manager Pro** and generate a new **Authentication Token**, save your API user and save this new token in Remote Desktop Manager in ***File – My Account Settings – Password Manager Pro***.

USER IS NOT ALLOWED TO ACCESS FROM THIS HOST

During the creation of an API User in **Password Manager Pro**, a **Host** (Computer name) is necessary to create the user. In **Password Manager Pro** it may be registered using the **Fully Qualified Domain Name (FQDN)** of the computer. In Remote Desktop Manager on the other hand, you must set it exactly the same as the % COMPUTERNAME% environment variable.

Another reason for this error we have seen is that the DNS name of the server was specified, but it would work perfectly fine if you were using the IP address instead. Please test it with the procedure described below.

TESTING PROCEDURE WITH POWERSHELL

Here is a script that you can use to test your access from a client workstation. Save the following code in a file called **PMPTest.ps1**. The technology used in the script is the same as is used from within Remote Desktop Manager, therefore its the most conclusive test. If you contact **Password Manager Pro** support, they can provide a Java based test fixture. It is not as useful except to prove that the server basically responds to your queries.

```
[CmdletBinding()]
Param(
  [Parameter(Mandatory=$True,Position=1)]
  [string]$PMPServer,

  [Parameter(Mandatory=$True,Position=2)]
  [string]$AuthToken
)

add-type @"
    using System.Net;
    using System.Security.Cryptography.X509Certificates;
    public class TrustAllCertsPolicy : ICertificatePolicy {
        public bool CheckValidationResult(
            ServicePoint srvPoint, X509Certificate certificate,
            WebRequest request, int certificateProblem) {
            return true;
        }
    }
"@

[System.Net.ServicePointManager]::CertificatePolicy = New-Object TrustAllCertsPolicy
cls
$connect = "https://" + $PMPServer + ":7272/restapi/json/v1/resources?AUTHTOKEN=$Aut
$result = Invoke-WebRequest -Uri $connect
$form = $result.Content
$content = ConvertFrom-Json $form

$status = $content.operation.result.status

if ($status -eq "Success") {
    $content.operation.Details
}

if ($status -eq "Failed") {
    $status
    $content.operation.result.Message
}

Pause
```

Please note that the port is hard-coded in the script to 7272, which is the default value for **Password Manager Pro**. Adapt to your environment.

From within **Powershell**, type the following.

```
.\PMPTest.ps1 {YOUR_PMP_SERVER} {YOUR_PMP_TOKEN}
```

Test with both the DNS name of the server and the IP address and observe the results.

REMOTE DESKTOP MANAGER IS RETURNING THE IP ADDRESS OF THE SERVER INSTEAD OF THE FQDN

In some organization, IP addresses are blocked and the host name of the **Password Manager Pro** server needs to be returned. In that case, the Configuration File of the application would need to be modified.

1. Close Remote Desktop Manager.
2. Find the Remote Desktop Manager Configuration File.
3. Edit the configuration file and add the line <ResolvePMProURLIntoIPAddress>false</ResolvePMProURLIntoIPAddress>.
4. Save the modification and restart the application.

13.10.18Performance

13.10.18.1Data sources

REFRESH

This category affects all data source refreshes, therefore:

1. **Initial load at program startup**.
2. **Prior to an Edit operation**: by default, we reload the entry to ensure that we are working on the current version.
3. **Prior to establishing a connection**: we need to insert in the activity in our Logs.
4. **Whenever you use Refresh**: Depending on your cache settings, we typically just get the changes that occurred since your last refresh
5. **Whenever you use the Tree View**.

SQL Server has certain particularities that, if the default configuration is used, will cause performance degradation as time goes by. Please consult SQL Server Performance.

HEAVY USAGE OF CUSTOM IMAGES

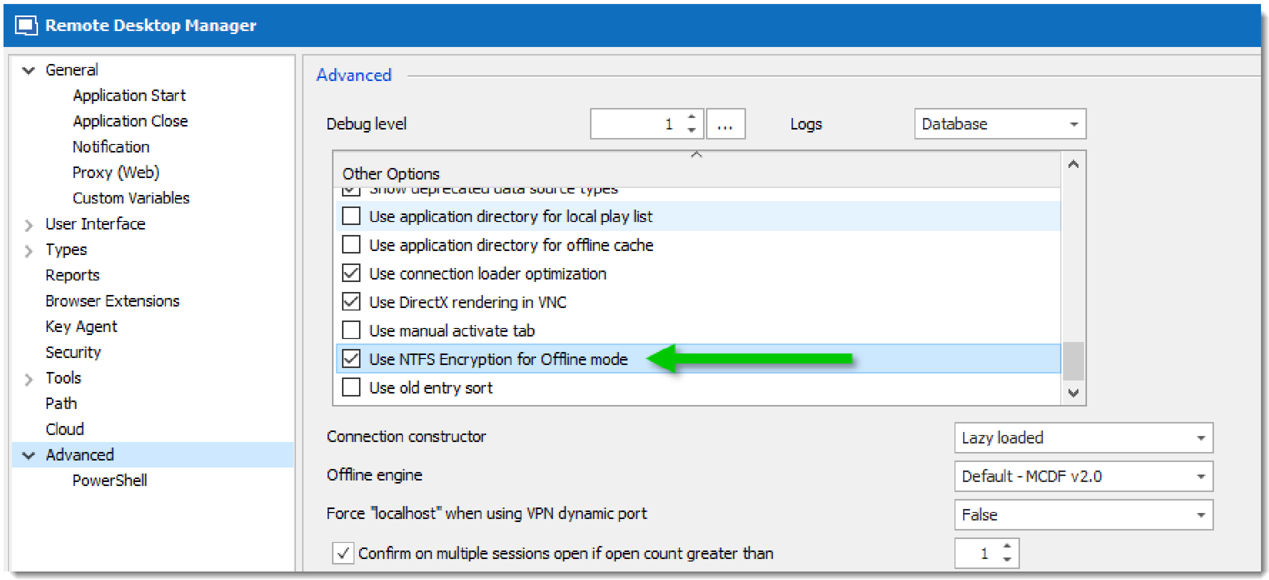
Custom images need to be stored in the data source, this results in the size of the configuration becoming problematic if there are too many entries using them. If that becomes the case it would be better to revert to built-in images.

HEAVY USAGE OF RTF DESCRIPTION

RTF in itself is not a real issue until you decide to embed images in the description. This results in the same problem as using custom images, namely the size of the configuration becoming too large. If that becomes the case, reduce the size of your descriptions.

OFFLINE MODE ACTIVATED FOR DATA SOURCE

When you enable the Offline Mode, a local file is created and is kept in sync with the data source. This file is encrypted using the Windows built-in NTFS encryption which can cause delays in refreshing the local data file. This is rarely the case but seems to happen on computers within a domain which has been hardened by the network administrator. You can turn off this option by unchecking **Use NTFS Encryption for offline mode** in ***File – Options – Advanced***.



Debug level 1 ... Logs Database

Other Options

☑ Show deprecated data source types

☐ Use application directory for local play list

☐ Use application directory for offline cache

☑ Use connection loader optimization

☑ Use DirectX rendering in VNC

☐ Use manual activate tab

☑ Use NTFS Encryption for Offline mode

☐ Use old entry sort

Connection constructor: Lazy loaded

Offline engine: Default - MCDF v2.0

Force "localhost" when using VPN dynamic port: False

☑ Confirm on multiple sessions open if open count greater than 1

NTFS Encryption

CLASSIC UI

The new Ribbon UI is modern and allows for infinite variations of panel organization, but it does take more calculations by the UI layer. On most system this is not a cause for noticeable performance slowdown, but on others setting the User Interface to Classic UI (v7.x) in the general options tab will definitely help.

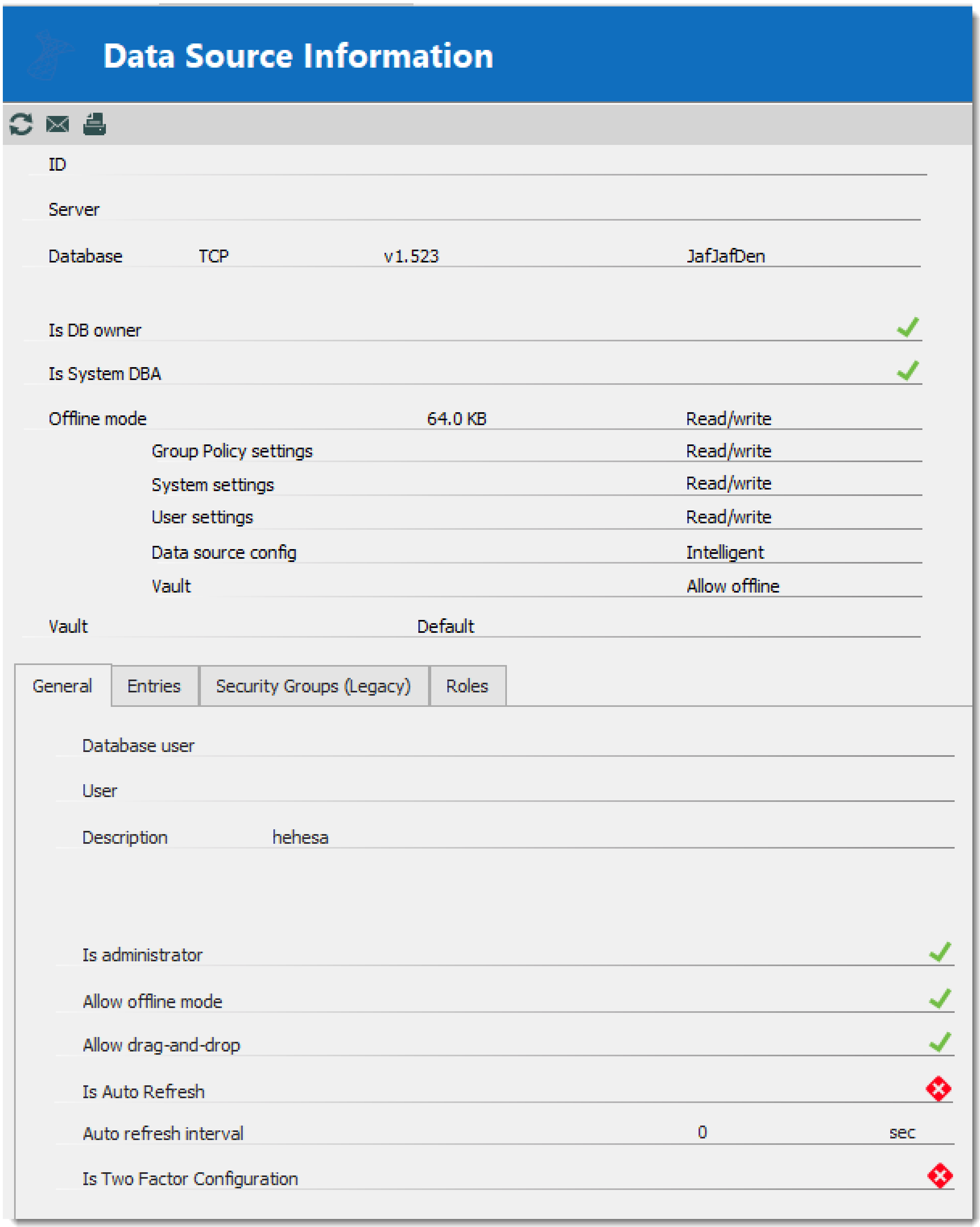
13.10.18.2 Diagnostic

DESCRIPTION

Sometimes when a performance issue occurs while using Remote Desktop Manager, the support personnel may ask you to send information. Here are three sources or information that the support team requires to help diagnose your issue.

PROCEDURES

MY DATA SOURCE INFORMATION



Data Source Information

ID

Server

Database TCP v1.523 JafJafDen

Is DB owner ✓

Is System DBA ✓

Offline mode 64.0 KB Read/write

Group Policy settings Read/write

System settings Read/write

User settings Read/write

Data source config Intelligent

Vault Allow offline

Vault Default

Database user

User

Description hehesa

Is administrator ✓

Allow offline mode ✓

Allow drag-and-drop ✓

Is Auto Refresh ✗

Auto refresh interval 0 sec

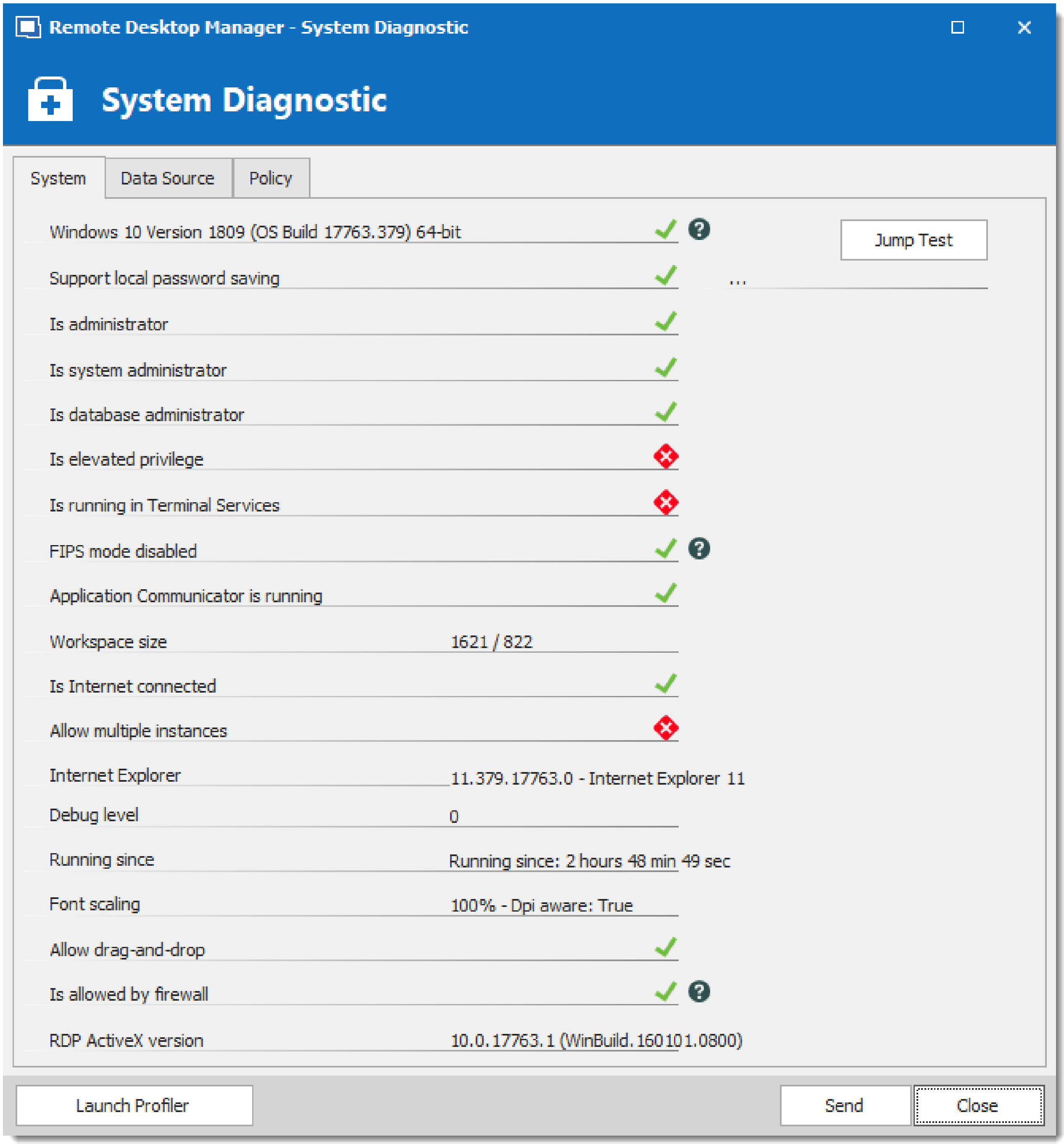
Is Two Factor Configuration ✗

My Data Source Information

1. Open ***File — My Data Source Information***.

2. Click on the envelope button to send the information to our support team. In the following dialog, ensure you specify enough information to link the report to the appropriate ticket, if the process was started from the forum include your forum username.

DIAGNOSTIC



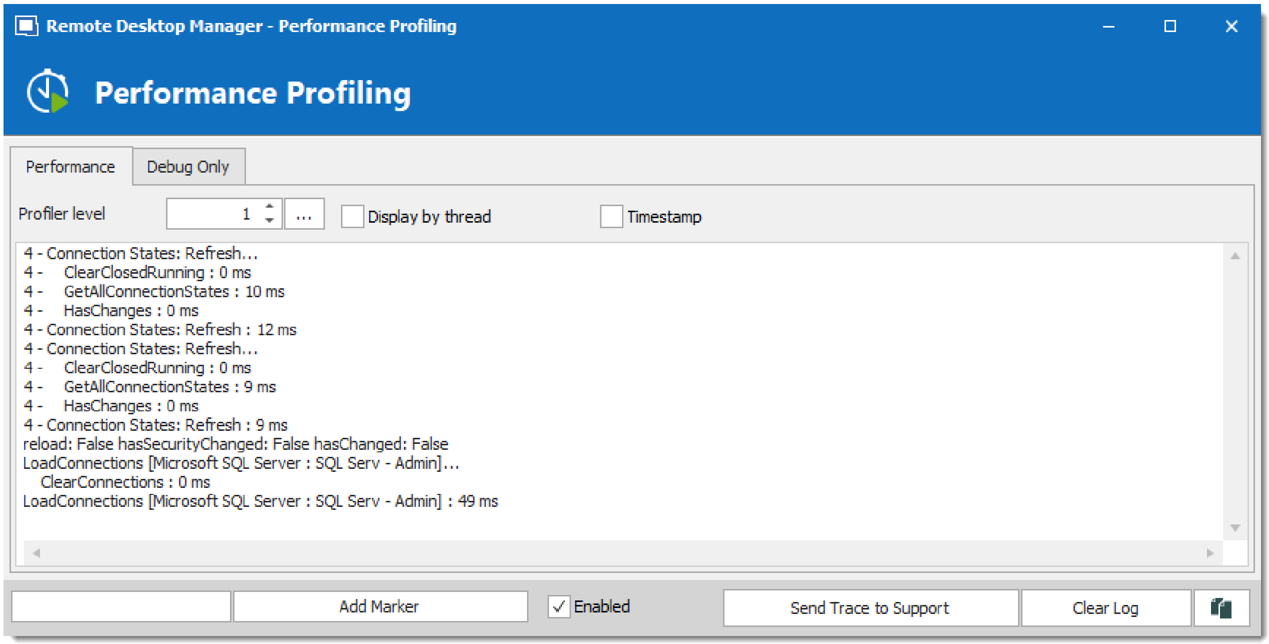
Windows 10 Version 1809 (OS Build 17763.379) 64-bit	✓ ?
Support local password saving	✓
Is administrator	✓
Is system administrator	✓
Is database administrator	✓
Is elevated privilege	✗
Is running in Terminal Services	✗
FIPS mode disabled	✓ ?
Application Communicator is running	✓
Workspace size	1621 / 822
Is Internet connected	✓
Allow multiple instances	✗
Internet Explorer	11.379.17763.0 - Internet Explorer 11
Debug level	0
Running since	Running since: 2 hours 48 min 49 sec
Font scaling	100% - Dpi aware: True
Allow drag-and-drop	✓
Is allowed by firewall	✓ ?
RDP ActiveX version	10.0.17763.1 (WinBuild.160101.0800)

Diagnostic Window

1. Open ***Help — Diagnostic***.

2. Click on the **Send** button. In the following dialog, ensure you specify enough information to link the report to the appropriate ticket, if the process was started from the forum, please include your forum username.

PROFILER



Profiler level 1

☐ Display by thread

☐ Timestamp

```
4 - Connection States: Refresh...
4 -     ClearClosedRunning : 0 ms
4 -     GetAllConnectionStates : 10 ms
4 -     HasChanges : 0 ms
4 - Connection States: Refresh : 12 ms
4 - Connection States: Refresh...
4 -     ClearClosedRunning : 0 ms
4 -     GetAllConnectionStates : 9 ms
4 -     HasChanges : 0 ms
4 - Connection States: Refresh : 9 ms
reload: False hasSecurityChanged: False hasChanged: False
LoadConnections [Microsoft SQL Server : SQL Serv - Admin]...
    ClearConnections : 0 ms
LoadConnections [Microsoft SQL Server : SQL Serv - Admin] : 49 ms
```

☑ Enabled

Profiler

1. Open ***Help – Profiler***, move the window aside to clear the main window of Remote Desktop Manager.
2. Select the **Performance** tab.
3. In Remote Desktop Manager, hold the CTRL key and press the refresh button.
4. Information will be added in the **Performance** tab.
5. Click on the **Send Trace to Support** button. In the following dialog, ensure you specify enough information to link the report to the appropriate ticket, if the process was started from the forum, please include your forum username.

13.10.18.3 Startup

DESCRIPTION

The start-up performance of the application can be affected by two main events:

1. Launching the "Shell".
2. Obtaining the content of the data source.

Since getting the data involves an additional layer that may be the cause of a perceived slowness for the application to be ready, we require that you create a new empty XML data source to measure the application start-up time. This will in help determine if the issue lies with the shell or with the data source.

Please consult Remote Desktop Manager Startup performance for the first step. You can then consult Performance - Data sources if you feel that there is an issue in that area.

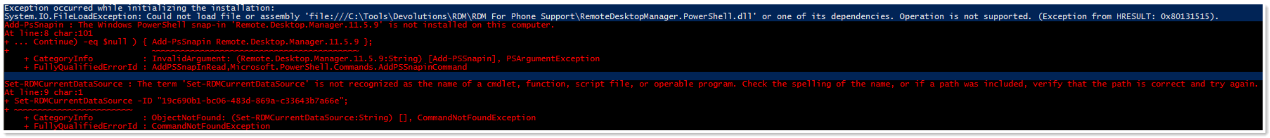
13.10.19Powershell

ERROR

When running **PowerShell (RDM CmdLet)** after deploying Remote Desktop Manager from the ***.zip*** file, you might see an error message like the following:

Exception occurred while initializing the installation:

System.IO.FileLoadException: Could not load file or assembly 'file:///C:\Tools\Devolutions\RDM\RDM For Phone Support\RemoteDesktopManager.PowerShell.dll' or one of its dependencies. Operation is not supported. (Exception from HRESULT: 0x80131515).

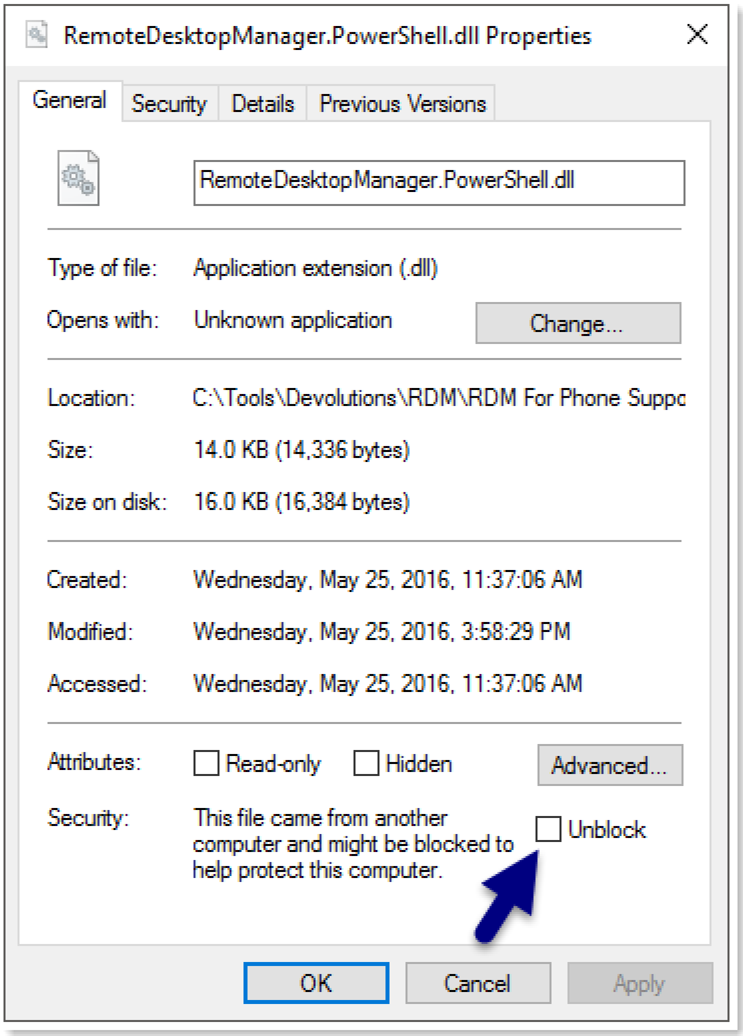


```
Exception occurred while initializing the installation:
System.IO.FileLoadException: Could not load file or assembly 'file:///C:\Tools\Devolutions\RDM\RDM For Phone Support\RemoteDesktopManager.PowerShell.dll' or one of its dependencies. Operation is not supported. (Exception from HRESULT: 0x80131515).
Add-PsSnapin : The Windows PowerShell snap-in 'Remote.Desktop.Manager.11.5.9' is not installed on this computer.
At line:8 char:101
+ ... Continue) -eq $null ) { Add-PsSnapin Remote.Desktop.Manager.11.5.9 };
+                             ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
    + CategoryInfo          : InvalidArgument: (Remote.Desktop.Manager.11.5.9:String) [Add-PSSnapin], PSArgumentException
    + FullyQualifiedErrorId : AddPSSnapInRead,Microsoft.PowerShell.Commands.AddPSSnapinCommand

Set-RDMCurrentDataSource : The term 'Set-RDMCurrentDataSource' is not recognized as the name of a cmdlet, function, script file, or operable program. Check the spelling of the name, or if a path was included, verify that the path is correct and try again.
At line:9 char:1
+ Set-RDMCurrentDataSource -ID "19c690b1-bc06-483d-869a-c33643b7a66e";
+ ~~~~~~~~~~~~~~~~~~~~~~~~
    + CategoryInfo          : ObjectNotFound: (Set-RDMCurrentDataSource:String) [], CommandNotFoundException
    + FullyQualifiedErrorId : CommandNotFoundException
```

Error Message

SOLUTION

You must unblock ***RemoteDesktopManager.PowerShell.dll*** & ***RemoteDesktopManager.Core.XmlSerializers.dll***. The 2 files are located in the installation folder of Remote Desktop Manager. ***Right-click*** on ***RemoteDesktopManager.PowerShell.dll*** & ***RemoteDesktopManager.Core.XmlSerializers.dll*** and select **Properties**. In the **Properties windows**, click on **Unblock**.



RemoteDesktopManager.PowerShell.dll Properties

RemoteDesktopManager.PowerShell.dll

Type of file: Application extension (.dll)

Opens with: Unknown application

Location: C:\Tools\Devolutions\RDM\RDM For Phone Suppc

Size: 14.0 KB (14,336 bytes)

Size on disk: 16.0 KB (16,384 bytes)

Created: Wednesday, May 25, 2016, 11:37:06 AM

Modified: Wednesday, May 25, 2016, 3:58:29 PM

Accessed: Wednesday, May 25, 2016, 11:37:06 AM

Attributes: □ Read-only □ Hidden

Security: This file came from another computer and might be blocked to help protect this computer. □ Unblock

Properties Of RemoteDesktopManager.PowerShell.dll

ERROR

Cannot load Windows PowerShell snap-in Remote.Desktop.Manager.10.0.4 because of the following error: Could not load file or assembly 'file:///C:\Program Files (x86) \Devolutions\Remote Desktop Manager\RemoteDesktopManager.PowerShell.dll' or one of its dependencies. This assembly is built by a runtime newer than the currently loaded runtime and cannot be loaded.

SOLUTION

PowerShell v.4.0 need to be installed.

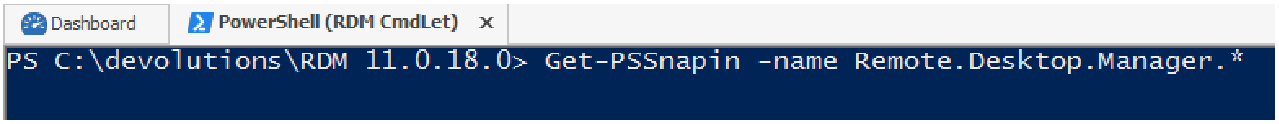
To get your PowerShell version, execute the following command: $PSVersionTable.

ERROR

None of the Powershell cmdlets in Remote Desktop Manager work after an update, even if they were running correctly prior to the update.

SOLUTION

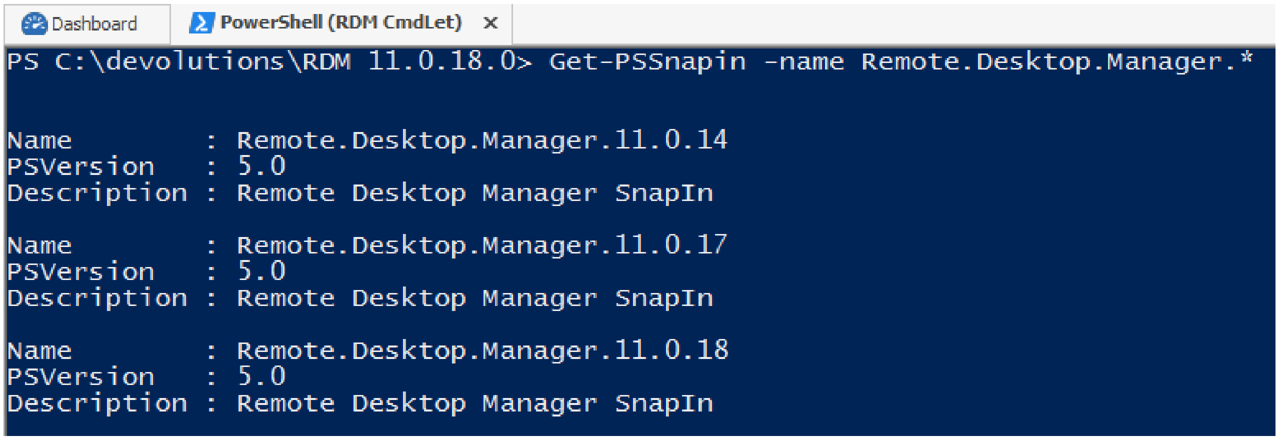
The first step is to check how many versions of the RDM snap-in are currently installed on the computer. Just type this command in Powershell (RDM CmdLet) :
`Get-PSSnapin -name Remote.Desktop.Manager.*`



```
PS C:\devolutions\RDM 11.0.18.0> Get-PSSnapin -name Remote.Desktop.Manager.*
```

Get-PSSnapin commandlet

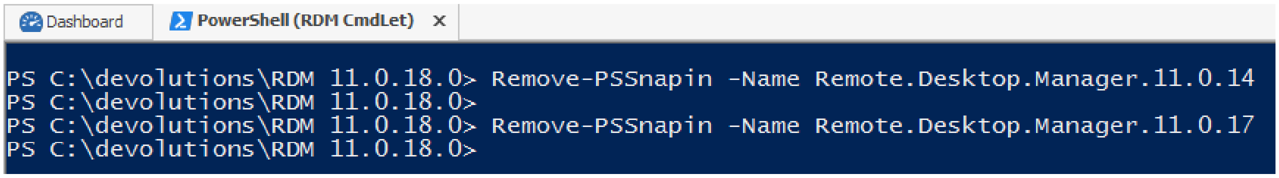
If there are more than one version of the snap-in installed, the result of the command will list them like this :



```
PS C:\devolutions\RDM 11.0.18.0> Get-PSSnapin -name Remote.Desktop.Manager.*


Name        : Remote.Desktop.Manager.11.0.14
PSVersion   : 5.0
Description : Remote Desktop Manager SnapIn

Name        : Remote.Desktop.Manager.11.0.17
PSVersion   : 5.0
Description : Remote Desktop Manager SnapIn

Name        : Remote.Desktop.Manager.11.0.18
PSVersion   : 5.0
Description : Remote Desktop Manager SnapIn
```

List of all versions of the RDM snap-in

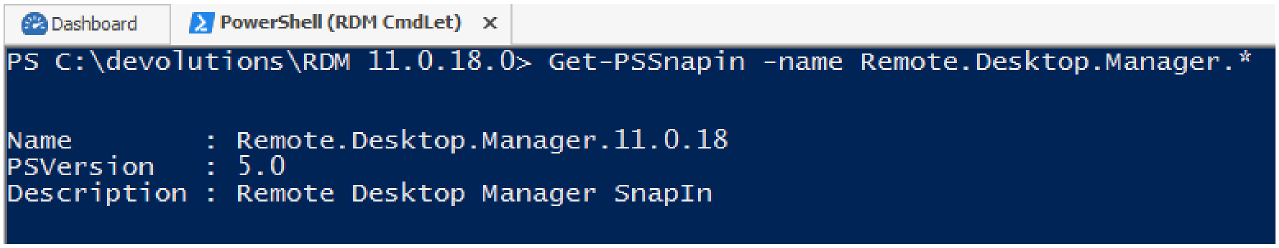
To remove snap-ins that do not match with the actual version of Remote Desktop Manager installed on the computer, use the **Remove-PSSnapin** cmdlet, ensure you specify the specific version to remove.



```
PS C:\devolutions\RDM 11.0.18.0> Remove-PSSnapin -Name Remote.Desktop.Manager.11.0.14
PS C:\devolutions\RDM 11.0.18.0>
PS C:\devolutions\RDM 11.0.18.0> Remove-PSSnapin -Name Remote.Desktop.Manager.11.0.17
PS C:\devolutions\RDM 11.0.18.0>
```

Removing the undesired RDM snap-in

Finally, verify if only the snap-in of the current version of RDM is installed with the Get-PSSnapin command.



```
PS C:\devolutions\RDM 11.0.18.0> Get-PSSnapin -name Remote.Desktop.Manager.*


Name        : Remote.Desktop.Manager.11.0.18
PSVersion   : 5.0
Description : Remote Desktop Manager SnapIn
```

List of all versions of the RDM snap-in

"CANNOT BE LOADED BECAUSE RUNNING SCRIPTS IS DISABLED ON THIS SYSTEM."

There are 2 probable causes.

1. This is a Windows Security Policy.

You must run the command below (Run as Administrator first);

```
Set-ExecutionPolicy
```

More Information can be found here;

https://technet.microsoft.com/en-us/library/ee176961.aspx

2. Open Remote Desktop Manager as Administrator and open the Powershell module and run;

```
Set-ExecutionPolicy
```

13.10.2(Putty

ERROR

PUTTY IN EMBEDDED MODE DOES NOT WORK IN THE APPLICATION

Remote Desktop Manager is not able to execute Putty in embedded mode when Team Viewer's QuickConnect button ⇔ is present in the title bar.

To resolve this issue, you need to disable the QuickConnect button in Team Viewer by unchecking the option ***Extra — Options — Advanced — Show advanced options — QuickConnect button — Configure — Show QuickConnect button***.

This solution can also be applied to other applications such as Filezilla or Firefox.

13.10.21 Remote Desktop Manager

ERRORS

MY MAPPED NETWORK DRIVE(S) ARE NOT AVAILABLE WHEN USING RUN AS ADMINISTRATOR TO LAUNCH REMOTE DESKTOP MANAGER

This is because of User Access Control (UAC), a built-in security layer of Windows. Effectively you are considered a different user with different preferences, the Mapped network drives being one such preference. In order to have the same mapped drives you have a few options:

1. Using an elevated command prompt, recreate the same mapped drive(s) using the *NET USE {DRIVENAME} {SHARENAME} /PERSISTENT:YES* command
2. Modifying the registry to link connections between the accounts, see https://support.microsoft.com/en-us/kb/937624.

“COULD NOT LOAD FILE OR ASSEMBLY "SYSTEM.ENTERPRISESERVICES.WRAPPER.DLL OR ONE OF ITS DEPENDENCIES. THE SYSTEM CANNOT FIND THE PATH SPECIFIED.”

This error is due to a corrupted Microsoft's .NET Framework installation. Please consult the Corrupted System File topic for more information on how to resolve this issue.

"MIXED MODE ASSEMBLY IS BUILD AGAINST VERSION 2.0.50727 OF THE RUNTIME"

This should occur only on machines with development environments or when the .net framework have undergone multiple installs/uninstalls.

In RemoteDesktopManager.exe.cfg, which is located in the installation folder, locate the **startup** element and add the **useLegacyV2RuntimeActivationPolicy** attribute. The end result should look like:

```
<startup useLegacyV2RuntimeActivationPolicy="true">
```

CAN'T PASTE IN ANY FIELDS OF REMOTE DESKTOP MANAGER

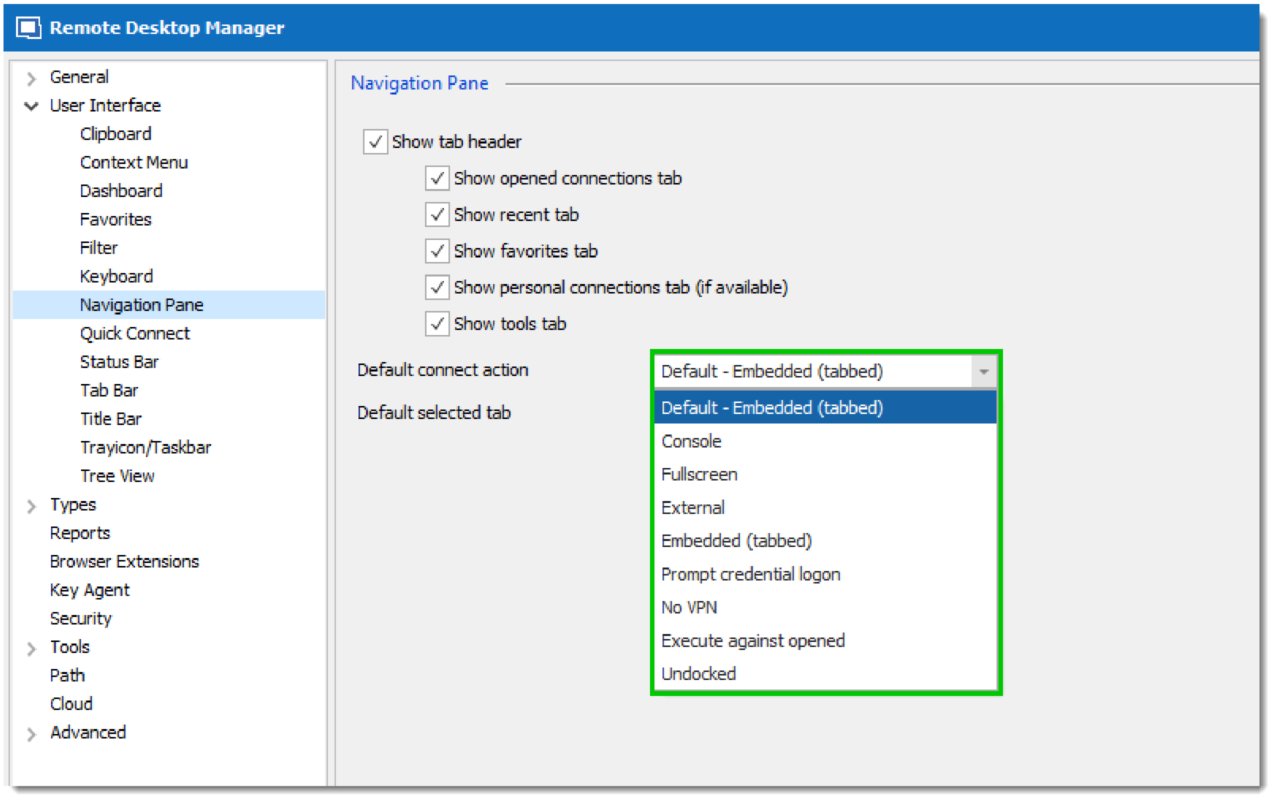
Webroot SecureAnywhere AntiVirus may cause the issue because of the Identity Protection module. Set ***remotedesktopmanager.exe*** to Allow and it will let you paste again in the application.

REMOTE DESKTOP MANAGER HANGS

Please consult topic Hung Remote Desktop Manager troubleshooting for more information.

ALL OF MY SESSIONS OPEN IN EMBEDDED AND/OR EXTERNAL MODE

All your sessions open in a display mode that is undesirable and you can't seem to set it the way you want by default. This can be changed by going in ***File -> Options -> User Interface -> Navigation Pane***



Navigation Pane

☑ Show tab header

☑ Show opened connections tab

☑ Show recent tab

☑ Show favorites tab

☑ Show personal connections tab (if available)

☑ Show tools tab

Default connect action: Default - Embedded (tabbed)

Default selected tab

Default Display Mode Action

13.10.21.1 Caching

DESCRIPTION

You are not seeing the content that you're expecting to see in the Navigation Pane.

SOLUTION

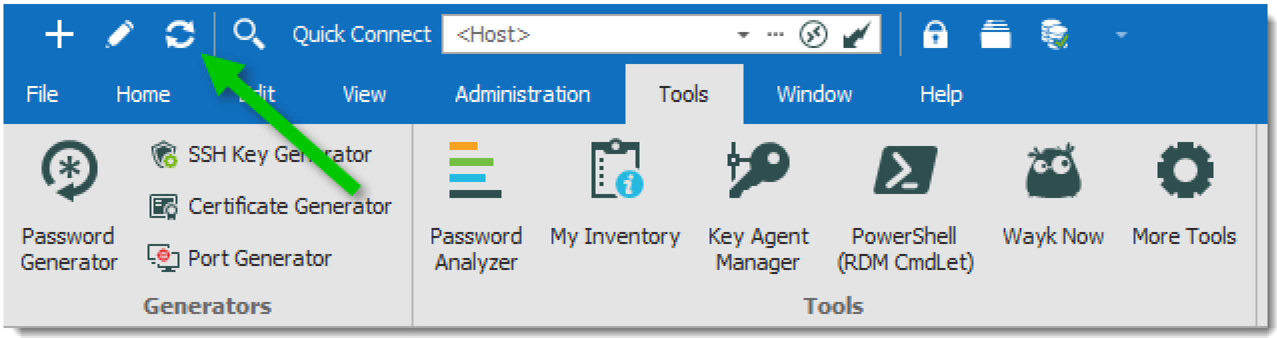
This issue can be caused by a corruption of the local cache. There's several methods to refresh the local cache in Remote Desktop Manager.

METHOD 1

Press CTRL + F5 on your keyboard.

METHOD 2

Hold the CTRL key on your keyboard and click on the **refresh** button in the Quick Access Toolbar.



Quick Access Toolbar

METHOD 3

You can manage the local cache by doing a **Vaccum**, a **Repair** or a **Delete**. Please consult Manage Cache topic for more information.

13.10.21.2 Debugging

DESCRIPTION

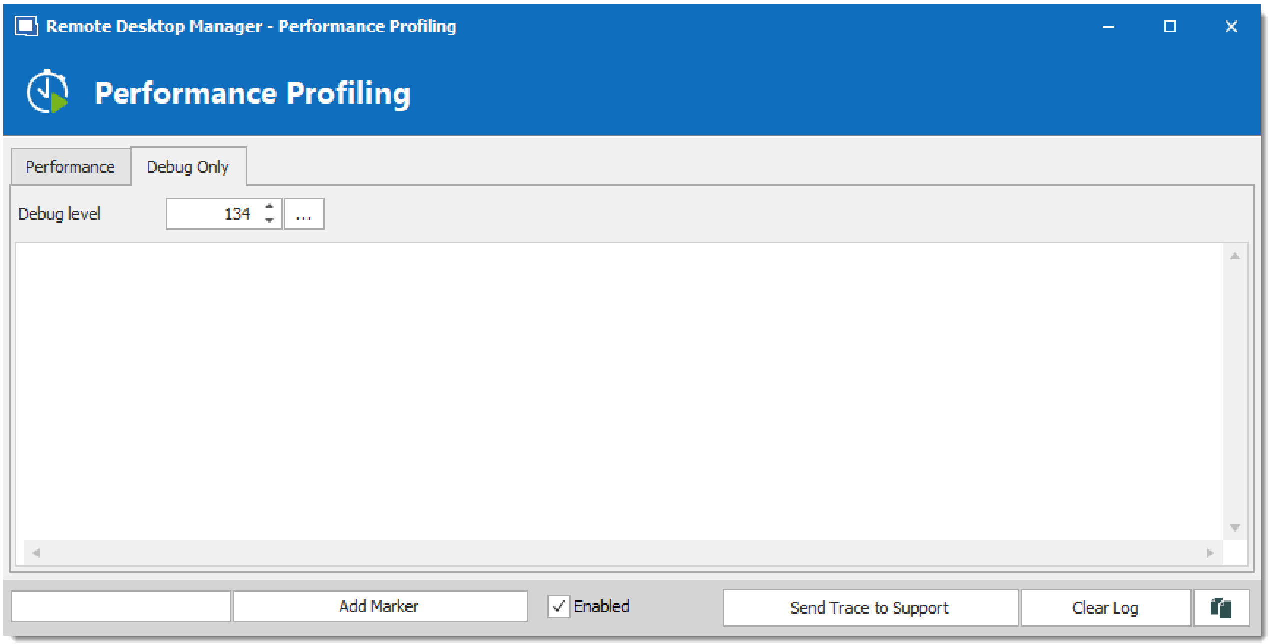
Sometimes when an issue occurs while using Remote Desktop Manager, the support personnel may ask you to turn on debugging and send the information back. Here are two procedures that you can follow.

> Any debug level other then zero will slow down the application and write a lot of information in the application logs. As soon as you have completed the diagnostics you should revert back the debug level to zero.

PROCEDURES

Use the in-depth debugging method whenever you need to diagnose the startup or initial connection.The Ad-hoc debugging method is much easier to follow and is sufficient in most cases.

AD-HOC DEBUGGING



Debug level: 134

☑ Enabled

Debug only tab of the profiler window

1. Open ***Help – Profiler***, move the window aside to clear the main window of Remote Desktop Manager.

2. In the **Debug only** tab, click on the ellipsis button and activate the proper debug categories.

3. In Remote Desktop Manager, perform the action that is under investigation. For timing session load times, please press CTRL-F5 to invalidate the cache and perform a full refresh. You should see debug information appear in the profiler window.

4. Click on **Send trace to support**. In the following dialog, ensure you specify enough information to link the report to the appropriate ticket, if the process was started from the forum include your forum username.

IN-DEPTH DEBUGGING

1. Open ***File – Options – Advanced***, click on the **Debug level** ellipsis button and activate the proper debug categories.

2. In the Information section below, you will see a hyperlink to your configuration folder, press on it to have an explorer window opened in that folder.

3. Close Remote Desktop Manager.

4. As a preparatory phase, it would be best to clear existing logs to limit the scope of what will need to be analyzed. Delete or rename files named RemoteDesktopManager.log, RemoteDesktopManager.log.db and RemoteDesktopManager.debug from your configuration folder.

5. Start Remote Desktop Manager.

6. Perform the action that is under investigation.

7. Open ***File – Options – Advanced***, set the **Debug level** to zero.

8. Close Remote Desktop Manager.

9. Package the ***.log***, ***.log.db*** and ***.debug*** files from your configuration folder and send them to us.

13.10.21.3 High CPU Usage

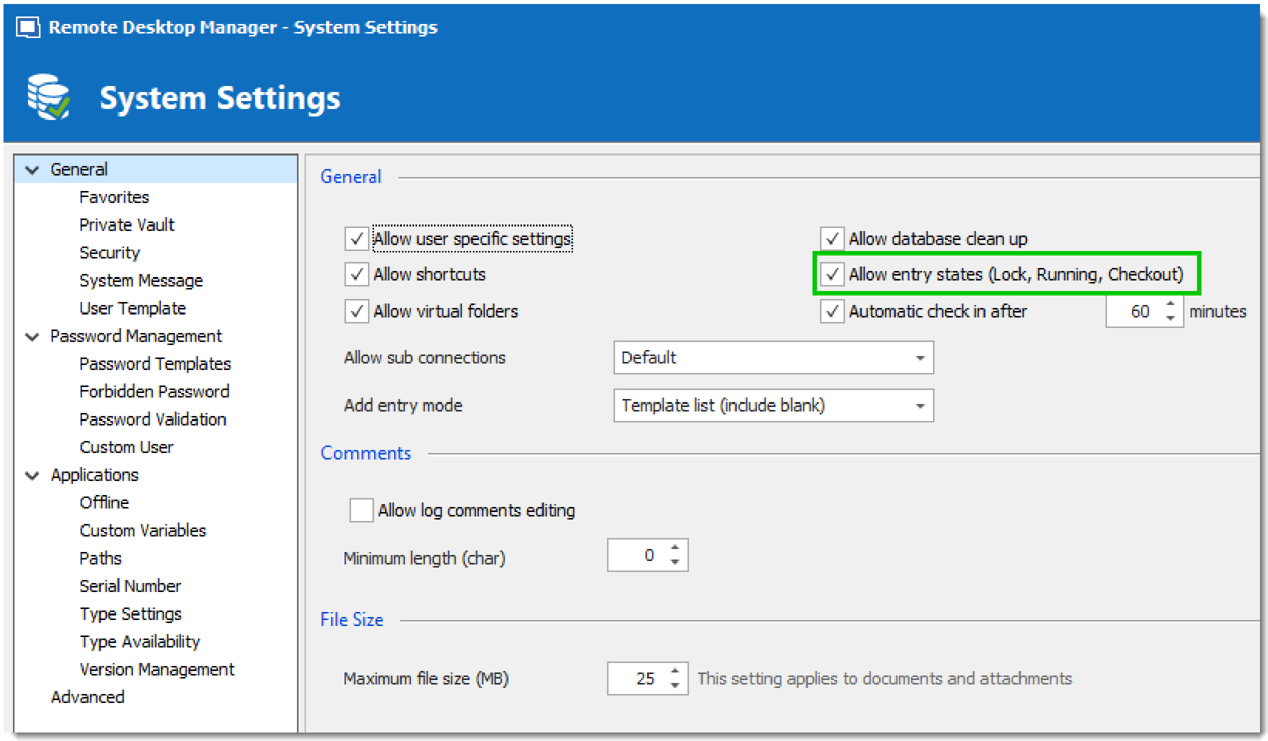
DESCRIPTION

Since the release of Remote Desktop Manager 13, some users have experienced high CPU usage on their systems, especially in Remote Desktop Services (RDS) environment. This is caused by the entry state verification feature.

SOLUTION

This option is available with version 13.0.13.0 and above.

Disable the option **Allow entry states (Lock, Running, Checkout)** in ***Administration – Data Source Settings (System Settings) – General*** to improve performance on your servers and your workstations.



General

☑ Allow user specific settings

☑ Allow shortcuts

☑ Allow virtual folders

☑ Allow database clean up

☑ Allow entry states (Lock, Running, Checkout)

☑ Automatic check in after 60 minutes

Allow sub connections: Default

Add entry mode: Template list (include blank)

Comments

☐ Allow log comments editing

Minimum length (char) 0

File Size

Maximum file size (MB) 25 This setting applies to documents and attachments

System Settings

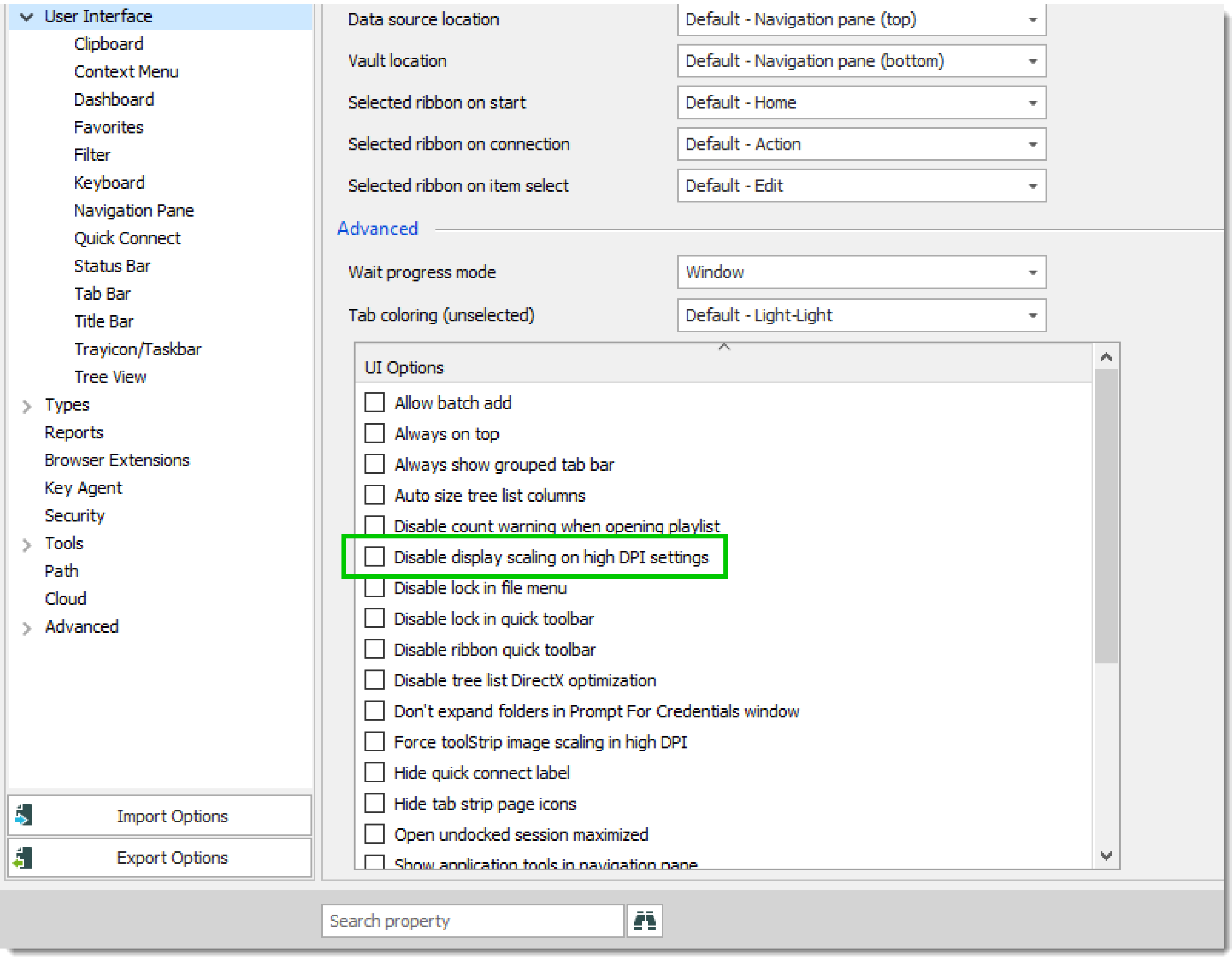
13.10.21.4HDPI Scaling Issues

4K SCREENS MAKE REMOTE DESKTOP MANAGER UNUSABLE

To resolve these issues, we will elaborate on two methods. One in Remote Desktop Manager and another using a built-in Windows functionality.

METHOD 1

First, in Remote Desktop Manager, go in ***File — Options — User Interface*** and please uncheck **“Disable display scaling on high DPI settings.”**



Data source location: Default - Navigation pane (top)
Vault location: Default - Navigation pane (bottom)
Selected ribbon on start: Default - Home
Selected ribbon on connection: Default - Action
Selected ribbon on item select: Default - Edit

Advanced

Wait progress mode: Window
Tab coloring (unselected): Default - Light-Light

UI Options

- ☐ Allow batch add
- ☐ Always on top
- ☐ Always show grouped tab bar
- ☐ Auto size tree list columns
- ☐ Disable count warning when opening playlist
- ☐ Disable display scaling on high DPI settings
- ☐ Disable lock in file menu
- ☐ Disable lock in quick toolbar
- ☐ Disable ribbon quick toolbar
- ☐ Disable tree list DirectX optimization
- ☐ Don't expand folders in Prompt For Credentials window
- ☐ Force toolStrip image scaling in high DPI
- ☐ Hide quick connect label
- ☐ Hide tab strip page icons
- ☐ Open undocked session maximized
- ☐ Show application tools in navigation pane

HDPI Scaling

If you cannot see the setting because of display issues, you can add the line in your config files directly. To locate your config file please refer to Configuration File Location. Once you have found the right folder, please open **RemoteDesktopManager.cfg** with your preferred text editor. Under the line “<CreationDate>2016-11-14T00:00:00-05:00</CreationDate> please add, “

<DisableHDPIAutoScaling>false</DisableHDPIAutoScaling>

Restart Remote Desktop Manager and the problem should be resolved.

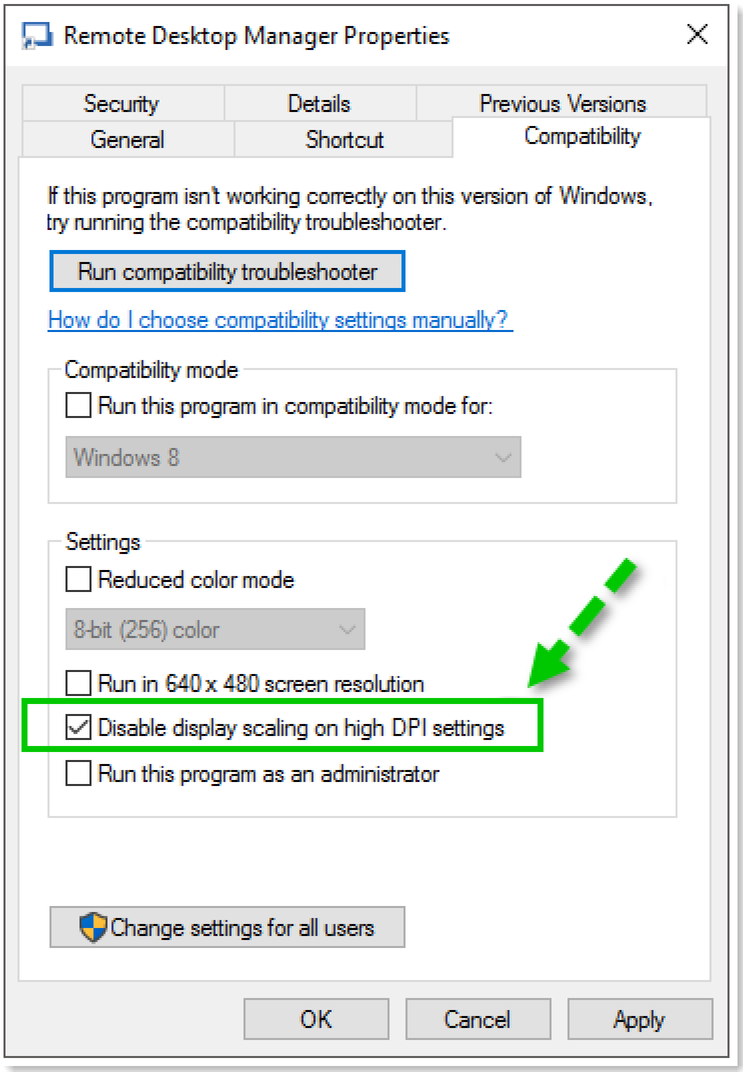
METHOD 2

The second is directly with windows options.

Right-click on your Remote Desktop Manager icon. Go to **Properties** and in the **Compatibility** tab check **Disable display scaling on high DPI settings.**

When applying this change, you must log off and log back in with your user for changes to take effect.

Windows 10 Anniversary Update (Build 14393)


Remote Desktop Manager Properties
Security
Details
Previous Versions
General
Shortcut
Compatibility
Run compatibility troubleshooter
How do I choose compatibility settings manually?
Compatibility mode
Settings
Change settings for all users
OK
Cancel
Apply

If this program isn't working correctly on this version of Windows, try running the compatibility troubleshooter.

□ Run this program in compatibility mode for:

Windows 8

□ Reduced color mode

8-bit (256) color

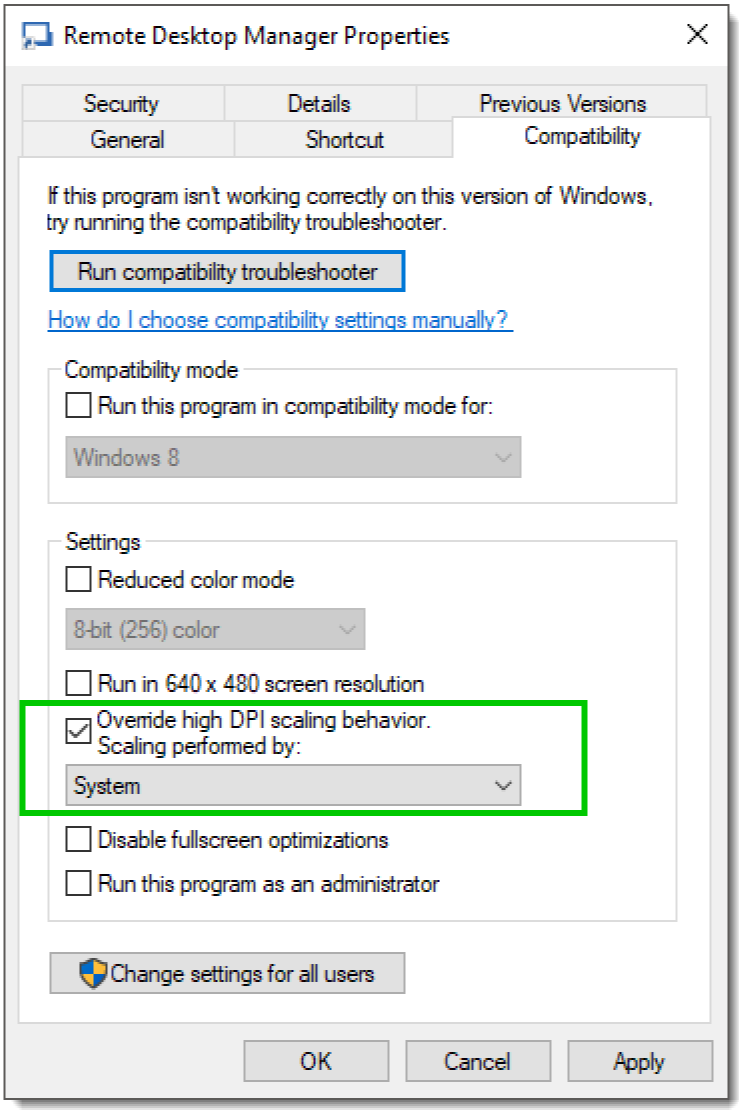
□ Run in 640 x 480 screen resolution

☑ Disable display scaling on high DPI settings

□ Run this program as an administrator

DPI Settings

Windows 10 Creators Update (Build 15063 and above)



Remote Desktop Manager Properties

Security
Details
Previous Versions
General
Shortcut
Compatibility

If this program isn't working correctly on this version of Windows, try running the compatibility troubleshooter.

Run compatibility troubleshooter
How do I choose compatibility settings manually?

Compatibility mode

□ Run this program in compatibility mode for:

Windows 8

Settings

□ Reduced color mode

8-bit (256) color

□ Run in 640 x 480 screen resolution

☑ Override high DPI scaling behavior.
Scaling performed by:

System

□ Disable fullscreen optimizations

□ Run this program as an administrator

DPI Settings

13.10.21.5 Hung Remote Desktop Manager

DESCRIPTION

Remote Desktop Manager integrates with many different technologies and we do our best to isolate our main process from others, but it is not always possible.

SYMPTOMS

REMOTE DESKTOP MANAGER HANGS WHEN LOGGING OFF A RDP SESSION

Please refer to RDM Hangs when logging off RDP sessions.

REMOTE DESKTOP MANAGER HANGS FOR NO APPARENT REASON

Remote Desktop Manager hangs while you were not even using it or you were not using any other technology from within it. This makes it hard to identify the culprit. Advanced users can follow Hung Remote Desktop Manager Dump file creation.

13.10.21.5.1 Hung Remote Desktop Manager Dump file creation

DESCRIPTION

> ! Follow this procedure ONLY when guided by a Devolutions support specialist.

There are no guarantees the we can identify the issue, but following this procedure may guide Devolutions towards identifying the root cause.

> ! Please refrain from sending more than two dump files. We will simply not be able to analyze all of them.

PROCEDURES

AD-HOC METHOD

Perform this only when the application becomes unresponsive, meaning that it stops refreshing its screen and that the operating system adds the Unresponsive label in its title bar.

1. Launch the Task Manager.
2. Identify Remote Desktop Manager in the Apps list.
3. Right-click and choose **Create dump file.**
4. This will generate a file that cannot be transferred by email. There are multiple free online services to send large files, please contact us if you need a suggestion for such a service.

USING THE PROCDUMP UTILITY

The following procedure makes use of a tool offered by Microsoft's Technet, namely the Sysinternals suite. The tool that we need is **procdump.** It is easier because the tool will monitor the application and create a dump file automatically.

Create a batch file containing a command such as:

```
{TOOLS_PATH}\procdump.exe -e -h -ma -g -x {DUMP_PATH} "{INSTALL_PATH}\RemoteDesktopManager
```

If the application becomes unresponsive, the tool will handle everything. Simply locate the dump file and send it to us.

13.10.21.6 Large Memory Aware Application

DESCRIPTION

Remote Desktop Manager 32 bit version is limited in the amount of memory it can use. This is limited to 2 GB. This didn't cause issues until the release of Window 8 and Windows Server 2012, RDP connections to these OS's consume a large amount of memory, typically 140-160 Mb per connection.

Remote Desktop Manager 64 bit version allow the application to use as much memory as is available, in the mean time, we've modified Remote Desktop Manager to allow it to access more memory, but this must be paired with a modification to your operating system.

> You can perform this only if you have more then 2 GB of RAM.

INSTRUCTIONS

WINDOWS XP/SERVER 2003

1. Right-click **My Computer** and select **Properties**. The System Properties dialog box will appear.

2. Click the **Advanced** tab.

3. In the **Startup and Recovery** area, click **Settings**. The **Startup and Recovery** dialog box will appear.

4. In the **System startup** area, click **Edit**. This will open the Windows ***boot.ini*** file in **Notepad**.

5. In the **[Operating Systems]** section, add the following switches to the end of the startup line that includes the /fastdetect switch: /3GB

6. Save the changes and close Notepad.

7. Click **OK** two times to close the open dialog boxes, and then restart the computer for the change to take effect.

WINDOWS VISTA, WINDOWS 7, SERVER 2008

> ! The memory parameter can be any value between 2048 (2 GB) and 3072 (3 GB). If you have 3GB of RAM you must reserve some for your system. If you have 3 GB of ram, allocate 2560 Mb, for 4 GB systems use 3072.

1. Open command prompt with Administrator rights. To do this, go to **Programs**, **Accessories**, right-click on **Command Prompt** and select "**Run as Administrator**".

2. Enter the following at the prompt and press enter:

```
bcdedit /set IncreaseUserVA 2560
```

3. Close the prompt and restart the computer.

13.10.21.7Missing Navigation Pane

DESCRIPTION

Several panes are missing in Remote Desktop Manager and you seem unable to bring them back.

REMOTE DESKTOP MANAGER ENTERPRISE

Execute the following steps below:

- Close Remote Desktop Manager.
- Navigate to ***%localappdata%\Devolutions***
- Copy the **RemoteDesktopManager** folder on your desktop.
- Delete the **RemoteDesktopManager** folder in ***%localappdata%\Devolutions***
- Restart Remote Desktop Manager.

This will create a new **RemoteDesktopManager** folder in ***%localappdata%\Devolutions***. If everything is back to normal, close Remote Desktop Manager again and copy the 3 files below from the folder **RemoteDesktopManager** on your desktop in ***%localappdata%\Devolutions\RemoteDesktopManager*** to restore your configuration and your local data source.

- ***RemoteDesktopManager.cfg***
- ***RemoteDesktopManager.ext***
- ***Connections.db***

REMOTE DESKTOP MANAGER FREE

Execute the following steps below:

- Close Remote Desktop Manager.
- Navigate to ***%localappdata%\Devolutions***
- Copy the **RemoteDesktopManagerFree** folder on your desktop

- Delete the **RemoteDesktopManagerFree** folder in ***%localappdata%\Devolutions***
- Restart Remote Desktop Manager.

This will recreate a new **RemoteDesktopManagerFree** folder in ***%localappdata%\Devolutions***. If everything is back to normal, close Remote Desktop Manager again and copy the 3 files below from the folder **RemoteDesktopManagerFree** on your desktop in ***%localappdata%\Devolutions\RemoteDesktopManagerFree*** to restore your configuration and your local data source.

- ***RemoteDesktopManagerFree.cfg***
- ***RemoteDesktopManagerFree.ext***
- ***Connections.db***

13.10.21.8 Missing Sessions

DESCRIPTION

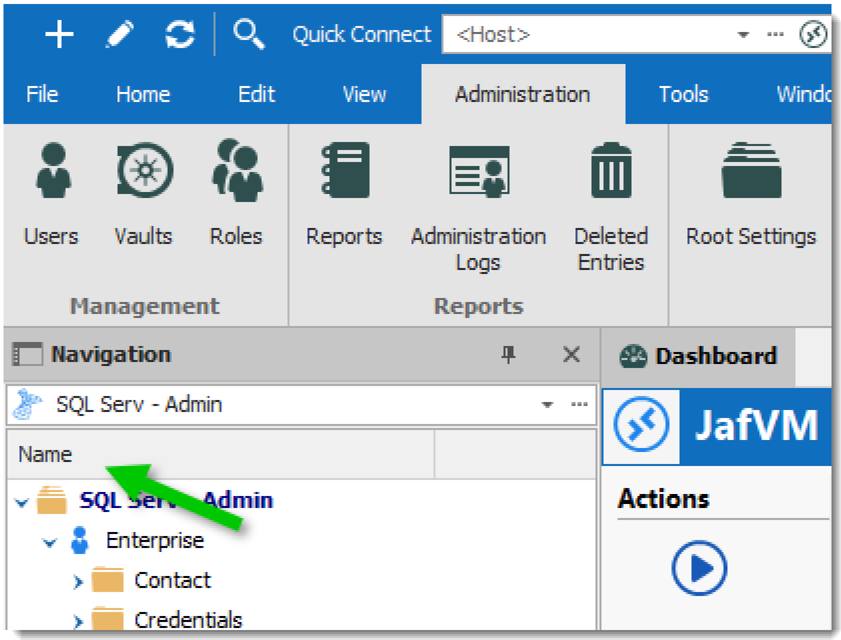
All entries are missing from the Navigation Pane.

SOLUTION 1

Refresh the local cache. Please consult the Caching topic for more information.

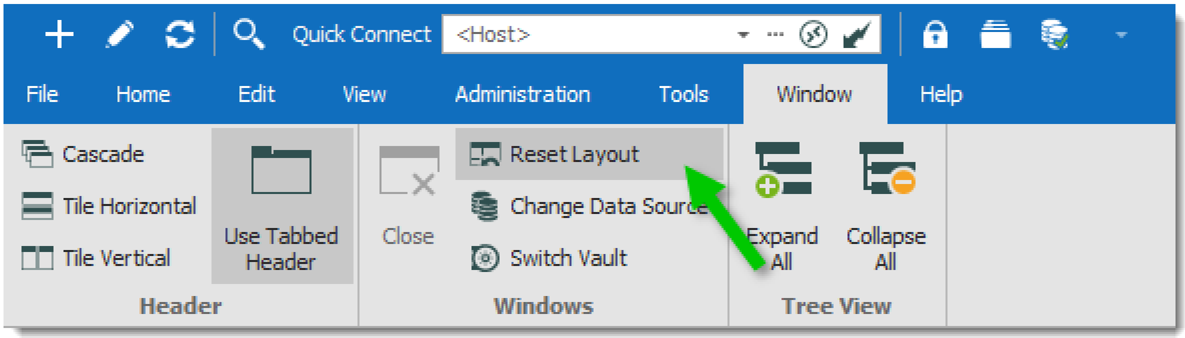
SOLUTION 2

The **Name** column may be missing.



Name Column Missing

Click on ***Window -> Reset Layout*** to bring back the **Name** column.



Reset Layout

13.10.21.9 Offline Mode

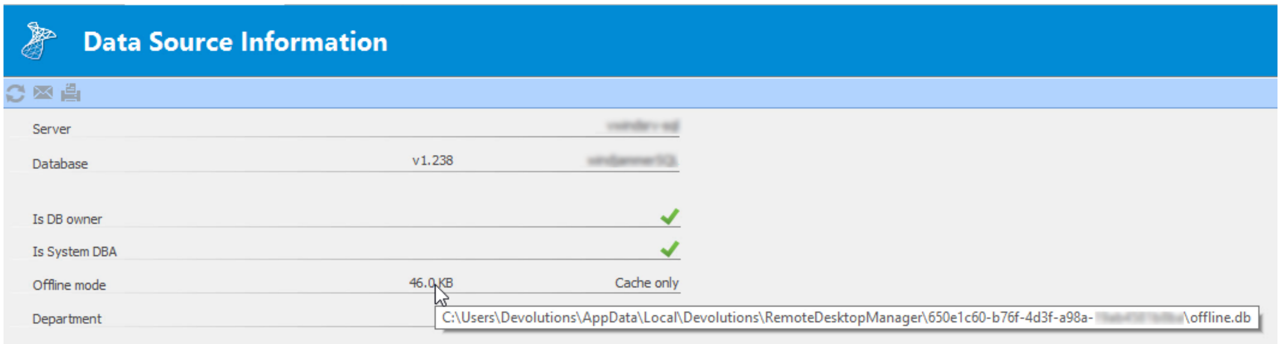
ERRORS

MISSING ENTRIES OR DELETED ENTRIES STILL SHOWING

Your offline cache may be out of sync with the content of the data source. Press CTRL + F5 to refresh the local cache.

SYSTEM.DATA.SQLITE.SQLITEEXCEPTION (0X80004005): FILE IS ENCRYPTED OR IS NOT A DATABASE

The offline file (***offline.db***) needs to be deleted manually.
Click on ***File – My Data Source Information*** and now hover over the file size. This will give you the full file path, something like ***%LocalAppData%\Devolutions\RemoteDesktopManager\GUID-DatasourceID\offline.db***.



Data Source Information

Server		[redacted]
Database	v1.238	[redacted]
Is DB owner		✓
Is System DBA		✓
Offline mode	46.0 KB	Cache only
Department		

C:\Users\Devolutions\AppData\Local\Devolutions\RemoteDesktopManager\650e1c60-b76f-4d3f-a98a-[redacted]\offline.db

My Data Source Information

Close Remote Desktop Manager, delete the ***offline.db*** file and restart Remote Desktop Manager. This will force the application to recreate the offline file.

13.10.21.1Profiler

DESCRIPTION

Please consult the Profiler topic for more information.

13.10.21.1Red X in Navigation Pane or Credential List

DESCRIPTION

There is a huge Red "X" in the Navigation Pane or in the Credential List

SOLUTION

There are a few things you can try to get rid of the red X.

First, try going to the Window tab and click Reset Layout

Sometimes that can fix some Red X issues.

If that doesn’t work, you can try to close RDM, then navigate to %localappdata% -> Devolutions -> RemoteDesktopManager and delete every file with the .lyt extension.

If neither of those methods does the trick, you will have to move the RemoteDesktopManager folder from localappdata to your desktop, then uninstall RDM, reboot your computer and reinstall RDM. Once you reopen RDM, the red X should be gone.

13.10.21.1 Root Is Empty Error

DESCRIPTION

After upgrading to Remote Desktop Manager 13.5.x, you may receive the error below;

```
RootException - Root is empty!

at Devolutions.RemoteDesktopManager.Managers.RootConnectionManager.get_RootConnection()

at Devolutions.RemoteDesktopManager.Frames.ConnectionViews.FreConnectionTreeListView.ce5f4c5875531b613e87da05d31efd852(ConnectionViewMode cfa8984eaceb595fb57911c4e0ee96824)

at Devolutions.RemoteDesktopManager.Frames.ConnectionViews.FreConnectionTreeListView.LoadConnectionList(Connection[] connections, ConnectionViewMode viewMode)

at Devolutions.RemoteDesktopManager.Forms.FrmMainRibbonBase.LoadAllConnectionView(Boolean saveState)

at Devolutions.RemoteDesktopManager.Forms.FrmMainRibbonBase.RefreshAllConnectionView(Boolean saveState, Boolean checkOnline)

at Devolutions.RemoteDesktopManager.Managers.MainFormManager.DoFirstLoad(IMainForm mainform)

at Devolutions.RemoteDesktopManager.Forms.FrmMainDocumentManager.cae3b4c7c167cf0d9
```

747ac4fee11ac00a(Object c19f185fd70cefc696ba148af1c4faf54, EventArgs cf1018bb83ec7debd818319fd3cb4844e)

at System.Windows.Forms.Timer.OnTick(EventArgs e)

at System.Windows.Forms.Timer.TimerNativeWindow.WndProc(Message& m)

at System.Windows.Forms.NativeWindow.Callback(IntPtr hWnd, Int32 msg, IntPtr wparam, IntPtr lparam)

SOLUTION 1

Many issues related to it have been addressed in the latest version which you can download here;

https://remotedesktopmanager.com/home/download

SOLUTION 2

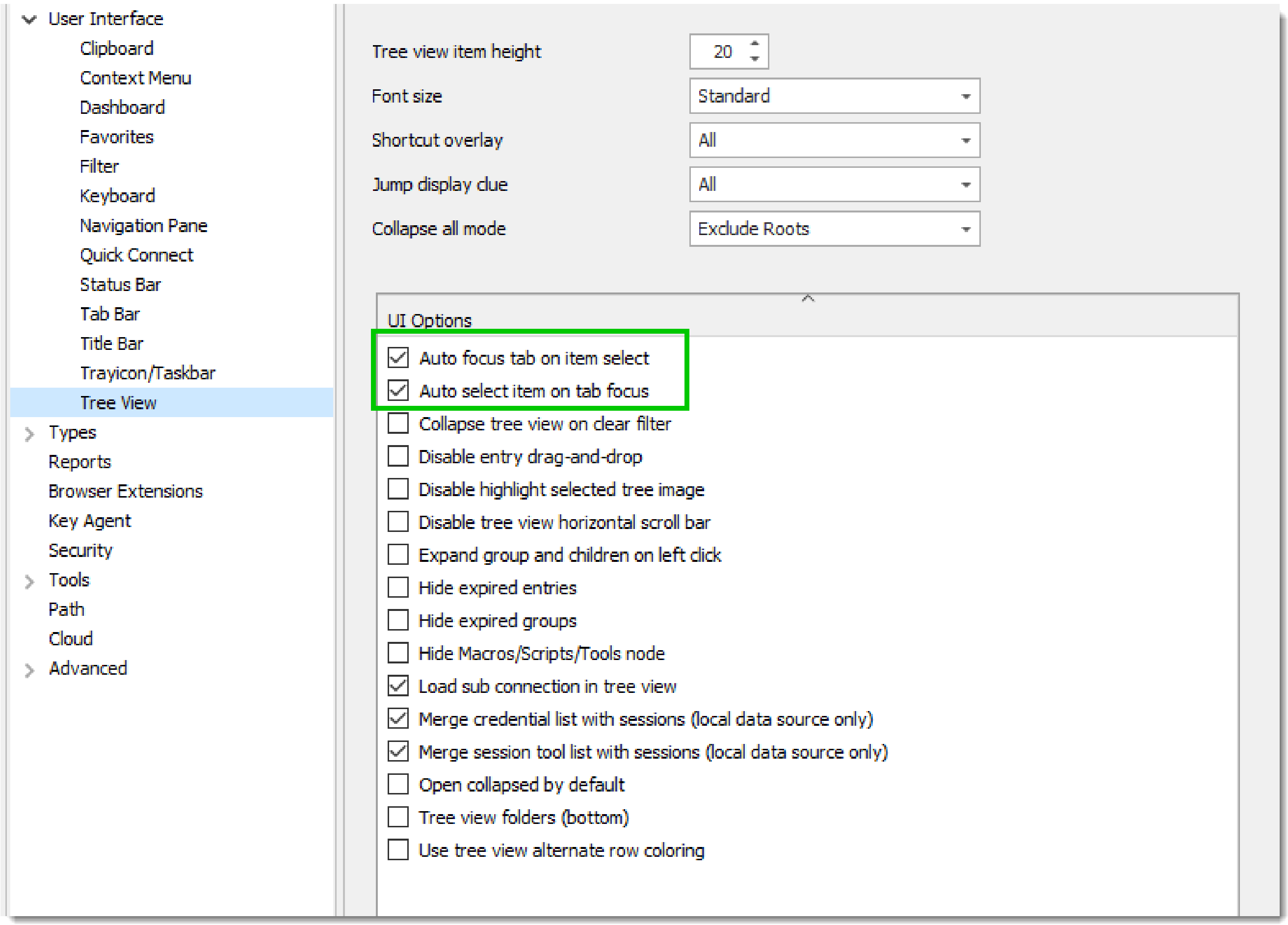
The other solution is to simply switch between data sources or delete and recreate the data source in ***File -> Data Sources***.

13.10.21.1 Session Focus Issue

DESCRIPTION

AFTER CLOSING A SESSION, THE FOCUS IS SET TO THE LAST OPENED CONNECTION.

There are two settings in ***File -> Options -> User Interface -> Tree View*** that you can enable/disable to resolve this issue. Those are **Auto focus tab on item select** and **Auto select item on tab focus.**



Tree view item height: 20

Font size: Standard

Shortcut overlay: All

Jump display clue: All

Collapse all mode: Exclude Roots

UI Options

- ☑ Auto focus tab on item select
- ☑ Auto select item on tab focus
- ☐ Collapse tree view on clear filter
- ☐ Disable entry drag-and-drop
- ☐ Disable highlight selected tree image
- ☐ Disable tree view horizontal scroll bar
- ☐ Expand group and children on left click
- ☐ Hide expired entries
- ☐ Hide expired groups
- ☐ Hide Macros/Scripts/Tools node
- ☑ Load sub connection in tree view
- ☑ Merge credential list with sessions (local data source only)
- ☑ Merge session tool list with sessions (local data source only)
- ☐ Open collapsed by default
- ☐ Tree view folders (bottom)
- ☐ Use tree view alternate row coloring

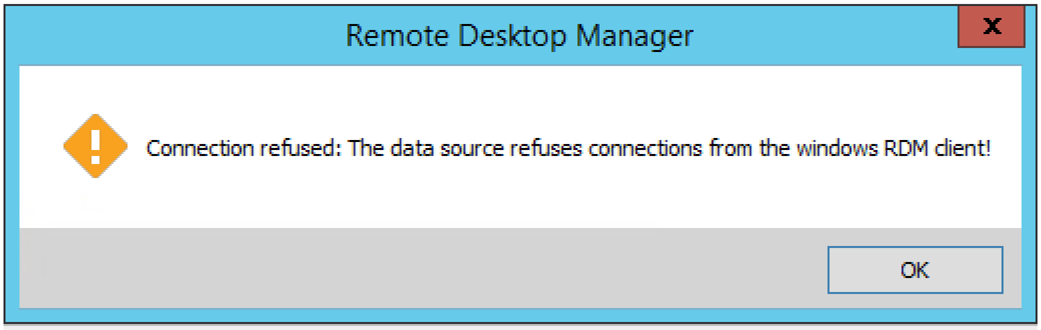
Tree View Options

13.10.21.1 SQL Server Data Source Connection Refused

DESCRIPTION

UNABLE TO CONNECT FROM RDM OR PVM. CONNECTION REFUSED.

When you try to connect from either Remote Desktop Manager and/or Password Vault Manager, you receive the following message;



Connection refused: The data source refuses connections from the windows RDM client!

Data Source Connection Error

You will need to access the database via **SQL Server Management Studio** and execute the following statement on the database;

Please do a backup of the database before running that script.

```
UPDATE dbo.DatabaseInfo

SET Settings = REPLACE(Settings,
'<AllowAccessWindowsPVM>false</AllowAccessWindowsPVM>', '')



UPDATE dbo.DatabaseInfo

SET Settings = REPLACE(Settings,
'<AllowAccessWindowsRDM>false</AllowAccessWindowsRDM>', '')
```

13.10.21.1 Startup performance

DESCRIPTION

As described in the Performance chapter, the application performance must be validated with an empty data source. Please create a new empty XML data source and select it as being the current data source.

If you experience slow startup times, there are a few things to try in order to reduce the time before the application is available for use.

SLOW STARTUP ON MACHINES THAT ARE NOT CONNECTED TO THE INTERNET.

For your security, we "sign" our program with a code signature. This results in the validity of the signature being checked at application startup. If the machine is not connected to the internet the application will wait for a response until a timeout occurs. For detailed explanations please read the following:

- Improving Application Start Up Time
- https://blogs.technet.microsoft.com/markrussinovich/2009/05/23/the-case-of-the-slow-keynote-demo/

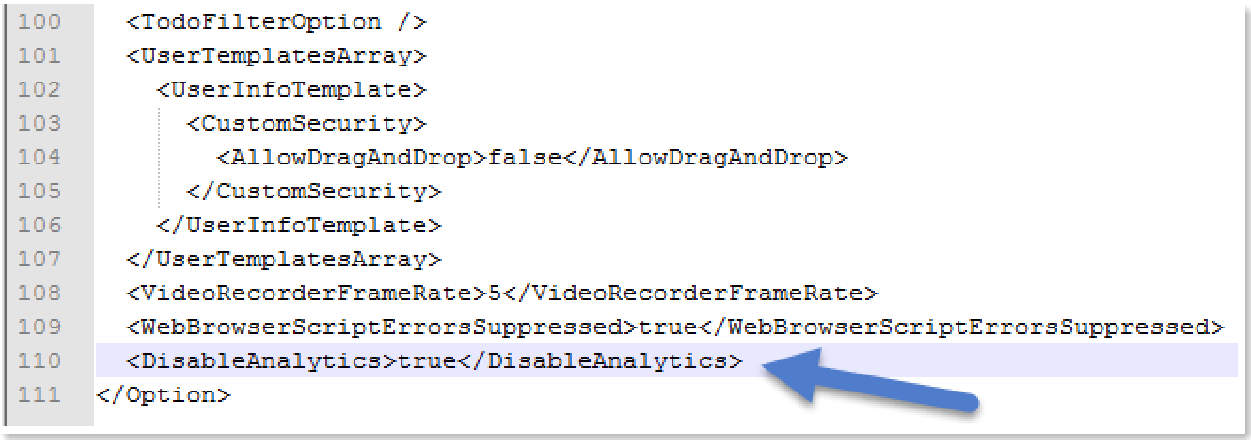
The workaround is to create a text file in Remote Desktop Manager installation folder, named ***RemoteDesktopManager.exe.config*** that must contain the following:

```
<configuration>
  <runtime>
    <generatePublisherEvidence enabled="false"/>
  </runtime>
</configuration>
```

PREVENT INTERNET ACCESS

Every time you start Remote Desktop Manager, the application will try to connect on https://remotedesktopmanager.com/clientinternal/enterprisenews. You should prevent all internet access from the application.

Add the line ***<DisableAnalytics>true</DisableAnalytics>*** to your RemoteDesktopManager.cfg file. You can place it above the last line, which should contain **</Option>**. You can find the configuration file using ***File – Options – Advanced*** and click on the blue hyperlink at the bottom.



```
  <TodoFilterOption />
  <UserTemplatesArray>
    <UserInfoTemplate>
      <CustomSecurity>
        <AllowDragAndDrop>false</AllowDragAndDrop>
      </CustomSecurity>
    </UserInfoTemplate>
  </UserTemplatesArray>
  <VideoRecorderFrameRate>5</VideoRecorderFrameRate>
  <WebBrowserScriptErrorsSuppressed>true</WebBrowserScriptErrorsSuppressed>
  <DisableAnalytics>true</DisableAnalytics>
</Option>
```

RemoteDesktopManager.cfg

NATIVE IMAGE GENERATION

Remote Desktop Manager is a .NET application. This means that the code is delivered in an intermediate format. It is then processed on your local machine in order to generate what is called a **Native Image**. Sometimes, this process can be slow. It can also reoccur after certain conditions are met. For these reasons, we deliver a batch file to process all of our files at once. You will find this file in the installation folder of Remote Desktop Manager. It is called `OptimizeRDM.bat`. Please open a Command Window using Run As Administrator and launch that script.

ANTIVIRUS

It is possible that an antivirus application is causing slowdowns.

> We do not recommend turning off the antivirus protection in risky conditions. You should close all browsers and ensure that only essential applications are running. We also suggest this step only for a short duration in order to see the startup time of the application change significantly.

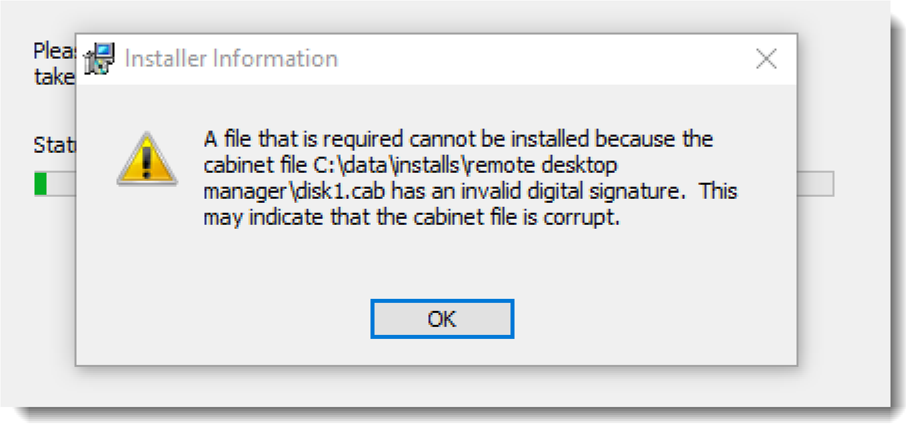
If your antivirus application allows it, simply turn off monitoring of Remote Desktop Manager's installation folder. If you are comfortable with turning of the whole antivirus protection, do this to test the startup time.

There is sadly nothing we can do in this case. It is only a step that helps in isolating the cause.

13.10.21.1Unable to install or upgrade

DESCRIPTION

When you install or upgrade Remote Desktop Manager, you receive this error message below;



A file that is required cannot be installed because the cabinet file C:\data\installs\remote desktop manager\disk1.cab has an invalid digital signature. This may indicate that the cabinet file is corrupt.

Installation Error Message

You simply have to deploy the ***.zip** file of Remote Desktop Manager in Remote Desktop Manager's installation folder.

By default, Remote Desktop Manager is installed in ***C:\Program Files (x86)\Devolutions\Remote Desktop Manager***.

When the ***.zip** file is downloaded, extract or copy/paste the content of the ***.zip** file in the ***C:\Program Files (x86)\Devolutions\Remote Desktop Manager*** folder. When you restart Remote Desktop Manager, the latest version will be installed.

You can download the zip here; https://remotedesktopmanager.com/Home/Download.

13.10.21.1Unable to Uninstall

ERROR

UNABLE TO UNINSTALL REMOTE DESKTOP MANAGER FROM YOUR COMPUTER BECAUSE OF A MISSING MSI FILE

To fix issues that you may encounter with the installation, removal of the application or missing MSI file, please run the Microsoft Troubleshooting tool on your computer.
https://support.microsoft.com/en-us/mats/program_install_and_uninstall

If the installer still reports an error, please run the installer from the command line using these parameters:

```
msiexec /i "{Name of msi package" /L*V "Name of log file"
```

Please adapt to your environment and the folders that you use. Here is an example:

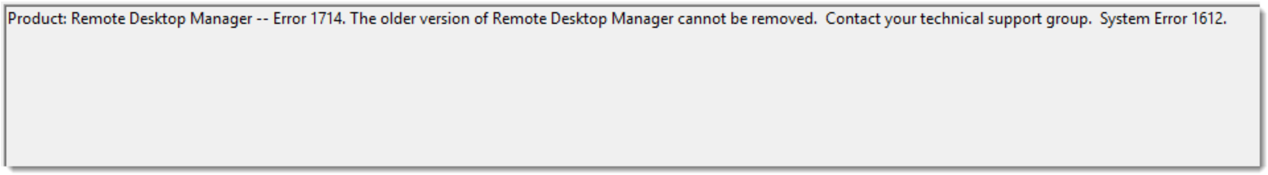
```
msiexec /i "Setup.RemoteDesktopManager.11.7.6.0.msi" /L*V "C:\log\RdmInstall.log"
```

Send the resulting log file to ticket@devolutions.net.

13.10.21.1Upgrade

DESCRIPTION

You seem unable to uninstall Remote Desktop Manager from Programs and Features in Windows. In the Event log; you see the following error message;



Product: Remote Desktop Manager -- Error 1714. The older version of Remote Desktop Manager cannot be removed. Contact your technical support group. System Error 1612.

Event Log Message

STEP1

Please try the suggested fix by Microsoft here; https://support.microsoft.com/en-us/help/17588/fix-problems-that-block-programs-from-being-installed-or-removed.

Your settings and local data for RDM are by default under ***%LOCALAPPDATA%\Devolutions\RemoteDesktopManager***, our installer doesn't touch this at all. You must preserve this folder in its current state.

STEP 2

Once this is done, please contact ticket@devolutions.net for further assistance.

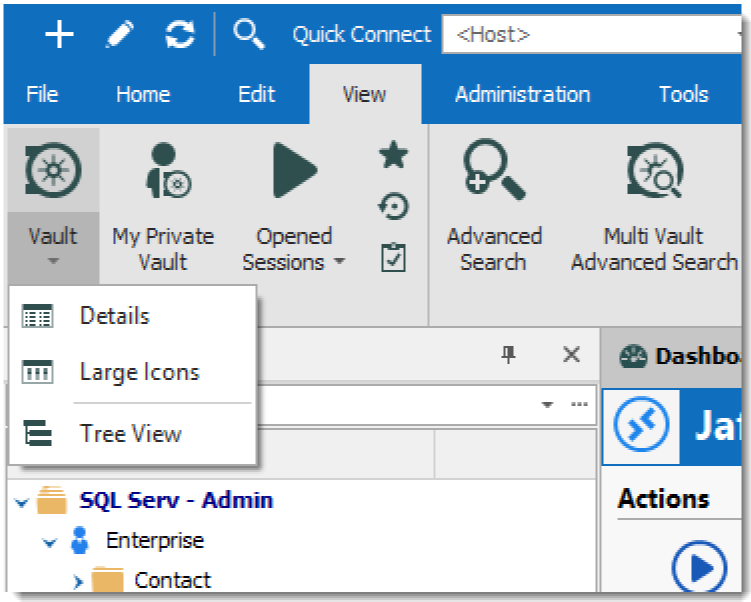
13.10.21.1User Interface

THE RIBBON HAS BEEN HIDDEN AND I DON'T KNOW HOW TO MAKE IT VISIBLE

You have two options: Use the **Alt + F11** shortcut or using the system menu of the application you can check the "Top Pane" command. Please see Top Pane for more information.

THE TREE VIEW HAS DISAPPEARED FROM THE NAVIGATION PANE

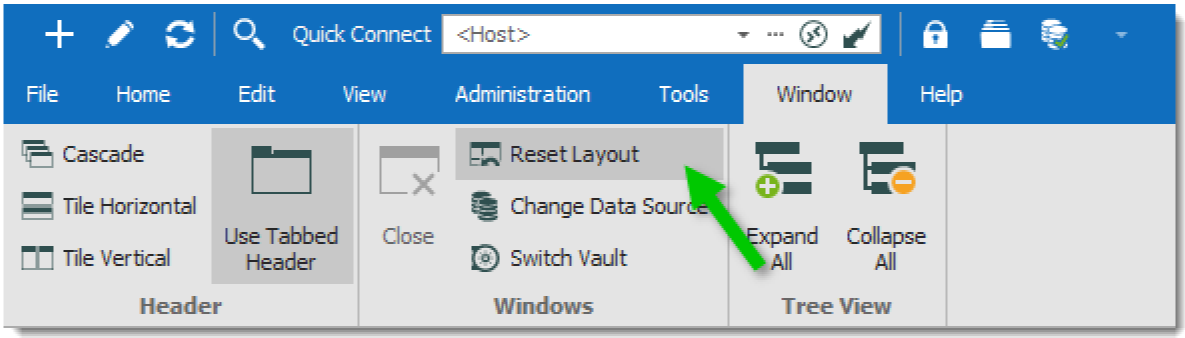
The Navigation Pane can be displayed in many modes. You can select the tree view with ***View — Vault — Tree View*** or use the default shortcut **F7.**



View - Vault Menu

THE MAIN FORM LAYOUT IS BROKEN

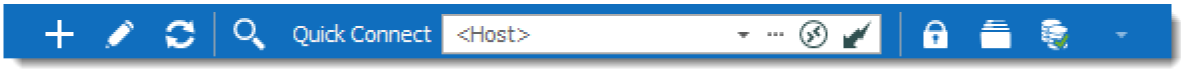
Use the **Reset Layout** option to revert back to the default UI layout in the **Window** tab.



Reset Layout Button

The reset layout might not resolve all the issues. Close the application and delete the layout files ***(*.lyt***) in ***%LocalAppData%\Devolutions\RemoteDesktopManager*** to completely restore the layout.

THE QUICK ACCESS TOOLBAR NEEDS TO BE RESET

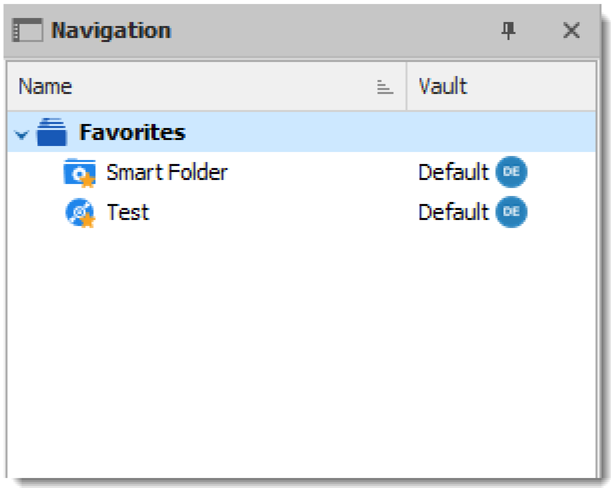


Quick Access Toolbar

To reset the quick access toolbar, close the application and delete the file ***remotedesktopmanager.qtb*** in ***%LocalAppData%\Devolutions\RemoteDesktopManager***

THE NAVIGATION PANE DISPLAYS ONLY MY FAVORITES

Only your favorites are displayed, the root node is also entitled "**Favorites**".



Name	Vault
Favorites	
Smart Folder	Default
Test	Default

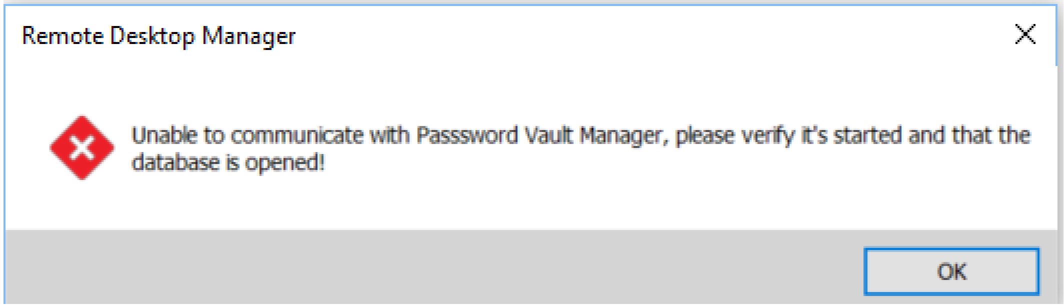
You may have inadvertently enabled a filter. Click on the ellipsis button of the search filter box and deselect the **Show Only Favorites** menu item. Simply **Vault** or whichever view you expected at the bottom of the pane.

13.10.21.2 Unable to communicate with Password Vault Manager

ERROR

UNABLE TO COMMUNICATE WITH PASSWORD VAULT MANAGER, PLEASE VERIFY IT'S STARTED AND THAT THE DATABASE IS OPENED!:

When trying to retrieve a credential using your Password Vault Manager credential entry in Remote Desktop Manager, the loading times out and you receive the following error message;


Remote Desktop Manager

Unable to communicate with Password Vault Manager, please verify it's started and that the database is opened!

Error Dialog

SOLUTION

Please follow the steps bellow to resolve this.

1. Close Remote Desktop Manager.

2. Navigate to ***%LOCALAPPDATA%/Devolutions/RemoteDesktopManager***

3. Edit the file ***RemoteDesktopManager.cfg*** with a file editor.

3. Add the following line in the **Configuration File**:

```
<EnsurePasswordVaultManagerPresent>false</EnsurePasswordVaultManagerPres
```

4. Save the file & restart Remote Desktop Manager. You should now be able to successfully communicate with Password Vault Manager.

13.10.21.2 Proxy Authentication Required Error

DESCRIPTION

When opening Remote Desktop Manager, you receive the following error message;

The remote server returned an error. (407) Proxy Authentication Required.

SOLUTION 1

Please configure your proxy in ***File -> Options -> Proxy***.

SOLUTION 2

Please add the ***devolutions.net*** in your Proxy's exception list.

For those using our cloud solutions, please also add https://cloud.devolutions.net.

13.10.22RPC

ERRORS

THE RPC SERVER IS UNAVAILABLE (EXCEPTION FROM HRESULT: 0X800706BA)

This error may occur in the normal operation of RDM. The root causes are network connectivity or stopped Windows services.

1) Ensure the host is properly identified (**Name** or **IP address**) and it is indeed running and accepting network traffic.
2) Ensure the host firewall allows inbound traffic for Windows Management Instrumentation.
3) Ensure the following services are started and are set to automatic startup type.

   - **TCP/IP NetBIOS Helper**
   - **Remote Procedure Call (RPC)**
   - **Windows Management Instrumentation**

13.10.23Secret Server

DESCRIPTION

TESTING PROCEDURE WITH POWERSHELL

Here is a script that you can use to test your access from a client workstation.

Save the following code in a file called ***searchsecret.ps1***.

Change the script as needed to match your Secret Server and username/password/domain.

Change the $searchterm to match your search.

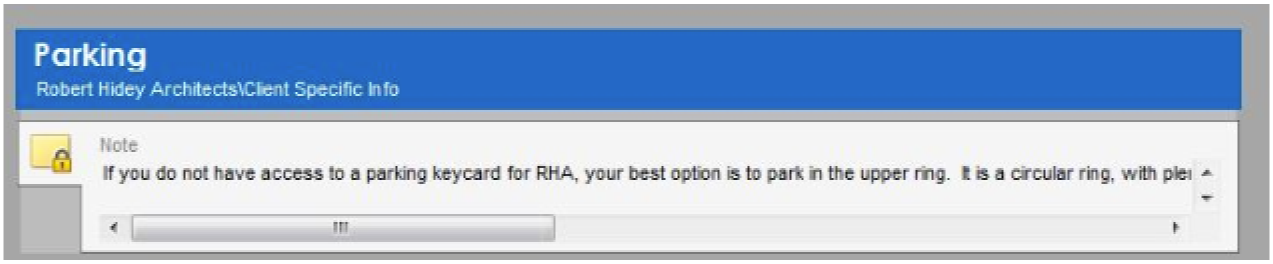
This will allow you to test the connectivity between your workstation and your Secret Server server.

```
$url = 'http://mysecretserver/webservices/sswebservice.asmx'
$username = 'myusername'
$password = 'mypassword'
$domain = 'mydomain'   # leave blank for local users

$searchterm = 'VPN'
$proxy = New-WebServiceProxy -uri $url -UseDefaultCredential

# get a token for further use by authenticating using username/password
$result1 = $proxy.Authenticate($username, $password, '', $domain)
if ($result1.Errors.length -gt 0){
$result1.Errors[0]
exit
}
else
{
$token = $result1.Token
}

# search secrets with our searchterm (authenticate by passing in our token)
Write-Host 'Searching for: ' $searchterm
$result2 = $proxy.SearchSecrets($token, $searchterm,$null,$null)
if ($result2.Errors.length -gt 0){
$result2.Errors[0]
}
else
{
Write-Host 'Got search results: ' $result2.SecretSummaries.length

# If you want the data as XML
# $xml = convertto-xml $result2.SecretSummaries -As string -Depth 20
# $xml

$result2.SecretSummaries | ForEach-Object { Write-Host 'SecretId:' $_.SecretId '  Name:'

# if ($result2.SecretSummaries.length -gt 0) {
# $result2.SecretSummaries[0]
# }

}
```

13.10.24 Secure Note

ERROR

THE TEXT IN A SECURENOTE IS NOT DISPLAYED PROPERLY.



Parking

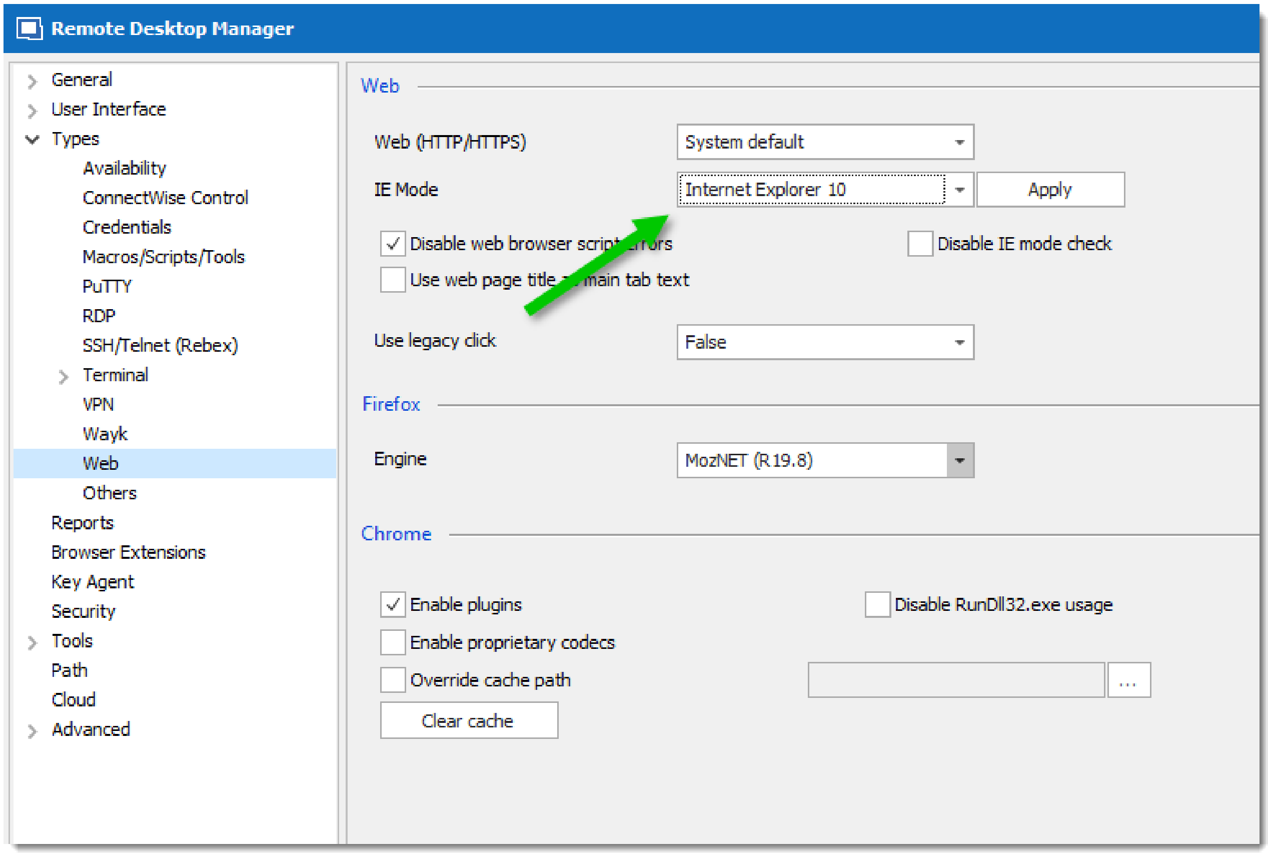
Robert Hidey Architects\Client Specific Info

Note

If you do not have access to a parking keycard for RHA, your best option is to park in the upper ring. It is a circular ring, with plei

SecureNote

Change the IE emulation mode in ***File – Options – Types – Web,*** set the **IE Mode** to use **Internet Explorer 10**.



Web

Web (HTTP/HTTPS): System default

IE Mode: Internet Explorer 10 Apply

☑ Disable web browser script errors

☐ Disable IE mode check

☐ Use web page title as main tab text

Use legacy click: False

Firefox

Engine: MozNET (R19.8)

Chrome

☑ Enable plugins

☐ Disable RunDll32.exe usage

☐ Enable proprietary codecs

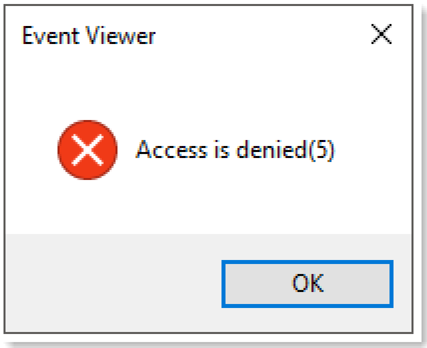
☐ Override cache path

IE Mode

13.10.25Session Tools

COMPUTER MANAGEMENT GENERATES AN "ACCESS IS DENIED(5)" ERROR MESSAGE

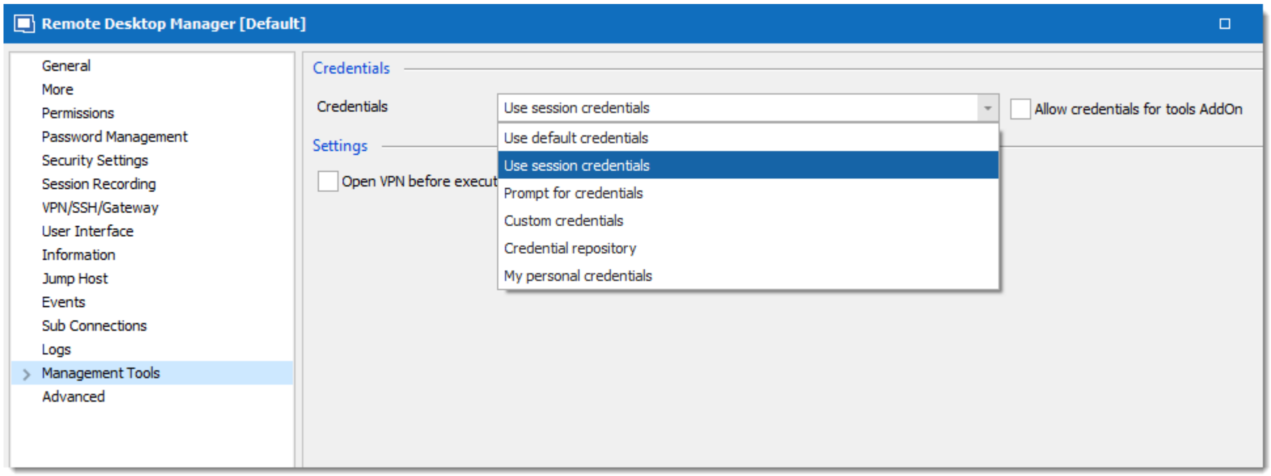
When you attempt to use **Computer Management**, you receive the error below.



Event Viewer

Access is denied(5)

To get this working, you need to check this option in the **Tools** tab of the RDP session.



Remote Desktop Manager [Default]

Credentials: Use session credentials

□ Allow credentials for tools AddOn

□ Open VPN before execut

RDP Session Properties

If this doesn't solve your issue, it is likely that your session has **User Specific Settings** enabled. Please check your session for these settings.

This can be useful when you are using tools such as:

- **Hyper-V**
- **Event Viewer**
- **Computer Management**
- **Windows Services**

If this is often needed, we recommend you to change the Default Settings of the entry type. With this modification, all your new sessions will use the specified credentials when a tool is launched!

13.10.26SSH

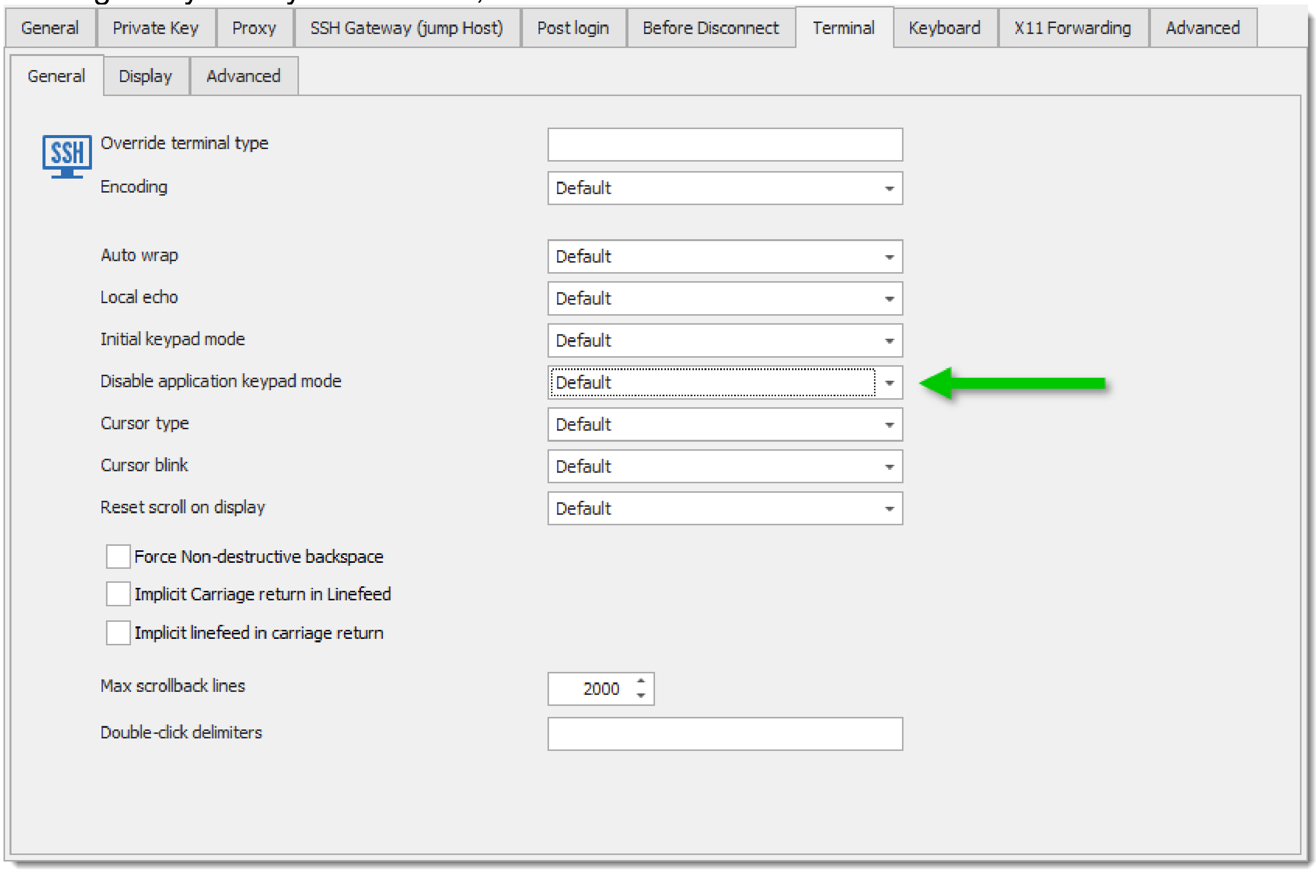
REBEX.NET.SSHEXCEPTION: UNSUPPORTED PROTOCOL VERSION.

Only SSH v2 is supported. SSH v1 has inherent design flaws which make it vulnerable and it has been generally considered obsolete. Putty can be used for situations where SSH v1 is required.

APPLICATION KEYPAD NOT WORKING CORRECTLY.

When trying to use the keypad in SSH, it does not send the correct characters when you type.

In the **Terminal** tab, please set the Disable application keypad mode to True so that the option works globally on all your sessions;



Override terminal type

Encoding: Default

Auto wrap: Default

Local echo: Default

Initial keypad mode: Default

Disable application keypad mode: Default

Cursor type: Default

Cursor blink: Default

Reset scroll on display: Default

□ Force Non-destructive backspace

□ Implicit Carriage return in Linefeed

□ Implicit linefeed in carriage return

Max scrollback lines: 2000

Double-click delimiters

SSH Keypad mode

13.10.27 Synchronizers

13.10.27.1 Active Directory Synchronizer

GENERAL

ENTRIES ARE CREATED WITH A *CNF:{GUID} SUFFIX

This is a problem caused by Multimaster replication of directory objects. When there are name collisions, the system automatically renames one of the accounts by appending CNF to indicate conflict resolution and a GUID which is guaranteed to be unique.

There is a command to run to remove these objects, namely ***repadmin /removelingeringobject,*** please consult these references for the recipe to follow.

REF : http://technet.microsoft.com/en-us/library/bb727059.aspx and https://social.technet.microsoft.com/Forums/windowsserver/en-US/e9327be6-922c-4b9f-8357-417c3ab6a1af/cnf-remove-from-ad?forum=winserverDS

DUPLICATE ENTRIES CREATED

HOST NAME IS APPENDED WITH CNF, AND THE ENTRY NAME ALSO CONTAINS A GUID SUFFIX

Please refer to Entries created with a CNF:{GUID} suffix above.

13.10.28 VMWare

ERRORS

VMware tools make assumptions that their scripts are run in an interactive session and also present warnings the first time that they are run. As it stands today, you have to run commands interactively after you've installed or upgraded their tools.

The PowerCLI configuration has multiple scopes: **Session**, **User**, and **AllUsers**. Please refer to their documentation for details and on how to properly configure as per your requirements.

CONNECTION TO THE SERVER FAILED!

This error message is displayed for various reasons. For a quick diagnostic, launch the VMware vSphere PowerCLI shortcut of the same bitness (32/64 bit) as your Remote Desktop Manager. Some commands will be listed in the table below to diagnose issues in sequence

STEP	COMMAND
Have you specified the Execution Policy of scripts?	Get-ExecutionPolicy
Have you configured the PowerCLI's InvalidCertificateAction?	Get-PowerCLIConfiguration
Have you configured the PowerCLI's DefaultVIServerMode?	Get-PowerCLIConfiguration

IN THE POWERSHELL WINDOW : ERROR MESSAGE APPEAR BUT IT IS IMPOSSIBLE TO READ THEM BEFORE THE WINDOW CLOSES

Remote Desktop Manager ultimately sends a few commands in an encoded script, you can open a PowerShell window and type the following commands sequentially. This way you will have time to see the error messages.

The first command connects with the server, a password prompt will appear:

```
Connect-VIServer {server ip or name};
```

The second command lists the virtual machines present on the server. It displays the Name and the ID.

```
Get-View -ViewType VirtualMachine |  select -Property Name, {$_.Moref.Value};
```

IN THE POWERSHELL WINDOW : THERE WERE ONE OR MANY PROBLEM WITH THE SERVER CERTIFICATES

You also see a message related to **Set-PowerCLIConfiguration**. Please consult https://www.vmware.com/support/developer/PowerCLI/PowerCLI51/html/Set-PowerCLIConfiguration.html and make an informed decision as what is the best course of action when you take your security concerns into account. For users that are comfortable in leaving the default certificate on the VMware server, you can launch a PowerShell command window and run the following:

```
set-PowerCLIConfiguration -invalidCertificateAction "ignore" -confirm:$false
```

IN THE POWERSHELL WINDOW : THERE IS A QUESTION ABOUT MULTIPLE SERVER SUPPORT

As described in their message, it will be the default value in a coming release. Please consult their documentation and make an informed decision, but most users should accept the Multiple option.

ISSUES WITH VMWARE POWERCLI

THE TERM 'CONNECT-VISERVER' IS NOT RECOGNIZED AS THE NAME OF A CMDLET, FUNCTION, SCRIPT FILE, OR OPERABLE PROGRAM. CHECK THE SPELLING OF THE NAME, OR IF A PATH WAS INCLUDED, VERIFY THAT THE PATH IS CORRECT AND TRY AGAIN

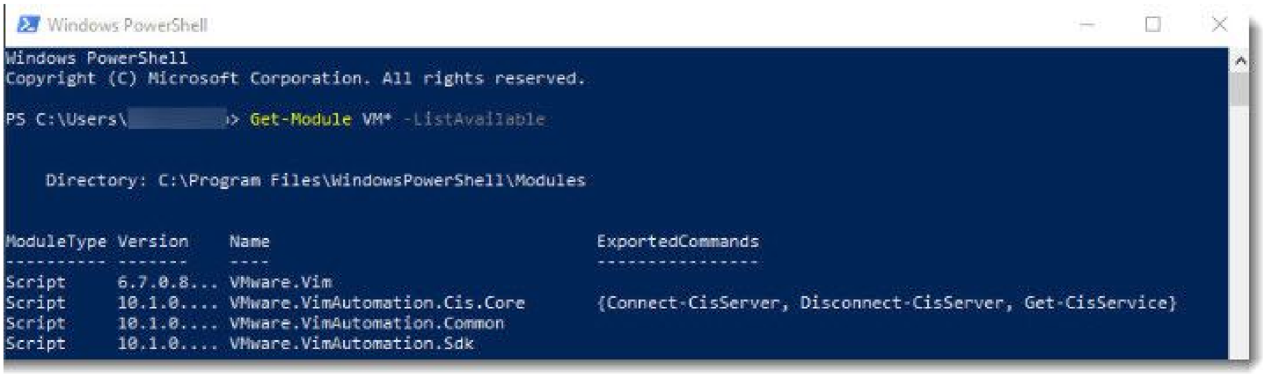
CAUSE

This error occurs because the PowerCLI modules are not linked with PowerShell or the PowerCLI Module for the Connect-ViServer command is missing.

SOLUTION

Check is VMware PowerCLI is installed.

Running **'Get-Module VM* -ListAvailable'** in PowerShell shows the list of VMware modules installed.

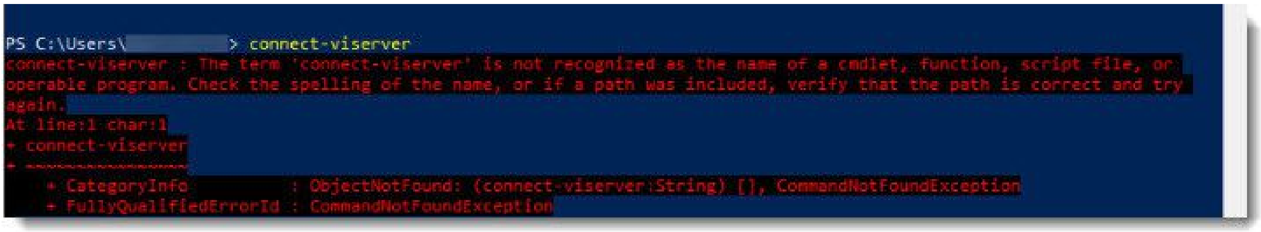


```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

PS C:\Users\[redacted]> Get-Module VM* -ListAvailable


    Directory: C:\Program Files\WindowsPowerShell\Modules


ModuleType Version    Name                              ExportedCommands
---------- -------    ----                              ----------------
Script     6.7.0.8... VMware.Vim
Script     10.1.0.... VMware.VimAutomation.Cis.Core     {Connect-CisServer, Disconnect-CisServer, Get-CisService}
Script     10.1.0.... VMware.VimAutomation.Common
Script     10.1.0.... VMware.VimAutomation.Sdk
```

VMware PowerCLI

You should see 4 VMware modules listed in PowerShell as shown in the image above.

You can test to see if PowerShell recognizes the **'Connect-ViServer'** command.



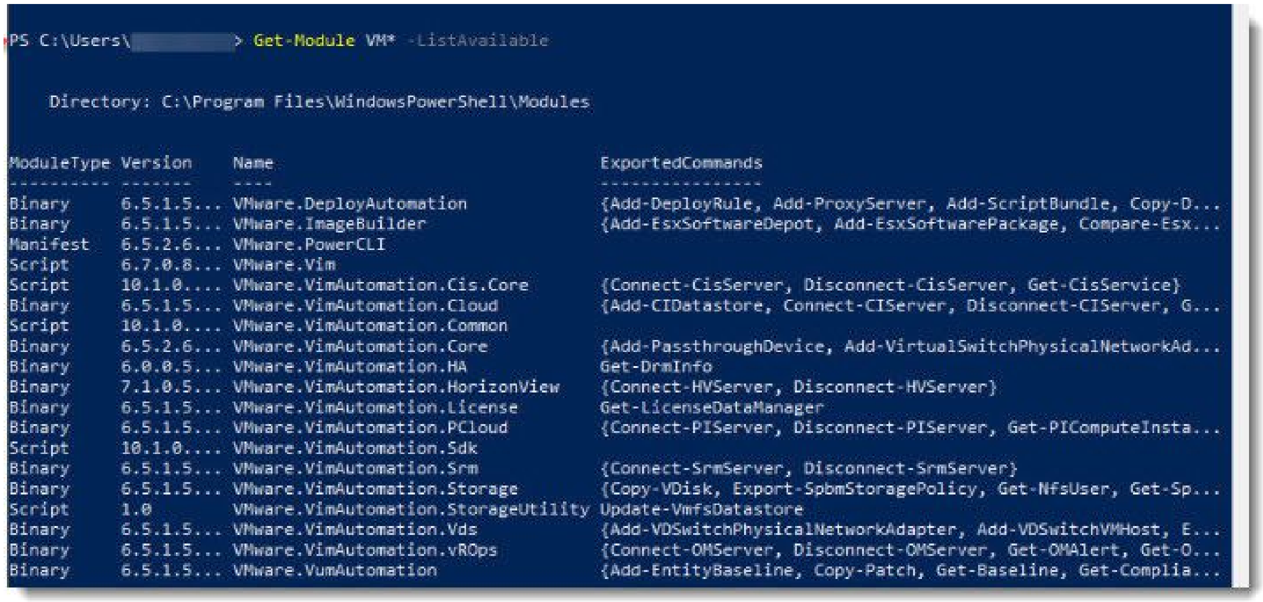
```
PS C:\Users\[redacted]> connect-viserver
connect-viserver : The term 'connect-viserver' is not recognized as the name of a cmdlet, function, script file, or
operable program. Check the spelling of the name, or if a path was included, verify that the path is correct and try
again.
At line:1 char:1
+ connect-viserver
+ ~~~~~~~~~~~~~~~~
    + CategoryInfo          : ObjectNotFound: (connect-viserver:String) [], CommandNotFoundException
    + FullyQualifiedErrorId : CommandNotFoundException
```

VMware PowerCLI

By typing the command, we see that PowerShell doesn't have the proper module installed.

In the PowerShell Window, install the PowerCLI modules by using the **'Install-Module'** command. Many step by step instructions can be found on Google.

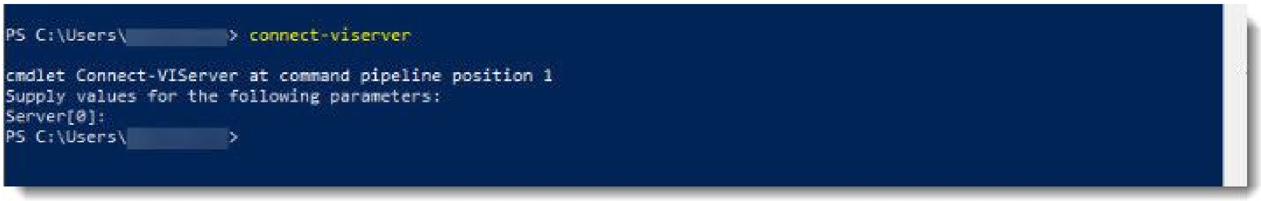
Then type the **'Get-Module VM* -ListAvailable'** command again, we can see that the PowerCLI modules are now listed.



```
PS C:\Users\[redacted]> Get-Module VM* -ListAvailable


    Directory: C:\Program Files\WindowsPowerShell\Modules


ModuleType Version    Name                                ExportedCommands
---------- -------    ----                                ----------------
Binary     6.5.1.5... VMware.DeployAutomation             {Add-DeployRule, Add-ProxyServer, Add-ScriptBundle, Copy-D...
Binary     6.5.1.5... VMware.ImageBuilder                 {Add-EsxSoftwareDepot, Add-EsxSoftwarePackage, Compare-Esx...
Manifest   6.5.2.6... VMware.PowerCLI
Script     6.7.0.8... VMware.Vim
Script     10.1.0.... VMware.VimAutomation.Cis.Core       {Connect-CisServer, Disconnect-CisServer, Get-CisService}
Binary     6.5.1.5... VMware.VimAutomation.Cloud          {Add-CIDatastore, Connect-CIServer, Disconnect-CIServer, G...
Script     10.1.0.... VMware.VimAutomation.Common
Binary     6.5.2.6... VMware.VimAutomation.Core           {Add-PassthroughDevice, Add-VirtualSwitchPhysicalNetworkAd...
Binary     6.0.0.5... VMware.VimAutomation.HA             Get-DrmInfo
Binary     7.1.0.5... VMware.VimAutomation.HorizonView    {Connect-HVServer, Disconnect-HVServer}
Binary     6.5.1.5... VMware.VimAutomation.License        Get-LicenseDataManager
Binary     6.5.1.5... VMware.VimAutomation.PCloud         {Connect-PIServer, Disconnect-PIServer, Get-PIComputeInsta...
Script     10.1.0.... VMware.VimAutomation.Sdk
Binary     6.5.1.5... VMware.VimAutomation.Srm            {Connect-SrmServer, Disconnect-SrmServer}
Binary     6.5.1.5... VMware.VimAutomation.Storage        {Copy-VDisk, Export-SpbmStoragePolicy, Get-NfsUser, Get-Sp...
Script     1.0        VMware.VimAutomation.StorageUtility Update-VmfsDatastore
Binary     6.5.1.5... VMware.VimAutomation.Vds            {Add-VDSwitchPhysicalNetworkAdapter, Add-VDSwitchVMHost, E...
Binary     6.5.1.5... VMware.VimAutomation.vROps          {Connect-OMServer, Disconnect-OMServer, Get-OMAlert, Get-O...
Binary     6.5.1.5... VMware.VumAutomation                {Add-EntityBaseline, Copy-Patch, Get-Baseline, Get-Complia...
```

VMware PowerCLI

A Final test with the **'Connect-ViServer'** command, by typing it in PowerShell, the connection is established and the issue should be resolved.



```
PS C:\Users\[redacted]> connect-viserver

cmdlet Connect-VIServer at command pipeline position 1
Supply values for the following parameters:
Server[0]:
PS C:\Users\[redacted]>
```

VMware PowerCLI

ADDITIONAL TROUBLESHOOTING

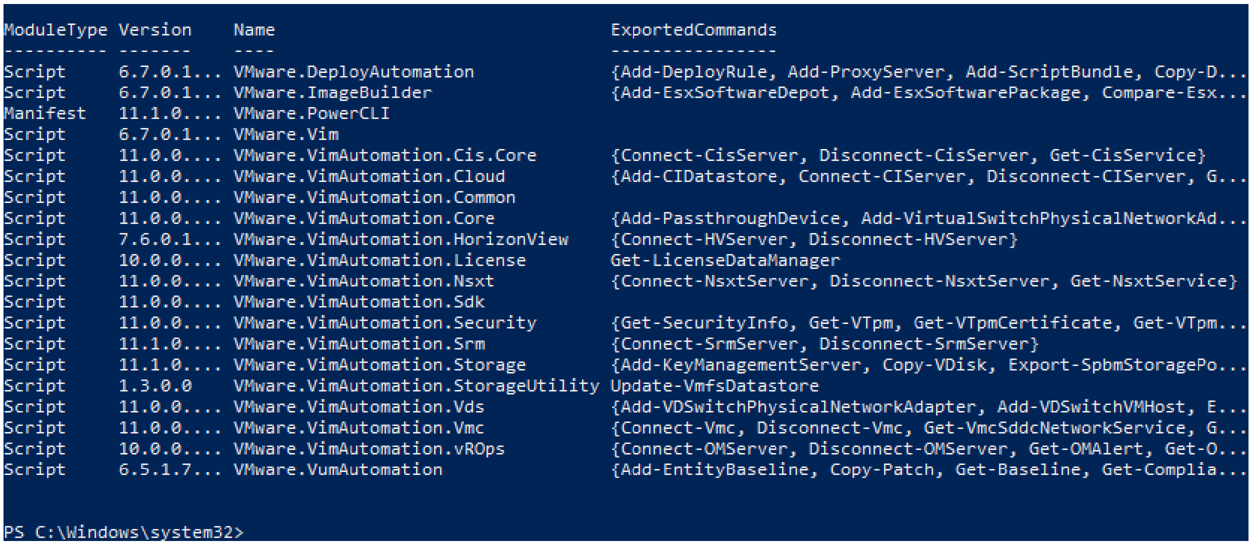
If try on a new computer and have an issue with VimAutomation.Core, you can install it with the command:

```
Install-Module -Name VMware.VimAutomation.Core -AllowClobber -Scope CurrentUser
```

After the installation, if you run the command:

```
Get-Module VM* -ListAvailable
```

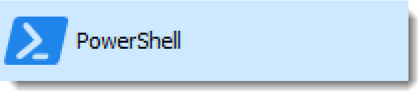
You should get the output below:



```
ModuleType Version    Name                               ExportedCommands
---------- -------    ----                               ----------------
Script     6.7.0.1... VMware.DeployAutomation            {Add-DeployRule, Add-ProxyServer, Add-ScriptBundle, Copy-D...
Script     6.7.0.1... VMware.ImageBuilder                {Add-EsxSoftwareDepot, Add-EsxSoftwarePackage, Compare-Esx...
Manifest   11.1.0.... VMware.PowerCLI
Script     6.7.0.1... VMware.Vim
Script     11.0.0.... VMware.VimAutomation.Cis.Core      {Connect-CisServer, Disconnect-CisServer, Get-CisService}
Script     11.0.0.... VMware.VimAutomation.Cloud         {Add-CIDatastore, Connect-CIServer, Disconnect-CIServer, G...
Script     11.0.0.... VMware.VimAutomation.Common
Script     11.0.0.... VMware.VimAutomation.Core          {Add-PassthroughDevice, Add-VirtualSwitchPhysicalNetworkAd...
Script     7.6.0.1... VMware.VimAutomation.HorizonView   {Connect-HVServer, Disconnect-HVServer}
Script     10.0.0.... VMware.VimAutomation.License       Get-LicenseDataManager
Script     11.0.0.... VMware.VimAutomation.Nsxt          {Connect-NsxtServer, Disconnect-NsxtServer, Get-NsxtService}
Script     11.0.0.... VMware.VimAutomation.Sdk
Script     11.0.0.... VMware.VimAutomation.Security      {Get-SecurityInfo, Get-VTpm, Get-VTpmCertificate, Get-VTpm...
Script     11.1.0.... VMware.VimAutomation.Srm           {Connect-SrmServer, Disconnect-SrmServer}
Script     11.1.0.... VMware.VimAutomation.Storage       {Add-KeyManagementServer, Copy-VDisk, Export-SpbmStoragePo...
Script     1.3.0.0    VMware.VimAutomation.StorageUtility Update-VmfsDatastore
Script     11.0.0.... VMware.VimAutomation.Vds           {Add-VDSwitchPhysicalNetworkAdapter, Add-VDSwitchVMHost, E...
Script     11.0.0.... VMware.VimAutomation.Vmc           {Connect-Vmc, Disconnect-Vmc, Get-VmcSddcNetworkService, G...
Script     10.0.0.... VMware.VimAutomation.vROps         {Connect-OMServer, Disconnect-OMServer, Get-OMAlert, Get-O...
Script     6.5.1.7... VMware.VumAutomation               {Add-EntityBaseline, Copy-Patch, Get-Baseline, Get-Complia...


PS C:\Windows\system32>
```

VMware PowerCLI

If you restart RDM with the current user (not running as admin) and open the VMware Dashboard entry, after 30 seconds, you should see all your servers.

If this does not work, create a PowerShell entry, the blue one  , select **Embedded** Script and type the script below:

```
Import-Module VMware.PowerCLI;
Connect-ViServer "SERVER_IP";
Get-View -ViewType VirtualMachine |  select -Property Name, {$_.Moref.Value};
```

Click **OK** twice and try to start the Powershell entry.

If you get an error about execution policies, please refer to https://docs.microsoft.com/en-us/powershell/module/microsoft.powershell.core/about/about_execution_policies?view=powershell-5.1

But you can resolve the issue with the following command;

```
Set-ExecutionPolicy Unrestricted -Scope CurrentUser
```

Please refer to your administrator to ensure this command is allowed to be used within your infrastructure.

13.10.28.1 Advanced Troubleshooting of the PowerCLI

DESCRIPTION

Remote Desktop Manager calls PowerCLI's cmdlets and presents the results in its user interface. Here are steps to help isolate issues when the integration is not working as expected.

SCRIPT A GET THE LIST OF VIRTUAL MACHINES

GETVMS.PS1

```
Param(
    [Parameter(Mandatory=$true)]
    [string]$viServer,
    [Parameter(Mandatory=$true)]
    [string]$userName,
    [Parameter(Mandatory=$true)]
    [string]$password
) #end param

$VMHost = Connect-VIServer $($viServer) -User $userName -Password $password
if ($VMHost -eq $null ) { throw "Connection to server failed!";}
try
{
  Get-View -ViewType VirtualMachine |  select -Property Name, {$_.Moref.Value};
}
catch
{
    write-host $ErrorMessage
}
Disconnect-VIServer $VMHost -Force -Confirm:$false
```

EXAMPLE USE

```
.\GetVMs.ps1 [SERVER_NAME] [USER_NAME] [PASSWORD]

Name           $_.Moref.Value
----           --------------
MACHINE1       18
MACHINE2       19
```

SCRIPT B - :LAUNCHING THE VMRC

CONNECTVMRCFROMPOWERCLI.PS1

```
Param(
    [Parameter(Mandatory=$true)]
    [string]$viServer,
    [Parameter(Mandatory=$true)]
    [string]$userName,
    [Parameter(Mandatory=$true)]
    [string]$password,
    [Parameter(Mandatory=$true)]
    [string]$morefId = ""
) #end param

$VMHost = Connect-VIServer $($viServer) -User $userName -Password $password

if ($VMHost -eq $null ) { throw "Connection to server failed!";}
$si = Get-View ServiceInstance
$sm = Get-View $si.Content.SessionManager
$ticket = $sm.AcquireCloneTicket()
try
{
    Start-Process -FilePath "C:\Program Files (x86)\VMware\VMware Remote Console\vmr
}
catch
{
    write-host $ErrorMessage
}
#must wait to allow for the process to be started BEFORE we disconnect from the serv
Start-Sleep -s 10
Disconnect-VIServer $VMHost -Force -Confirm:$false
```

EXAMPLE USE

You must send the ***MoRef.Value*** which was obtained using Script A, in our example, let's start MACHINE2 which has 19 for ID.

```
.\ConnectVMRCFromPowerCLI.ps1 [SERVER_NAME] [USER_NAME] [PASSWORD] 19
```

The VMRC should appear and allow you to interact with it.

13.10.29 VPN

13.10.29.1 Missing Opened VPN from List

MISSING OPENED VPN FROM LIST:

The opened VPN is not listed in Remote Desktop Manager. Unfortunately, there is no way for us to detect an already opened VPN session.

13.10.29.2 FortiClient

DESCRIPTION

> Fortinet removed the feature to inject credentials in FortiClient 5.4 and above. However, they still left the feature with FortiSSL

Company terminology:

- Fortinet is the name of the company
- Fortigate is the router of Fortinet
- Forticlient and FortiSSL are VPN of Fortinet

SOLUTION

The CLI for FortiSSL is not included anymore with the download of FortiClient. You need to download the tools related to the current version of FortiClient here.

> You need to have a support plan with Fortinet to download the tools. If you don't have a support plan, try to contact Fortinet directly and ask them to send you the file.

The file FortiSSLVPNClient.exe needs to be saved in the installation folder of FortiClient.

13.10.29.3 Sonicwall Global VPN Client

ERRORS

THE CONNECTION IS NOT ESTABLISHED

Remote Desktop Manager simply calls the command line interface (CLI) with supported parameters. At this time (v4.9), the executable can be found in:

```
C:\Program Files\Dell SonicWALL\Global VPN Client\SWGVC.exe
```

Simply call it as follows:

```
SWGVC.exe /E connection_name /U username /P password
```

The CLI must be able to connect, Remote Desktop Manager doesn't perform anything additional to make it work.

13.10.29.4Microsoft VPN

DESCRIPTION

✓ These types of VPNs can use either the RASDIAL or RASPHONE applications for establishing the connection. Please consult Microsoft's article on their differences and usage.

You can refer to this Microsoft TechNet article for more information on RASDIAL: https://technet.microsoft.com/en-us/library/bb490979.aspx.

For specific errors, consult the ISSUES section below.

GENERAL

Sometimes you need to accept a message or make a choice upon first use, but that typically occurs only the first time. Sadly this makes running the command manually once mandatory on all machines.

If you have elected to store the PBK in Remote Desktop Manager, we simply extract it to ***%TMP%\RDM*** upon usage. After trying to establish a connection once, you should see your phonebook in that folder, is it present?

By default, it uses RASDIAL, what happens if you run the following at the command prompt?

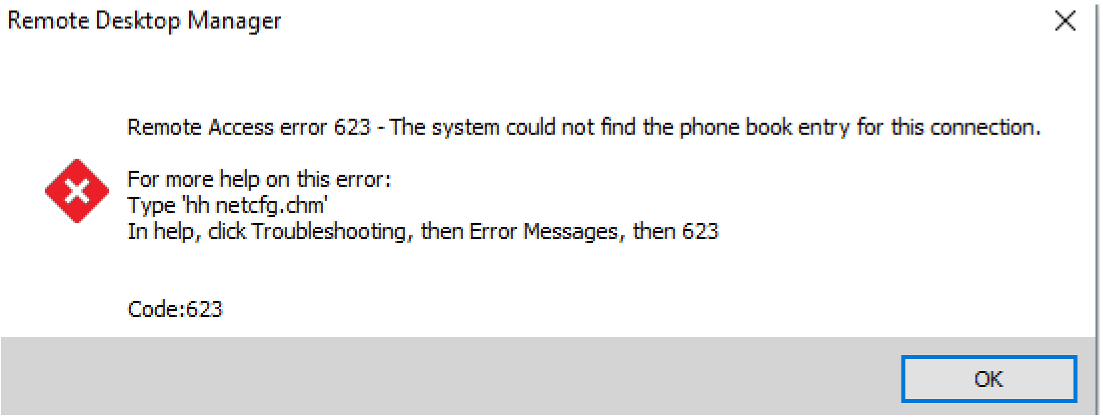
```
rasdial <connectionname> <username> <password> /phonebook:<phonebookpath>
```

or if the **Use rasphone (ConnectionManager Administrator Kit)** option is checked, it will use RASPHONE. What happens if you run the following at the command prompt?

```
rasphone -d <connectionname> -f <phonebookpath>
```

ISSUES

REMOTE ACCESS ERROR 623



Remote Desktop Manager

Remote Access error 623 - The system could not find the phone book entry for this connection.

For more help on this error:
Type 'hh netcfg.chm'
In help, click Troubleshooting, then Error Messages, then 623

Code:623

Remote Access Error 623

Ensure that within the phonebook, the vpn definition name does contain a space character.

PASSWORD WITH QUOTATION MARKS

Quotation mark (") is not a valid character and should not be used in the password of a Microsoft VPN entry.

13.10.29.5 Cisco AnyConnect

DESCRIPTION

The Cisco AnyConnect add-on doesn't send the proper information like the password or the group number to the ***vpncli.exe*** DOS window to establish the VPN connection.

For example, only the half of the password is sent to the Cisco AnyConnect window.

SOLUTION

The Cisco AnyConnect add-on use sendkeys to send information to the ***vpncli.exe*** window. The issue that we encounter is caused by the Windows UAC feature. Enabling/Disabling UAC on your computer should resolved the issue.

On your computer, go in ***Control Panel – User Account – User Account Control Settings***:

- Select **Never Notify** to turn off the option.
- Select **Notify me or Always notify** to turn on the option.

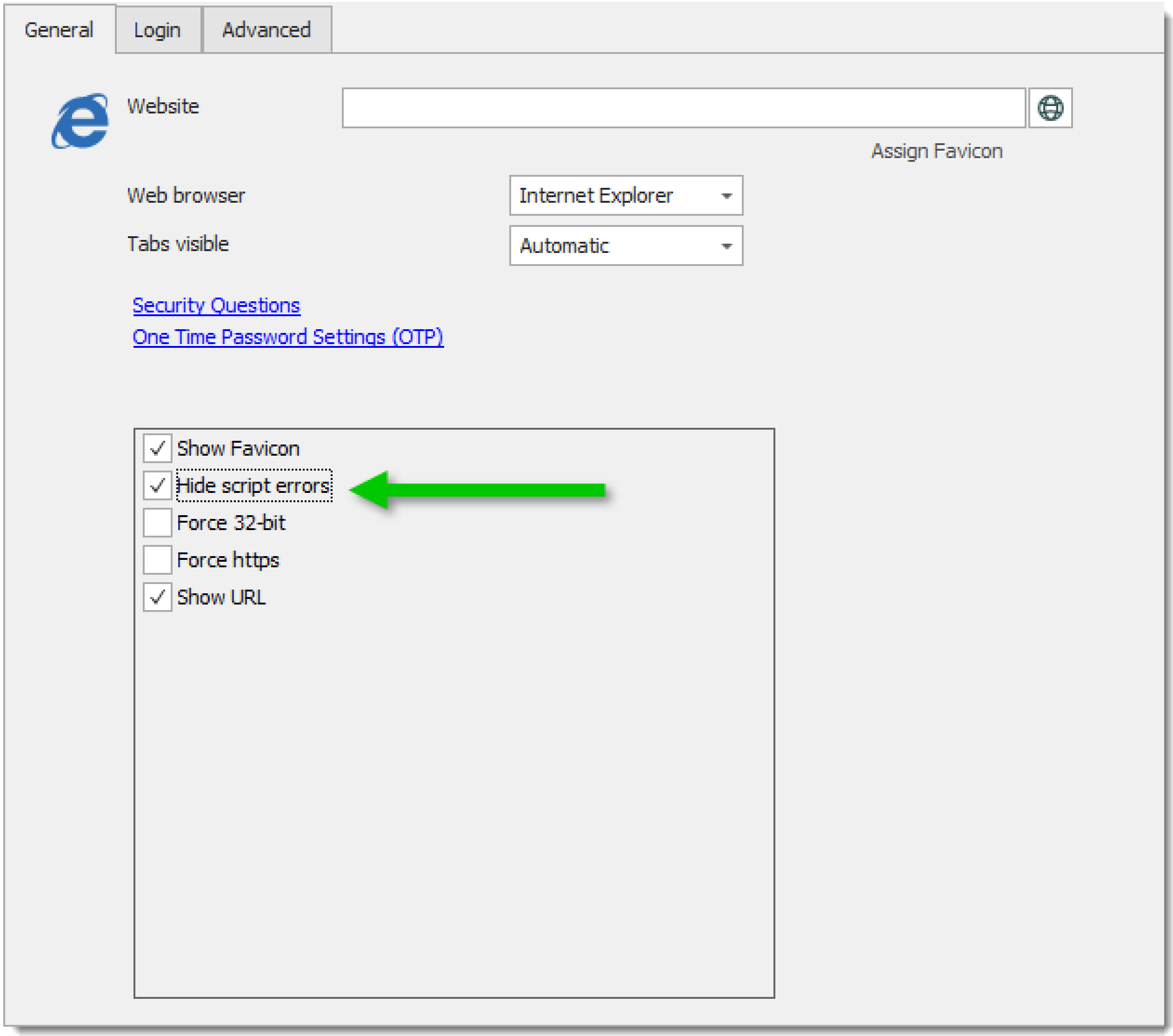
13.10.30Web Browsers

13.10.30.1Internet Explorer

SCRIPT ERROR WITH IE EMBEDDED

AN ERROR HAS OCCURRED IN THE SCRIPT ON THIS PAGE

When you launch a **Web Browser (http/https)** in Internet Explorer directly (**external mode**), the script errors are handled by the browser, so they are not displayed. In embedded mode, you need to enable the **Hide script error** in the properties of your session.



Website

Web browser: Internet Explorer

Tabs visible: Automatic

Security Questions

One Time Password Settings (OTP)

☑ Show Favicon

☑ Hide script errors

□ Force 32-bit

□ Force https

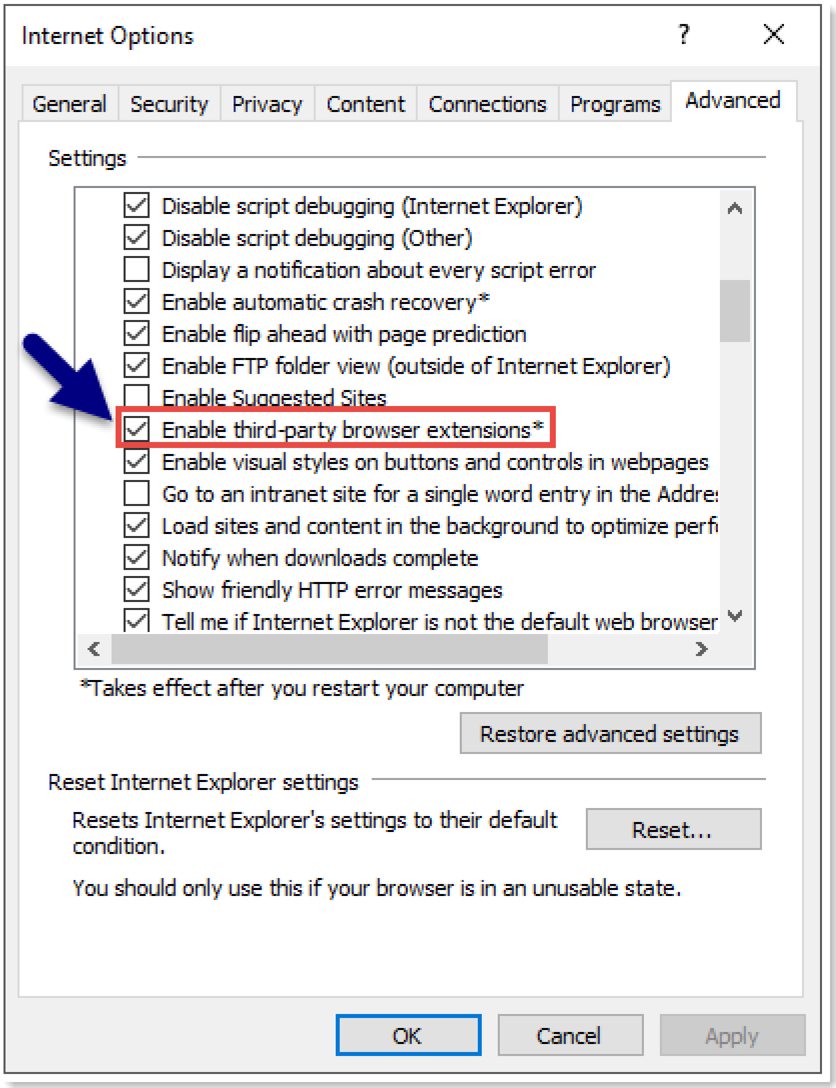
☑ Show URL

IE Embedded

BROWSER EXTENSION DOESN'T APPEAR IN THE TOOLBAR BUT IT IS INSTALLED

This issue occurs when a specific option is unchecked for IE in ***Tools -> Internet Options -> Advanced***

The option is called **Enable third-party browser extensions**. After enabling this option, IE must be restarted.



Internet Options

Settings

☑ Disable script debugging (Internet Explorer)
☑ Disable script debugging (Other)
☐ Display a notification about every script error
☑ Enable automatic crash recovery*
☑ Enable flip ahead with page prediction
☑ Enable FTP folder view (outside of Internet Explorer)
☐ Enable Suggested Sites
☑ Enable third-party browser extensions*
☑ Enable visual styles on buttons and controls in webpages
☐ Go to an intranet site for a single word entry in the Addre
☑ Load sites and content in the background to optimize perf
☑ Notify when downloads complete
☑ Show friendly HTTP error messages
☑ Tell me if Internet Explorer is not the default web browser

*Takes effect after you restart your computer

Reset Internet Explorer settings

Resets Internet Explorer's settings to their default condition.

You should only use this if your browser is in an unusable state.

IE Advanced Options

RENDERING

EMBEDDED HTML CONTENT IS NOT RENDERED WITH THE LATEST INTERNET EXPLORER VERSION

By default Remote Desktop Manager does not use the latest IE version (emulation mode). This can be changed in ***File – Options – Type – Web,*** **IE Mode**.

ACCESSVIOLATIONEXCEPTION - ATTEMPTED TO READ OR WRITE PROTECTED MEMORY

When a crash occurs in Remote Desktop Manager while using some ActiveX in IE, it's often caused by Data Execution Prevention (DEP). DEP is a security feature included in Windows. It is used to prevent an application or service from executing code from a non-executable memory region.

To fix this, simply change the DEP settings for the application as follows:

1. Right Click **My Computer – Properties.**
2. Choose **Advanced System Settings**.
3. Click the **Advanced** Tab.
4. Click **Settings** under **Performance**.
5. Select the tab **Data Execution Prevention**.
6. Add **RDM** to the list.

LAUNCHED EXTERNAL WINDOWS (SUCH AS IE) POPUP IN THE BACKGROUND

You may have noticed that when you launch items such as IE windows from within RDM, they pop-up in the background.

The **ForegroundLockTimeout** registry value for the User’s Profile has to be modified from the default of 200000 down to 0:

```
[HKEY_CURRENT_USER\Control Panel\Desktop]
"ForegroundLockTimeout"=dword:00000000
```

Please note that some programs that have an extensive library of add-ons (Like MS Word) may take the focus every time the add-on performs an action. You have to observe the reaction of your most used programs and judge what is the setup that works best for you.

13.10.30.2 Google Chrome

ISSUES

ADOBE FLASH PLAYER NEEDS YOUR PERMISSION TO RUN

You need to install Adobe Flash Player with PPAPI.

To do so, please follow the steps below:

1- Visit https://get.adobe.com/flashplayer/ **with Google Chrome browser**;

2- Download **Adobe Flash Player**.

3- Launch the installer from your download folder.

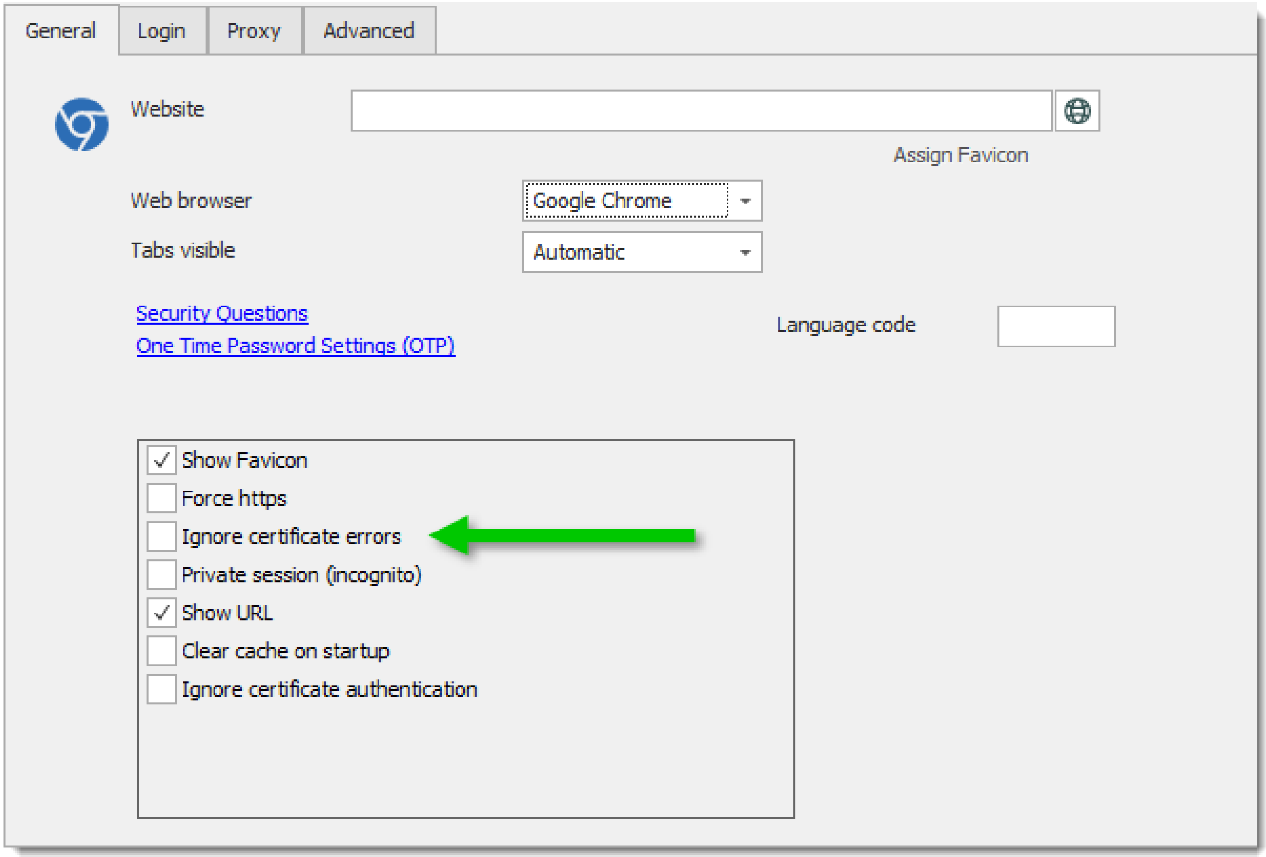
4- After the installation, close and restart Remote Desktop Manager.

5- Create an embedded Chrome web session and use the following link https://get.adobe.com/flashplayer/about/ to verify that it works.

CERTIFICATE ERRORS IN EMBEDDED MODE

Remote Desktop Manager starts Google Chrome in a separate application (Embedded32.exe) and then re-parents the application inside Remote Desktop Manager.

To resolve this issue, you need to check the option **Ignore certificate errors** in the properties of the **Web Browser (http/https)** session.



Website

Assign Favicon

Web browser: Google Chrome

Tabs visible: Automatic

Security Questions

One Time Password Settings (OTP)

Language code

☑ Show Favicon
□ Force https
□ Ignore certificate errors
□ Private session (incognito)
☑ Show URL
□ Clear cache on startup
□ Ignore certificate authentication

Google Chrome Session Properties

13.10.30.3Firefox

ISSUES

FIREFOX IN EMBEDDED MODE DOESN'T WORK IN THE APPLICATION

Remote Desktop Manager starts Firefox in a separate application (Embedded32.exe) and then re-parents the application inside Remote Desktop Manager.

Firefox does not work when the Team Viewer QuickConnect button is present in the title bar.

To resolve this issue, you need to disable the QuickConnect button in Team Viewer by unchecking the option in ***Extra – Options – Advanced – Show advanced options – QuickConnect button – Configure – Show QuickConnect button***.

13.10.30.4 Web Authentication

DESCRIPTION

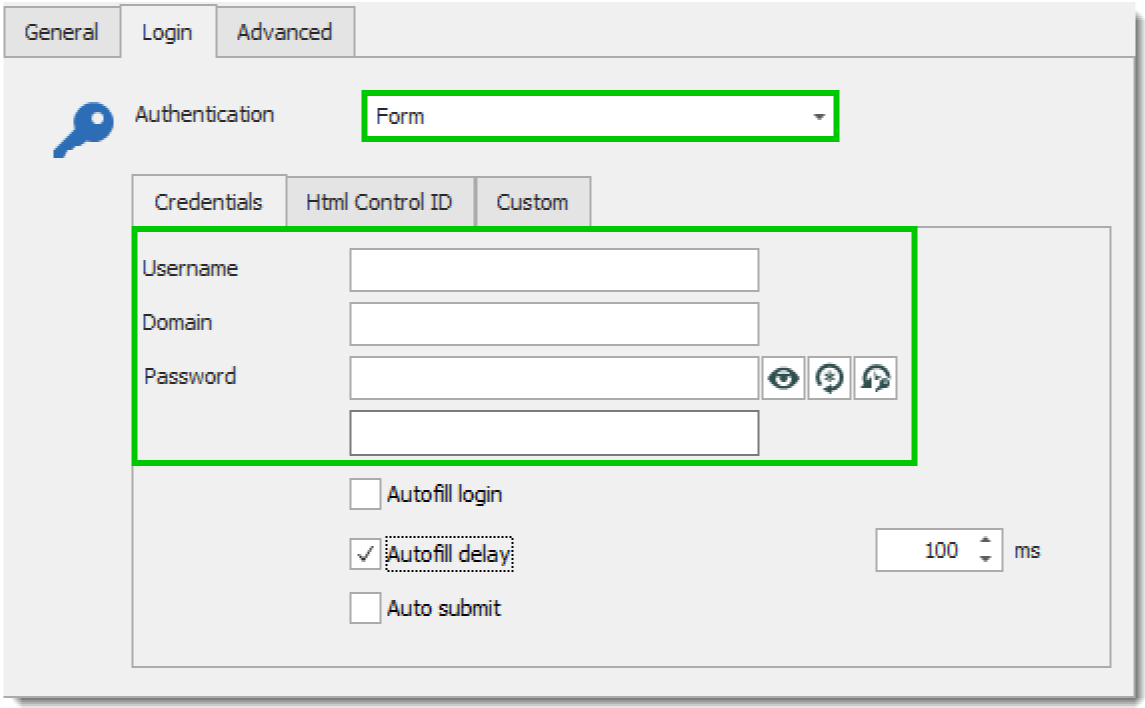
For some websites, the auto fill function does not work out of the box.

It requires some steps in order to properly send the username and password. Depending on the website, the process can be simple or may require additional tweaks.

METHOD 1

AUTOMATICALLY LOG IN TO A WEBSITE

1. In the **Login** tab of the Web Browser entry, select the **Form Authentication mode**, and enter the credentials. Then, verify that the **Autofill login** and **Auto submit** options are enabled.



Authentication: Form

☐ Autofill login

☑ Autofill delay 100 ms

☐ Auto submit

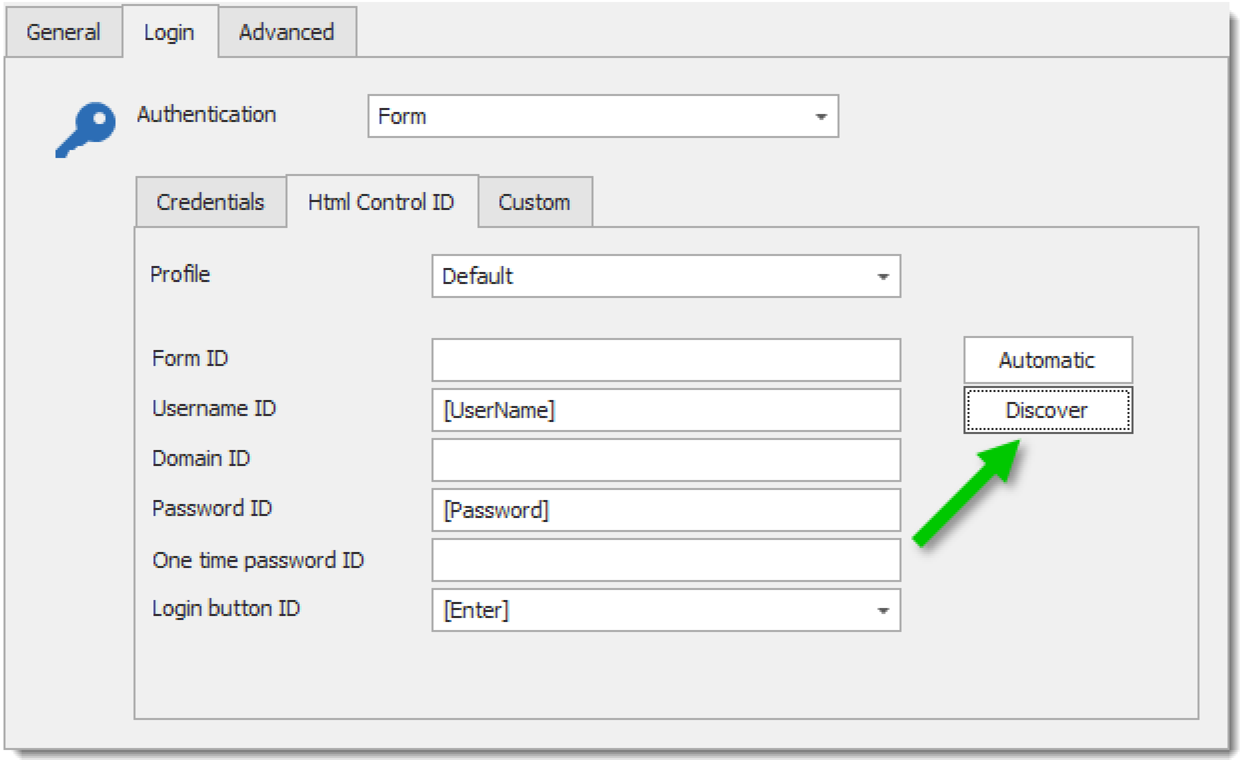
Login - Form Authentication and Credentials

OPTION	DESCRIPTION
Username	Enter the username to connect on the website.

OPTION	DESCRIPTION
Domain	Enter the domain to connect on the website.
Password	Enter the password to connect on the website.
Autofill login	Automatically fills in the credential fields when opening the web page.
Autofill delay	Set a delay between opening the web page and attempting the auto fill feature.
Auto submit	Automatically submit the credentials and try connecting to the website.

2. In the **Html Control ID** tab, click the **Discover** button to define the appropriate fields.

The **Discover** command searches the web page to find the fields that correspond to those in the entry. This allows the application to find the appropriate fields to fill when connecting to the website.



Authentication: Form

Profile: Default

Form ID:

Username ID: [UserName]

Domain ID:

Password ID: [Password]

One time password ID:

Login button ID: [Enter]

Login - Html Control ID - Discover Form Fields

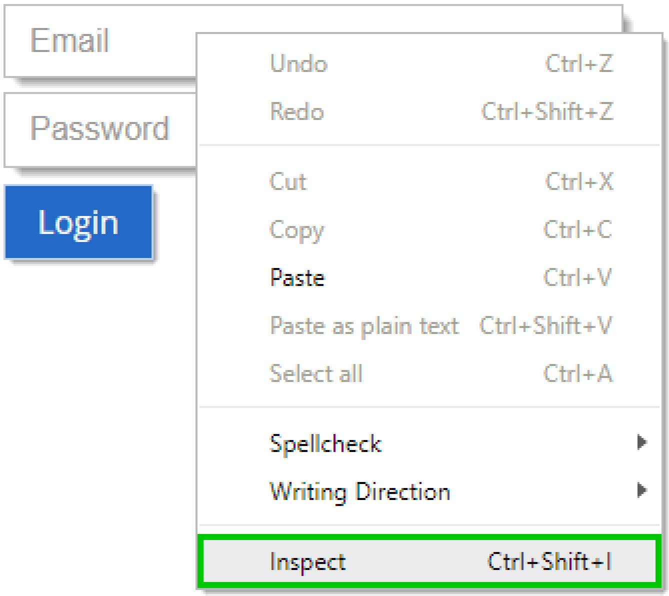
3. Once all the necessary steps have been completed, upon launching the session, the credentials will automatically be entered and logged into the site.

METHOD 2

The second method requires to manually identify the IDs corresponding to the logon fields on the login web page.

For this example, we will be using Google Chrome to inspect the logon fields.

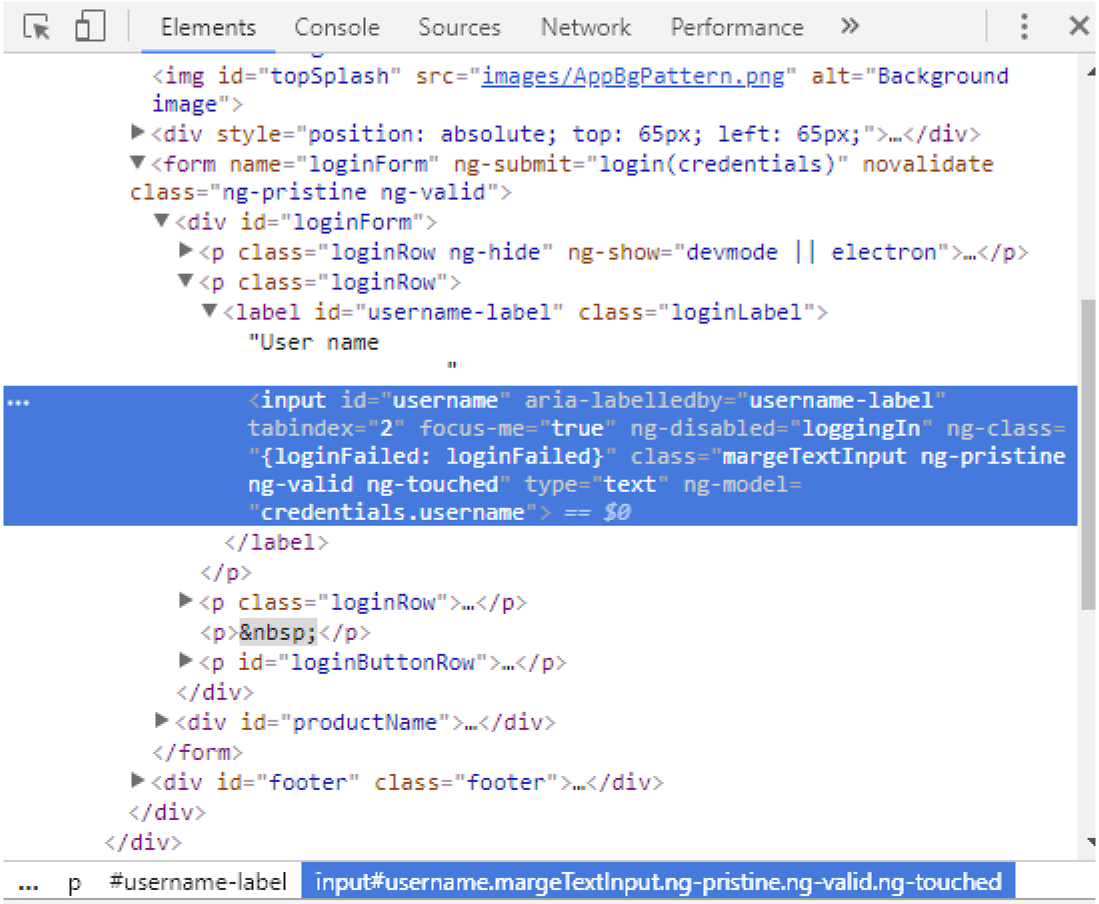
For both the Username & Password fields, do a right-click inside the field and click on Inspect;



Login fields – Inspect

You will see the corresponding IDs to be used in the HTML Control ID tab of the Web session in Remote Desktop Manager;

Below, an example of the inspection for the Username field;


Elements
Console
Sources
Network
Performance
»
… p #username-label input#username.margeTextInput.ng-pristine.ng-valid.ng-touched

```
<img id="topSplash" src="images/AppBgPattern.png" alt="Background
image">
▶<div style="position: absolute; top: 65px; left: 65px;">…</div>
▼<form name="loginForm" ng-submit="login(credentials)" novalidate
class="ng-pristine ng-valid">
  ▼<div id="loginForm">
    ▶<p class="loginRow ng-hide" ng-show="devmode || electron">…</p>
    ▼<p class="loginRow">
      ▼<label id="username-label" class="loginLabel">
          "User name
                  "
          <input id="username" aria-labelledby="username-label"
          tabindex="2" focus-me="true" ng-disabled="loggingIn" ng-class=
          "{loginFailed: loginFailed}" class="margeTextInput ng-pristine
          ng-valid ng-touched" type="text" ng-model=
          "credentials.username"> == $0
        </label>
      </p>
    ▶<p class="loginRow">…</p>
      <p>&nbsp;</p>
    ▶<p id="loginButtonRow">…</p>
    </div>
  ▶<div id="productName">…</div>
  </form>
▶<div id="footer" class="footer">…</div>
</div>
</div>
```

Logon Fields Inspect

13.10.31WebDav

ERRORS

UNABLE TO CONNECT TO WEBDAV

Make sure that the appropriate domain is configured in the **Host** field (ex: domain.com) and that you have "***/remote.php/dav/files/USERNAME/***" in **Start location**.

If you have a HTTPS website, check the **Use SSL** checkbox and configure the port to be 443.

You can always refer you to the ownCloud documentation for more details on WebDav.

13.10.32Web traffic

DESCRIPTION

Do not use this without a specific request from Devolution's support personnel.

The trace file must NOT have a path specified, this requires that RDM be installed in a folder other than Program Files. (Running with elevated privileges doesn't circumvent the UAC.)

PROCEDURE

```
<system.diagnostics>
  <trace autoflush="true" />
    <sources>
      <source name="System.Net" tracemode="protocolonly" maxdatasize="1024">
        <listeners>
          <add name="MyTraceFile"/>
        </listeners>
      </source>
    </sources>

    <sharedListeners>
      <add
       name="MyTraceFile"
       type="System.Diagnostics.TextWriterTraceListener"
       initializeData="System.Net.trace.log"
      />
    </sharedListeners>

    <switches>
      <add name="System.Net" value="Verbose" />
    </switches>
</system.diagnostics>
```

ADVANCED MODE

To use with ***SvcTraceViewer.exe***

```
<sharedListeners>
  <add
   name="MyTraceFile"
   type="System.Diagnostics.XmlWriterTraceListener"
   initializeData="System.Net.trace.svclog"
  />
</sharedListeners>
```

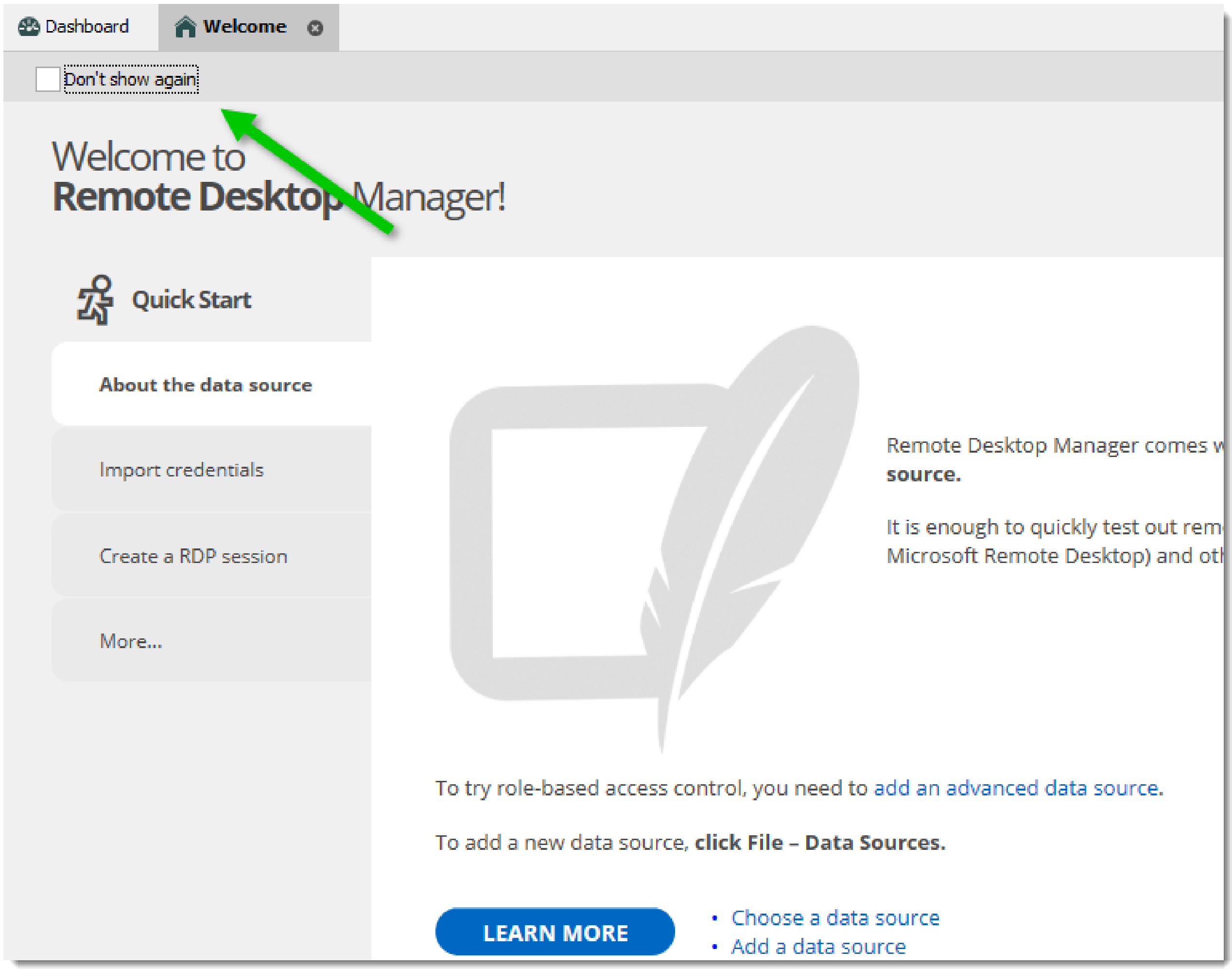
13.10.33Welcome Page

DESCRIPTION

We added a new **Getting Started** page at the opening of Remote Desktop Manager but you don't want to see it every time you open our application.

There are 2 ways of removing that page:

1. If you haven't closed it yet, simply click on **Don't show again** in the upper left corner.



□ Don't show again

Welcome to
Remote Desktop Manager!

Remote Desktop Manager comes w
source.

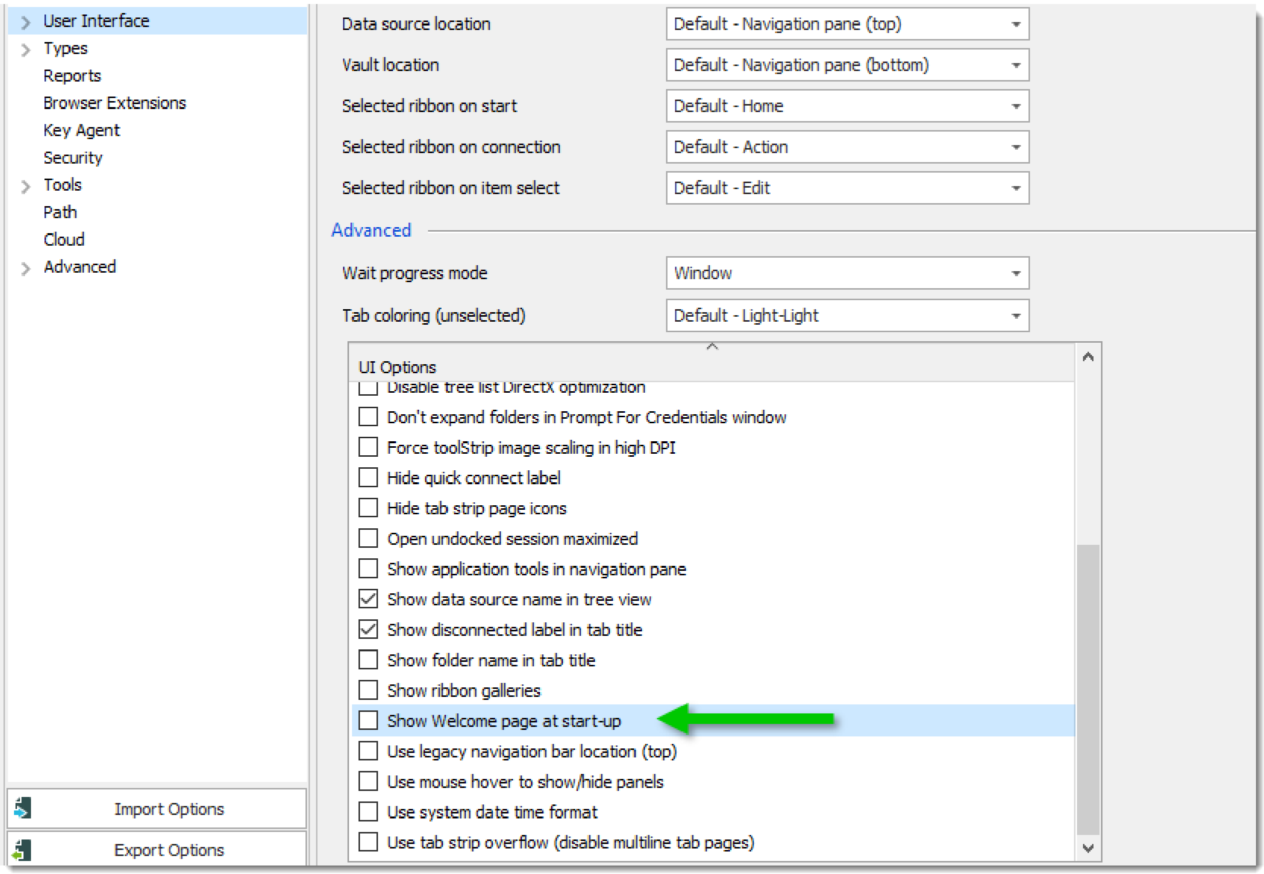
It is enough to quickly test out rem
Microsoft Remote Desktop) and ot

To try role-based access control, you need to add an advanced data source.

To add a new data source, **click File – Data Sources.**

Hide Welcome Page

2. Go in ***File -> Options -> User Interface*** and uncheck **Show Welcome page at start-up**.



Data source location: Default - Navigation pane (top)
Vault location: Default - Navigation pane (bottom)
Selected ribbon on start: Default - Home
Selected ribbon on connection: Default - Action
Selected ribbon on item select: Default - Edit

Advanced

Wait progress mode: Window
Tab coloring (unselected): Default - Light-Light

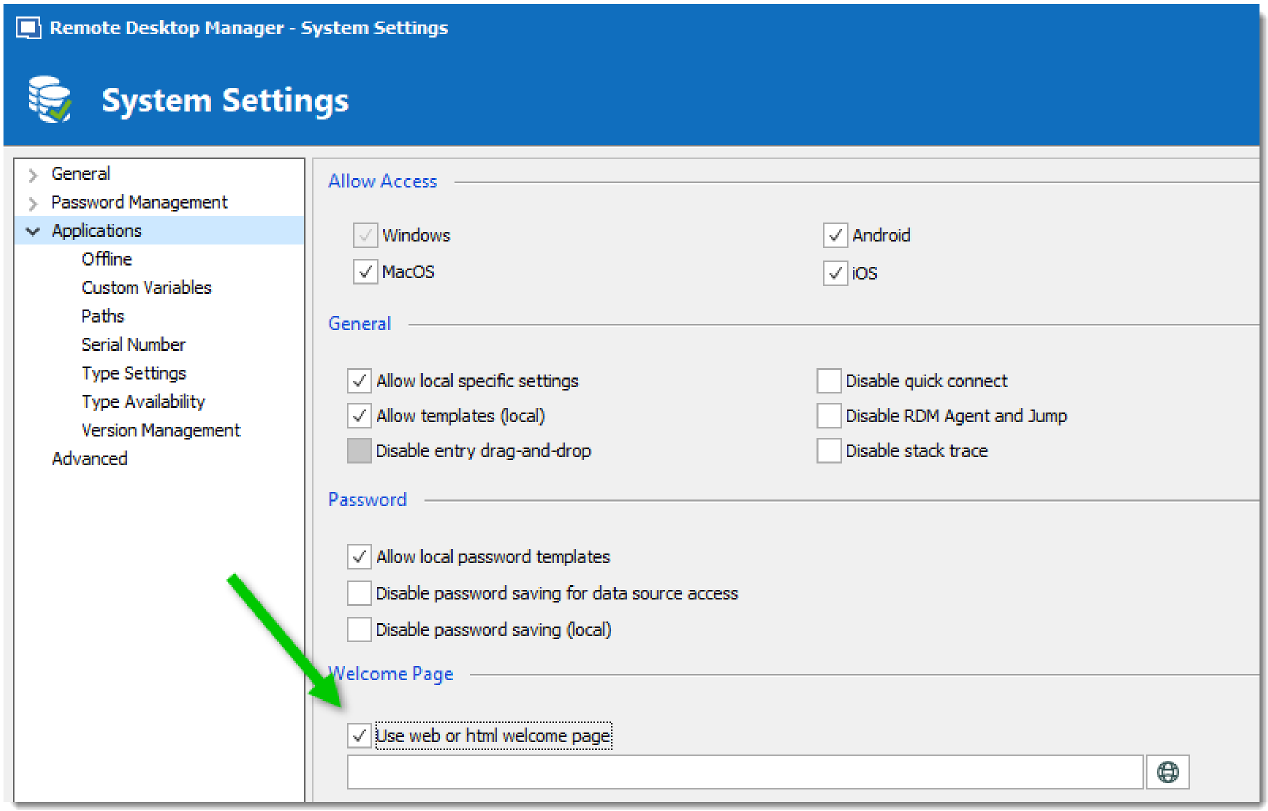
UI Options

- ☐ Disable tree list DirectX optimization
- ☐ Don't expand folders in Prompt For Credentials window
- ☐ Force toolStrip image scaling in high DPI
- ☐ Hide quick connect label
- ☐ Hide tab strip page icons
- ☐ Open undocked session maximized
- ☐ Show application tools in navigation pane
- ☑ Show data source name in tree view
- ☑ Show disconnected label in tab title
- ☐ Show folder name in tab title
- ☐ Show ribbon galleries
- ☐ Show Welcome page at start-up
- ☐ Use legacy navigation bar location (top)
- ☐ Use mouse hover to show/hide panels
- ☐ Use system date time format
- ☐ Use tab strip overflow (disable multiline tab pages)

Hide Welcome Page

CUSTOM WELCOME PAGE

It is possible to display your own welcome page at startup. Under **Administration** in the ribbon, choose **Data Source Settings (System Settings)**. Then, in **Applications**, under the **Welcome Page** section, enter the URL that points to your custom welcome page.



Allow Access

☑ Windows ☑ Android
☑ MacOS ☑ iOS

General

☑ Allow local specific settings ☐ Disable quick connect
☑ Allow templates (local) ☐ Disable RDM Agent and Jump
☐ Disable entry drag-and-drop ☐ Disable stack trace

Password

☑ Allow local password templates
☐ Disable password saving for data source access
☐ Disable password saving (local)

Welcome Page

☑ Use web or html welcome page

Welcome Page URL

13.10.34WMI

DESCRIPTION

Here's a primer on remote WMI:

https://msdn.microsoft.com/en-us/library/aa389290.aspx

In our environment, we basically run winrm quickconfig on all our machines, for those not joined to a domain we also add them to the TrustedHosts list. For machines not joined to a domain, there's an added difficulty if you are using the IP address instead of the **Host** name, it definitely offers a few challenges.

A good strategy is to get remoteWMI to work, then we integrate it in RDM. We like to use WMIC.

https://msdn.microsoft.com/en-us/library/aa394531(v=vs.85).aspx

This is a lot of information to go over, please contact us at ticket@devolutions.net if you hit a hurdle.

ACCESS DENIED ERRORS

Ensure the user account has the necessary permissions to access a computer remotely Securing a Remote WMI Connection (Windows).

You can also find troubleshoot tips in WMI Troubleshooting (Windows).

ERROR GETTING PRODUCTS INFORMATIONS

Invalid Class WMI or WMI class not found on Windows Server 2003. On Windows Server 2003, Win32_Product is not enabled by default. You can enable it by following the steps provided in the link below:

https://social.msdn.microsoft.com/Forums/vstudio/en-US/6fb0d3ea-1ccf-4554-bdf1-79c9e24388af/invalid-class-wmi-windows-2003-server

TESTING FROM A REMOTE COMPUTER

The WMIC command is used to test if you have access to the machine through WMI. You need to enter the following command below;

```
wmic /NODE:"ComputerName" bios get serialnumber
```

Below, an example with other credentials;

```
wmic /NODE:"ComputerName" /user:"username" /password:"password" bios get serialnumber
```

13.11 Tutorials

DESCRIPTION

Our tutorials are published on Devolutions YouTube channel. We have three main categories of tutorials:

- Overview: Brief presentation of a product.
- Getting Started: Procedure to get up and running in a quick fashion.
- Spotlight On...: Detailed presentation of a specific aspect of our products.

Obviously some tutorials will not fit in one of these categories, but our focus is to deliver quality information as soon as possible after the release of a new or modified feature.

Please use our forums if documentation is missing or plain wrong, we will do our best to correct the situation.

13.11.1 Overview

DESCRIPTION

Overview videos present a brief presentation of a product, there is no step-by-step but only explanation of a certain part of our product.

OVERVIEW	DESCRIPTION	LINK
Register your Remote Desktop Manager license	A quick look at how to register your license in Remote Desktop Manager. The data sources are the heart of Remote Desktop Manager. Here is a quick overview of the most popular data sources that we support.	▶ Watch Vide
Register Remote Desktop Manager	A quick look at how to download Remote Desktop Manager and register your license key.	▶ Watch Vide
Remote Desktop Manager	A quick overview of Remote Desktop Manager. See how you can easily and securely centralize and consolidate all your remote connections, credentials and passwords.	▶ Watch Vide
Create Templates and Default Settings	A quick overview at how to execute and export multiple reports with the option of exporting reports through a command line.	▶ Watch Vide
Create Users and Assign Permission	Take a quick look at how to create users for your data base and how to assign specific permission to each user.	▶ Watch Vide
Create a folder structure that reflects your	An overview at how to create a folder structure that will reflect your organizations.	▶ Watch Vide

OVERVIEW	DESCRIPTION	LINK
organization		
Simplified Security	Learn how to create roles and permissions for a granular protection system using our Role Based Security System.	▶ Watch Vide
Choose your data source	An overview at our multiple data sources and how to select the proper one for you and your enterprise.	▶ Watch Vide

13.11.2 Getting Started

DESCRIPTION

Getting Started videos present a step-by-step sequence to start using a product. They differ from our "Spotlight On..." series in that they are targeted on significant feature of the product, rather than on a piece of a whole.

GETTING STARTED	DESCRIPTION	LINK
KeePass	Learn how to perform the setup for the integration of KeePass with Remote Desktop Manager	▶ Watch Vide
LastPass	Learn how to use your own LastPass account to manage passwords in Remote Desktop Manager.	▶ Watch Vide
Remote Desktop Manager Jump	Learn how to perform the initial setup for allowing usage of Remote Desktop Manager Jump to connect to remote devices through a jump host.	▶ Watch Vide
Simplified Security	Learn how to create roles and permissions for a granular protection system using our Role	▶ Watch Vide

GETTING STARTED	DESCRIPTION	LINK
	Based Security System.	
Remote Desktop Manager Step 1: Register your Data Source	Upon first launch learn how to create your first data source and your first database.	▶ Watch Vide
Remote Desktop Manager Step 2 Options for Team Environment	Learn how to set up your options to make your environment more fitting for teams.	▶ Watch Vide
Remote Desktop Manager Step 3: Default Settings	Taking a quick look at our options and what are the best default settings for your team environment before creating your entries.	▶ Watch Vide
Remote Desktop Manager Step 4: Getting Set Up	Learn how to create a folder structure that reflects your organization using Remote Desktop Manager best practices.	▶ Watch Vide
Remote Desktop Manager Step 5: **How to create your entries**	Learn how to create and manage your entries and also taking a quick look at Security Group Management.	▶ Watch Vide
Devolutions Password Server	Learn how to create and set up your Devolutions Password Server.	▶ Watch Vide
Devolutions Online Database	Learn how to can create your Devolutions Account and get started setting up your Online Database.	▶ Watch Vide

13.11.3 Spotlight On...

DESCRIPTION

This video category is destined to contain a number of short tutorials that provide information on more specific aspects or features of Remote Desktop Manager.

Ultimately, all longer videos will be replaced by a series of **Spotlight on...** tutorials.

Our Getting Started topic contains a sequence of steps to follow to go through the initial setup under various conditions. Please refer to it for the best sequence for your environment.

SPOTLIGHT ON...	DESCRIPTION	LINK
Batch Edit	Change the settings of multiple sessions in one operation. For example, it can be used to remove or update all of the credentials of a group of sessions.	▶ Watch Vide
Host and Templates	A host is used to define and configure a generic host session that could be used as the parent for others. You can define a subset of templates to apply at the execution.	▶ Watch Vide
Offline Mode	The offline mode allows you to connect to a read/write copy of the data source when the live database is unavailable. It can be used when a user is working from a disconnected network or when there is any kind of connectivity issue to the data source.	▶ Watch Vide
Simplified Security	Learn how to create roles and permissions for a granular protection system using our Role Based Security System.	▶ Watch Vide
User Interface	Learn how to manipulate the user interface elements of Remote Desktop Manager and adapt it according to your preferences.	▶ Watch Vide
Execute Report through Command Line	Learn how to execute and export same reports multiple times by exporting reports through a command line.	▶ Watch Vide

Index

Devolutions

Control the IT Chaos

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