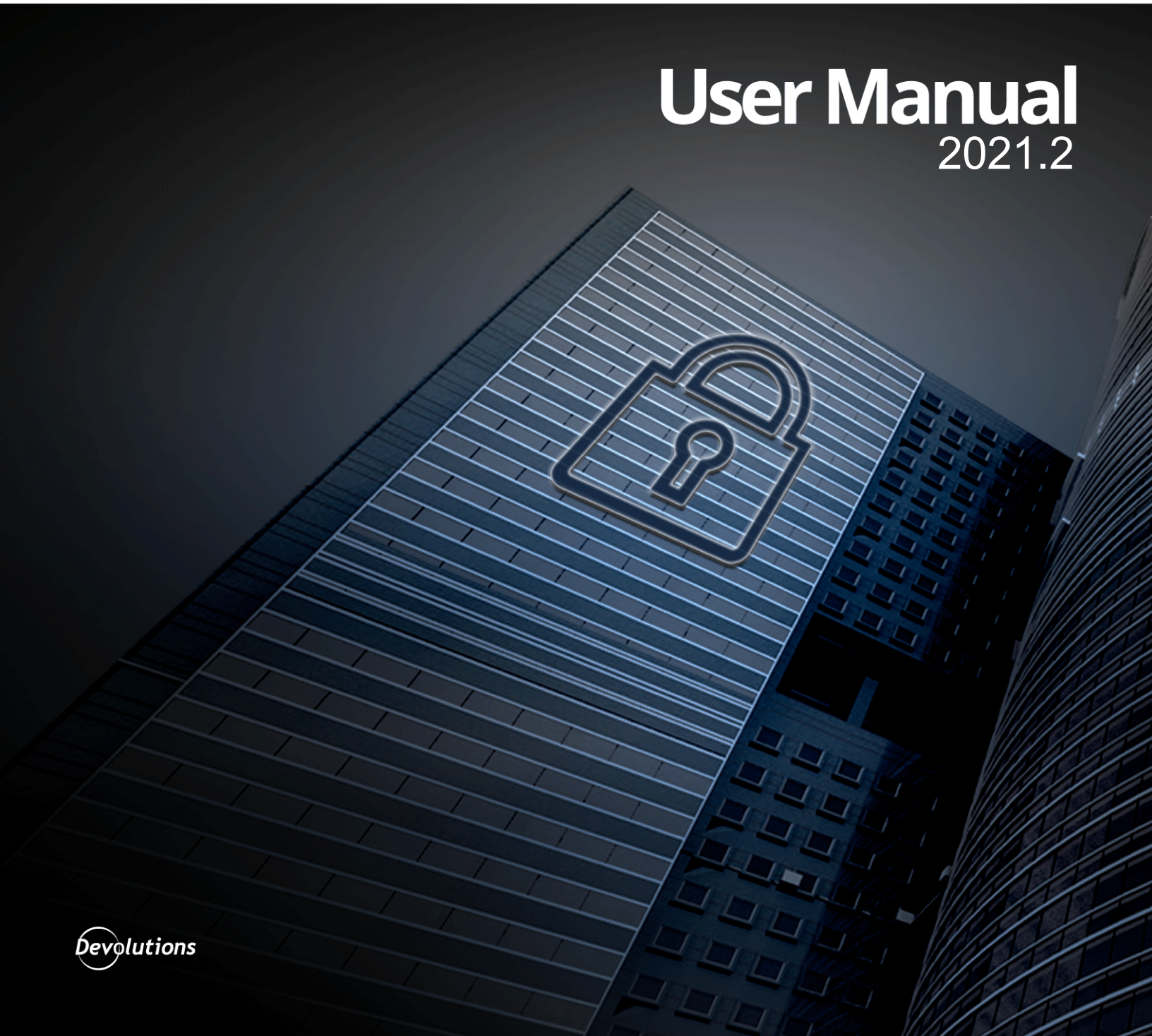
Devolutions Server

Privileged Access Management
for Small and Medium-Sized Businesses

User Manual

2021.2



Devolutions

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Overview

Part

1 Overview

1.1 What is Devolutions Server?

DESCRIPTION

This documentation is valid for version 2021.2.0.Previous Versions

Devolutions Server is an **on-premise** vault for storing and **sharing** information across your whole organization. Manage remote connections, credentials, and sensitive information with ease.

Use our **User Groups Based Access Control** to grant permissions in a granular fashion. Advanced logging of all user activity is included to offer visibility in all aspects of the solution.

Because of its Web Architecture you have the possibility to offer it only from your intranet or publish it on the Internet.

There are two ways of using Devolutions Server:

Web-Based Vault

Session Management

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Web browser access and Devolutions Web Login	Using a client application (desktop or mobile)
Access vaulted resources from a web browser using a Client Access License (CAL). Credentials are managed directly from the web interface and no client application is required. With the Devolutions Web Login browser extension, credentials can be automatically submitted when connecting to a website.	Access vaulted resources using our client applications which communicate with Devolutions Server web services. A local installation of a client application such as Remote Desktop Manager is required to manage the data source and its resources. Note that we offer Windows, macOS, Android and iOS editions. Use any type of entry, manage all aspects of the data source and monitor user activity all in the same application.
Remote access technologies (RDP, VNC, etc) are not supported within a web browser.	**Unlike with web browser access, Remote Desktop Manager can launch sessions using remote access technologies.**

HIGHLIGHTS

HIGH-END SERVER

FULL ACTIVE DIRECTORY (AD) INTEGRATION

WEB ARCHITECTURE

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Installed **on-premise** on an application server. Store entries in an unlimited number of vaults and manage access to these entries with our **User Groups Based Access Control**.	Users accessing the system will be granted permissions based on their membership in specific AD groups, making user management almost seamless for organizations that use AD to manage teams.	Implemented using a Web architecture so it can exposed publicly on the **Internet** or only to your **Intranet** or **private cloud**.
TWO-FACTOR AUTHENTICATION	**EMAIL NOTIFICATIONS**	**IP RESTRICTIONS**
Widest choice of Two-factor authentication (2FA) providers. Many providers can be enabled concurrently. They can selectively be enforced per user.	Optionally receive email notifications for various events on sessions, users, user groups, etc.	Controlling access to Devolutions Server from IP addresses / ranges, including GeoIP restriction and IP whitelisting / blacklisting.

1.2 System Requirements

MINIMUM REQUIREMENTS

Devolutions Server needs Microsoft .NET Framework 4.7.2 to function. Please adapt your environment depending on which version you are running.

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DEPENDENCIES

- Microsoft SQL Server 2012/2014/2016/2017/2019 (including Express editions).
- Azure SQL database is supported with SQL login accounts only. Azure Active Directory accounts are not supported.
- Windows 10, Windows Server 2012R2, 2016 and 2019.
- Windows Server 2012R2 domain functional level or higher.
- Microsoft .NET Framework 4.7.2 (Please refer to the requirements for the .Net Framework for operating systems).
- Internet Information Services (IIS) 7.0 or better.
- Devolutions Server Console must be installed on the server to manage the Devolutions Server instance(s).

SERVER SIZING

Many customers often ask how to properly customize their servers for various topologies. This is essentially unreliable because the way the system is used has a significant impact on the resource usage of each node within the chosen Topology.

The great majority of setups that we have observed work well with nodes of 4GB RAM and a dual CPU. Most of these are virtualized environments, so granting more resources is relatively simple.

For a proper estimate, the following aspects must be considered:

- Number of entries stored in your instance (server details, credentials, etc.).
- Churn of these entries; do you create entries daily or are they quite static?

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- Number of concurrent users that connect to the Devolutions Server instance during peak times.
- Usage of information by the users. Are they launching 10 sessions at a time, doing a batch operation that takes a few minutes and then repeating the cycle, or are they opening only a few sessions but working within them all day long. This results in **write** operations to our logs, therefore the former case is more intensive then the latter.

64-BIT SUPPORT

Devolutions Server is compatible with all 64-bit versions of Windows.

1.3 Topologies

DESCRIPTION

Devolutions Server instances can be installed through different topologies. The following are examples of different topologies serving various purposes.

SINGLE SERVER TOPOLOGY

The Devolutions Server and the SQL Server can be installed on the same machine for a small team up to 20 users. Having Devolutions Server and SQL Server on the same machine could result in certain performance issues if you attempt to serve more than 20 users.

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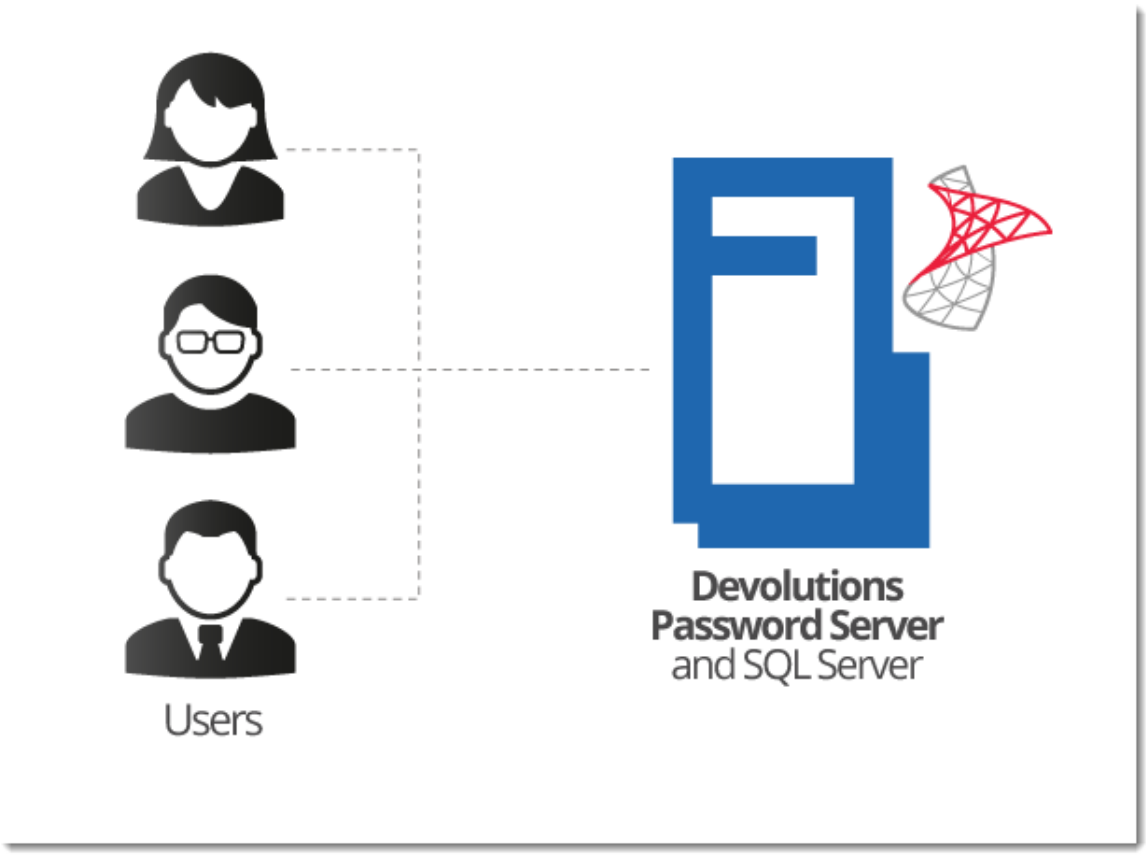

Single Server Installation

RECOMMENDED BASIC TOPOLOGY

A recommended basic topology consists of two servers, one for the Devolutions Server and one for the SQL Database. By doing so, all queries are made by the SQL server and performance is less affected on the application server.

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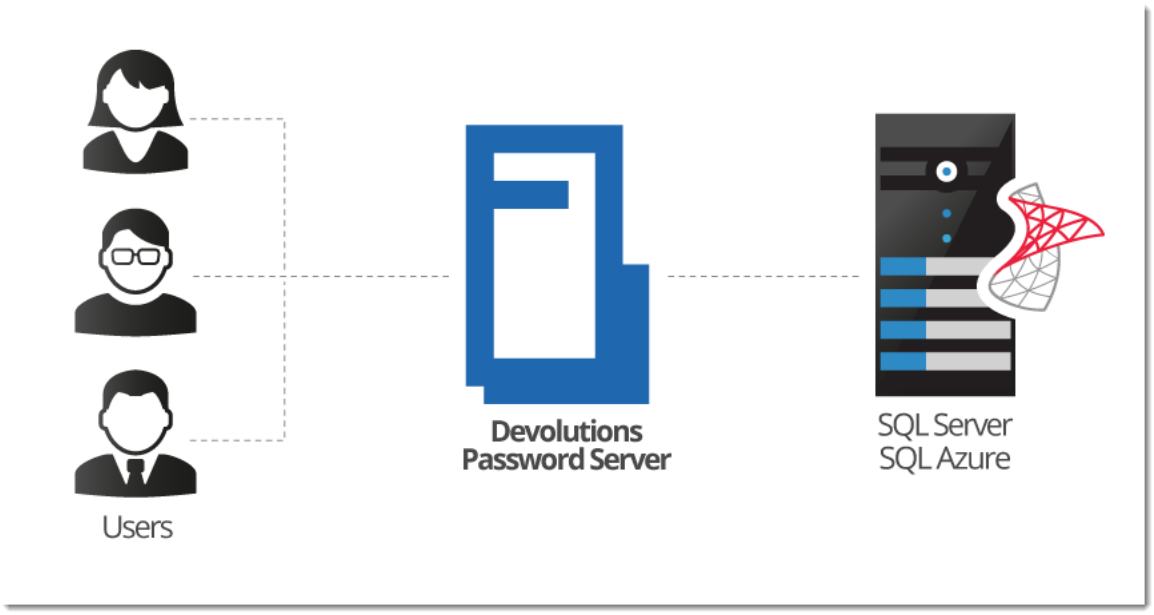

Basic Topology

HIGH AVAILABILITY TOPOLOGY

DATABASE LAYER ONLY

For a high availability of the database, Database Mirroring can be used which replicates data to a partner server. The failover partner server will be ready at anytime when the main server becomes unavailable. This ensures that the Devolutions Server is still accessing the data source and is transparent for Remote Desktop Manager users.

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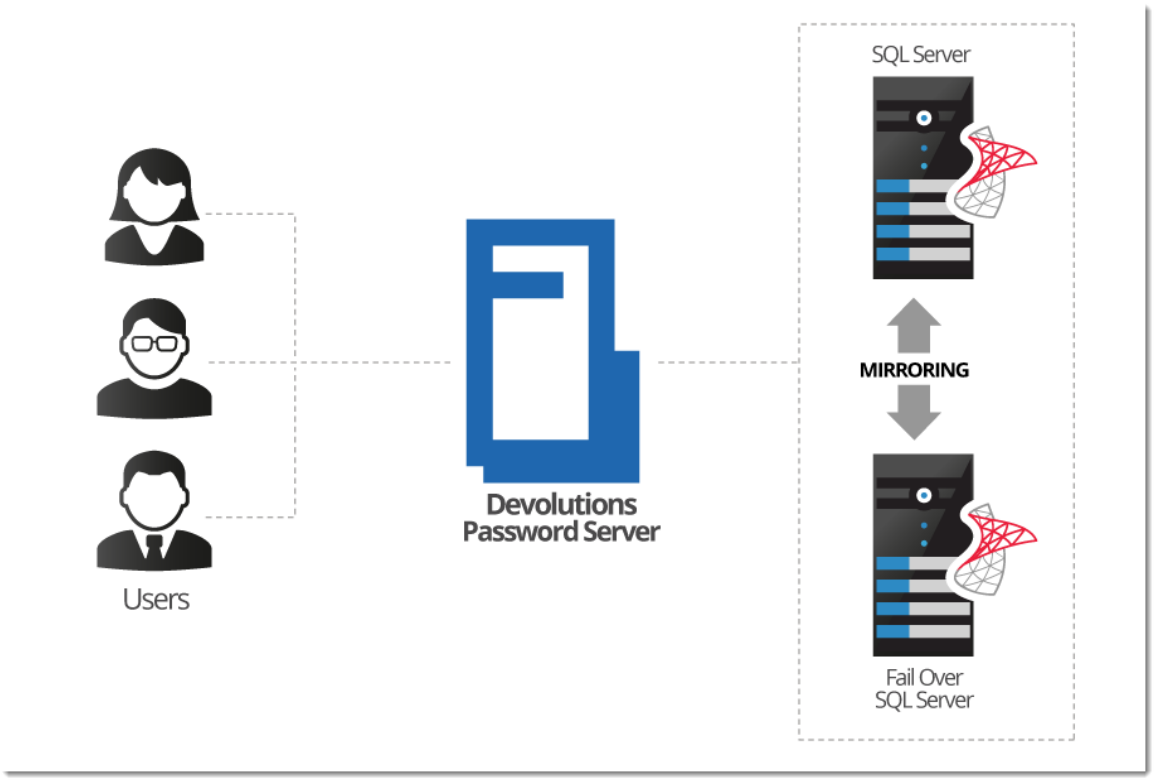

High Availability Topology

LOAD BALANCING TOPOLOGY

To ensure maximum performance of the Devolutions Server, it can be deployed as a load balancing Devolutions Server topology as illustrated in the image below. It can either be a physical or software load balancing system.

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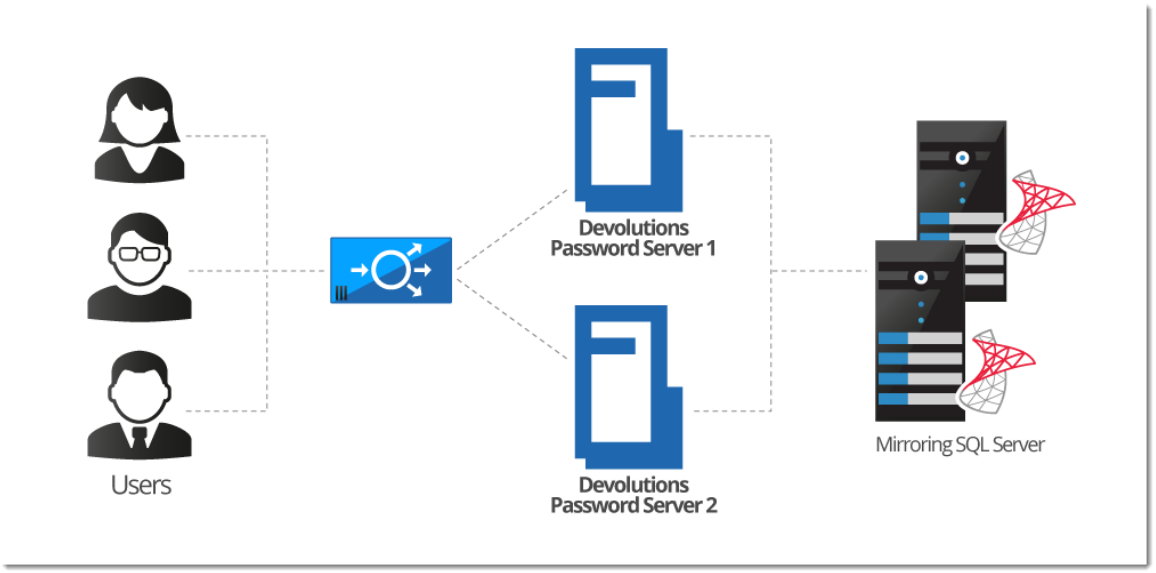

Load Balancing Devolutions Server Topology

DEVOLUTIONS SERVER INSTANCE MANUAL FAILOVER

For customers that do not wish to purchase a load balancer or are seeking a more simplified topology for their system, you can simply utilize two Devolutions Server instances on two different web servers and direct them to the same SQL Server database. By registering both instances as separate data sources in the client applications, users can manually toggle between servers in the scenario that one becomes unresponsive.

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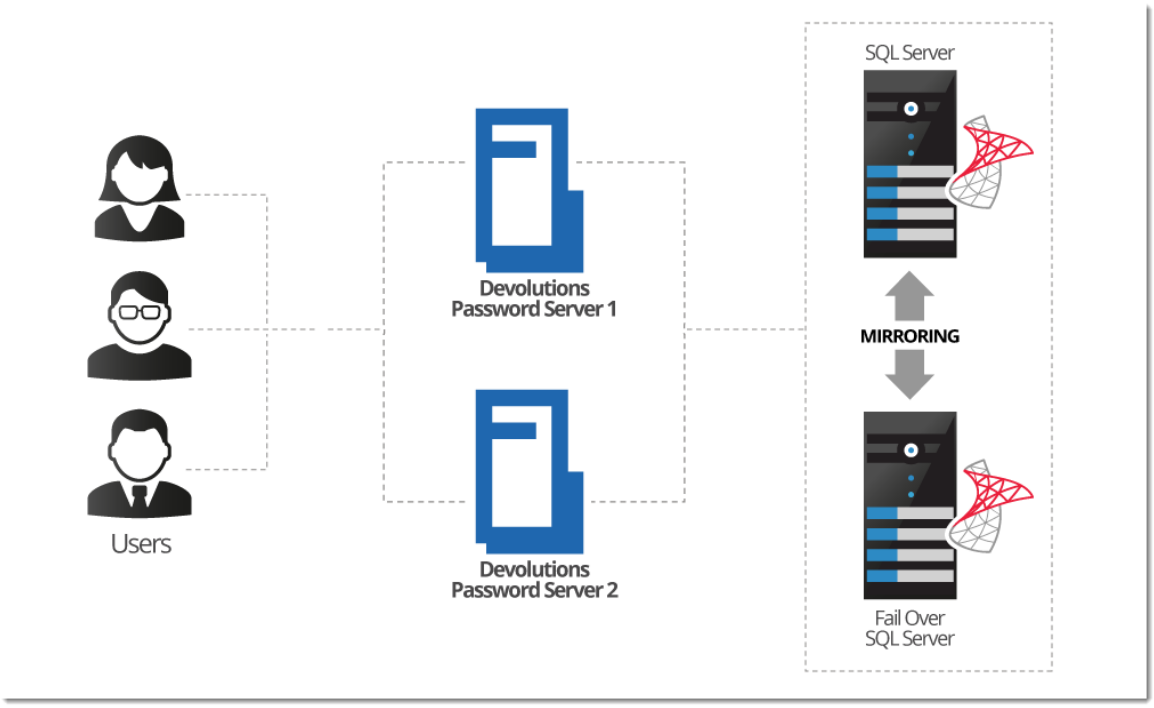

Manual Failover with Two Devolutions Servers

1.4 Fault Tolerance

DESCRIPTION

The Devolutions platform follows certain design guidelines to preserve full version history of your data, be it modifications or deletions. It also has an extensive logging layer to provide full visibility on the activity carried out while using the system. These design choices impact the choices offered to you when you wish to provide fault tolerance at the database level.

IMPACT ON TECHNOLOGICAL CHOICES

Because of all of the write operations that occur behind the scenes, you cannot have a topology other than ACTIVE/PASSIVE. The standby replica must be kept in sync at all times, but left untouched. There can be only ONE database in use at any one time. You can use both Microsoft technologies of mirroring or clustering, but it is key is that the replicated content is only accessed when the master content is unavailable.

MIRRORING AS A WAY TO SHARE WITH DISTANT TEAMS

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The consequence of keeping replicated data untouched means that replication is NOT the proper solution to use whenever you have multiple teams and you wish to share a set of master data across them. For this scenario it is best to use a mix of:

- Synchronizers, particularly the one for RDM data.
- PowerShell scripting (to export a specific branch of your tree).

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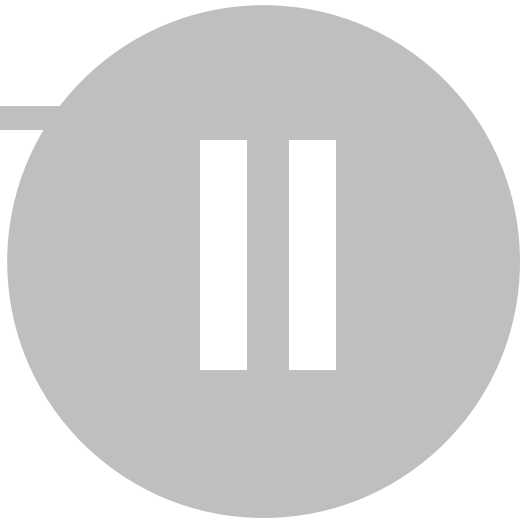
Getting Started

Part



2 Getting Started

DESCRIPTION

This topic is for **Devolutions Server - Corporate Edition**. If you have purchased **Devolutions Server - Team Edition** instead, please consult Getting Started - Team Edition.

After completing your purchase of Devolutions Server - Corporate Edition, you will receive an email with **three** license serials. Each license serial allows for running a Devolutions Server instance. An instance is in itself a web server application which acts as a back-end for our client applications. You can think of it as a specialized database for your data. All instances can be installed on the same physical server or spread across many.

Devolutions Server can be installed through different topologies.

DOMAIN REQUIREMENTS

These requirements apply especially if you intend to use Automatic User Account Creation (see Authentication) and/or User Groups to manage your instance.

✓	Create Active Directory groups to manage your instance. Typical examples are: **RDM Admins, RDM Operators, RDM Users**.
✓	Add domain users to the Active Directory groups.
✓	Create a **VaultOwner** account that will be the owner of the database. Performing upgrades with this account will ensure the proper rights are held.
✓	Create a **VaultRunner** account that will be used as the identity of the website. This will allow you to harden the permissions to what is minimally required.

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CHECKLIST FOR INSTALLING AND RUNNING DEVOLUTIONS SERVER

SOFTWARE REQUIREMENTS ON THE SERVER HOSTING THE INSTANCE

✓	Microsoft .NET Framework 4.7.2 (can be installed using the Microsoft Web Platform Installer).
✓	Microsoft SQL Server (see Database Instance) **if you intend to host the solution on a single server** (see Topologies).
✓	Internet Information Services (IIS) 7.0 or better (see https://technet.microsoft.com/en-ca/library/hh831475.aspx#InstallIIS).

INSTALLATION STEPS

✓	Create a new instance of Devolutions Server (see Create Devolutions Server instance).
✓	Create a Devolutions Server administrator account in the User Management.
✓	Create user groups.
✓	Add domain users or built-in users (see User Management).

2.1 Security Checklist

DESCRIPTION

To achieve the highest level of security, you should adhere to the following guidelines.

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These recommendations are valid ONLY if the Devolutions Server instance is hosted on an **intranet** EXCLUSIVELY. You must involve a person with knowledge of Internet security to safely host any application on the Internet. You need to protect the site from **Denial of Service** attacks using an appliance or a security module that is external to Devolutions Server.

GENERAL

- Use Windows Authentication exclusively.
- Ensure all LDAP communication uses LDAP over SSL.

SQL SERVER

- Enable only the **Windows Authentication Mode**.
- Create a domain account that will be used to create the database (**VaultOwner**), as well as another account that will be used by the web server to connect to the database (**VaultRunner**). The latter must have only the minimal set of permissions to perform its tasks.
- Communicate **ONLY** through an encrypted connection, please see Encrypting Connections to SQL Server.

WEB SERVER

- Configure the application pool to use domain credentials. This account will be added to the SQL Server as a login and be granted only the permissions that are needed (**VaultRunner**).
- Serve content through SSL (https). See Configure SSL.

2.1.1 LDAP over SSL

DESCRIPTION

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The LDAP over SSL (LDAPS) is a method to secure LDAP communications.

By default, LDAP communications between client and server are not encrypted. In some organizations, this could lead to a security breach.

Follow this link for further information http://social.technet.microsoft.com/wiki/contents/articles/2980.ldap-over-ssl-ldaps-certificate.aspx.

2.1.2 Encrypting Connections to SQL Server

DESCRIPTION

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

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

After proper configuration, the only modification required in Devolutions Server is to enable the **Use SQL Server encrypted connection** in the Database tab of the instance settings.

2.2 Team Edition

DESCRIPTION

After the purchase of the **Devolutions Server - Team Edition**, an email is sent with the license serial. This key allows you to create a new instance of Devolutions Server.

The installation procedure is available at Devolutions Server Installation

Please check your junk/spam mail folder if you do not see the email in your inbox.

DOMAIN REQUIREMENTS

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These requirements apply only if you intend to use Automatic User Account Creation (see Authentication) and/or User Groups to manage your instance.

✓	Create Active Directory groups to manage your instance. Typical examples are: **RDM Admins, RDM Operators, RDM Users**.
✓	Add domain users to the Active Directory groups.

CHECK LIST FOR INSTALLING AND RUNNING <%TITLEBE%>

SOFTWARE REQUIREMENTS ON THE SERVER HOSTING THE INSTANCE

✓	Microsoft .NET Framework 4.7.2 (It can be installed through the Microsoft Web Platform Installer).
✓	Microsoft SQL Server database (see Database Instance).
✓	Information Services (IIS) 7.0 or better (see https://technet.microsoft.com/en-ca/library/hh831475.aspx#InstallIIS).

INSTALLATION STEPS

✓	Create a new instance of Devolutions Server (see Create Devolutions Server Instance).
✓	Create a Devolutions Server administrator account in the User Management.
✓	Create User Groups.
✓	Add domain users or built-in users (see User Management).

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Installation

Part

3 Installation

TOPOLOGY

If you just have received your license serials, please refer to the Getting Started topic.

A Devolutions Server instance is actually a web application. This allows for exposing its services on the Internet or an Intranet.

The recommended topology is the use of two servers: a Database server and a Web server. For smaller installations, a single server can be used, but resources will be shared between the two user groups, thereby minimizing performance.

The Devolutions Server Console is now offered as a stand alone application. It is available on the Download page.

Please ensure before starting the installation that you have .NET 4.7.2 installed on your machine. You can download it on the following page. https://dotnet.microsoft.com/download/dotnet-framework-runtime/net472

It's highly recommended to enable SSL Encryption in order to protect communication with the instance of the SQL Server. Please follow the instructions on http://support.microsoft.com/kb/316898. Note that we recommend this be done **after** the initial setup is complete.

For full Active Directory integration, the application pool uses a domain identity. Both servers need to be joined to the domain.

INSTALL DEVOLUTIONS SERVER

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WEB SERVER PREREQUISITES

Please refer to the appropriate topic depending on the operating system of the web server.

INSTALLING WEB USER GROUPS

Please refer to the Installing Web User Groups Prerequisites topic.

After you have installed the pre-requisites, test the IIS installation by navigating to http://localhost. **Do not proceed further** if you do not see the IIS welcome screen. There are issues that must be resolved.

DATABASE SERVER PRE-REQUISITES

Please refer to the Database Instance topic.

CREATE DEVOLUTIONS SERVER INSTANCE

Please refer to the Create Devolutions Server instance topic.

3.1 Installing Web User Groups Prerequisites

DESCRIPTION

The installation of the Devolutions Server is supported by Windows 10, Windows Server 2012R2, 2016 and 2019. For previous Windows Server versions, please consult the PDF documentation of previous Devolutions Server.

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As a web application, Devolutions Server requires the IIS Manager, the URL Rewrite Module and specific Web User Groups on the machine on which it will be hosted.

It is possible to install these prerequisites, IIS Manager and URL Rewrite Module included, from the Devolutions Server Console or through an existing PowerShell scripts provided with Remote Desktop Manager Enterprise Edition for Windows.

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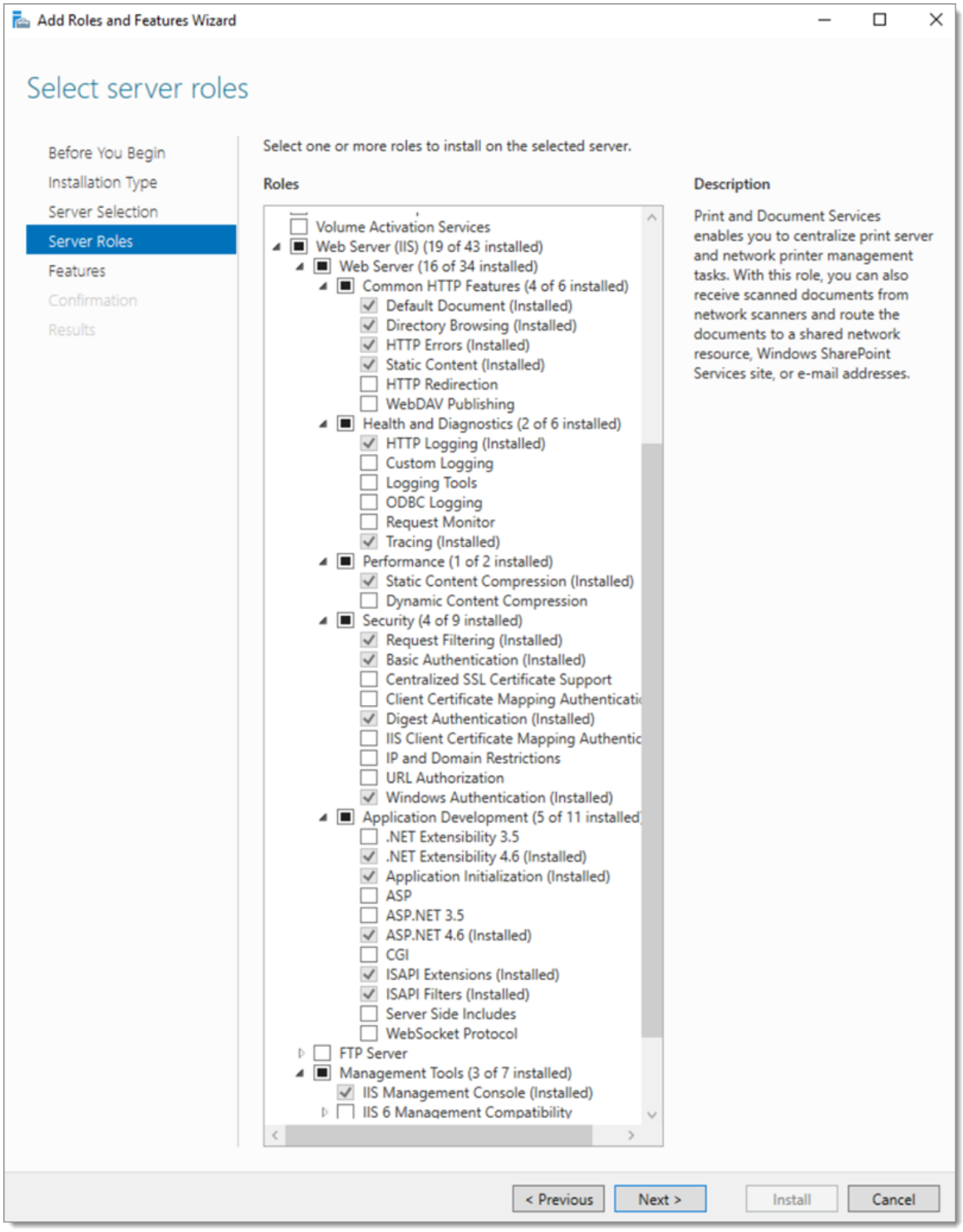

Web Roles needed for Devolutions Server

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Installing prerequisites from Devolutions Server Console or from the PowerShell script require internet access to download Web Platform Installer and URL Rewrite Module.

STEPS

Here are the two different methods available to install the prerequisites:

1. **Devolutions Server Console**

   a. Open the Devolutions Server Console.

   b. Click on the New button.

   c. Click on the Install Prerequisites button to run the PowerShell script.

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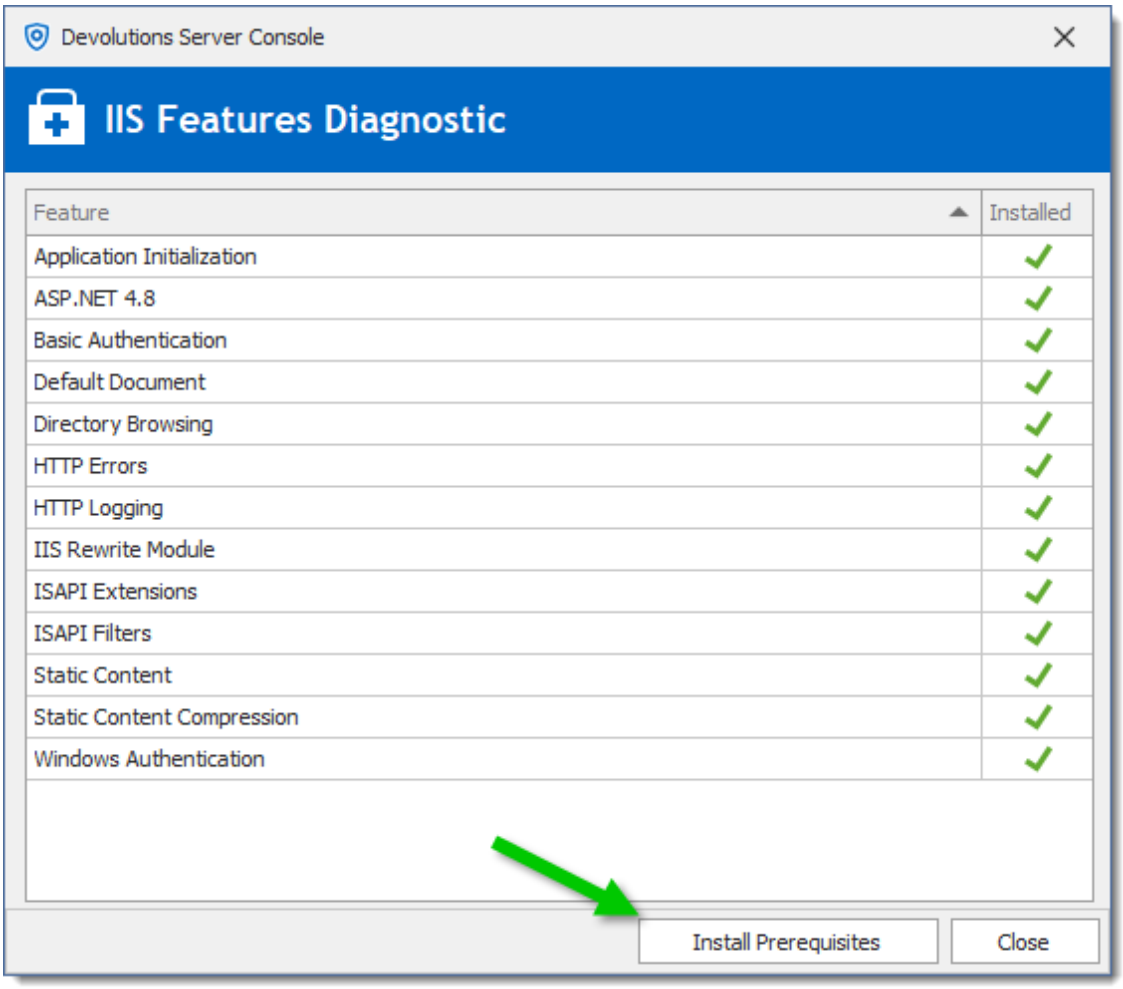

IIS Features Diagnostic Dialog

2. **PowerShell command line**

   a. Run Windows PowerShell with elevated privileges.

   b. Change the current path to the sub-folder Scripts that is located in the current installation folder of Devolutions Server Console.
   (***C:\Program Files (x86)\Devolutions\Devolutions Server Console\Scripts***)

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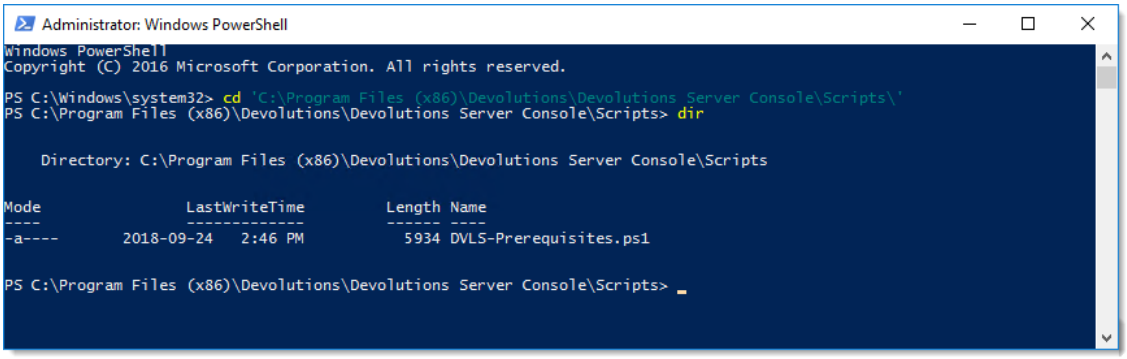


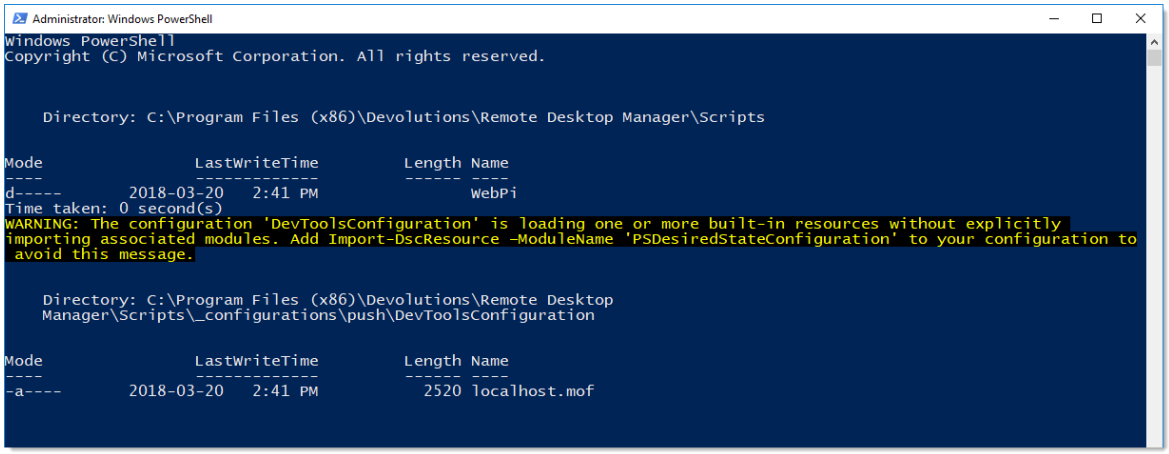
Location of DVLS-Prerequisites PowerShell script

c. Run the script DVLS-Prerequisites.ps1.

RESULTS

Here is what the installation of these prerequisites through the PowerShell script should display.

1. On the beginning of the PowerShell script, it will install Microsoft Web Platform Installer if it is not already installed.



PowerShell Window

2. Next, the Command windows is displayed and will install the IIS Manager, ASP .Net 4.5, some specific Web User Groups and the URL Rewrite Module.

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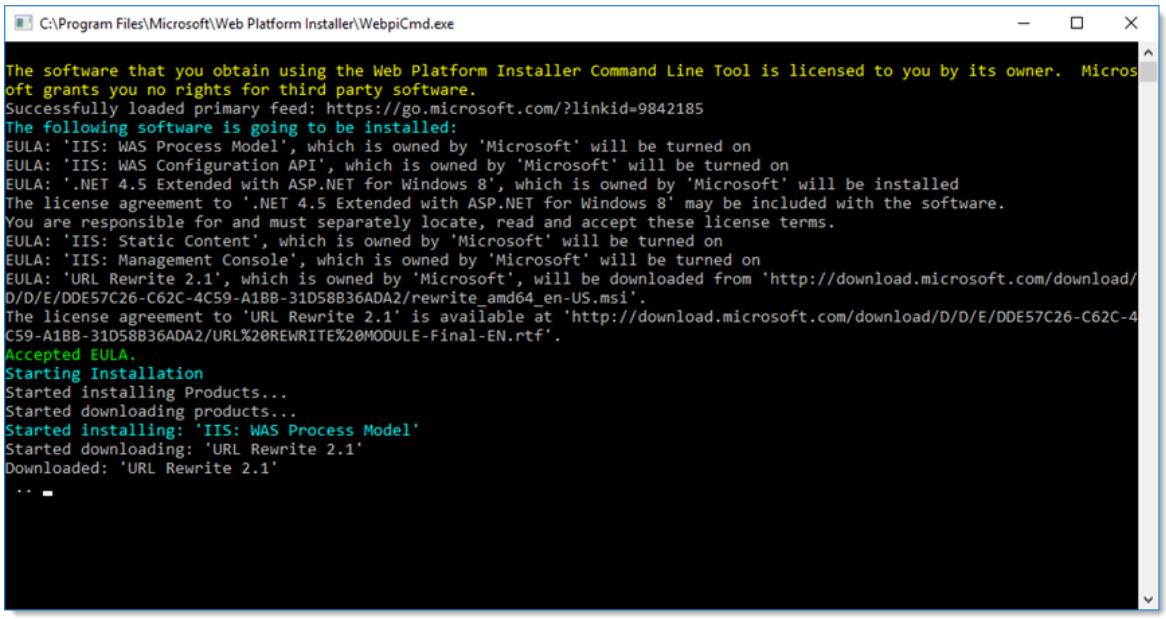
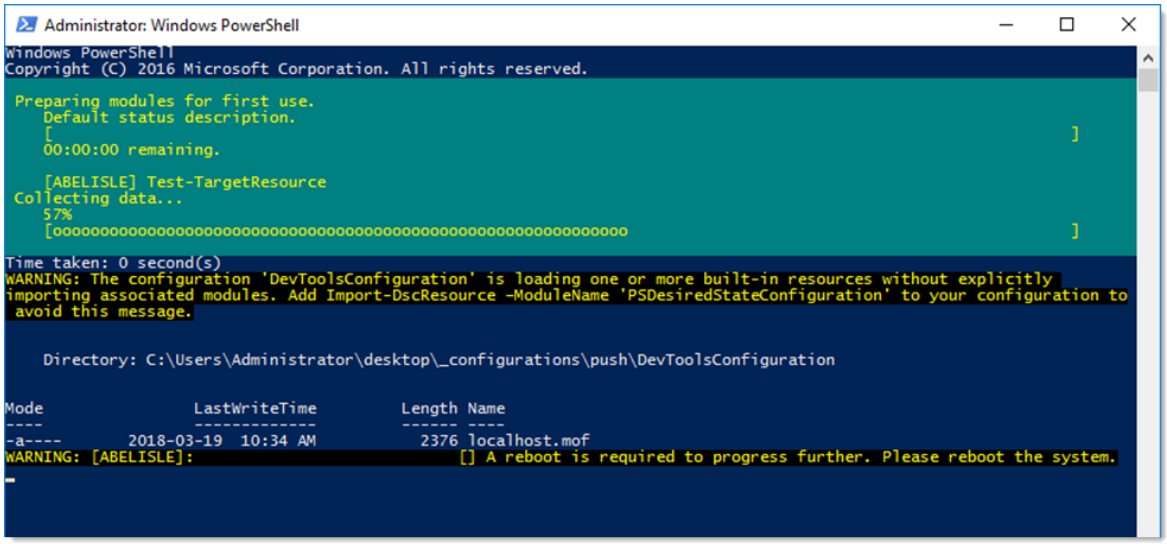


IIS Installation

3. Then, the PowerShell script will install all missing Web User Groups.



Web Roles Installation

3.2 Database Instance

DESCRIPTION

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Devolutions Server has no requirements that would dictate which communication protocol is used, as well as many of the options offered to you by the chosen SQL Server instance. As long as the client workstation can connect to the SQL instance, Devolutions Server will run effectively. Please refer to the Microsoft Documentation in order to allow connectivity to the instance.

With Windows authentication, you must set the Application Pool identity to an account from the domain. We recommend creating a dedicated account for this purpose. Please refer to Configure Devolutions Server to use integrated security for instructions that need to be performed **after** creating the Devolutions Server instance.

3.2.1 On-Premise

DESCRIPTION

Install any edition of **Microsoft SQL Server**. Many of our customers with less than 30 users run successfully with the free edition called **SQL Server Express**. Download SQL Server 2017 Express from Microsoft's site.

If full integration with Active Directory is required, you can decide to activate Windows Authentication solely. Please refer to the MSDN online help for full details.

3.2.2 Microsoft Azure SQL

DESCRIPTION

Create an empty SQL database on your Microsoft Azure SQL portal. Provide enough privileged to an account you will use to update the database schema from the Devolutions Server Console.

Once all fields are properly configured, click on the **Update database** button to update the database schema.

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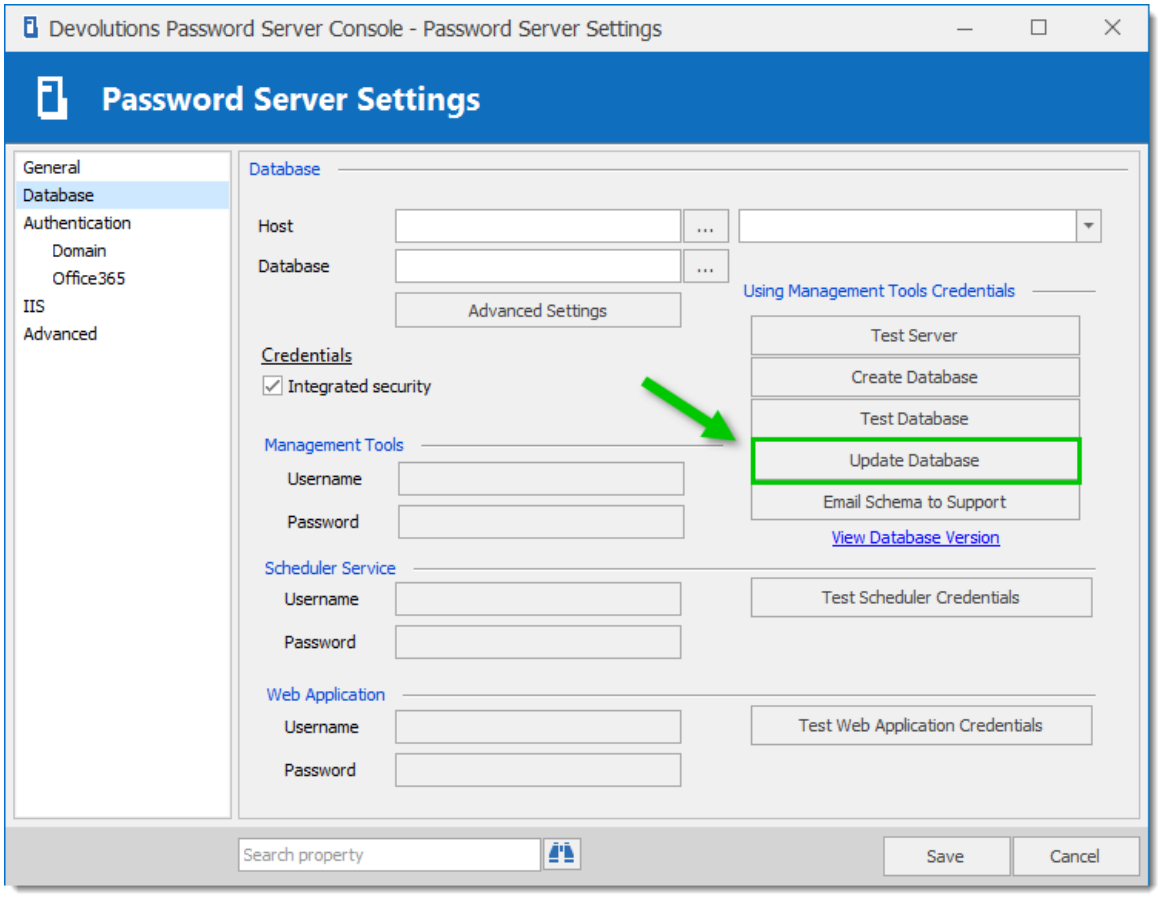

Devolutions Server Console - Database Tab

3.3 Create Devolutions Server instance

DESCRIPTION

If you have recently received your serial licenses keys, please refer to the Getting Started topic.

For more information about any of the features in the deploy wizard, please consult their respective topic under the Server Settings chapter.

Multiple Devolutions Server instances can be hosted on the same server. Each instance resides in its own Web Application within IIS. The following steps are carried out using the **Devolutions Server Console**.

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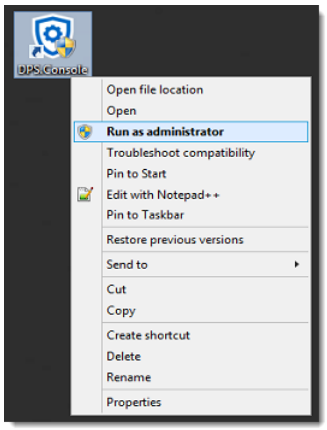
PROCEDURE

1. Install **Devolutions Server Console** on the web server. It is available from the Download page

2. Execute **Devolutions Server Console** with elevated privileges (run as administrator). This is performed by right-clicking on the application, and selecting **Run as administrator**.

> All operations performed through the console are done with the credentials used to launch **Devolutions Server Console**. If you must use other credentials, you will need to launch another Windows session. The RunAs command does not offer the option of starting a process with elevated privileges.



Run as administrator

3. In the **Devolutions Server Console**, click on the **New** button or the ***Install New Instance*** blue link to deploy a new server instance.

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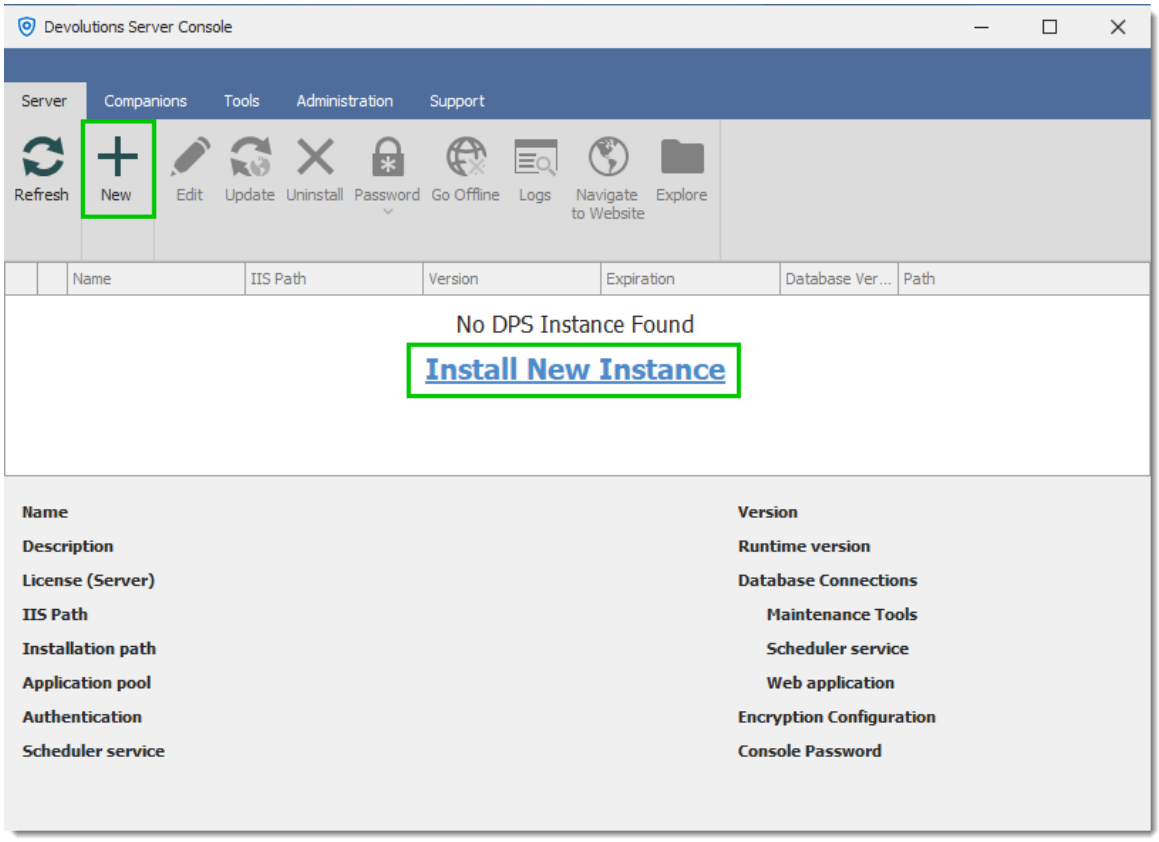

Deploy a new Devolutions Server

4. The first dialog will run diagnostics on the server to verify if the IIS Server has all the necessary Web User Groups prerequisites installed and is ready to run Devolutions Server. Missing features are marked with an . The Install Prerequisites button will install all missing features using a PowerShell script.Click on Close to continue.

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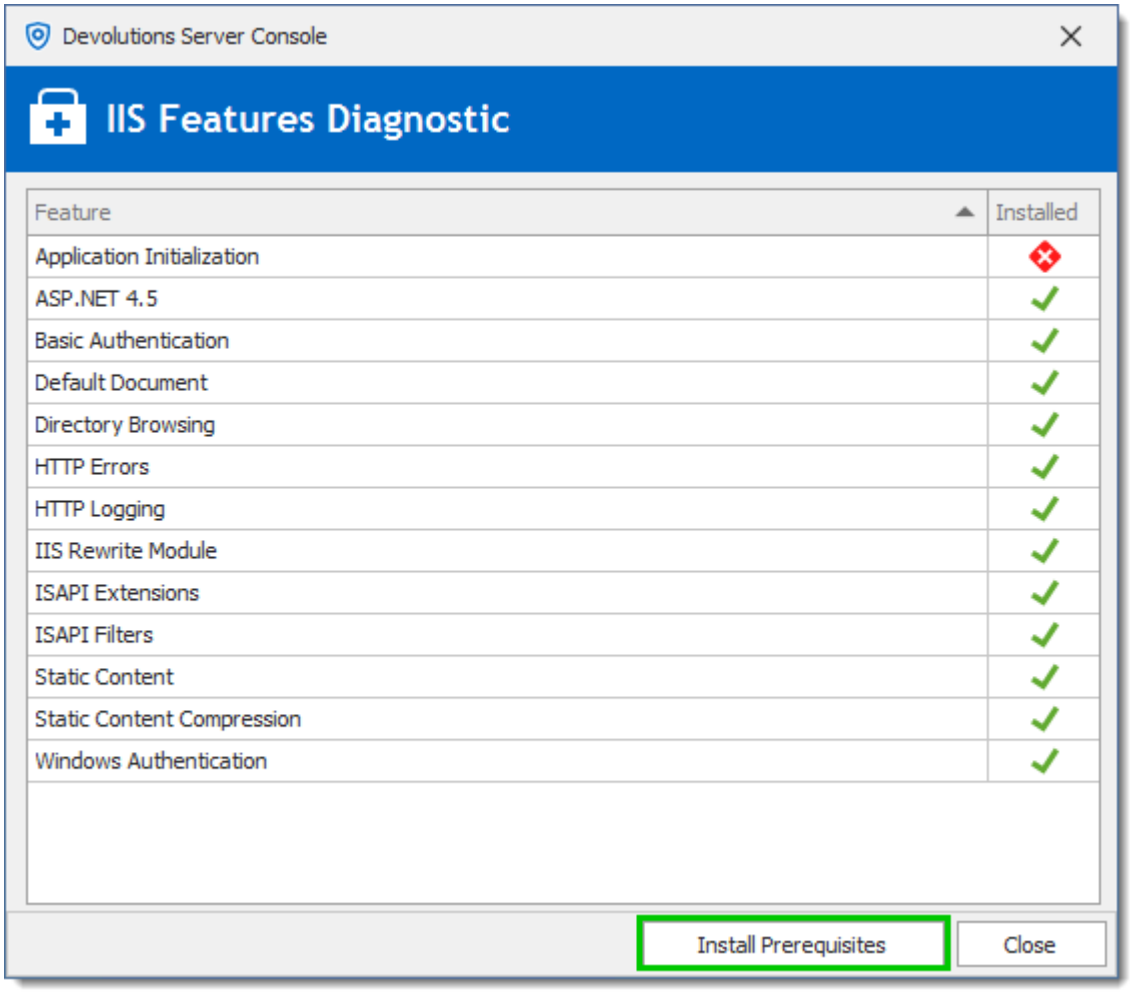

IIS Features Diagnostic Dialog

5. The License Agreement needs to be accepted to proceed.

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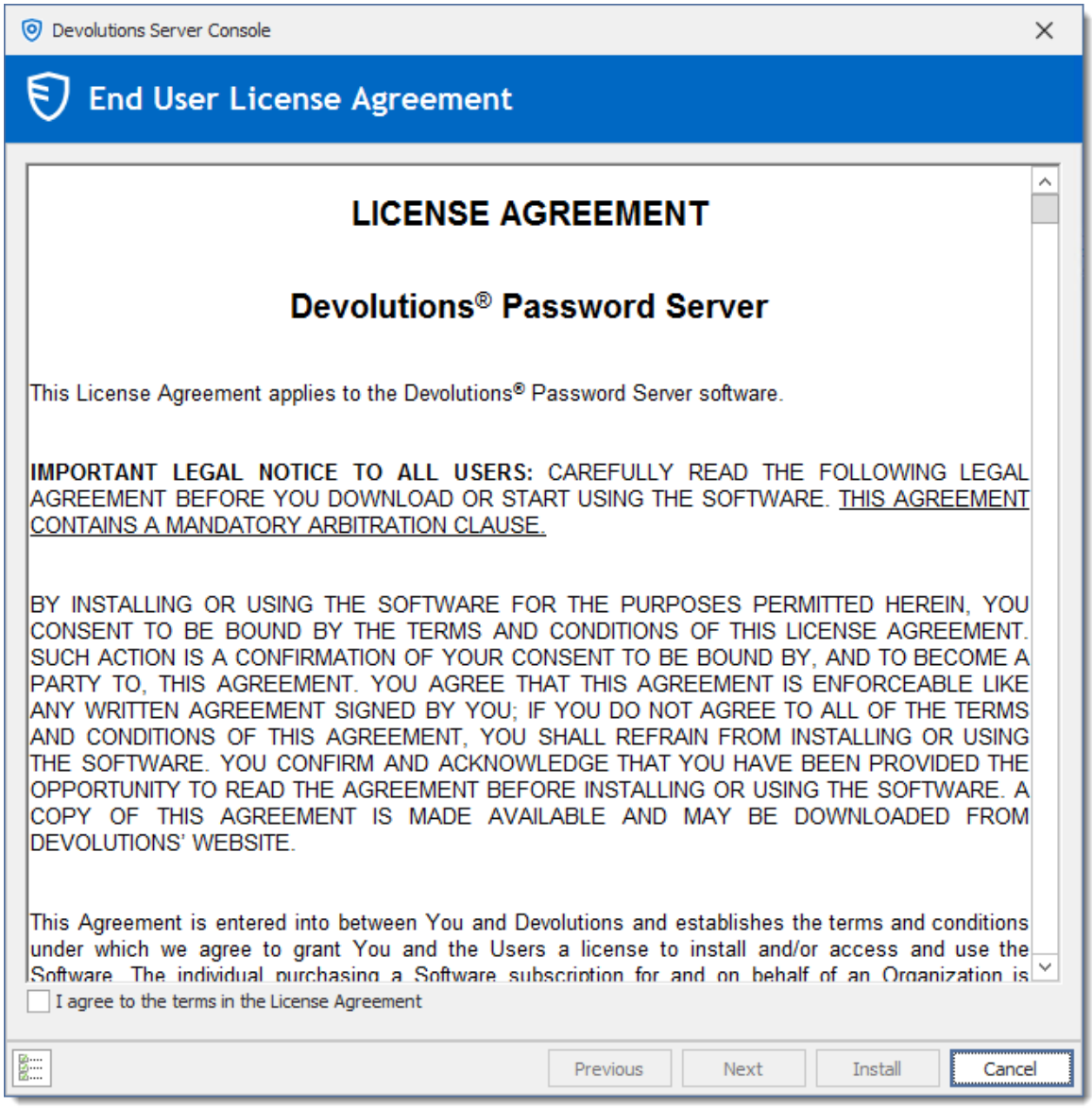

Devolutions Server License Agreement Dialog

6. Under **Database**, enter the server and database information. The user account used to create the database must have sysadmin privileges in the SQL Server instance. Consult the Database topic for more information. To use **Integrated Security** to connect to the database, it is important to change the Application Pool Identity in the IIS Manager and set the proper permission of the service account on the SQL database. Please consult How to Configure Devolutions Server to use integrated security.

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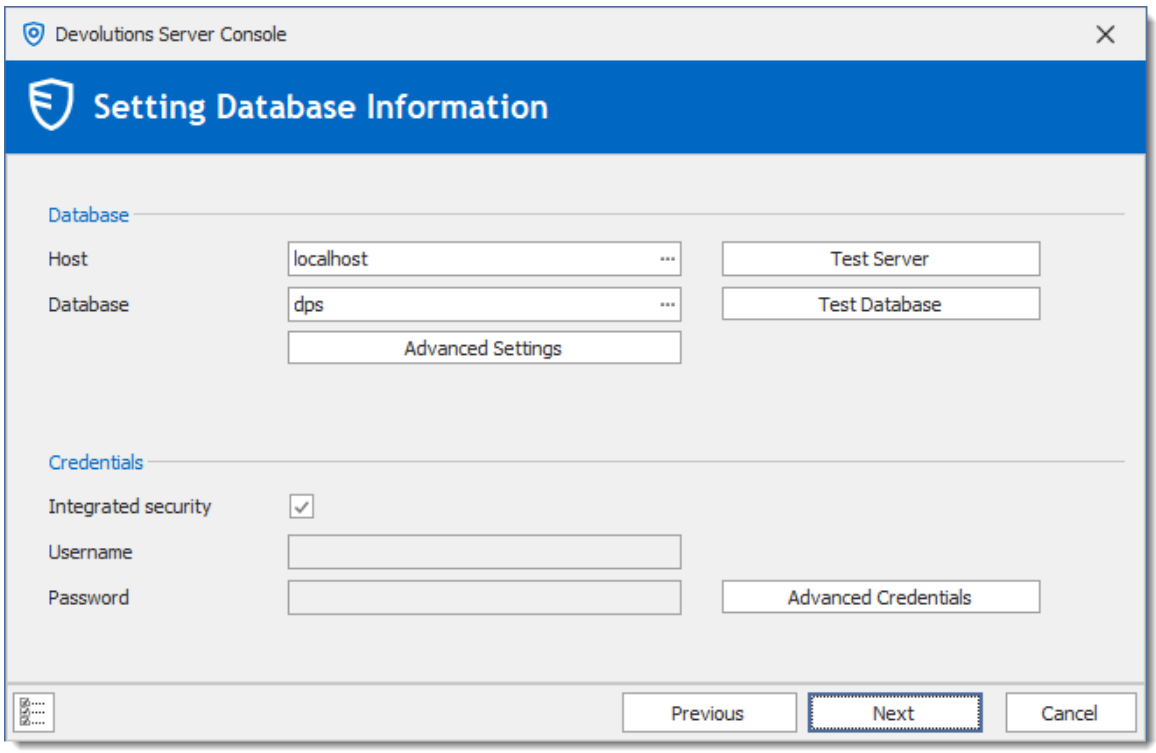

Database Dialog

7. Under **General**, enter a custom **Name** and **Description**. Under **Serial**, provide a license serial that has been received by email upon buying the product.
   If you did not buy any Devolutions Server license yet, you may Request a 30-days trial.

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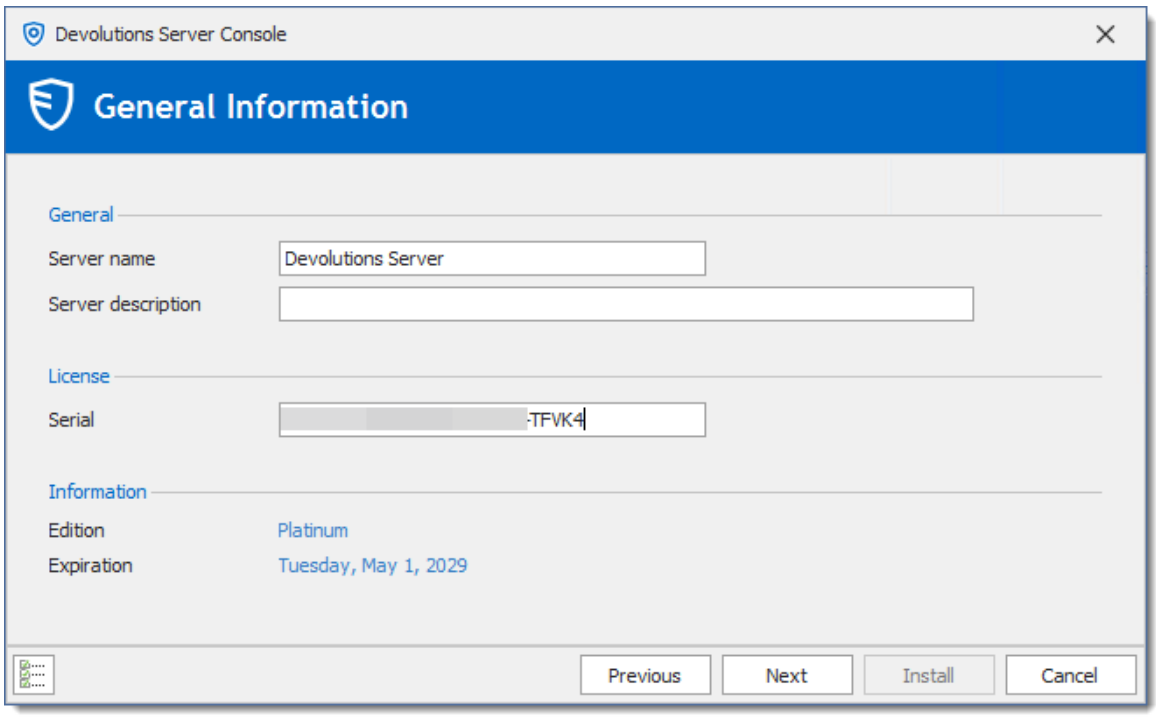
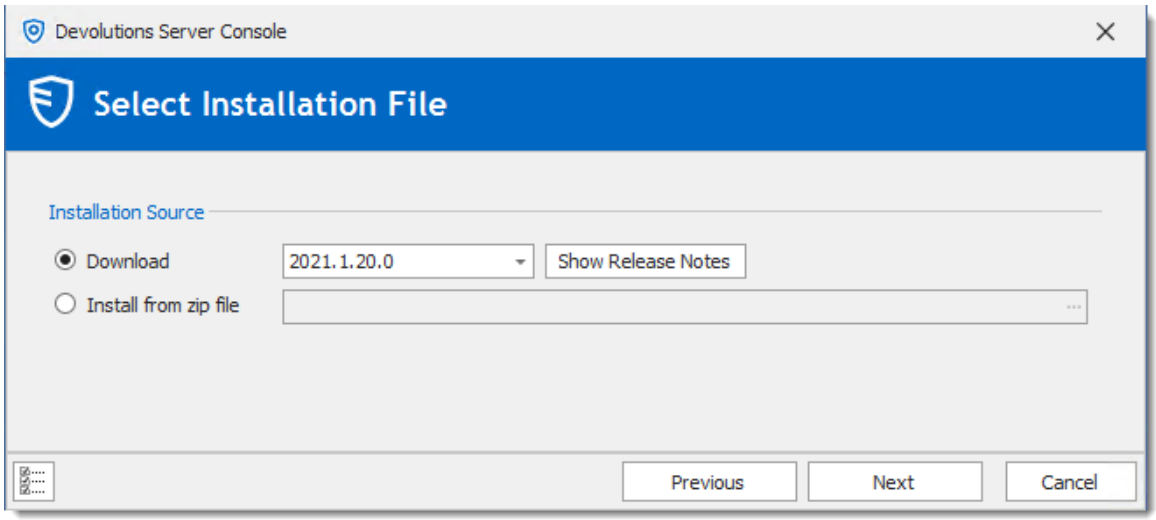


General and Registration Dialog

8. Under **Installation Source**, select to either ***Download from the web (latest version)***, or ***Install from zip file*** available from the Download page.



Source Dialog

9. Under ***General***, select the ***Website*** and ***Web Application Name***. Under ***Installation Destination***, set the ***Installation Folder*** where the instance's files will be located. The process to run Web sites has been granted the proper permissions under ***c:\inetpub\wwwroot***. We recommend to create a new folder beneath it and create the Devolutions Server instance within this folder. Under ***Application Pool***, set the Application Pool Name.

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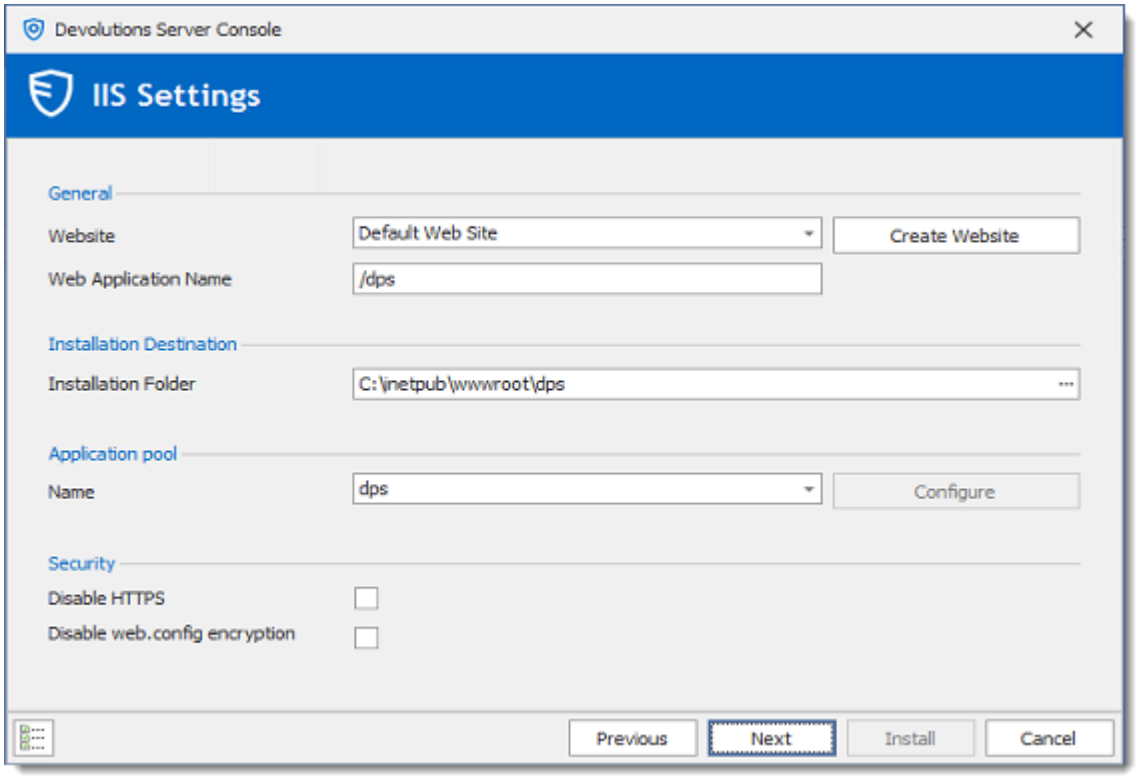
We do not recommend to set the installation folder to ***C:\Program Files*** or ***C:\Program Files (x86)***. Devolutions Server is a web application and this could result in unwanted behavior and issues because IIS do not have enough permissions to run web applications that are located under those folders.



Destination dialog

10. Under ***Administration Credentials***, fill in the information to create a Devolutions Server Custom administrator account. All fields are required.

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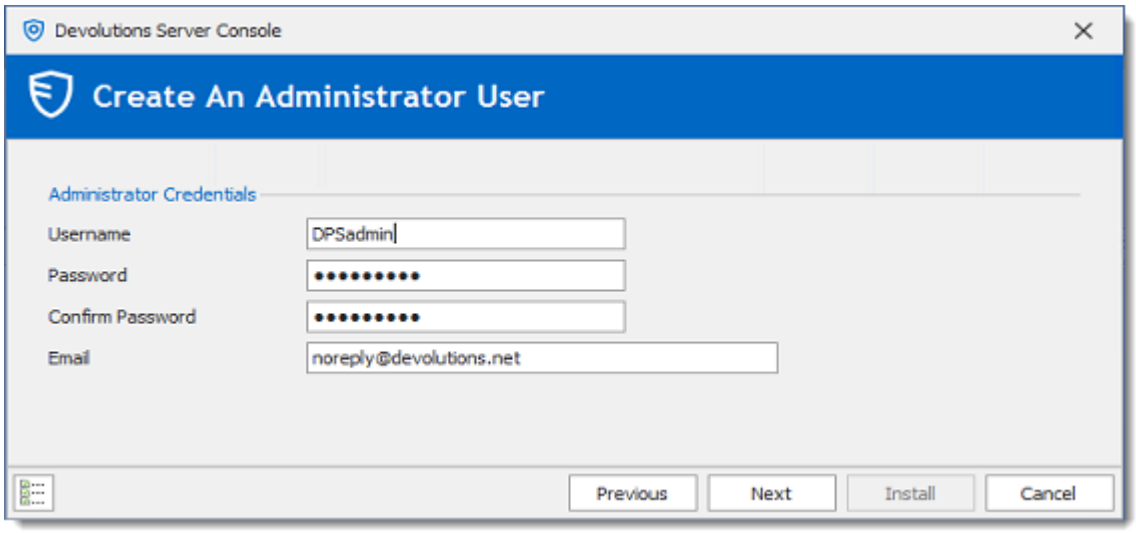
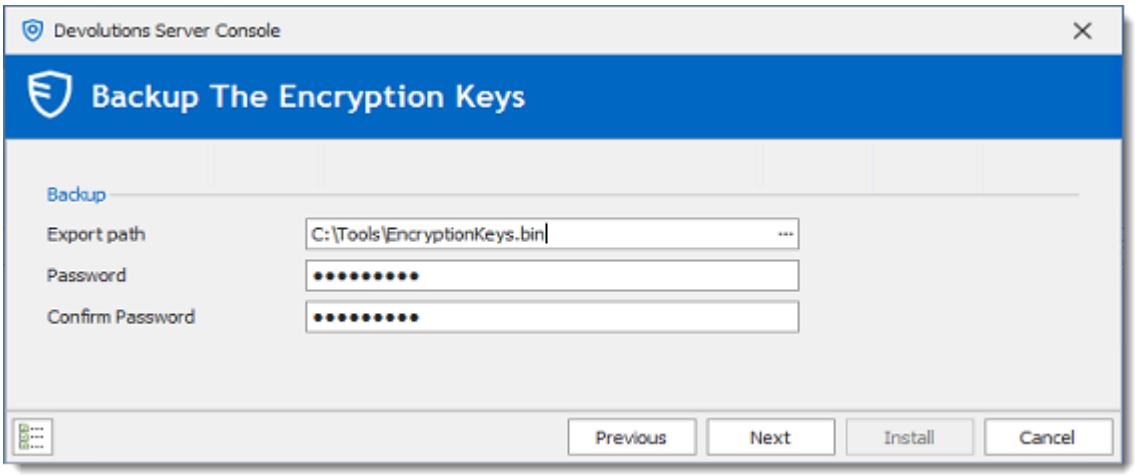


Create An Administrator User

11. Under ***Backup***, select the destination folder and file name of the Devolutions Server Encryption Keys file.
And set a password to protect that file.

We recommend to protect the Encryption Keys in a safe to avoid data loss if Devolutions Server has to be restored.



Backup the Encryption Keys Dialog

12. Under ***DVLS console password setup***, when configuring a password, the Devolutions Server instance will be protected by a password that will be saved in the database.

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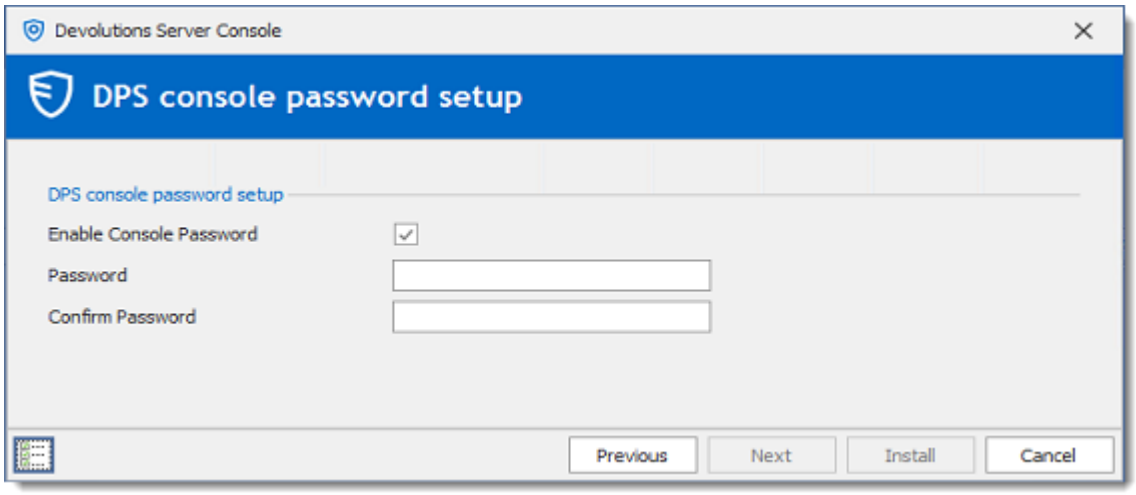
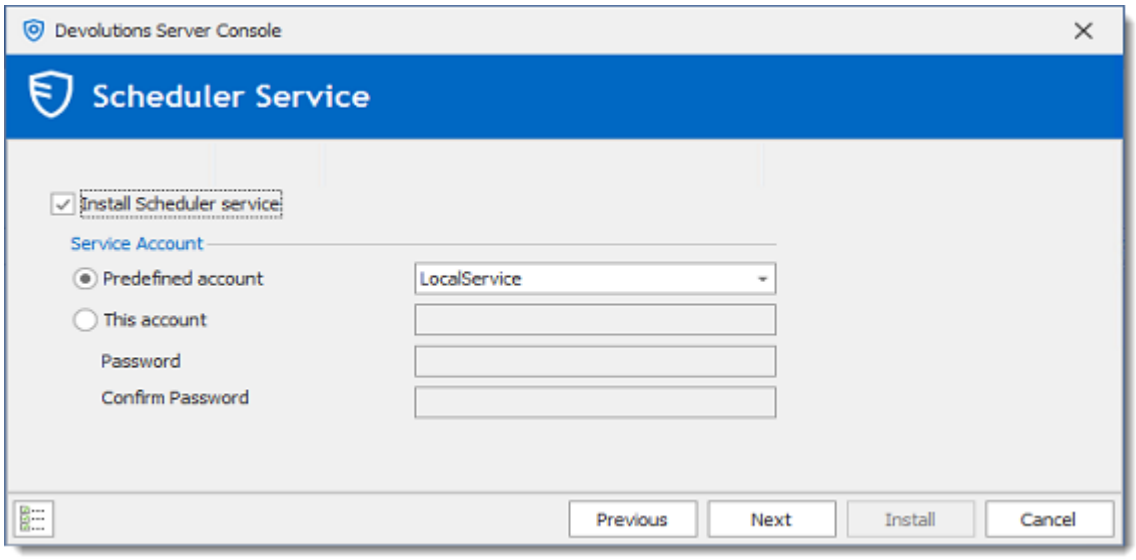


Devolutions Server password protected console

13. Under ***Scheduler Service***, when enabling the ***Install Scheduler service*** option, please set the proper Service Account. The following features depend on the Scheduler : Backup manager, Domain Users and Users Groups cache, Office365 Users and User Groups cache, Email notifications and Privileged Access Management.



Scheduler Dialog

14. Choosing to not install the Scheduler, you will get the following warning message.

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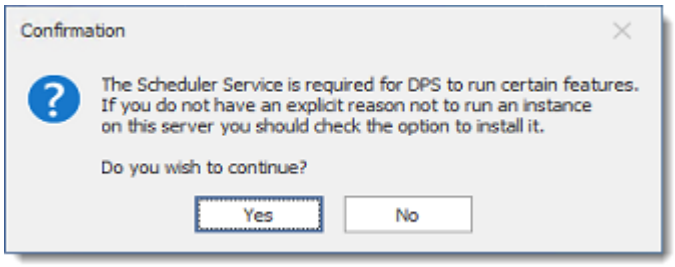
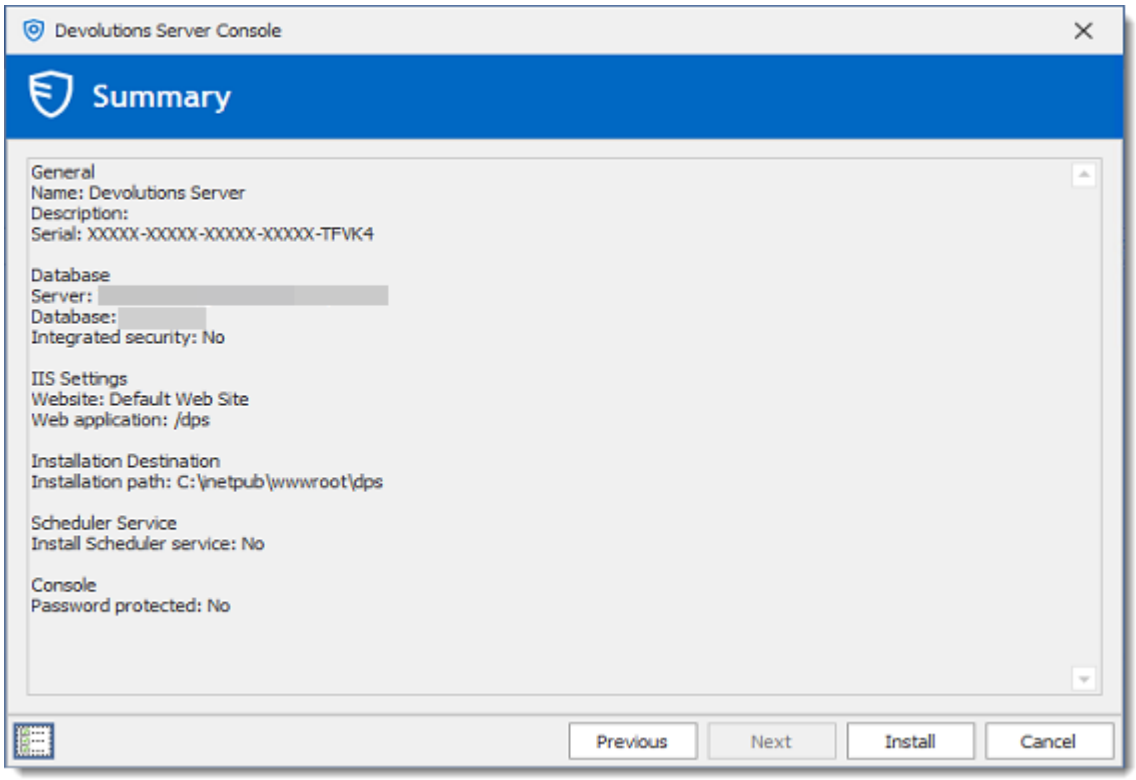


Scheduler Warning

15. Under **Settings**, validate the configuration and click **Install**.



Settings Dialog

Once the installation is complete, a summary indicates if the Devolutions Server has been deployed correctly.

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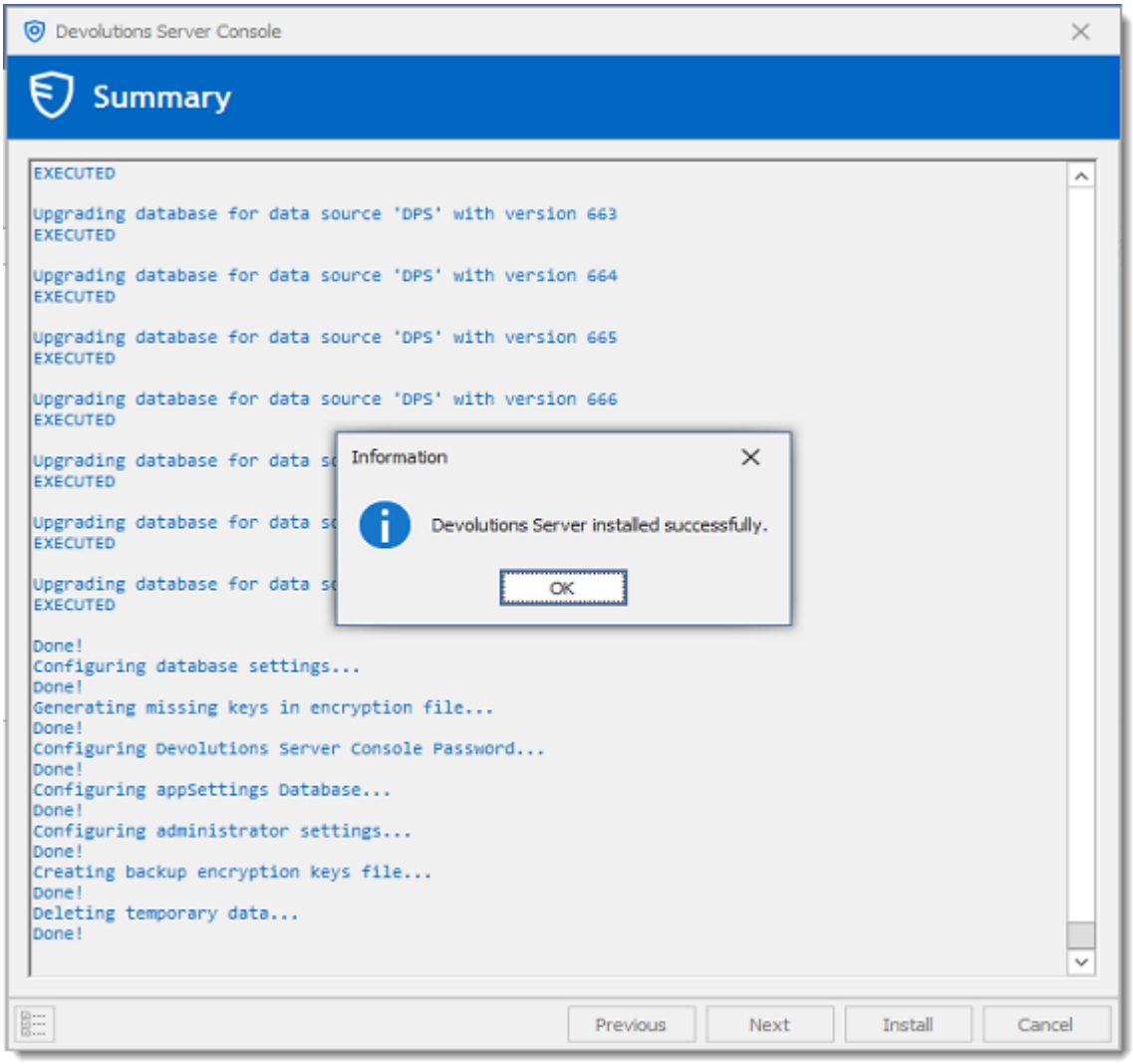

Progress Installation Dialog

TEST THE INSTALLATION

To test the server installation, click on navigate to the instance URL (e.g.: http://<Machine_Name>/<InstanceName>) with any web browser or click on the ***Navigate to Website*** button in the Devolutions Server Console.

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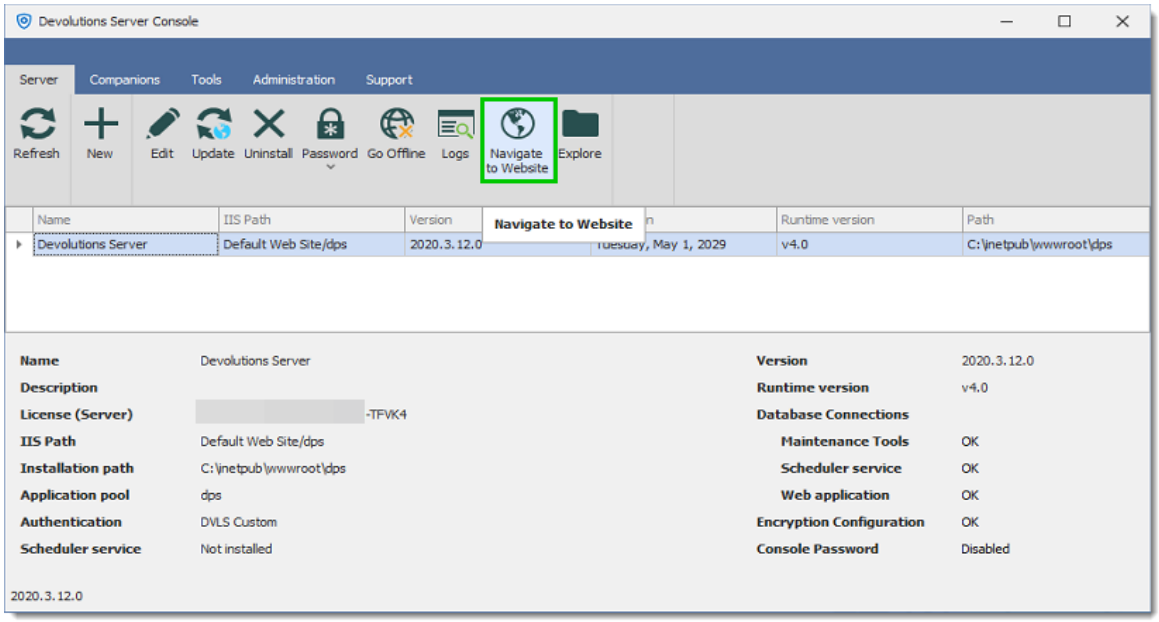

Devolutions Server Console

To test the connection from a client by creating a data source in Remote Desktop Manager. Please consult the How to Configure Client Data Source for more information.

3.4 Register a User CAL License

DESCRIPTION

There are two methods for you to register your User CAL license, with the Devolutions Server console or through the web interface.

DEVOLUTIONS SERVER CONSOLE

Register your User CAL license in ***Server - Edit - General - License***.

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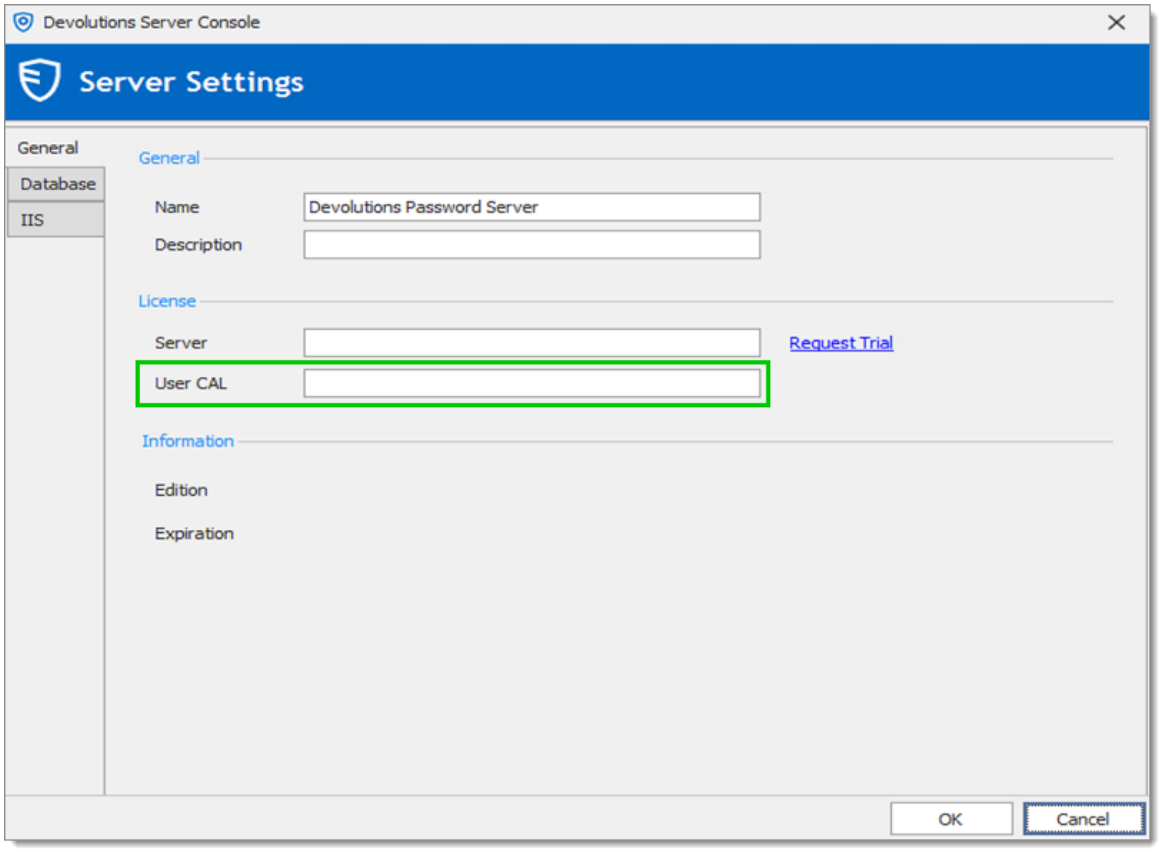

DEVOLUTIONS SERVER WEB INTERFACE

Save your User CAL License in ***Administration - Server Settings - General - Serial***.

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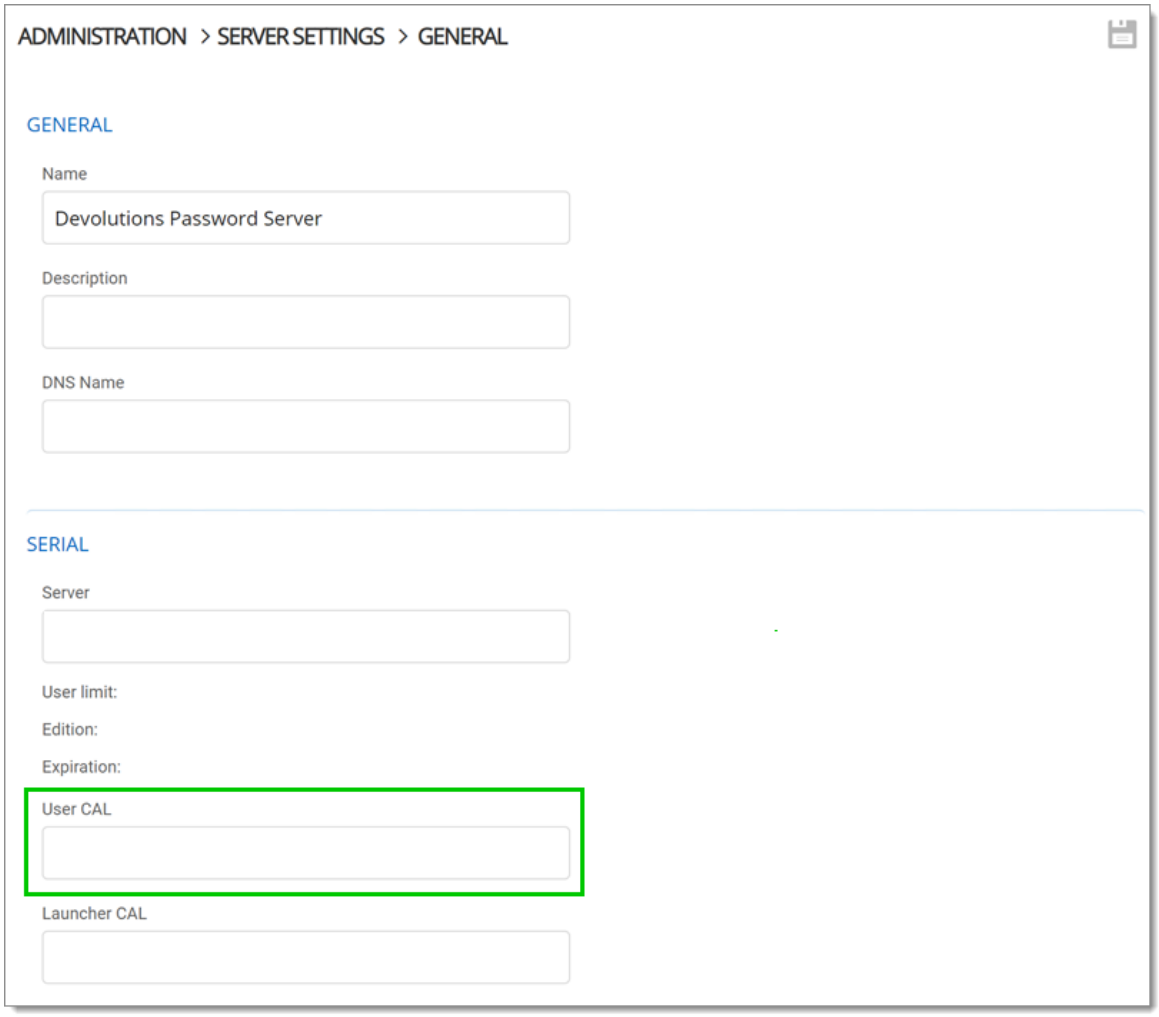

3.5 Upgrading Devolutions Server

UPGRADE

Install the proper version of Devolutions Server Console before upgrading the Devolutions Server web application. It is available on the Download page.

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Since Devolutions Server 2019.x, most administrative features can only be managed from the web interface. Please see Administration - Devolutions Server Settings.

It is highly recommended as a best practice to first deploy the new version of Devolutions Server to a staging instance and verify its stability before deploying it to your whole organization. If you do not have a staging instance we then recommend a limited roll-out to ensure the work flow is supported to your satisfaction prior to impacting your whole team.

These steps are intended to be achieved on a single server or a basic topology. If your environment differs from these topologies, please contact us and we will guide you on how to upgrade Devolutions Server.

WORKFLOW

We highly recommend to test the upgrade process in a staging/test environment before upgrading your production instance.

The upgrade steps will be performed with Devolutions Server Console. You will need to upgrade your copy to the latest version that is matched with the target version of Devolutions Server that you are preparing to install. Please follow the steps carefully.

If you have elected to use **Integrated Security** for connecting to the database, you must perform the upgrade using a Windows user account that has full rights on the database. Ensure that the IIS Application Pool Identity and Scheduler accounts have enough privileges on the database. After an upgrading to a new version, new permissions are possibly required. Please contact us about the new permissions list.

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If you have set the Security Provider on your current Devolutions Server, specific operations will need to be done before the upgrade. Please contact us for further details.

We recommend doing a backup of the Encryption Keys before any operation that could modify the information of the database or before the upgrade of Devolutions Server. Protect the Encryption Key file in a safe to avoid data loss if Devolutions Server has to be restored.

PREPARATION PHASE

- Ensure that the instance users have the offline mode enabled and that they all perform a full refresh of the cache (CTRL+F5).
- Have your team switch to the offline mode in Remote Desktop Manager, allowing them to work while the system is down.
- Update the Maximal version of Remote Desktop Manager in ***Administration - System Settings - Version Management - Maximal version***, if this option was set before the upgrade.

PHASE 1

- Perform a full backup of the database, take precautions against that backup file being deleted by a maintenance plan.
- Archive the content of the web application folder containing the Devolutions Server instance, move to a safe place.
- Install the proper version of Devolutions Server Console. In each of the sub-topics related to a specific version of Devolutions Server you will find the version of the client that you need.
- Devolutions Server Console must be run with elevated privileges.

PHASE 2

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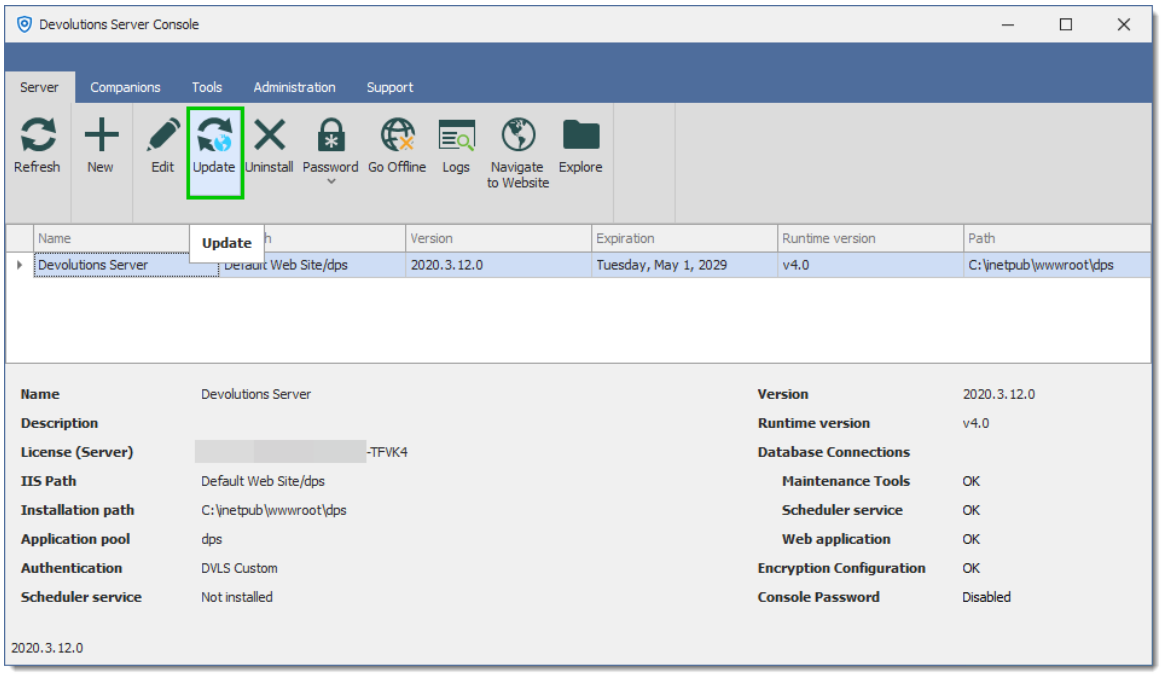
1. Open the Devolutions Server Console.
2. Select the instance that you wish to upgrade.
3. Set the instance in **Offline Mode** with the **Go Offline** button. On a High Availability/Load Balancing topology, all instances must be set to Offline mode before starting the upgrade process.
4. Click the **Upgrade Server** button.



Devolutions Server Console

5. Select the **Upgrade Source**. You can either use the latest General Availability release that is available online automatically or specify the path to a zip file that you have downloaded yourself. Use this for beta releases or for earlier versions.

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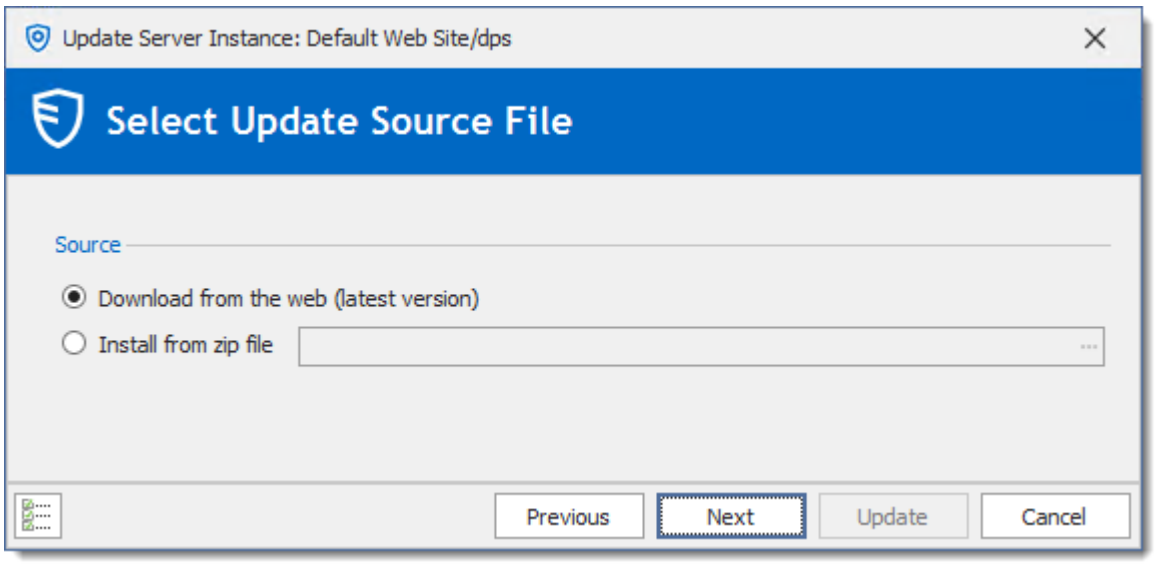

Devolutions Server Upgrade Wizard

6. Press **Next**.
7. Review the summary and press **Upgrade** if you are satisfied.

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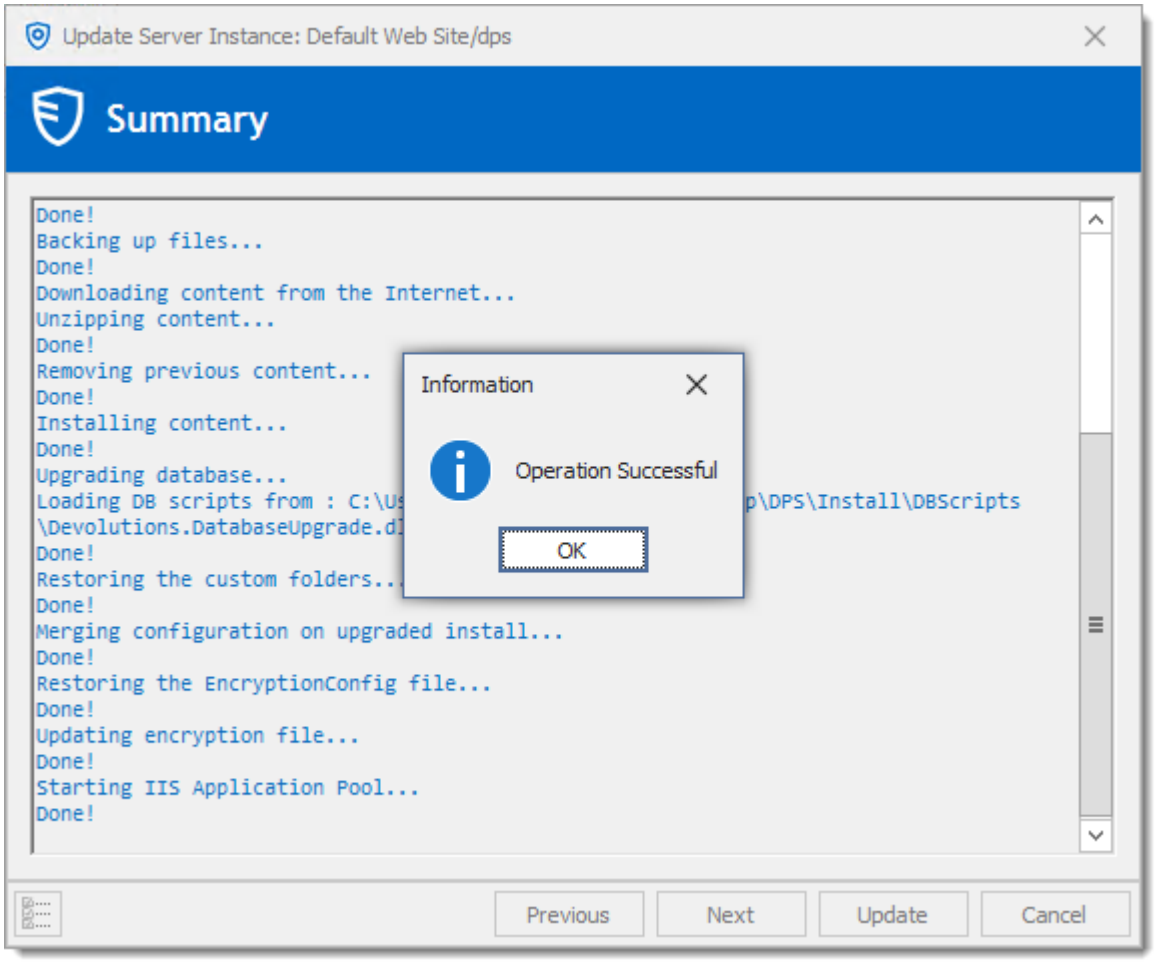

Upgrade completed

FINAL PHASE

The **Backup Folder** contains information about the configuration of the Devolutions Server instance prior to the upgrade. After a successful upgrade, you must ensure the content is either moved to a safe place, or deleted.

Our support department gets more and more urgent requests for assistance because of a rogue admin upgrading his own copy of Remote Desktop Manager and introducing a schema update for some new feature. This may prevent other users from using the system. We strongly recommend setting both the Maximal and Minimal versions allowed to connect to your instance.

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If you have elected to use the Integrated Security for connecting to the database in the Database tab, ensure that the IIS Application Pool Identity and Scheduler accounts have enough privileges on the database. After an upgrading to a new version, new permissions are possibly required. Please contact us about the new permissions list.

- Have a user upgrade his workstation with the version of Remote Desktop Manager supported by the Devolutions Server version and test connectivity with the server instance.
- When you are satisfied with your tests, have the rest of the staff upgrade to the same version of Remote Desktop Manager.
- Update the Maximal/Minimal version of Remote Desktop Manager in ***Administration - System Settings - Version Management.***

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Management

Part

4 Management

4.1 Devolutions Server Console

DESCRIPTION

Because Devolutions Server is in fact a web application, the management interface is provided by the Devolutions Server Console.

USAGE

The Devolutions Server Console is now offered as a stand alone application. It is now available on the Download page.

Since Devolutions Server 2019.x, many features can only be managed from the web interface. Please see Administration - Devolutions Server Settings.

The Devolutions Server Console manages the IIS metabase, it must be started with elevated privileges when the console needs to be used. Elevated privileges are granted when you use "**Run as administrator**" to launch the application. You can modify the shortcut to always start it in this manner.

CONSOLE

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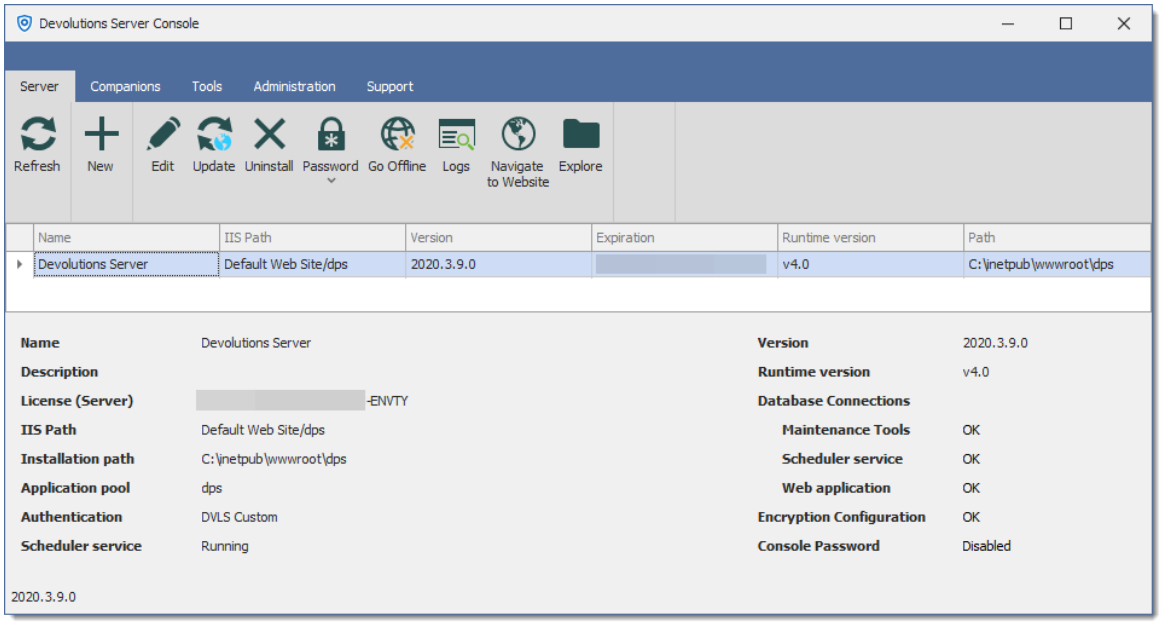
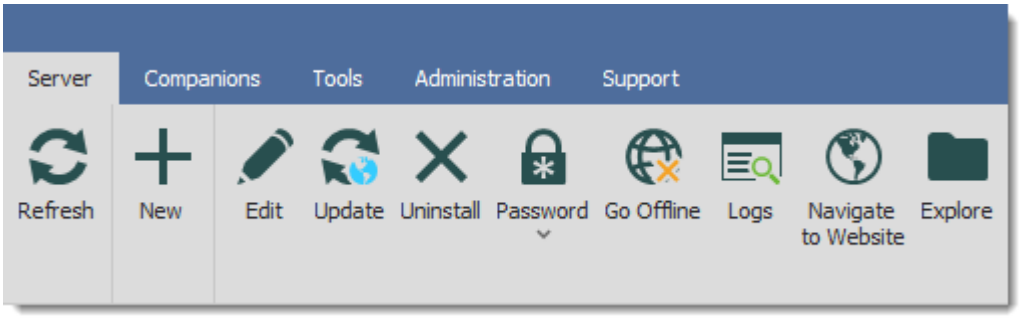


Devolutions Server Console

SETTINGS

SERVER



Option	Description
Refresh	Refresh the list of Devolutions Server instances in the Devolutions Server Console.
New	Create a new Devolutions Server instance.

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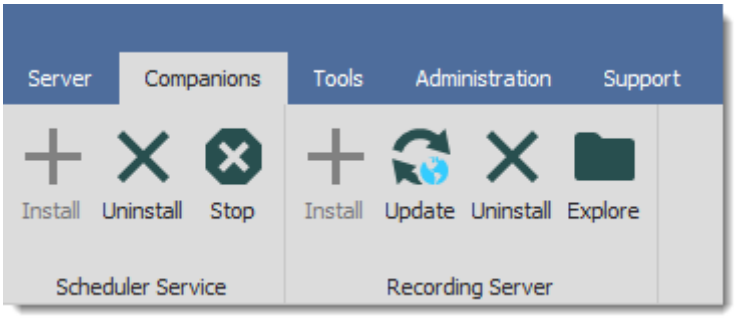
Edit	Edit the selected Devolutions Server instance's properties.
Update	Update the selected Devolutions Server instance.
Uninstall	Uninstall the selected Devolutions Server instance.
Password	Set, Change or Disable the Devolutions Server instance password.
Go Offline	Toggle the selected Devolutions Server instance to offline/online mode.
Logs	View the Data Source Logs of the selected Devolutions Server instance.
Navigate to Website	Open the web interface in the default browser.
Explore	Open the file explorer and points it to the Devolutions Server instance installation folder.

COMPANIONS



Scheduler Service	Description
Install	Install the Scheduler Service.

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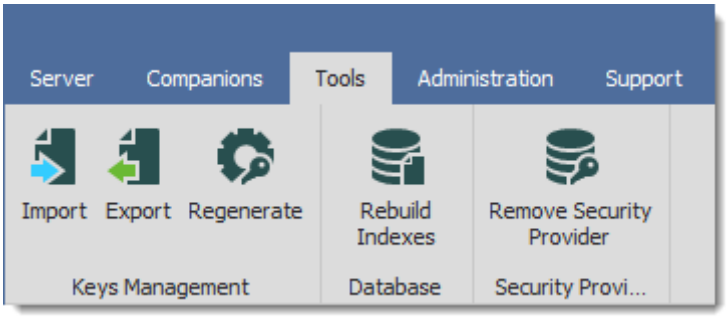
Uninstall	Uninstall the Scheduler Service.
Start/Stop	Start or stop the Scheduler Service.
Recording Server	**Description**
Install	Install the Recording Service.
Update	Update the Recording Service.
Uninstall	Uninstall the Recording Service.
Browse Directory	Browse the folder where the recording files are stored.

TOOLS



Keys Management	Description
Import	Import the encryption keys.
Export	Export the encryption keys.
Regenerate	Regenerate the encryption keys.

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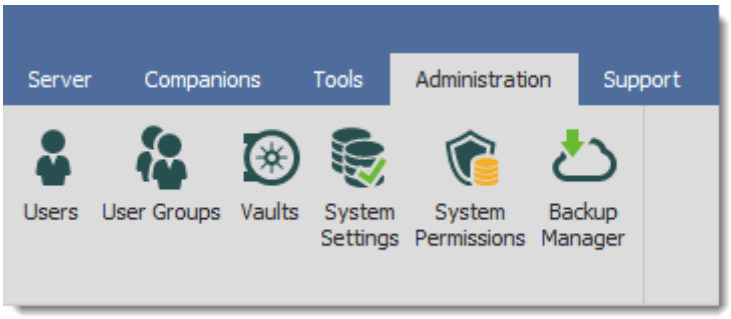
Database	Description
Rebuild Index	Rebuild indexes of the SQL database tables.
Security Provider	**Description**
Remove Security Provider	Remove the Security Provider that was previously used to encrypt a part of the data in the SQL database.

ADMINISTRATION



Option	Description
Users	Will open the Users management page on the Devolutions Server web interface.
User Groups	Will open the User Groups management page on the Devolutions Server web interface.
Vaults	Will open the Vaults management page on the Devolutions Server web interface.
System Settings	Will open the System Settings page on the Devolutions Server web interface.

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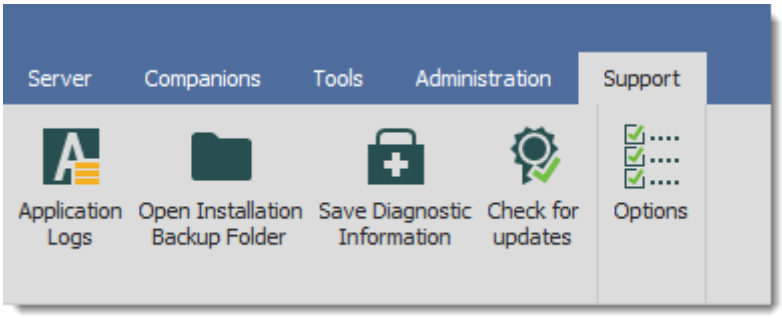
System Permissions	Will open the System Permissions page on the Devolutions Server web interface.
Backup manager	Will open the Backup Manager page on the Devolutions Server web interface.

SUPPORT



Option	Description
Application Logs	Open the Devolutions Server Console Application Logs dialog.
Open Installation Backup Folder	Open the Installation Backup Folder in the Windows File Explorer.
Save Diagnostic Information	Save the Diagnostic report in a text file.
Check For Update	Check for updating the Devolutions Server Console.
Options	Language setting and Update type options.

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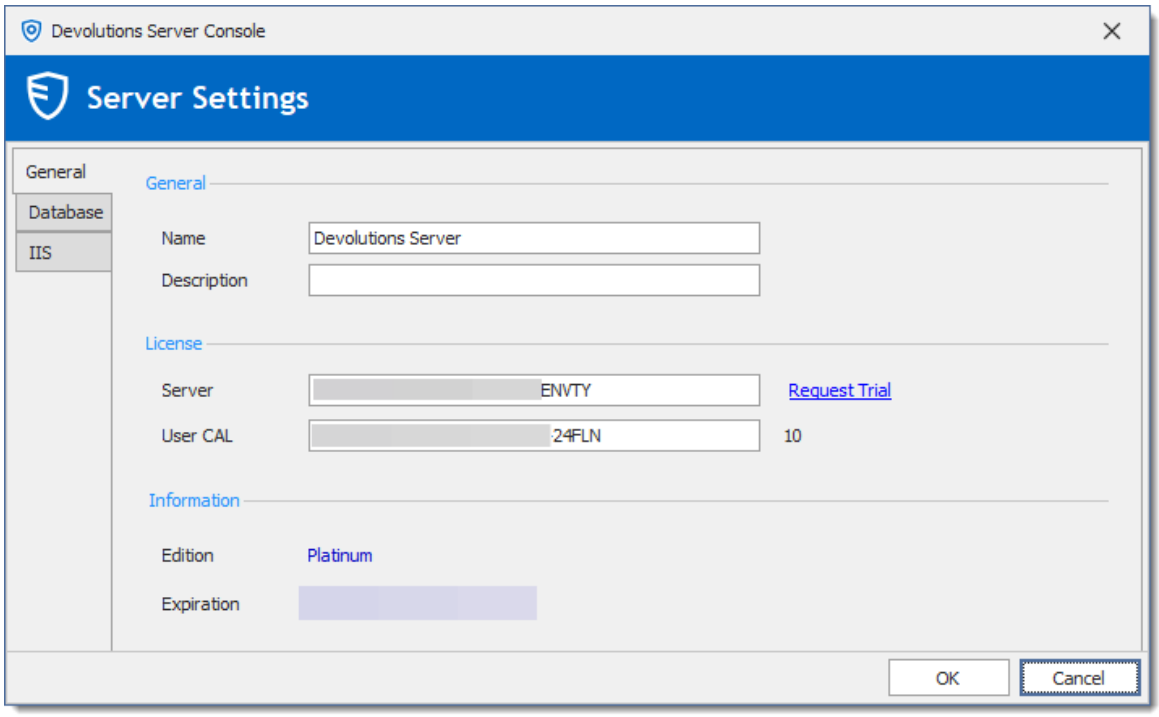
4.1.1 Devolutions Server Settings

4.1.1.1 General

DESCRIPTION

The General tab contains the basics information of the Devolutions Server instance such as the Name, Description, Serial Keys, etc.



General Tab

SETTINGS

GENERAL

OPTION	DESCRIPTION
Name	Enter the name for your server, it will be displayed in the Content area.

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OPTION	DESCRIPTION
Description	Enter a short description or additional information.

SERIAL

OPTION	DESCRIPTION
Server	Insert your serial registration number.
Request trial	This will redirect you to our Devolutions Server page to request a free 30 days trial.
User CAL	Insert your Client Access License key.

INFORMATION

OPTION	DESCRIPTION
Edition	Display the Devolutions Server Edition according to your Server license key.
Expiration	Expiration date of the product.

4.1.1.2 Database

DESCRIPTION

The Database tab contains the information of the SQL Server, the SQL credentials information and the database name used by Devolutions Server.

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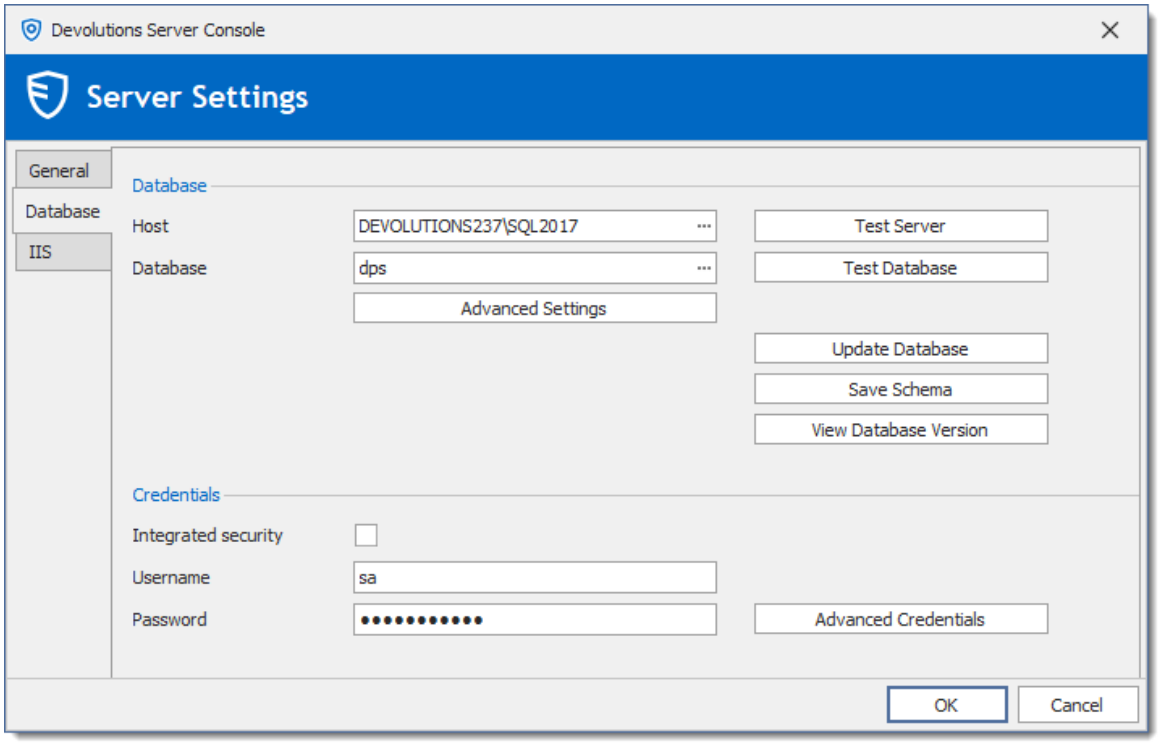

Database Tab

SETTINGS

DATABASE

OPTION	DESCRIPTION
Host	Name of the host where the database will be stored.
Database	Name of the database on the server.
Advanced Settings	Access the Advanced Settings.
Test Server	Test the connection with the server to validate if the proper information has been provided.

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OPTION	DESCRIPTION
Test Database	Test the connection with the database to validate if the proper information has been provided.
Update Database	Update the database on the server.
Save Schema	Save the database schema in a file to allow to send it the Devolutions Support team.
View database version	View what is the current database version.

CREDENTIALS

Note that the Integrated Security or Credentials settings affect how the Devolutions Server communicates with the SQL database. These options do not have any impact on how users will authenticate on the Devolutions Server instance.

OPTION	DESCRIPTION
Integrated security	Specify to use Windows Integrated Authentication for authenticating to the database. In order for integrated security to be used to connect to the database, you must set a domain account as the Application Pool identity in the IIS Manager.
Username	SQL login account username.
Password	SQL login account password.
Advanced Credentials	Access the Advanced Credentials that allows the Devolutions Server Console to communicate with the SQL database.

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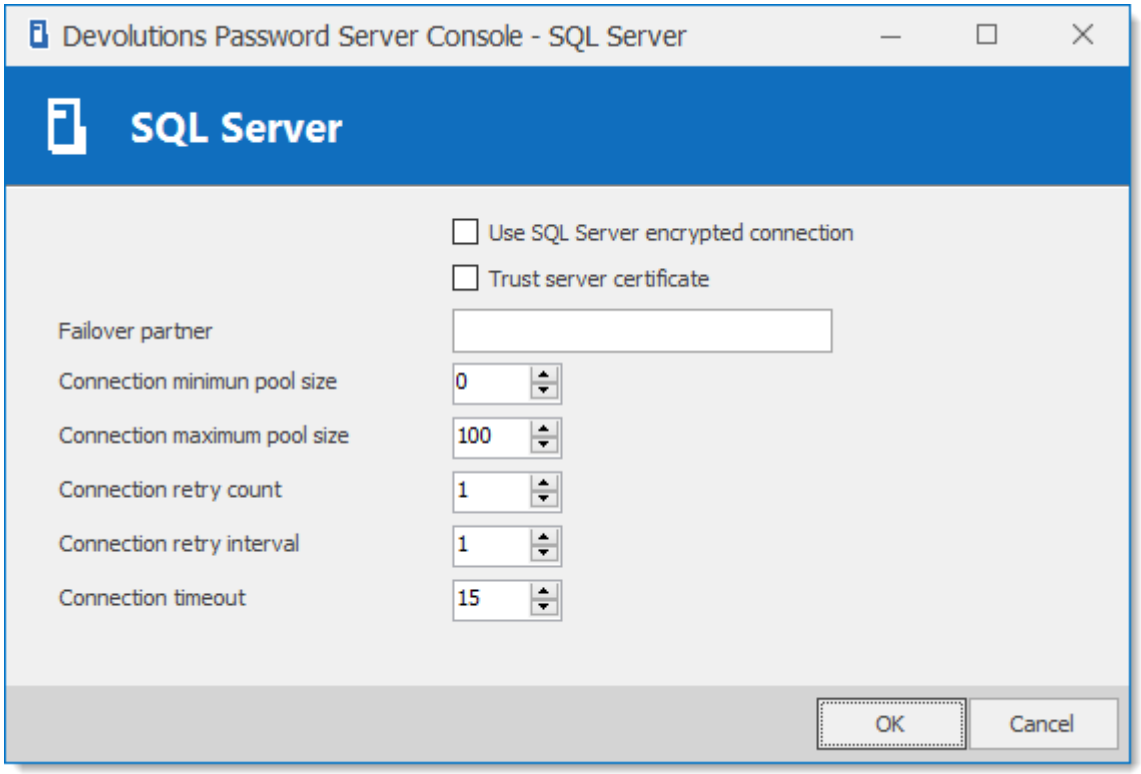
4.1.1.2.1 Advanced Settings

DESCRIPTION

The Advanced Settings contains advanced parameters that are used for the SQL database connection string.



Advanced Settings Dialog

SETTINGS

OPTION	DESCRIPTION
Use SQL Server encrypted connection	Use SSL to encrypt communication with the database.
Trust server certificate	Always trust the server certificate.

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OPTION	DESCRIPTION
Failover partner	The name of the failover partner server if database mirroring is configured. This is used only for the initial connection as the principal server will return a name which will replace the configured value when different.
Connection minimum pool size	The minimum number of connections that are allowed in the pool.
Connection Maximum pool size	The maximum number of connections that are allowed in the pool.
Connection retry count	Controls the number of reconnection attempts after the client identifies an idle connection failure. Valid values are 0 to 255. The default is 1. 0 means do not attempt to reconnect .
Connection retry interval	Specifies the time between each connection retry attempt (ConnectRetryCount). Valid values are 1 to 60 seconds (default=10), applied after the first reconnection attempt. When a broken connection is detected, the client immediately attempts to reconnect; this is the first reconnection attempt and only occurs if ConnectRetryCount is greater than 0. If the first reconnection attempt fails and ConnectRetryCount is greater than 1, the client waits ConnectRetryInterval to try the second and subsequent reconnection attempts.
Connection timeout	The length of time (in seconds) to wait for a connection to the server before terminating the attempt and generating an error.

4.1.1.2.2 Advanced Credentials

DESCRIPTION

The following credentials are used to allow Devolutions Server to communicate with the SQL database. Only SQL login accounts can be used.

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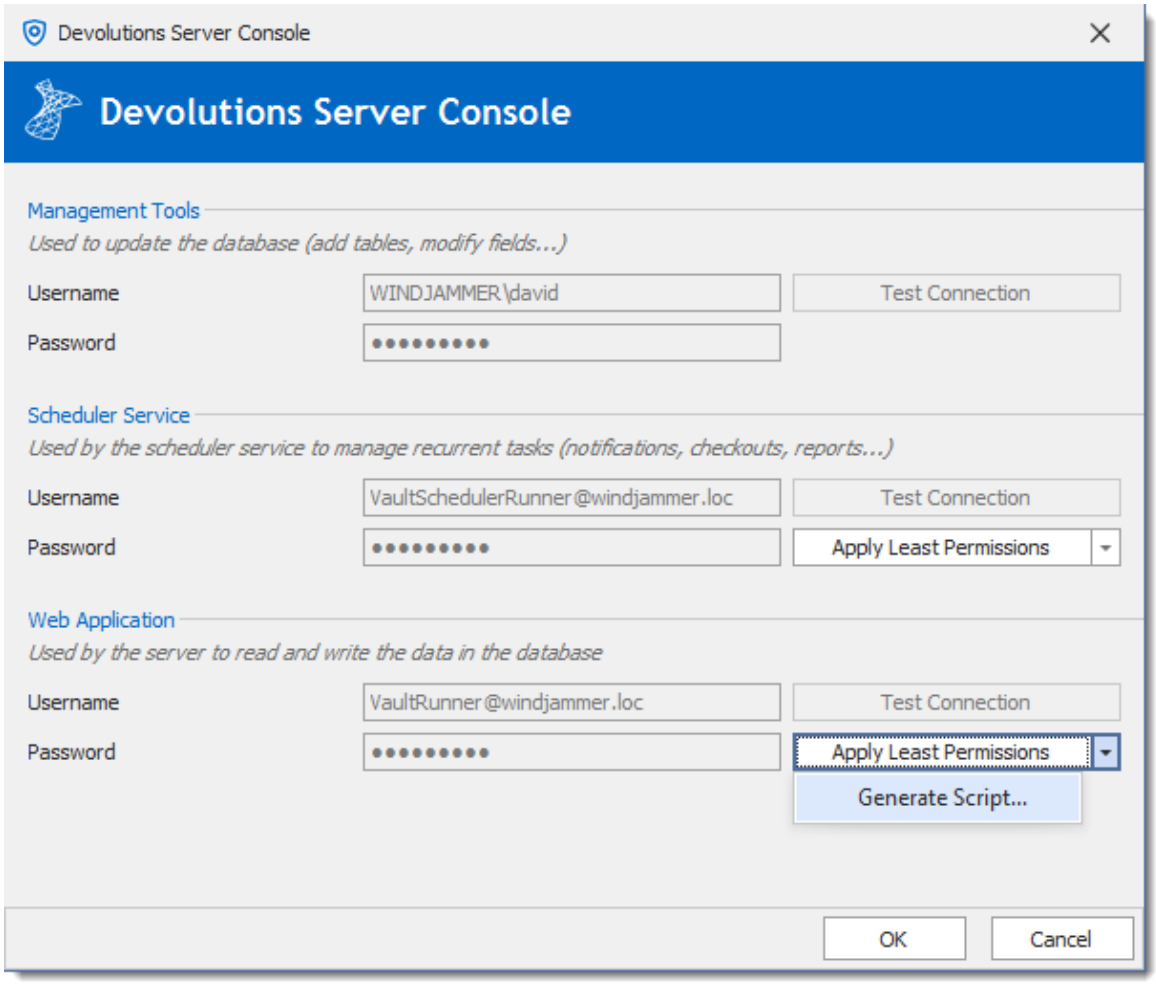
For further information about these accounts, please see Pre-Deployment Account Survey.



Advanced Credentials dialog

OPTION	DESCRIPTION
Management Tools	Credentials that allows the Devolutions Server Console to communicate with the SQL database. Must be a SQL account.
Scheduler Service	Credentials used for the Scheduler features (Backup manager, Email Notifications, Secure Messaging, Domain Users and User groups cache, Azure AD cache). Must be a SQL account. If the Integrated

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OPTION	DESCRIPTION
	Security option is enabled, the Username and Password fields are grayed out.
Web Application	Credentials used for the Web Application to communicate with the SQL database. Must be a SQL account. If the Integrated Security option is enabled, the Username and Password fields are grayed out.
Test Connection	Test against the SQL server the credentials set in the Username/Password fields. If the Integrated Security option is enabled, the button is grayed out.
Apply Least Permissions	Will execute a SQL statement to grant least permissions on the database for the Scheduler Service or the Web Application accounts.
Generate Script	Will generate a SQL script that can be run on the SQL database for the Scheduler Service or the Web Application accounts.

4.1.1.3 IIS

DESCRIPTION

The IIS settings are part of your prerequisite at the installation level. Most of what is found in this tab is automatically filled in by the information given while setting up your Devolutions Server, the IIS Settings tab is used more as an informative source rather than configuration.

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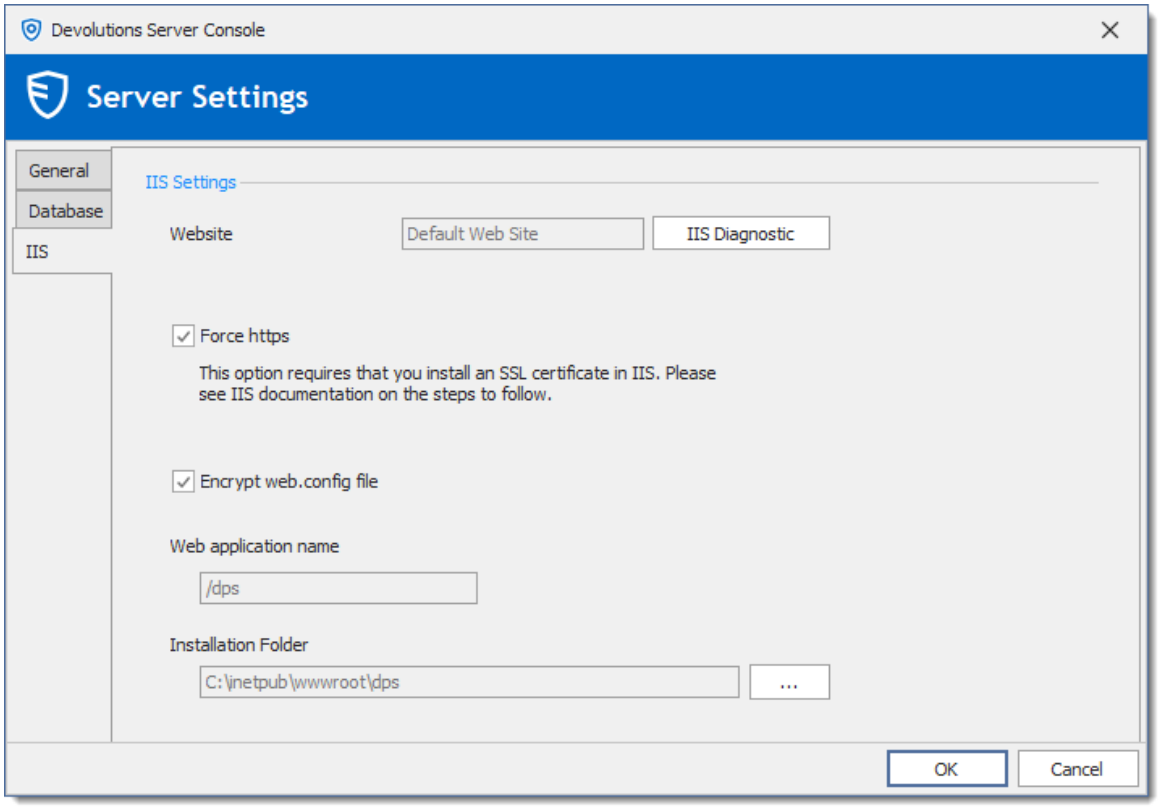

IIS Tab

SETTINGS

OPTION	DESCRIPTION
Force https	Force the use of the https instead of the http.
Encrypt web.config file	Activate this option if you wish to add an extra layer of security to your configuration by encrypting your file.

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Web Interface

Part

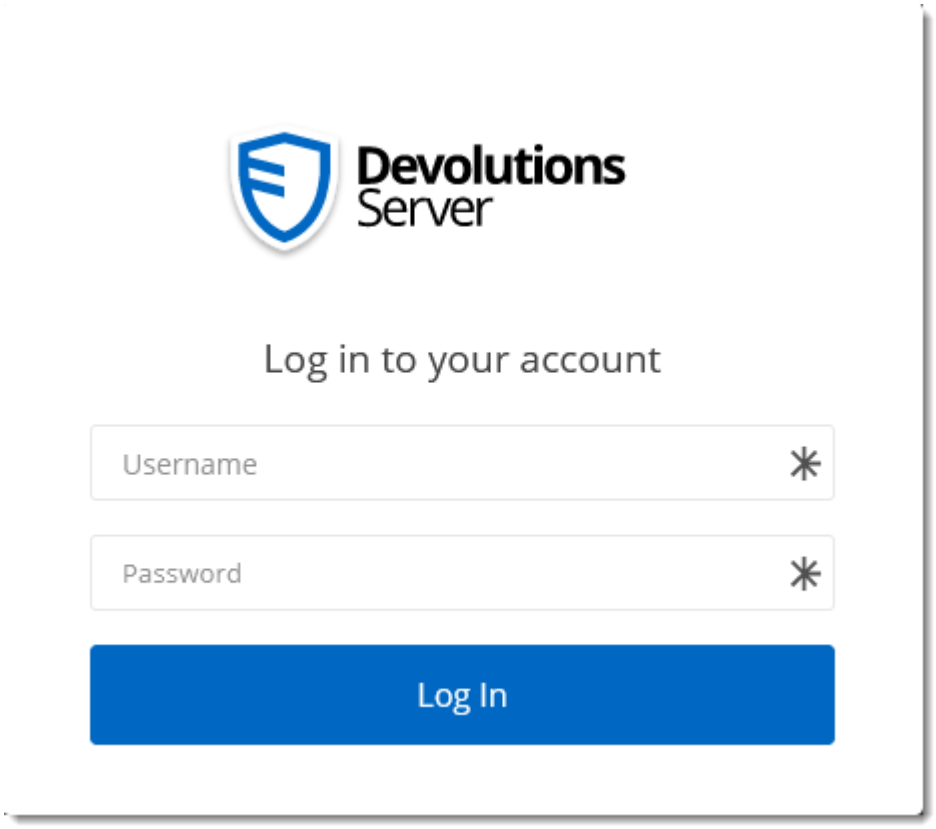
5 Web Interface

DESCRIPTION

The Devolutions Server web interface offers a simplified interface for end-users to use and manage passwords from any web browser.

LOGIN PAGE

Open a web browser and navigate to the URL of the Devolutions Server instance. If the instance has been created with the default URL, it would be available at http://<ServerName>/dps. Simply enter the username and password of a Devolutions Server account to connect.



Devolutions Server - Login Page

MENU

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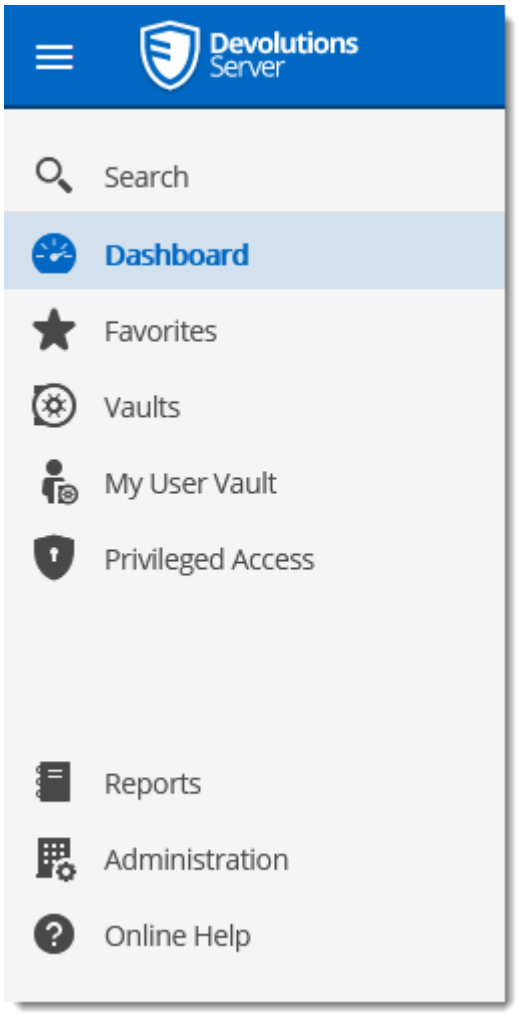
The **Menu** allows the user to navigate through the different sections. It can be expanded or collapsed to hide the labels by clicking on the Devolutions Server icon the the top-left corner.



Menu

5.1 Dashboard

DESCRIPTION

The **Dashboard** section provides an overview of the available **Check Outs**, **Number of vaults**, **Recently viewed items**

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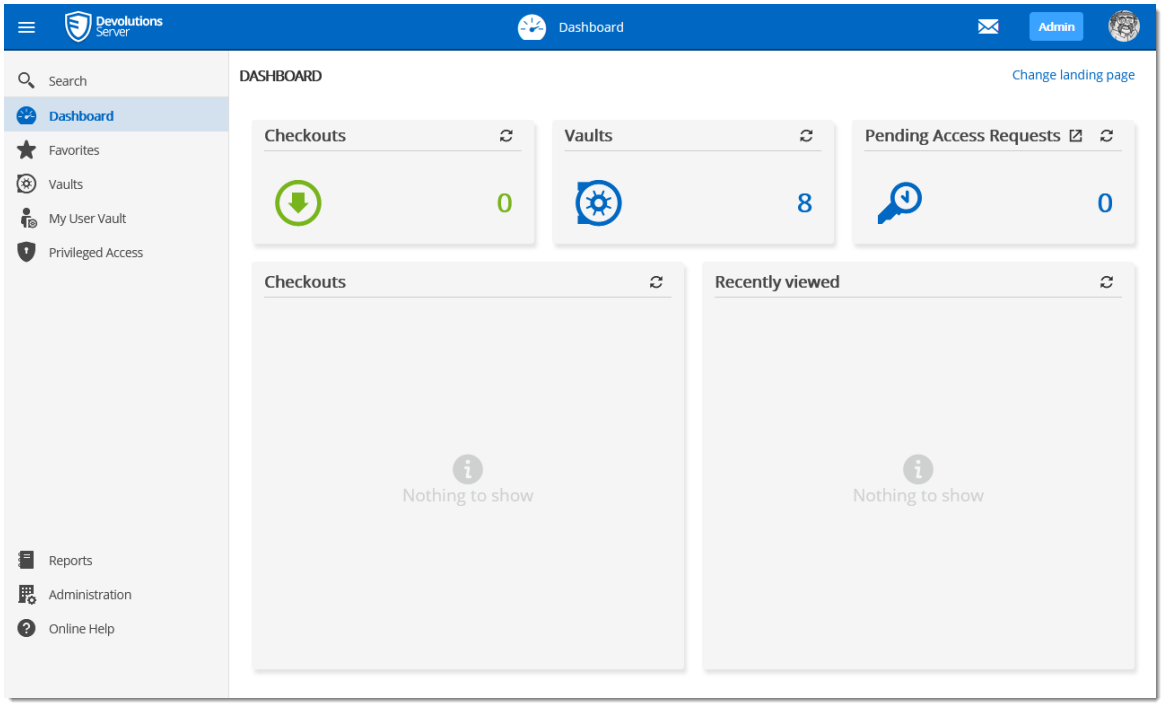

Dashboard

5.2 Account Menu

DESCRIPTION

Users manage their account: language preferences, personal information, Gravatar, as well as limited configuration of the web interface. The menu includes links to Devolutions Online Help and forum. Users log out of Devolutions Server from the **Account Menu**.

SETTINGS

Click the Gravatar or initials to access the **Account Menu**.

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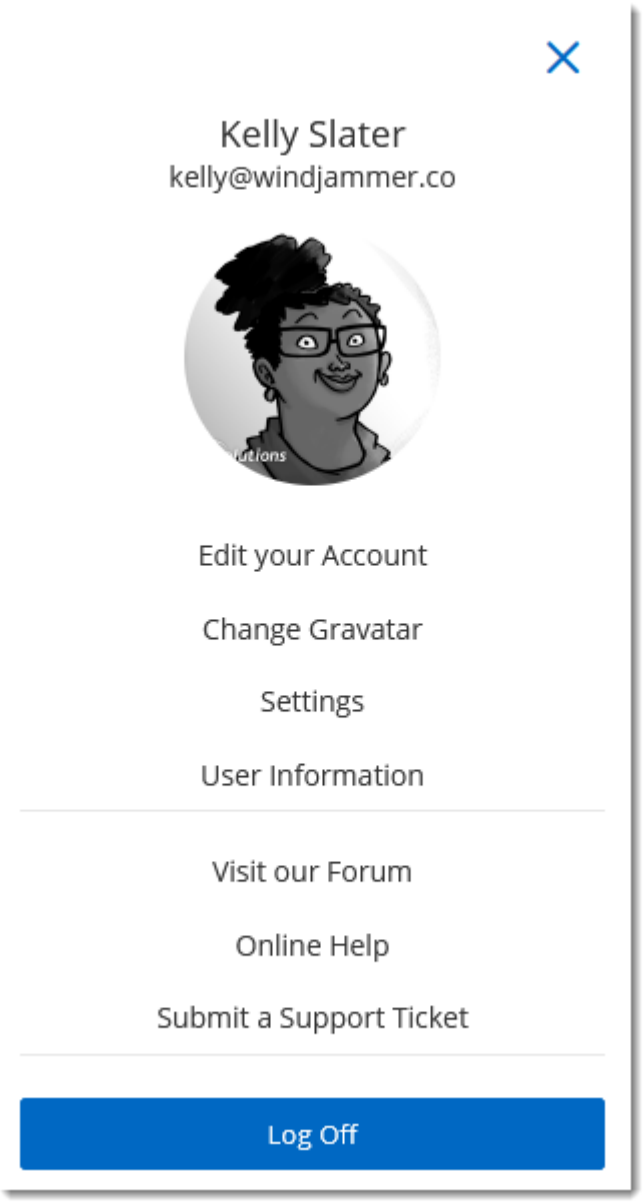

Account Menu

EDIT YOUR ACCOUNT

Set the language of the web interface.

Add or modify personal information.

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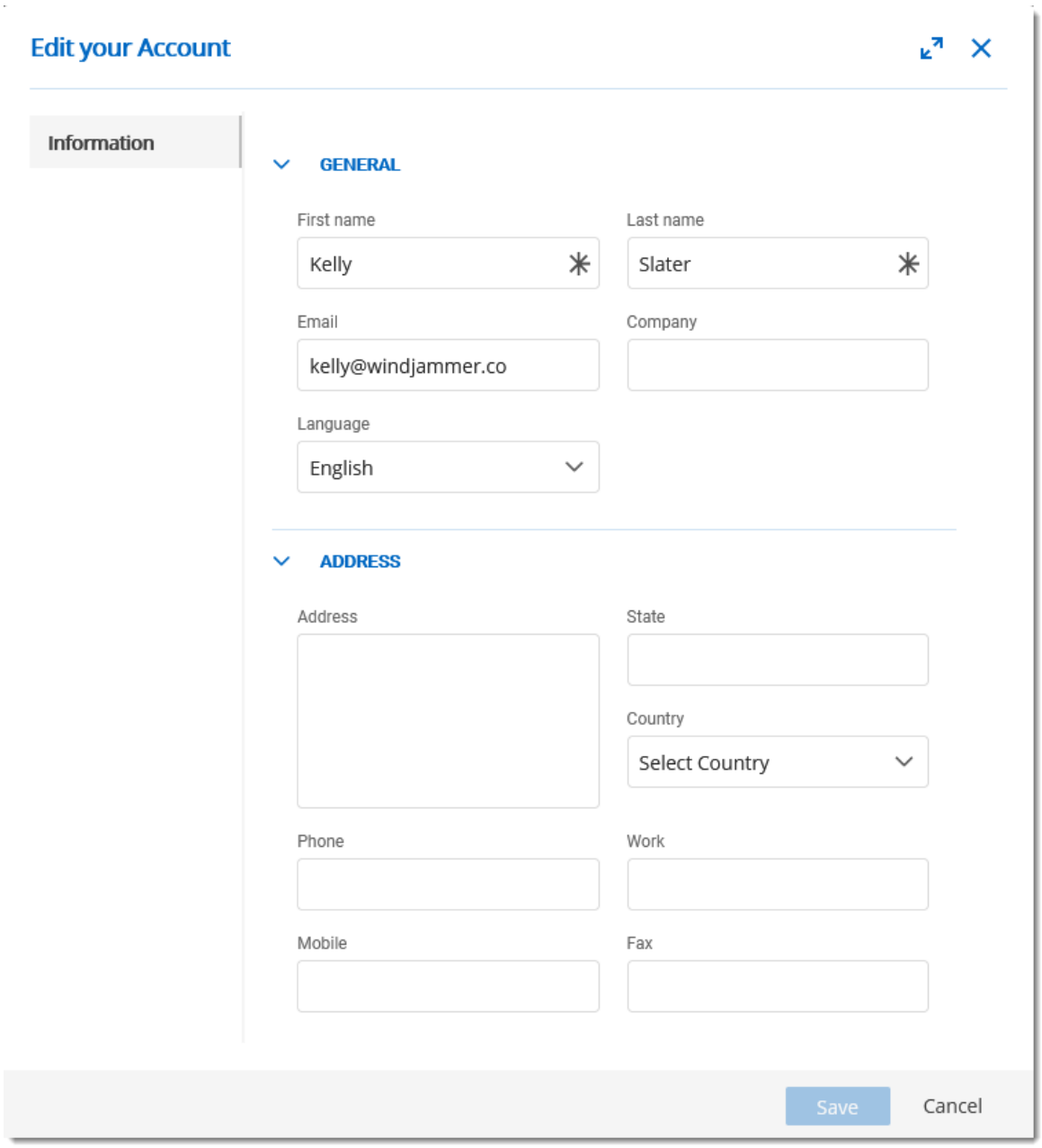

Edit your Account

CHANGE GRAVATAR

The default user avatar is the user initials. Users can use an image uploaded at Gravatar.com.

Enter the email associated with your Gravatar account.

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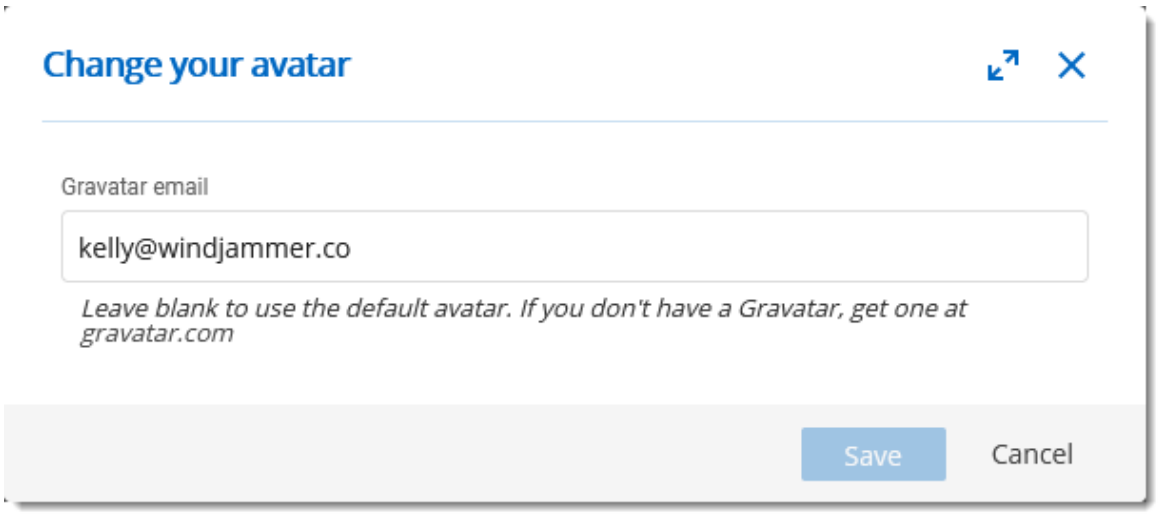

Change your Avatar

CHANGE PASSWORD

Allow the user to modify his password. Only available for Devolutions Server Custom account type. Please see Authentication for more information.

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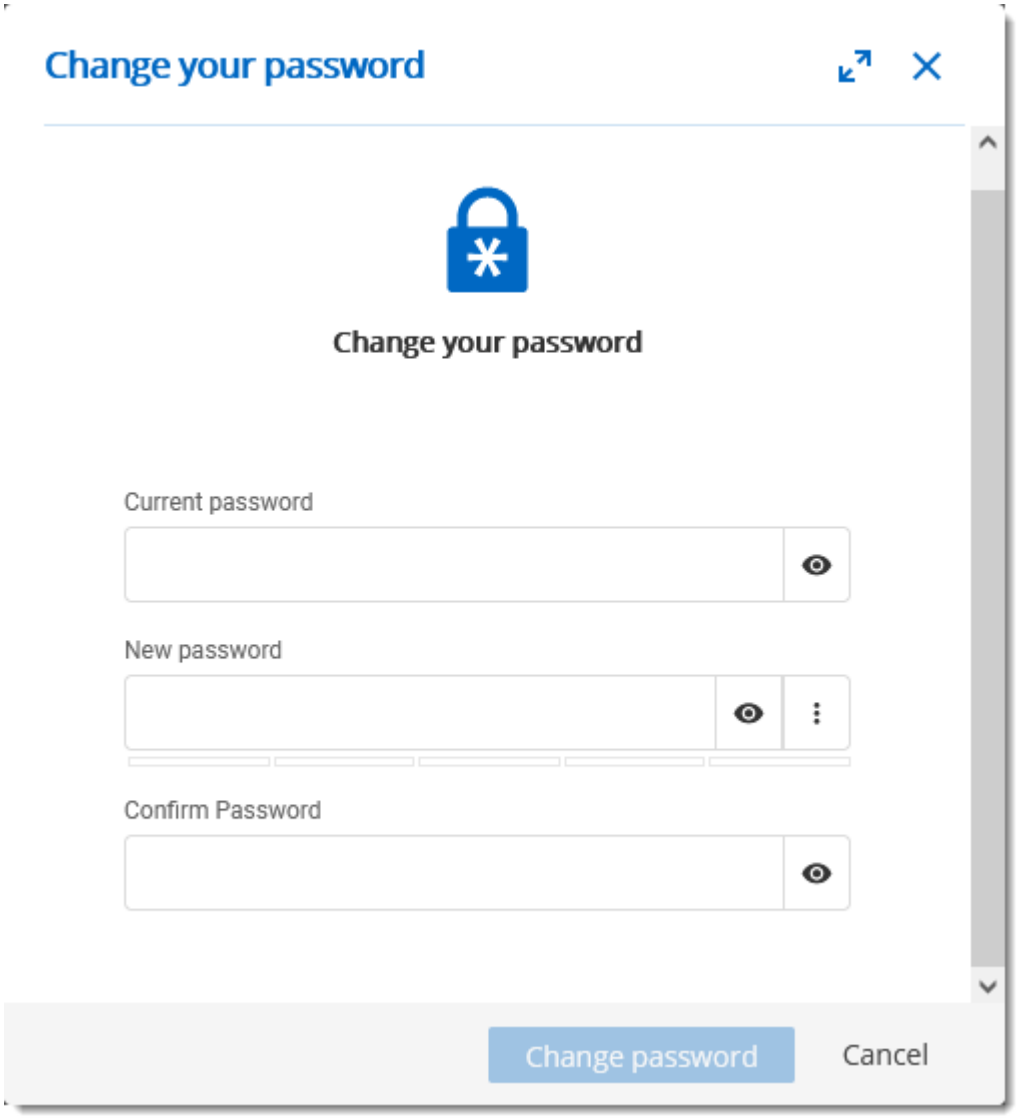

Change Password

SETTINGS

Modify **User Interface** elements.

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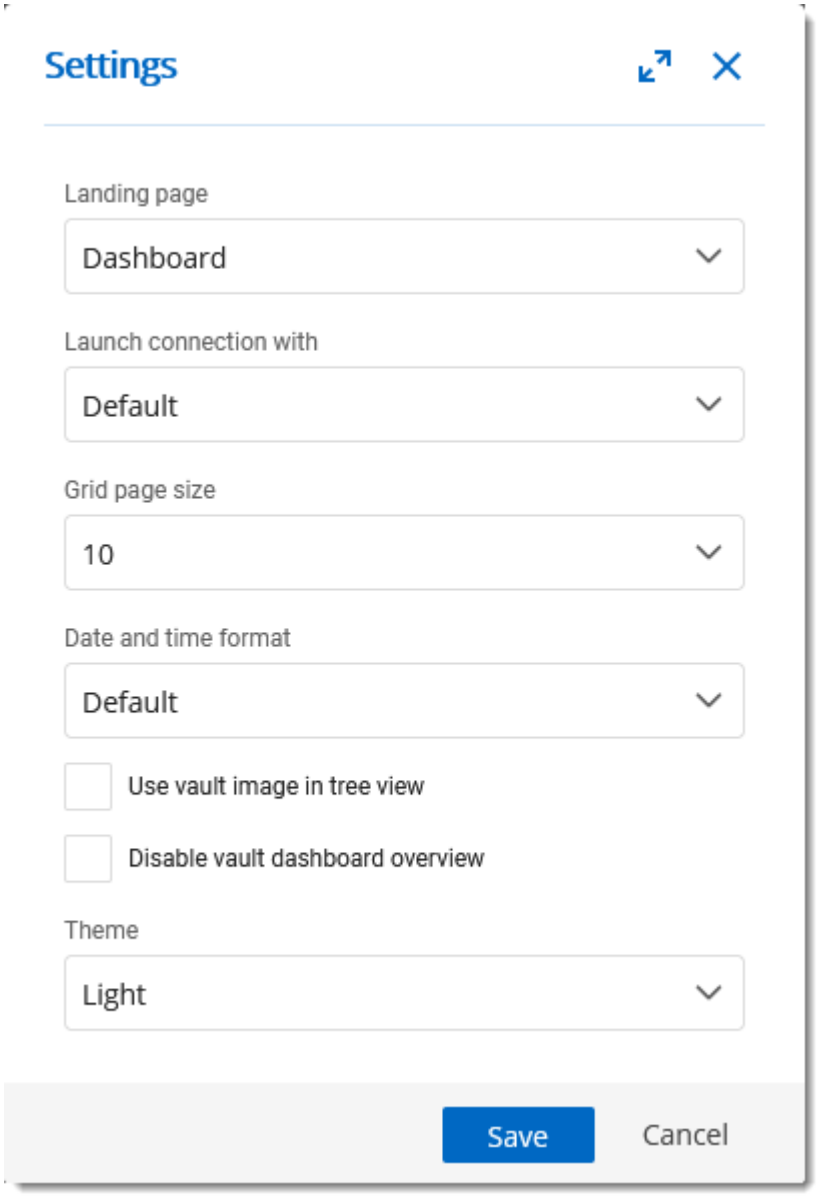

User Interface Settings

OPTION	DESCRIPTION
Landing page	Choose the home page that opens when you sign on: • Dashboard • Vaults • My User Vault

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OPTION	DESCRIPTION
	• Reports • Administration
Launch connection with	Choose the application that opens remote connections: • Default: refers to Devolutions Launcher • Remote Desktop Manager • Devolutions Launcher
Grid page size	Choose the number of rows displayed in lists (e.g. reports) • 10 • 20 • 30
Date and time	Choose a format: • Default: month/day/year • US • Custom
Theme	Choose a theme: • Default: machine's theme • Light • Dark

USER INFORMATION

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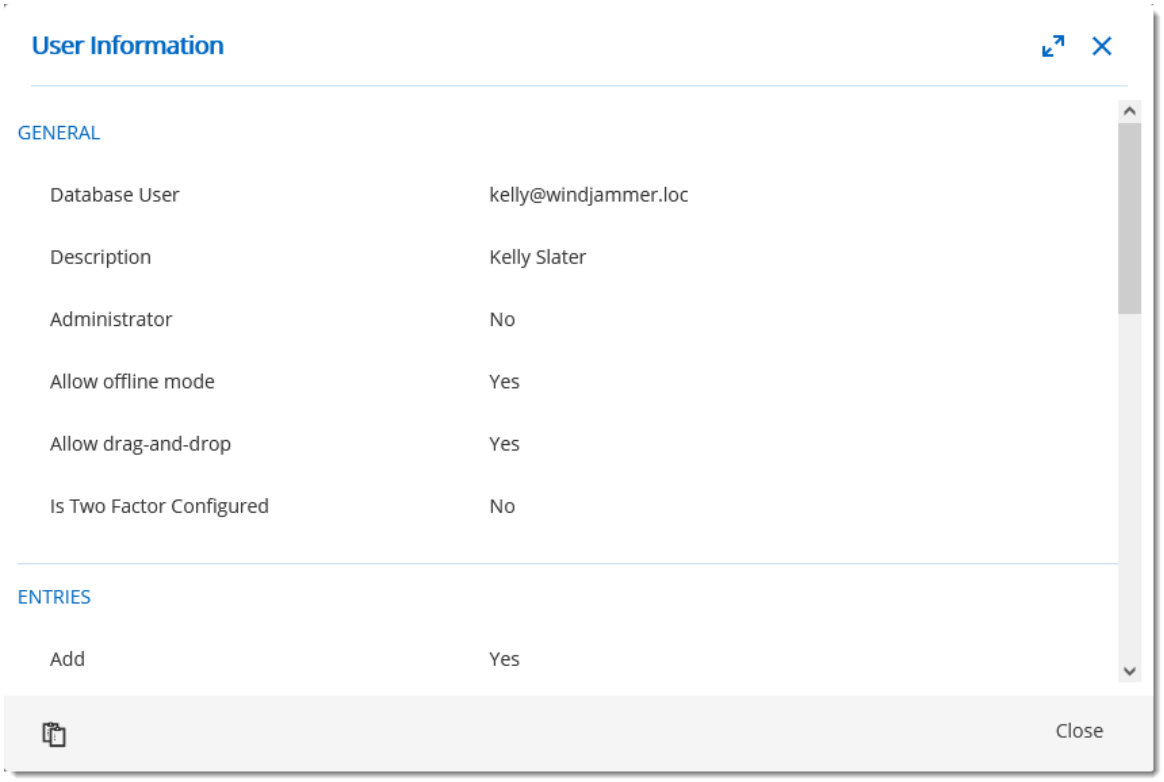
Display the User Information report that contains the user account configuration.



VISIT OUR FORUM

A link to our forum for support and feature requests.

ONLINE HELP

A link to our online user guides.

SUBMIT A SUPPORT TICKET

Submit the **Data Source Information** and **Diagnostic Report** to the Devolutions Support team.

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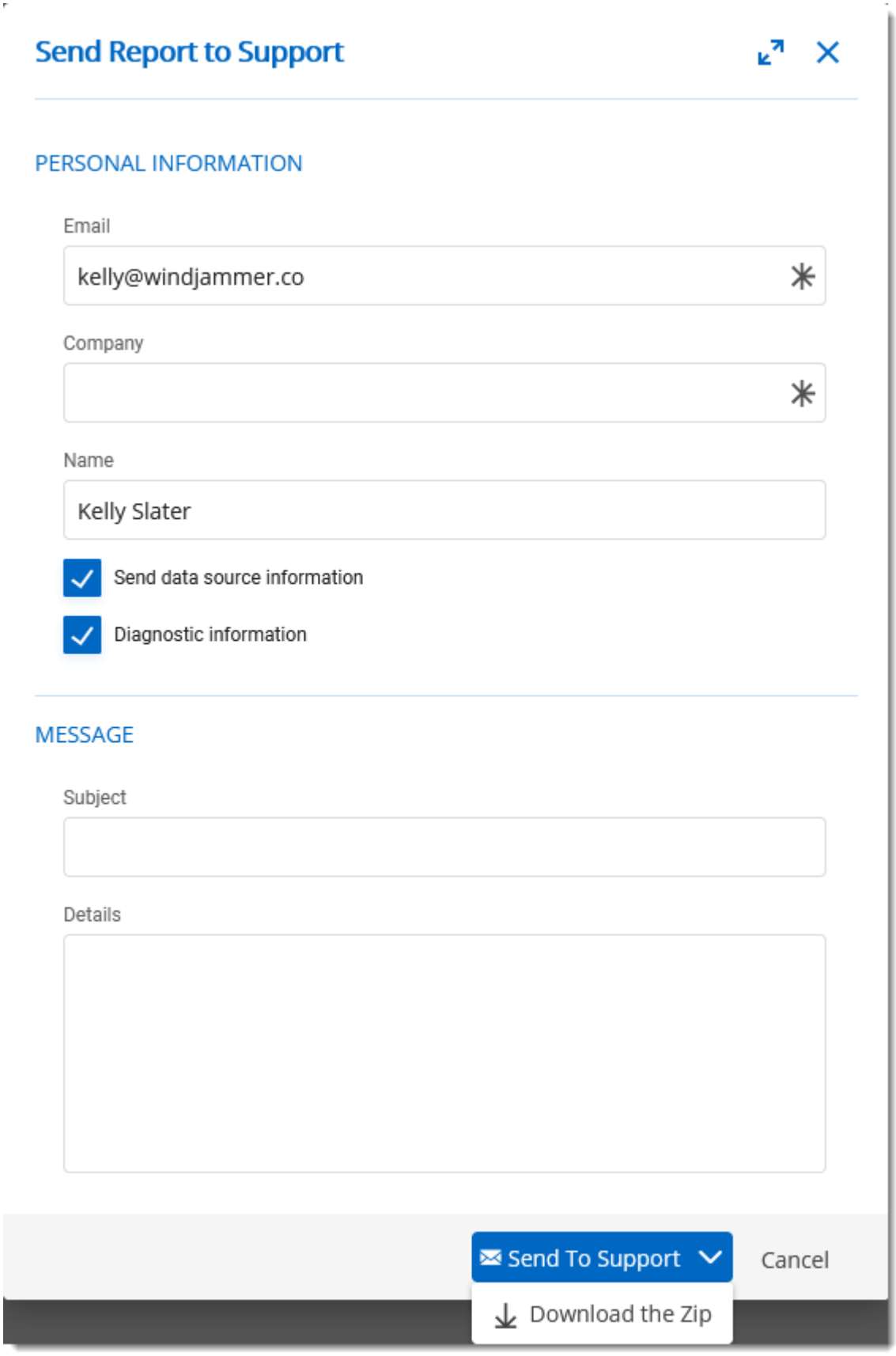

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OPTION	DESCRIPTION
Email	Provide your email address.
Company	Provide your company name.
Name	Provide your name.
Send data source information	When enabled, the Data Source Information report will be attached to the email.
Diagnostic information	When enabled, the Diagnostic report will be attached to the email.
Subject	Subject of the message.
Detail	Additional information or detail can be enter in the Detail section.
Send to Support	Will send this Report to Devolutions Support team.
Download the Zip	Allows to download the Report into a Zip file that can be saved on your local computer.
Cancel	Cancel the operation.

LOG OFF

Sign off from your account.

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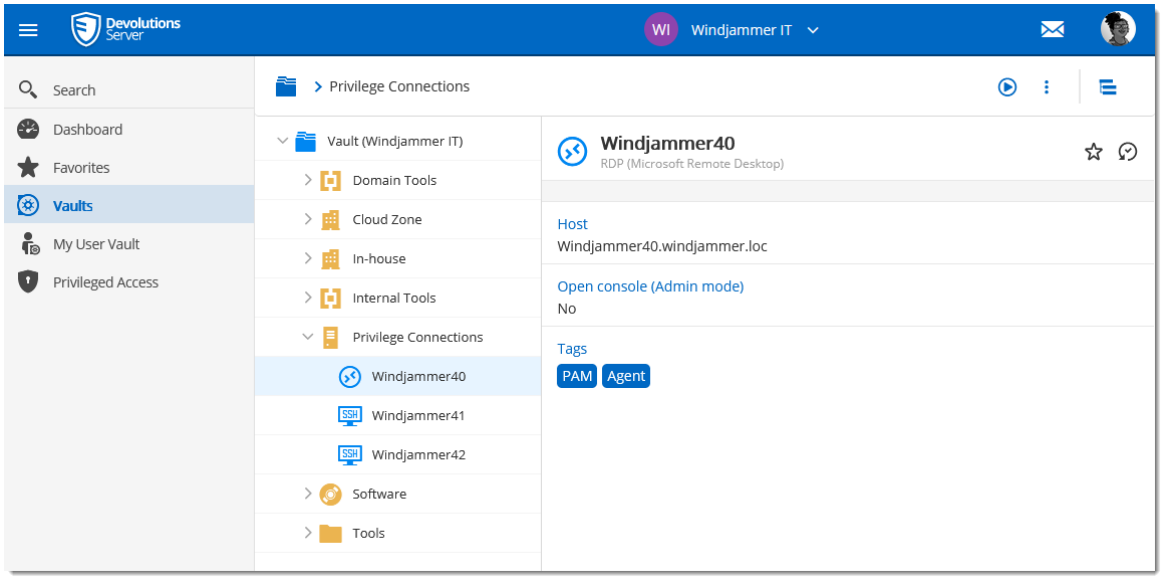
5.3 Vaults

DESCRIPTION

The **Vaults** allows the users to create entries and manage the content of the data source. Vaults are divided in two parts:

- The **Navigation Pane** (left) lists the entries available in the data source (current Vault).
- The **Content Area** (right) displays information regarding the selected entry.



Vaults

NAVIGATION PANE

The **Navigation Pane** displays the entries available to the user. The **Navigation Pane** can display entries in two different manners:

- **Tree View**
- **List View**

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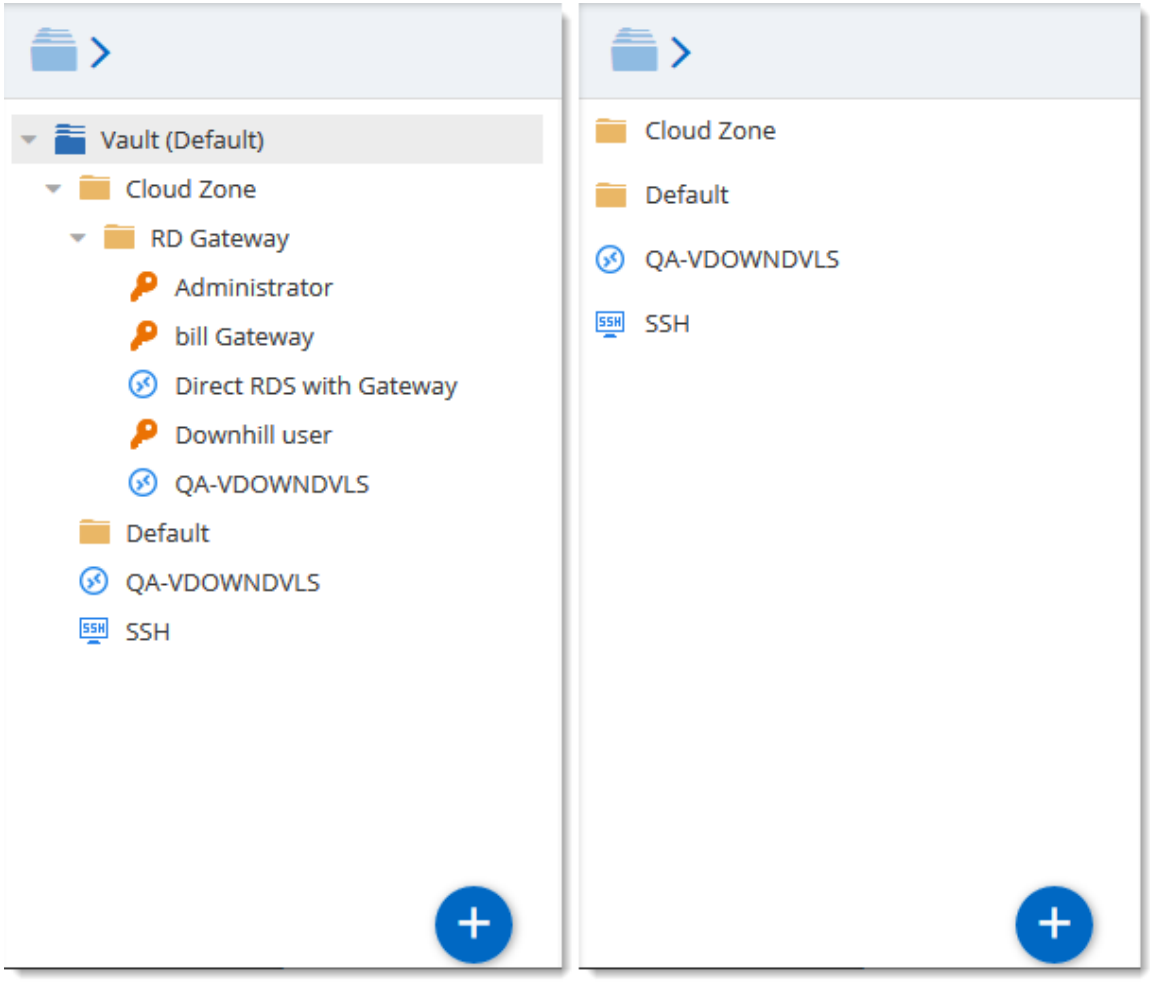

Navigation Pane - Tree View (left), List View (right)

DASHBOARD

The **Content Area** displays various information regarding the selected entry.

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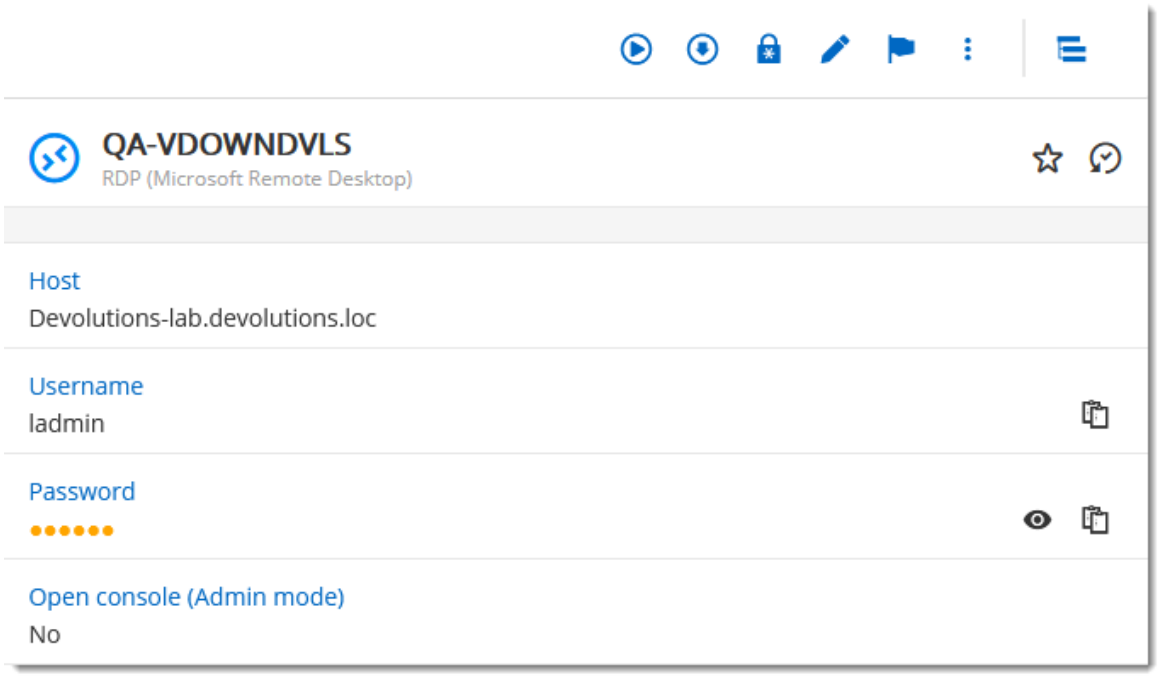

Entry Overview

OPTIONS	DESCRIPTION
Open	Open the session **(Devolutions Launcher required)**.
Check Out	Check Out the session.
View Password	View the password of the selected entry.
Properties	Edit the properties of the selected entry.
Status	Edit the status of the selected entry.
More	Display more options for the selected entry. • User Specific Settings • Save as Template • View Password History

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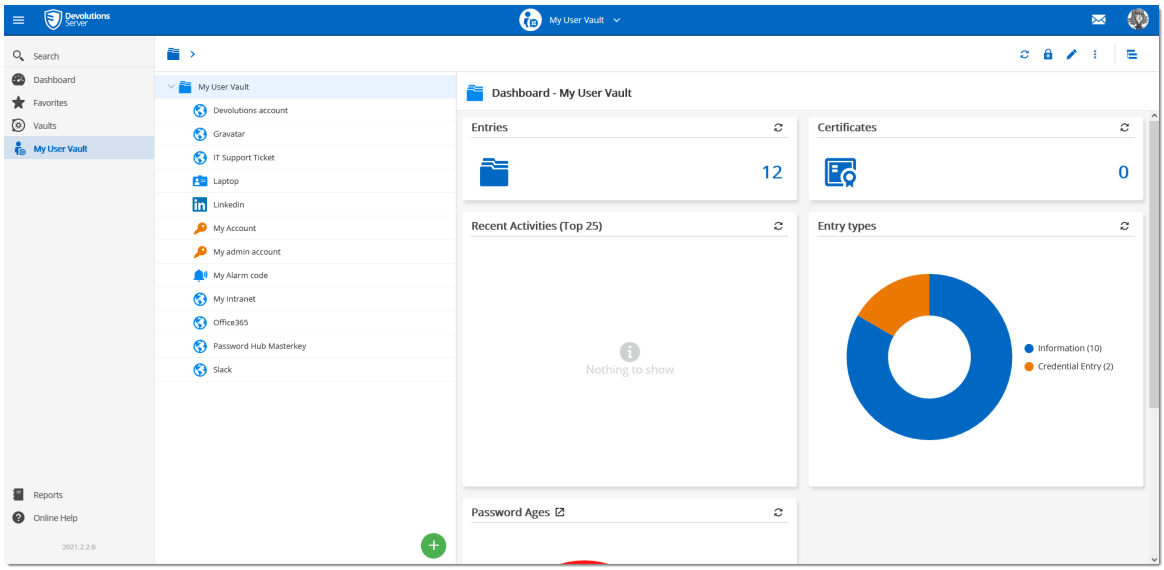
OPTIONS	DESCRIPTION
	• Delete
Add to Favorites	Add the selected entry to favorites.
Statistics	Hover the icon to view who has created/modified the entry.
View Password	Display the password of the selected entry.
Copy to clipboard	Copy the field of the selected entry (Usually Username or Password).

5.3.1 My User Vault

DESCRIPTION

The **User Vault** is a user centric **Vault** used to store private information, credentials and passwords. It allows each user to have their very own **User Vault**. The **User Vault** prevents users from using a non-secure tool to manage their personal passwords at work.



User Vault

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5.3.2 Create a New Entry

DESCRIPTION

Every item you see in your Vault and User Vault is an **Entry**. There are many type of entries that can be created directly in Devolutions Server web interface.

CREATING A NEW ENTRY

To create a new entry go in the Vaults page or User Vault page and then click on the **Add** button to create a new entry.

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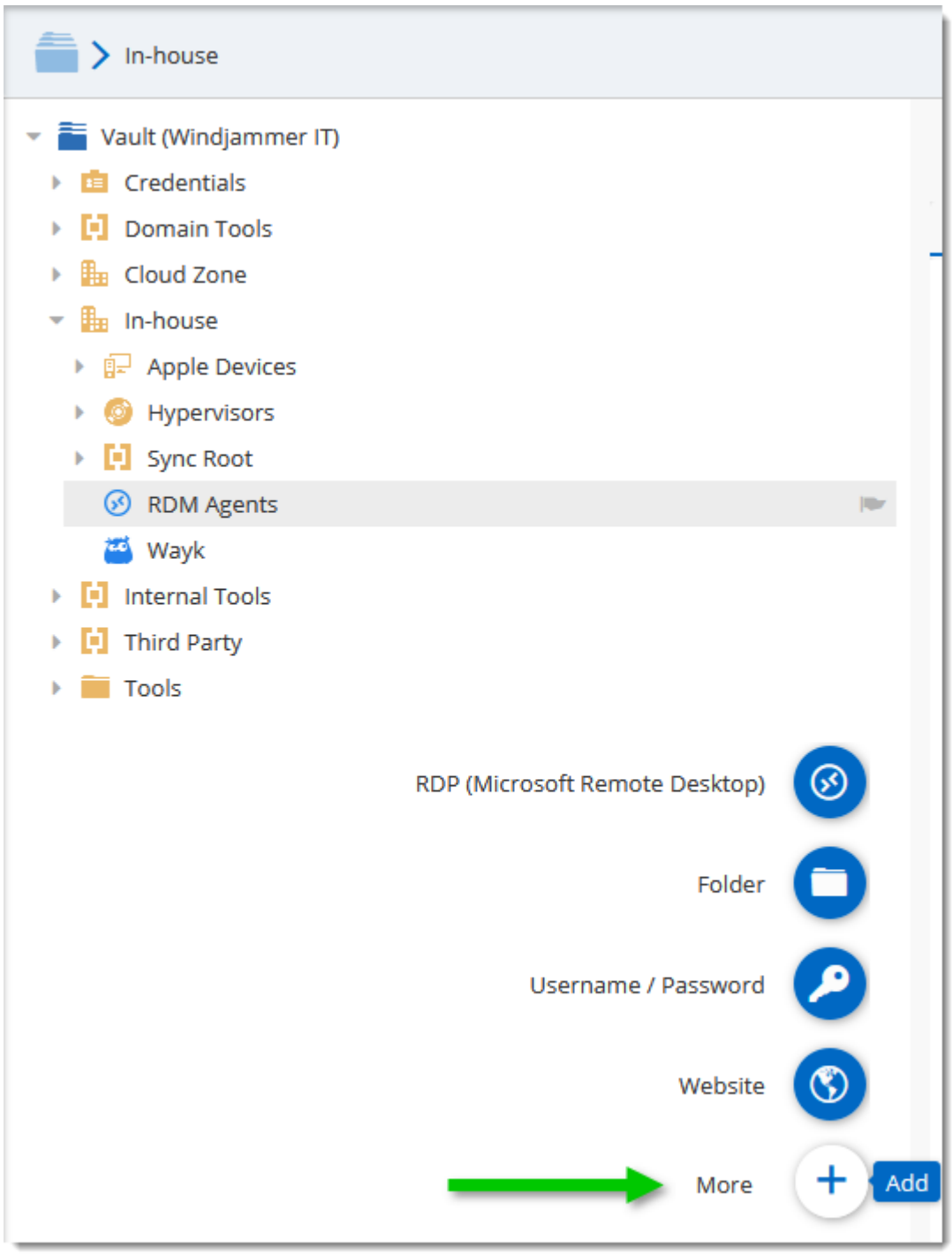

Add a new Entry

Moving the mouse over the **Add** button will display a list of shortcuts for common entries.

Entries come in various types, all serving different purposes for your convenience.

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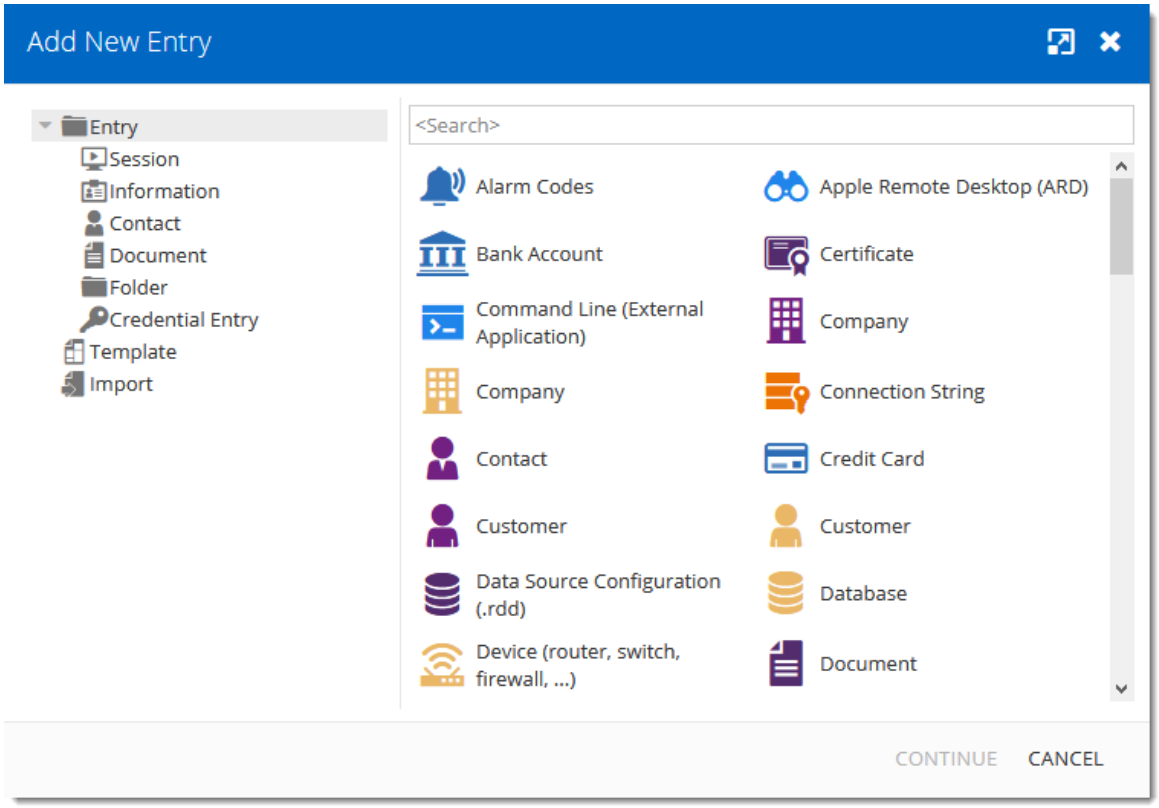

New Entry

OPTIONS	DESCRIPTION
Session	Session type entries are used for connections.
Information	Information type entries are used to store all sorts of data, both sensitive or not.
Contact	Contact type entries are used to store information about particular individuals.
Document	Document type entries are used to store external files.
Folder	Folder entries are used to help you customize and compartmentalize your entries.
Credential Entry	Credential entries are used to store all sorts of credentials.

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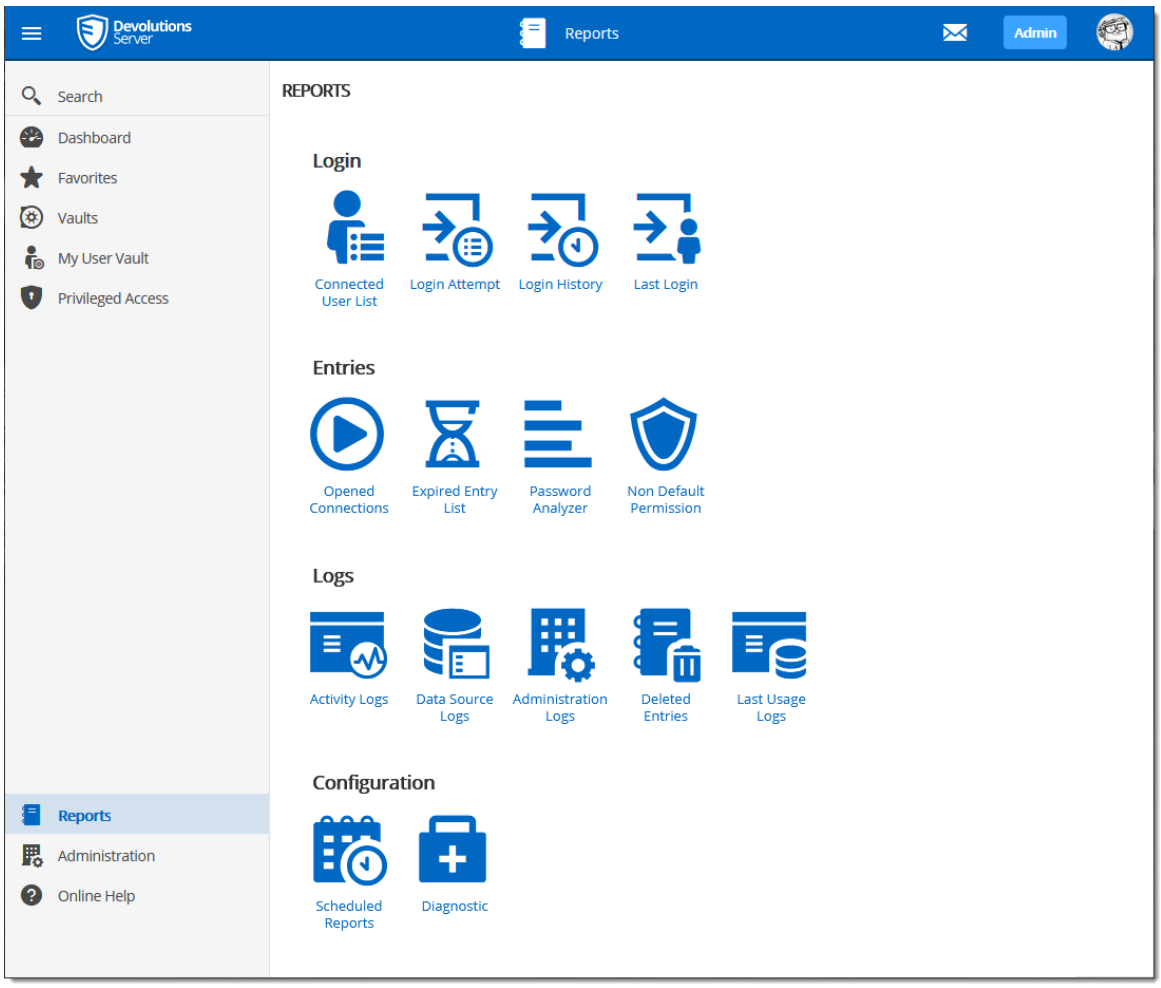
5.4 Reports

DESCRIPTION

The **Reports** is only available for administrators. It allows the administrator to consult different reports.

REPORTS



Reports

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LOGIN	DESCRIPTION
Connected User List	This displays the users that are currently connected to the Devolutions Server data source.
Login Attempt	This lists all unsuccessful logins to the Devolutions Server data source.
Login History	This displays the information of each user that has been connected to the Devolutions Server data source.
Last Login	This displays the last login information for each user per platform.
ENTRIES	**DESCRIPTION**
Opened Connections	This lists all connections that are currently opened by users.
Expired Entry List	This displays the entries that are expired or should expire in the future.
Password Analyzer	This lists all entries containing encrypted passwords and displays their Strength.
Non Default Permission	This lists all permissions per vault.
LOGS	**DESCRIPTION**
Activity Logs	The displays the information about session activity.
Data Sources Logs	This displays the logs of the Devolutions Server data source.
Administration Logs	This displays the Admin logs of the Devolutions Server data source.

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LOGIN	DESCRIPTION
Deleted Entries	This lists every entries deleted in the data source.
Last Usage Logs	This displays the time of the last modification of the entries.
CONFIGURATION	**DESCRIPTION**
Scheduling Reports	With this feature, you can set dates, filters and various customized settings to schedule recurring reports over any desire period.
Diagnostic	This will present a data source diagnostic report.

REPORT CUSTOMIZATION

Most of the reports available can be customized. It is possible to filter or sort the data, set the time interval or even export the report in a .CSV file.

FILTERING AND SORTING

Following the column title, the **sort button** offers to sort columns.

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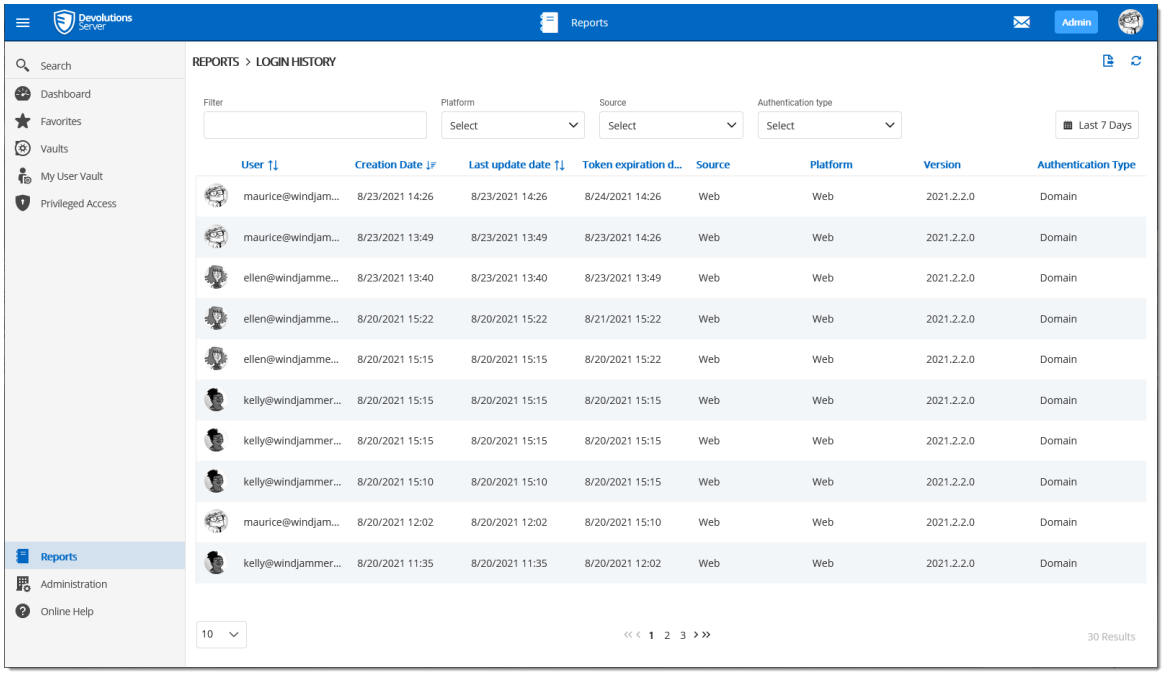

Filtering and Sorting Reports

TIME INTERVAL

Select the **Time Interval** on which the report will be based on.

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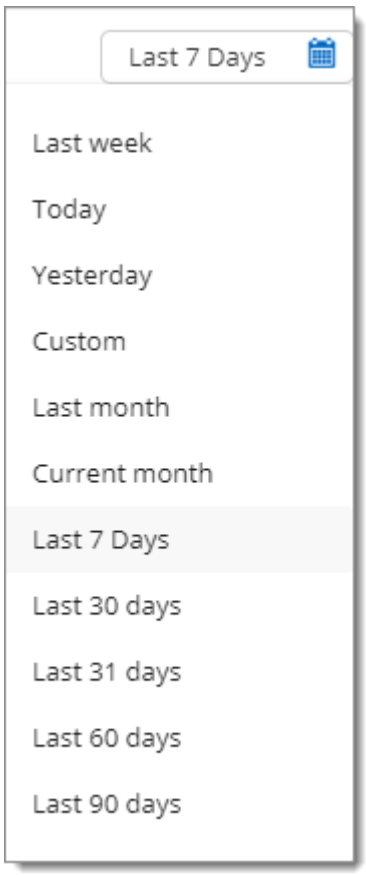

Time Interval button

5.4.1 Configuration

5.4.1.1 Scheduling Reports

DESCRIPTION

The Scheduled Reports will generate a report and send it by email to any selected user accounts. It could be an on demand report or a recurrent report based on a schedule (daily, weekly, monthly, yearly).

SETTINGS

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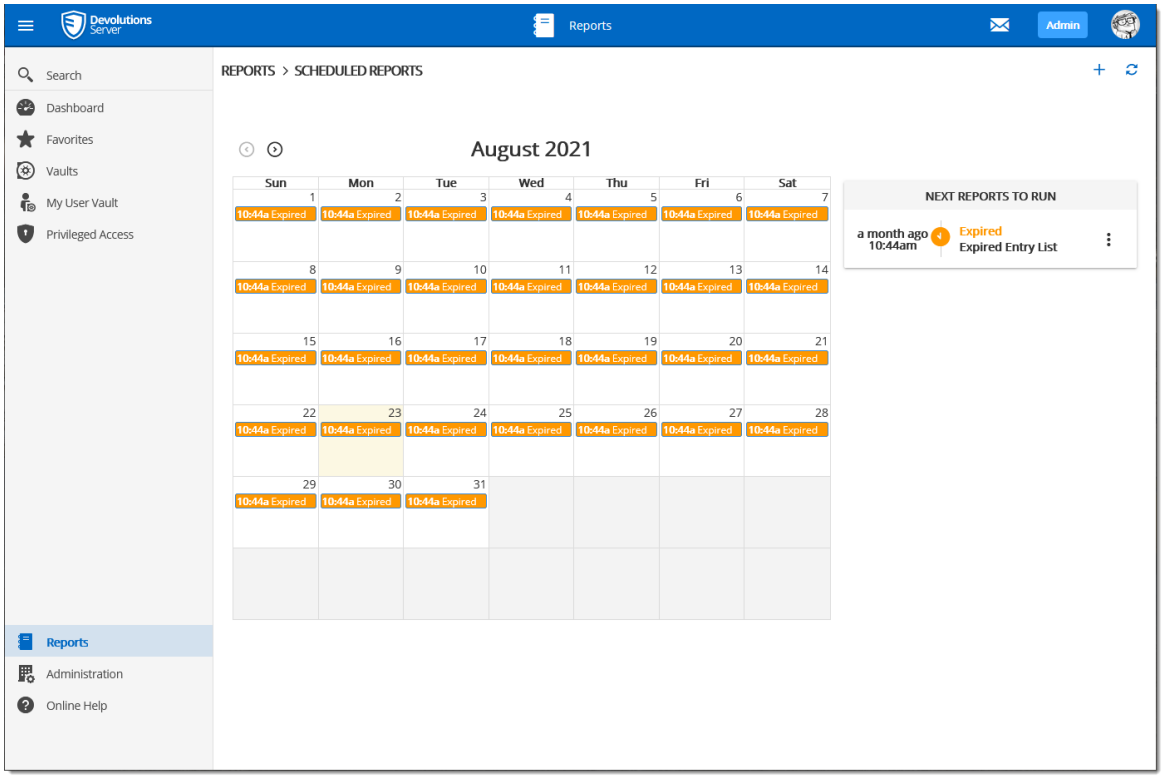

Reports - Scheduling Reports

To create a new Scheduling Report, click on the Add button.

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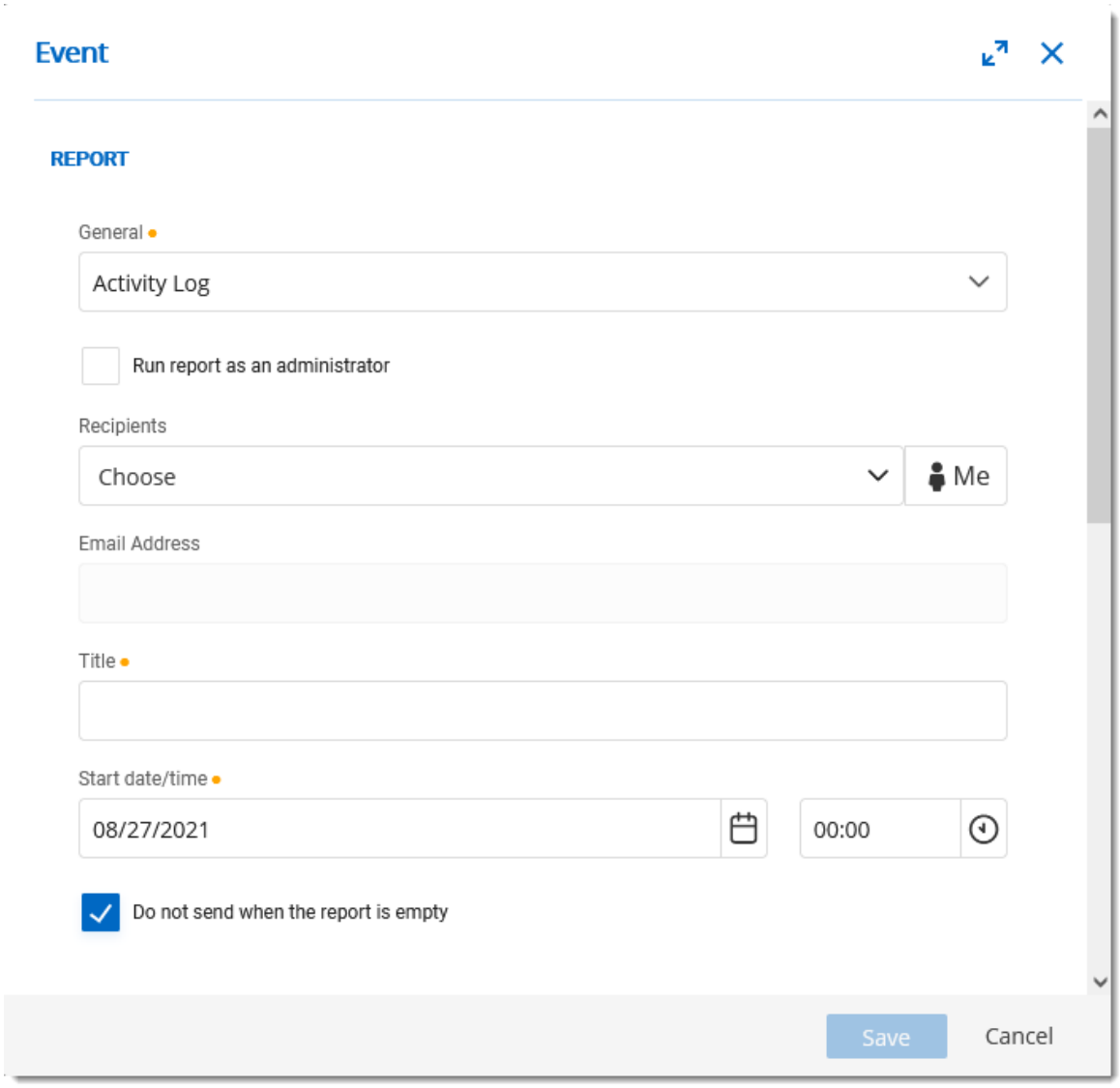

Scheduling Report creation

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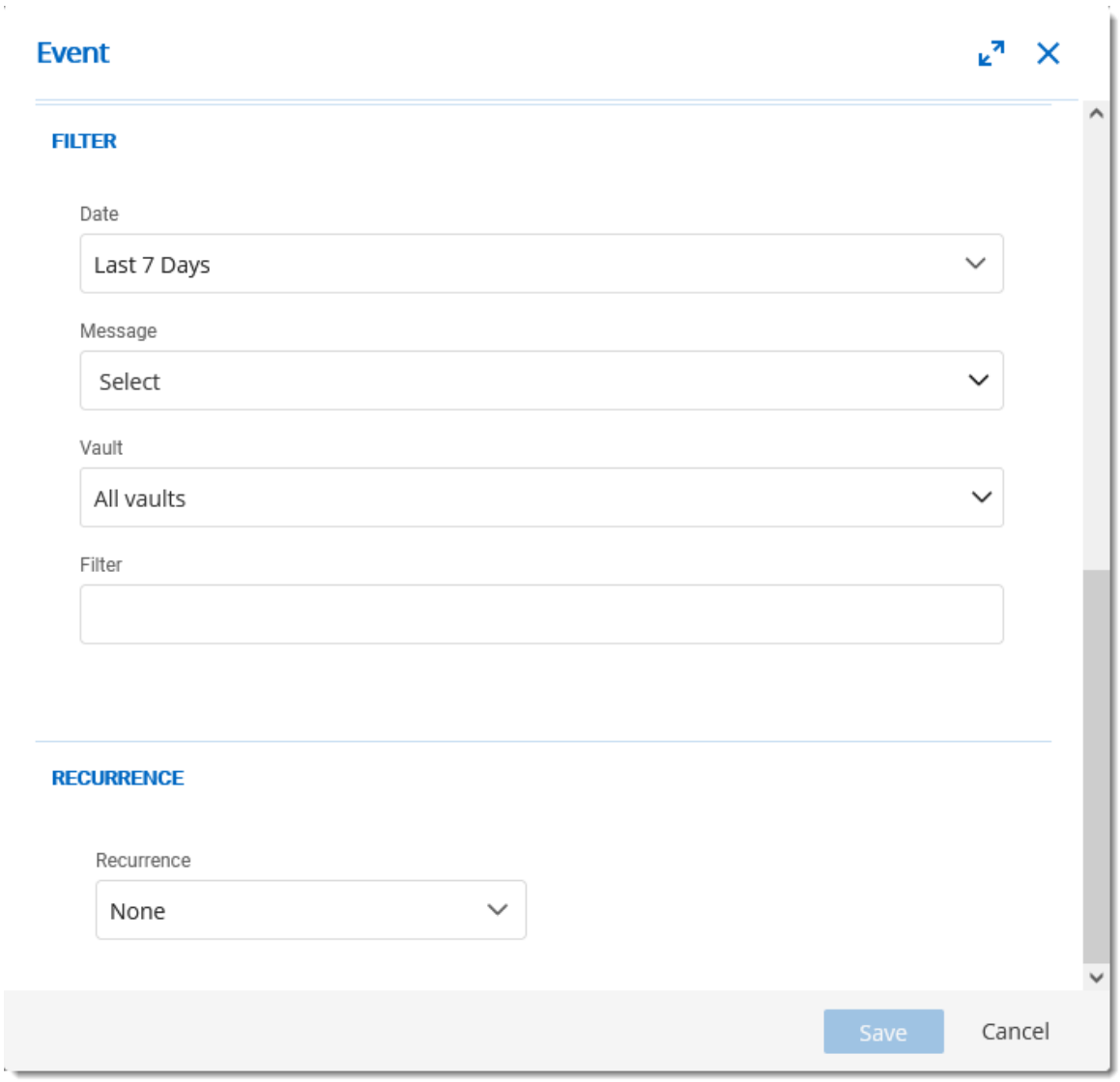

Scheduling Report creation

OPTIONS

The following options may vary according to the selected report.

GENERAL OPTIONS	DESCRIPTION
General	Select the report type that will be generated. These reports are available to be generated according to the chosen schedule.

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GENERAL OPTIONS	DESCRIPTION
	• Administration Log • Activity Log • Data Source Log • Expired Entry List • Login Attempts • Login History • Last Login
Run report as an administrator	Will run the report with administrator privileges.
Recipients	Select all user accounts that will receive the report.
Email Address	If Run report as an administrator is enabled, a custom email address must be provided.
Title	Set the title of the report.
Start	Set the date and time when the report will be created.
Do not send when the report is empty	The report will not be sent to the recipients if the report contains no data.

FILTER OPTIONS

The filters available will depend on the selected report.

RECURRENCE OPTIONS

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OPTIONS	DESCRIPTION
Recurrence	None, Daily, Weekly, Monthly, Yearly
Every ...	Set the the number for the recurrence.
End	Set when the scheduled report will terminate. • **End by** Set this option and the date to stop the report at a specific moment. • **End after** Set this option to run this report a specific number of times. • **No end date** Set this option to get the report running indefinitely.

5.4.1.2 Diagnostic

DESCRIPTION

The Diagnostic report contains information such as the Devolutions Server and database version, the number of entries, the size of the data, etc. This report could be useful for troubleshooting or simply as an indication of your Devolutions Server content.

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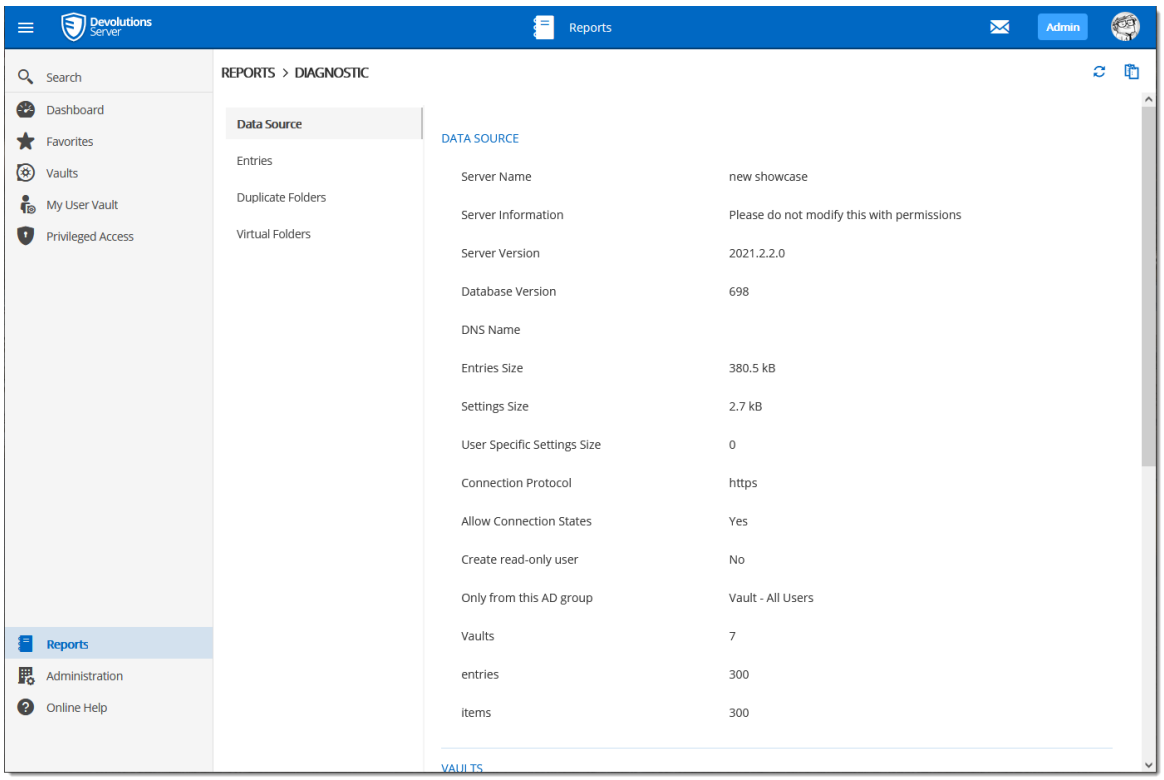

Reports - Diagnostic

5.5 Administration

DESCRIPTION

The **Administration** section is only available for administrators. Here you can find the various necessities to probably manage and customize your settings, ranging from security to the Backup system.

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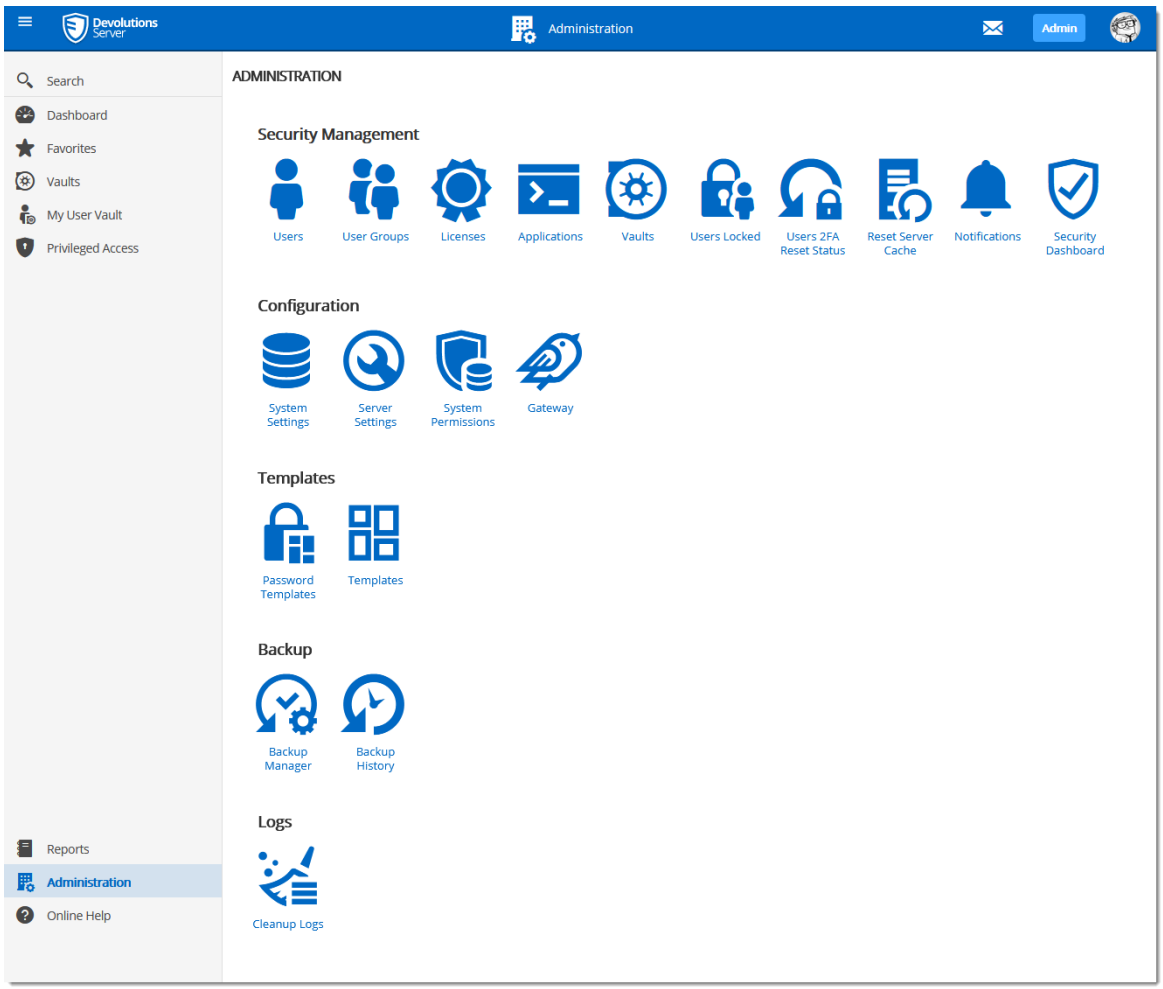

Administration

5.5.1 Security Management

5.5.1.1 Users

DESCRIPTION

Users is where you can create, import and manage users. To access the user management, navigate to ***Administration – Users***. Click on a user to configure specific settings and permissions.

SETTINGS

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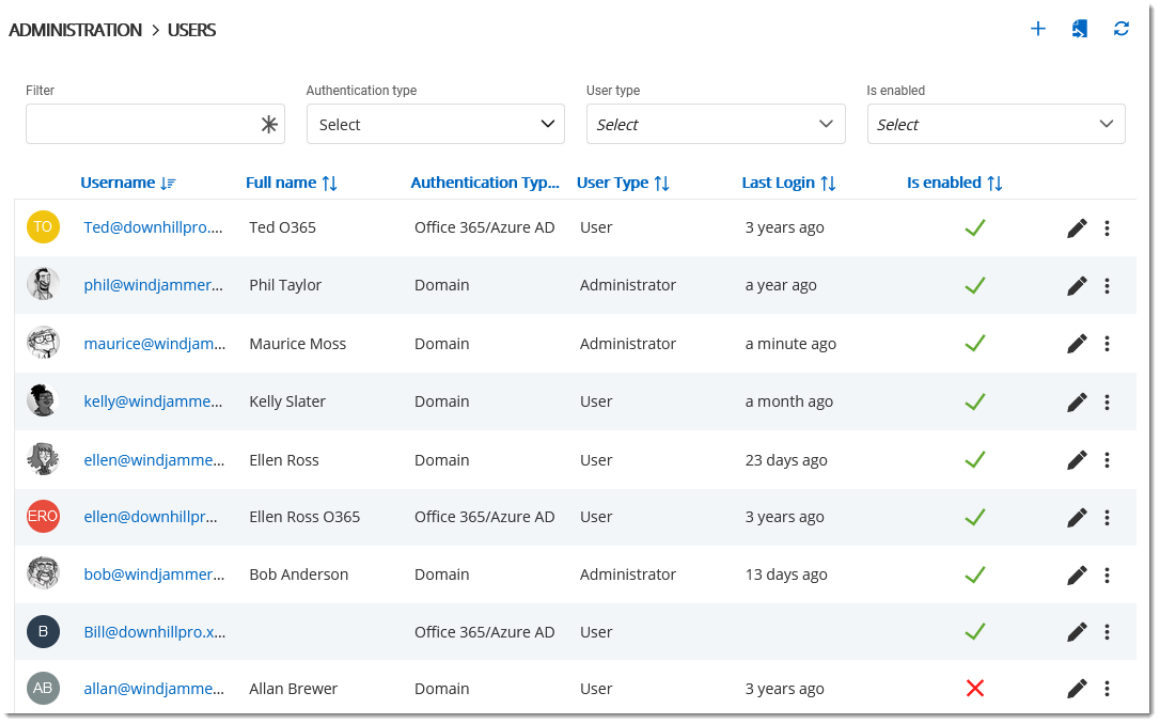

Administration - Users

GLOBAL OPTIONS

Options	DESCRIPTION
+	Add a user.
	Import users from LDAP or Azure.
	Refresh users list.

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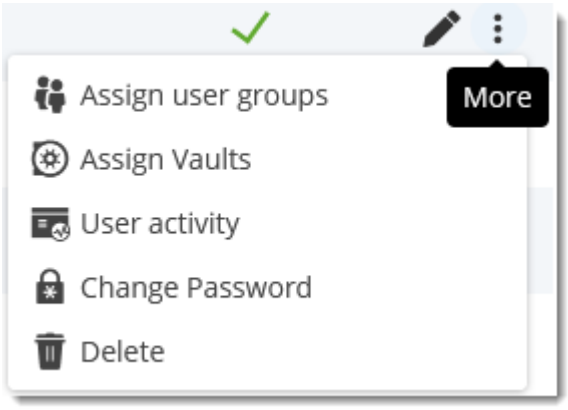

USER OPTIONS

Options	DESCRIPTION
	Edit user settings.
	Assign custom user groups to user account.
	Assign vaults to the user account.
	See user activity report.
	Change password for Custom accounts only.
	Delete user.

5.5.1.1.1 General

DESCRIPTION

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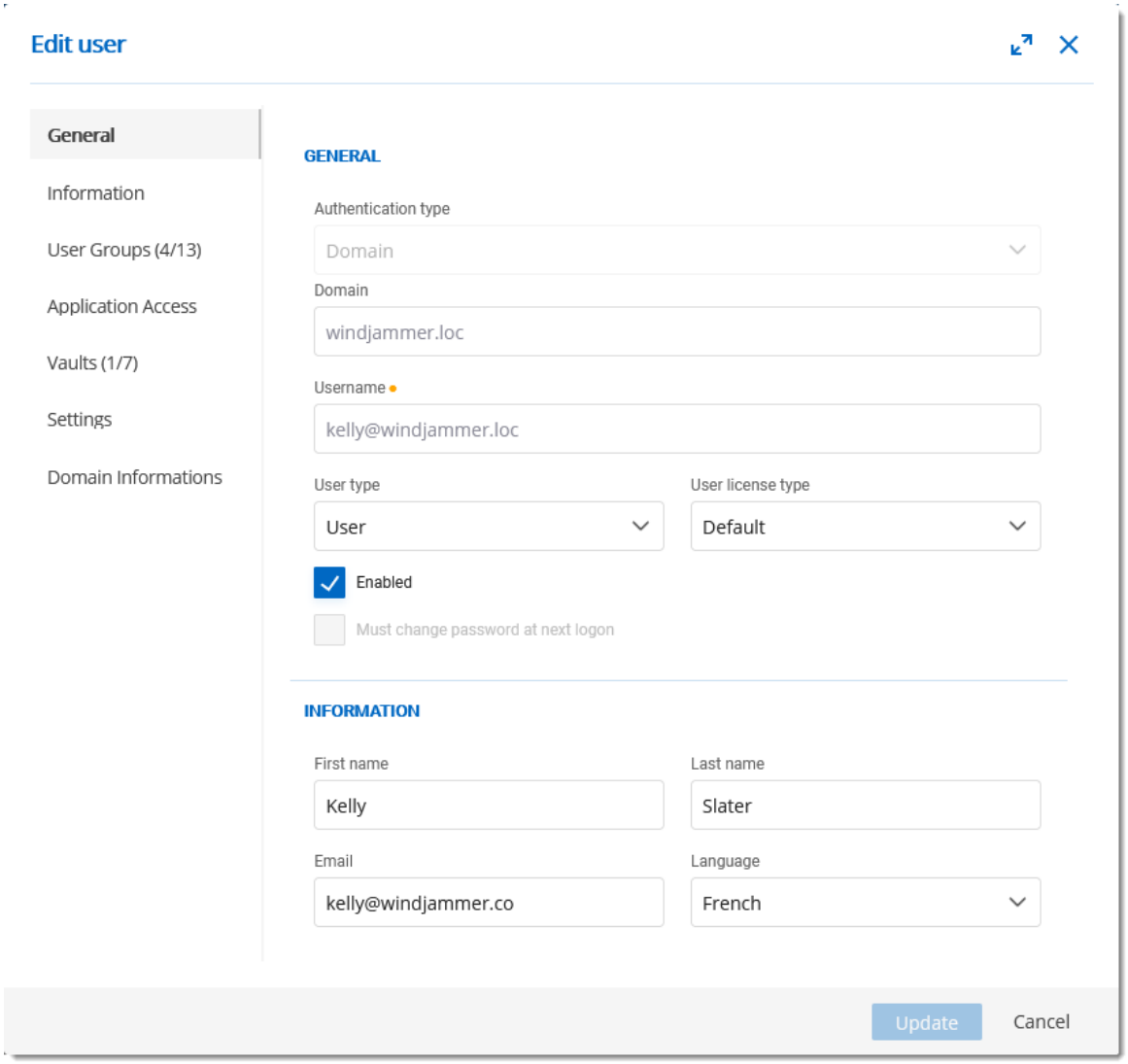

Edit Users - General

OPTION	DESCRIPTION
Authentication type	Select the user's authentication type: • **Custom (Devolutions)**: create a user in Devolutions Server without creating an SQL login. • **Domain** : authenticate using the Active Directory user account. • **Office365/Azure AD** : authenticate using the Azure AD user account.

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OPTION	DESCRIPTION
User (required)	User login name.
User type	Choose the user type: • **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).
User license type	Select the type of the license that the user has: • **Default**: Connection Mangement. • **Connection Management**: for users who open remote connections. • **Password Management**: for users who only use Devolutions Server as a password manager.
Enabled	Check to activate the user.
Must change password at next logon	Check to force the user to change the password next time they log on.
First name	Enter the user's first name.
Last name	Enter the user's last name.
Email (required)	Enter the user's email address.

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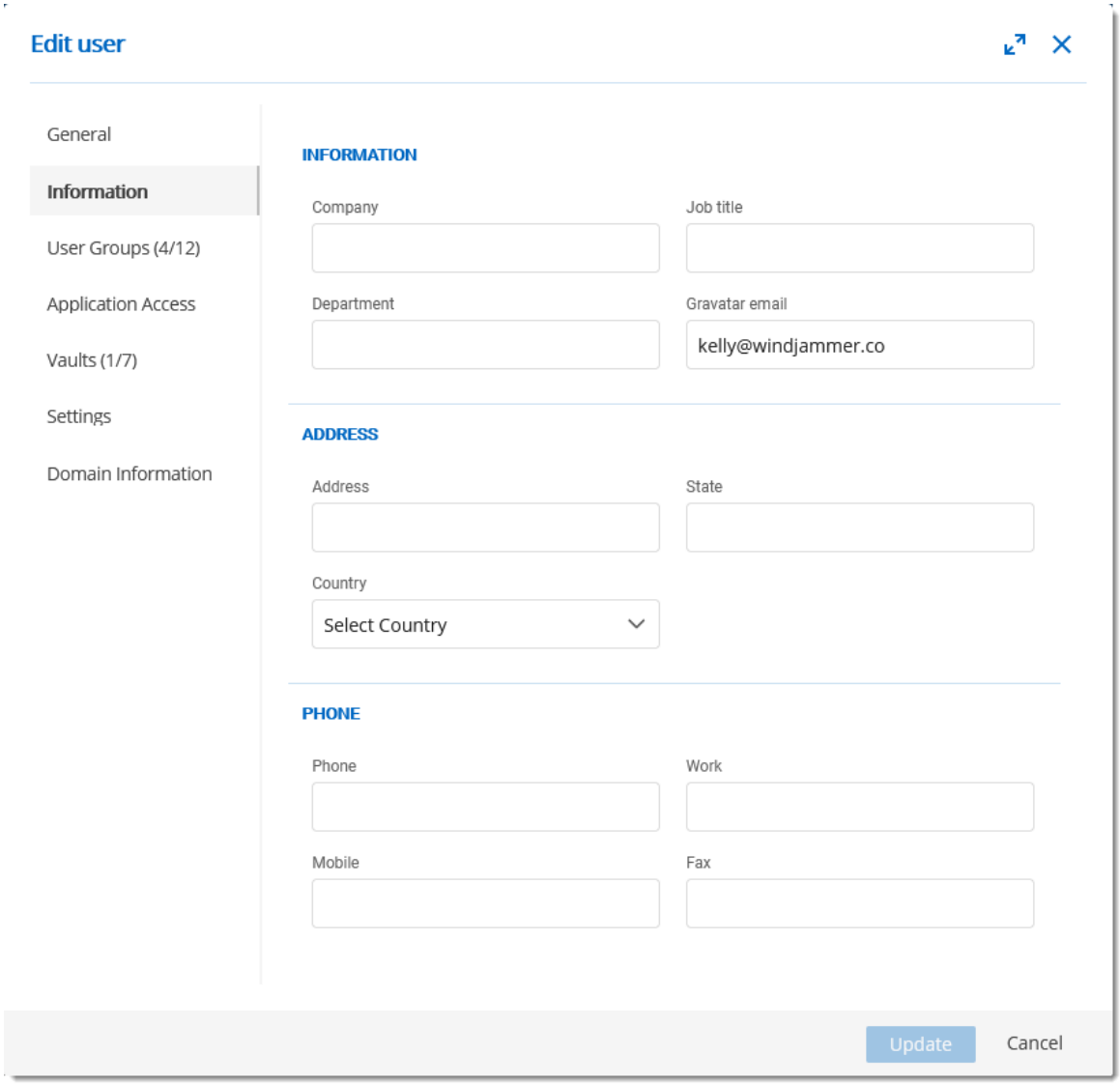
OPTION	DESCRIPTION
Langage	Language of the user's web interface.

5.5.1.1.2 Information

DESCRIPTION

The **Information** section is for optional information.



Edit User - Information

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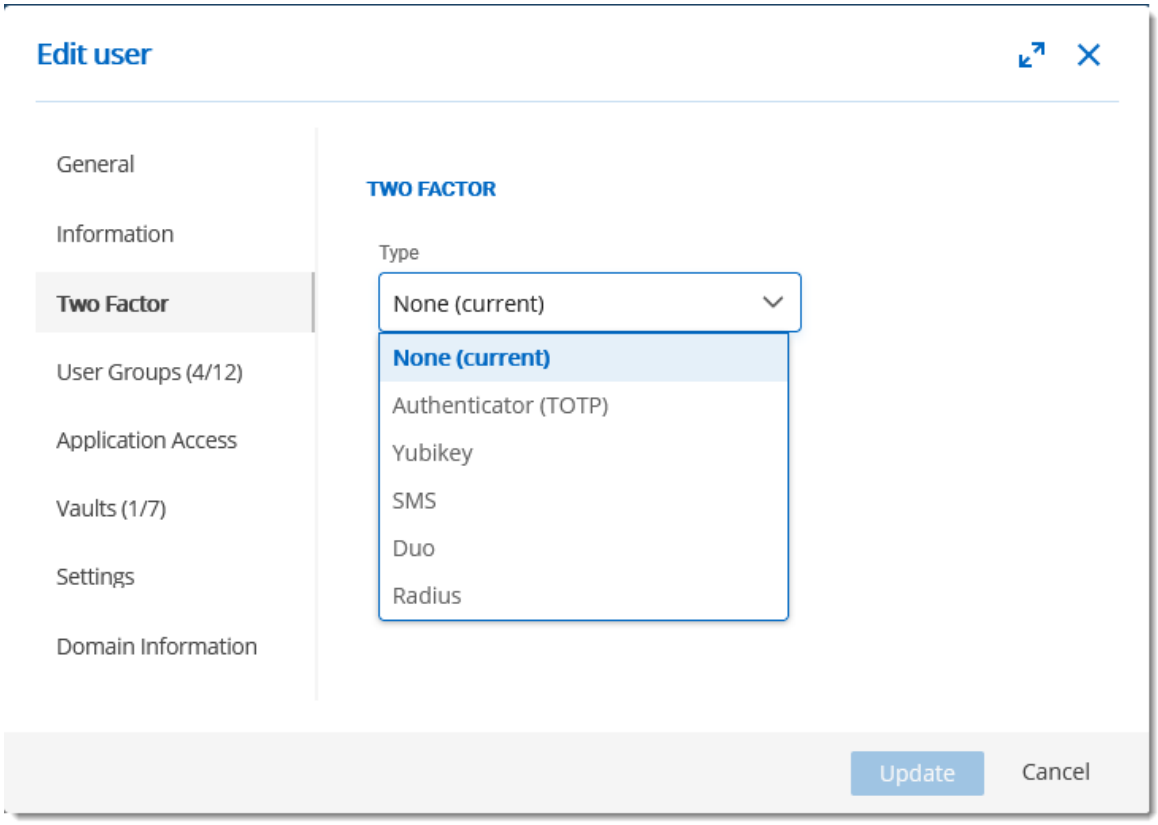
5.5.1.1.3 Two Factor

DESCRIPTION

If you set two-factor authentication as optional per user in Devolutions Server Settings, you then need to configure which 2FA method to use.

SETTINGS

1. Select the users 2FA **Type** from the list.



Edit User - Two Factor

2. Choose if you **(a)** want the user to configure the 2FA next time they log in or **(b)** complete the set up now.

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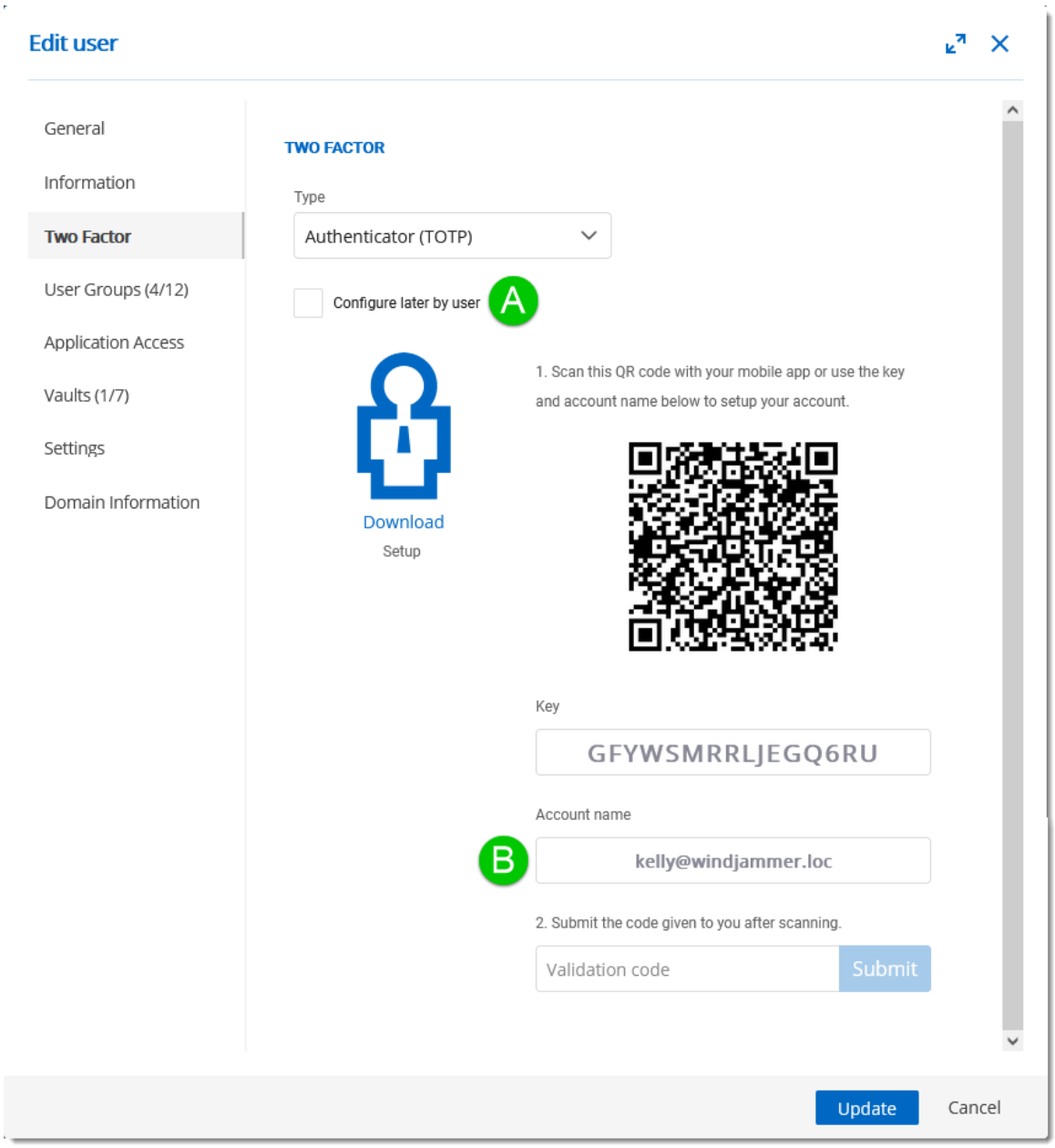

Edit User - Two Factor

5.5.1.1.4 User Groups

DESCRIPTION

Assign users to a **User Groups**.

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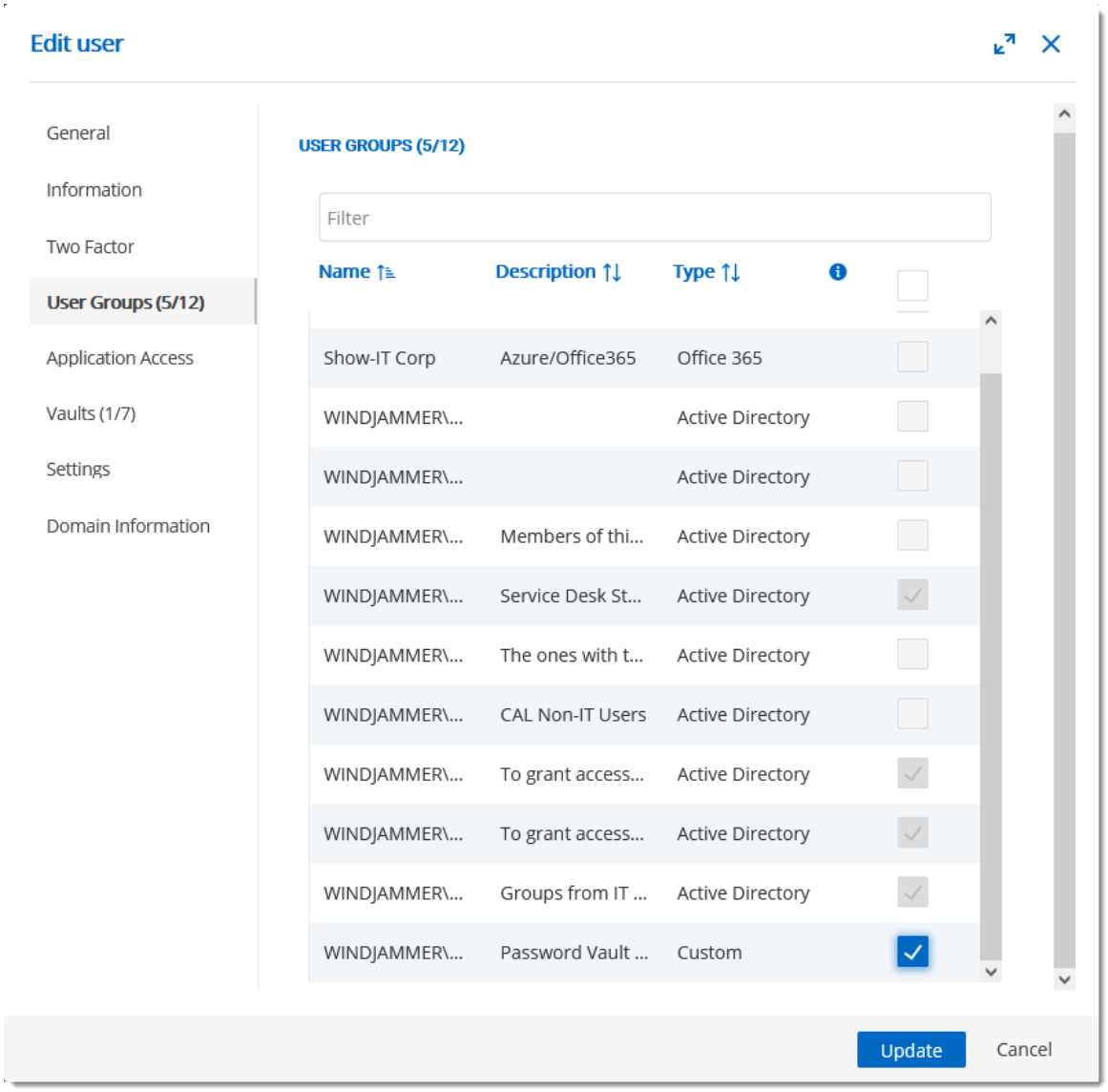

Edit User - User Groups

OPTION	DESCRIPTION
User Groups	Check the **Is Member** box to assign the user group to the user. Only custom user groups can be assigned. Consult User Groups topic for more information.

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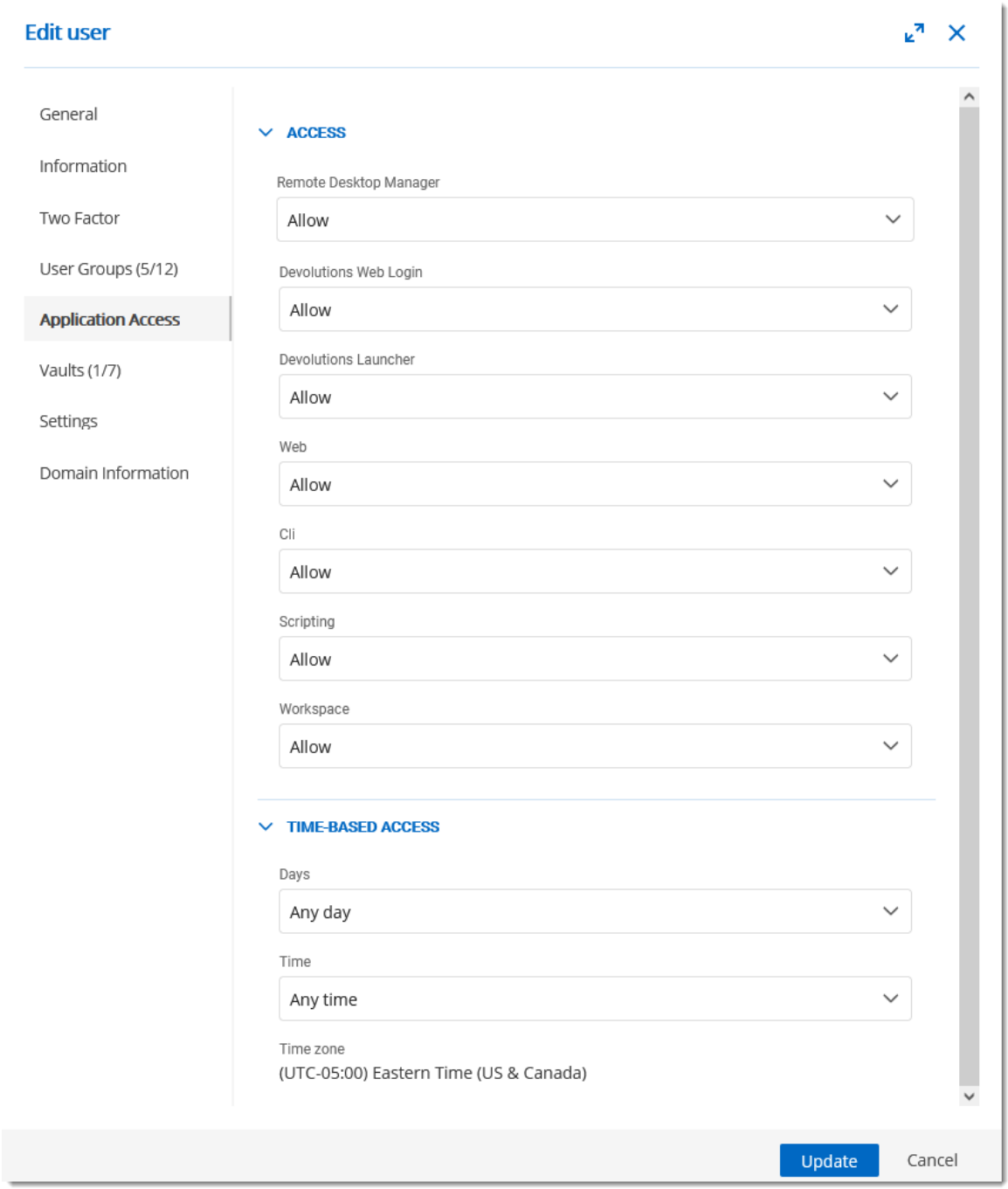
5.5.1.1.5 Applications Access

DESCRIPTION

Allow or deny the user access to different applications and companion tools:



Edit User - Applications

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OPTION	DESCRIPTION
Remote Desktop Manager	Allow user to access Devolutions Server through Remote Desktop Manager.
Devolutions Web Login	Allow user to auto fill username and passwords on websites with Devolutions Web Login.
Devolutions Launcher	Allow user to open remote connections with Devolutions Launcher.
Web	Allow user to use Devolutions Server web interface.
Cli	Allow user to use the Cli.
Scripting	Allow user to connect through Devolutions Server PowerShell Module.
Workspace	Allow user to use the Workspace mobile application.

TIME-BASED ACCESS

OPTION	DESCRIPTION
Days	Allow access to the instance according to one of these values: • **Any day** • **Week days** • **Weekends** • **Custom**

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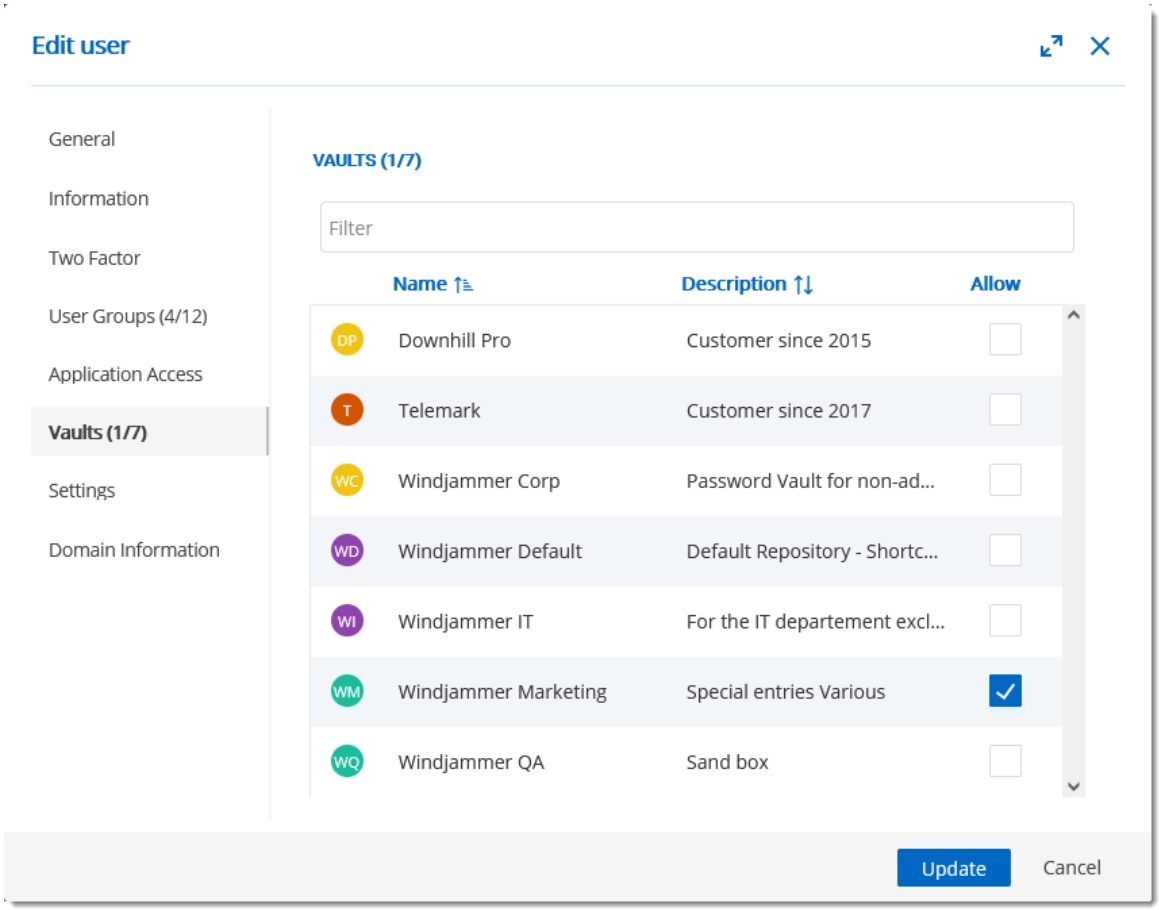
OPTION	DESCRIPTION
Time	Allow access to the instance according to the given possibilities: • **Any time** • **Custom**

5.5.1.1.6 Vaults

DESCRIPTION

Select which **vaults** the user has access to.

For more information, please consult the vaults topic.



Edit User - Vaults

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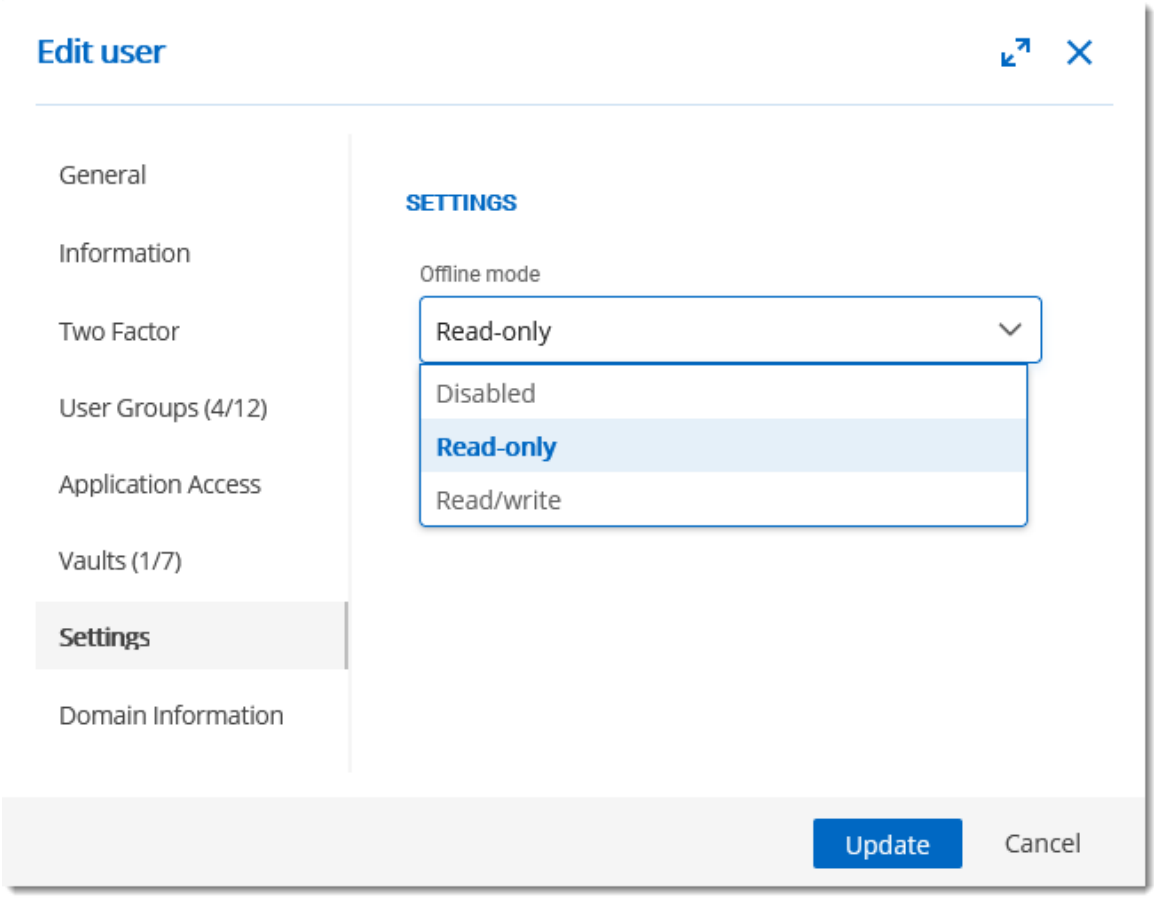
5.5.1.1.7 Settings

DESCRIPTION



Edit User - Settings

Allow the user to enable Offline Mode on the data source. The data source also needs to be configured to permit offline mode. There are 3 modes available:

OPTION	DESCRIPTION
Disabled	No offline cache allowed for the user.
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.

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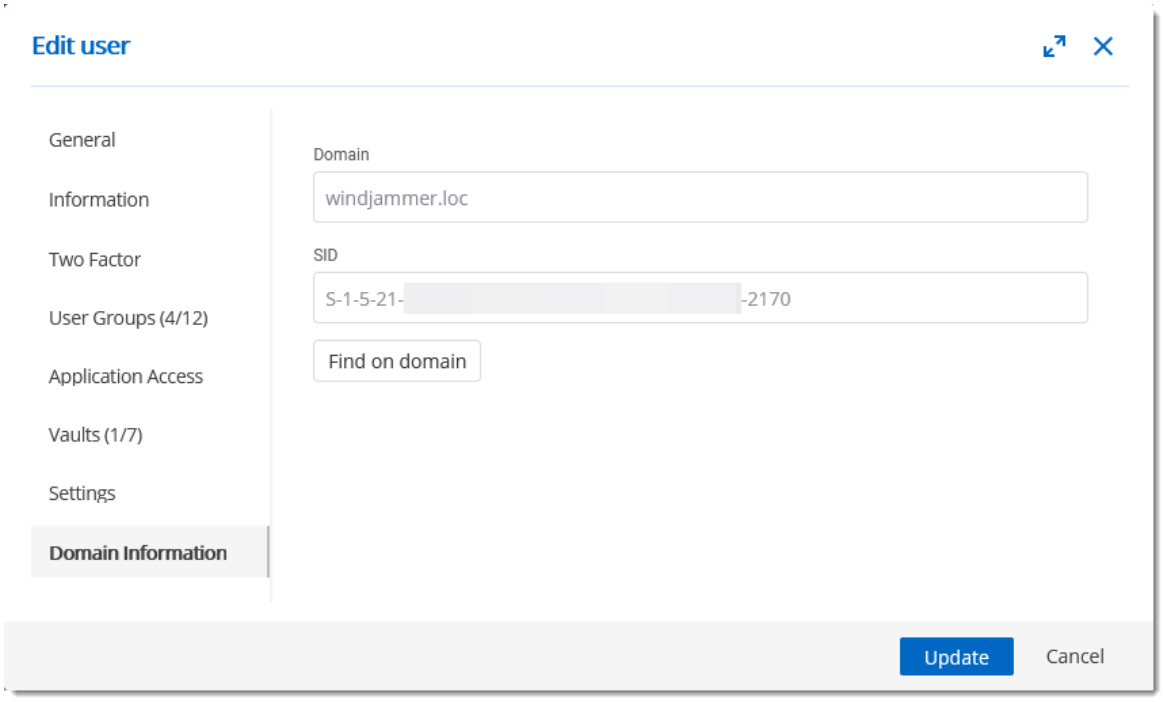
OPTION	DESCRIPTION
Read/Write	An advanced cache, with change synchronization. This mode is allowed for Advanced Data Sources only.

5.5.1.1.8 Domain Information

DESCRIPTION

Provides the user's domain information.



OPTION	DESCRIPTION
Domain	User's domain name.
SID	User domain security identifier.

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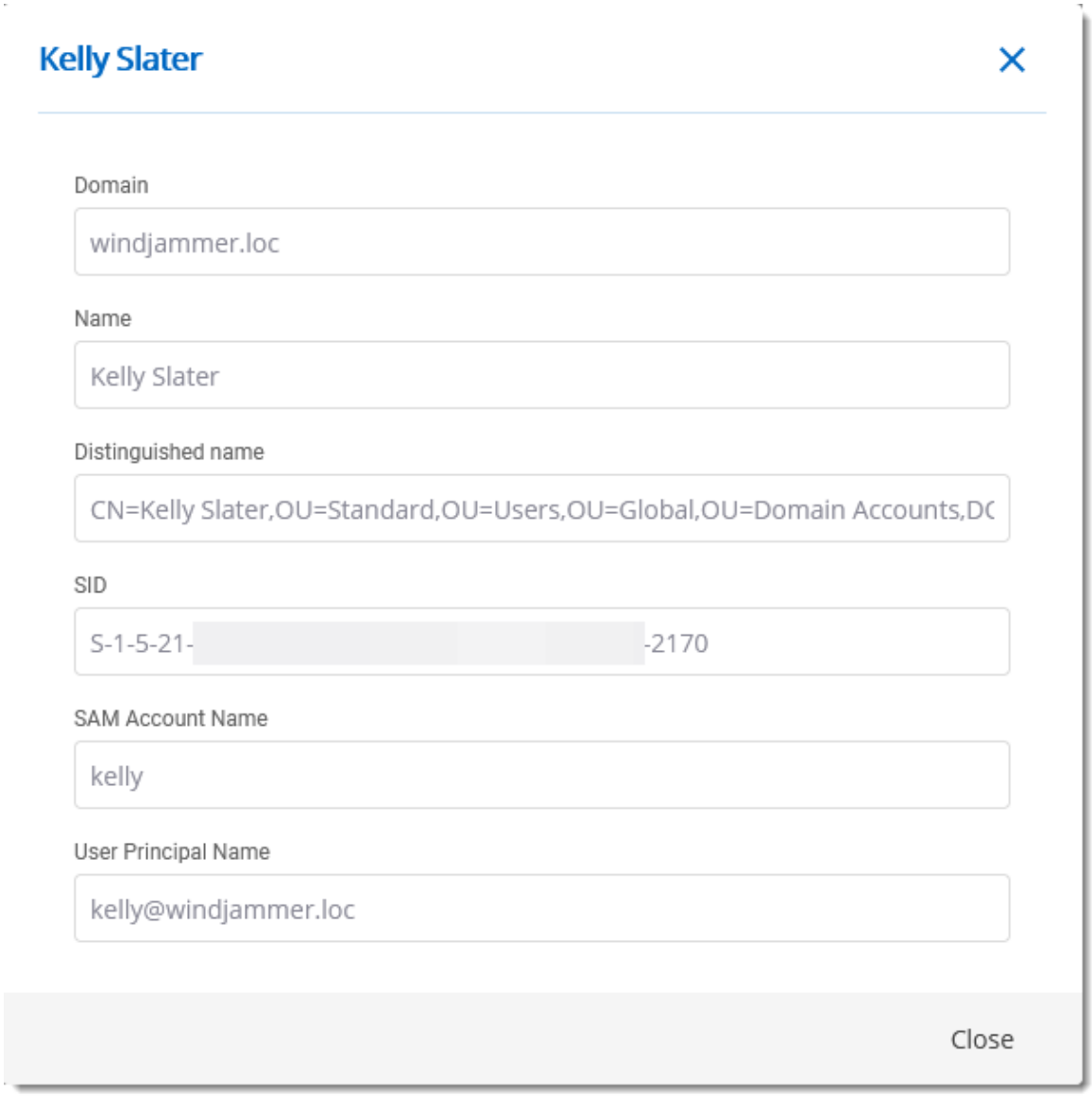
FIND ON DOMAIN

Display the detailed user domain account information.



Domain user account information

5.5.1.2 User Groups

DESCRIPTION

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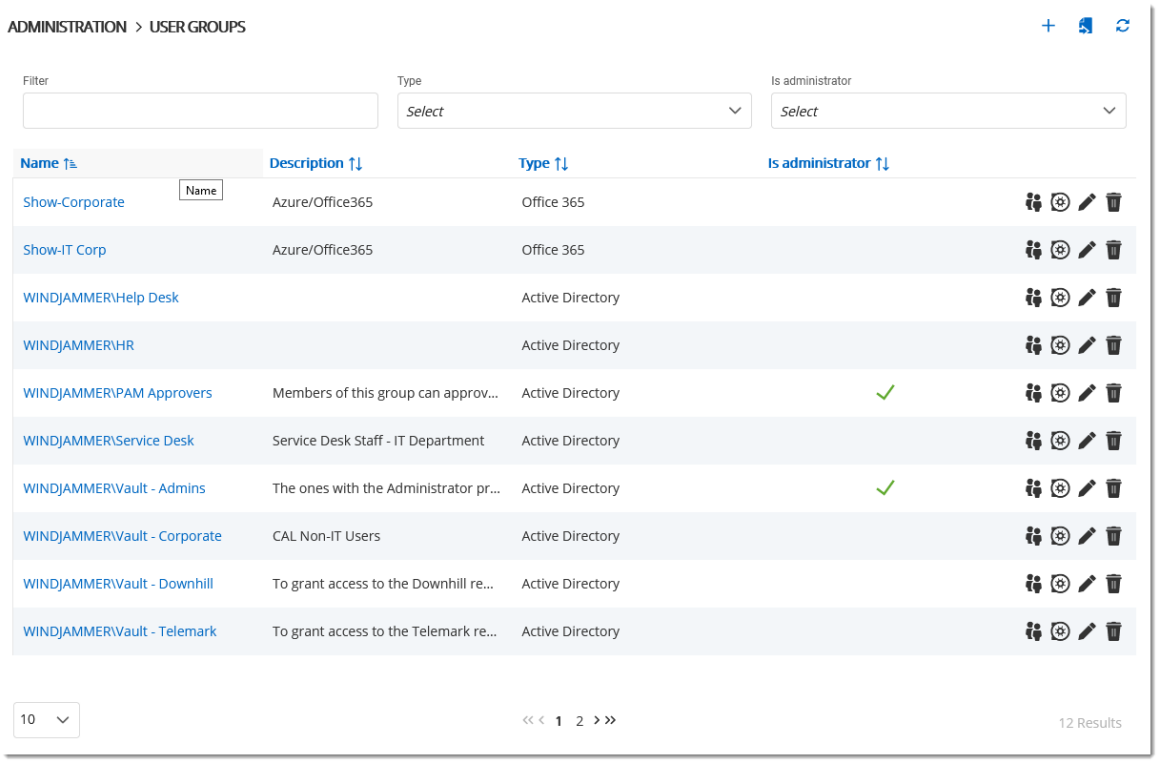
User Groups is where you can create, import and manage groups. To access the user group management, navigate to ***Administration – User Groups***. Click on a user group to configure specific settings.



User Groups

5.5.1.2.1 General

DESCRIPTION

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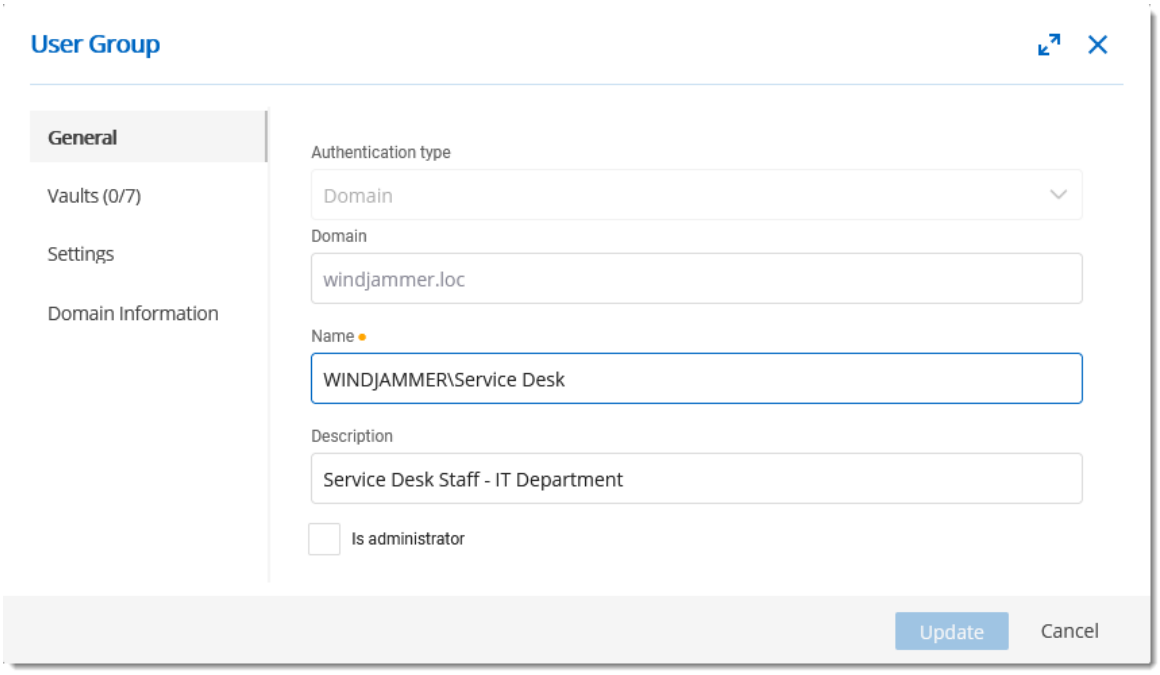

User Group - General

OPTION	DESCRIPTION
Authentication type	Select the user group's authentication type: • **Custom (Devolutions)**: create a user group in Devolutions Server. • **Domain** : Active Directory group. • **Office365/Azure AD** : Azure AD group.
Domain	Name of the domain where the Active Directory group exist.
Name	Name of the user group.
Is administrator	When enabled, grant administrator rights to the members of the user group.

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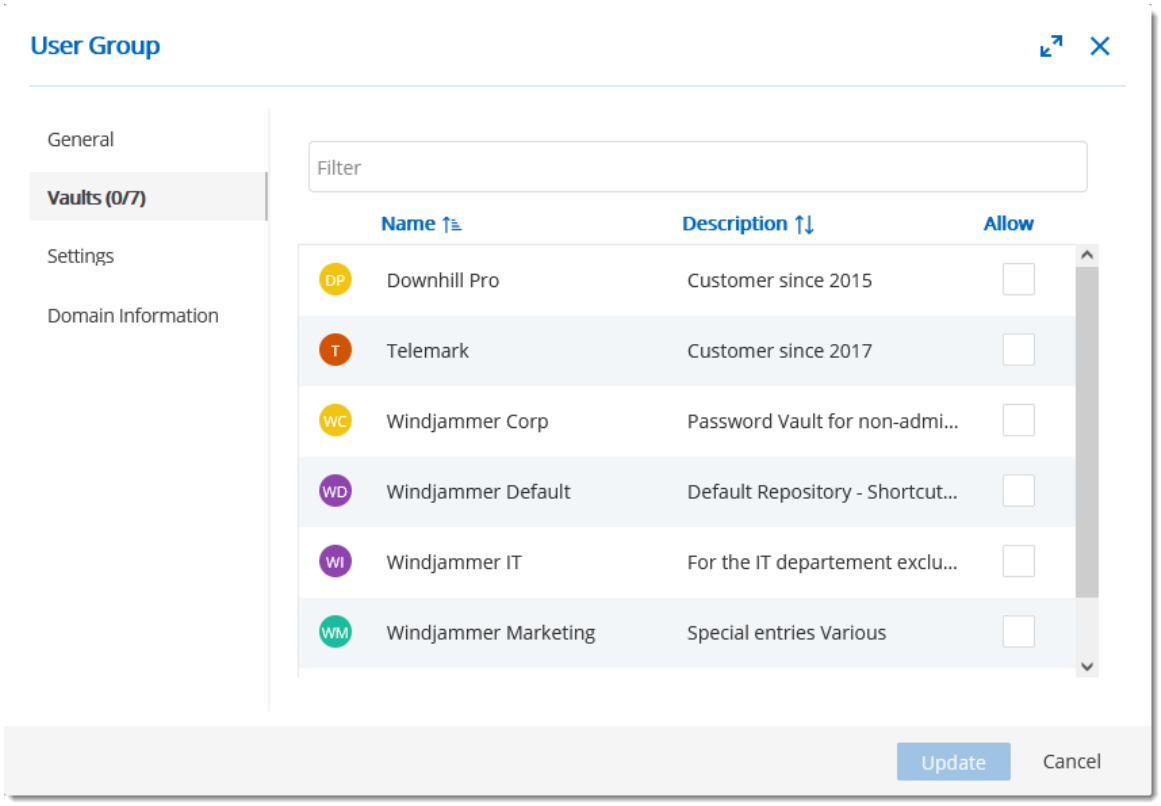
5.5.1.2.2 Vaults

DESCRIPTION

Select which **vaults** the user group has access to.

For more information, please consult the vaults topic.



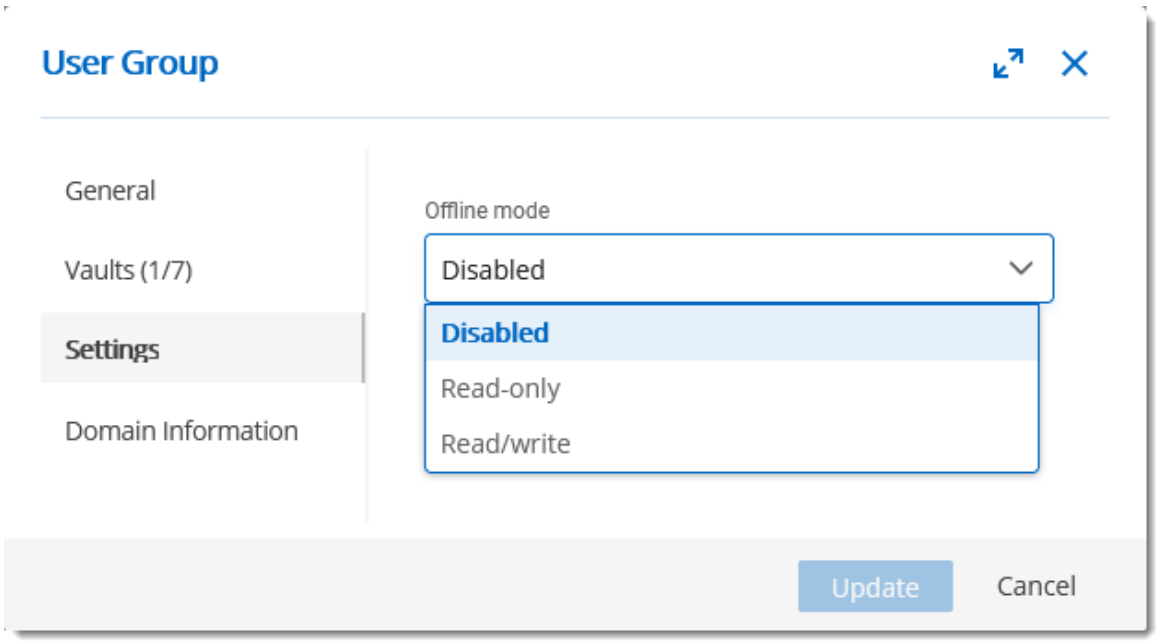
User Group - Vaults

5.5.1.2.3 Settings

DESCRIPTION

Allow the user group to enable Offline Mode on the data source. The data source also needs to be configured to permit offline mode. There are 3 modes available.

© 2021 Devolutions inc.



User Groups - Settings

OPTION	DESCRIPTION
Disabled	No offline cache allowed for the user group.
Read-only	A read-only cache. The user group 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.

5.5.1.2.4 Domain Information

DESCRIPTION

Provides the user group's domain information.

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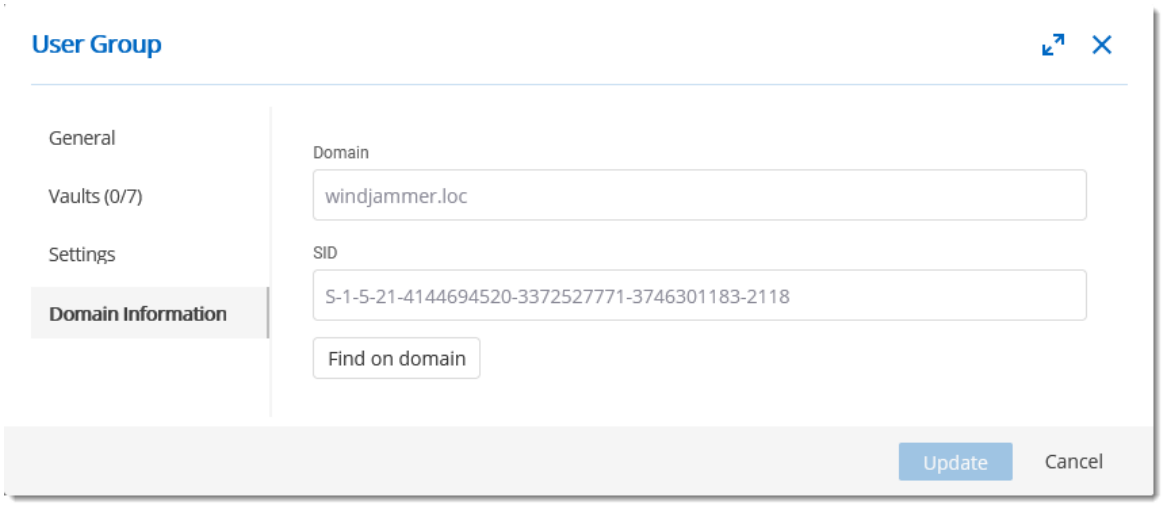
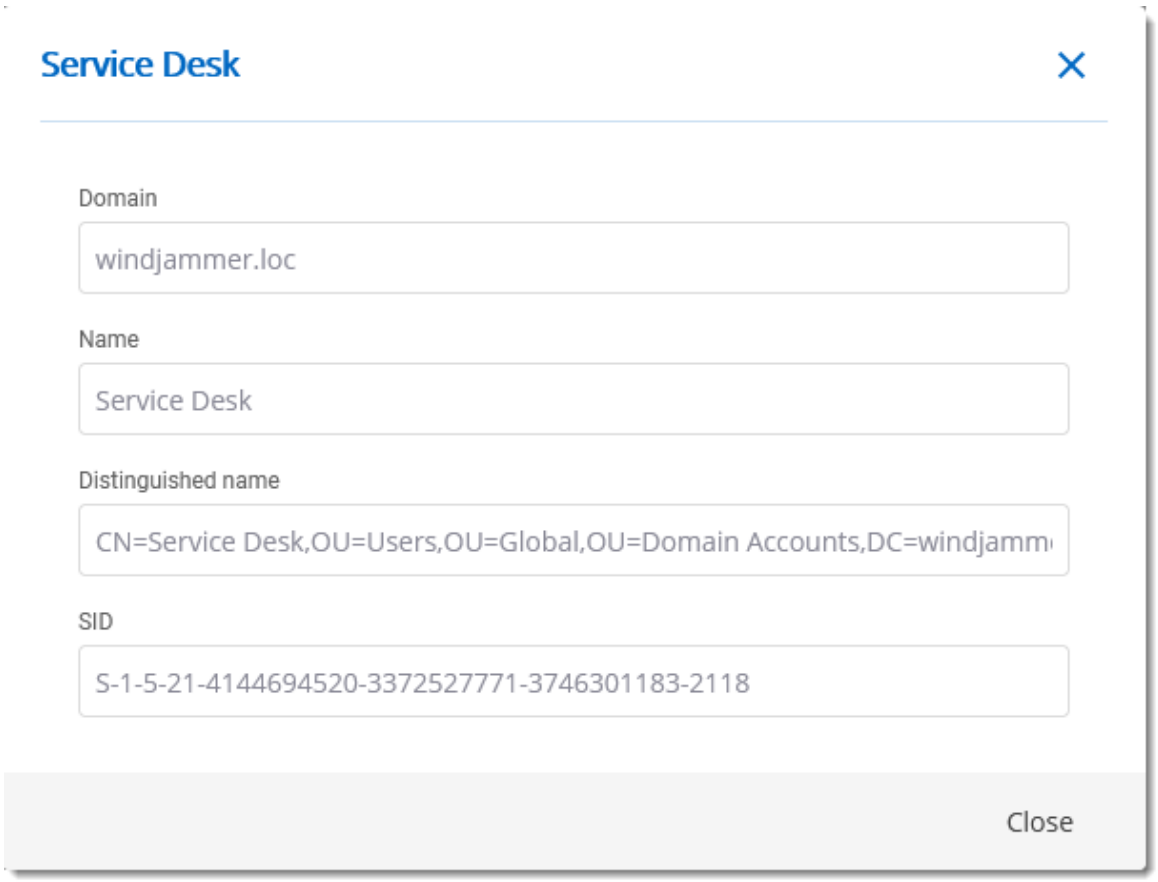


OPTION	DESCRIPTION
Domain	User group's domain name.
SID	User group domain security identifier.

FIND ON DOMAIN

Display the detailed user group domain information.

© 2021 Devolutions inc.



User Group Domain Information

5.5.1.3 Licenses

DESCRIPTION

Managing registration globally for all your users can be done with a license serial stored in Licenses section.

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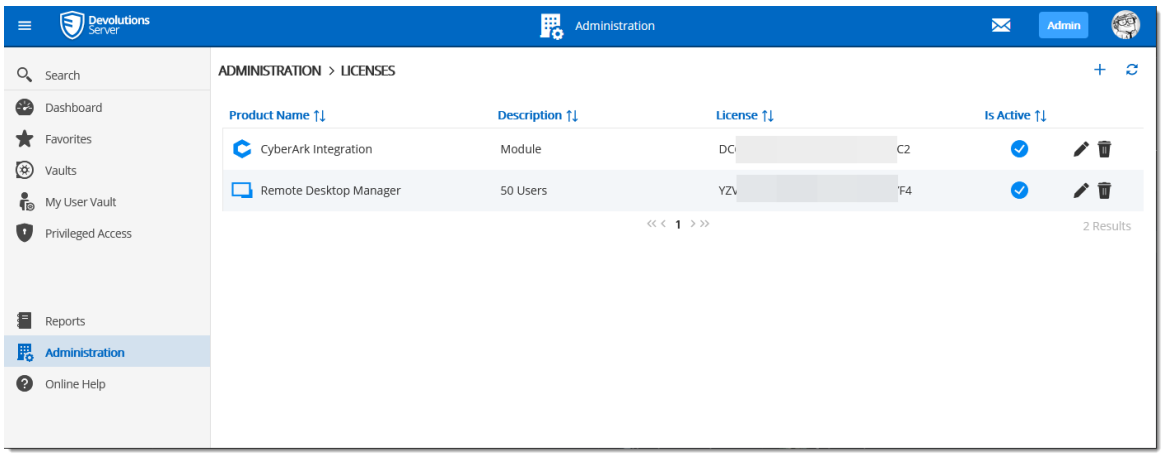
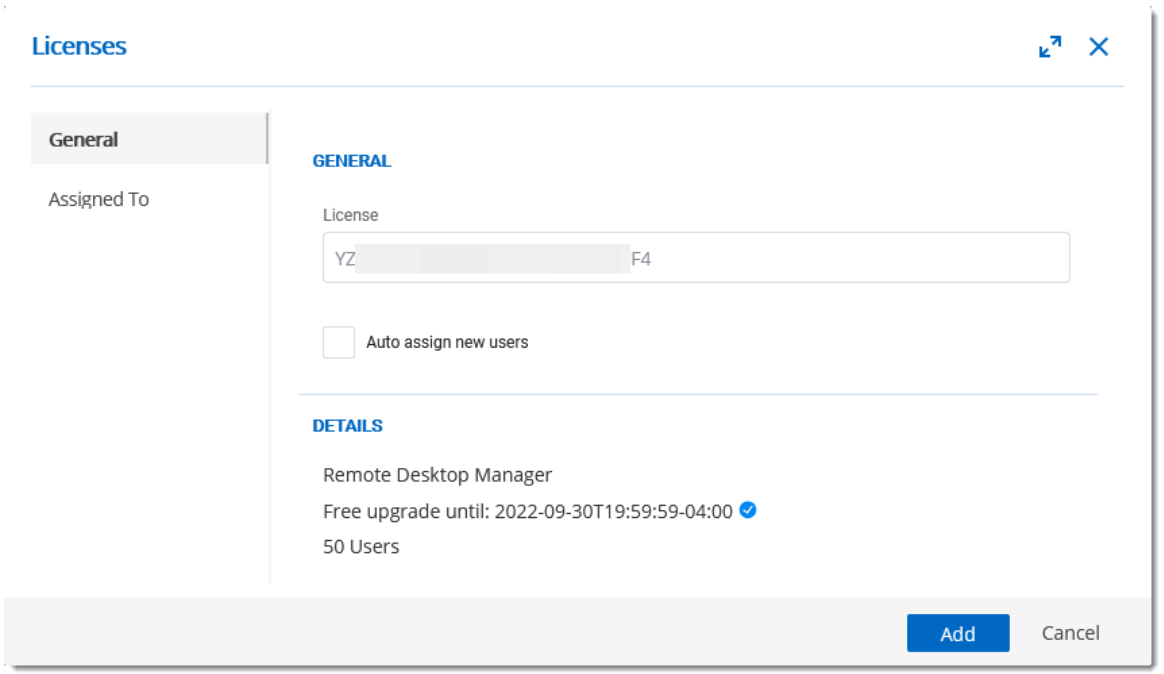


Licenses

GENERAL



Licenses - General

OPTION	DESCRIPTION
License	License to be stored.

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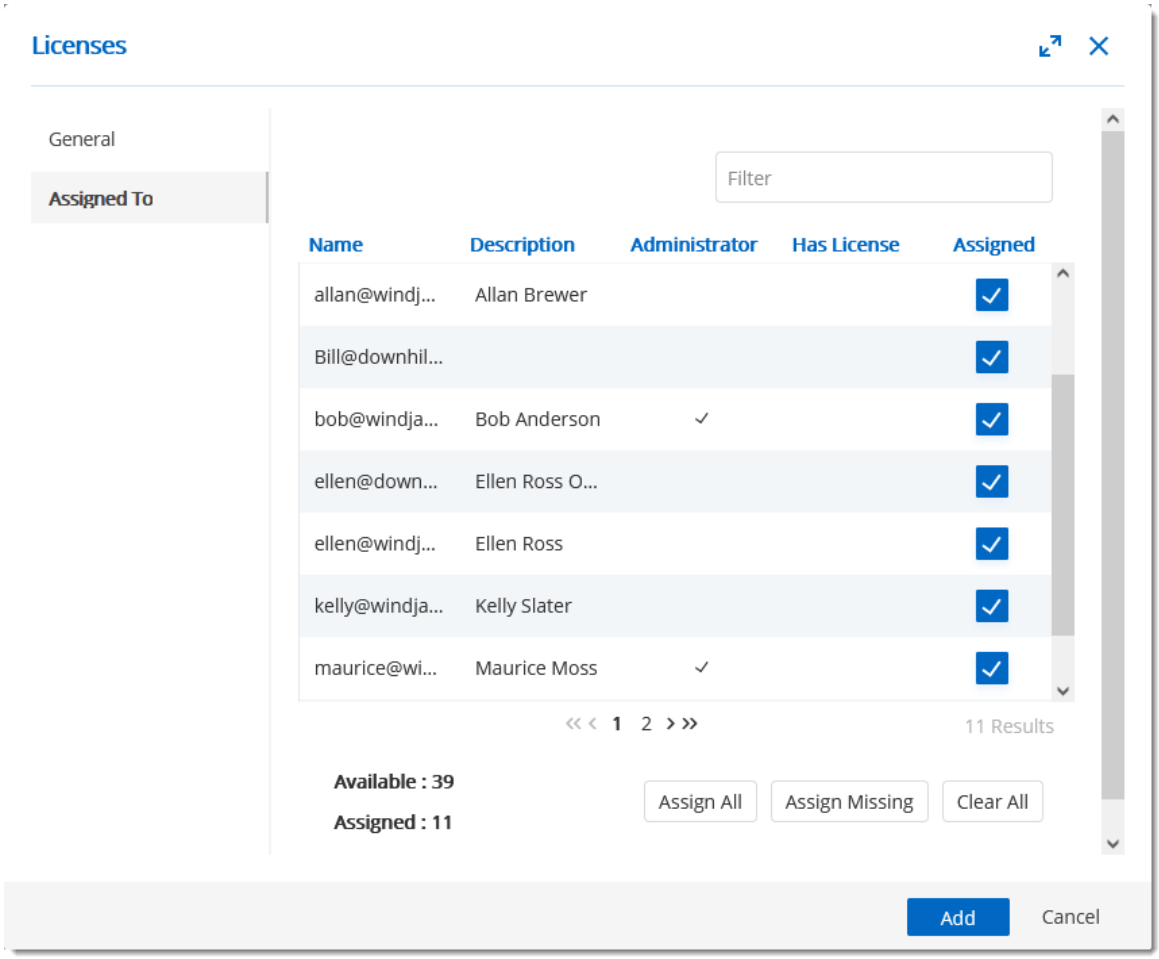
OPTION	DESCRIPTION
Auto assign new users	Will automatically assign the license key to every new user account.

ASSIGNED TO



Licenses - Assigned to

OPTION	DESCRIPTION
Filter	Filter the list based on the Name or Description column

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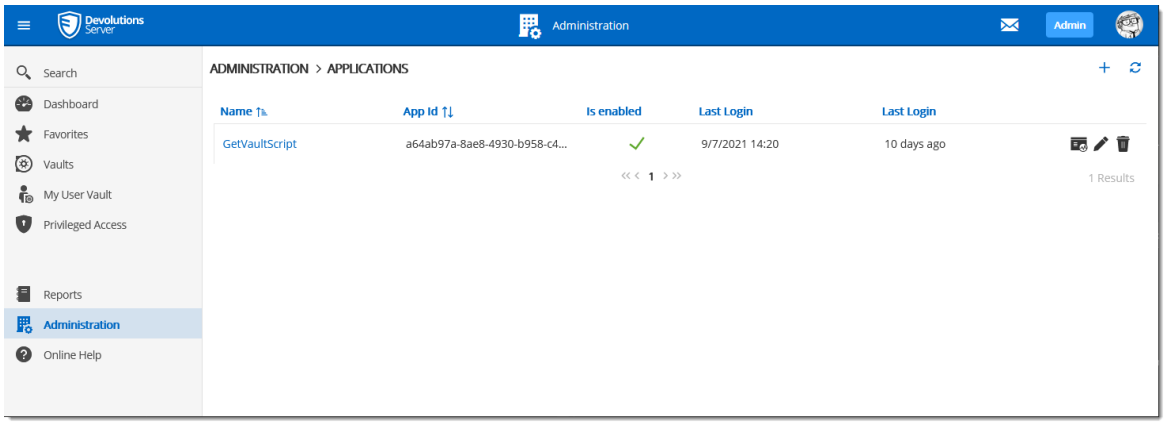
OPTION	DESCRIPTION
Assign All	Assign the license to all accounts.
Assign Missing	Assign the license to accounts that are not already selected.
Clear All	Remove the license for all accounts.

5.5.1.4 Applications

DESCRIPTION

The Applications section will allow to create an application key to communicate with Devolutions Server through the Devolutions Server PowerShell module.



Administration - Applications

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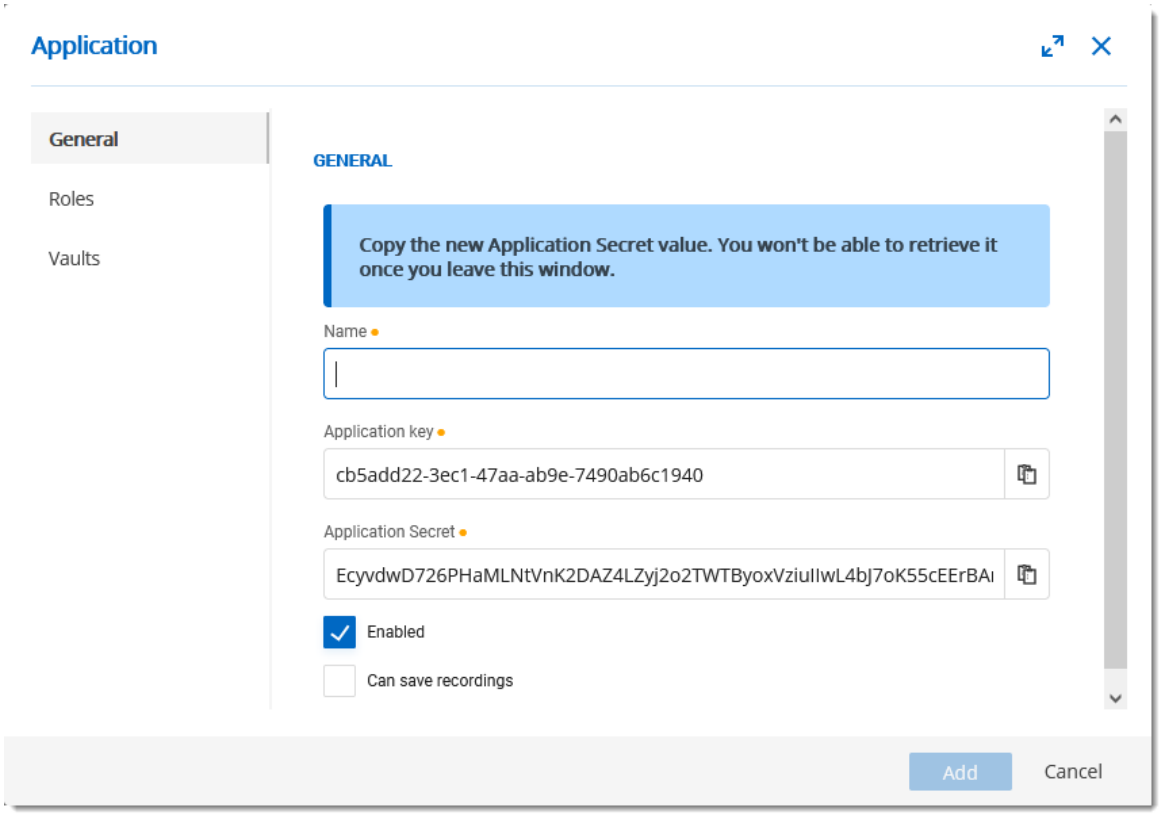

Administration - Applications - New Application

GENERAL	DESCRIPTION
Name	Display name of the Application key.
Application key	Application key to be use in the application to communicate with Devolutions Server instance.
Application Secret	Secret key to be use in combination with the Application key. Available only on Application key creation.
Enabled	Activate the Application key.
Can save recordings	Allow the Application key to save session's recordings.

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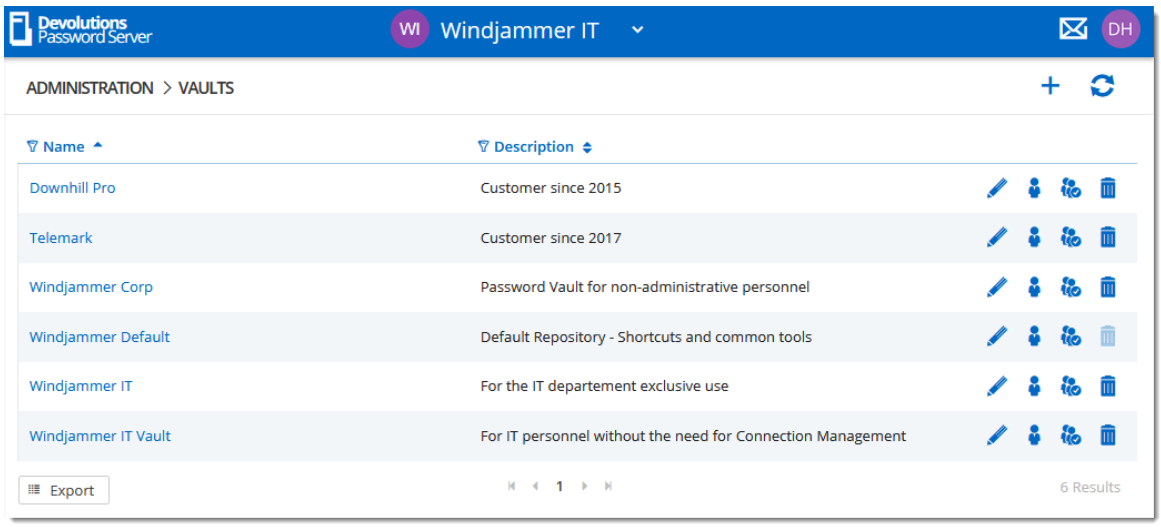
5.5.1.5 Vaults

DESCRIPTION

The **Vaults** management allows to create and manage **Vaults**. To access the **Vaults** management, navigate to ***Administration – Vaults***.

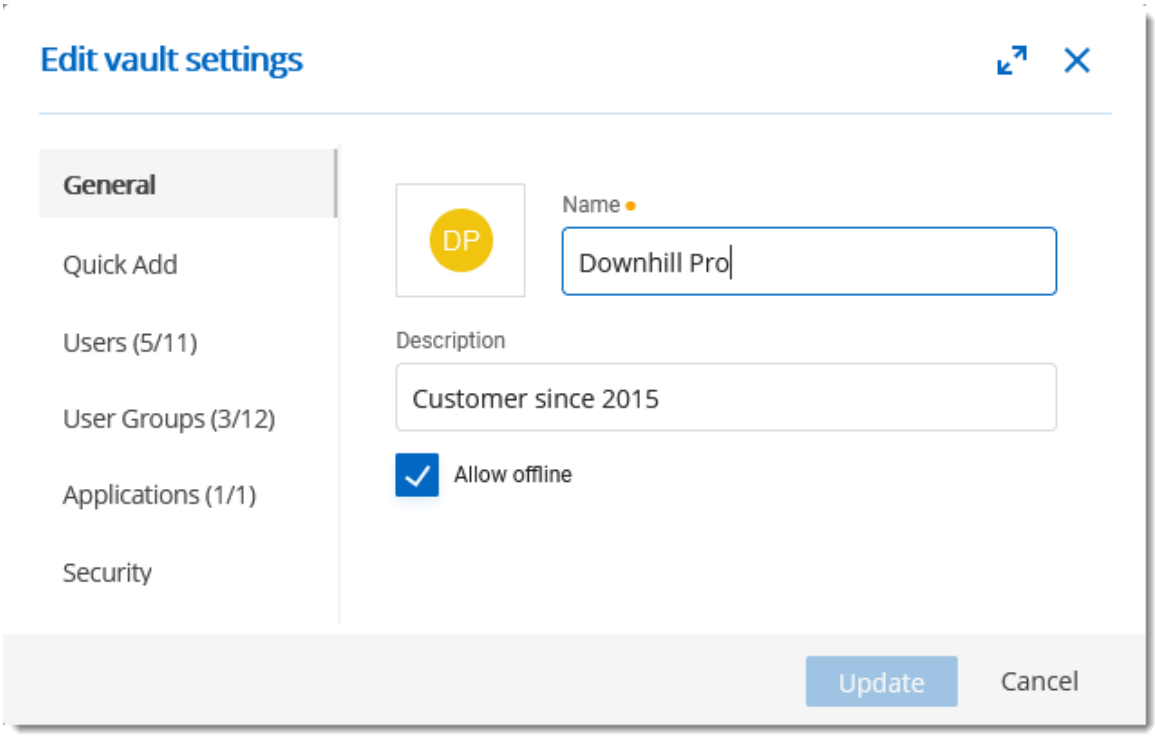


Administration - Vaults

5.5.1.5.1 General

DESCRIPTION

© 2021 Devolutions inc.



Vaults - General

OPTION	DESCRIPTION
Name	Vault's name.
Description	Vault's description.
Allow offline	Allow to have access to the vault in offline mode with Remote Desktop Manager. Please see the Offline mode topic for more information.

5.5.1.5.2 Quick Add

DESCRIPTION

Allow to customize the list of quick add buttons with preferred session types.

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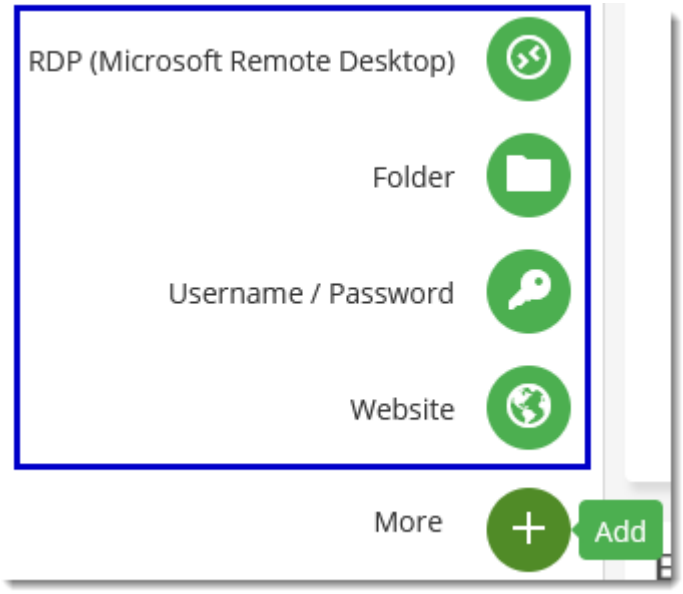
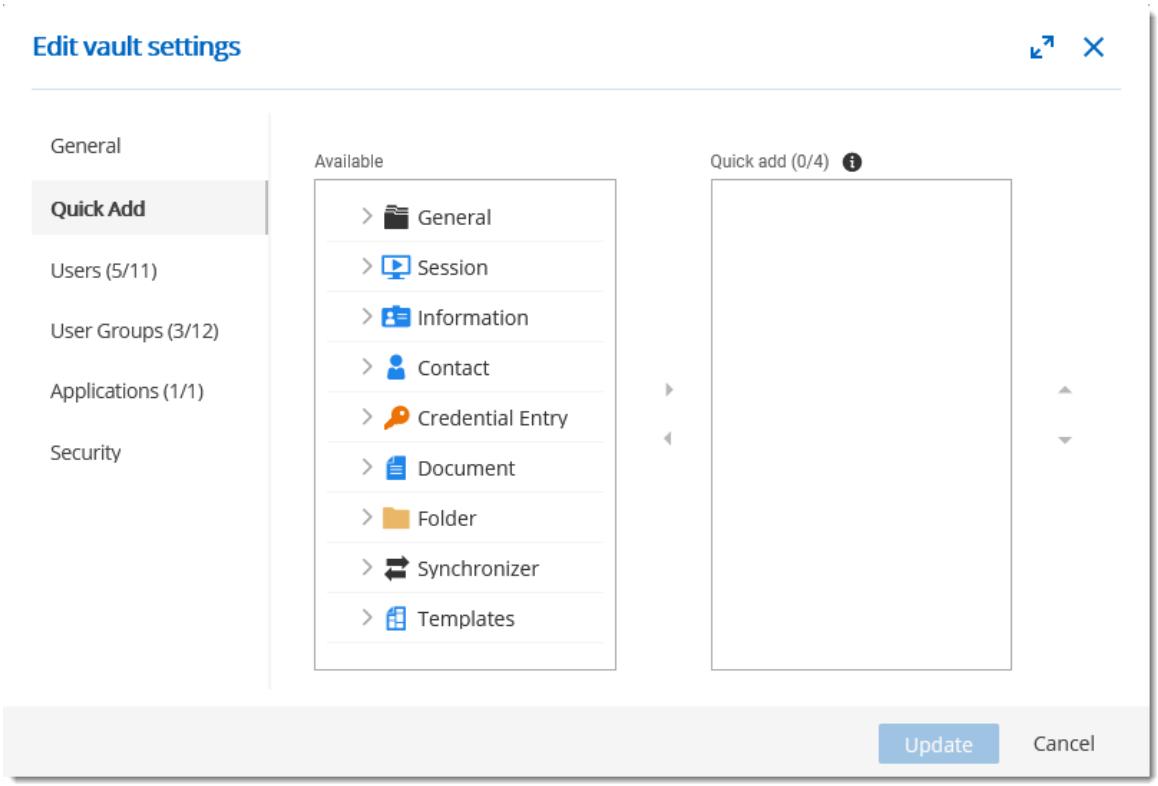




Vaults - Quick Add

OPTION	DESCRIPTION
Available	List of available session's types.

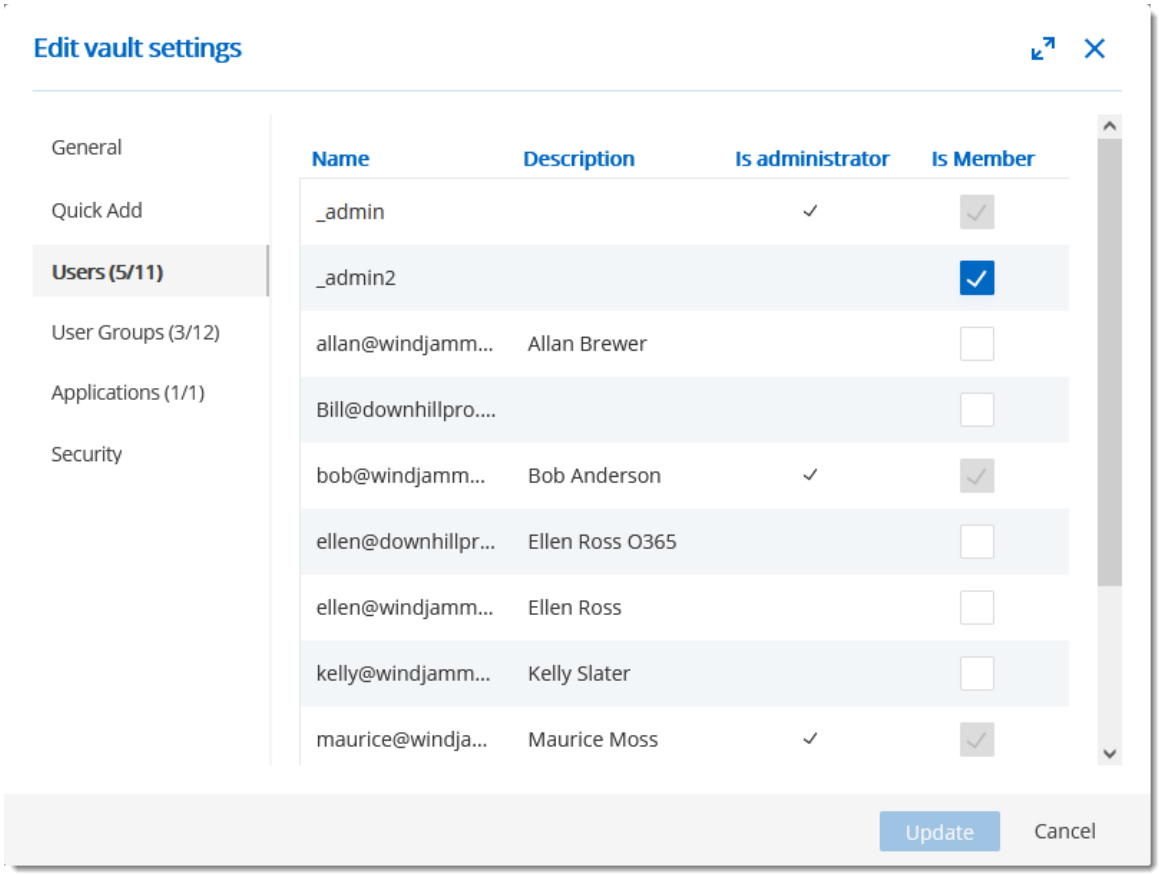
© 2021 Devolutions inc.

OPTION	DESCRIPTION
Quick add	List of the selected session's type that are available for the Quick add buttons.

5.5.1.5.3 Users

DESCRIPTION

Grant access to users on the vault.



Vaults - Users

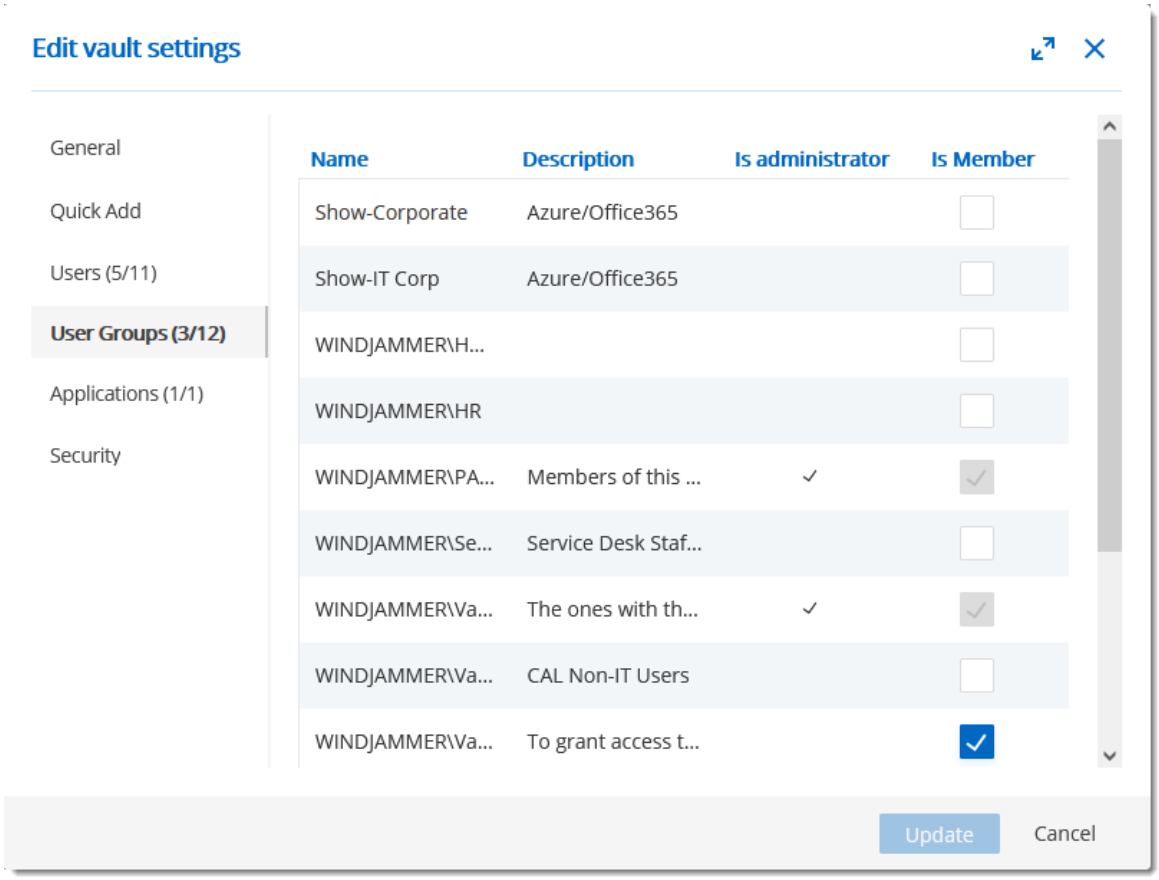
OPTION	DESCRIPTION
Is member	Grant access to the user on the vault when enabled.

© 2021 Devolutions inc.

5.5.1.5.4 User Groups

DESCRIPTION

Grant access to user groups on the vault.



Vaults - User Groups

OPTION	DESCRIPTION
Is member	Grant access to the user group on the vault when enabled.

5.5.1.5.5 Applications

DESCRIPTION

Grant access to applications on the vault.

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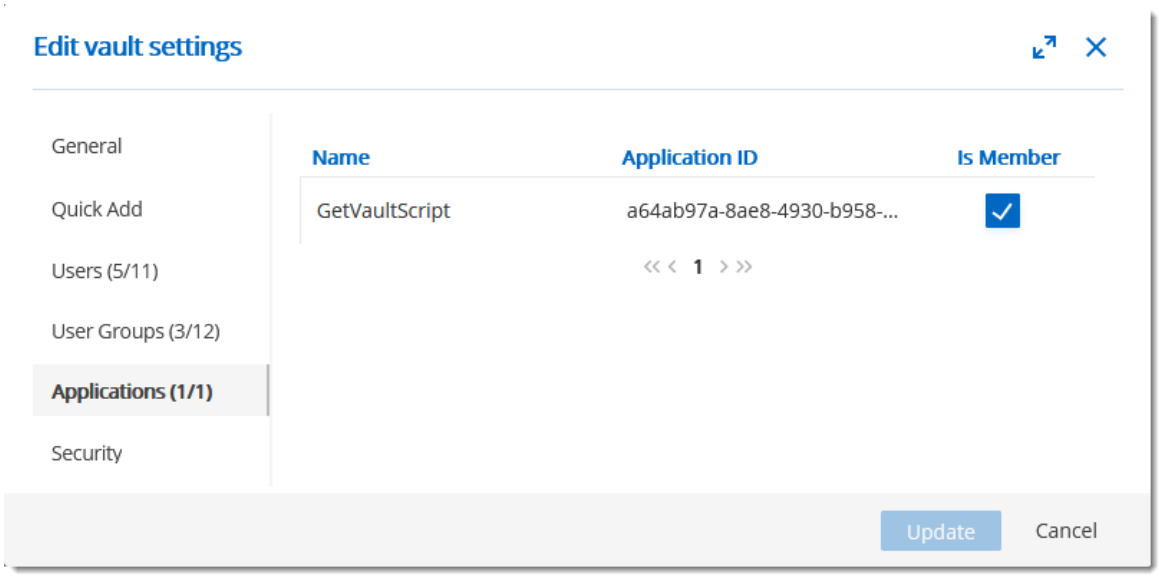

Vaults - Application

OPTION	DESCRIPTION
Is member	Grant access to the application on the vault when enabled.

5.5.1.5.6 Security

DESCRIPTION

Allow to protect the vault's modification from other administrator accounts.

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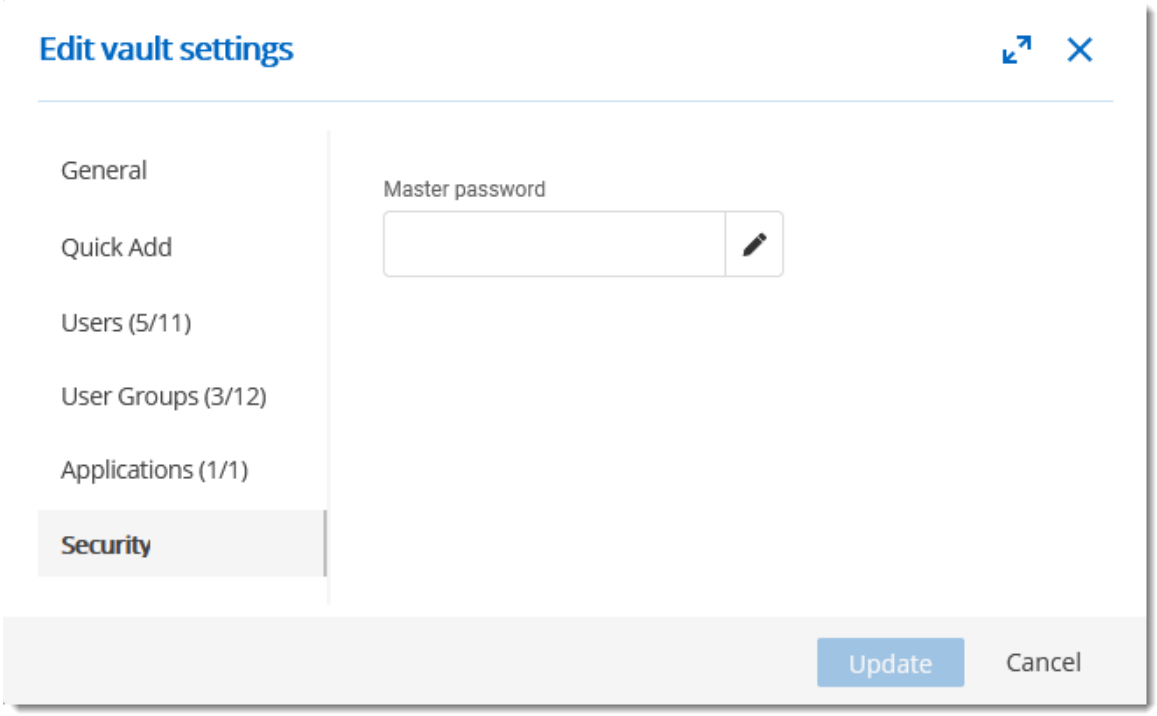

Vaults - Security

OPTION	DESCRIPTION
Master password	Master password to protect vault's modifications.

5.5.1.6 Users Locked

DESCRIPTION

The **Users Locked** allows to manage user accounts that has been locked after too many failed log in attempts. To access the **Users Locked** list, navigate to ***Administration – Users Locked***.

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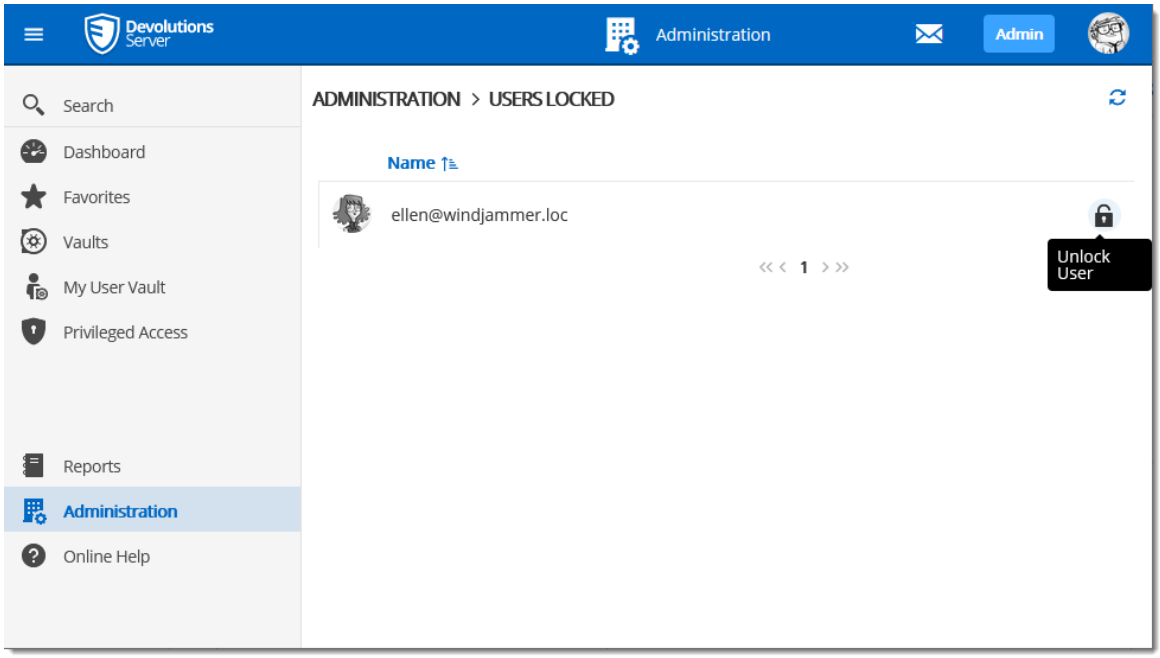
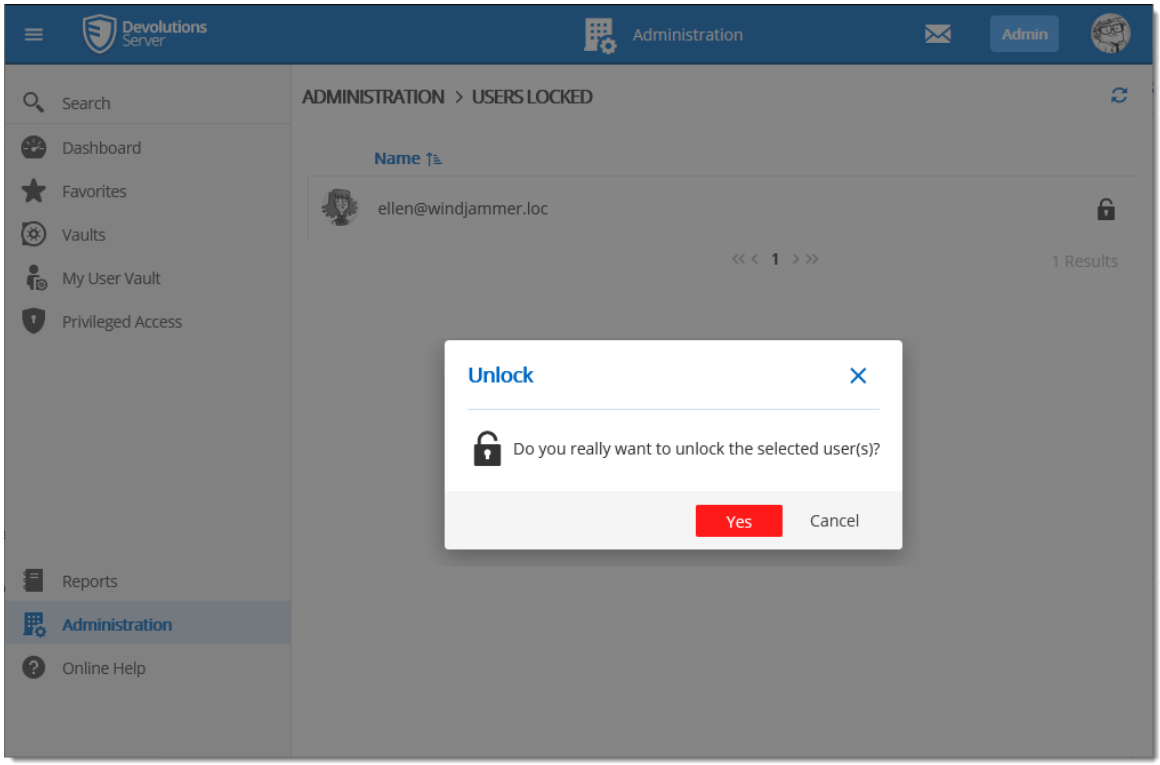


Administration - Users Locked



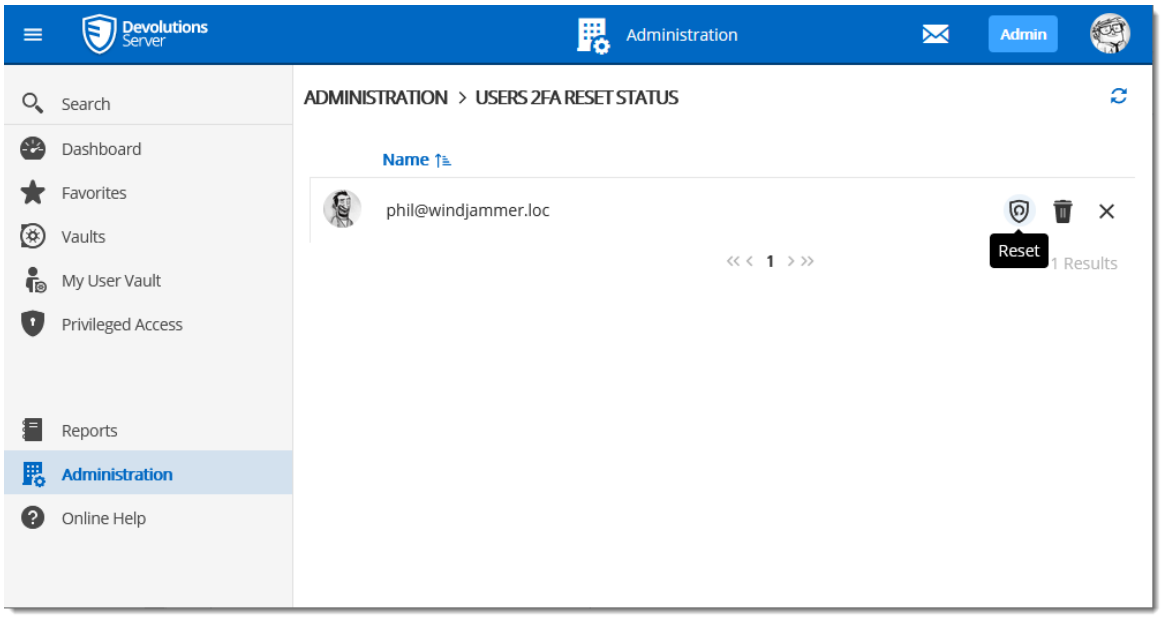
Unlock user account

© 2021 Devolutions inc.

5.5.1.7 Users 2FA Status

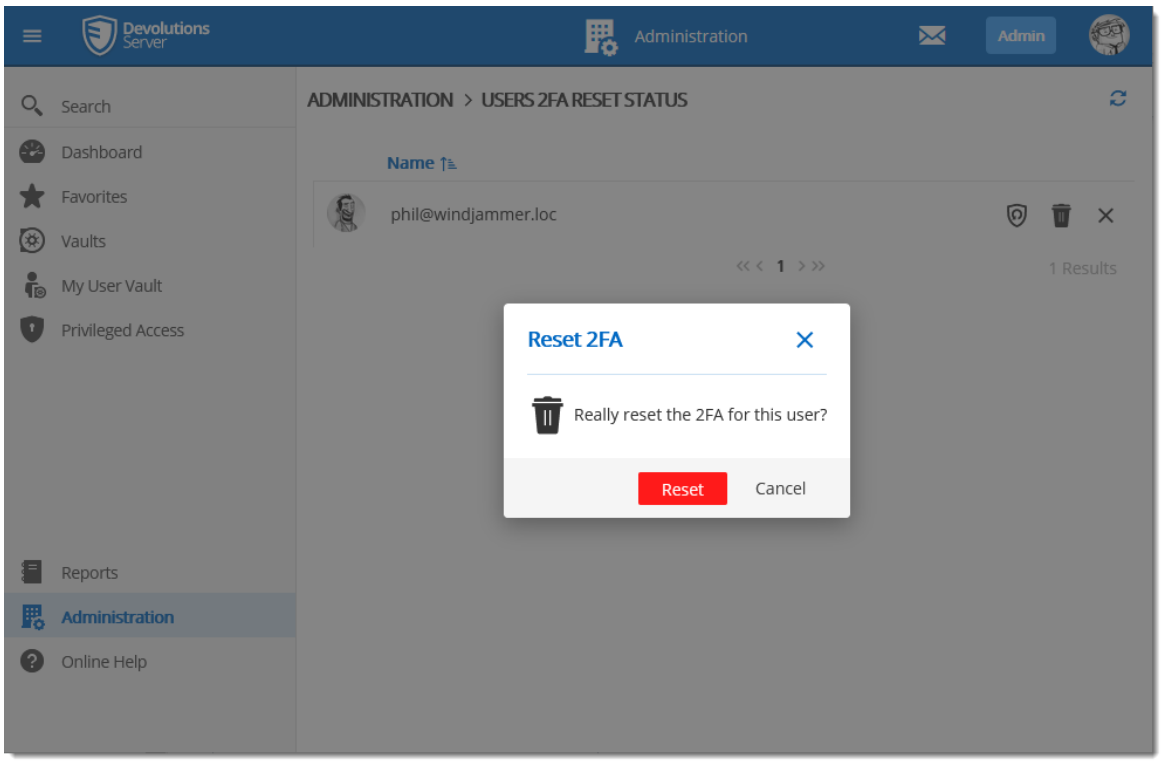
DESCRIPTION

The **Users 2FA Status** section displays user accounts that have requested a 2FA reset. To access the list of users that ask for a 2FA reset, navigate to ***Administration – Users 2FA Status***.



Administration - Users 2FA Reset Status

© 2021 Devolutions inc.



User 2FA Reset operation

5.5.1.8 Reset Server Cache

DESCRIPTION

Reset the **Server Cache** for specific elements.

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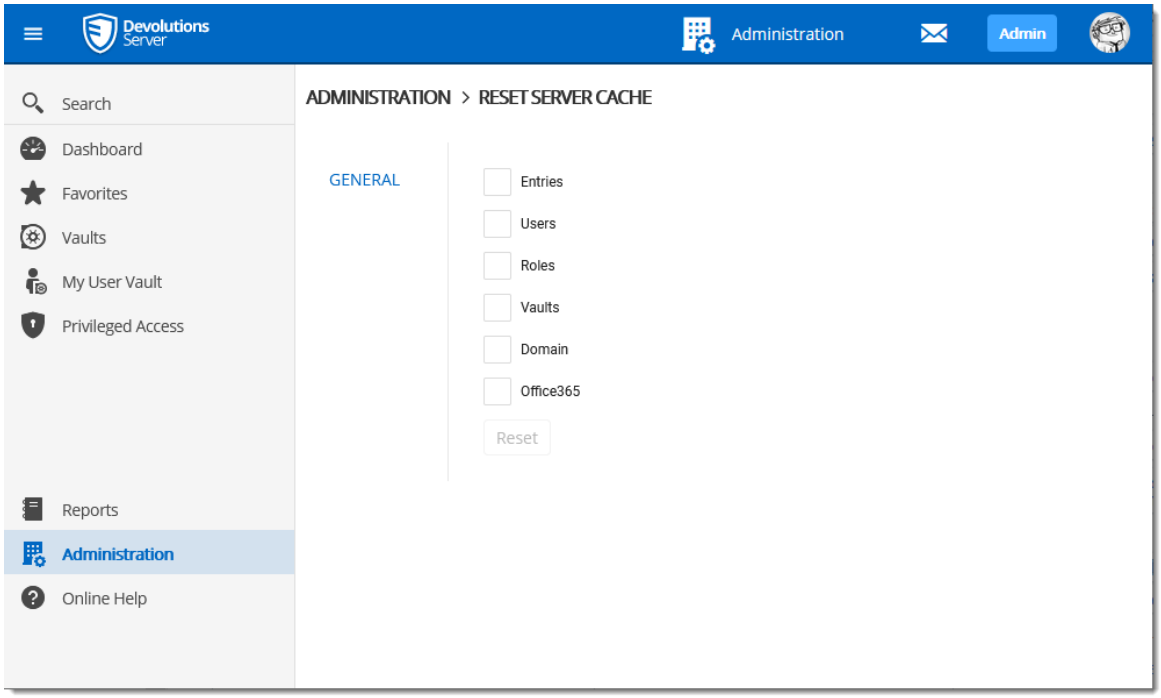

Administration - Reset Server Cache

OPTION	DESCRIPTION
Entries **User Groups** **Vaults** **Users**	When selecting one of those options, when resetting the cache, it will pull back all the information from the database and put the information in the server's memory cache.
Domain **Office365**	When resetting the **Domain** or the **Office365** cache, it will wipe out the information saved in the database and will reload all the users and groups memberships pulled from Active Directory or from Azure AD.

5.5.1.9 Notifications

DESCRIPTION

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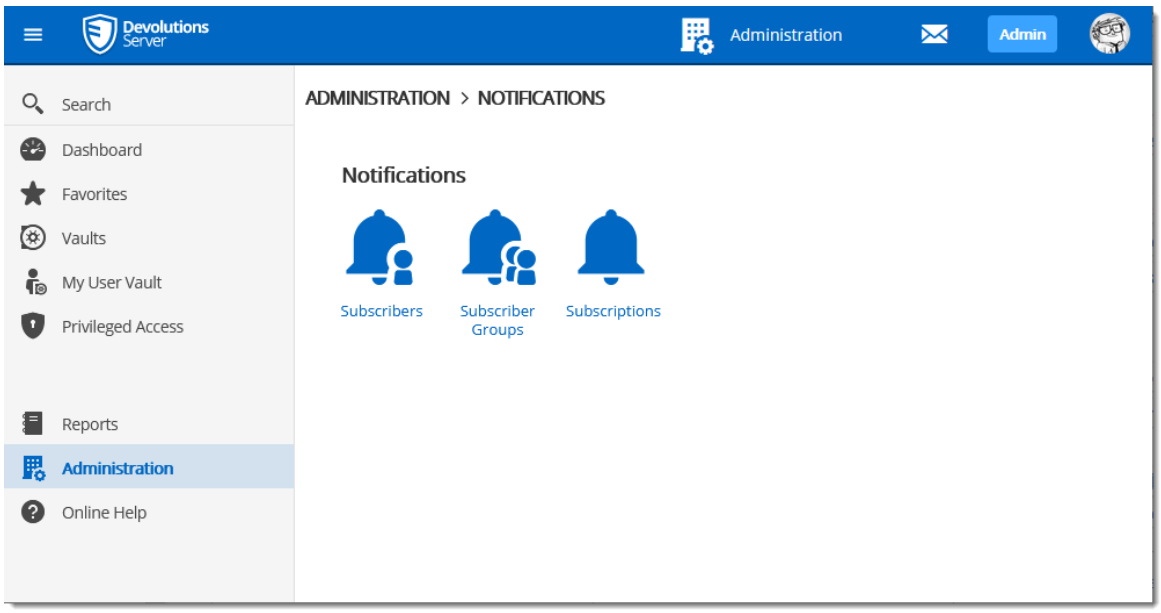
The Email feature must be enabled and properly configured to get the Notifications working.

With Devolutions Server, it is possible to get email notifications based on user activities with the Notification features.



Notifications

To get the Notification working, at least a Subscriber and a Subscription need to be created. It is also possible to regroup Subscribers in Subscriber Groups to send notifications to a group of subscribers.

The following sample represents a notification email that has been received for an entry creation.

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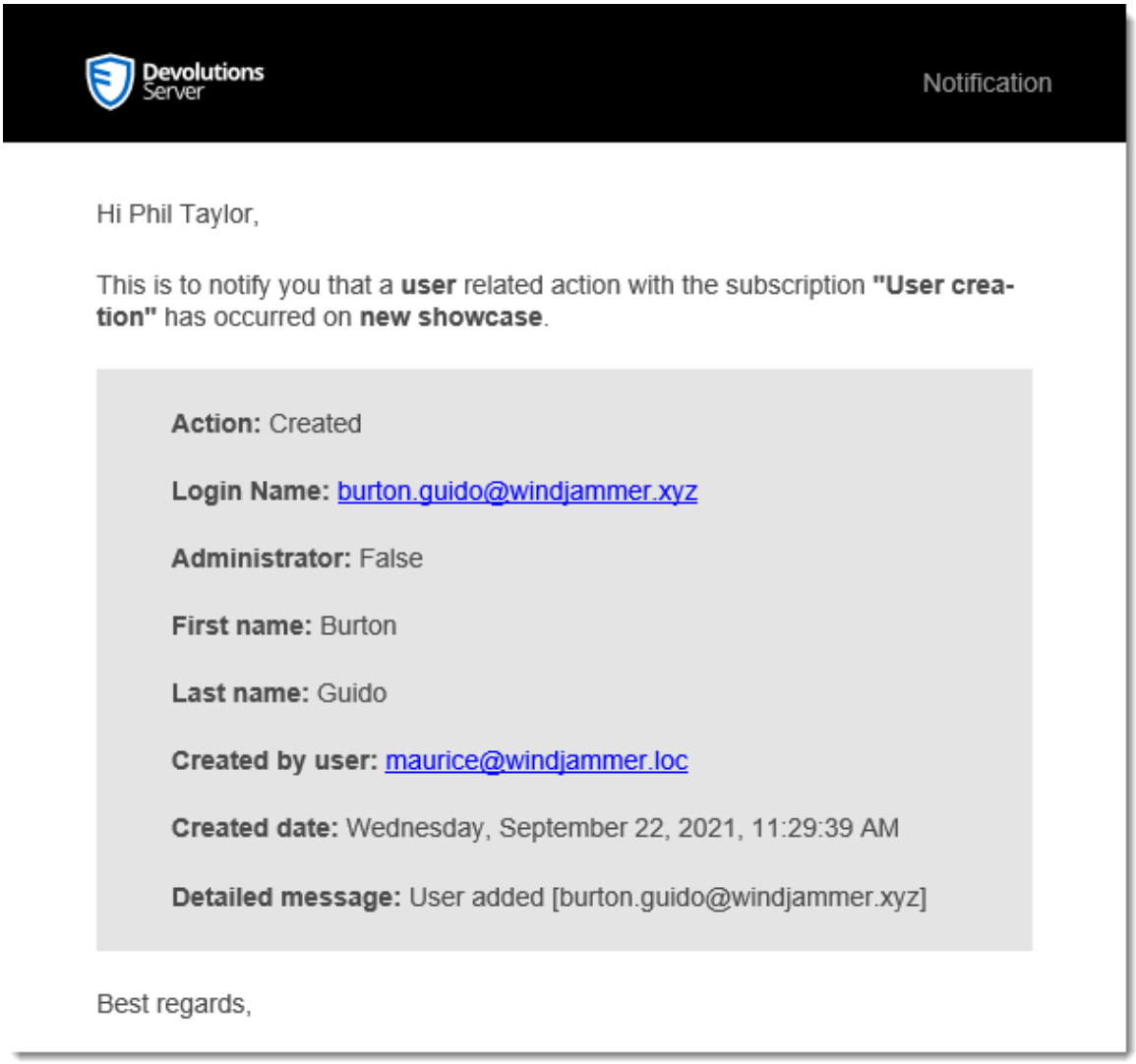

Email notification sample

5.5.1.9.1 Subscribers

DESCRIPTION

At least, one subscriber must exist to receive notifications about Devolutions Server activities.

To create a new Subscriber, click on the Add button.

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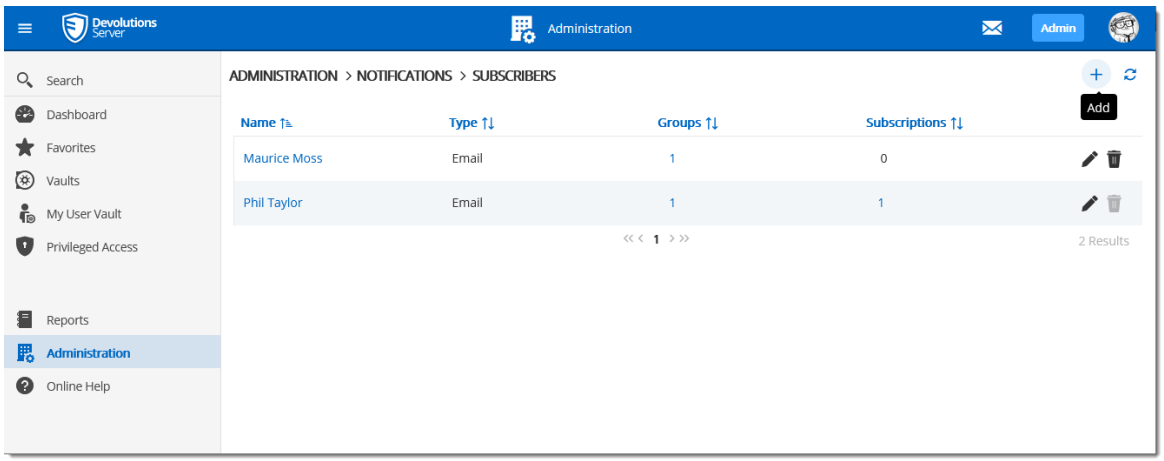
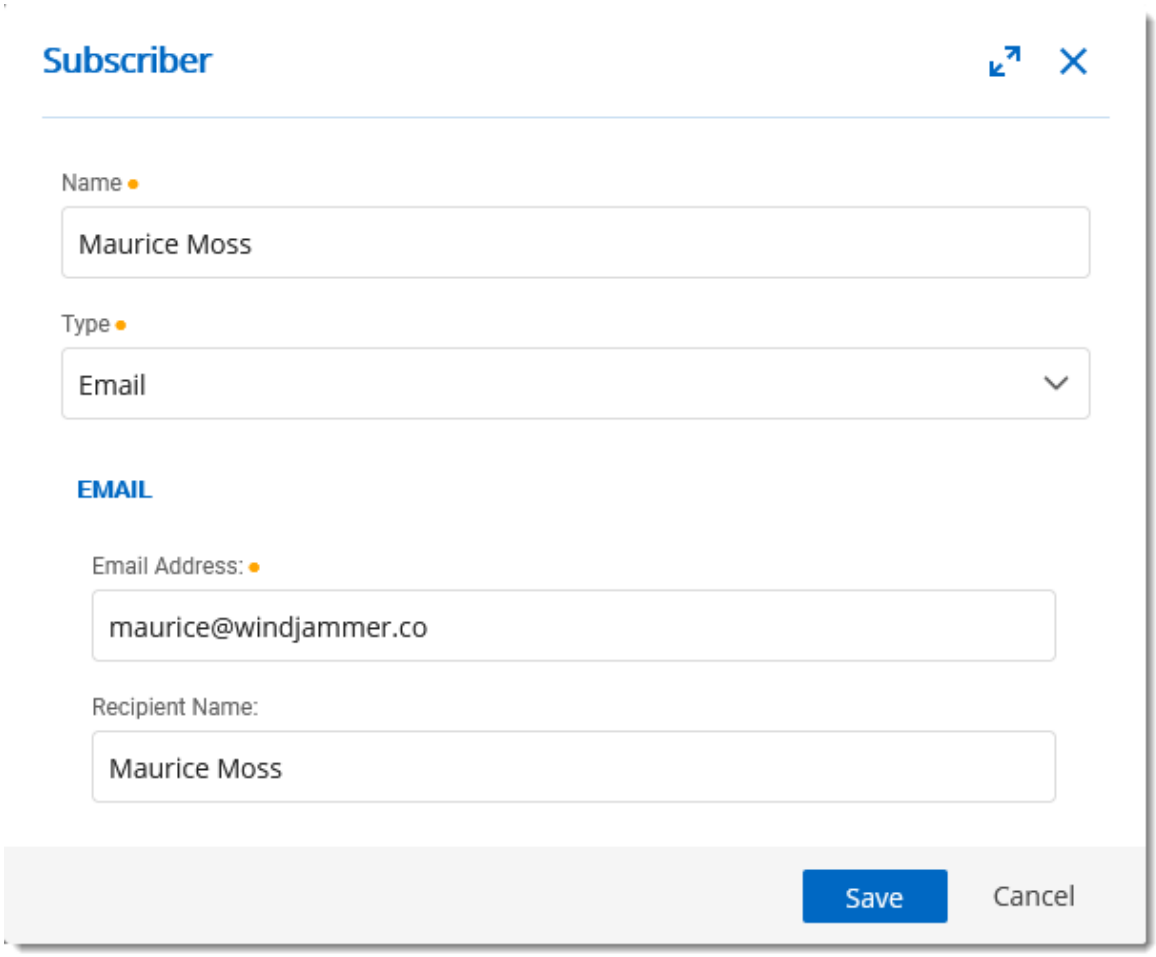


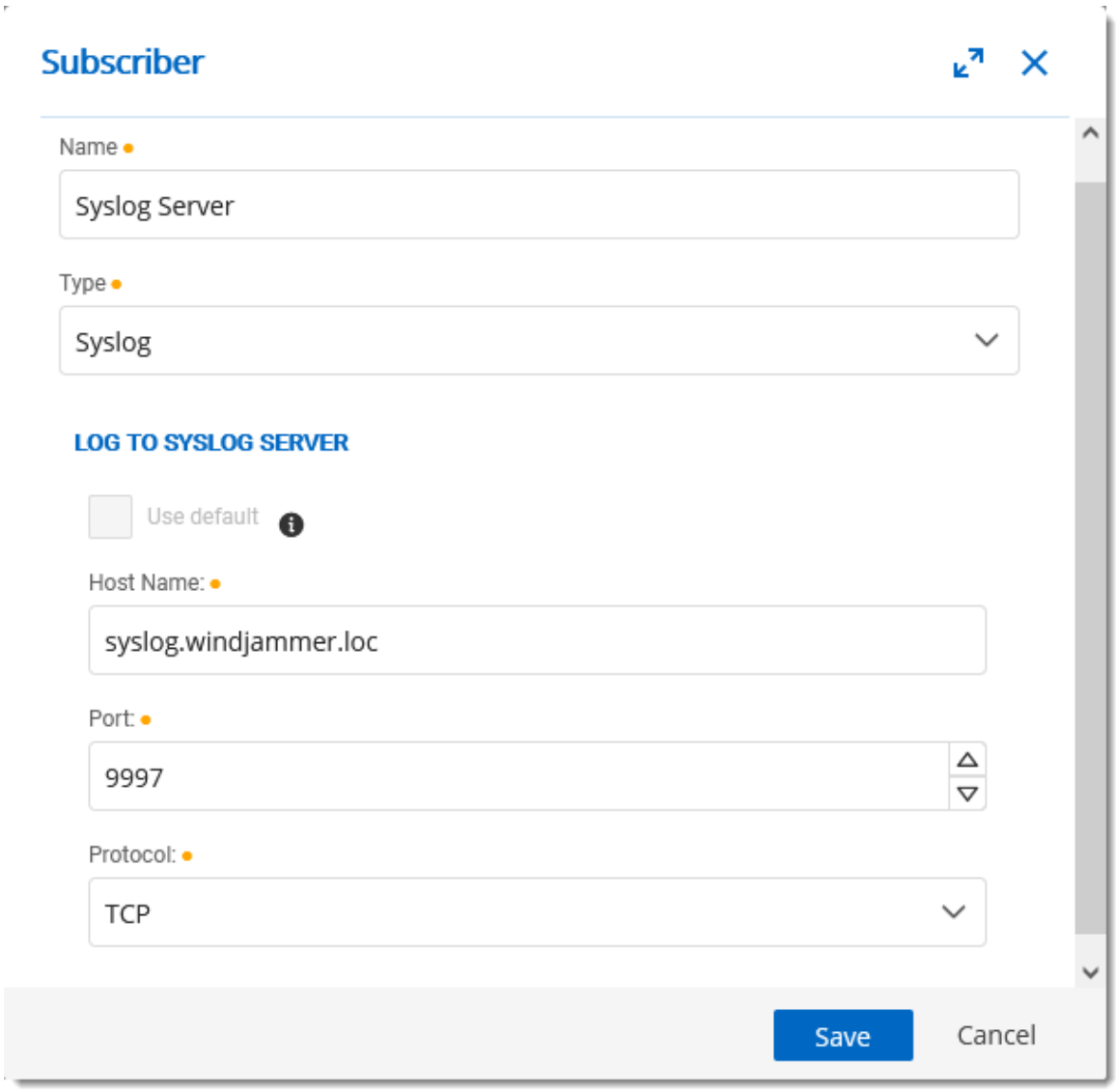
Create a Subscriber

Fill in the information in the following fields.



Email Subscriber properties

© 2021 Devolutions inc.



Syslog Server Subscriber properties

OPTION	DESCRIPTION
Name	Display of the Subscriber.
Type	• Email : The notification will be sent to an email address. ○ Email Address: Valid email address. ○ Recipient name: Email recipient name.

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OPTION	DESCRIPTION
	• Syslog : The notification will be sent to a syslog server. ○ Use default: Will use the Syslog server configuration set in Logging. ○ Host name: Host name of the Syslog server. ○ Port: Port of the syslog server. ○ Protocol: Protocol (TCP or UDP) to communicate with the Syslog server.

5.5.1.9.2 Subscriber Groups

DESCRIPTION

The Subscriber Groups can be used to regroup Subscribers and allow to send Subscriptions to a group of people and/or syslog servers.

Notifications - Subscriber Groups

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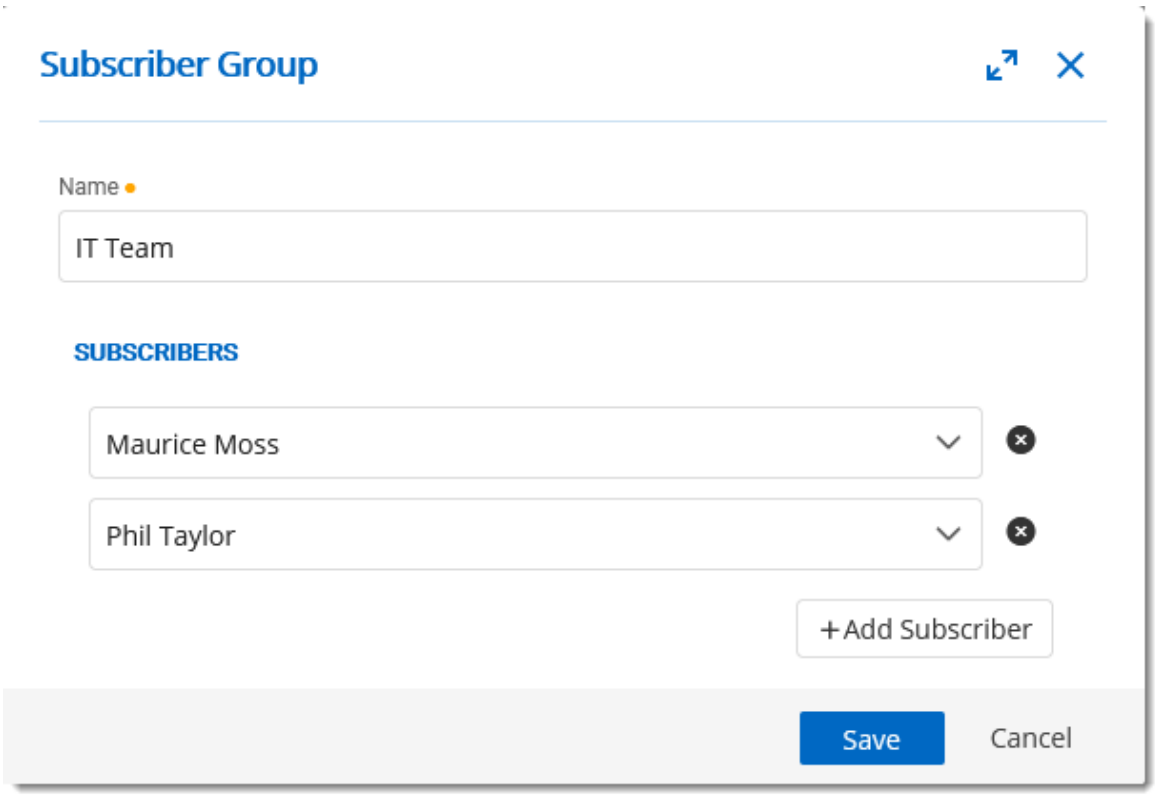

Subscriber Group properties dialog

OPTION	DESCRIPTION
Name	Name of the Subscriber Group.
Subscribers	List of subscribers that are member of the subscriber group. users and Syslog subscribers can be added in a subscriber group.

5.5.1.9.3 Subscriptions

DESCRIPTION

The subscriptions are intended to send email according to activities on Devolutions Server. It could be activities on entries, user accounts, system settings, etc.

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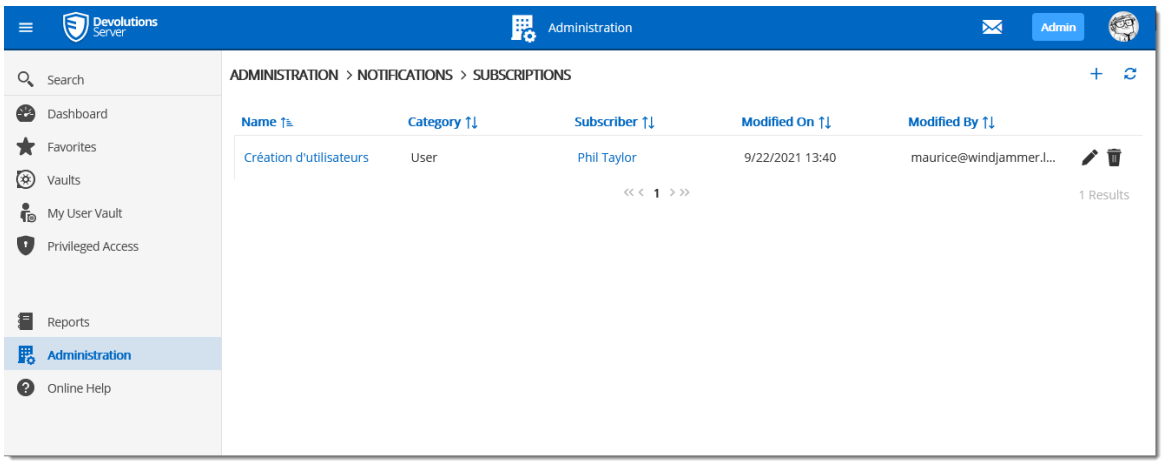
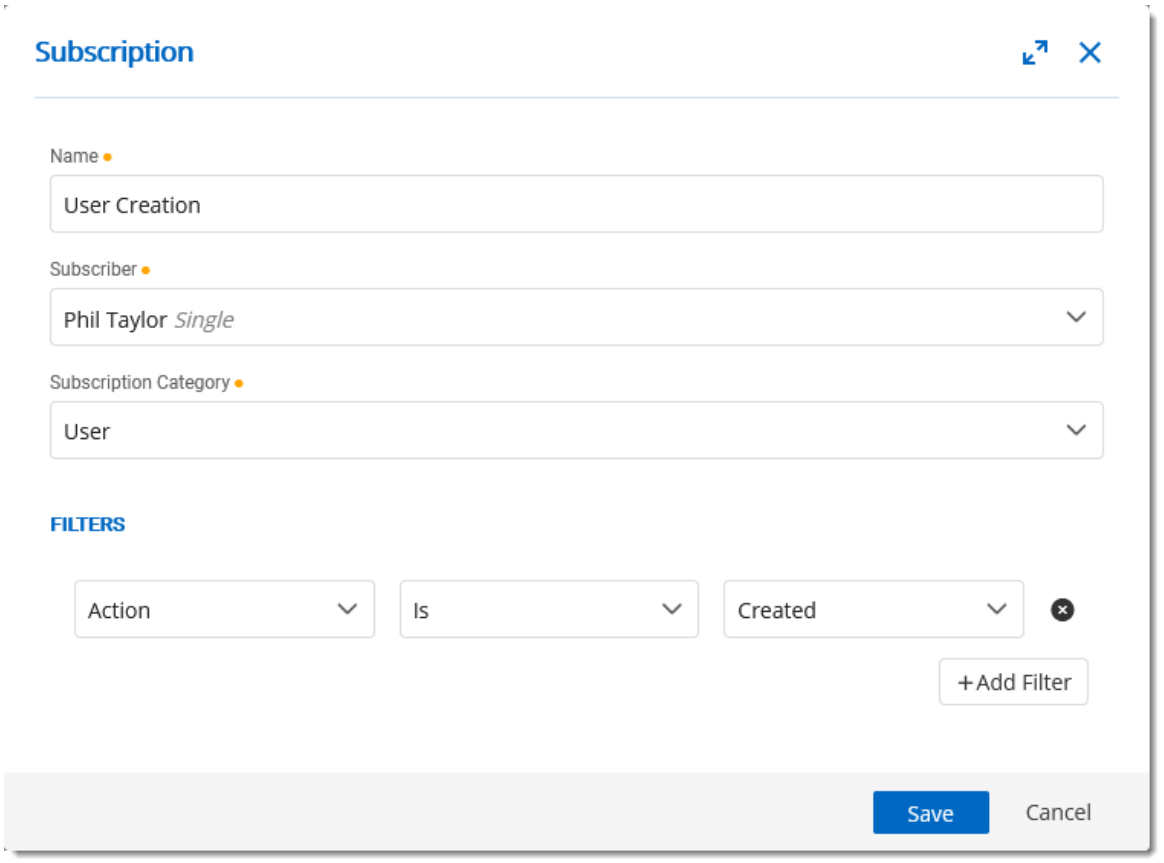


Notifications - Subscriptions



Subscription properties dialog

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OPTION	DESCRIPTION
Name	Name of the Subscription.
Subscriber	One subscriber that will receive the notifications from the current subscription. A subscriber or a subscriber group can be selected.
Subscription Category	Category of the subscription. This can be one of the following possibilities. • Entry • User • Vault • User Groups • PAM Privileged Account • PAM Provider • PAM Checkout • PAM Team Folder • System Settings • Administration Log • Data Source Log • Devolutions Gateway • PAM Checkout Policy • PAM OTP Template
Filters	The filters are tied to the subscription category and each of them has their own filters. You can add a filter

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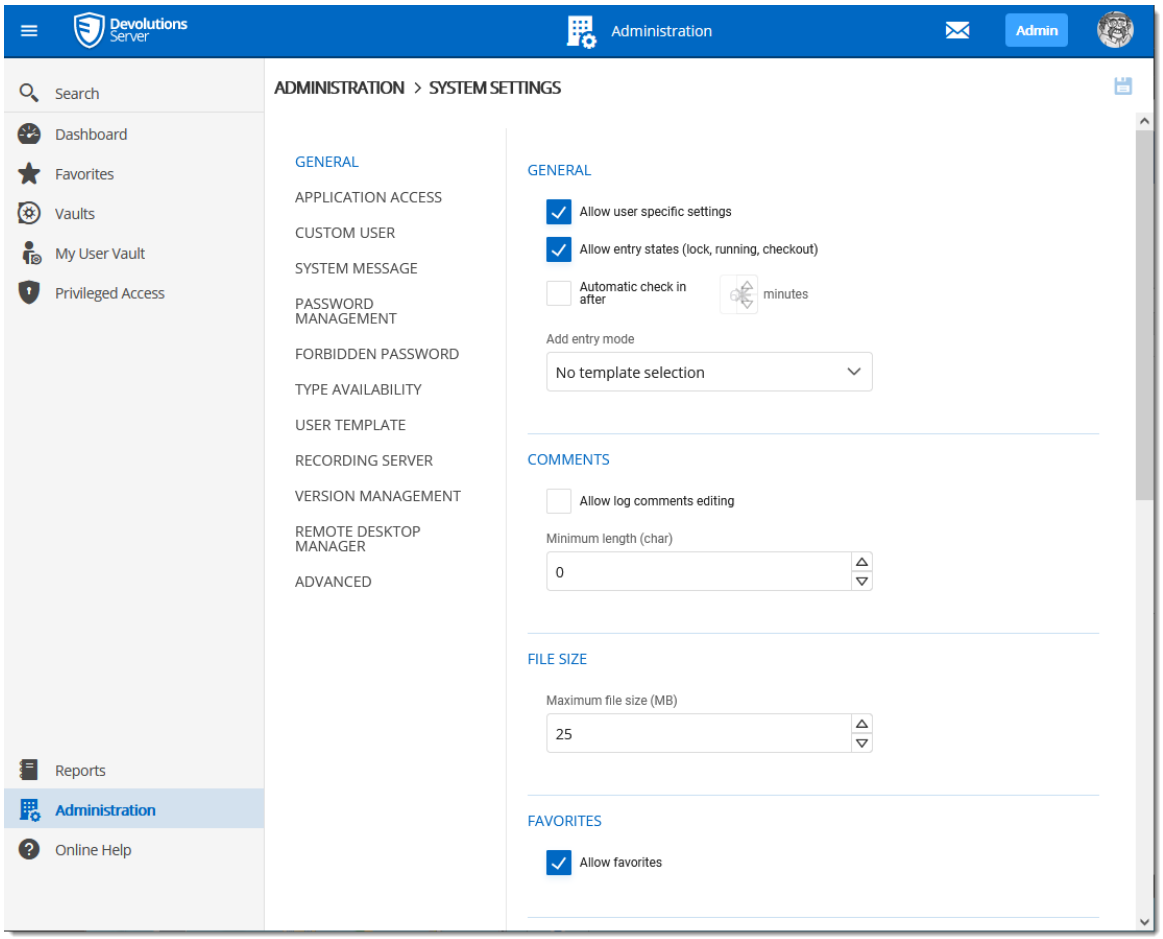
OPTION	DESCRIPTION
	with the Add Filter button. Be aware that the filters are cumulative.

5.5.2 Configuration

5.5.2.1 System Settings

DESCRIPTION

The System Settings allow the administrators control many global aspects of the Devolutions Server data source. Manage settings such as Password policy, Password Template, Type Availability, etc.



Administration - System Settings - General

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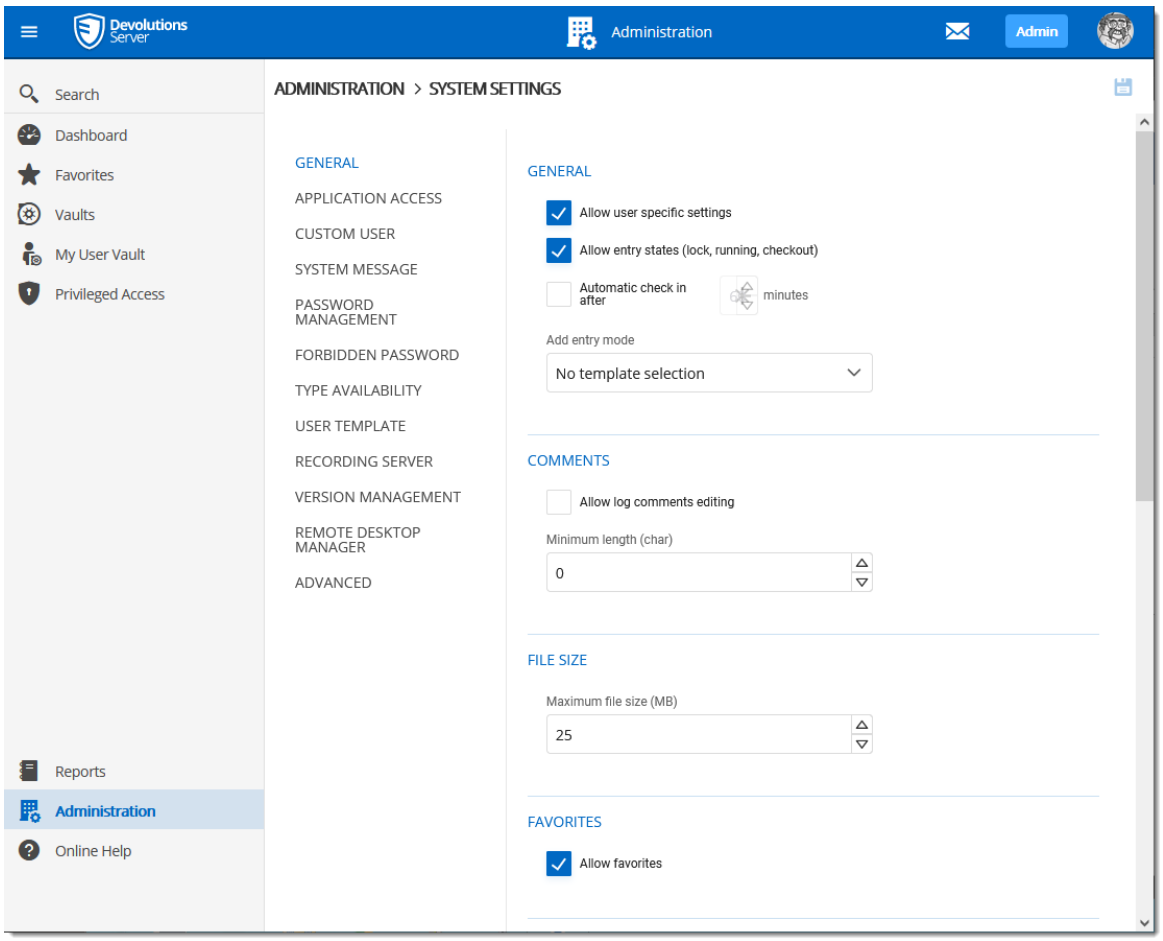
5.5.2.1.1 General

DESCRIPTION

The General section of the System Settings allow the administrators to apply general policies for the whole data source.



Administration - System Settings - General

GENERAL

OPTION	DESCRIPTION
Allow user specific settings	Allow users to save User Specific Settings.

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OPTION	DESCRIPTION
Allow entry states (Lock, Running, Checkout)	Allow entries to be locked when used or edited.
Automatic check in after	Allow to automatically checked in an entry after the defined time.
Add entry mode	Select if users are prompted to choose a template when creating a new entry. Select between: • **Default** • **Template list (include blank)** • **Template list only** • **No template selection**

COMMENTS

OPTION	DESCRIPTION
Allow log comments editing	Enable the log comment editing for all users.
Minimum length (char)	Minimum length in character for the comment.

FILE SIZE

OPTION	DESCRIPTION
Maximum file size (MB)	Limit the size of attachments and document entries to avoid to over load the data source.

FAVORITES

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OPTION	DESCRIPTION
Allow favorites	Allows to flag entries as favorites.

USER VAULT

OPTION	DESCRIPTION
Allow User Vault	Allow users to use the User Vault.
Log User Vault activities	Include the logs of the User Vault for all users of the data source.
Allow credential repository in User Vault	Allow credential repository for sessions in the User Vault.

SECURITY

OPTION	DESCRIPTION
Vault Locked Status	Creates vaults with a restricted access by default.
Data Source Security	Enable the legacy security.
Events Settings	

SECURITY - TIME-BASED USAGE	DESCRIPTION
Time Zone	Select the time zone you are currently in.

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SECURITY - TIME-BASED USAGE	DESCRIPTION
Days	Select which days the session 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 of day	Select the hours which the session 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.

5.5.2.1.2 Application Access

DESCRIPTION

Allows to grant access to applications.

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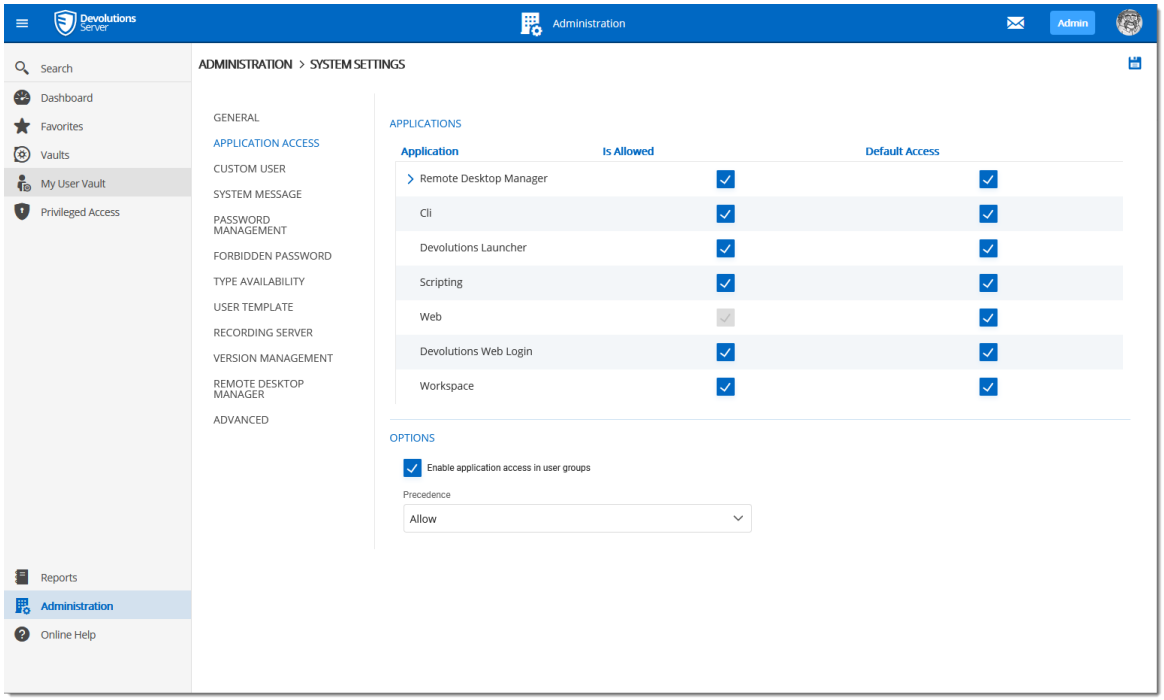

Administration - System Settings - Application Access

OPTIONS

OPTION	DESCRIPTION
Enable application access in user groups	Enable the Application Access parameters in the User Groups properties.
Precedence	Allow or Denied.

5.5.2.1.3 Custom User

DESCRIPTION

Allows to set the Password Policy for Devolutions Server Custom user accounts.

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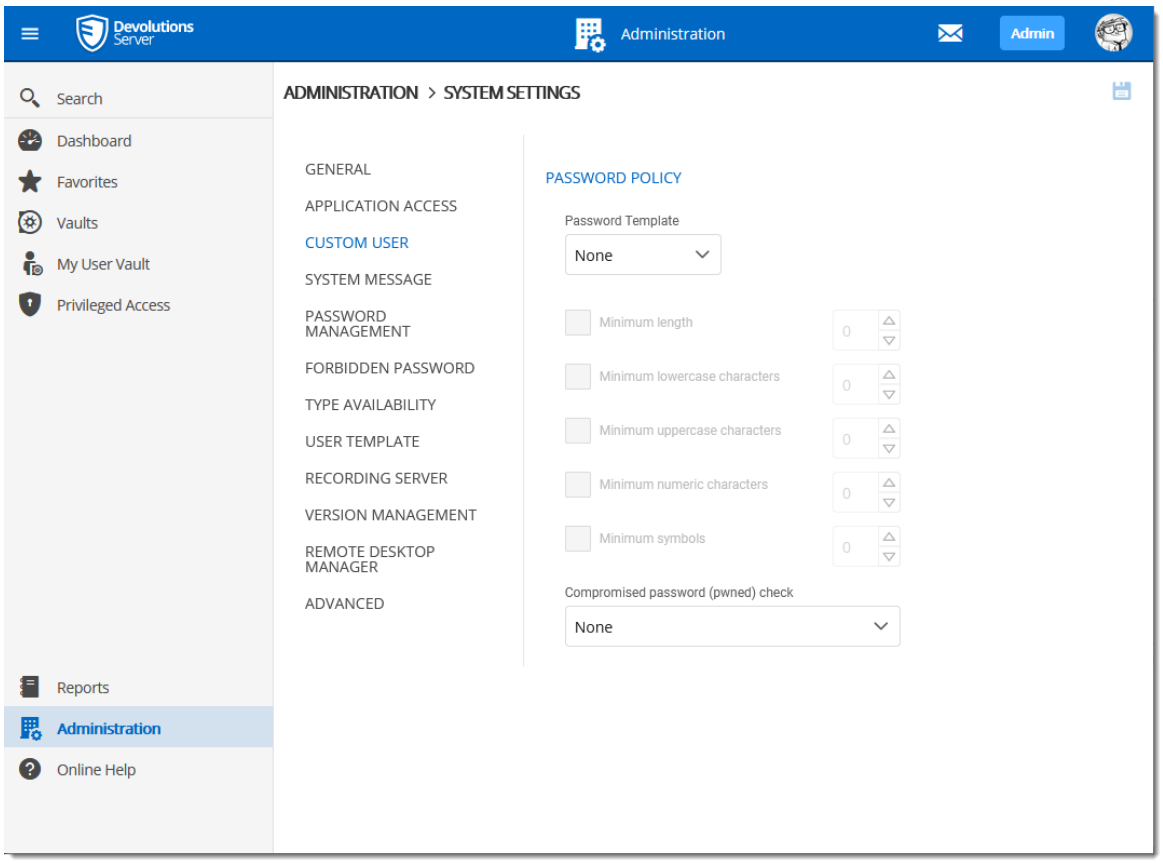

Administration - System Settings - Custom User

5.5.2.1.4 System Message

DESCRIPTION

The **System Message** allows to set a message that will be displayed every time a user connects on the Devolutions Server data source no matter which method will be used (web interface, Remote Desktop Manager).

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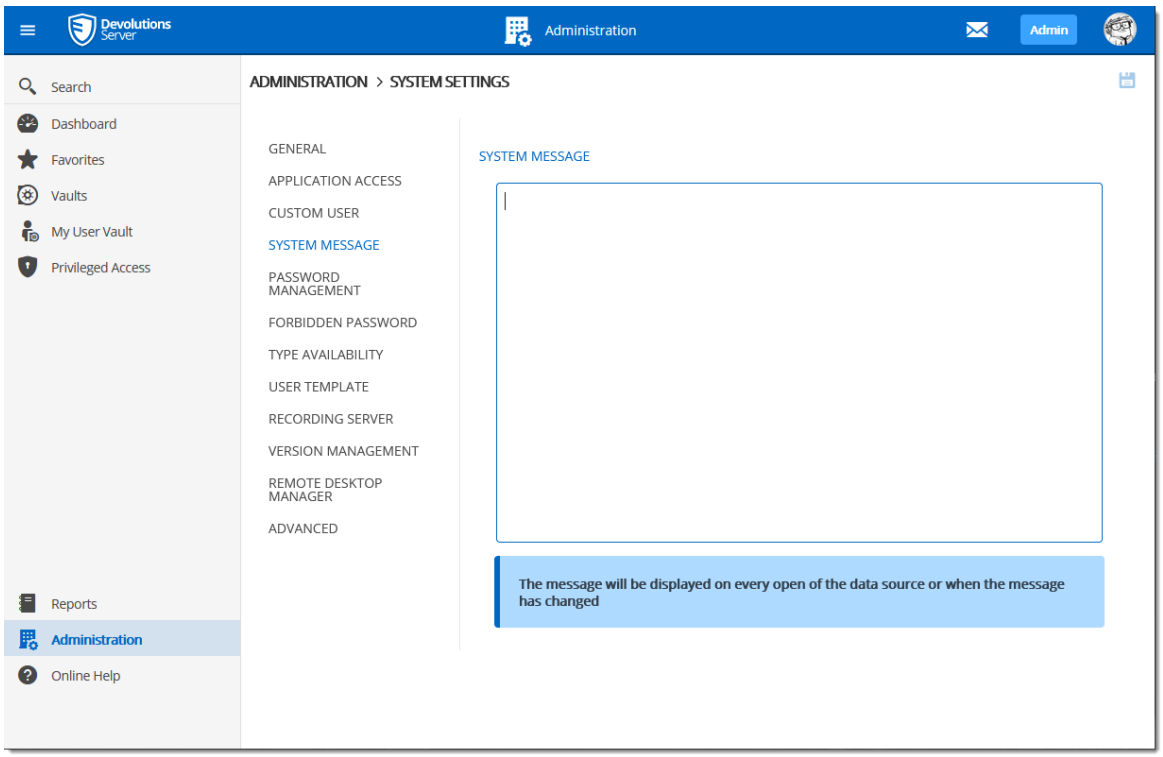

Administration - System Settings - System Message

5.5.2.1.5 Password Management

DESCRIPTION

The **Password Policy** settings allow to set the minimal requirements for passwords that will be saved in the entries.

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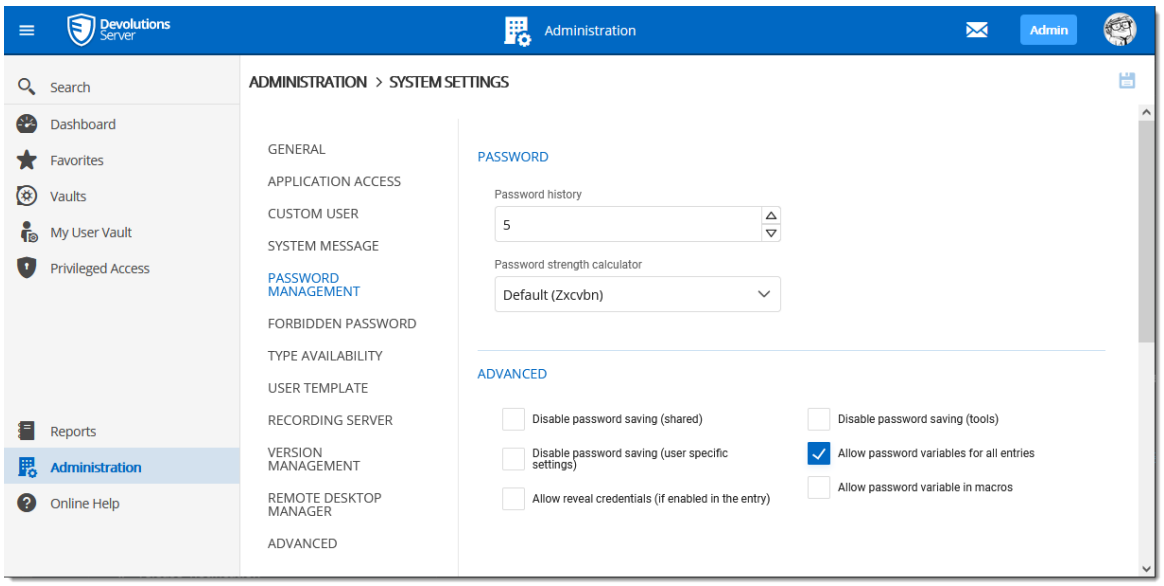
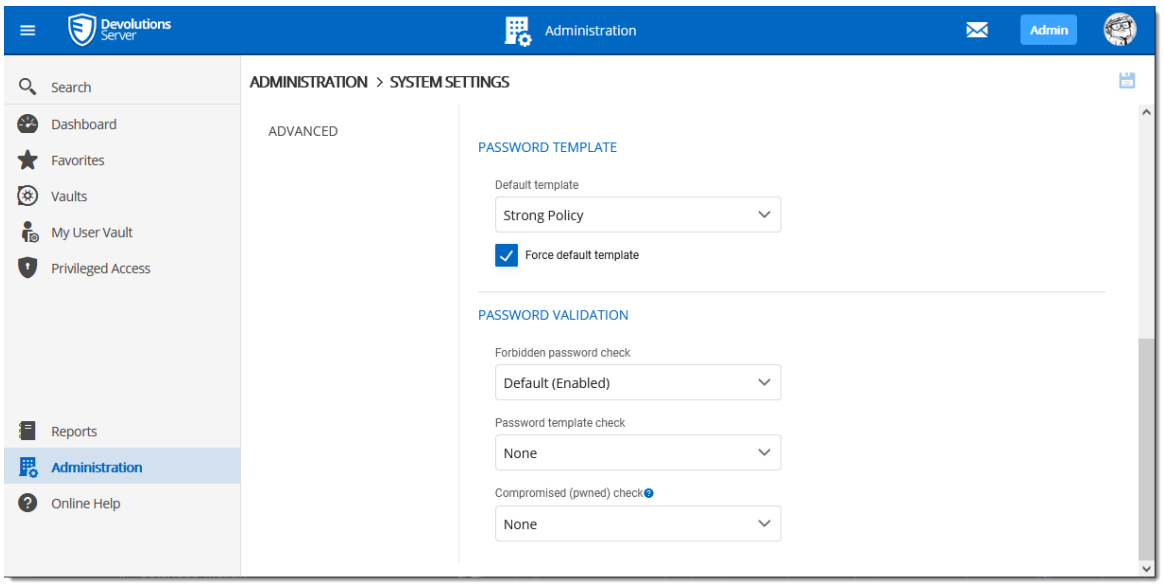


Administration - System Settings - Password Policy



Administration - System Settings - Password Policy

PASSWORD	DESCRIPTION
Password History	Indicate the maximum saved password to keep in history.
Password strength calculator	Select the tool to use to analyze the password strength.

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PASSWORD	DESCRIPTION
Pwned check	Verify if the used passwords have already been exposed to data breaches.

ADVANCED	DESCRIPTION
Disable password saving (shared)	Prevent users from saving passwords in entries.
Disable password saving (user specific settings)	Prevent users from saving passwords in the User Specific Settings.
Allow reveal credentials (if enabled in the entry)	Shows the credentials if the box "Allow show credentials (everybody)" is check inside the entry.
Disable password saving (tools)	Prevent users from saving passwords in the Tools tab of a session.
Disable password variable for all entries	Renders the **$PASSWORD$** variable unusable for this data source.
Allow password in macro (send keys)	Renders the **$MACRO_PASSWORD$** variable useless for this data source.

PASSWORD TEMPLATE	DESCRIPTION
Modèle p. déf.	Modèle de mots de passe par défault utilisé par le système. Des modèles peuvent être créés dans Modèles de mot de passe.

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PASSWORD TEMPLATE	DESCRIPTION
Forcer le modèle par défaut	Force l'utilisation du modèle par défaut lorsque l'option est activée.

PASSWORD VALIDATION	DESCRIPTION
Vérifier si mot de passe interdit	Une vérification du mot de passe parmi la liste des Mot de passe interdit est effectuée si activé.
Vérifier le modèle de mot de passe	• **Aucun**: Aucun modèle de mot de passe ne sera utilisé lors de la création du mot de passe. • **Obligatoire**: Lors de la création du mot de passe, l'utilisateur recevra un avertissement indiquant que le mot de passe ne répond pas aux règles du modèle de mot de passe. L'utilisateur ne peut pas enregistrer le mot de passe. • **Avertissement**: Lors de la création du mot de passe, l'utilisateur recevra un avertissement indiquant que le mot de passe ne répond pas aux règles du modèle de mot de passe. L'utilisateur peut enregistrer le mot de passe.
Vérification de compromission (pwned)	Vérifier si les mots de passe utilisés ont déjà été exposés à des violations de données.

5.5.2.1.6 Forbidden Password

DESCRIPTION

Forbidden Passwords allow to create a list of blacklisted passwords to forbid usage in the application. Once set in this list, the password cannot be used anymore in the Devolutions Server data source.

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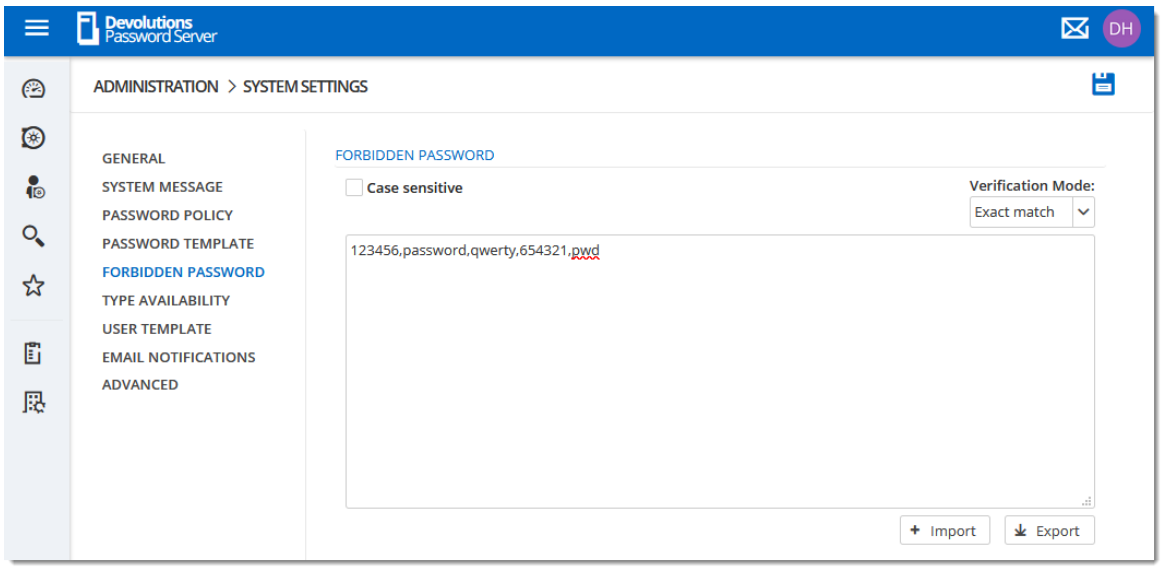

Administration - System Settings - Forbidden Password

OPTION	DESCRIPTION
Case sensitive	Make the verification mode case sensitive.
Verification mode	Select the verification mode between: **Contains**: the password will be forbidden if it contains a word in the blacklist. **Exact match**: the password will be forbidden if it matches a word in the blacklist.
Import	Import a list from your computer (*.pwd or .txt).
Export	Export your forbidden password list. By default the list will be exported in a password file format (.pwd).

5.5.2.1.7 Password Template

DESCRIPTION

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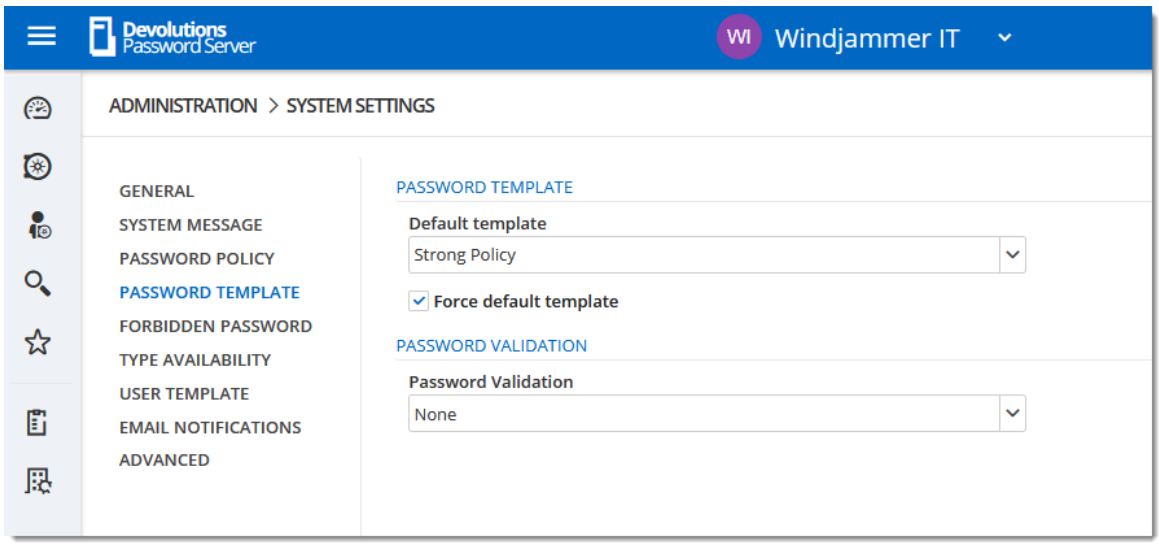

Administration - System Settings - Password Template

SETTINGS

PASSWORD TEMPLATES	DESCRIPTION
Password Validation	Select a password template to use. Consult the Password Template page for more information.
Force default template	Enforce the default template.
Password Template	• **None** : No password templates will be used on password creation. • **Required** : On password creation, the user will get a warning that the password doesn't meet the Password Template rules. The user cannot save the password. • **Warning** : On password creation the user will get a warning that the password doesn't meet the Password Template rules. The user can save the password.

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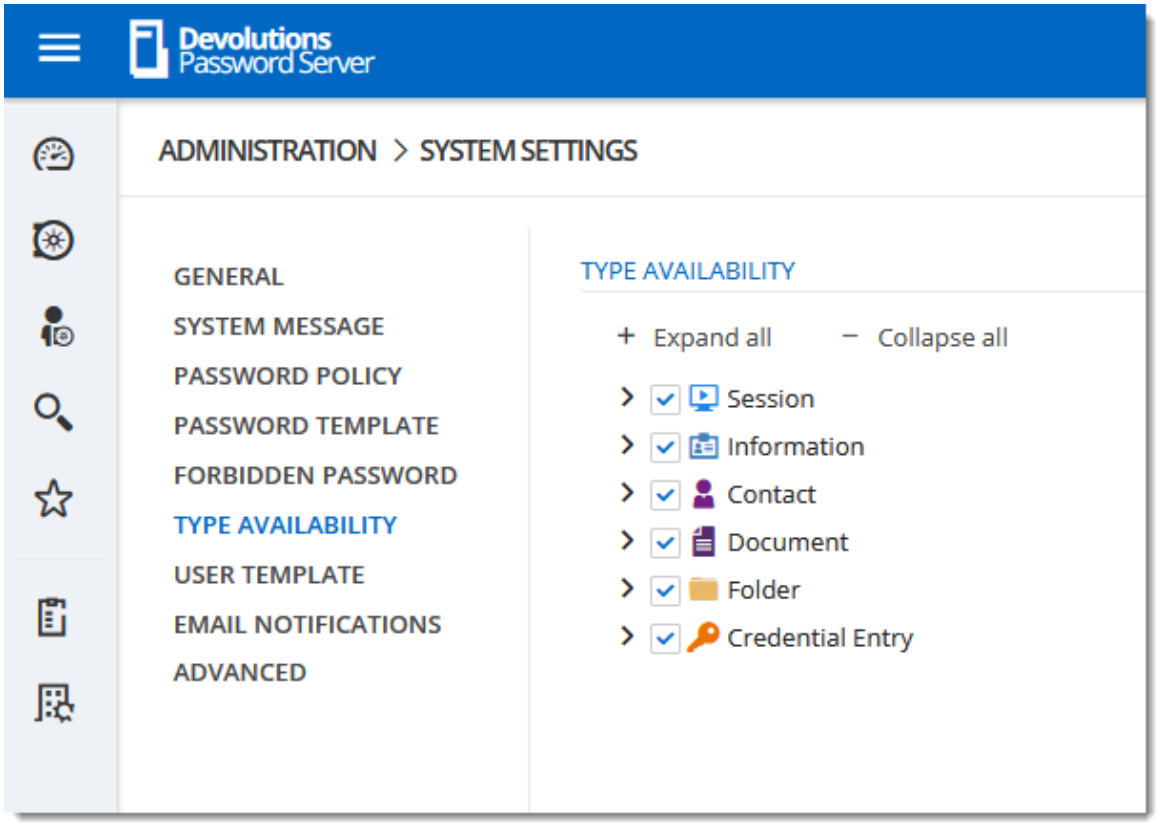
5.5.2.1.8 Type Availability

DESCRIPTION

This section will allow to control the availability of the session, information, contact, document, folder, credential entry in Devolutions Server data source. Each section contains different entry types you can choose to be available.



System Settings - Type Availability

5.5.2.1.9 User Template

DESCRIPTION

This section will set the user template for the Automatic User Creation feature.

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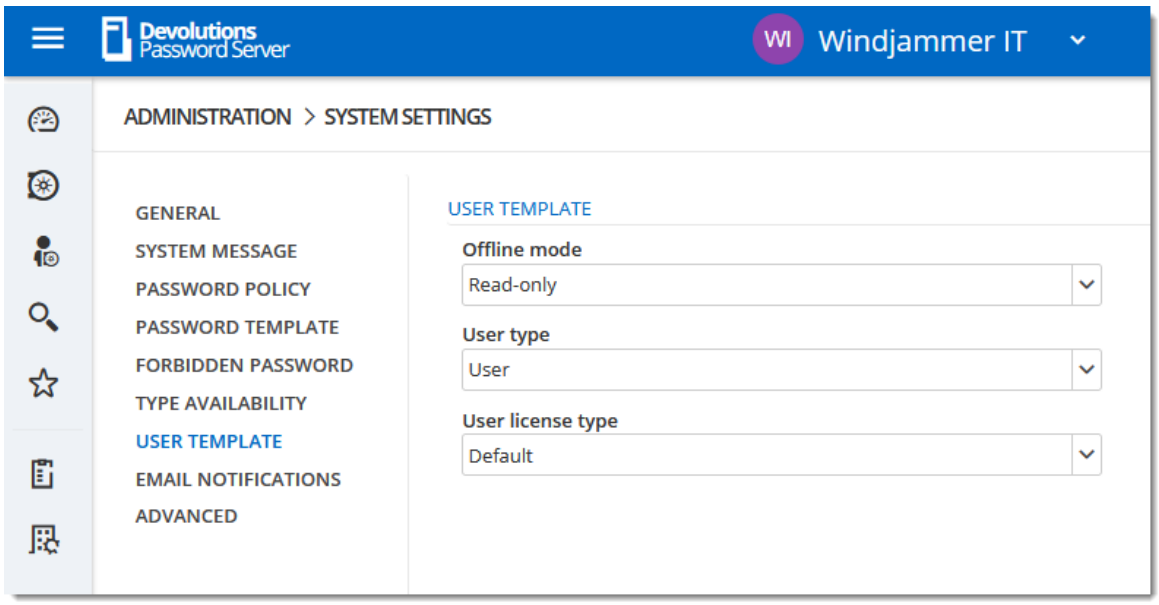

System Settings - User Template

OPTION	DESCRIPTION
Offline mode	This option will only affect Remote Desktop Manager application. The possible values are : • **Disabled** • **Read only** • **Read/write**
User type	The possible values are : • **Administrator** • **User** • **Read only user**
User license type	Select if users are prompted to choose a template when creating a new entry. Select between: • **Default** • **Connection Management** • **Password Management**

5.5.2.1.10 Advanced

DESCRIPTION

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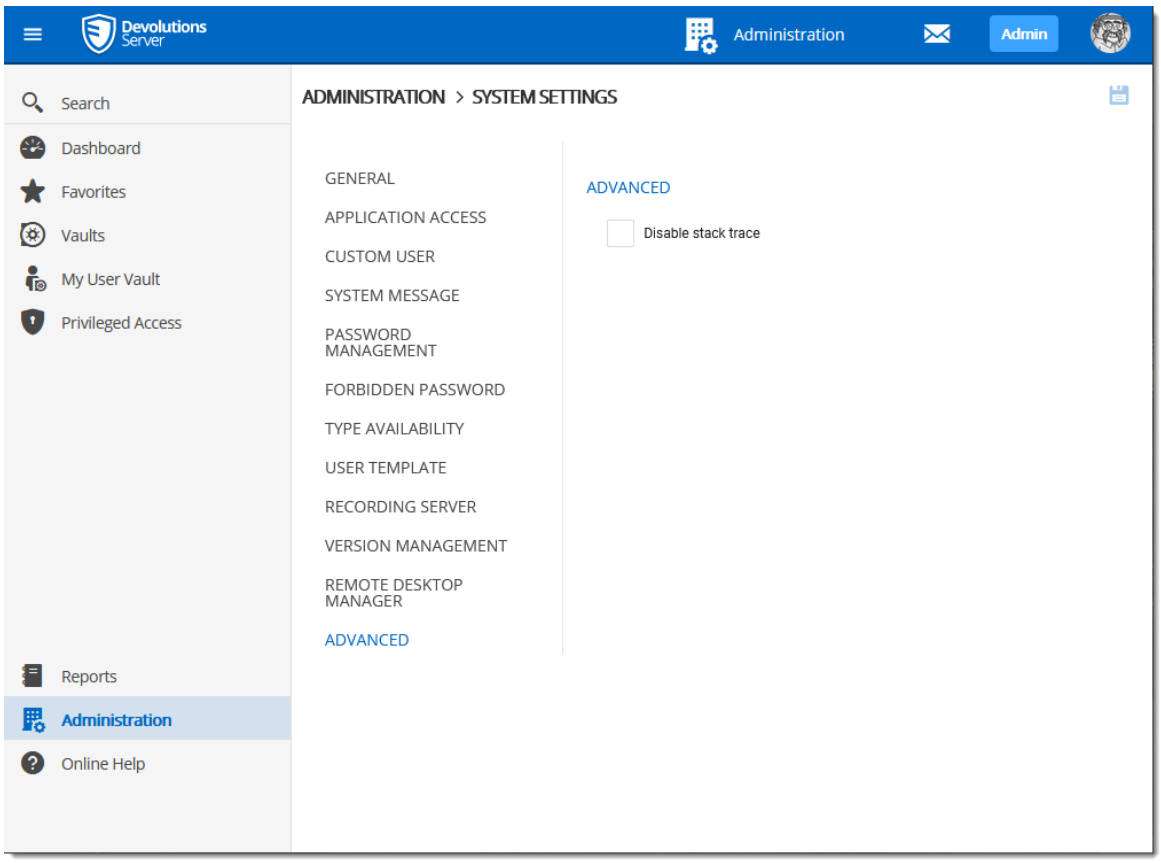

Administration - System Settings - Advanced

1.

OPTION	DESCRIPTION
Disable stack trace	Disable the stack trace of Devolutions Server in Remote Desktop Manager's error logs.

5.5.2.2 Devolutions Server Settings

DESCRIPTION

The **Devolutions Server Settings** page allows to manage the Devolutions Server configuration remotely.

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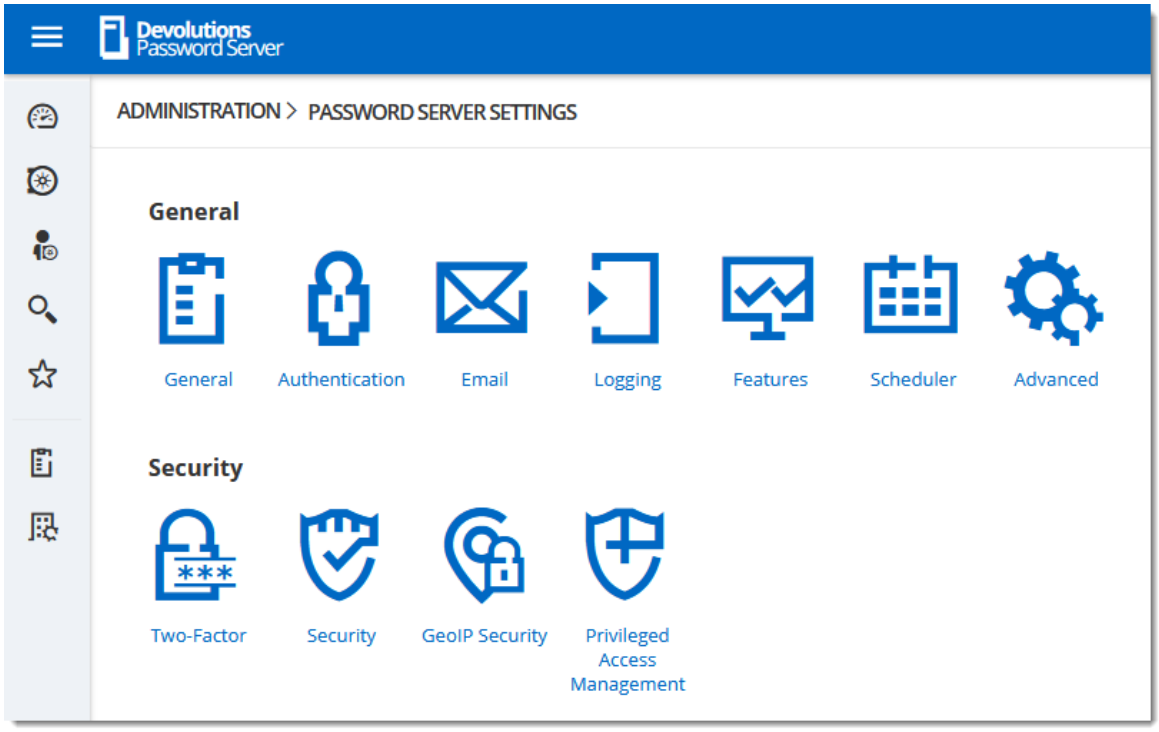

Administration - Devolutions Server Settings

5.5.2.2.1 General

5.5.2.2.1.1 General

DESCRIPTION

The **General** section allows the Administrator to modify the name or the description of the Devolutions Server instance.

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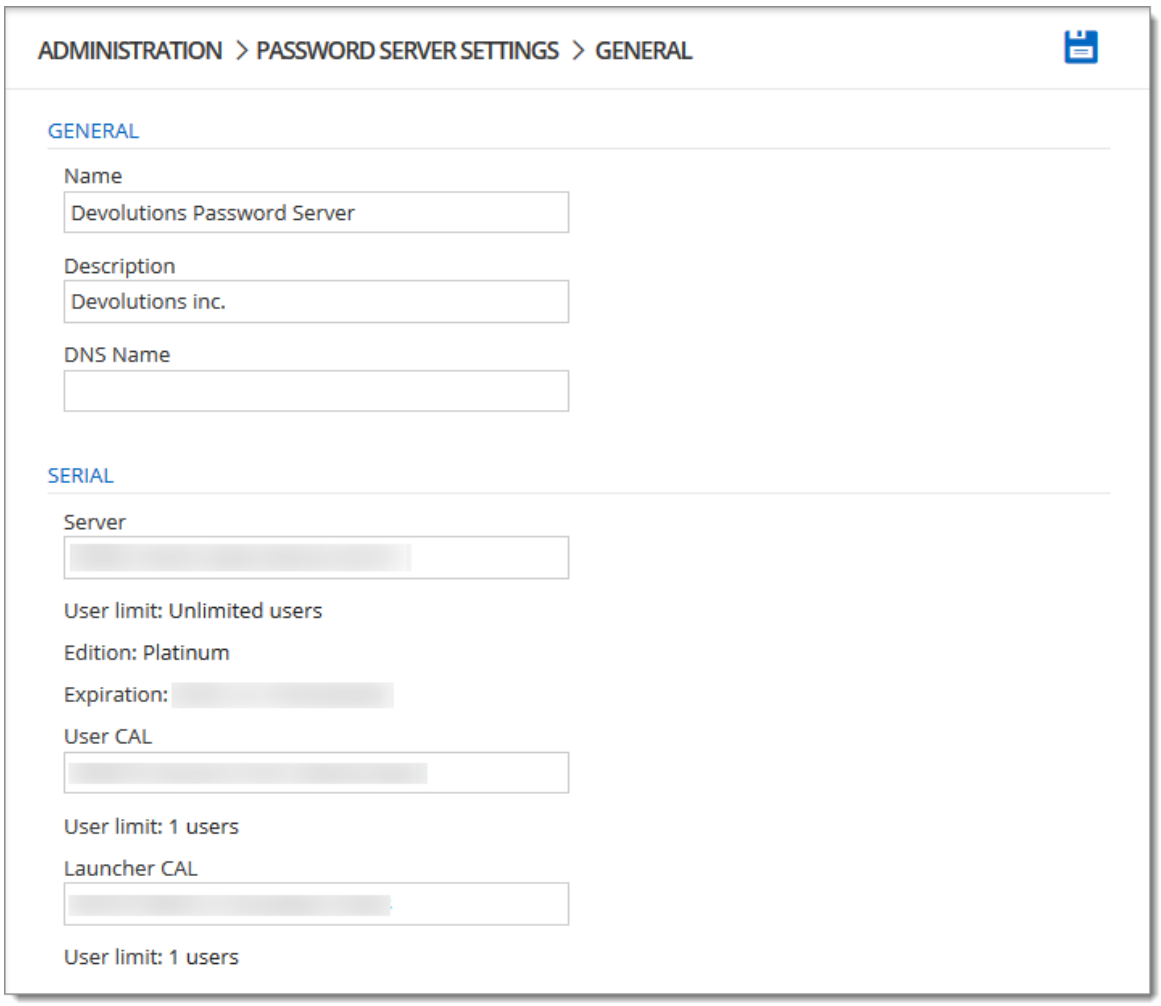

Administration - Devolutions Server Settings - General

SETTINGS

GENERAL

OPTION	DESCRIPTION
Name	Enter the name for your server, it will be displayed in the Content area.
Description	Enter a short description or additional information.

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OPTION	DESCRIPTION
DNS Name	Name of the DNS server.

SERIAL

OPTION	DESCRIPTION
Serial	Insert your serial registration number.
User CAL	Insert your Client Access License keys.
Launcher CAL	Insert your Launcher License keys.

5.5.2.2.1.2 Authentication

DESCRIPTION

The **Authentication** section allows the Administrator to select which authentication types will be used to connect on Devolutions Server.

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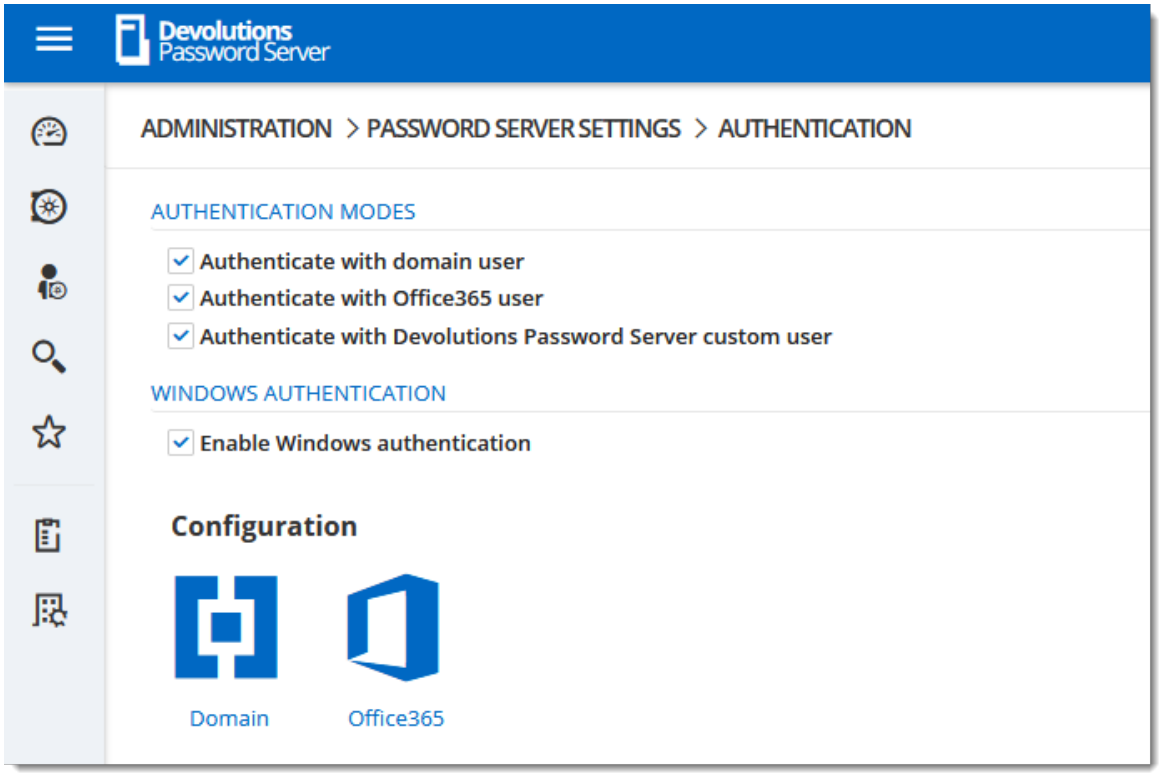

Adminsitration - Devolutions Server Settings - Authentication

SETTINGS

AUTHENTICATION MODES

OPTION	DESCRIPTION
Authenticate with domain user	The domain is used to authenticate the user.
Authenticate with Office365 user	AzureAD is used to authenticate the user.
Authenticate with Devolutions Server custom user	The Devolutions Server is used to authenticate the user. You must create the initial user through the console.

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OPTION	DESCRIPTION
Enable Windows authentication	The application will use the current Windows authenticated user to authenticate to the Devolutions Server instance.

CONFIGURATION

OPTION	DESCRIPTION
Domain	Configure the Domain type.
Office365	Configure the Office365 type.

DESCRIPTION

The domain is used to authenticate the user. This is the most secure, flexible and easiest to manage. No need to sync users between the domain and Devolutions Server. On first use of the Devolutions Server data source, the user will be created and be given access rights according to their role in the organization as defined on the domain. You simply need to grant appropriate permissions to your user groups in Devolutions Server. Upon authentication we will validate the AD groups to which the user belongs and for any that have a corresponding user group we will grant the permissions to the user.

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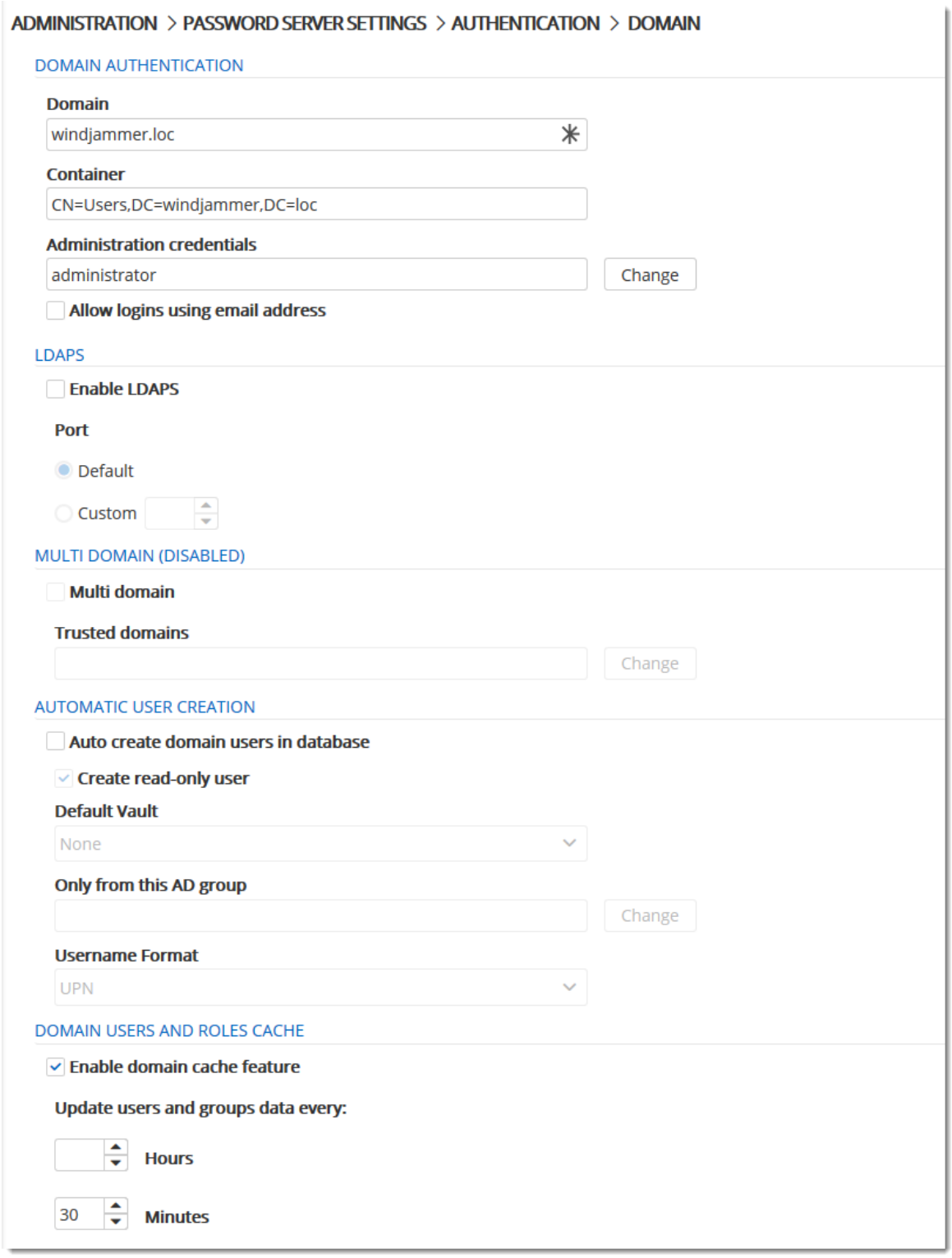

Authentication - Configure Domain

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SETTINGS

DOMAIN AUTHENTICATION

OPTION	DESCRIPTION
Domain	Specify the remote computer domain name.
Container	Specify the Active Directory Organizational Unit (OU) or Group to restrict the search in a specific area in the Active Directory structure. The format must be the distinguished name (CN=Users,DC=windjammer,DC=loc).
Administration credentials	Add the credentials of a domain or service account to access the Active Directory forest and obtain user account information through LDAP queries. This account needs to be able to retrieve user account information and group memberships. It may requires higher privileges than being part of the Domain Users built-in Active Directory group. In most case, it should be sufficient.
Allow logins using email address	Allow users to use their email address to connect to the Devolutions Server instance. The email address field must be filled in the User Management.

LDAPS

OPTION	DESCRIPTION
Enable LDAPS	Enable the LDAP over SSL communication.
Port	**Default**: LDAPS default communication port.

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OPTION	DESCRIPTION
	Custom: Set a specific port value.

MULTI DOMAIN (DISABLED)

The Multi Domain feature requires the Devolutions Server Platinum Edition license. Currently, it is only working with trusted domains that belong to the same AD Forest.

OPTION	DESCRIPTION
Multi domain	Enable the Multi domain feature.
Trusted domains	Add your trusted domains.

AUTOMATIC USER CREATION

OPTION	DESCRIPTION
Auto create domain users in database	Automatically create the domain user account in the the database on the first login attempt.
Create read-only user	When this option is enabled, the user account will be created as a Read only user type account.
Default Vault	Will give access to that Vault to the user.
Only from this AD group	Will create automatically the user only if he is a member of this AD group.

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OPTION	DESCRIPTION
Username Format	Select the username format that will be created in the database. • **UPN :** The user will be created using the UPN format ex: bill@windjammer.loc. • **NetBios :** The user will be created using the NetBios format ex: WINDJAMMER\bill. • **Username :** The user will be created using the SAM account name.

DOMAIN USERS AND USER GROUPS CACHE

OPTION	DESCRIPTION
Enable domain cache feature	Activate the domain cache feature.
Update users and groups data every:	Set the hours and minutes period that the Domain Users and User Groups Cache will be refreshed. When enable, the default value is set to 30 minutes.

DESCRIPTION

Microsoft Azure Active Directory subscription is required to configure Office365 authentication in Devolutions Server. You need to create three new app registrations in Microsoft Azure Active Directory before completing the authentication settings. For more information about the app registrations, see Azure portal configuration guide for Office 365 authentication.

The **Office365** tab allows Devolutions Server to authenticate users using **Office365 authentication**. All fields are mandatory.

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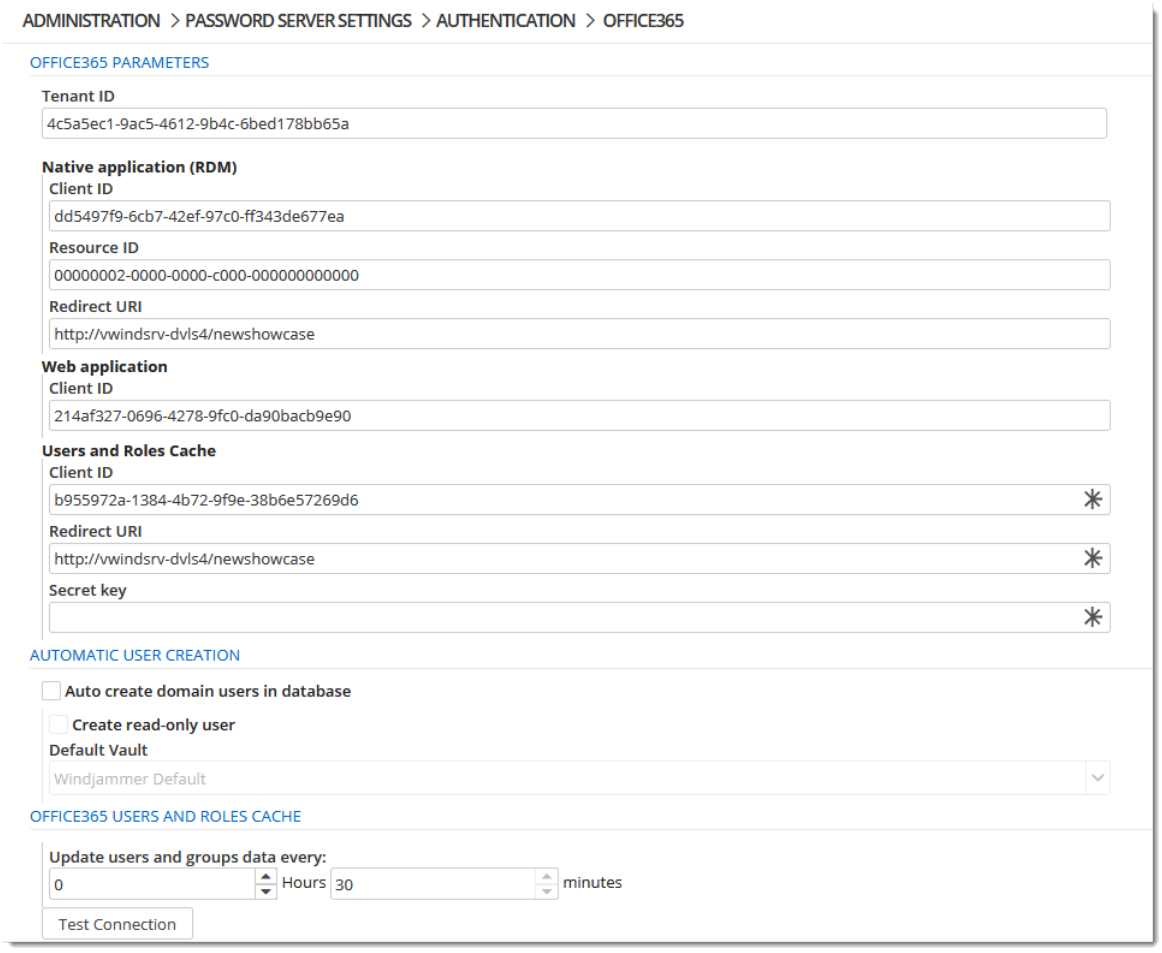

Authentication - Configure Office365

SETTINGS

OFFICE365 PARAMETERS

OPTION	DESCRIPTION
Tenant ID	The TenantID is the Directory ID of the Azure Active Directory.

NATIVE APPLICATION (RDM)

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OPTION	DESCRIPTION
Client ID	Application ID of the Azure AD application.
Resources ID	resourceAppid from the Manifest of the Azure AD application.
Redirect URI	Redirect URI from the Azure AD application.

WEB APPLICATION

OPTION	DESCRIPTION
Client ID	Application ID from the web app section of the Azure AD application.

USERS AND USER GROUPS CACHE

OPTION	DESCRIPTION
Client ID	Application ID of the Azure AD application.
Redirect URI	Redirect URI from the Azure AD application.
Secret Key	Key from the Password generated in Settings - Keys of the Azure AD application.

AUTOMATIC USER CREATION

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OPTION	DESCRIPTION
Auto create domain users in database	Automatically create the Office365 user account in the database on the first login attempt.
Create read-only user	Set the user account as a read-only account.
Default Vault	Will give access to that Vault to the user.

OFFICE365 USERS AND USER GROUPS CACHE

OPTION	DESCRIPTION
Update users and groups data every:	Set the hours and minutes period that the Office365 Users and User Groups Cache will be refreshed. Default value is set to 30 minutes.

5.5.2.2.1.3 Email

DESCRIPTION

Emails are sent by our Notification engine and by some of our 2 factor authentication providers.

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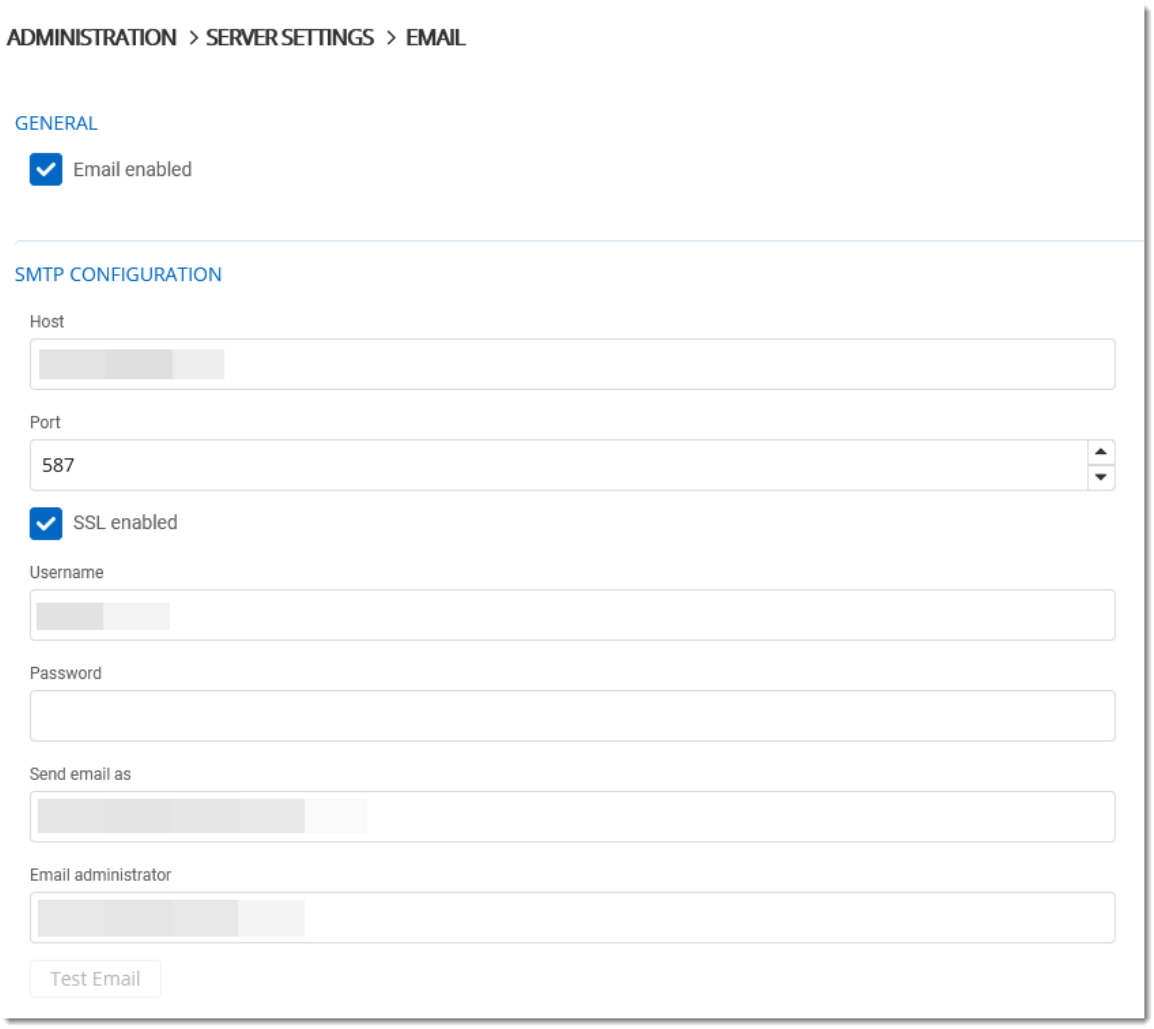

Administration - Devolutions Server Settings - Email

SETTINGS

GENERAL

OPTION	DESCRIPTION
Email enabled	Enable the Email feature.

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SMTP CONFIGURATION

OPTION	DESCRIPTION
Host	Name or IP address of the SMTP server.
Port	Set the SMTP server port.
SSL enabled	Specifies whether to use Secure Sockets Layer (SSL) to encrypt the connection. Please see Note 1 for important information.
Username	Enter your username to connect to your SMTP server.
Password	Enter your password to connect to your SMTP server.
Send email as	Sender email address.
Email administrator	Recipient email address that will receive the errors.
Test Email	Test your email settings.

NOTE 1

Devolutions Server only supports the **SMTP Service Extension for Secure SMTP over Transport Layer Security** as defined in RFC 3207. In this mode, the SMTP session begins on an unencrypted channel, then a **STARTTLS** command is issued by the client to the server to switch to secure communication using SSL.

An alternate connection method is where an SSL session is established up front before any protocol commands are sent. This connection method is sometimes called **SMTP/SSL**, **SMTP over SSL** or **SMTPS** and by default uses port 465. This alternate connection method using SSL is not currently supported.

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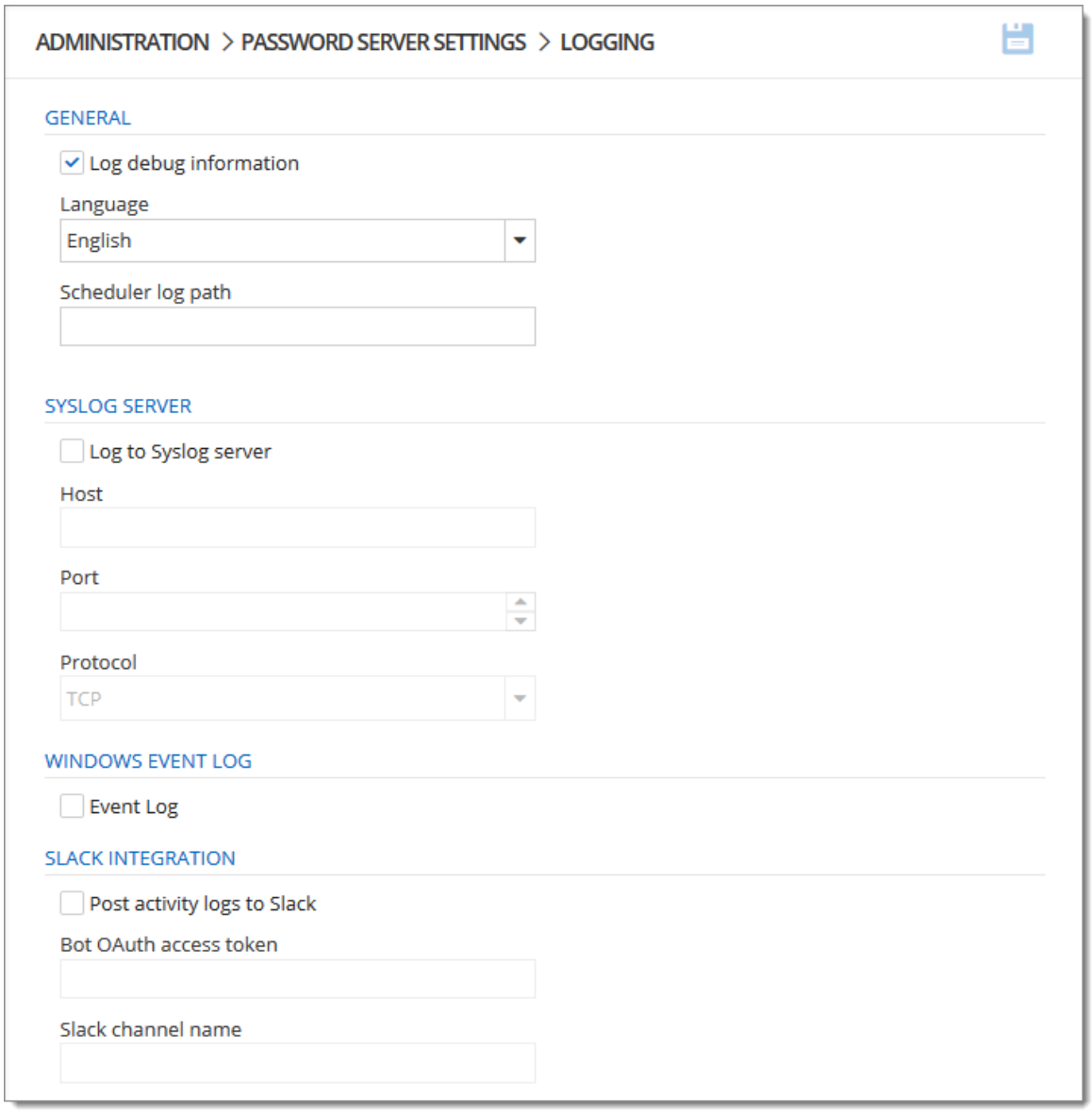
5.5.2.2.1.4 Logging

DESCRIPTION

The **Logging** section allows the administrator to configure the logging features.



Administration - Devolutions Server Settings - Logging

SETTINGS

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GENERAL

OPTION	DESCRIPTION
Log debug information	Enable the Devolutions Server instance logs. When enabled, this will raise the debug level and provide more log entries.
Language	Choose the language of the logs.
Scheduler log path	Set the destination path of the log file.

SYSLOG SERVER

OPTION	DESCRIPTION
Log to Syslog server	Send the logs to a Syslog Server.
Host	Enter your Syslog Server host to connect.
Port	Enter your Syslog Server port to connect.
Protocol	Select your preferred Protocol mode between: • **TCP** • **UDP**

WINDOWS EVENT LOG

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OPTION	DESCRIPTION
Event Log	Send the logs to Windows Event Log.

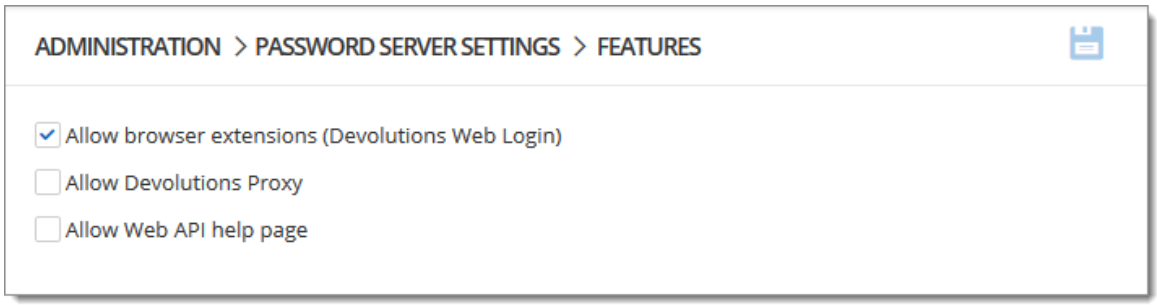
SLACK INTEGRATION

OPTION	DESCRIPTION
Post activity logs to Slack	Post the logs in a Slack channel.
Bot OAuth access token	Slack authentication access token.
Slack channel name	Name of the Slack channel where the logs will be posted.

5.5.2.2.1.5 Features

DESCRIPTION

The **Features** section section allows the administrator to configure the web interface features.



Administration - Devolutions Server Settings - Features

SETTINGS

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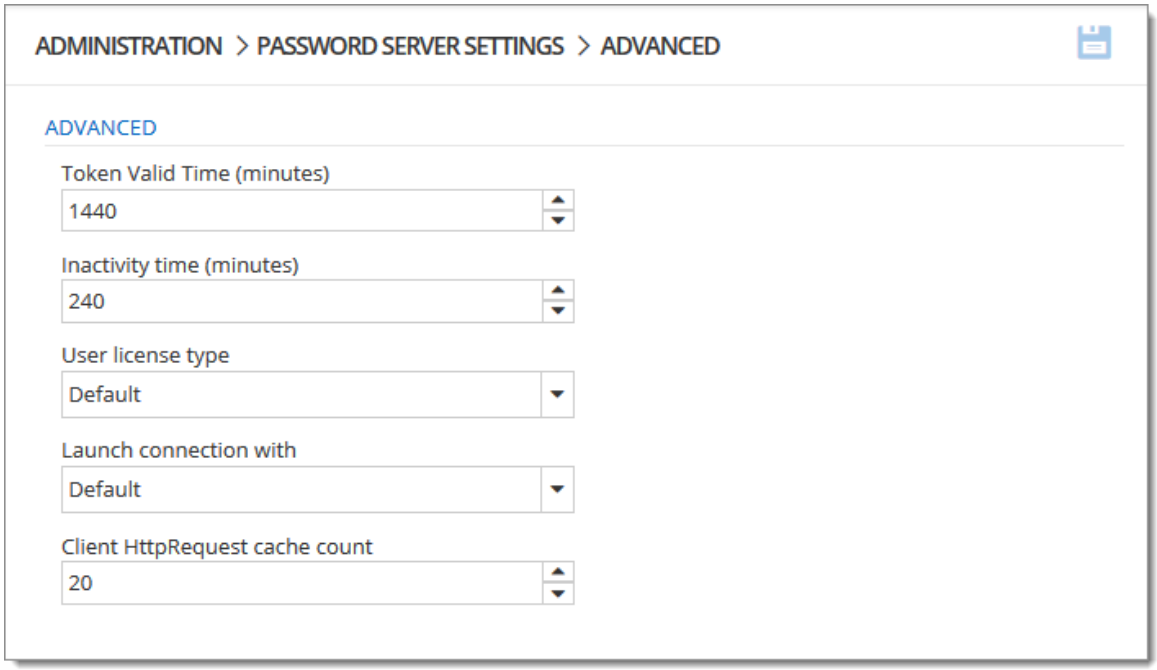
OPTION	DESCRIPTION
Allow browser extensions Devolutions Web Login)	Allow to save credentials in the Devolutions Server instance with Devolutions Web Login.
Devolutions Proxy	Enable the Devolutions Proxy feature.
Allow Web API help page	

5.5.2.2.1.6 Advanced

DESCRIPTION

The **Advanced** section allows the administrator to configure the **Token Valid Time** parameter and the Labelling.



Administration - Devolutions Server Settings - Advanced

SETTINGS

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FEATURES

CATEGORY	DESCRIPTION
Token Valid Time (minutes)	This the duration time of the token. At the expiration of the token, the user must again authenticate himself on the Devolutions Server instance. The maximal value is 1440 minutes which is 24 hours.
Inactivity time (minutes)	Enter the delay for the user to be disconnected from the server if inactive. This value must be lower than the Toke Valid Time parameter. This parameter is applied on the web interface or with the Devolutions Web Login browser companion tool. It has no effect on Remote Desktop Manager.
User license type	Select the license type. **Default** is **Connection Management**.
Launch connection with	Sets the application that opens remote connections: Remote Desktop Manager or Devolutions Launcher. **Default** refers to Devolutions Launcher.
Client HttpRequest cache count	For internal use. Do not modify this value unless specified for support situation.

DESCRIPTION

You can customize the Devolutions Server web interface logo's to better serve your own customers.

Brandring is possible in ***Administration - Server Settings - Advanced***.

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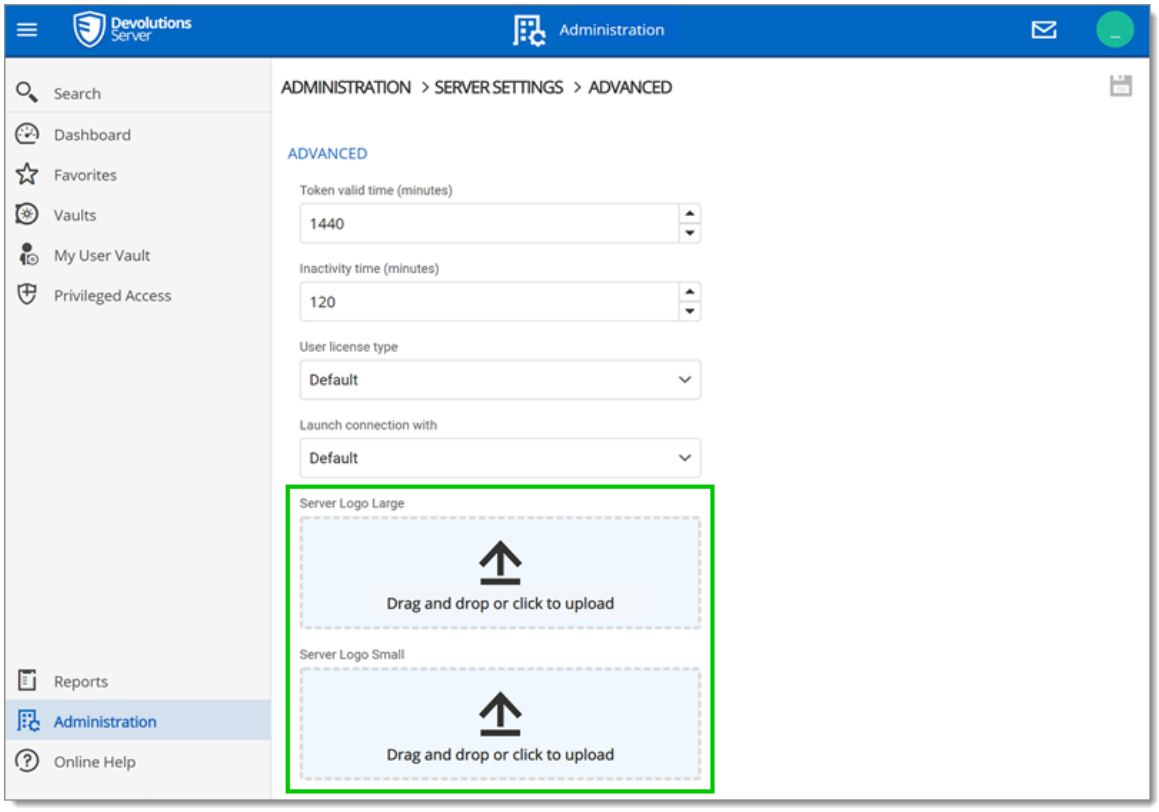

It is compatible with most popular file extension, like JPEG, GIF, PNG and TIFF.

CATEGORY	DESCRIPTION
Server Logo Large	This is the image for the login page with a max width of 300px. The height will be automatically set to observe the ratio of the image.
Server Logo Small	This is for the image in the toolbar with a max width of 145px and height of 40px.

Here is an example of this feature with loaded images in the Administration settings.

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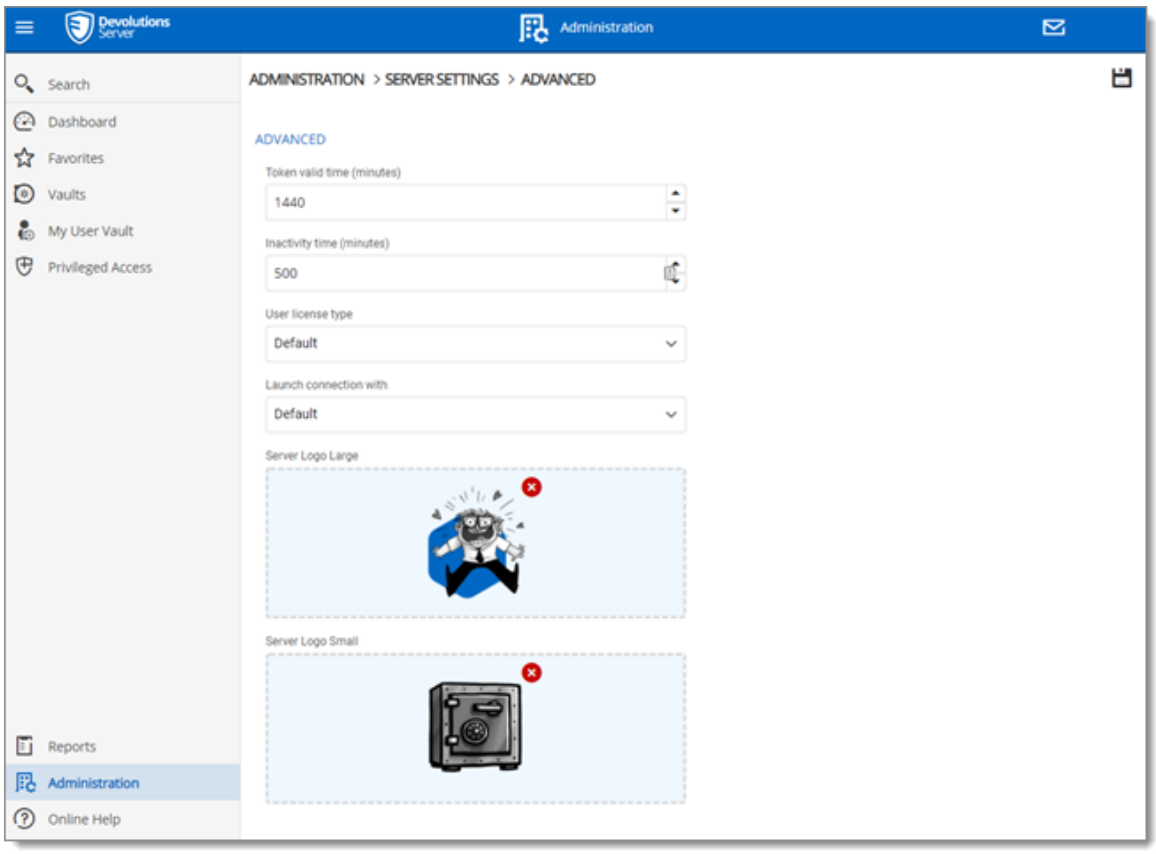
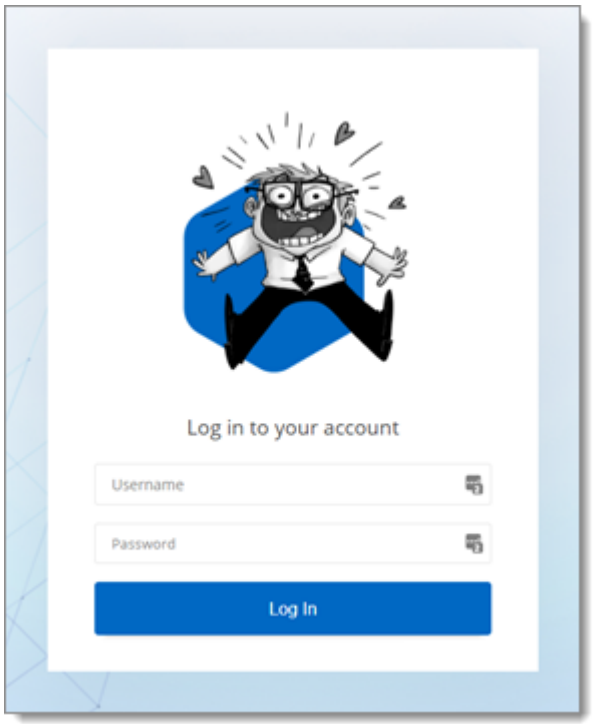


The result for the Devolutions Server login page:



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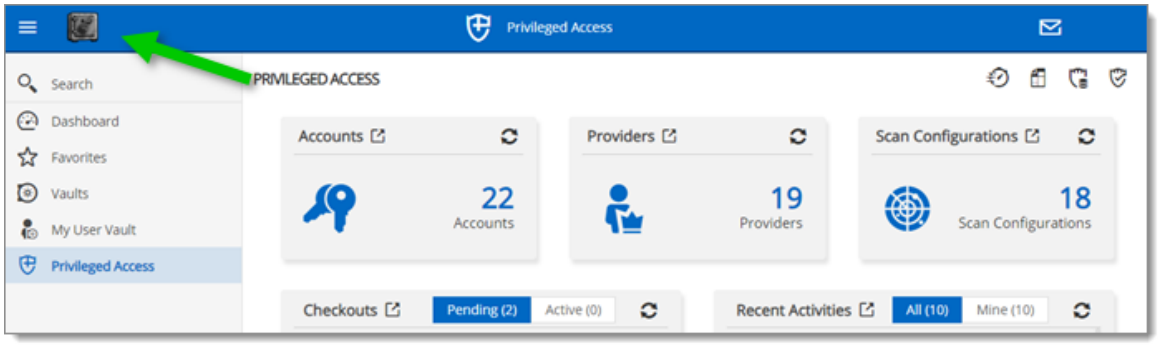
And for the toolbar logo:



5.5.2.2.2 Security

5.5.2.2.2.1 Two-Factor

DESCRIPTION

This feature is only available with Devolutions Server Enterprise or Platinum licenses.

Configure **Two-Factor Authentication** in Devolutions Server to add an extra layer of security to the application.

Devolutions Server supports 9 types of 2FA. You can configure a default 2FA type for your entire organization or configure 2FA by user. When 2FA is configured, users log in with their username/password as well as a 2FA product.

HOW TO CONFIGURE 2FA FROM THE WEB INTERFACE

SETTINGS

1. To access the 2FA configuration, go to ***Administration – Devolutions Server Settings – Two-Factor***
2. Choose how you want to enforce two-factor authentication in **2FA usage**.

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OPTION	DESCRIPTION
None	2FA is not enforced.
Optional per user	2FA is enforced on an individual basis. The administrator chooses who uses 2FA and what product or technology they use. Choose this option if not all users are set up for two-factor authentication.
Required	2FA is enforced for all users. A default 2FA type is set for all users.

3. Select who receives 2FA reset requests from users. You can choose to send the email to all Devolutions Server **administrators** or a **specific email**.
4. If you chose to send reset requests to an email address instead of the Devolutions Server administrators, enter the email address in **specific email**.
5. Select the 2FA types users can authenticate with. Choose as many as necessary.
6. If you chose 2FA usage as **Required** in **step 3**, choose the **Default** 2FA type.
7. Select **alternate** ways to log in. These options will be offered when users do not have access to the usual method.

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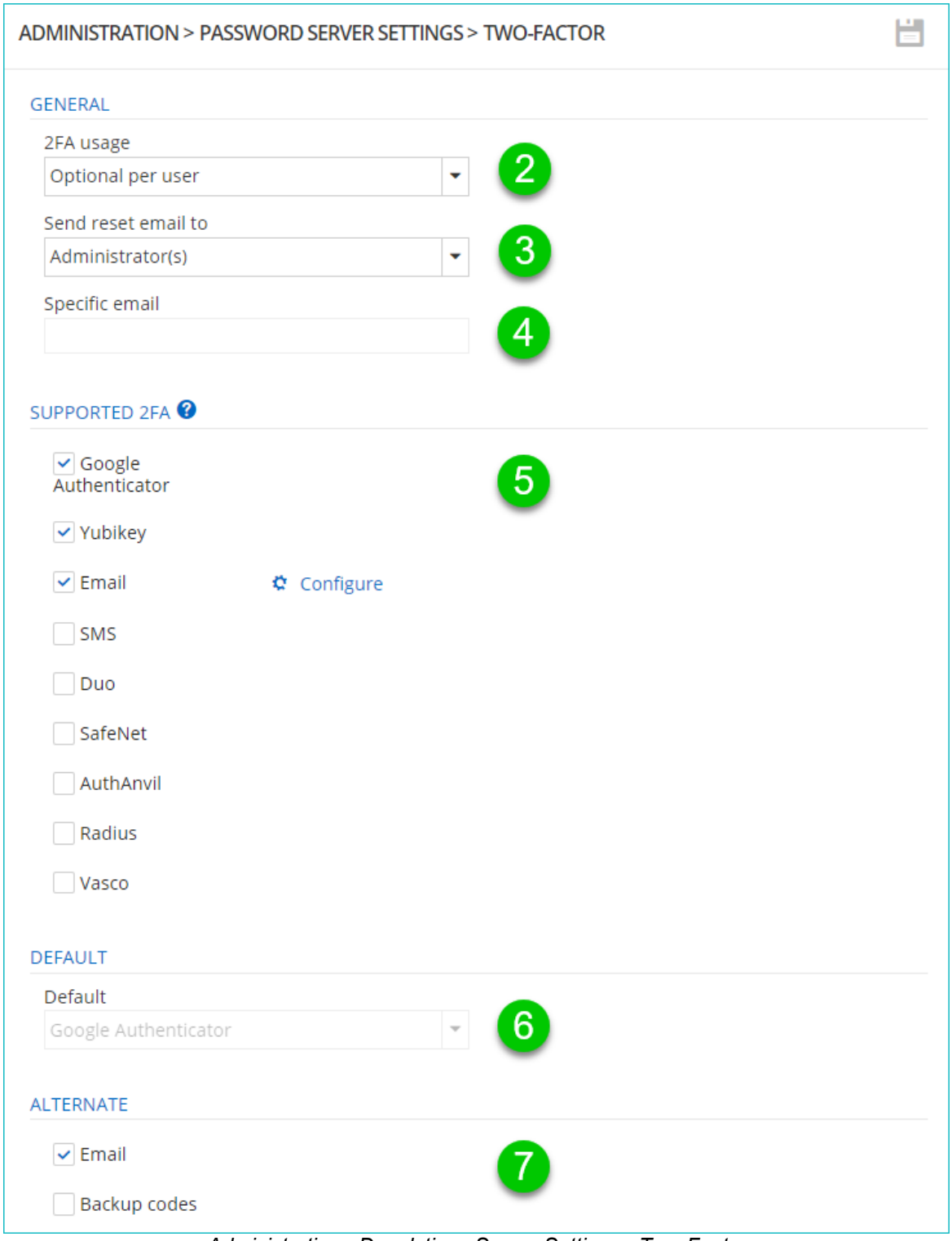

Administration - Devolutions Server Settings - Two-Factor

8. When 2FA usage is set to **Optional per user**, the 2FA method must be configured in ***Administration – Users – Two Factor*** for each user. You can

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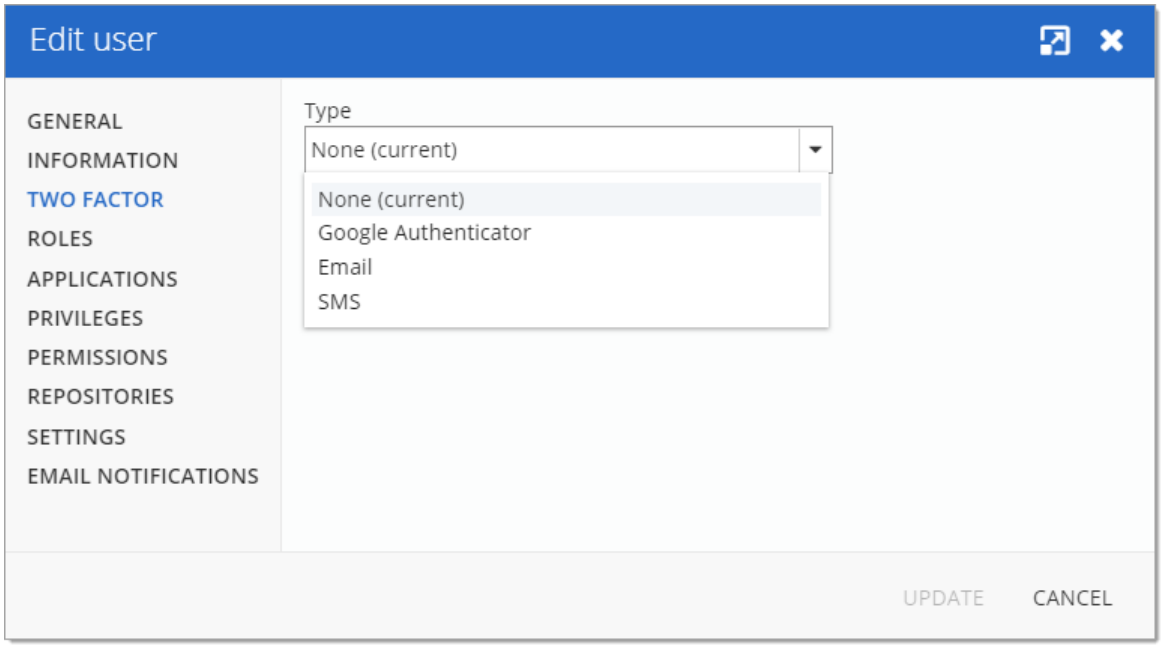
also set a 2FA type on the user if they are using a product different than the default method. See Edit Users for more information.



Edit User - Two Factor

OVERVIEW

The 2FA SMS will request the user to enter a code he has received on his mobile phone as its second component to access the data source.

There are two possible configuration available. To use the free version, do not fill in the Twilio settings.

The other available configuration is to configure Twilio. Please fill in the appropriate fields with the information from your Twilio subscription.

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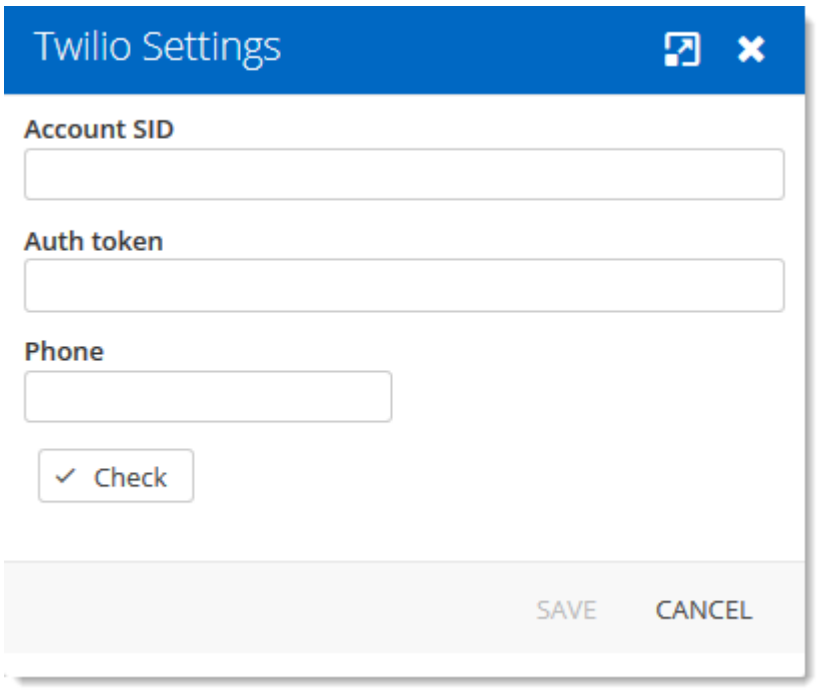

Twilio Settings dialog

OPTION	DESCRIPTION
Account SID	Account SID of your Twilio account.
Auth token	Authorization toke from your Twilio account.
Phone	Phone number.

DESCRIPTION

Backup codes are validation codes that provide users with one time access to Devolutions Server when they do not have access to their usual 2FA product or device. These must be generated before and kept safe in case of emergencies.

The **Administrator** enables the option and then users can generate their backup codes.

SETTINGS

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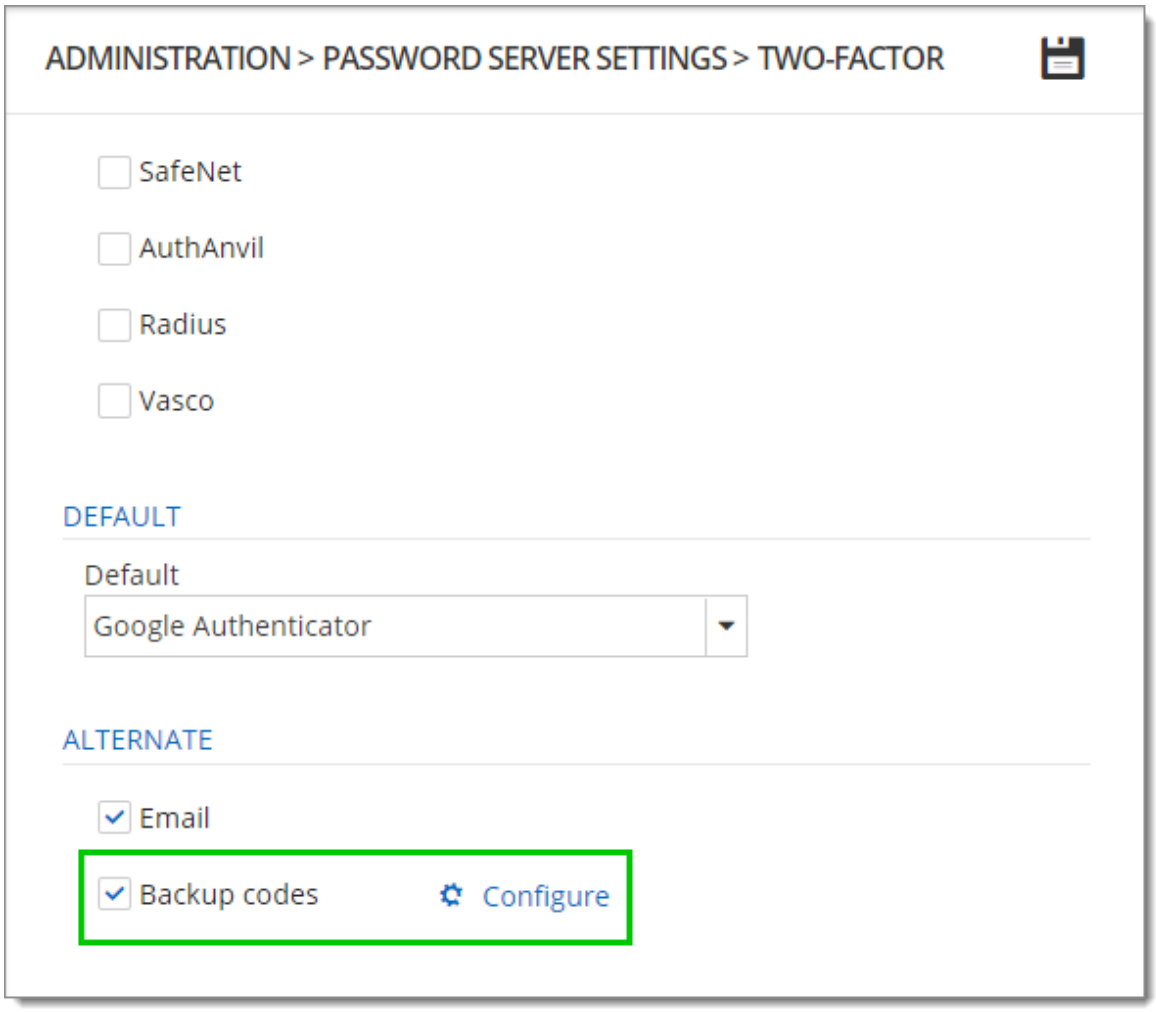
ADMINISTRATOR - ENABLE BACKUP CODES

An administrator must enable backup codes as an alternate method of two-factor authentication. To turn on the option, go to ***Administration – Devolutions Server Settings – Two-Factor***.



Backup Codes - Two-Factor Authentication

Click **Configure** to set how many backup codes a user can generate.

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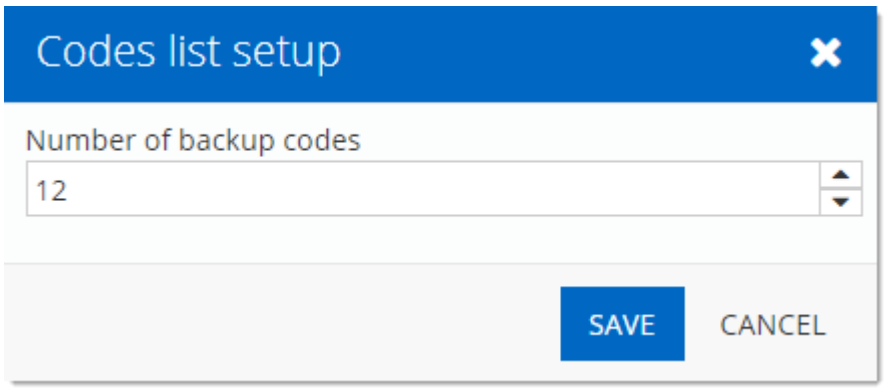
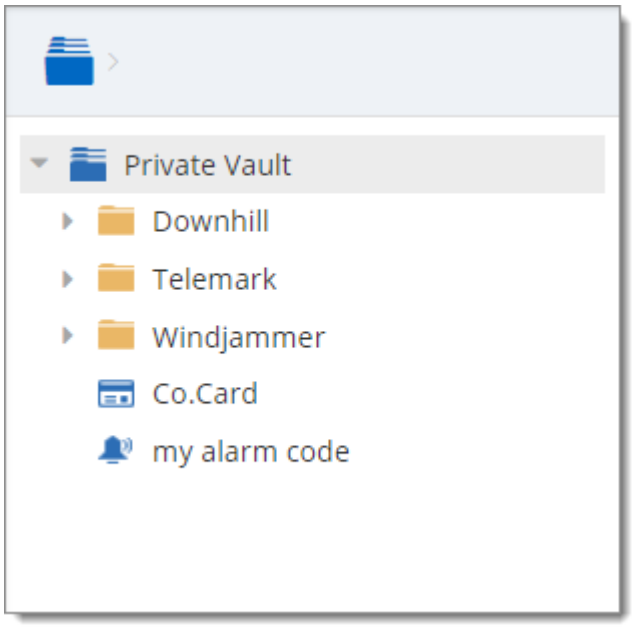


Configure the number of Backup Codes

USER - GENERATE BACKUP CODES

1. To generate your backup codes, click your **avatar** in the top right corner.



Click user avatar

2. Click **Edit your Account**

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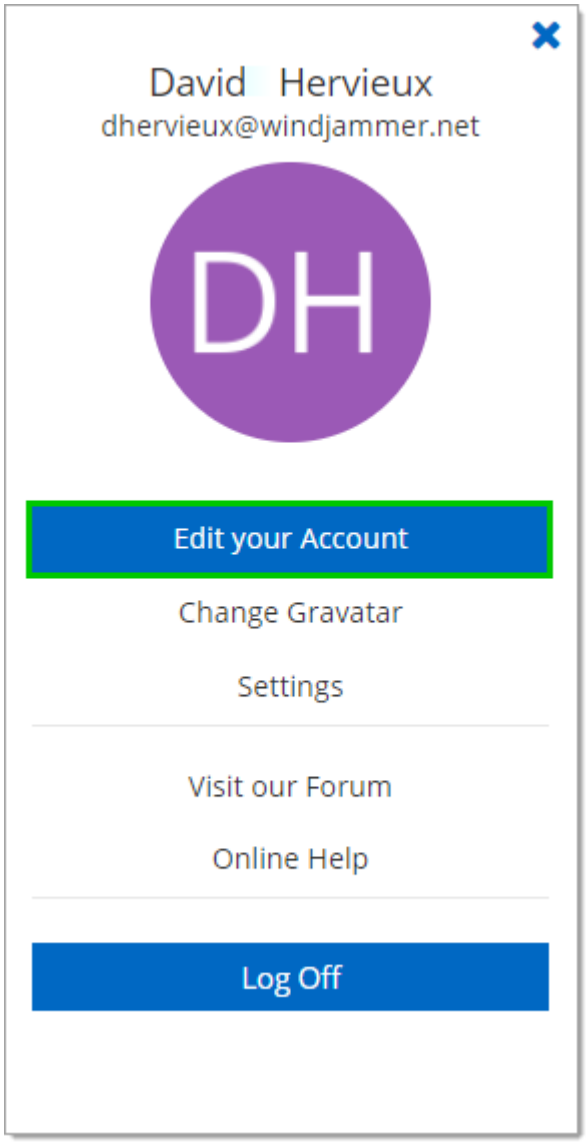

Edit your Account - Account Settings

3. Click **Alternate 2FA** and then **(a)** click **Generate backup codes**. A list of backup codes are displayed **(b)**. The user can copy and paste the codes and store them elsewhere.

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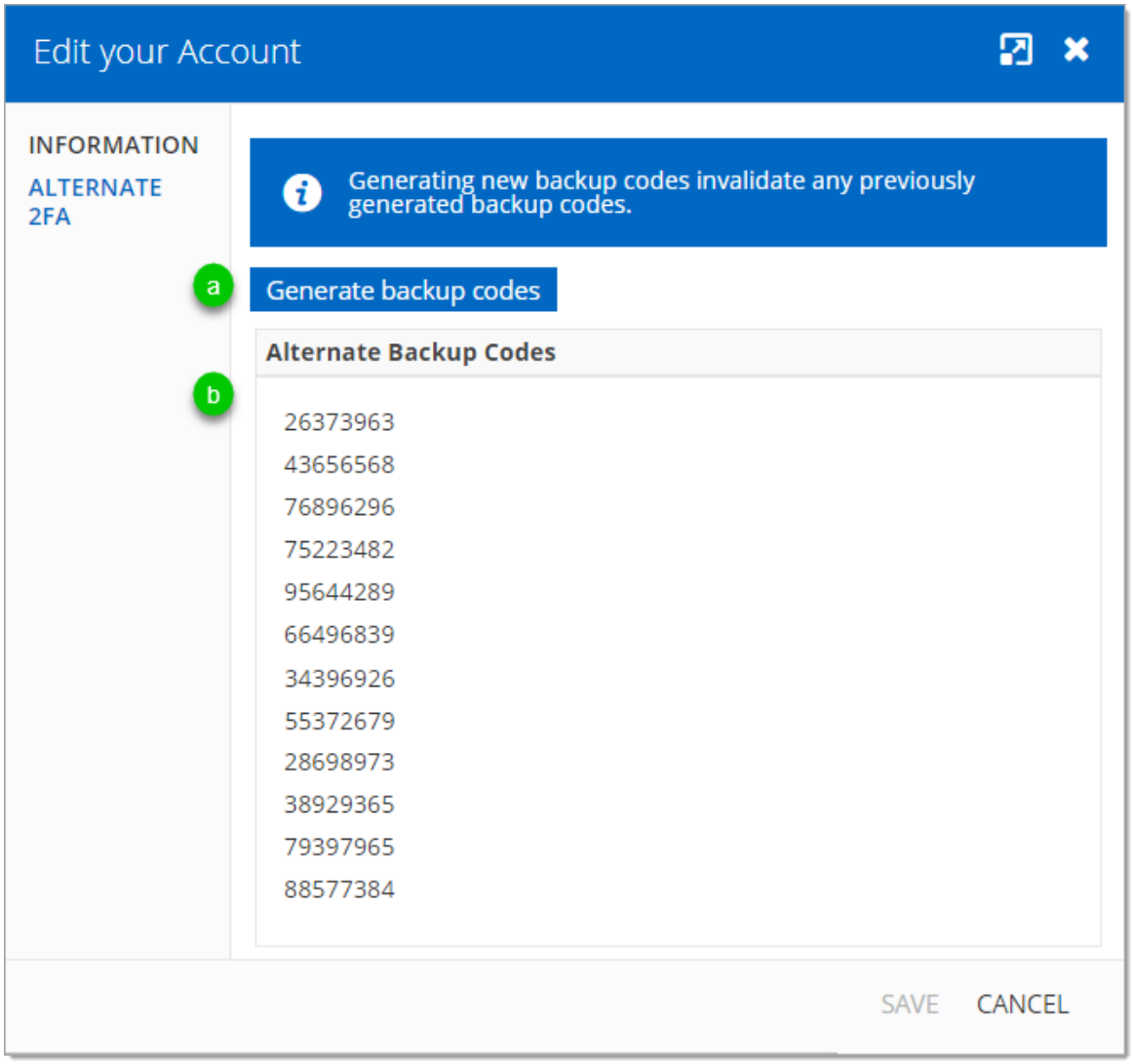

Alternate 2FA - Generate Backup Codes

5.5.2.2.2.2 Security

DESCRIPTION

The Security section allows the administrator to configure the allowed and denied IPs addresses.

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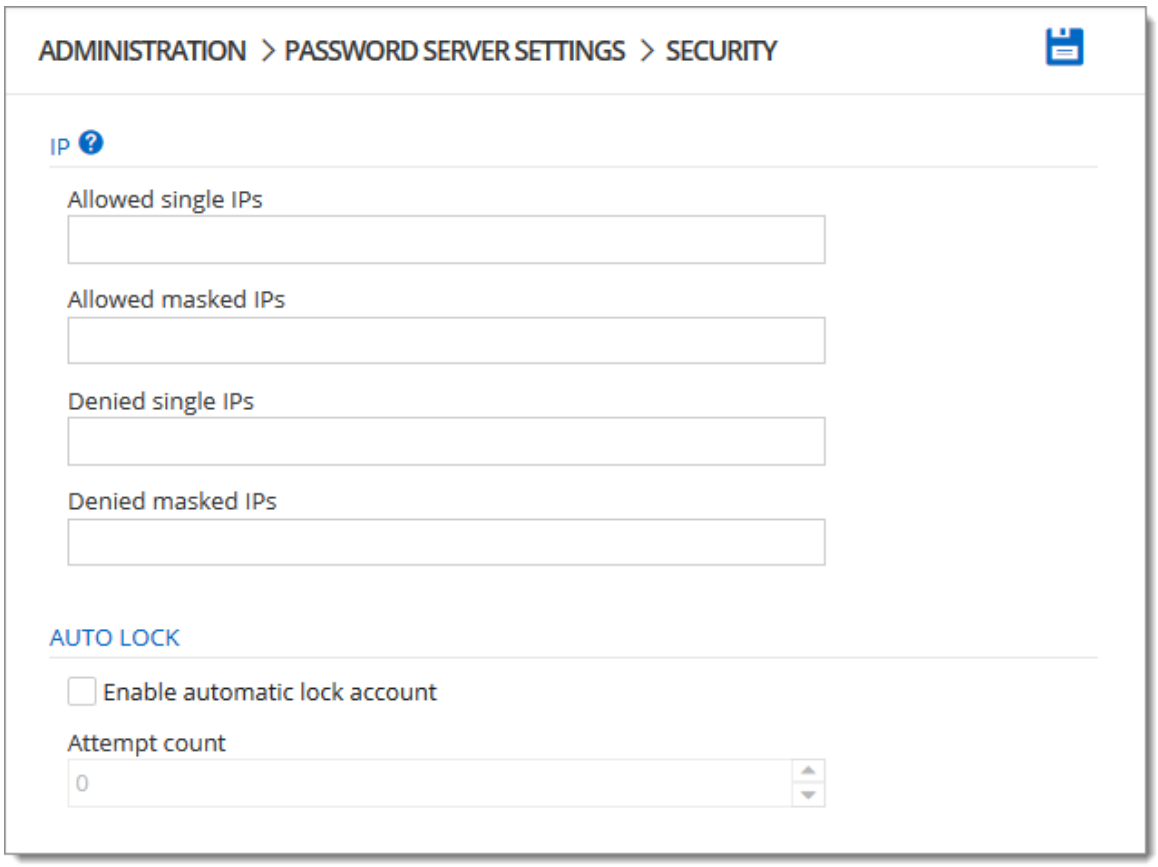

Administration - Devolutions Server Settings - Security

SETTINGS

IP

OPTION	DESCRIPTION
Allowed Single IPs	If you wish to restrain the access to the Devolutions Server to only certain IPs address enter those here. If nothing is entered in this field all IPs address will be allowed to connect to the Devolutions Server.
Allowed Masked IPs	If you wish to restrain the access to only certain Masked IPs (dividing the host part of an IP address into a subnet

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OPTION	DESCRIPTION
	and host address) on the Devolutions Server, enter those Masked IP address here.
Denied Single IPs	If you wish to deny access to the server from certain IPs address enter those in this field.
Denied Masked IPs	If you wish to deny access to the server from certain Masked IPs address (dividing the host part of an IP address into a subnet and host address) enter those in this field.

AUTO LOCK

Option	Description
Enabled auto lock	Automatically locks down the access to the Server after a predetermine number of failed attempt.
Attempt Count	Enter the number of failed attempts before locking down the Server.

5.5.2.2.2.3 GeoIP Security

DESCRIPTION

The **GeoIP Security** section section allows the administrator to set IPs restriction based on the geographical location.

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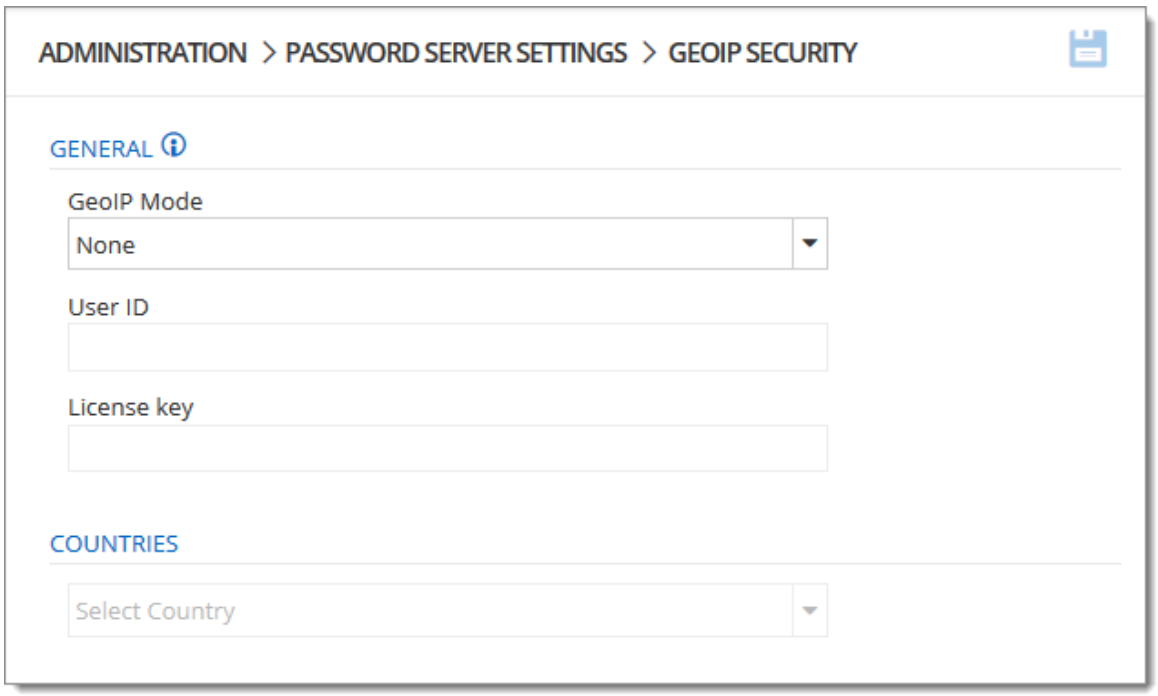

Administration - Devolutions Server Settings - GeoIP Security

SETTINGS

OPTION	DESCRIPTION
GeoIP Mode	Choose your method of GeoIP between: **None**: Will not be using GeoIP security **MaxMind**: Use the MaxMind's GeoIP database to look up the city, AS number and other information for an IP address. Connect to your account by entering your User ID and License Key in the appropriate field and then select the countries you wish to grant access to your Devolutions Server.
User ID	User ID to connect on MaxMind.
License key	License key to connect on MaxMind.

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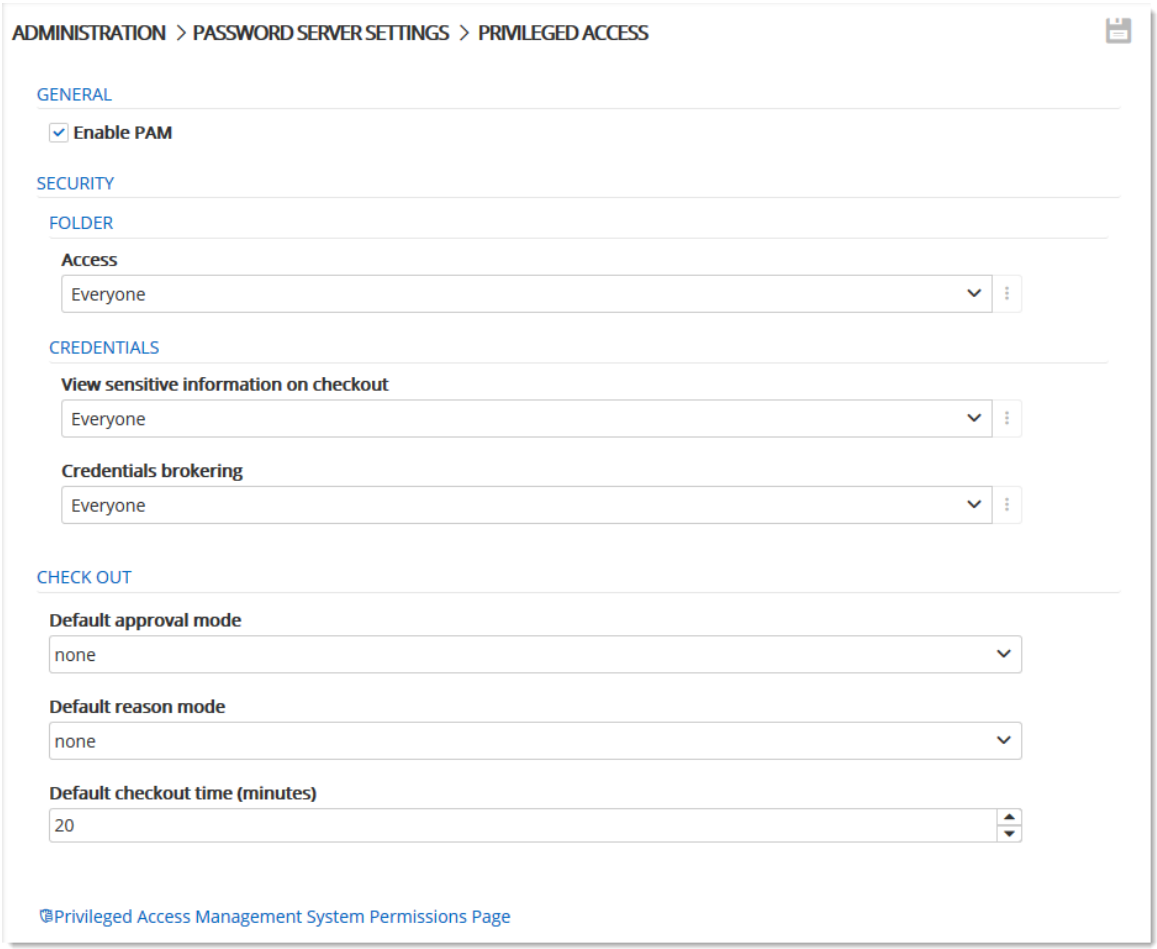
OPTION	DESCRIPTION
Countries	Select all authorized countries to connect to the Devolutions Server instance.

5.5.2.2.2.4 Privileged Access Management

DESCRIPTION

This section is dedicated to enable and configure the Privileged Access Management.



Administration - Devolutions Server Settings - Privileged Access Management

SETTINGS

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GENERAL

OPTION	DESCRIPTION
Enable PAM (Preview)	Enable the Privileged Access Management functionality.

SECURITY - FOLDER

OPTION	DESCRIPTION
Access	Possible values : • **Custom** • **Everyone** • **Never**

SECURITY - CREDENTIALS

OPTION	DESCRIPTION
View sensitive information on checkout	Possible values : • **Custom** • **Everyone** • **Never**
Credentials brokering	Possible values : • **Custom**

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OPTION	DESCRIPTION
	• **Everyone** • **Never**

CHECK OUT

OPTION	DESCRIPTION
Default approval mode	Possible values : • **none** • **mandatory**
Default reason mode	Possible values : • **none** • **mandatory** • **optional**
Default checkout time (minutes)	

5.5.2.3 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

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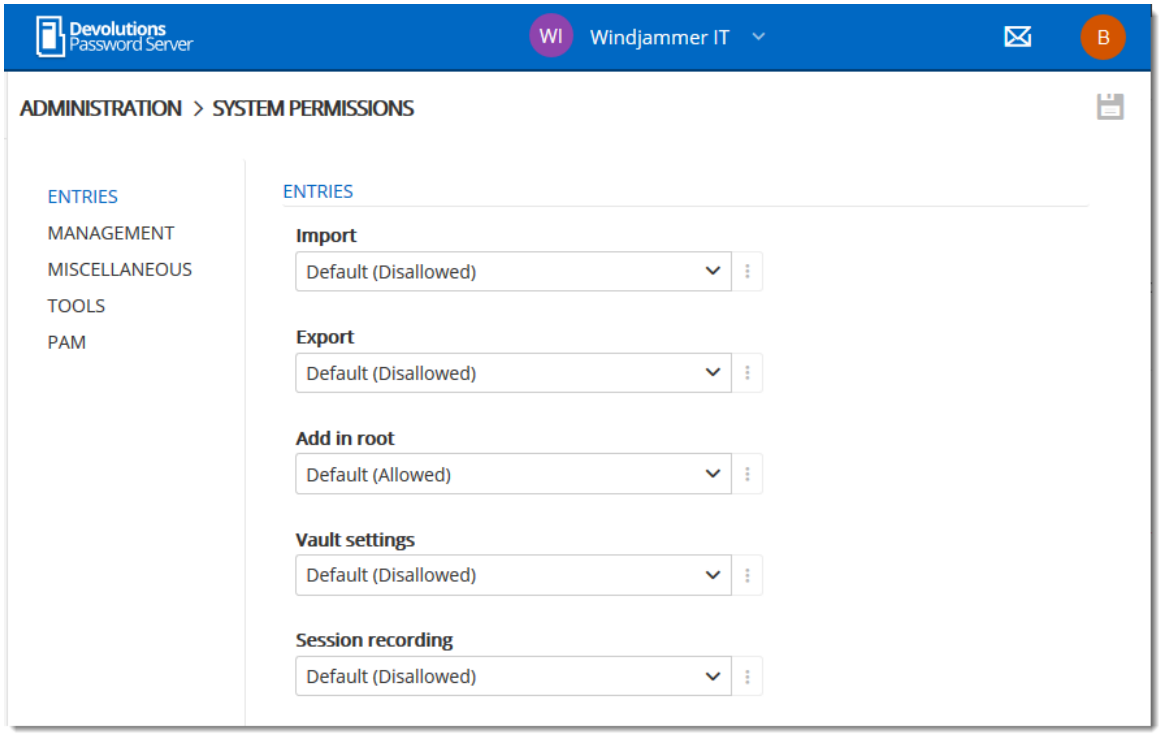
set on the user or user groups. These are handled as you would permissions in an entry.



Administration - System Permissions

SYSTEM PERMISSIONS

- Entries
- Management
- Miscellaneous
- Tools
- Privileged Access Management (PAM)

5.5.2.3.1 Entries

DESCRIPTION

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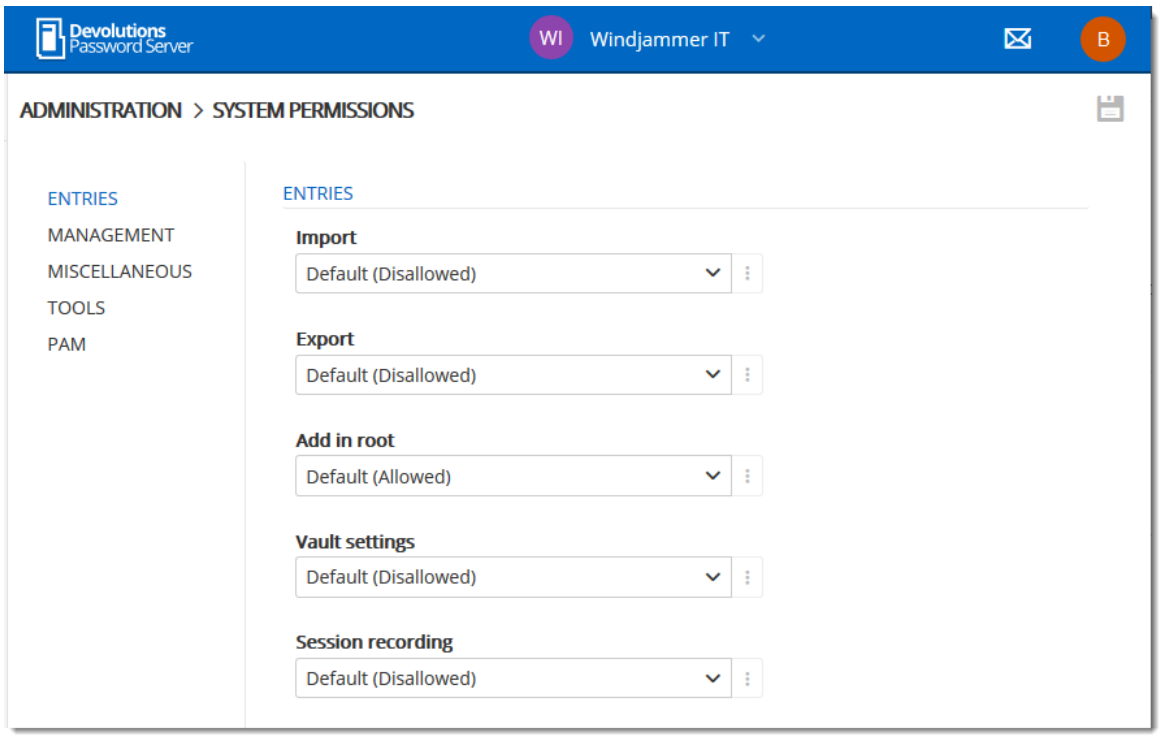

Administration - System Permissions

OPTION	DESCRIPTION
Import	Restrain the import privilege to certain users.
Export	Restrain the export privilege to certain users.
Add in root	Restrain creating entries in root to certain users.
Vault settings	Restrain access to vault settings to certain users.
Session recording	Restrain access to the session recording feature.

5.5.2.3.2 Management

DESCRIPTION

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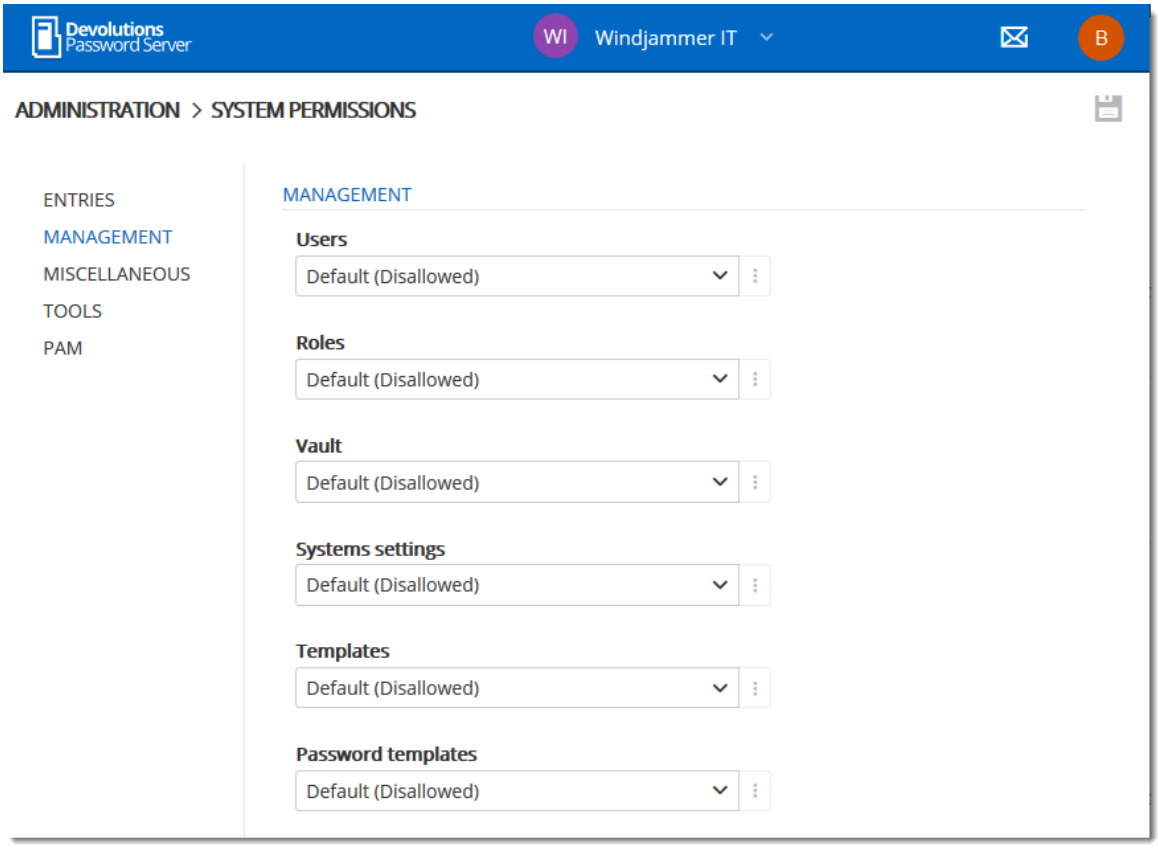

Administration - System Permissions - Management

OPTION	DESCRIPTION
Users	Allow users/user groups to access the user management.
User groups	Allow users/user groups to access the user groups management.
Vault	Allow users/user groups to access the Vault management.
System Settings	Allow users/user groups to access System Settings.
Templates	Allow users/user groups to create and manage templates.

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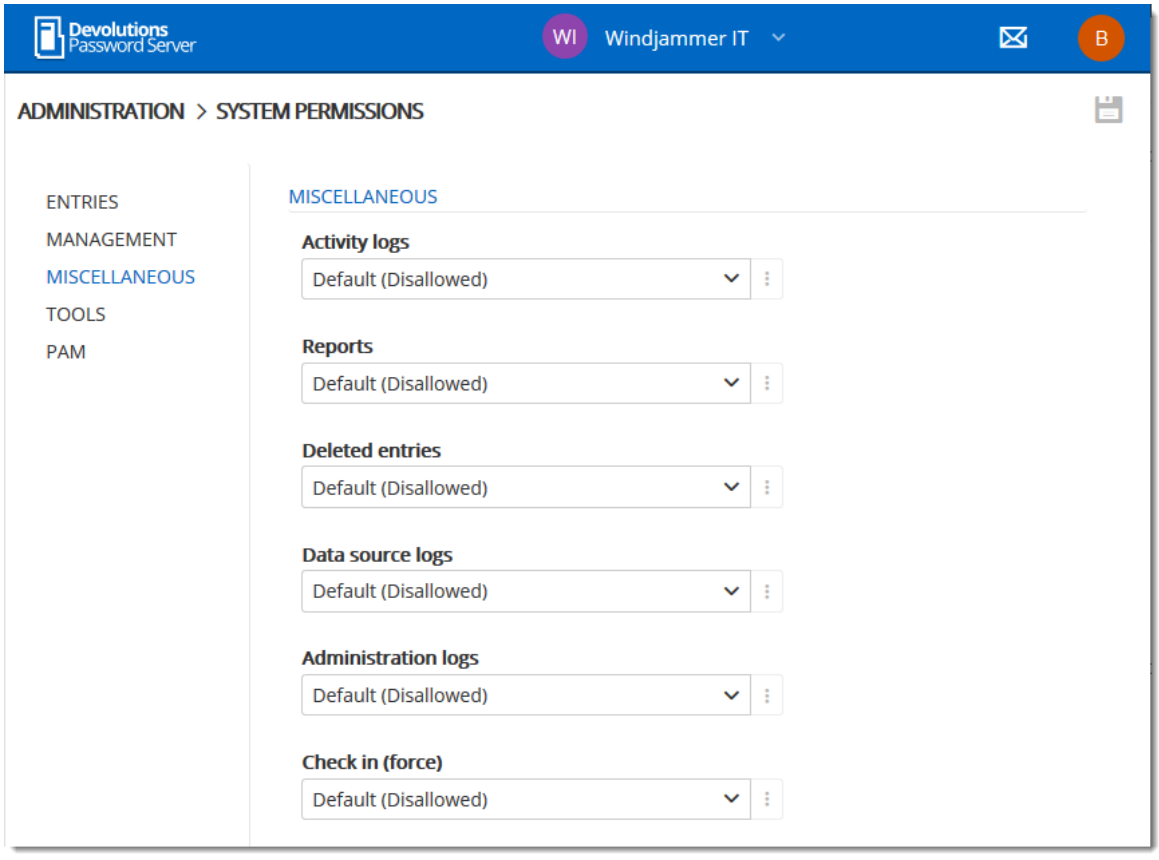
OPTION	DESCRIPTION
Password templates	Allow users/user groups to create and manage password templates.

5.5.2.3.3 Miscellaneous

DESCRIPTION



Administration - System Permissions - Miscellaneous

OPTION	DESCRIPTION
Activity logs	Allow users/user groups to view the activity logs.
Reports	Allow users/user groups to generate and view reports.

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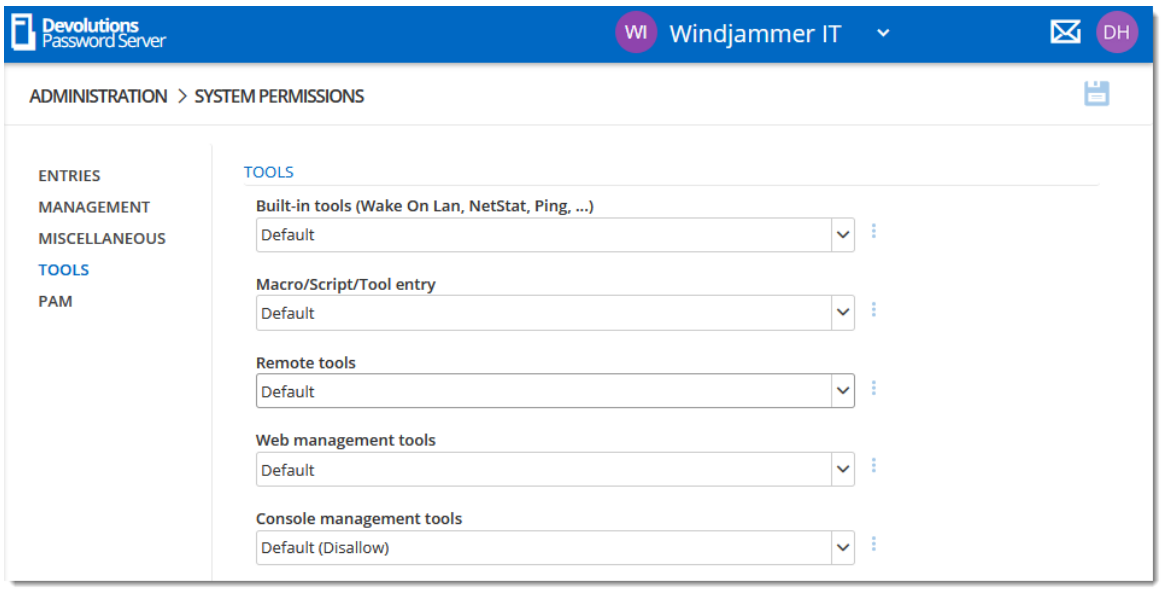
OPTION	DESCRIPTION
Deleted entries	Allow users/user groups to view and restore deleted entries.
Data source logs	Allow users/user groups to view the data source logs.
Administration logs	Allow users/user groups to view the administration logs.
Check in (force)	Allow users/user groups to be able to check in entries.

5.5.2.3.4 Tools

DESCRIPTION



Administration - System Permissions - Tools

OPTION	DESCRIPTION
Buit-in tools (Wake On Lan,	Allow users/user groups to use session related tools.

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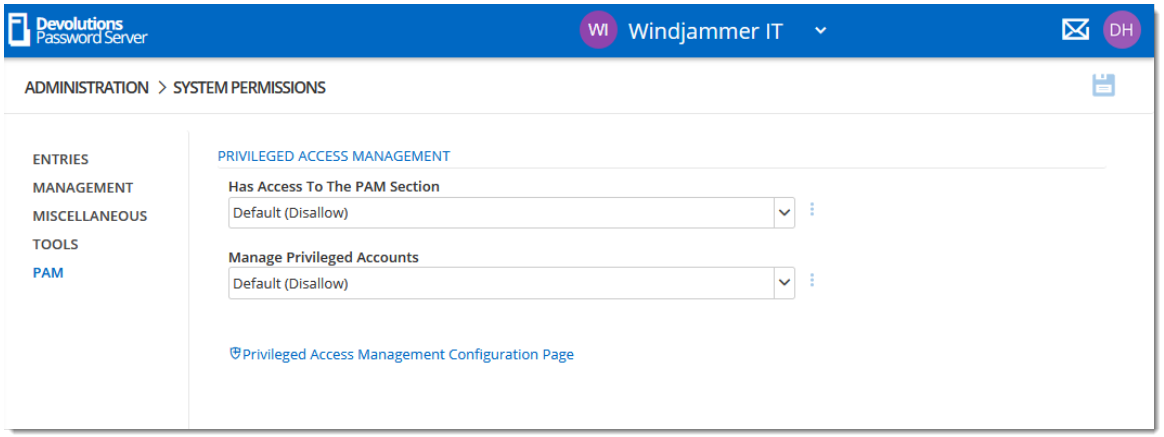
OPTION	DESCRIPTION
NetStat, Ping, ...)	
Macro/Script/Tool entry	Allow users/user groups to use Macro/Script/Tool entries.
Remote tools	Allow users/user groups to use remote tools.
Web management tools	Allow users/user groups to use web management tools.
Console management tools	Allow users/user groups to use console management tools.

5.5.2.3.5 Privileged Access Management

DESCRIPTION

To use these features you must first ensure they are enabled in the Privileged Access Management in the **Devolutions Server Settings**.



Administration - System Permissions - PAM

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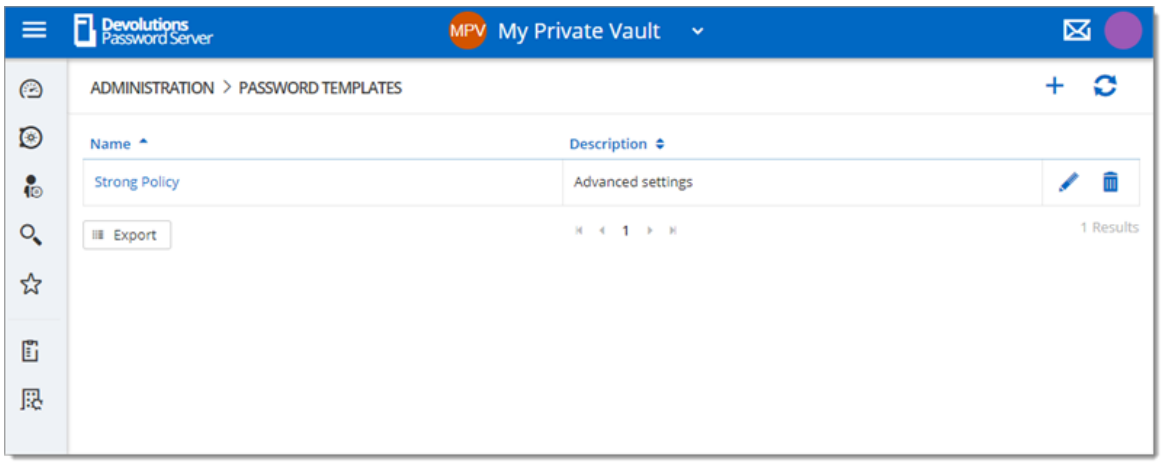
OPTION	DESCRIPTION
Has Access to the PAM Section	Determine who has access to the PAM section.
Manage Privileged Accounts	Determine who can managed the Privileged accounts.
Privileged Access Management Configuration Page	Links you to the Configuration page of the PAM.

5.5.3 Templates

5.5.3.1 Password Templates

DESCRIPTION

The **Password Templates** allow administrators to manage password templates.



Administration - Password Templates

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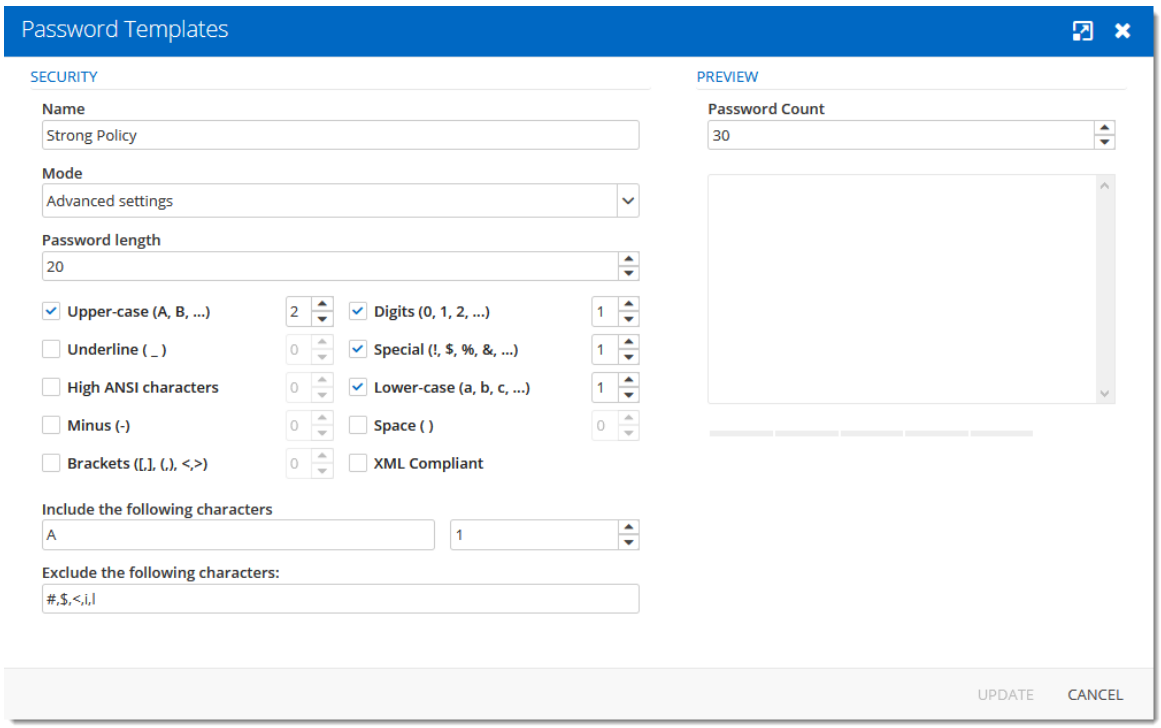

Password Templates

OPTION	DESCRIPTION
Name	Name of the Password Template.
Mode	• **Default** • **Advanced settings** • **Readable password** • **Use a pattern** • **Pronounceable password** • **Strong password**
Upper-case (A, B, C, ...)	Will include uppercase letters for password generation.

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OPTION	DESCRIPTION
Underline (_)	Will include the underline (_) character for password generation.
High ANSI characters	Will include characters form '-' to U255 (excluding U255) for password generation.
Minus (-)	Will include the minus (-) character for password generation.
Brackets ([,], (,), <,>)	Will include brackets characters for password generation.
Digits (0, 1, 2, ...)	Will include digits for password generation.
Special (!, $, %, &, ...)	Will include special characters for password generation.
Lower-case (a, b, c, ...)	Will include lowercase letters for password generation.
Space ( )	Will include the space character for password generation.
XML Compliant	Will generate XML compliant passwords.
Also include the following characters	Add any other characters to be include for password generation.
Exclude the following characters	The characters listed in this field will not be used for password generation.
Password count	Number of passwords that will be generated.
Include the following characters	Forcefully including characters inside the password.

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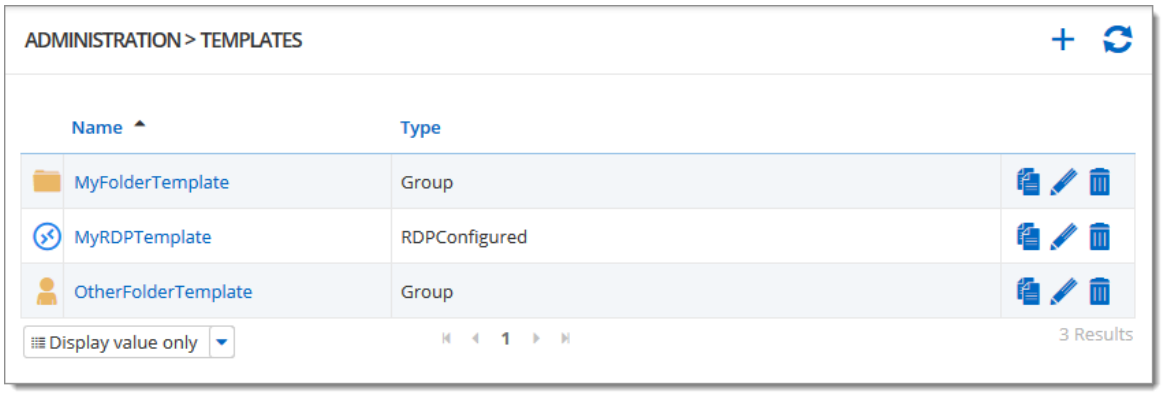
OPTION	DESCRIPTION
Exclude the following characters	Forcefully excludes characters from the password.

5.5.3.2 Templates

DESCRIPTION

The **Templates** allow administrators to manage entry templates. With this you can set preferences to how entries information will be filled when creating them.



5.5.4 Backup

5.5.4.1 Backup Manager

DESCRIPTION

The **Backup Manager** section allow administrators to configure the parameters to backup the database and the web application folder.

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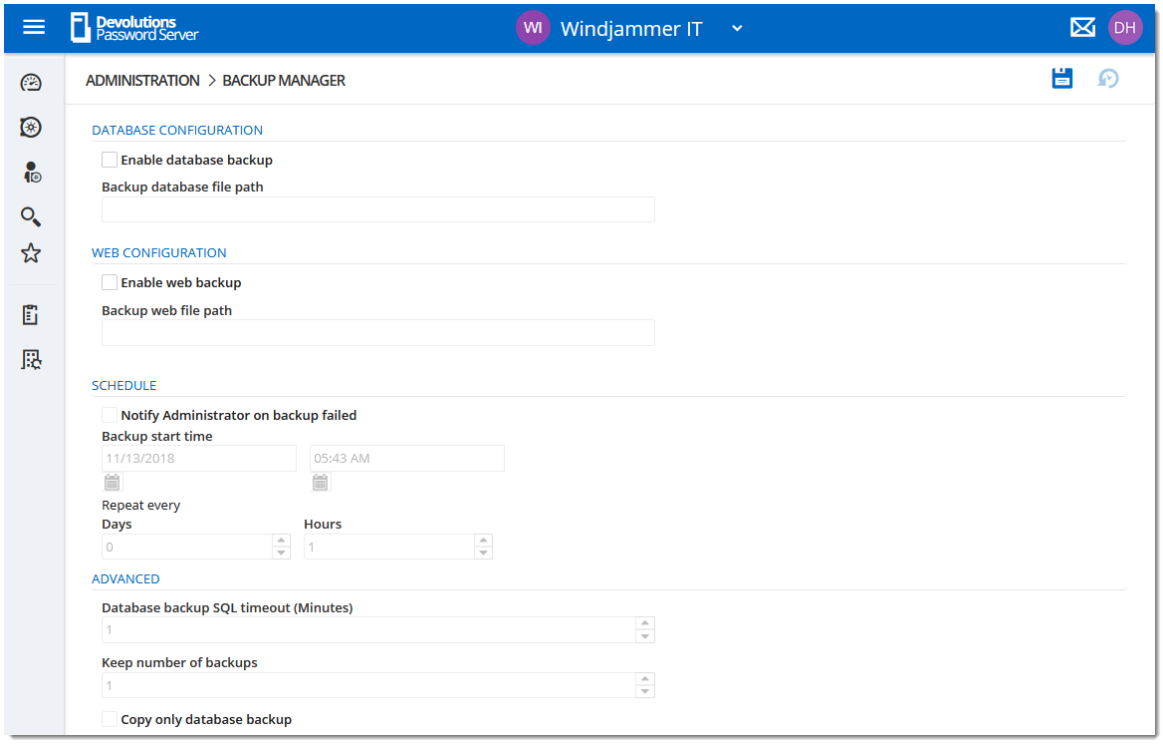

Administration - Backup Manager

SETTINGS

BUTTON	DESCRIPTION
Save	Save the latest modifications of the **Backup** schedule options.
Backup Now	Create immediately a backup of the SQL database and/or the web application folder.

DATABASE CONFIGURATION

OPTION	DESCRIPTION
Enable database	Activate the backup of the SQL database.

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OPTION	DESCRIPTION
backup	
Backup database file path	The path to the folder where the backup of the SQL database will be saved. We recommend to use a shared network folder with proper permissions set on it to be able to save the backup file. **Note: As the backup command is running on the SQL Server and on the machine where Devolutions Server is hosted, this path must be accessible from that SQL Server too. Then we recommend configuring the database backup path using a UNC path.**

WEB CONFIGURATION

OPTION	DESCRIPTION
Enable web backup	Activate the backup of the web application.
Backup web file path	The path to the folder where the backup of the web application will be saved. We recommend to use a shared network folder with proper permissions set on it to be able to save the backup file.

SCHEDULE

OPTION	DESCRIPTION
Notify Administrator on backup failed	Will send an email when the backup fails. The Email feature must be enabled in the Server Settings in order to work. For more information, please see Email Settings.

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OPTION	DESCRIPTION
Backup start time	Date and time when the backup will be automatically started.
Repeat every	The time interval when the backup will be repeated.

ADVANCED

OPTION	DESCRIPTION
Database backup SQL timeout (Minutes)	Number of minutes before a timeout in the SQL instance.
Keep number of backups	Number of the backup that will be kept in the backup folder.
Copy only database backup	A SQL Server backup that is independent of the sequence of conventional SQL Server backups. For more information, please see https://docs.microsoft.com/en-us/sql/relational-databases/backup-restore/copy-only-backups-sql-server.

5.5.4.2 Backup List

DESCRIPTION

The **Backup List** section displays the list of the backup that have been taken.

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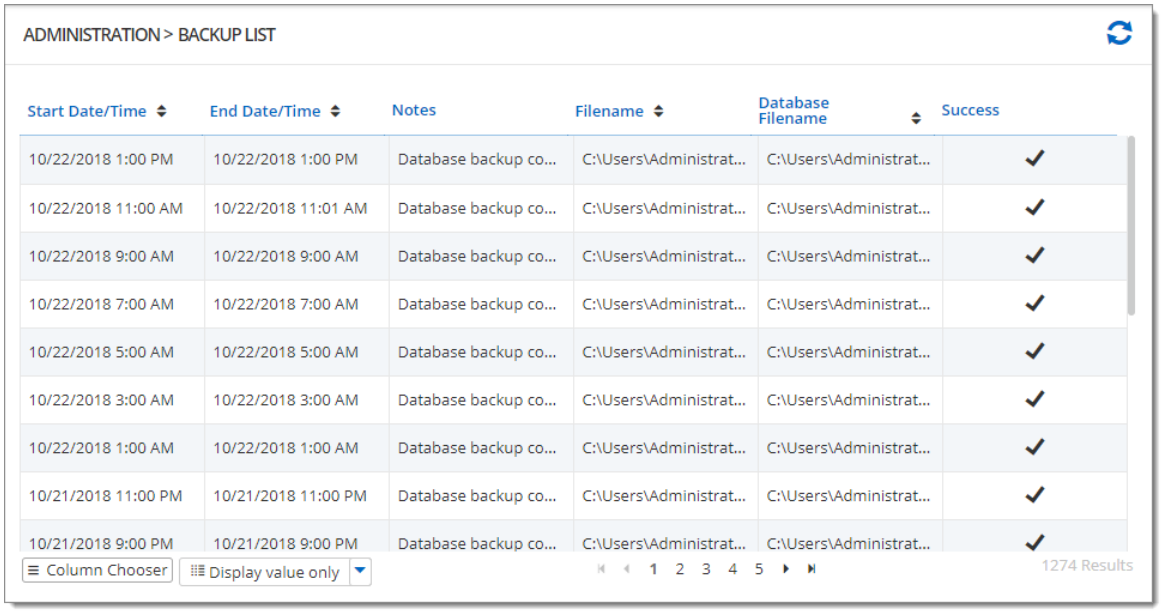

Administration - Backup List

COLUMN	DESCRIPTION
Start Date/Time	Date and time when the backup process was started.
End Date/Time	Date and time when the backup process was stopped.
Notes	Message to inform the completion or the fail of the backup.
Filename	Path and name of the web application backup file.
Database Filename	Path and name of the SQL database backup file.
Success	A check mark will indicate a successful backup. An X will indicate that the backup has failed.

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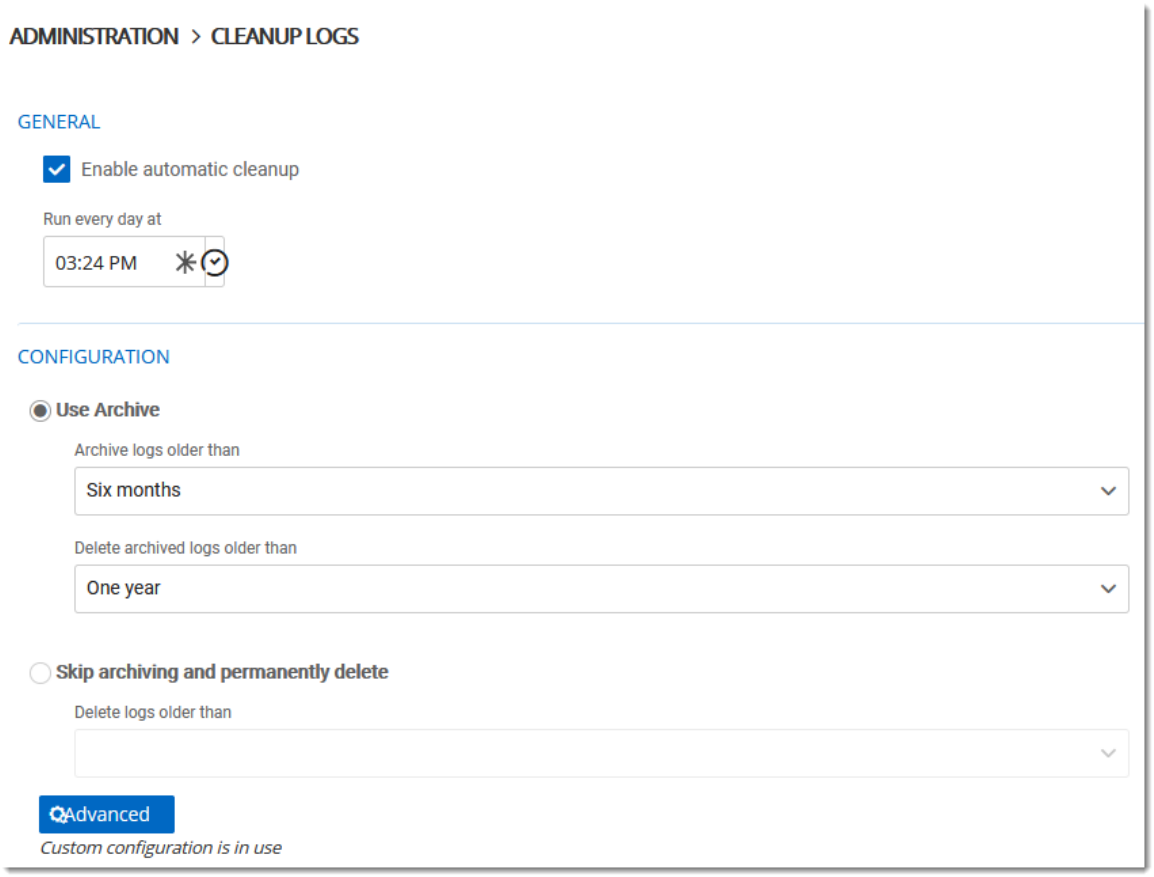
5.5.5 Logs

5.5.5.1 Cleanup Logs

DESCRIPTION

The Cleanup Logs functionality will allow to archive logs available in the database that are older than the selected period. And it can also delete these archived logs based on the selected time limit in the parameters.



Cleanup logs

OPTION	DESCRIPTION
Enable automatic cleanup	Enable the automatic cleanup logs feature to automatically archive and delete logs.
Run every day at	Set the time when the feature will run.

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OPTION	DESCRIPTION
Use Archive	If enable, the job will archive and delete logs based on the period selected in the two drop down lists.
Archive logs older than	Will archive logs that are older than the selected value in the drop down list. Possible choices : One month Three months Six months One year
Delete archived logs older than	Will delete all archived logs that are older than the selected value in the drop down list. Possible choices : Three months Six months One year Two years
Skip archiving and permanently delete	If enable, will not archive the logs and will permanently delete them
Delete Logs older than	Will permanently delete all logs older than the selected value in the drop down list. Possible choices : One month Three months Six months One year Two years
Advanced	Advanced configuration if for configuring the archiving and deletion operation on each logs separately.

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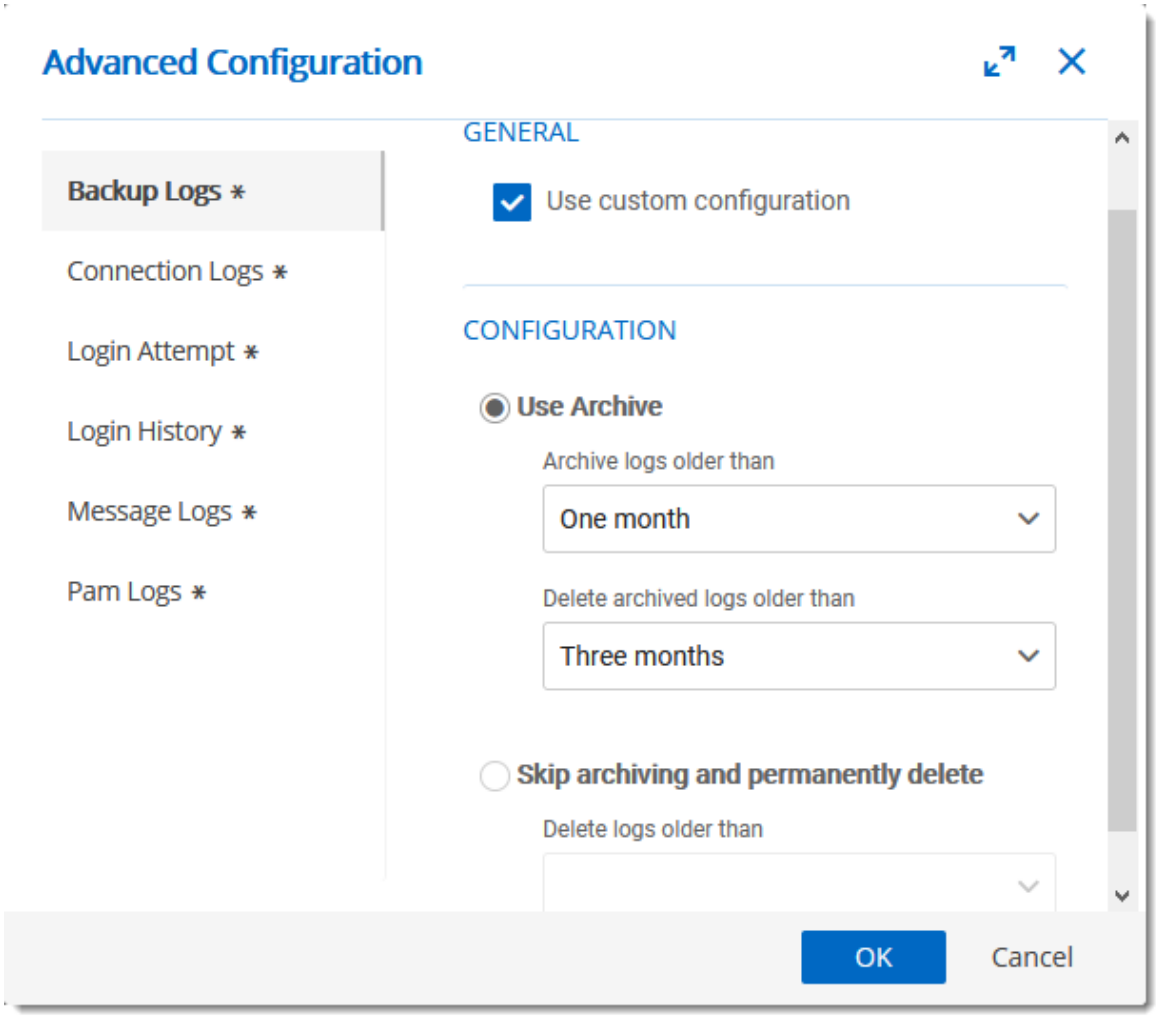
5.5.5.1.1 Advanced configuration

DESCRIPTION

The advanced configuration allows to set individual clean up parameters for all different logs of Devolutions Server.



Cleanup Logs - Advanced configuration

LOGS	DESCRIPTION
Backup Logs	Logs related to the Backup Manager.

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LOGS	DESCRIPTION
Connection Logs	Logs related to all operations on entries like viewing a password, opening an entry, etc.
Login Attempt	Logs related to failed login attemps to Devolutions Server.
Login History	Logs related to all successful logins to Devolutions Server.
Message Logs	Logs related to data source logs of Devolutions Server.
PAM Logs	Logs related to the Devolutions Server PAM feature.

GENERAL	DESCRIPTION
Use custom configuration	Allow to set specific archiving and deletion parameters for the selected log.

CONFIGURATION	DESCRIPTION
Use archive	Use the archive operation to clean the logs.
Archive logs older than	Will archive logs that are older than the selected value in the drop down list. Possible choices : One month Three months Six months One year

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CONFIGURATION	DESCRIPTION
Delete archive logs older than	Will delete all archived logs that are older than the selected value in the drop down list. Possible choices : Three months Six months One year Two years
Skip archiving and permanently delete	If enable, will not archive the logs and will permanently delete them
Delete Logs older than	Will permanently delete all logs older than the selected value in the drop down list. Possible choices : One month Three months Six months One year Two years

5.6 User Groups Based Security

DESCRIPTION

Devolutions Server user groups based security 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 Devolutions Server user groups based security efficiently.

Here are the main key points of the user groups based security:

- **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.

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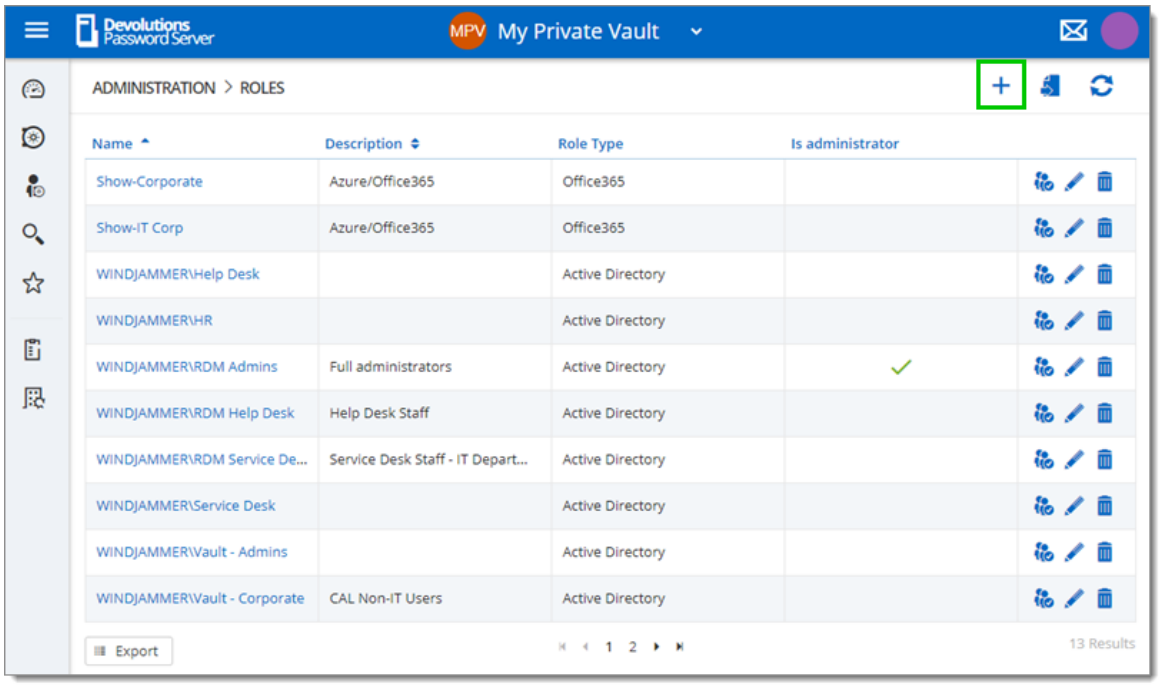
- **Permissions are granular**: multiple permissions can be set on entries at once.

USER GROUPS CONFIGURATION

When using Devolutions Server user groups based security, user groups are mostly used to control user access for multiple users at once.

CREATE THE USER GROUPS

To create user groups, navigate to ***Administration – User Groups***, then click + Add.



Create a User Group

All settings can be left to default unless the user group contains only administrators. In this case, check the **Administrator** box when configuring the user group. Enter a name for the user group, then click **OK**. For Active Directory groups, the domain must be provided like the following.

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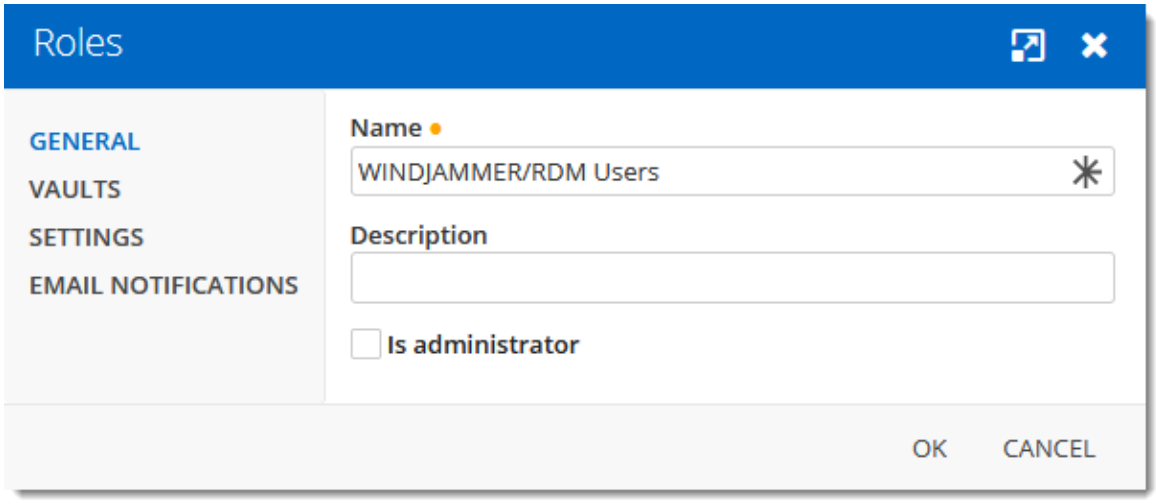
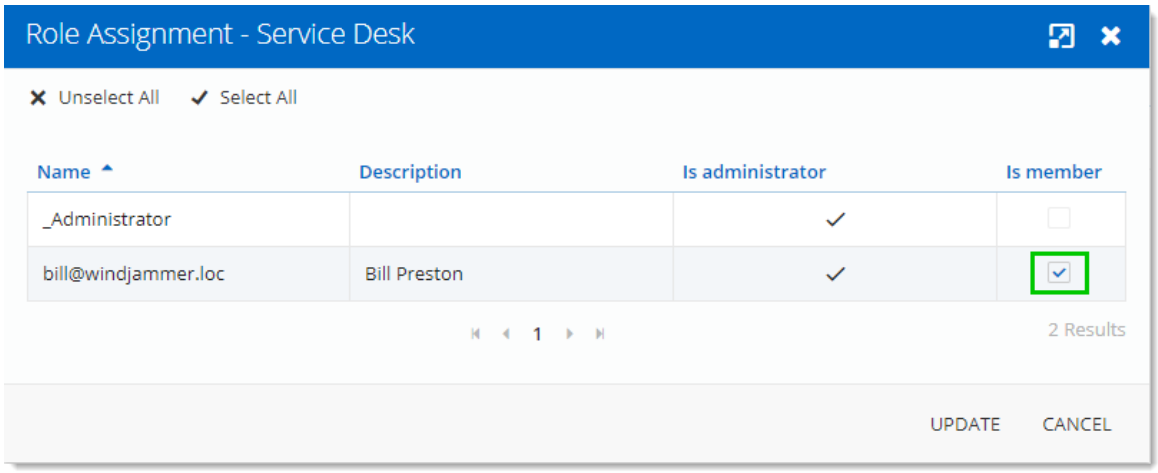


Configure a User Group

To assign users to the user group, click , then check the Is Member box of the respective user. With a user group created from an Active Directory group, there is no need to assign users as it is automatically managed by Devolutions Server.



Assign a user to the User Group

USER CONFIGURATION

USER TEMPLATE

It is possible to change the default user template. To do so, navigate to ***Administration – System Settings – User Template***. These settings control the default settings of a new user. The best practice is to disable all privileges.

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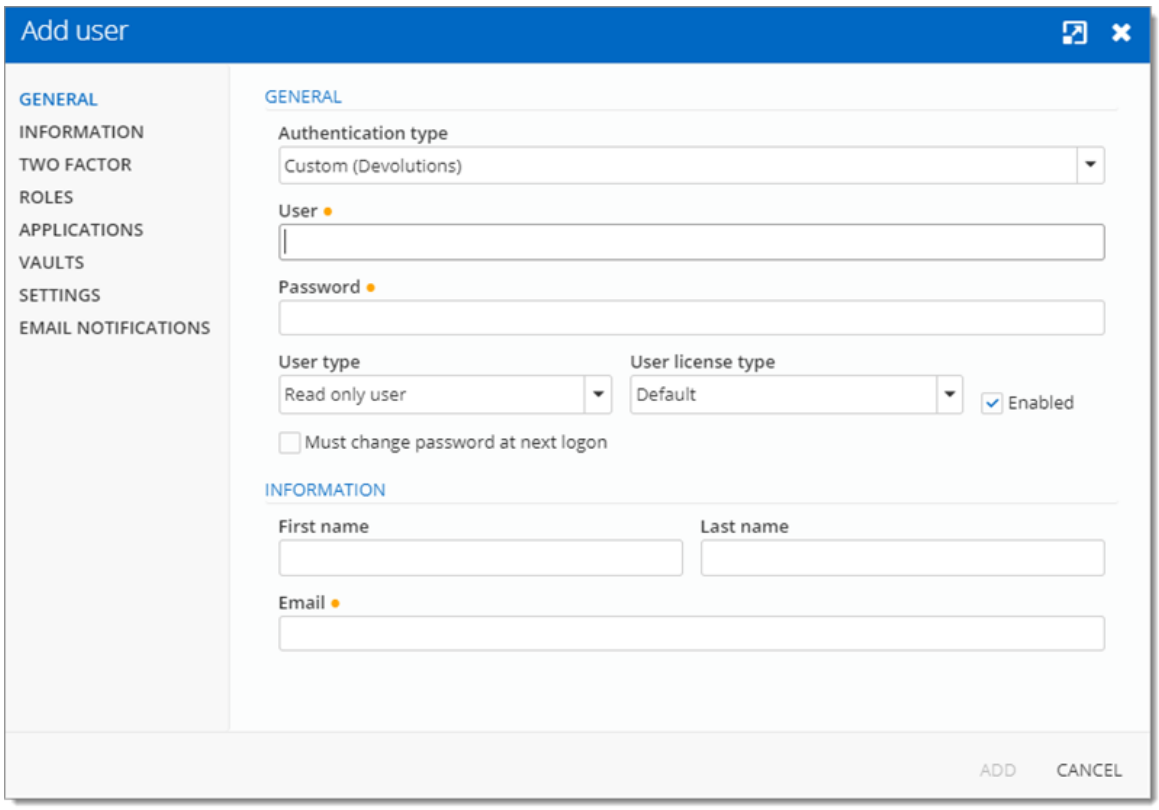
CREATE THE USER

To create users, navigate to ***Administration – Users***, then click **Add User**. Enter a **Login** for the user, select the **User** type and enter an email address.



Create a user

A user can be assigned to multiple user groups at once by checking the **Is Member** box of the respective user groups in the **User Groups** section of the **User Management**. As part of the Active Directory integration, there is no need to assign users to those user groups as it is automatically managed by Devolutions Server.

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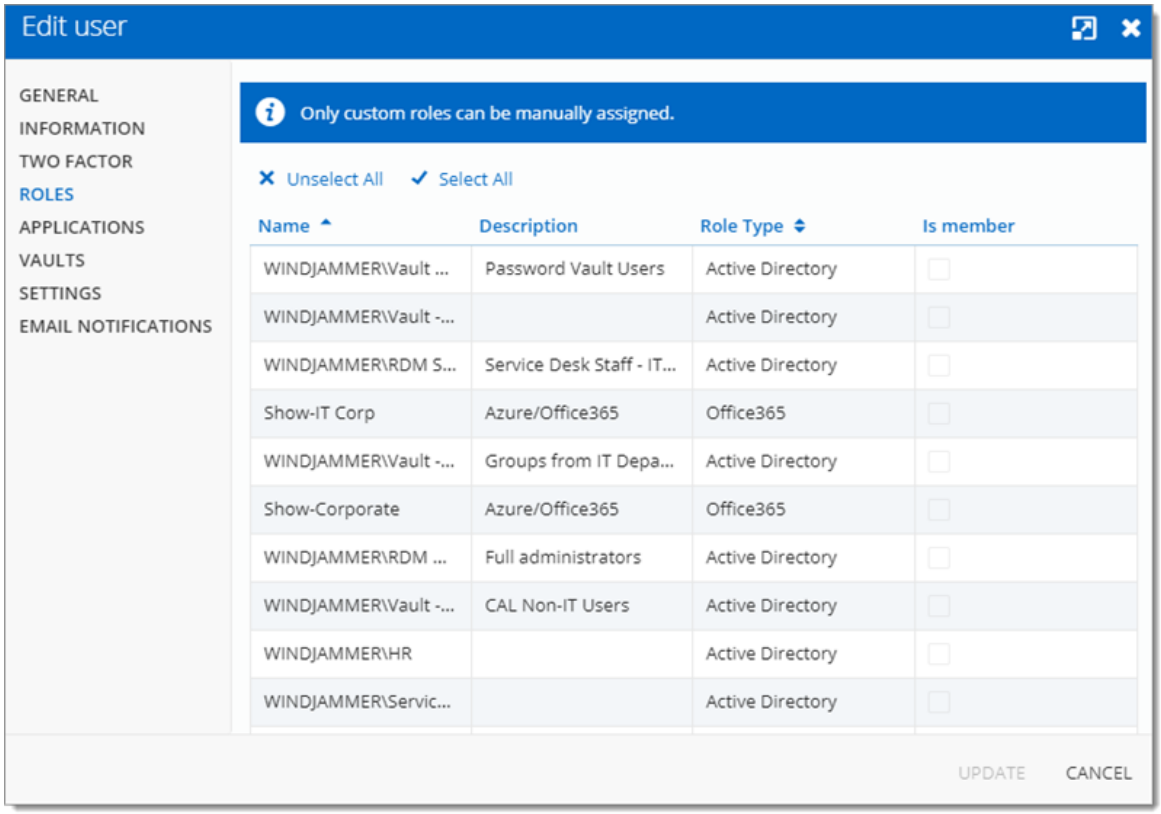

ADMINISTRATORS

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.

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READ ONLY USERS

Read only users can only view and use resources, but cannot edit them. These users are usually external consultants.

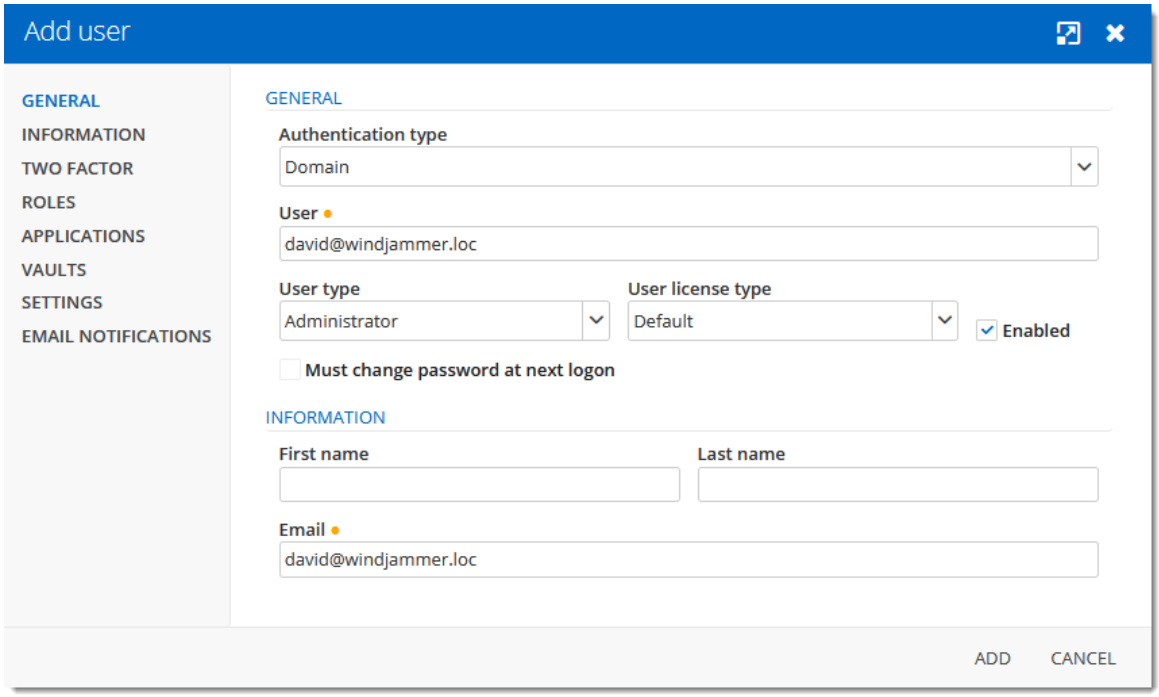
SELECT THE APPROPRIATE USER TYPE

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?**

✓**Administrators** can access any resource without restriction.

✓Make a user administrator by selecting **Administrator** as the **User type** when creating the user.



Administrator user

➢**Should they be able to add, edit, or delete entries?**

✓Make a **Restricted user** by selecting **Restricted user** as the **User type** when creating the user.

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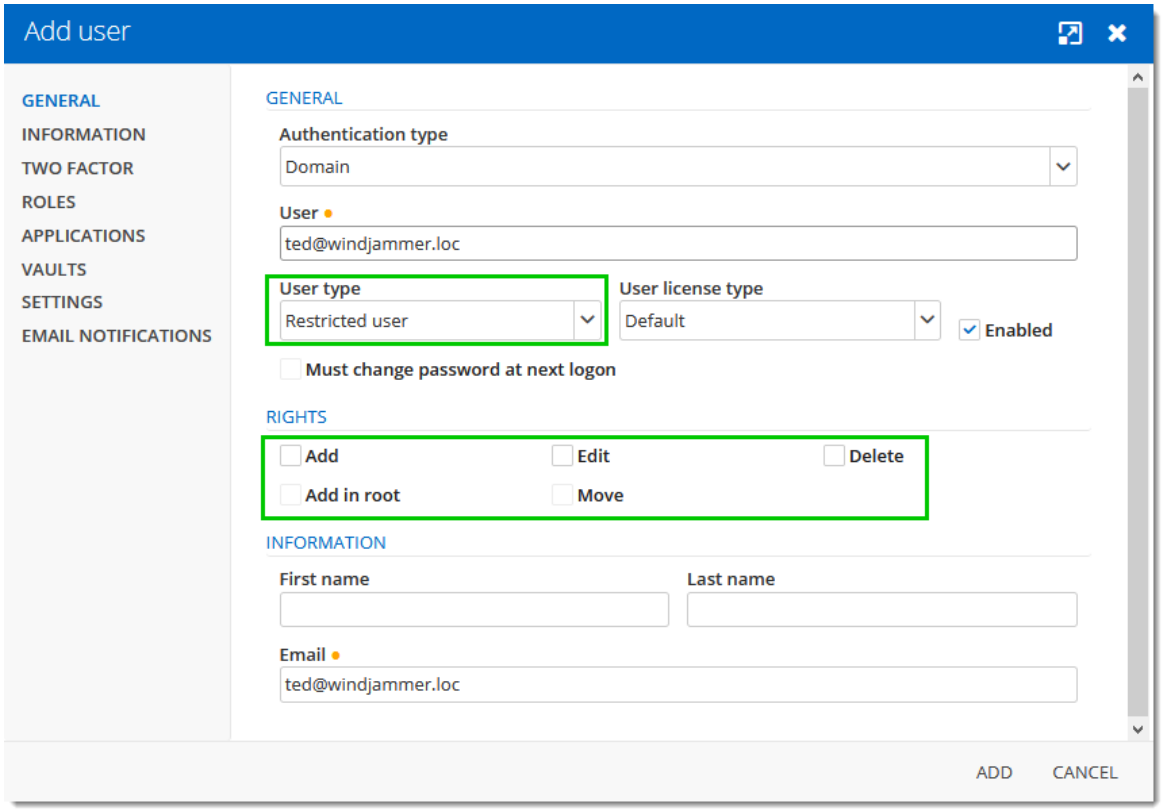
✓Set up manually which rights are granted to the user.



Restricted user

ENTRY CONFIGURATION

Access is granted or denied to users by setting permission on entries. **Permissions** can be set to users or user groups. The best practice is to grant permissions to user groups to control access for multiple users at once.

To set permissions on an entry, edit any entry, then navigate to the ***Security – Permissions*** section.

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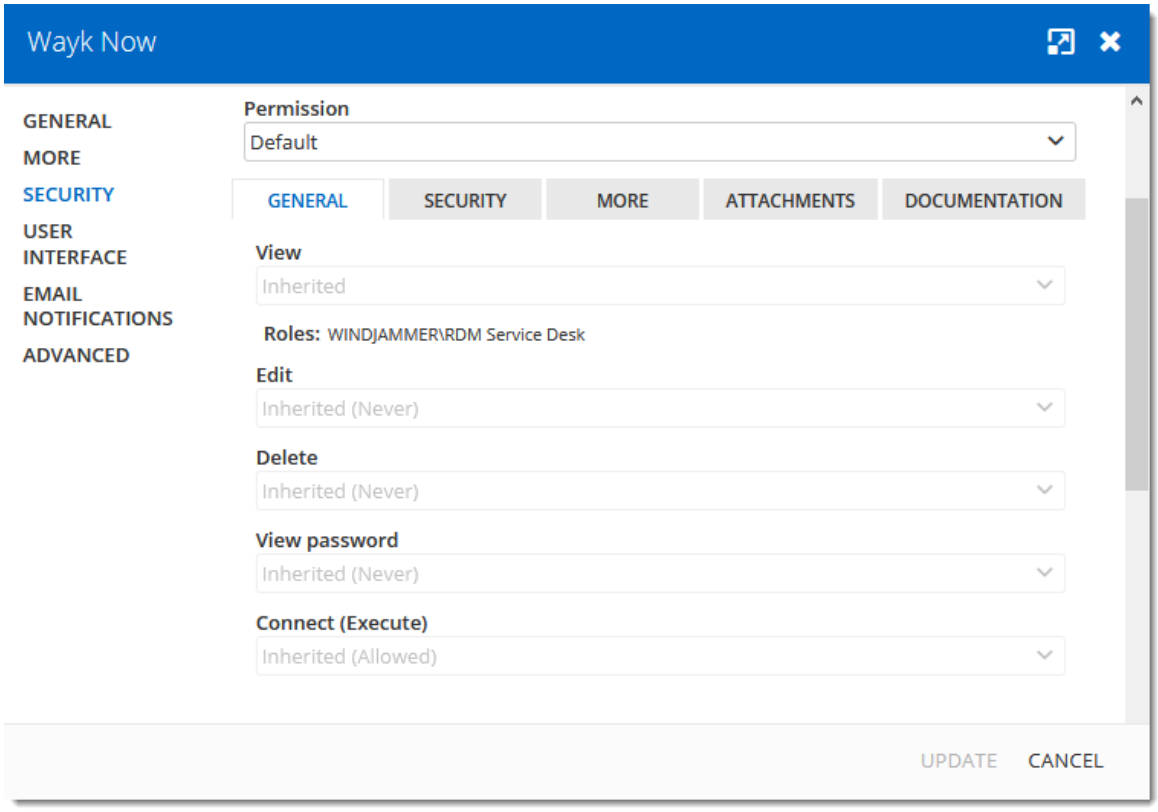

Entry's Permissions

Permissions are usually set on folders, and apply to all child entries. A best practice is to set all the permissions of the vault folder to **Never**. As a result, all permissions of all entries are denied by default.

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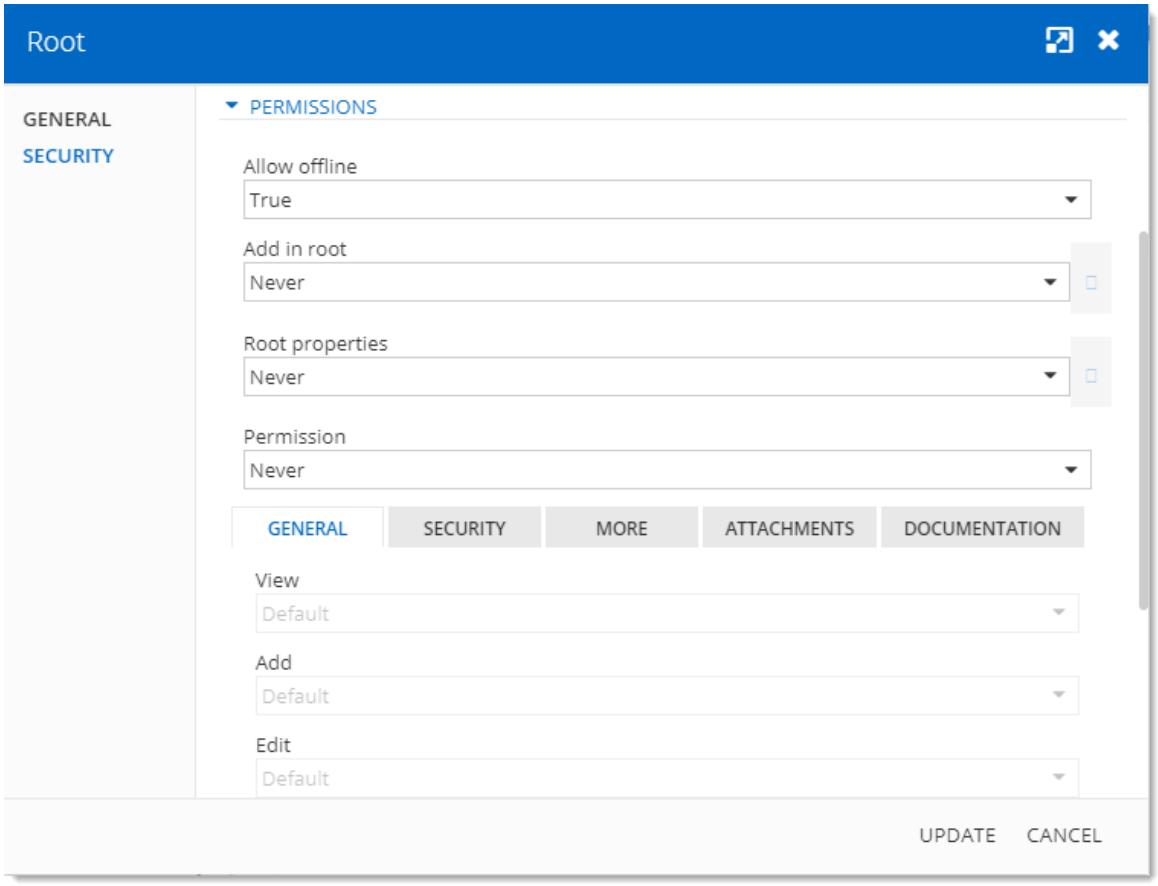

Root Permissions

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:

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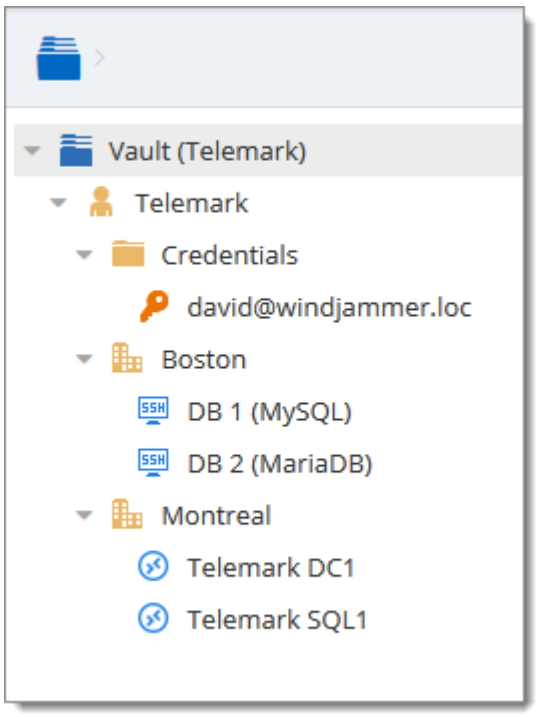

Sample Structure

There are three levels of folders: the Vault, 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.

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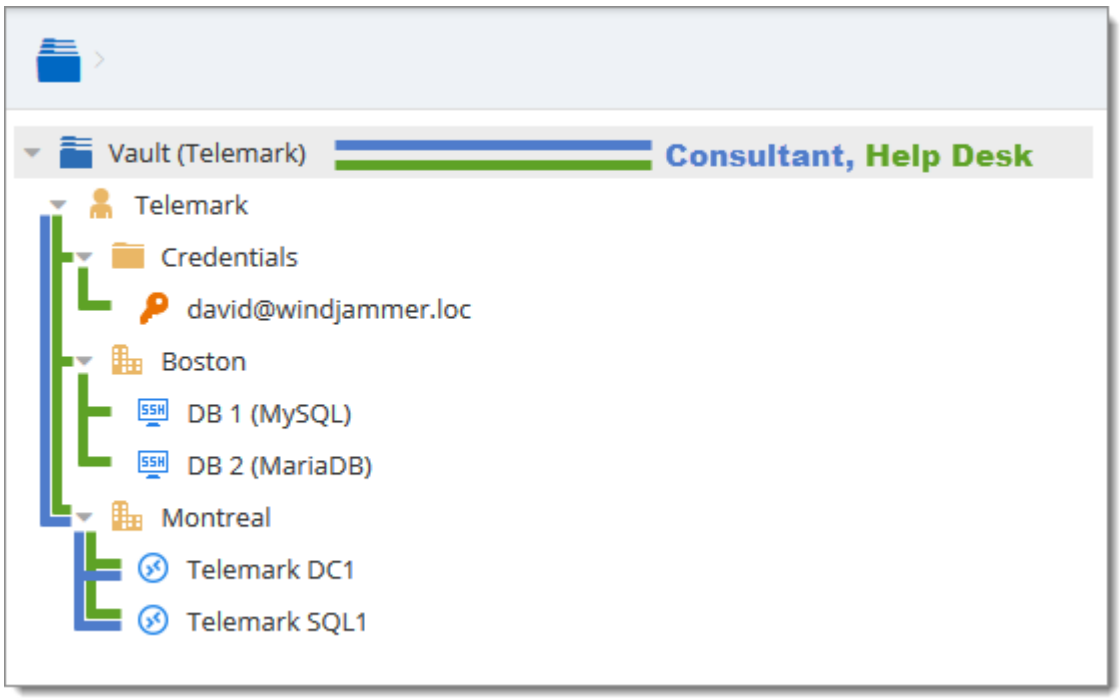

Permissions Structure

5.6.1 Permissions

DESCRIPTION

The **Permissions** panel can be found in every entry properties in the ***Security - Permissions*** section.

It is also possible to allow administrators to grant administrative permissions to standard users without making them administrators with System Permissions.

The user groups based permissions system can give a very accurate control of the security. Here is an overview of the permissions window:

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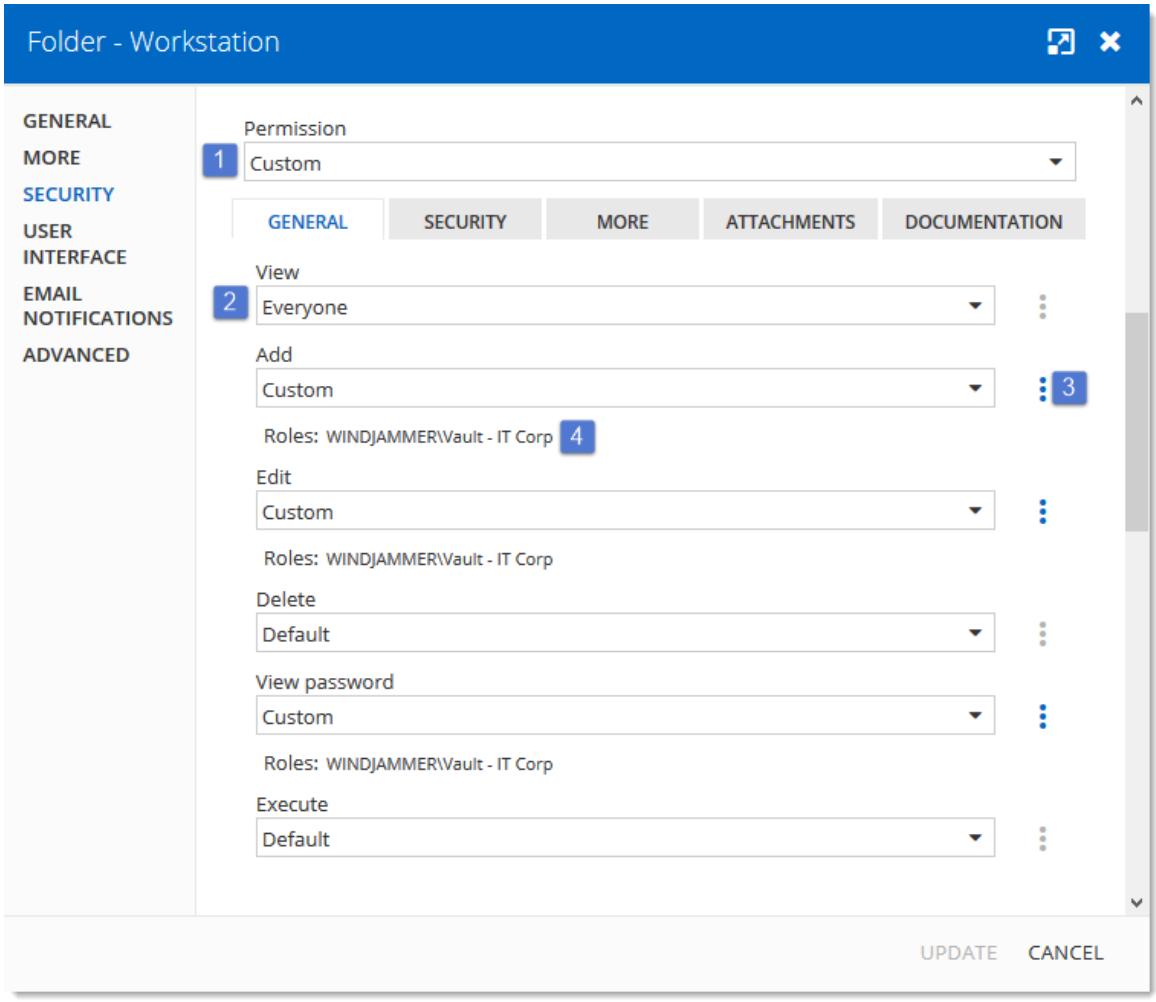

Permissions Panel

OPTION	DESCRIPTION
1. Permission	Sets the permission mode. This must be set to **Custom** in order to change the discrete permissions below. 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.

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OPTION	DESCRIPTION
	• **Never**: no one but the administrators will be granted the permissions
2. Discrete permissions	Lets you choose who you want to grant permissions to. These combo boxes are available only if the above **Permission** combo box is set to **Custom**. Select between: • **Inherited (Default)**: will inherit the permissions from the parent groups/folders. • **Custom**: lets you specify a custom value for the permission. • **Everyone**: everyone will be granted the permission • **Never**: no one but the administrators will be granted the permission.
3. Users / User groups selector	Lets you select **Users / User Groups** to be granted the permission. Available only if the permission is set to **Custom**.
4. Current permission	Displays the granted permission for the current entry.

GENERAL

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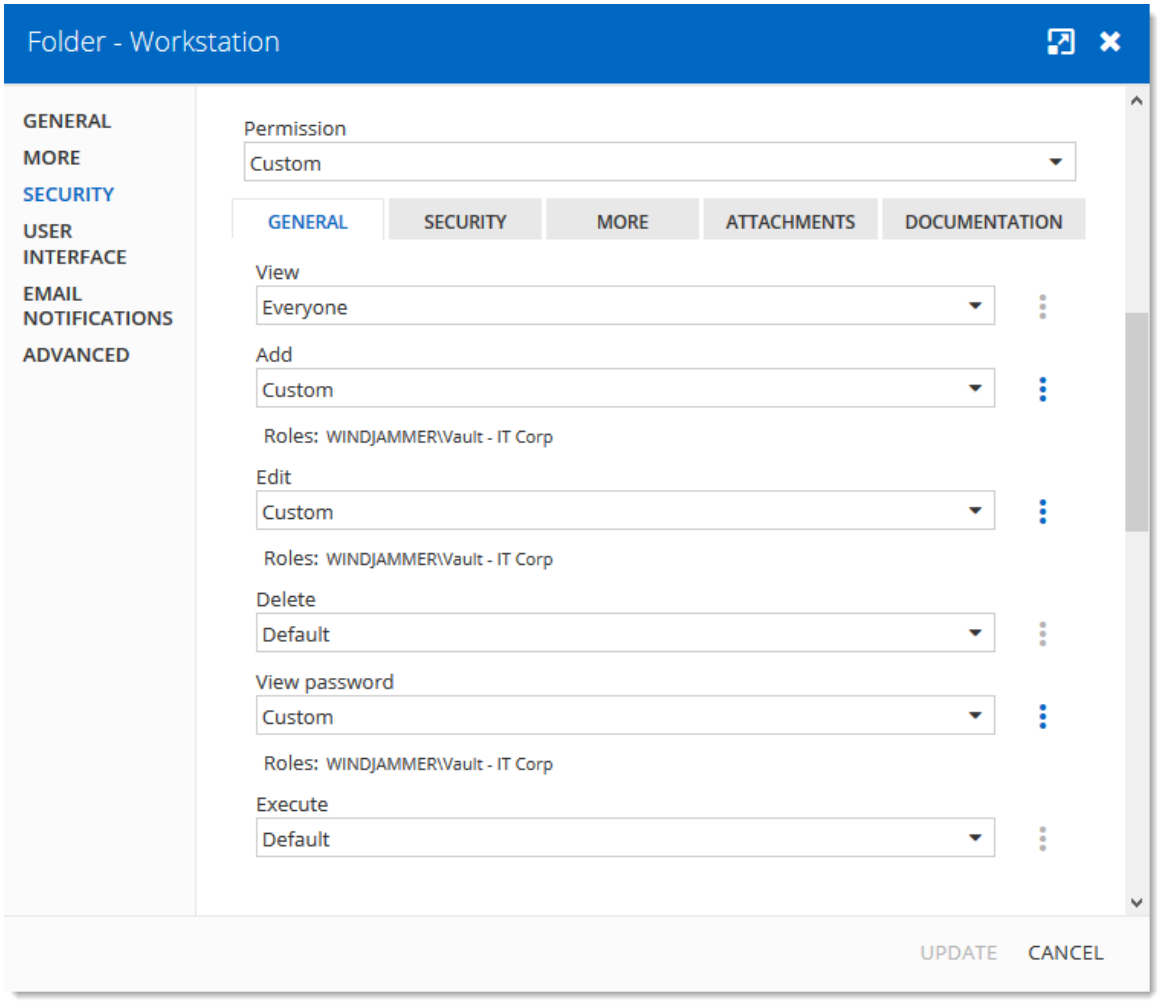

Permissions - General

OPTION	DESCRIPTION
Permission	Sets the permission mode. It must be set to **Custom** in order to change the permissions individually.
View	Allow users/user groups to **view** entries.
Add	Allow users/user groups to **add** entries
Edit	Allow users/user groups to **edit** entries.
Delete	Allow users/user groups to **delete** entries.

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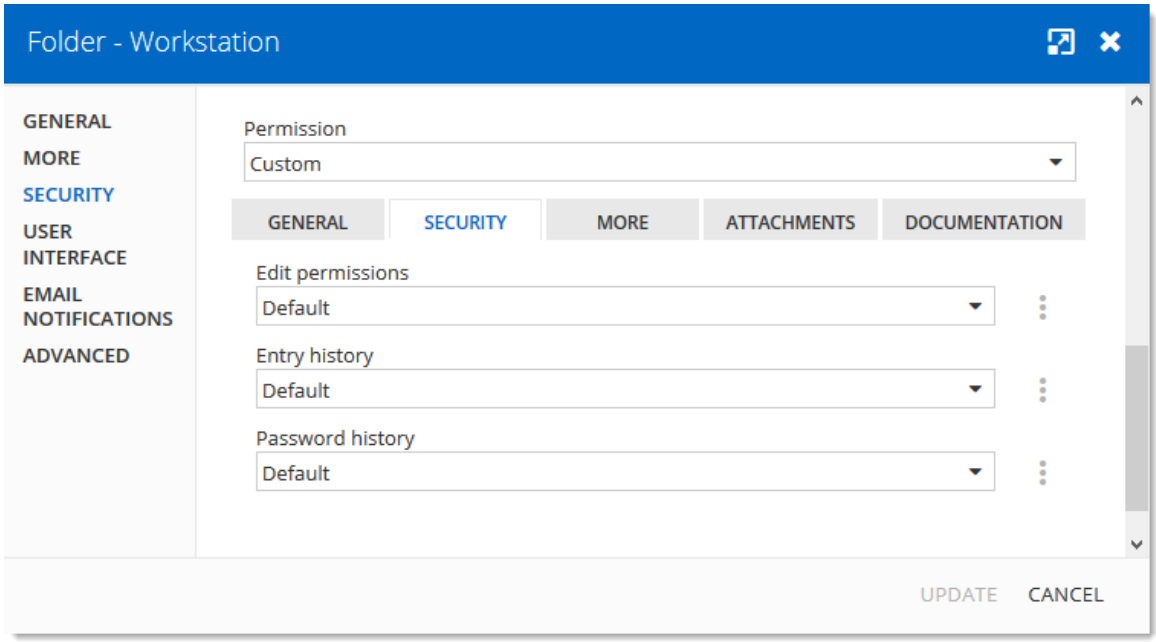
OPTION	DESCRIPTION
View password	Allow users/user groups to **view entry password**.
Connect (Execute)	Allow users/user groups to **open** entries.

SECURITY



Permissions - Security

OPTION	DESCRIPTION
Edit permissions	Allow users/user groups to **edit** permissions.
Entry history	Allow users/user groups to **view and use entry history**.
Password History	Allow users/user groups to **view** the **Password History**.

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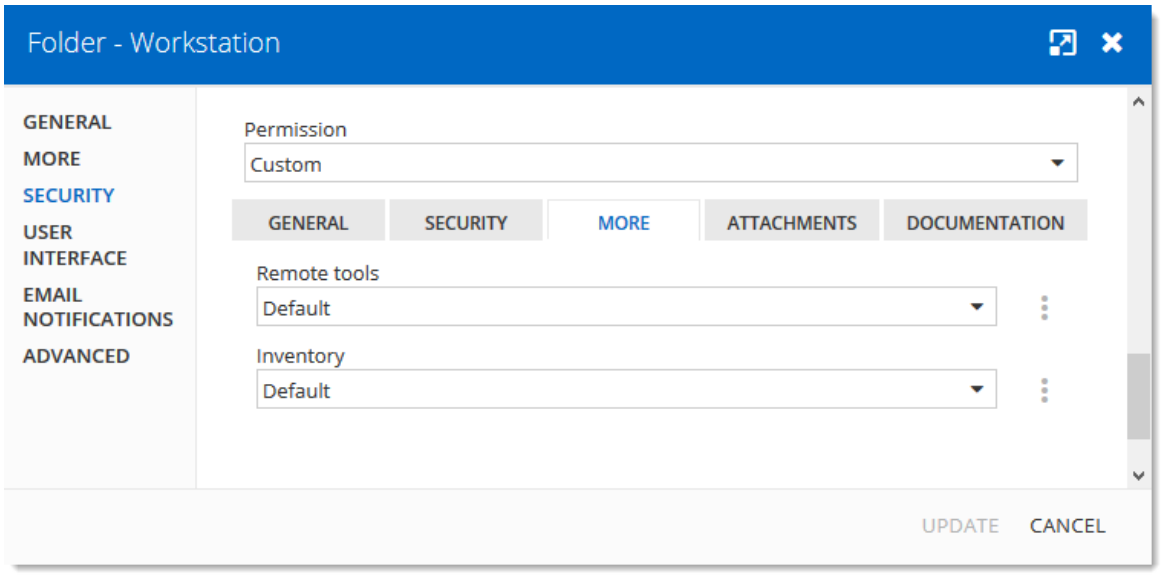
MORE



Permissions - More

OPTION	DESCRIPTION
Remote tools	Allow users/user groups to use **Remote Tools**.
Inventory	Allow users/user groups to use the **Inventory Report** tool.

ATTACHMENTS

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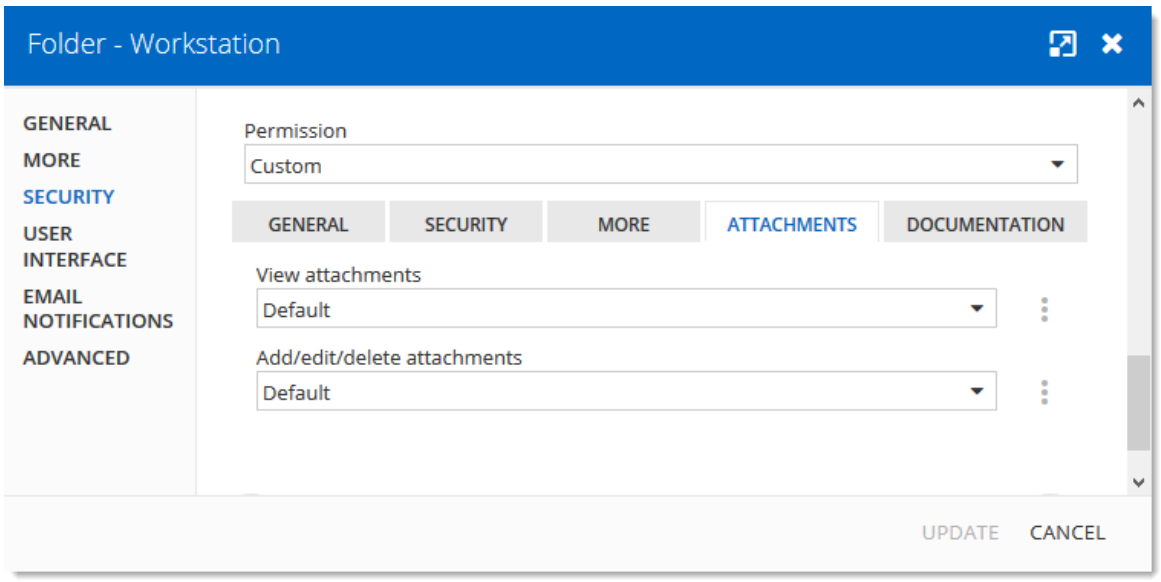

Permissions - Attachment

OPTION	DESCRIPTION
View attachments	Allow users/user groups to **view** attachments.
Add/edit/delete attachments	Allow users/user groups to **add/edit/delete** attachments.

DOCUMENTATION

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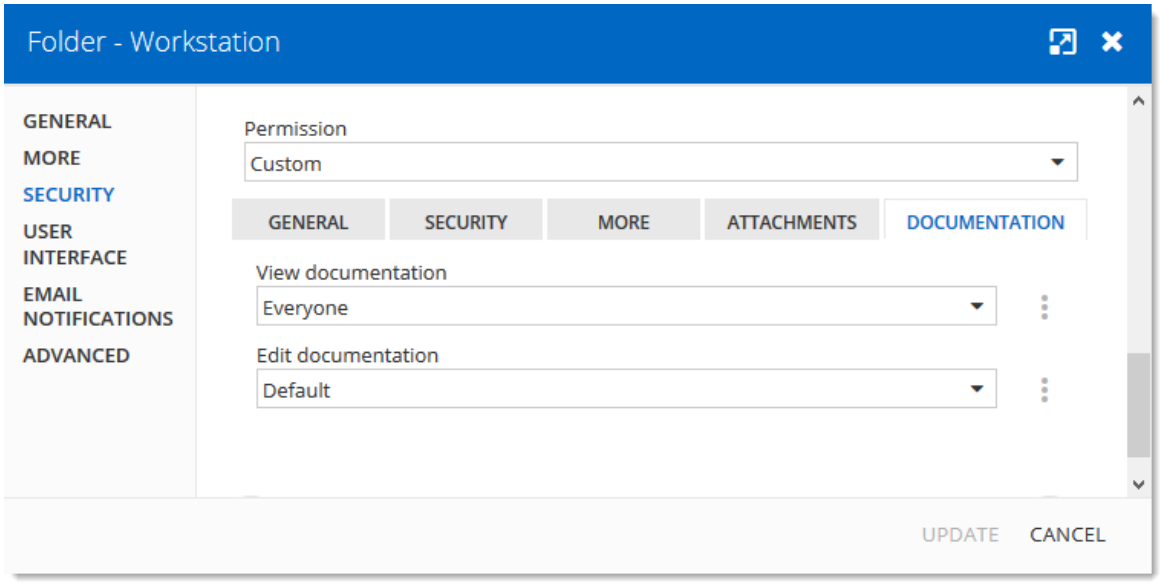

Permissions - Documentation

OPTION	DESCRIPTION
View documentation	Allow users/user groups to **view** documentation.
Edit documentation	Allow users/user groups to **edit** documentation.

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Privileged Access Management

Part

6 Privileged Access Management

DESCRIPTION

Devolutions Privileged Access Management solution provides all the following features. It is specifically designed to meet the needs of SMBs, providing enterprise-grade features to bring a level of protection usually only afforded to large organizations while at the same time being robust, easy to deploy and affordable.

1. Ease of deployment and management
2. Secure password vault
3. Logging and reporting
4. Built-in two-factor authentication
5. Access brokering
6. User Groups access control

For an overview of the Devolutions Privileged Access Management, please watch the following video.

PAM Preview

PRIVILEGED ACCESS DASHBOARD

The Privileged Access Dashboard provides a quick overview of the available **Accounts**, **Providers**, **Scan Configurations**, current **Checkouts**, **Recurrent Scans** and the **Recent Activities**.

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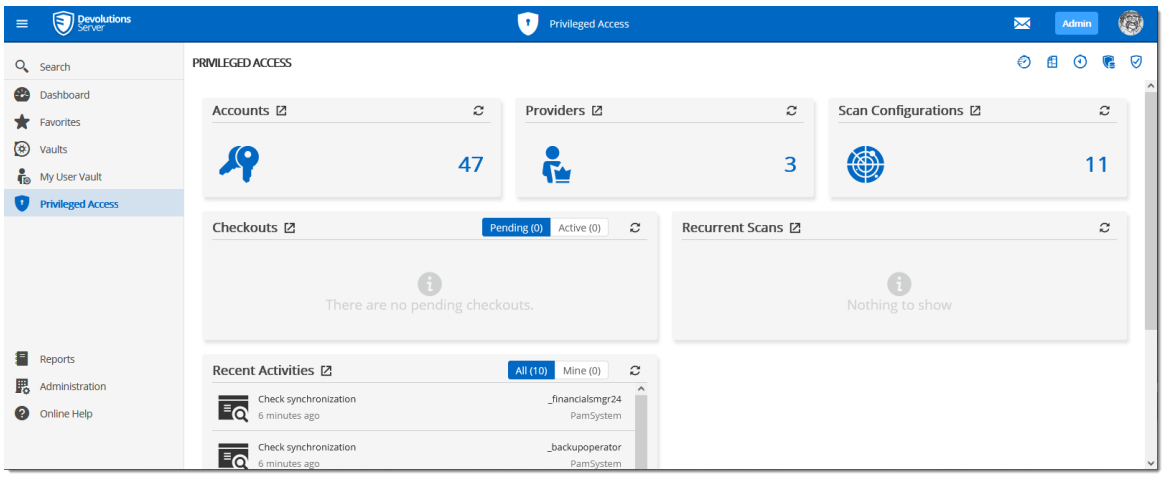


Privileged Access Management Dashboard

6.1 Getting Started

DESCRIPTION

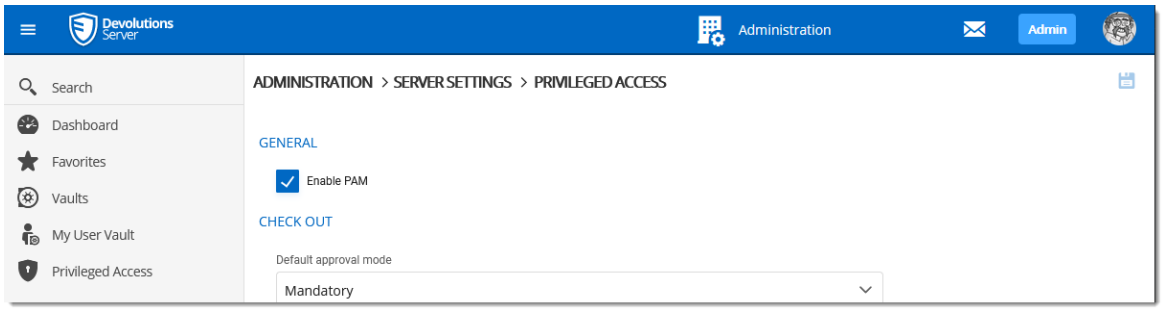
In this topic, you will find the steps on how to get started with the ***Privileged Access Management*** features in Devolutions Server.

First, you will need to be logged as an administrator in your DVLS.

PAM SETTINGS CONFIGURATION

1. Head to ***Administration -> Devolutions Server Settings -> PAM***.

2. Check ***Enable PAM*** and click the ***Save*** button in the top right to make the Privileged Access side-panel appear on the left.



Enabling PAM

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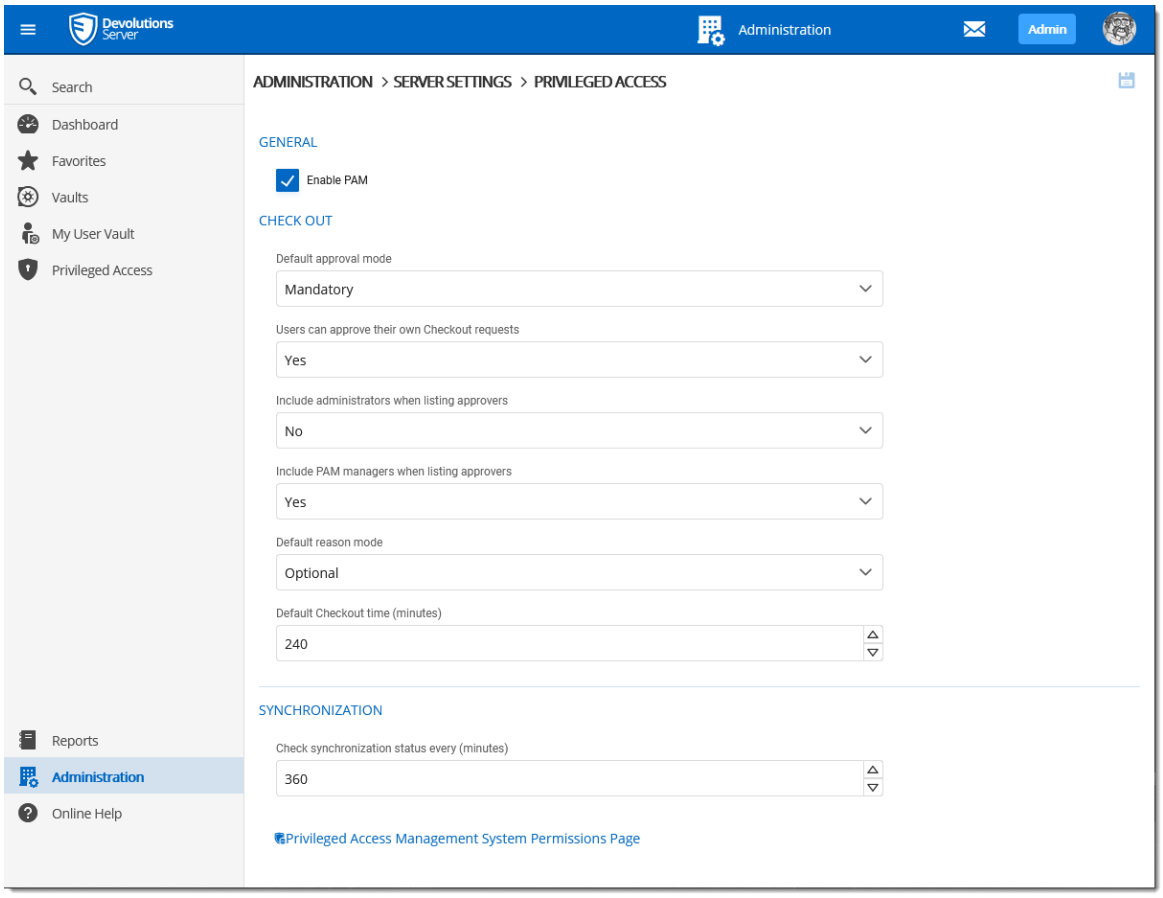
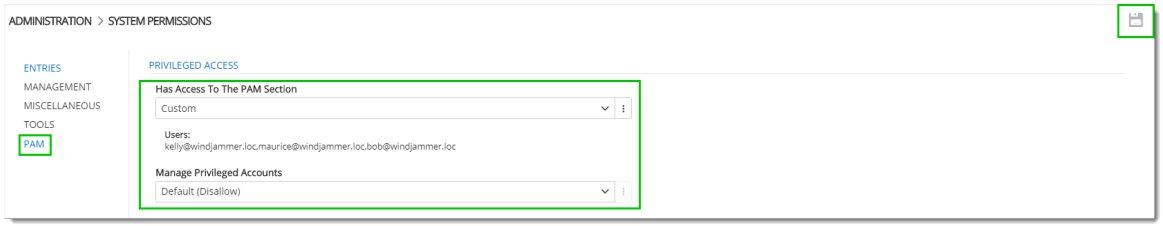
3. Configure the default settings for the checkout system, credentials brokering, sensitive information access, default checkout times and synchronizations. The ***Custom*** setting allows user groups based access control.



4. Next, head to ***Administration -> System Permissions -> PAM***.

5. Configure the accesses to the PAM system for the users/admins and manage privileged accounts rights on who can edit the privileged entries. Then, click ***Save***.



PAM Access configuration

ADD A PROVIDER

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Back to the PAM section, add a provider of any of the 3 types : ***Domain User*** (AD), ***Local User*** (SSH) or ***SQL User***.

When adding the provider, make sure you keep the ***Add Team Folder*** and ***Add Scan Configuration*** options checked.

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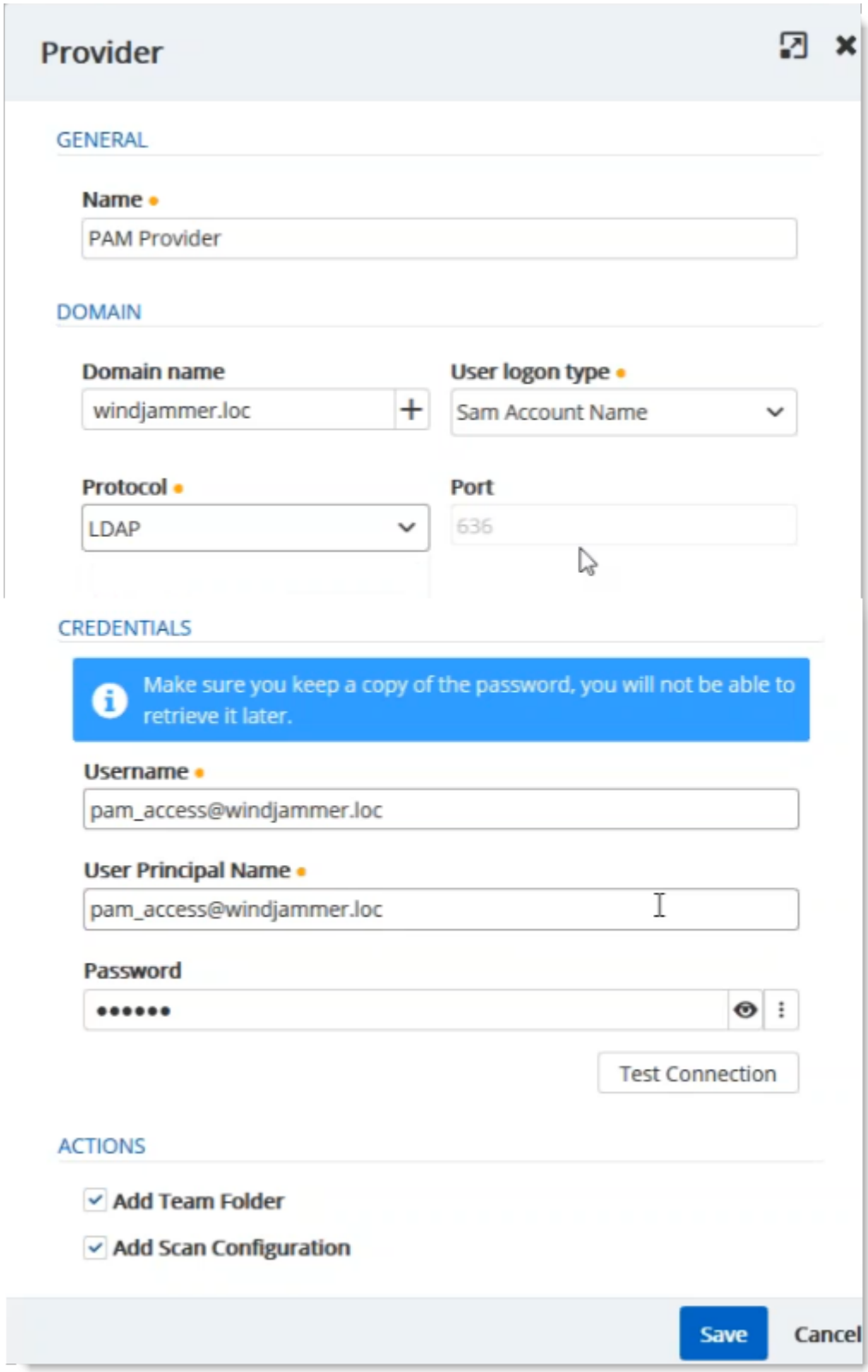

PAM Provider Configuration

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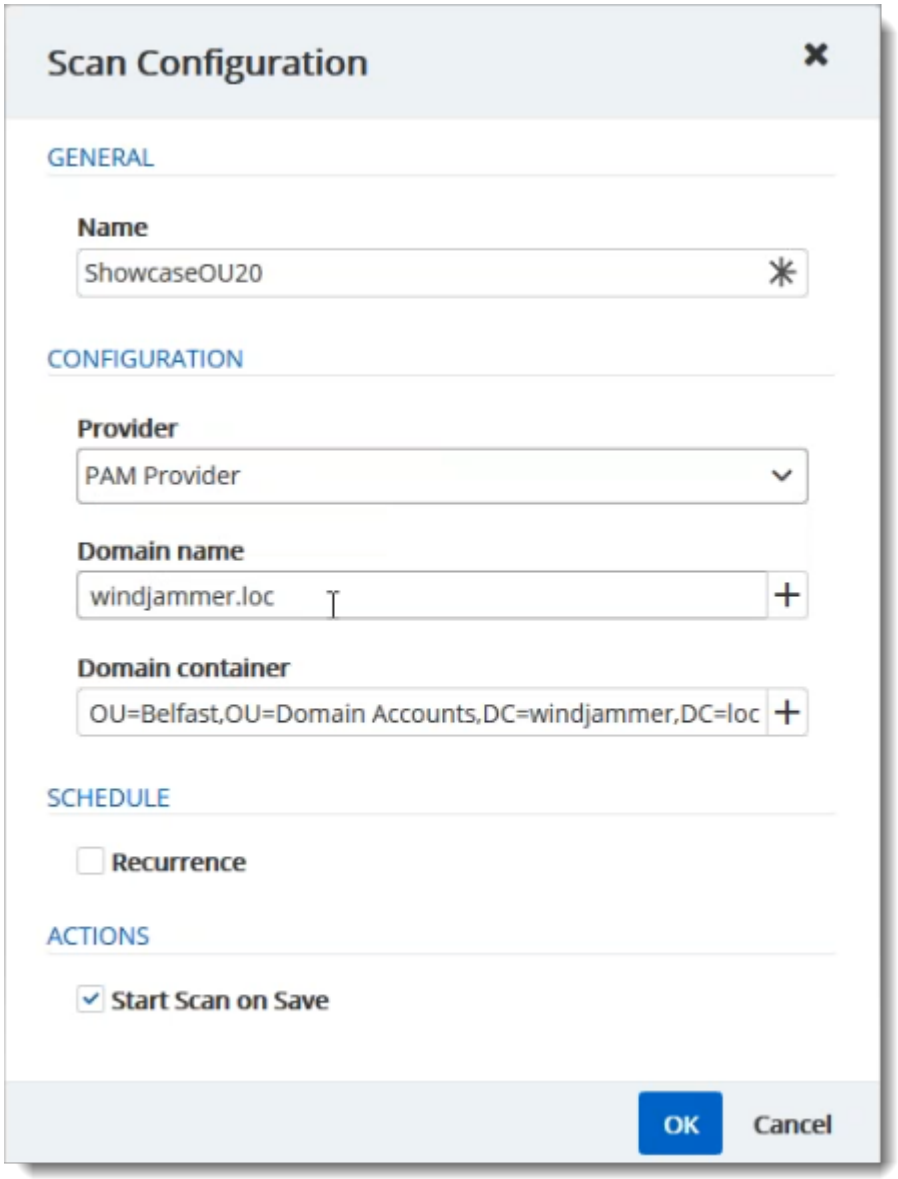
For more information, please consult the Providers topic.

ADD A SCAN CONFIGURATION

1. Confirm that it is the good provider, domain and domain container (where the accounts are located).

2. Make sure the ***Start Scan on Save*** checkbox is selected.

3. Click ***OK***.



PAM Scan Config

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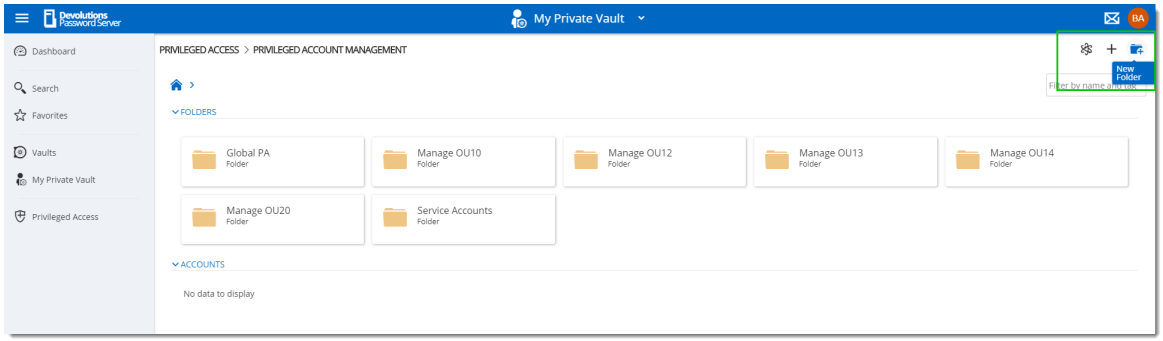
For more information, please refer to the Scan Configurations topic.

ADD FOLDERS IN THE ACCOUNTS SECTION

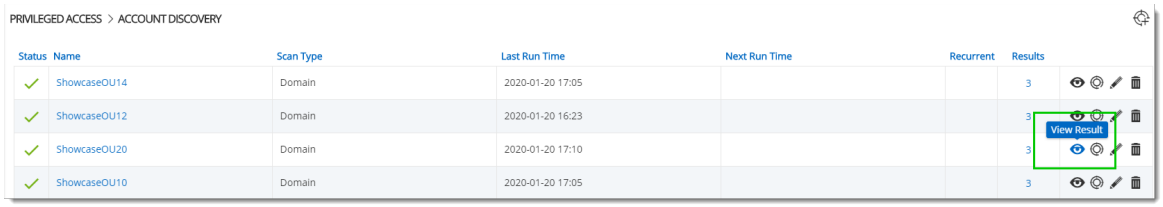
In the ***Accounts*** section of the PAM tab, you need to create a ***Folder*** to contain the accounts. You can customize that particular folder's security options if you don't want to give them the defaults you set during the initial configuration. You can also customize the approvers on the folder directly which will give you a list of the administrators.



PAM Create Folder

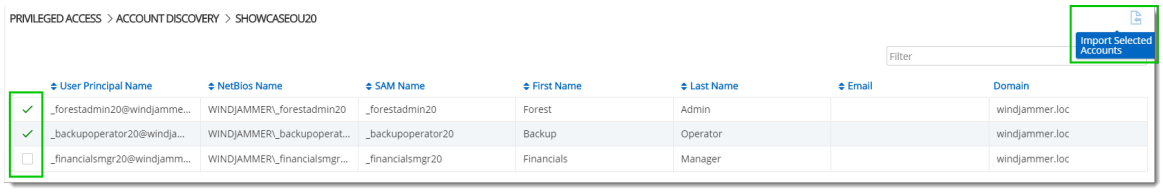
IMPORT ACCOUNTS FROM A SCAN

1. In the ***Scan Configuration*** section, click the result of your initial search.



View Scan Results

2. Select all the accounts you want to import, and on the top right, click the ***Import*** button.



Import Selected Entries

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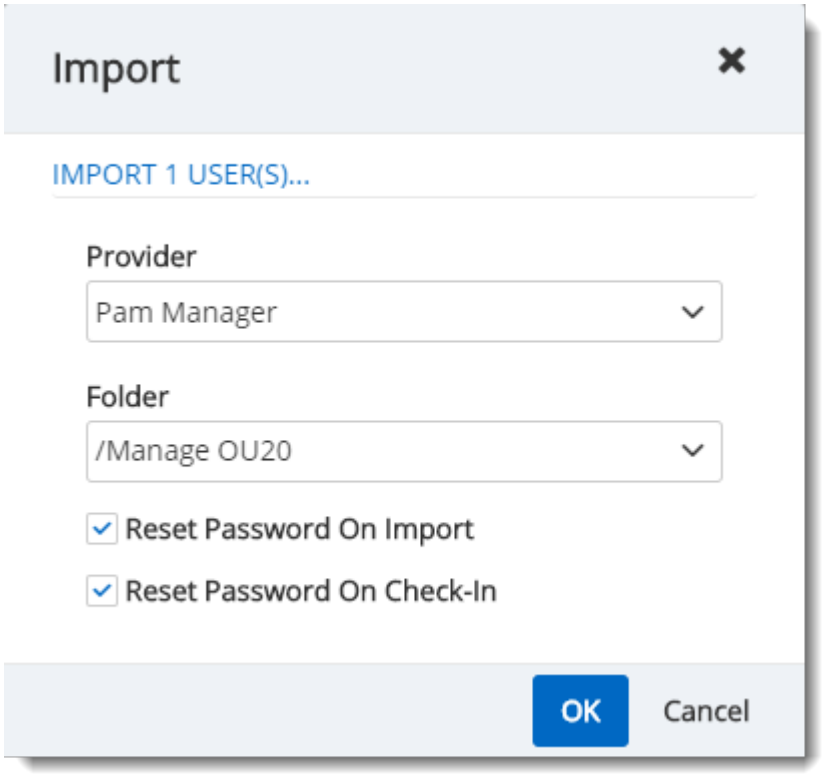
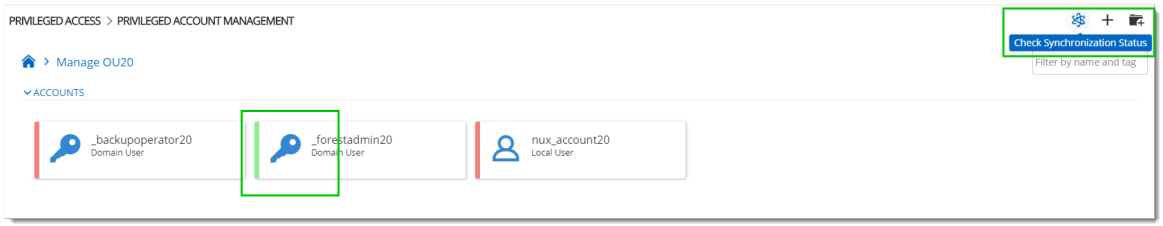
3. You can put them in the folder of your choice. You can also choose whether to reset password on import or on check-in (recommended). That way, the password is safe the moment the user checks it back in.



Import Users

Once imported, you can click into the folder and manually check the ***Synchronization Status*** in the top right of the screen. You will know the accounts are well synchronized when the credentials have a green bar on the left.



PAM Account Sync Check

You are now ready to use the privileged access management portion of Devolutions Server!

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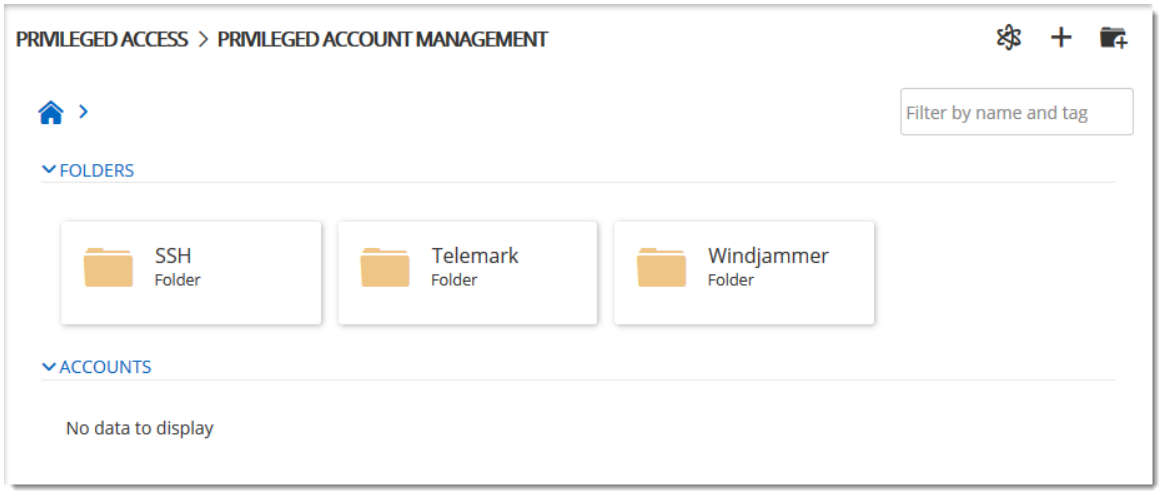
6.2 Accounts

DESCRIPTION

The Accounts section allows to manage all privileged accounts within the Privileged Access Management solution. The accounts can be organized within folders or directly saved in the Root.



Accounts dashboard

For every privileged account, it is possible to manage the checkout/check-in process or to have access to many options described below.

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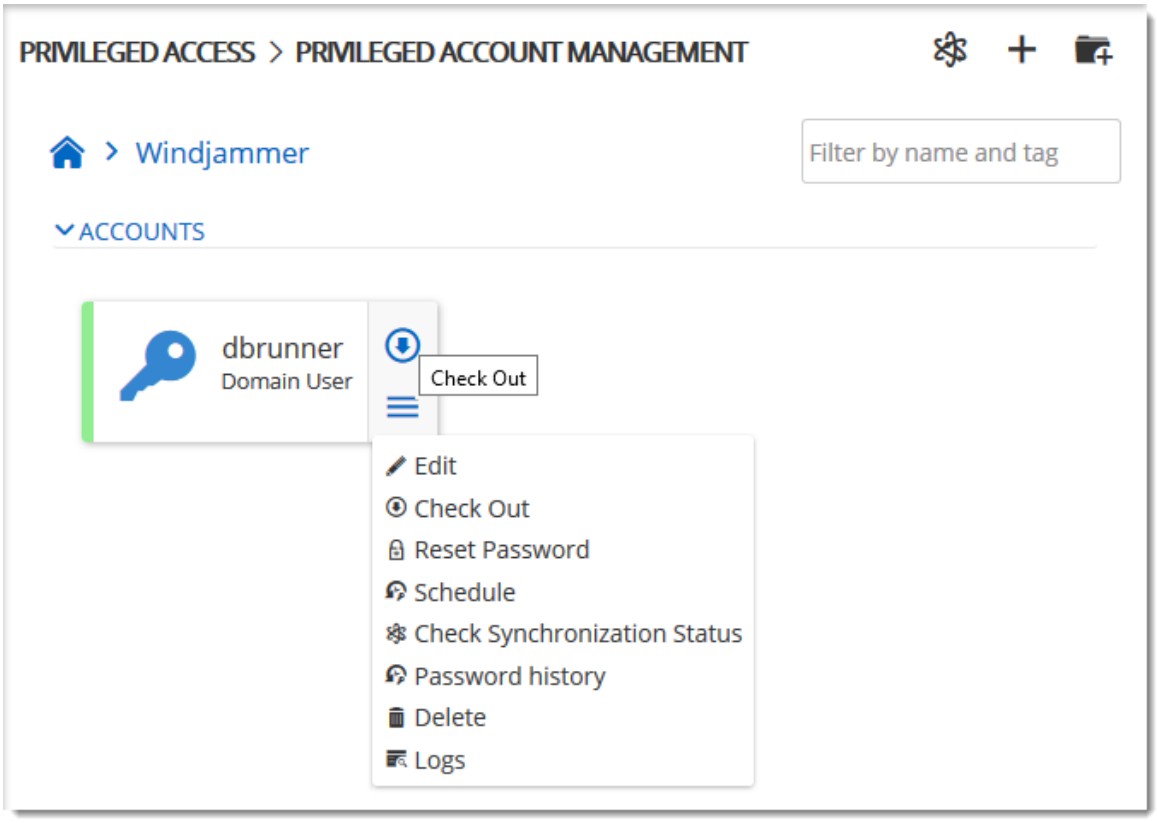

Privileged Accounts folder content

MORE

OPTIONS	DESCRIPTION
Edit	Edit the privileged account properties.
Check Out	Access and lock the privileged account.
Reset Password	Reset the password in Devolutions Server and in Active Directory or on the Local SSH machine.
Schedule	Reset the password based on a automated schedule.
Check Synchronization Status	Verify if the Provider can still access the account in the Domain or the Local SSH machine.

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OPTIONS	DESCRIPTION
Password history	Open the Password history dialog.
Delete	Remove the account from the Privileged Account Management system without deleting it in the Domain or the Local SSH machine.
Logs	Open the Logs dialog which contains the account's activity.

6.3 Providers

DESCRIPTION

The usage of Providers is required to scan the Active Directory structure, your local network for SSH discovering, and SQL.

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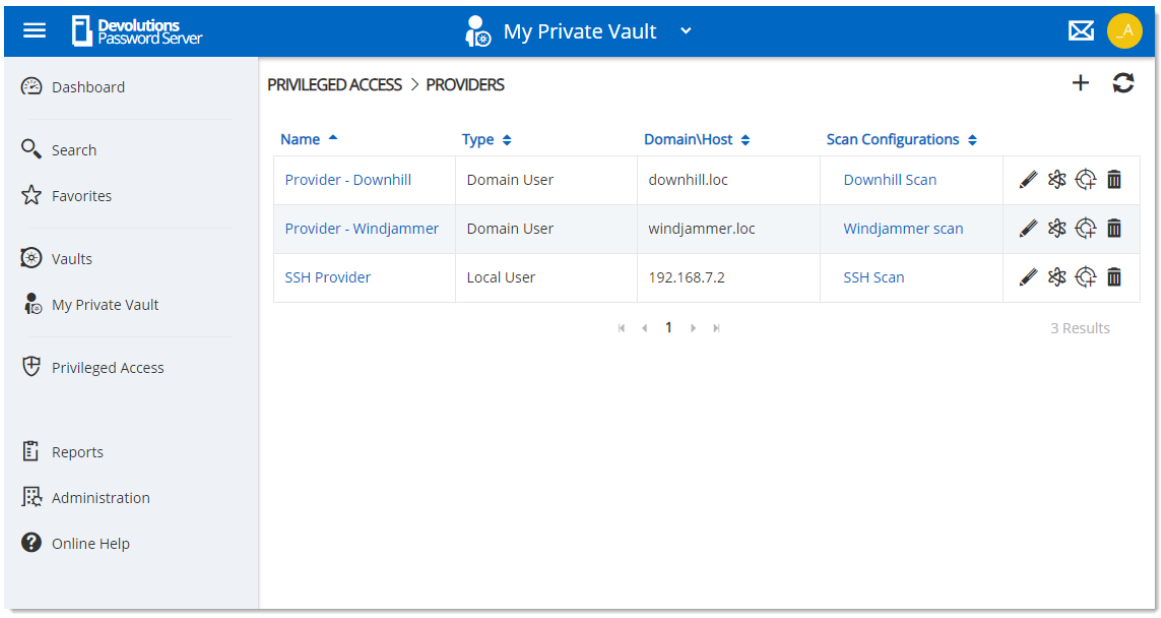
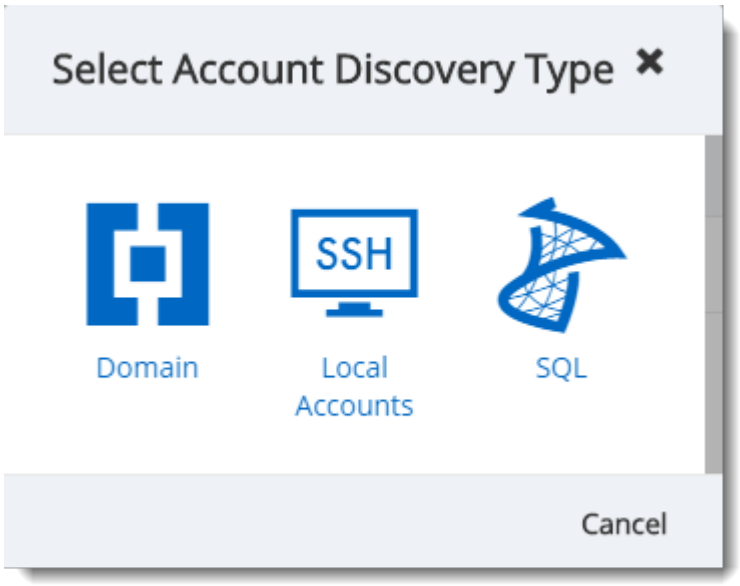


Providers dashboard

On the creation of a Provider, two choices are available: Domain User, SSH Local User, and SQL User. Multiple Providers can be created and can reach different domains as long as the Devolutions Server instance can communicate with the domain controller.



Provider Type dialog

The usage of Providers is required to scan the Active Directory structure, your local network for SSH discovering or your SQL Server accounts.

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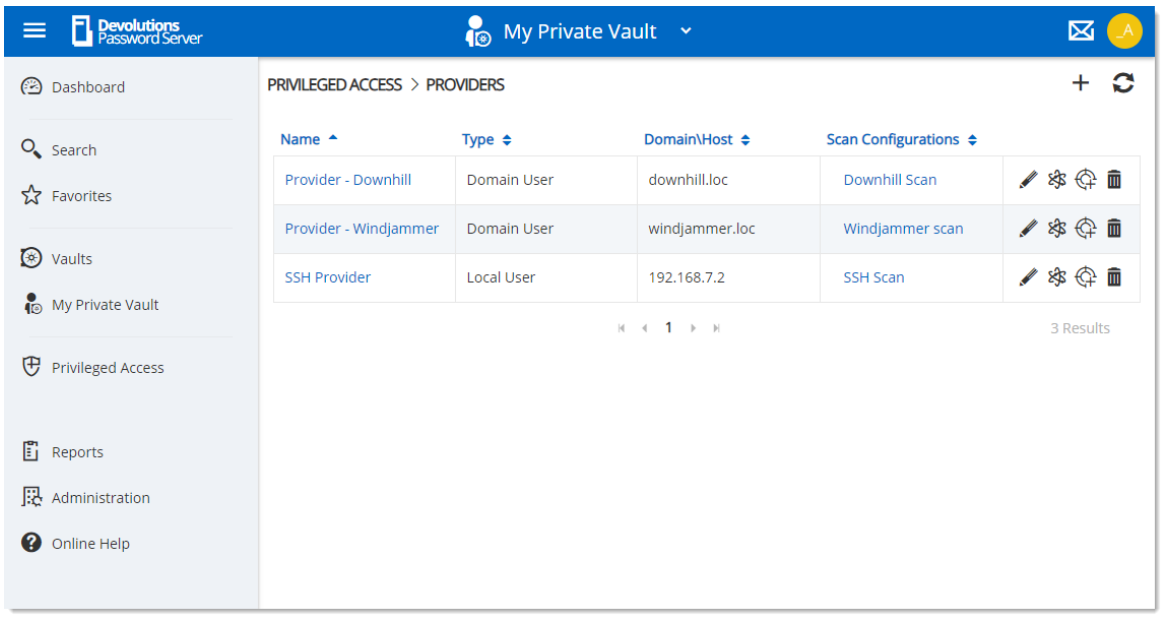
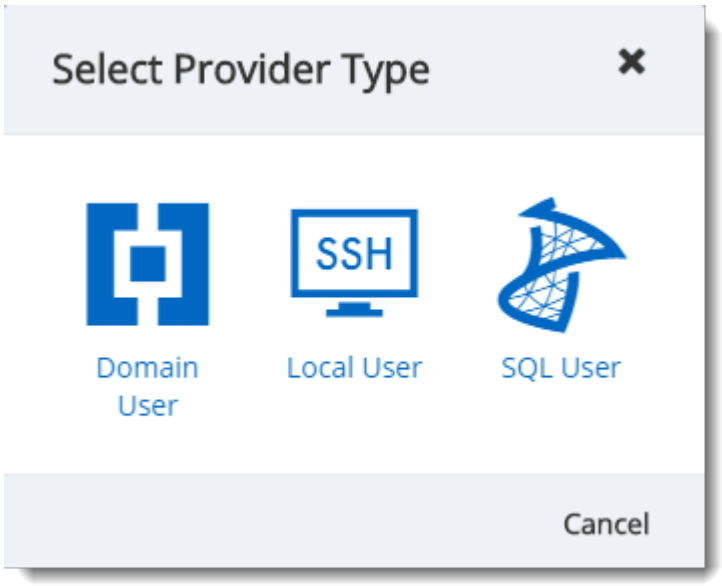


Providers dashboard

On the creation of a Provider, three choices are available: Domain User, SQL Server or SSH Local User. Multiple Providers can be created and can reach different domains as long as the Devolutions Server instance can communicate with the domain controller.



Provider Type dialog

6.3.1 Domain Provider

DESCRIPTION

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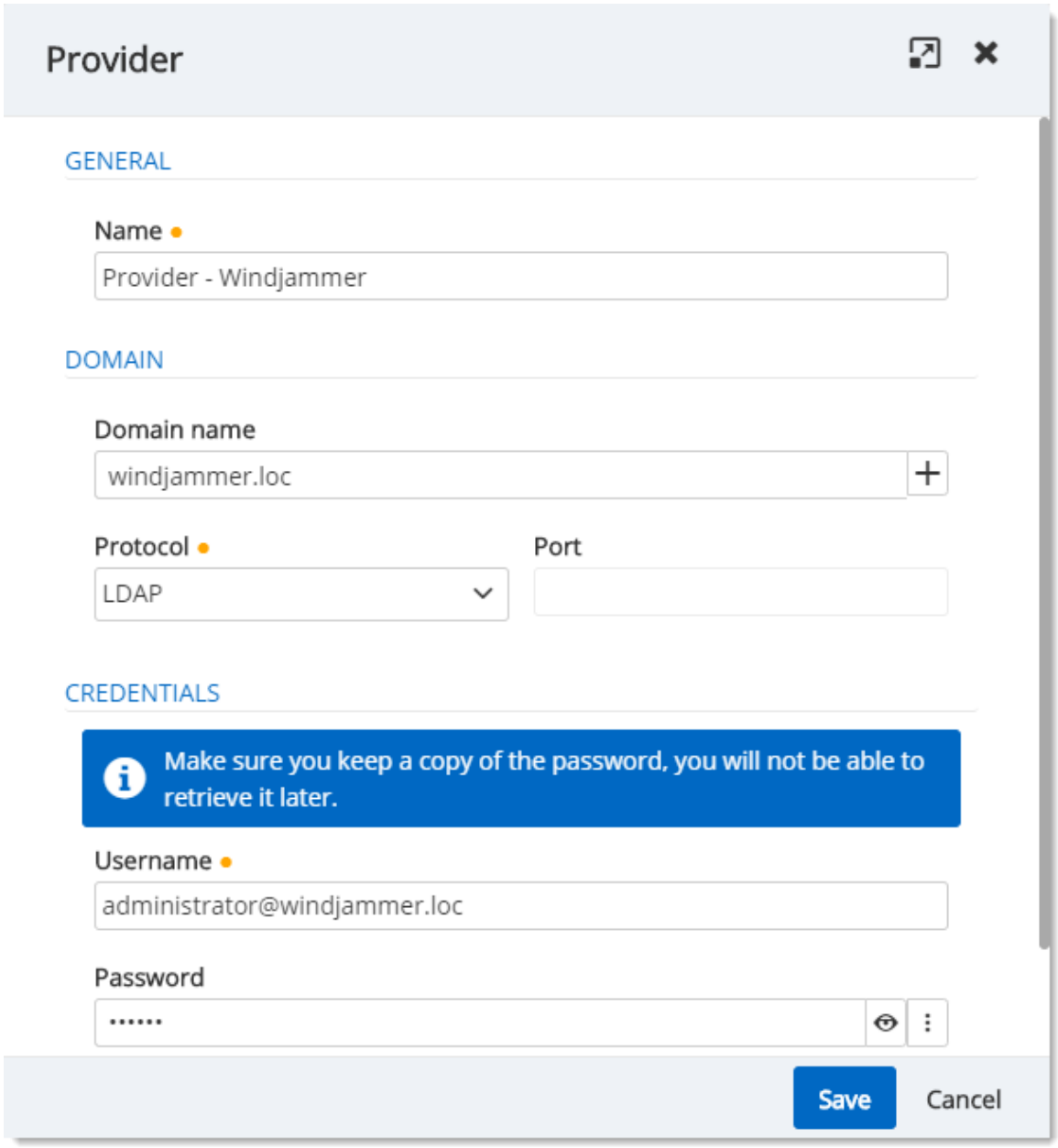
The Domain Provider allows Devolutions Server to store the domain account credentials to be used for Active Directory accounts discovery or to achieve password rotation.



Domain Provider dialog

GENERAL

© 2021 Devolutions inc.

OPTIONS	DESCRIPTION
Name	Display name of the Provider.

DOMAIN

OPTIONS	DESCRIPTION
Domain name	FQDN of the domain against where the scan or the password rotation will be executed.
Protocol	Protocol used to contact the domain controller. Select between: • **LDAP** • **LDAPS**
Port	Set the port number used with the configured Protocol.

CREDENTIALS

OPTIONS	DESCRIPTION
Username	Username of the domain account.
Password	Password of the domain account.

6.3.2 Local SSH Provider

DESCRIPTION

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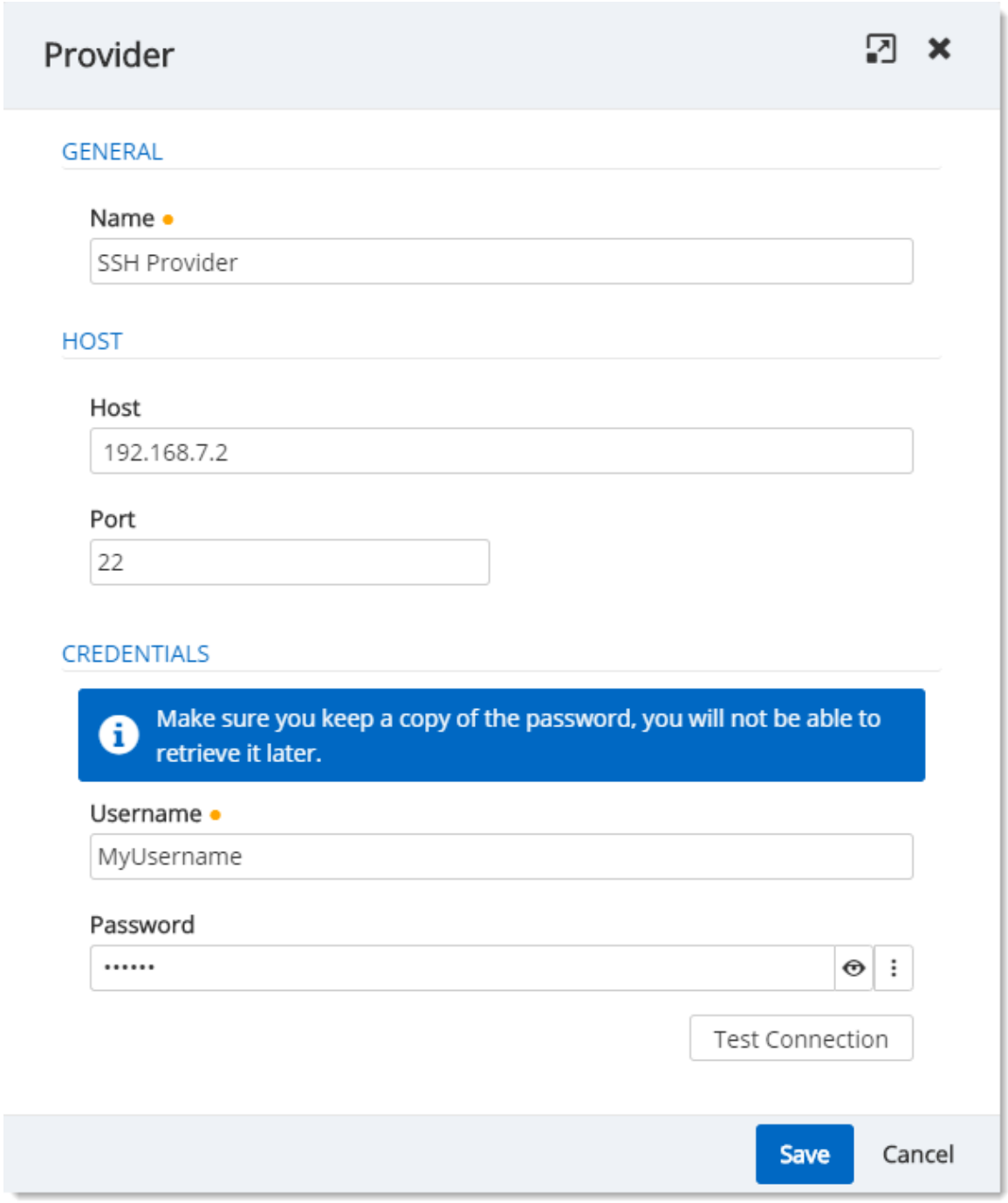
The SSH Provider allows Devolutions Server to store the SSH local account credentials to be used for SSH accounts discovery or to achieve password rotation.



SSH Provider dialog

GENERAL

© 2021 Devolutions inc.

OPTIONS	DESCRIPTION
Name	Display name of the Provider.

HOST

OPTIONS	DESCRIPTION
Host	IP Address or host name where the SSH accounts are located.
Port	Set the port number used to communicate with the host.

CREDENTIALS

OPTIONS	DESCRIPTION
Username	Username of the SSH account.
Password	Password of the SSH account.

6.3.3 SQL Server Provider

DESCRIPTION

The SQL Provider allows Devolutions Server to store the SQL account credentials to be used for SQL accounts discovery or to achieve password rotation.

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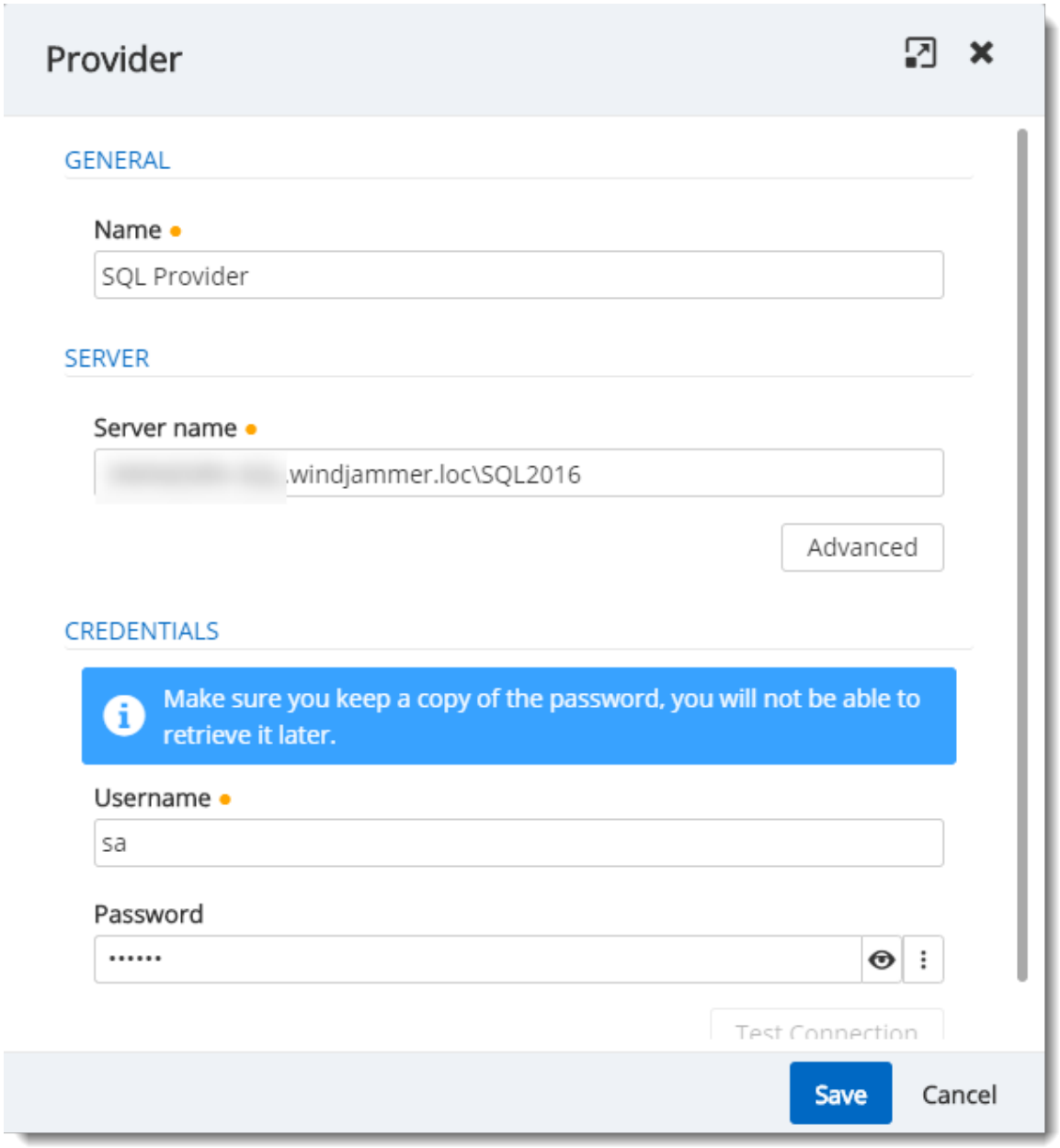

SQL Provider dialog

GENERAL

OPTIONS	DESCRIPTION
Name	Display name of the Provider.

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SERVER

OPTIONS	DESCRIPTION
Server	Hostname of the SQL Server

CREDENTIALS

OPTIONS	DESCRIPTION
Username	Username of the SQL account with rights to list accounts.
Password	Password of the SQL account.

6.4 Scan Configurations

DESCRIPTION

The Scan Configurations or Account Discovery is the configured instance that will discover accounts in a domain, a SQL server or SSH environment.

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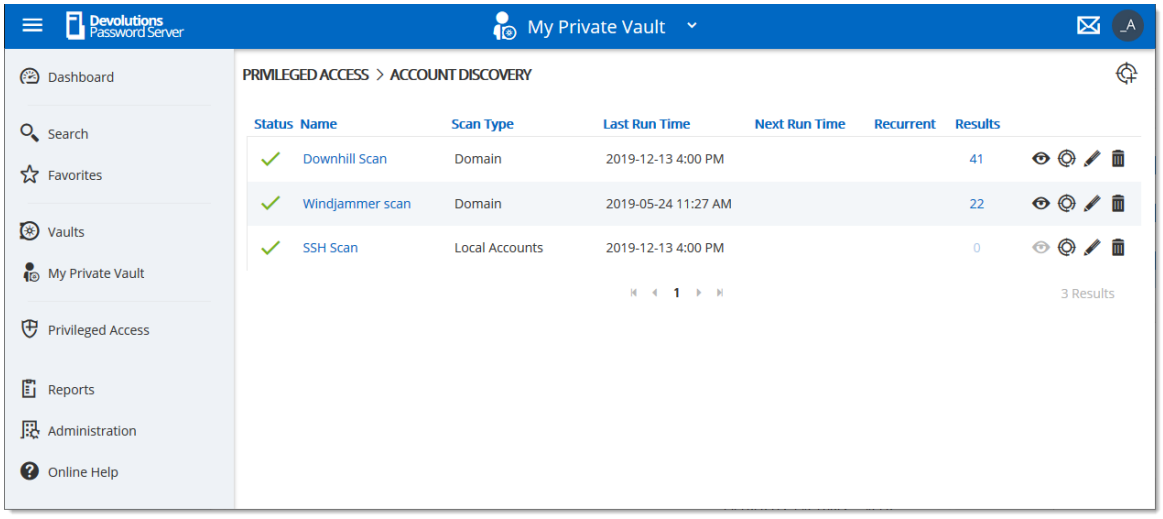
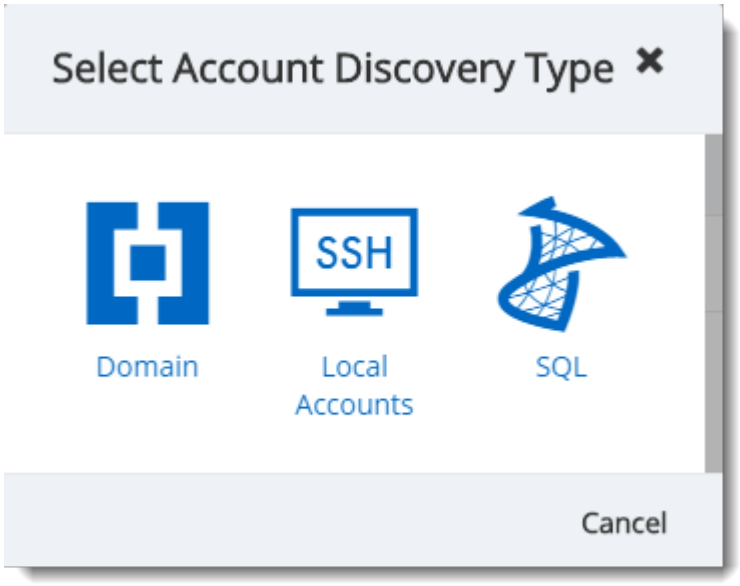


Account Discovery dialog

On the creation of an Account Discovery, it is possible to choose between Domain, SQL Server or SSH Local Accounts.



Account Type Options

To see the results of the discovery process, click on the eye icon of the Account Discovery to see the list of accounts.

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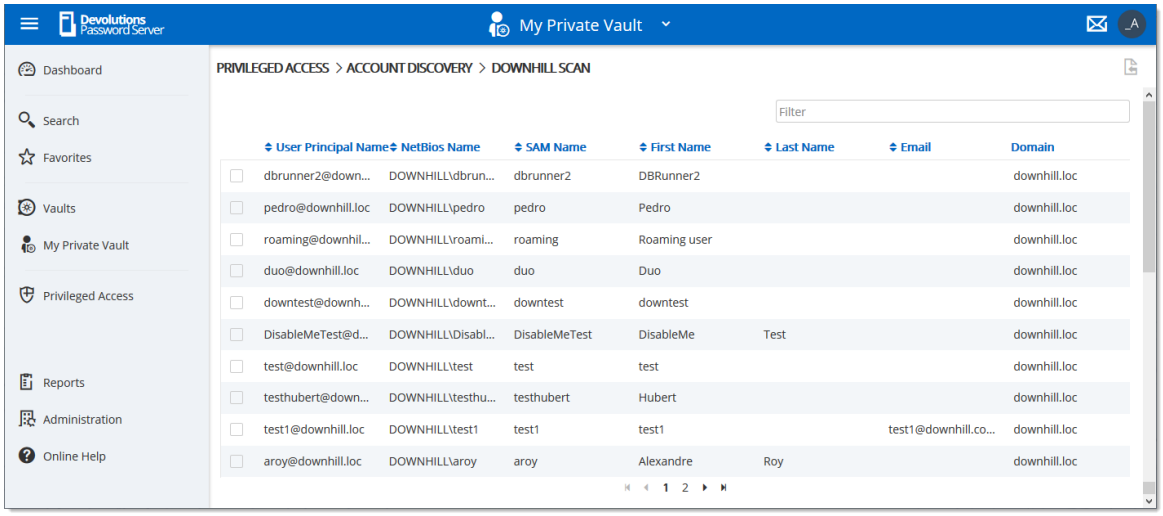
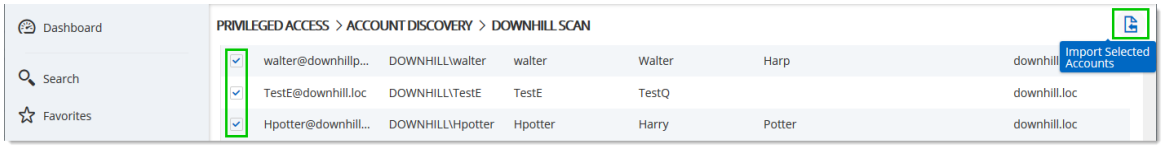


Account Discovery results dialog

In order to manage privileged accounts with the Devolutions Server PAM feature, select the accounts from the Account Discovery results page and click on the Import Selected Accounts button. Then the accounts will be available in Privileged Access - Accounts.



Import Selected Accounts operation

On import, the Provider, Destination Folder and Reset Password options can be set.

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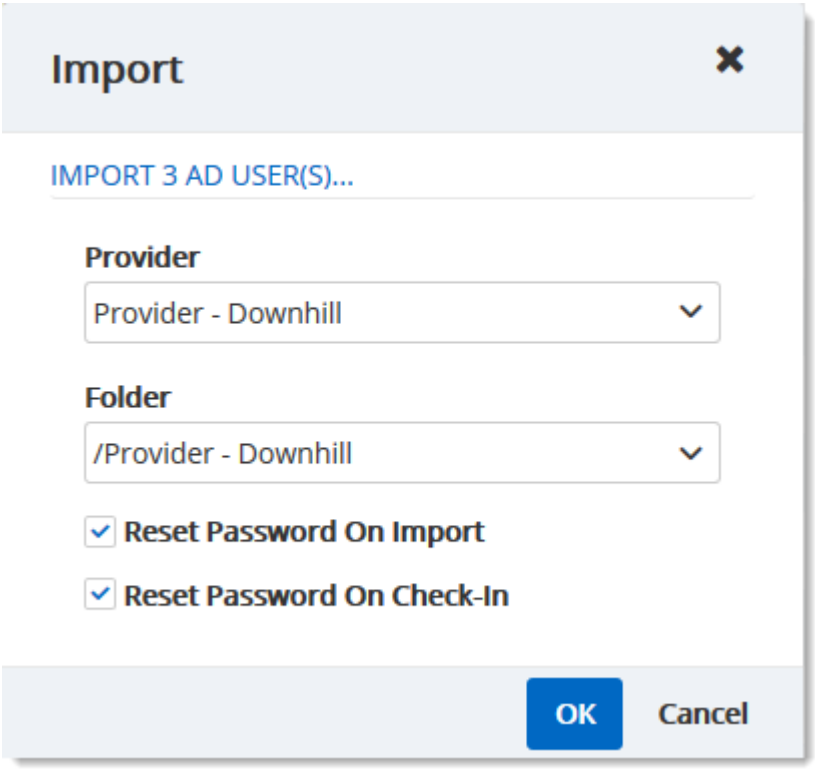

Import Window

IMPORT

OPTIONS	DESCRIPTION
Provider	Select the Provider in the drop-down list.
Folder	Select the destination folder in the drop-down list.
Reset Password On Import	On import, the password will be reset.
Reset Password On Check-In	When the user will release the account on Check-In, the password will be reset.

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6.4.1 Domain Account Discovery

DESCRIPTION

The Domain Account Discovery allows Devolutions Server to scan a domain area to find accounts. The accounts will not be automatically added.

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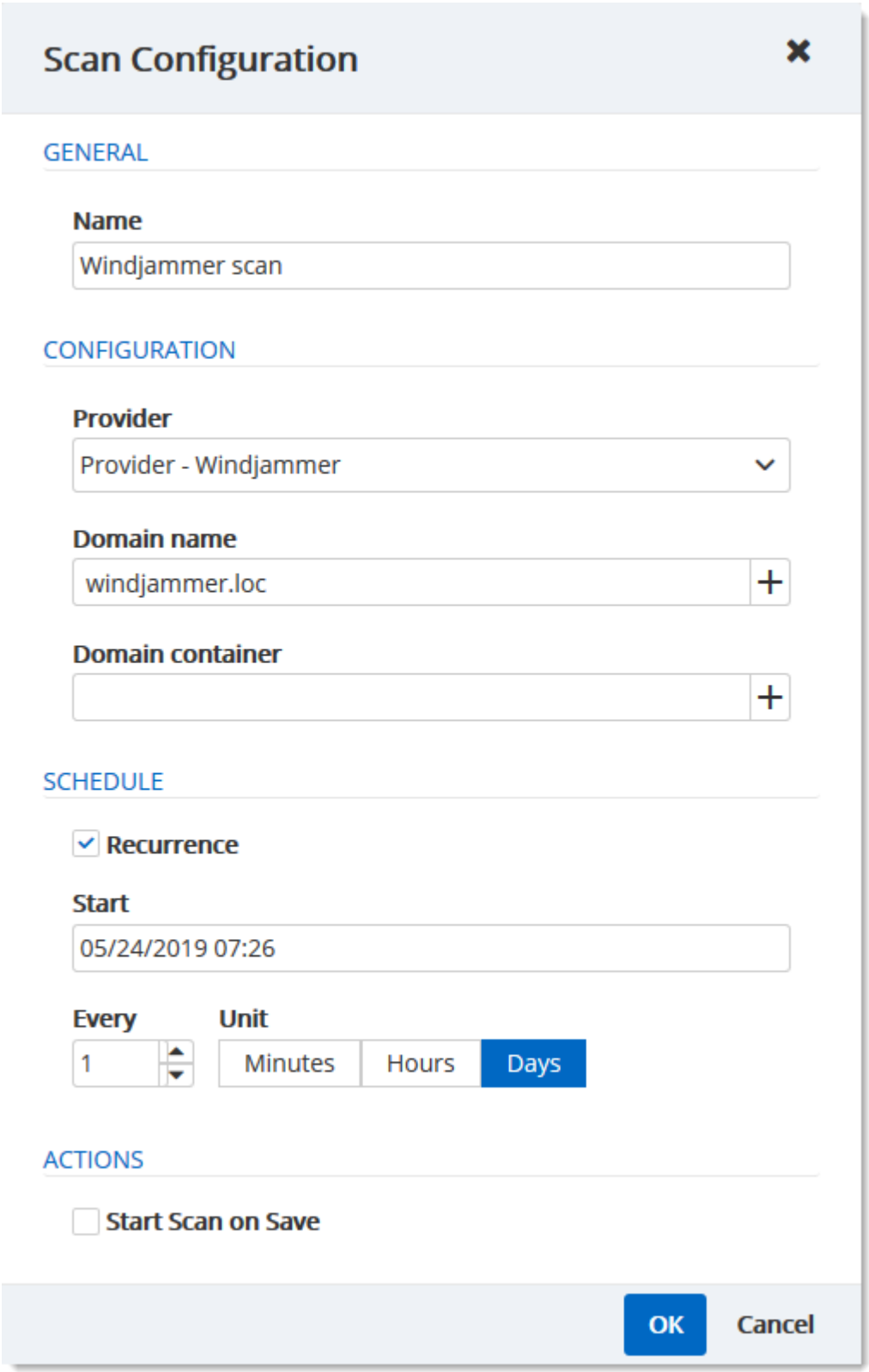


Domain Account Discovery dialog

© 2021 Devolutions inc.

GENERAL

OPTIONS	DESCRIPTION
Name	Display name of the Domain Account Discovery.

CONFIGURATION

OPTIONS	DESCRIPTION
Provider	Name of the Domain Provider.
Domain name	FQDN of the domain against where the scan or the password rotation will be executed.
Domain Container	Distinguished name of an Active Directory OU or group.

SCHEDULE

OPTIONS	DESCRIPTION
Recurrence	If enable, will run the Account Discovery on a regular basis depending on the schedule configuration.
Start	Starting date and hour of the Account Discovery recurrence.
Every	Number of Units.
Unit	Units of time.

© 2021 Devolutions inc.

ACTION

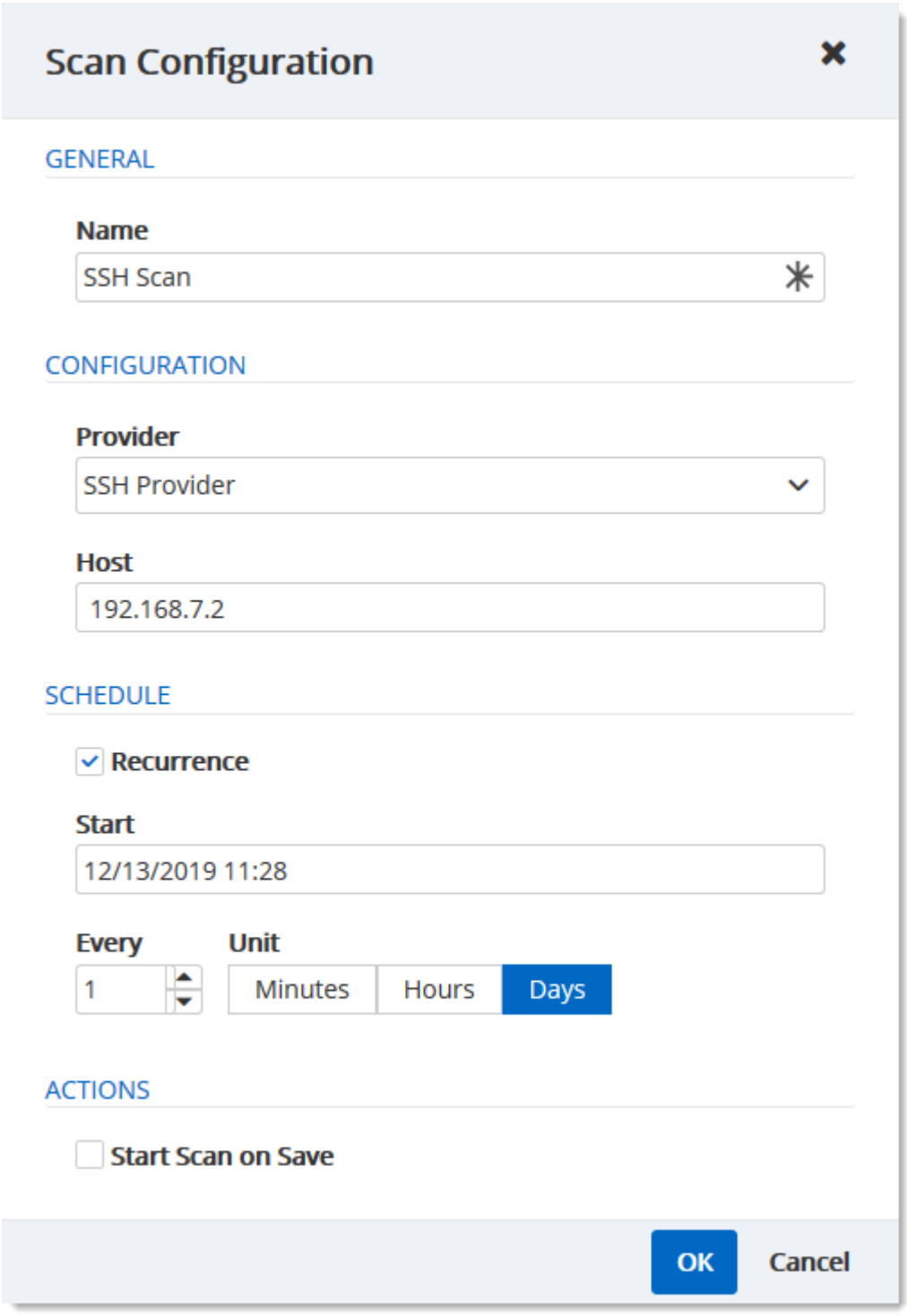
OPTIONS	DESCRIPTION
Start Scan on Save	If enabled, will start the account discovery scan on saving the modifications.

6.4.2 SSH Account Discovery

DESCRIPTION

The SSH Account Discovery allows Devolutions Server to scan the host to find accounts. The accounts will not be automatically added.

© 2021 Devolutions inc.



SSH Account Discovery dialog

GENERAL

© 2021 Devolutions inc.

OPTIONS	DESCRIPTION
Name	Display name of the SSH Account Discovery.

CONFIGURATION

OPTIONS	DESCRIPTION
Provider	Name of the SHH Provider.
Host	IP of the host where the scan or the password rotation will be executed.

SCHEDULE

OPTIONS	DESCRIPTION
Recurrence	If enable, will run the Account Discovery on a regular basis depending on the schedule configuration.
Start	Starting date and hour of the Account Discovery recurrence.
Every	Number of Units.
Unit	Units of time.

ACTION

© 2021 Devolutions inc.

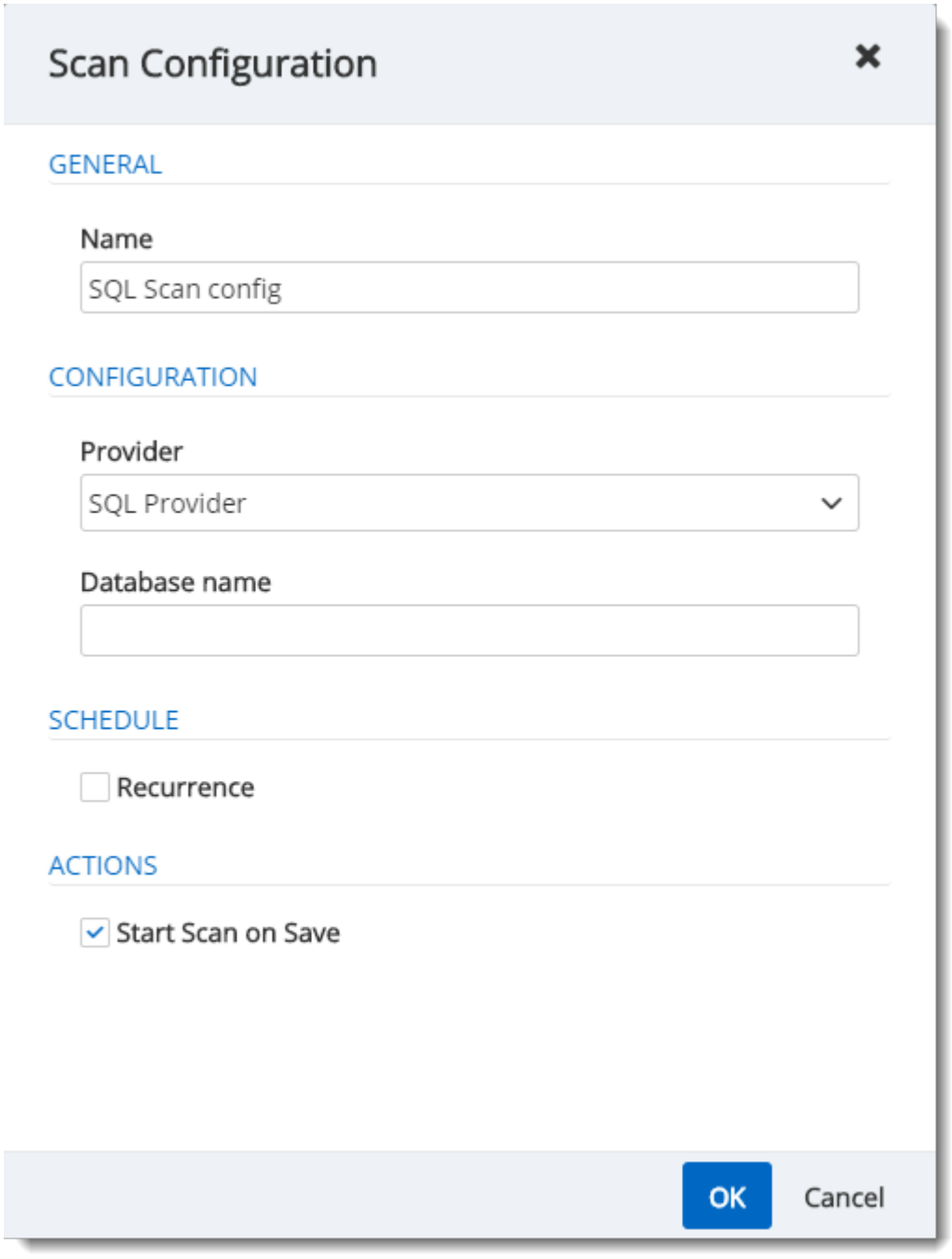
OPTIONS	DESCRIPTION
Start Scan on Save	If enabled, will start the account discovery scan on saving the modifications.

6.4.3 SQL Account Discovery

DESCRIPTION

The SQL Account Discovery allows Devolutions Server to scan the host to find accounts. The accounts will not be automatically added.

© 2021 Devolutions inc.



SQL Account Discovery dialog

GENERAL

© 2021 Devolutions inc.

OPTIONS	DESCRIPTION
Name	Display name of the SQL Account Discovery.

CONFIGURATION

OPTIONS	DESCRIPTION
Provider	Name of the SQL Provider.
Database Name	Name of the Database, the scan will list the accounts in that database

SCHEDULE

OPTIONS	DESCRIPTION
Recurrence	If enable, will run the Account Discovery on a regular basis depending on the schedule configuration.
Start	Starting date and hour of the Account Discovery recurrence.
Every	Number of Units.
Unit	Units of time.

ACTION

© 2021 Devolutions inc.

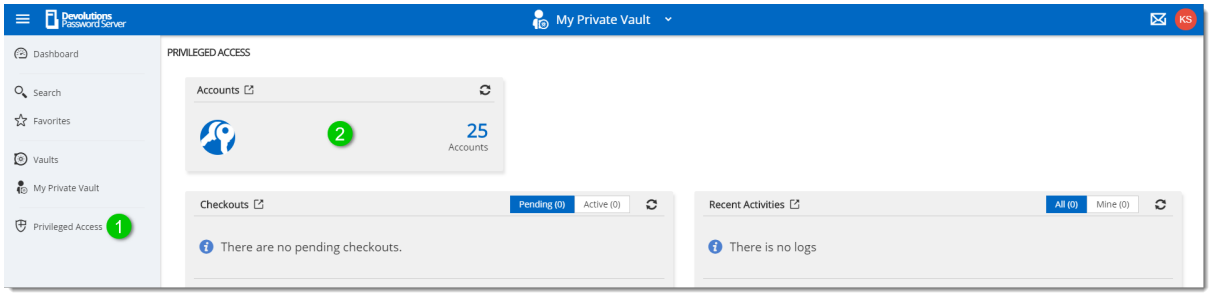
OPTIONS	DESCRIPTION
Start Scan on Save	If enabled, will start the account discovery scan on saving the modifications.

6.5 Checkout Process

DESCRIPTION

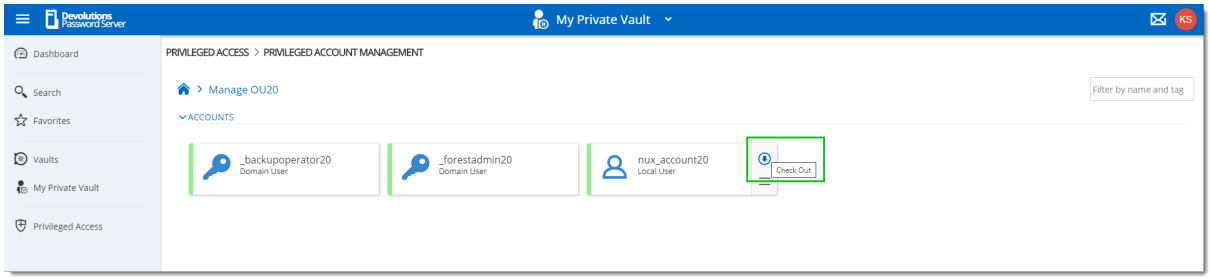
1. To check out an entry requiring approbation, the user needs to go to the ***Privileged Access*** section on the Devolutions Server's webpage.

2. The user then clicks on the ***Accounts*** panel.



Privileged Access

The user then locates the account they want to check out for temporary use and clicks the ***Check Out*** button on the entry.



PAM Account Selection

A pop-up will appear requesting information on the checkout request to be sent to an administrator for approval.

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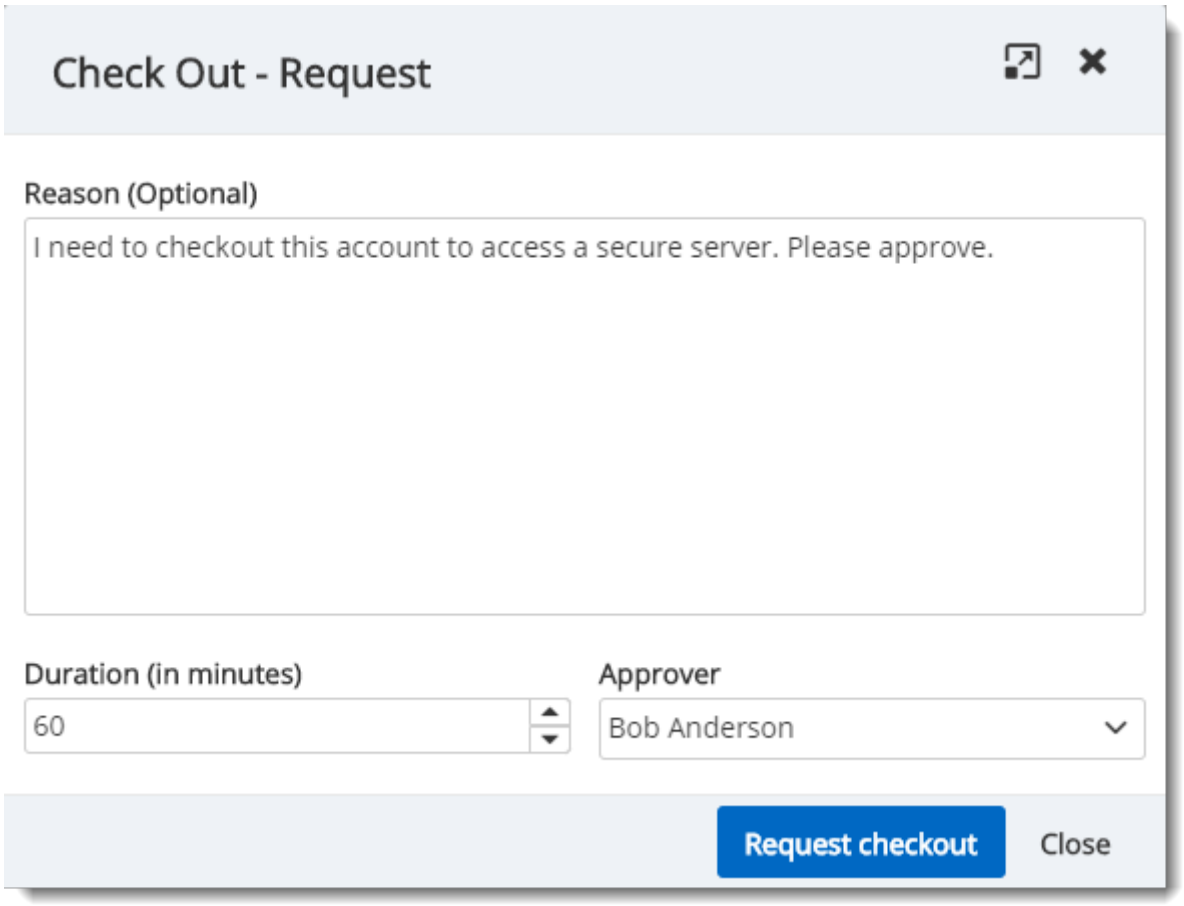
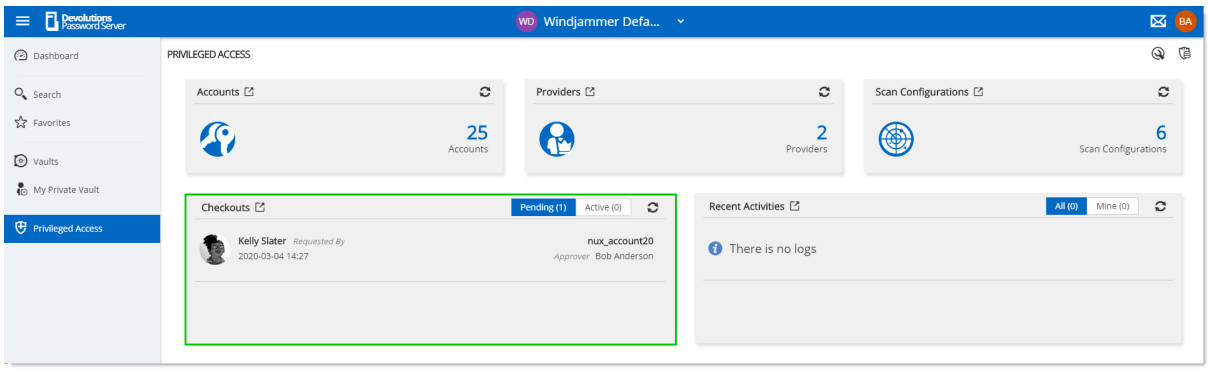


Checkout Request

Once the request is sent, the selected Approver will have the request in the ***Checkout*** field of his ***Privileged Access*** window.



Checkout Request

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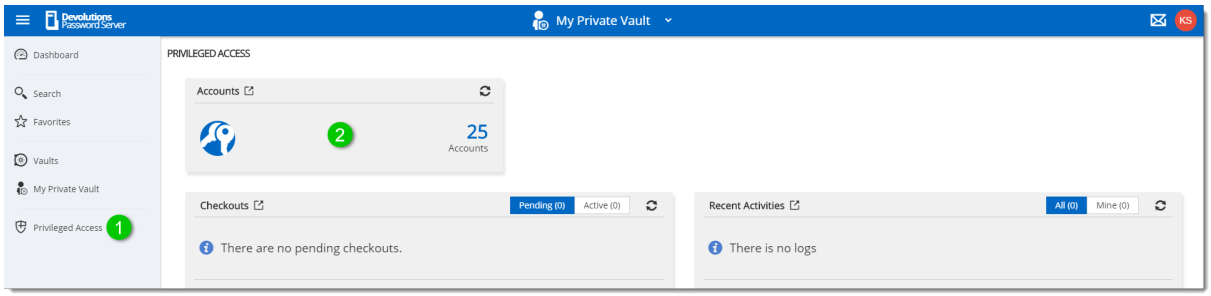
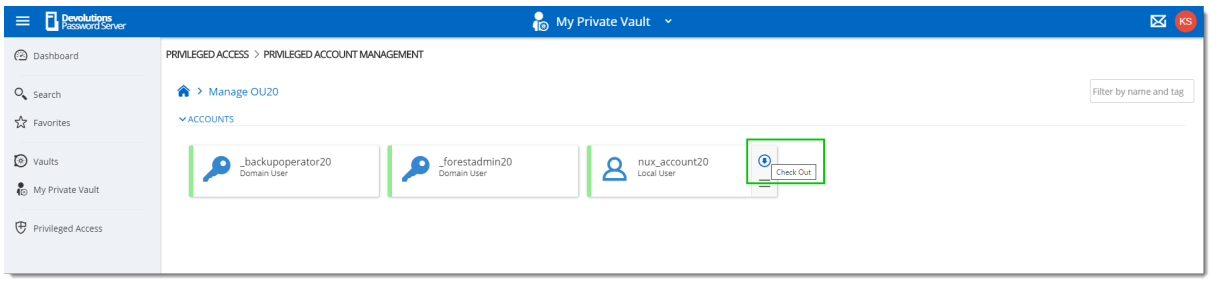


Privileged Access

The user then locates the account they want to Check Out for temporary use and clicks the ***Check Out*** button on the entry.



PAM Account Selection

A pop-up will appear requesting information on the checkout request to be sent to an administrator for approval.

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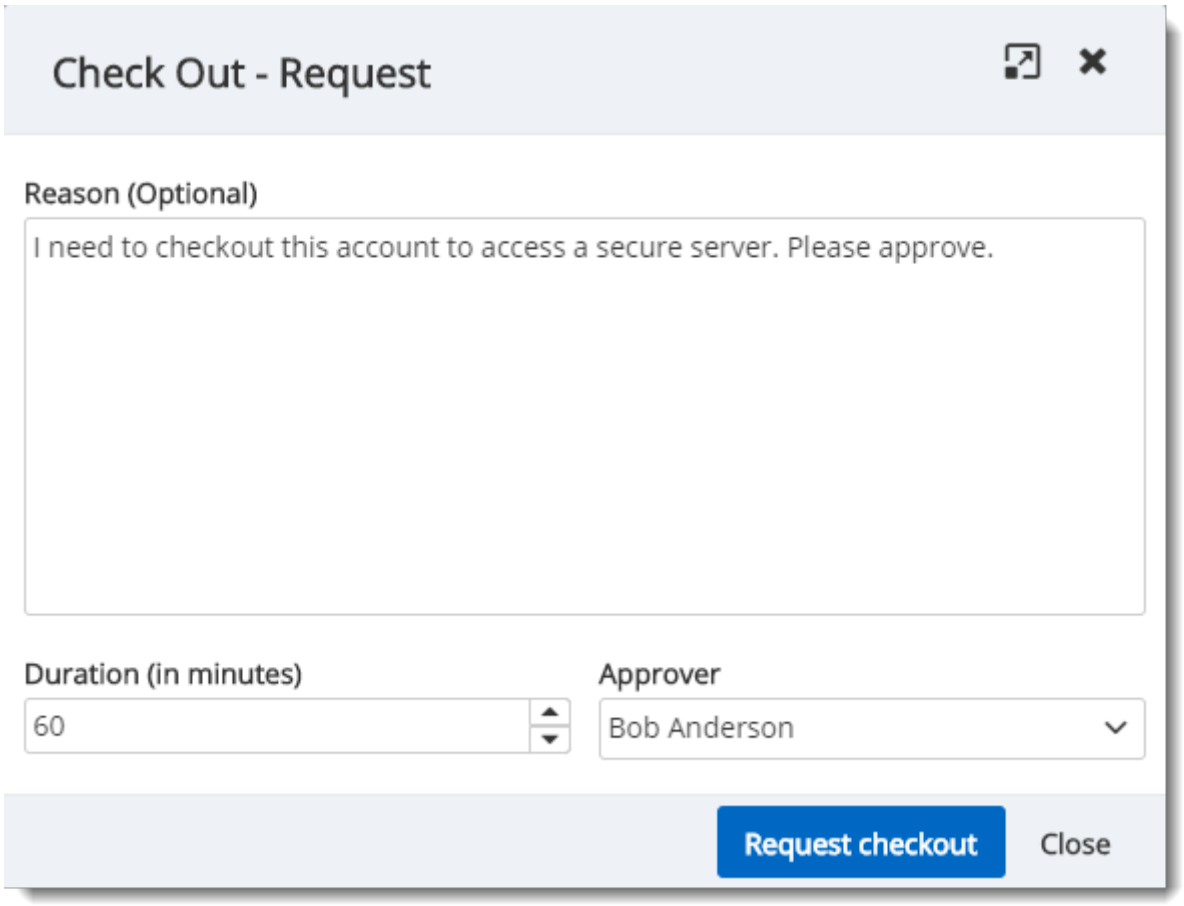
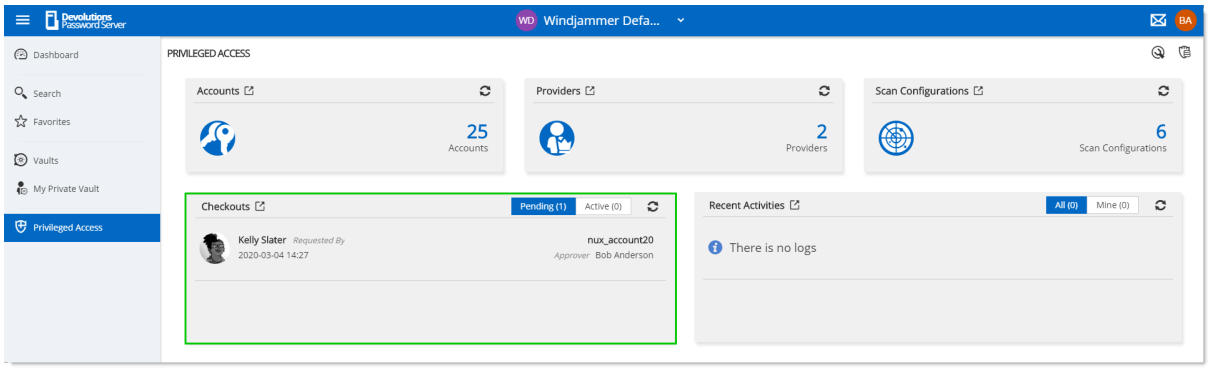


Checkout Request

Once the request is sent, the selected Approver will have the request in the "Checkout" field of his ***Privileged Access*** window.



Checkout Request

The approver gets the following pop-up when clicking on the request where it's possible to either ***Approve*** or ***Deny*** the request and leave an optional message.

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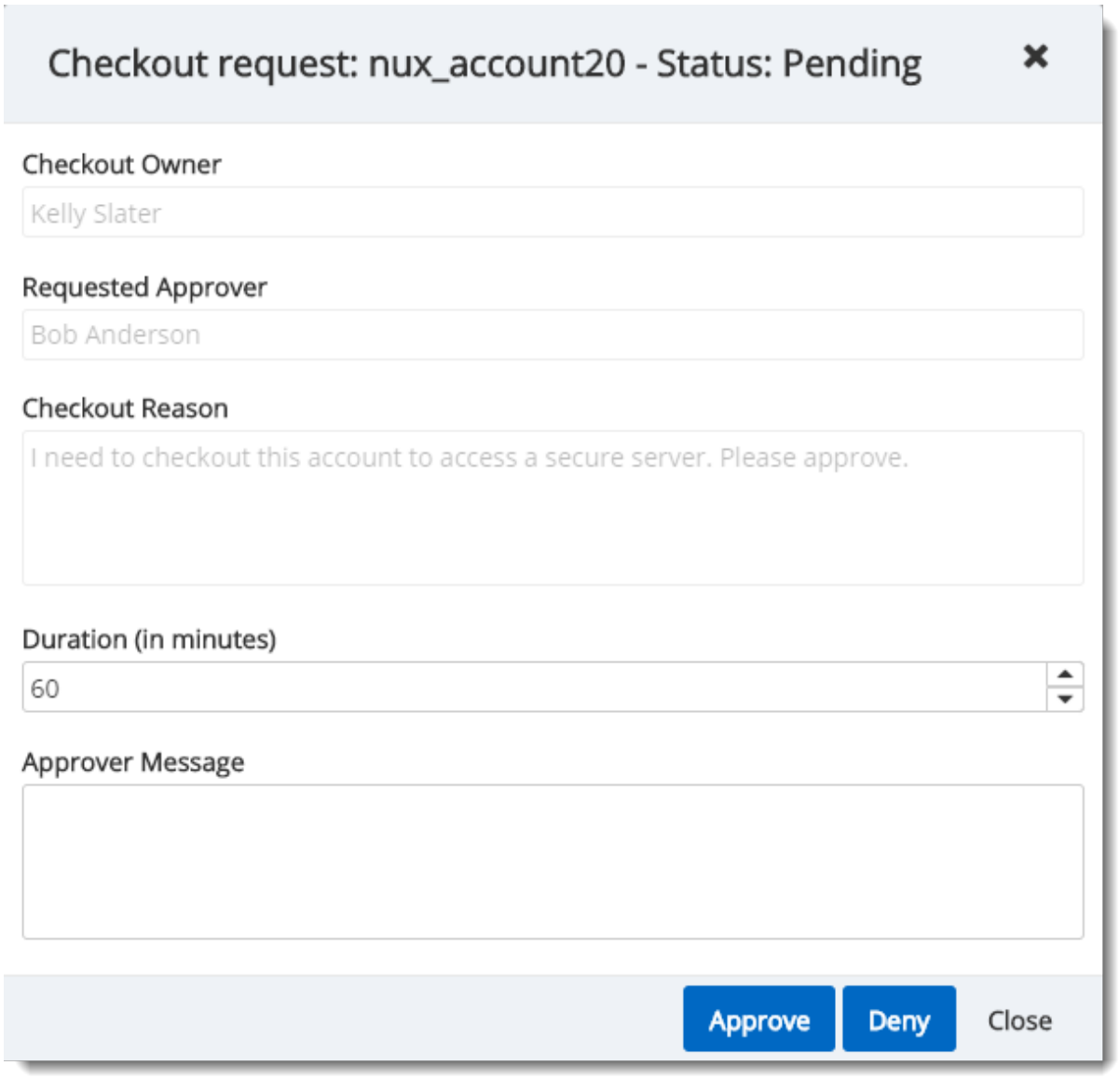

Approve/Deny Window

If the request is denied, the user will see that their request on the account is no longer pending and was denied in the recent activity field of the main ***Privileged Access*** page. If approved, they will be able to access the account by clicking on the same button they used to submit the request. They'll now get this ***Active Checkout*** window instead of the request one :

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Checkout Active

Once done with the account, they can use the ***CheckIn*** button on the last window to release their hold on the checkout.

Privileged accounts' passwords are automatically changed on check-in if the corresponding option is enabled.

6.6 View Sensitive Data vs Account Brokering

DESCRIPTION

It is important to learn the differences between the 2 sets of permissions known as ***View sensitive data on checkout*** and ***Credential Brokering***. In this topic, you will find an explanation of the way they're used.

Giving access to ***View Sensitive Data on Checkout*** to a user will let that user see the password when the entry is checked out.

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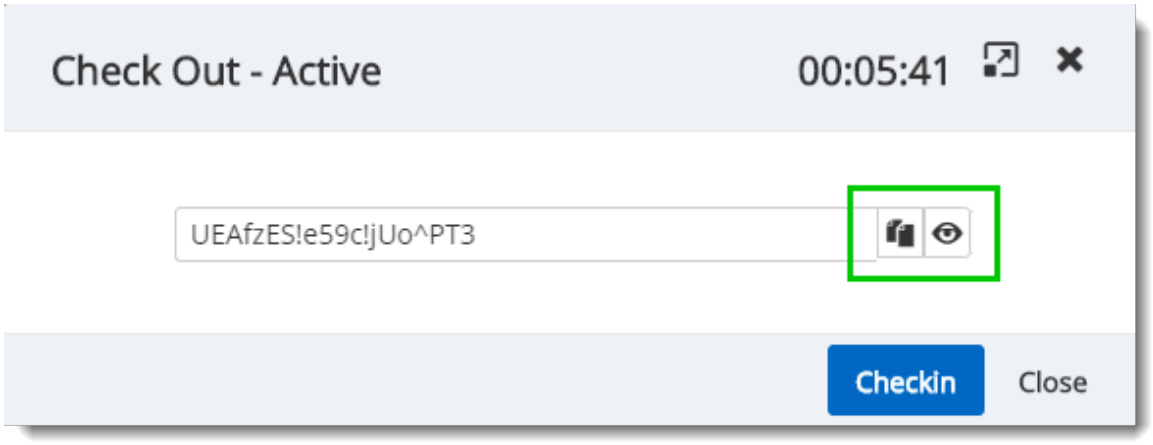

With Access

Without access

Credential Brokering lets a user check out credentials for a session from Remote Desktop Manager directly on the entry itself. When opening the session that requires a privileged account, a pop-up can appear with the ***checkout request*** window if the entry requires approval. Following the approval, the user will be able to launch the session successfully. Otherwise, the entry will be used seamlessly to open the session.

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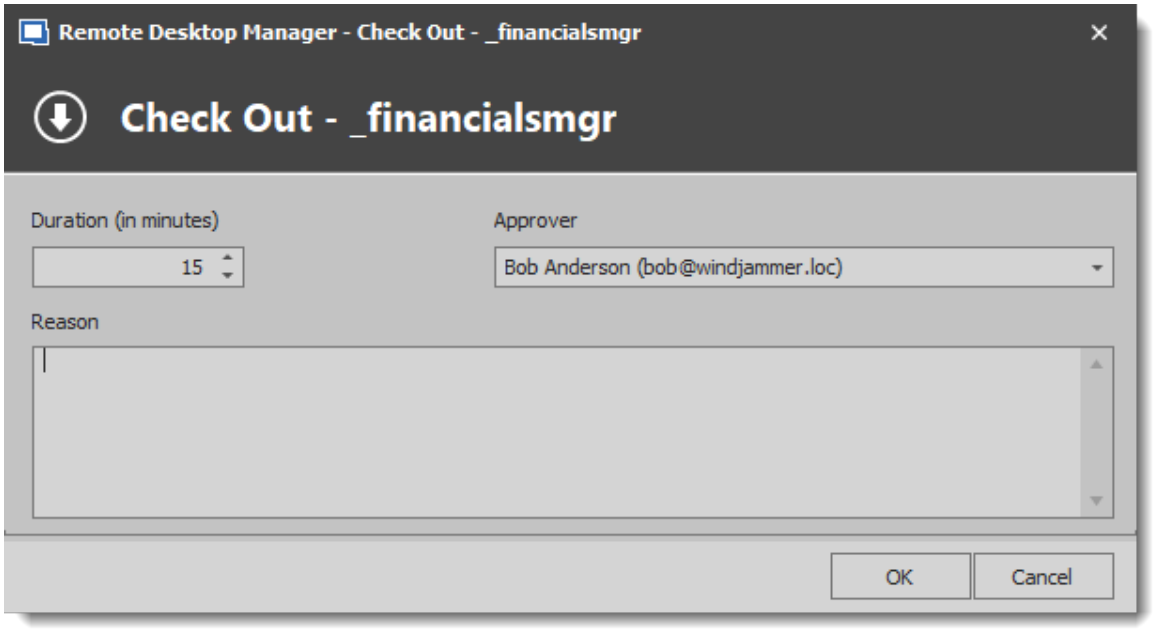

Credential Brokering Checkout Request

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Devolutions Gateway

Part

7 Devolutions Gateway

7.1 Overview

DESCRIPTION

Devolutions Gateway is the relay server for peer-to-peer connectivity between a remote machine and your machine when a direct connection is not possible.

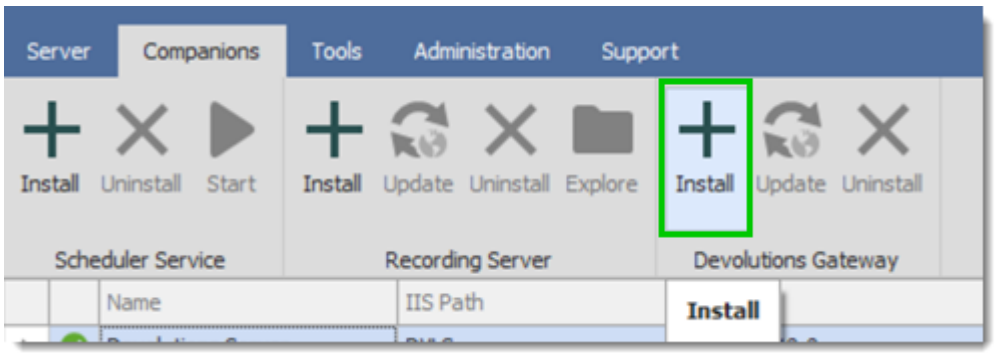
7.2 Devolutions Server Configuration

DESCRIPTION

This topic describes how to configure Devolutions Server to connect on Devolutions Gateway.

STEPS

1. From the Devolutions Server Console, click on the Companions tab and then Install the Devolutions Gateway.



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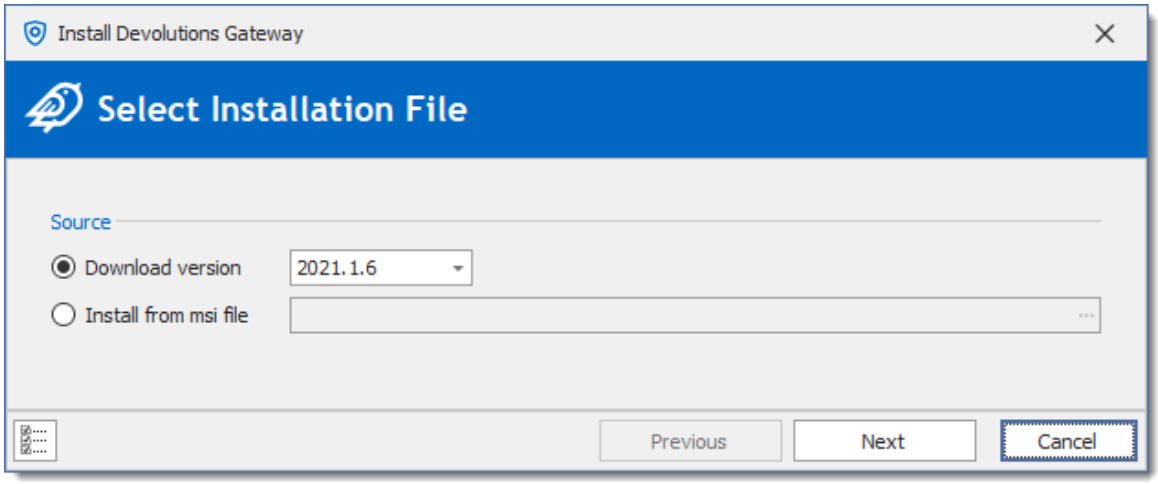
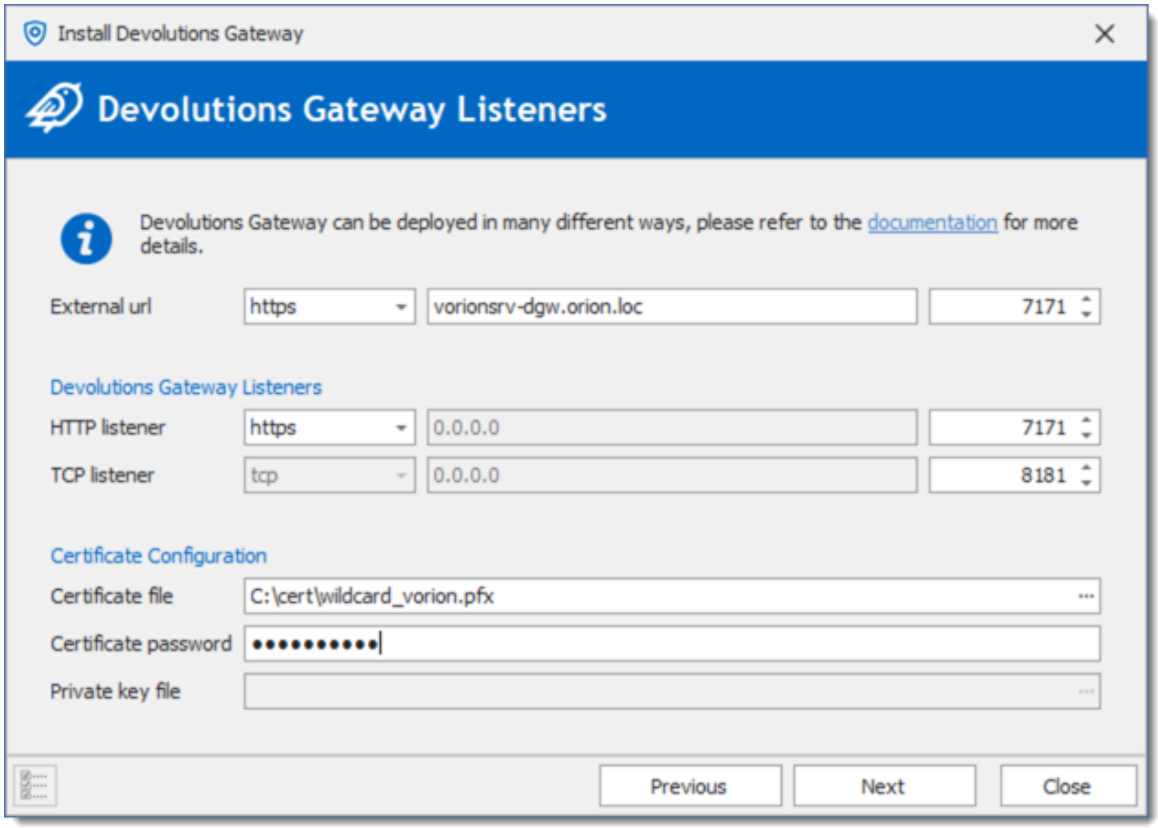
2. You can either download the latest version, or retrieve the msi file from GitHub if you do not have Internet access.
   https://github.com/Devolutions/devolutions-gateway/releases



3. You can then specify the configuration.



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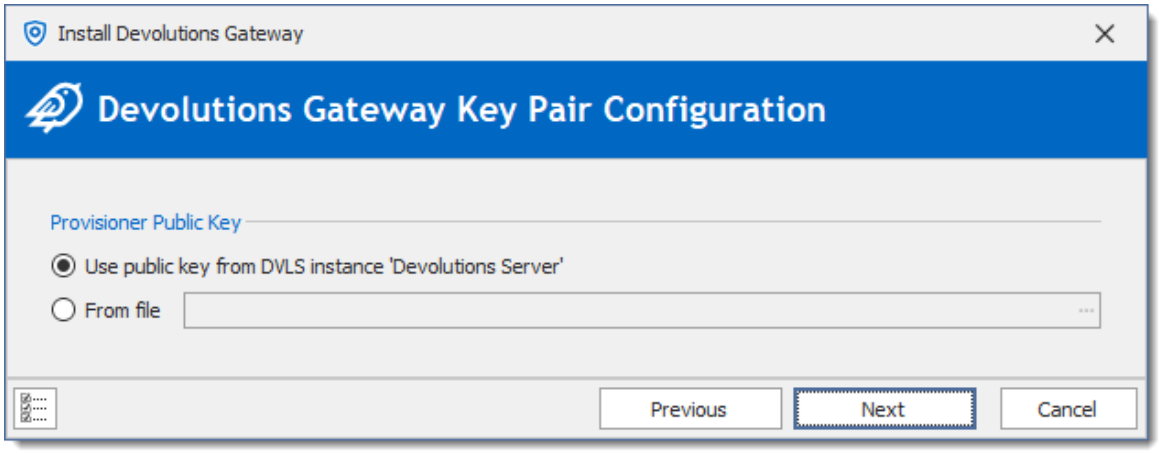
a. External URL: URL to reach the Devolutions Gateway from the RDM client. The port can be set as per your requirements, we will use 7171 since the Devolutions Gateway is installed on the same server as Devolutions Server.

b. HTTP Listener: HTTP(s) port to reach the Devolutions Gateway. If the Devolutions Gateway is placed behind a Load balancer, it can be set to use HTTP, if the Devolutions Gateway is directly accessible, you can (and should) specify an SSL certificate (see last section).

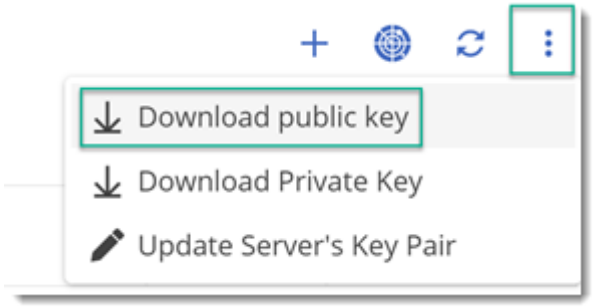
c. TCP Listener: port used for the RDP sessions, and eventually the SSH sessions.

d. Certificate configuration: required if the HTTP Listener is set to HTTPS.

4. If the Devolutions Gateway is installed on the same server as the instance of Devolutions Server, you can use the first option for the Key Pair.



If the Devolutions Gateway is installed on another server, you can download the Public Key from the web interface of Devolutions Server (Administration > Gateway).



5. Validate the information and click Install.

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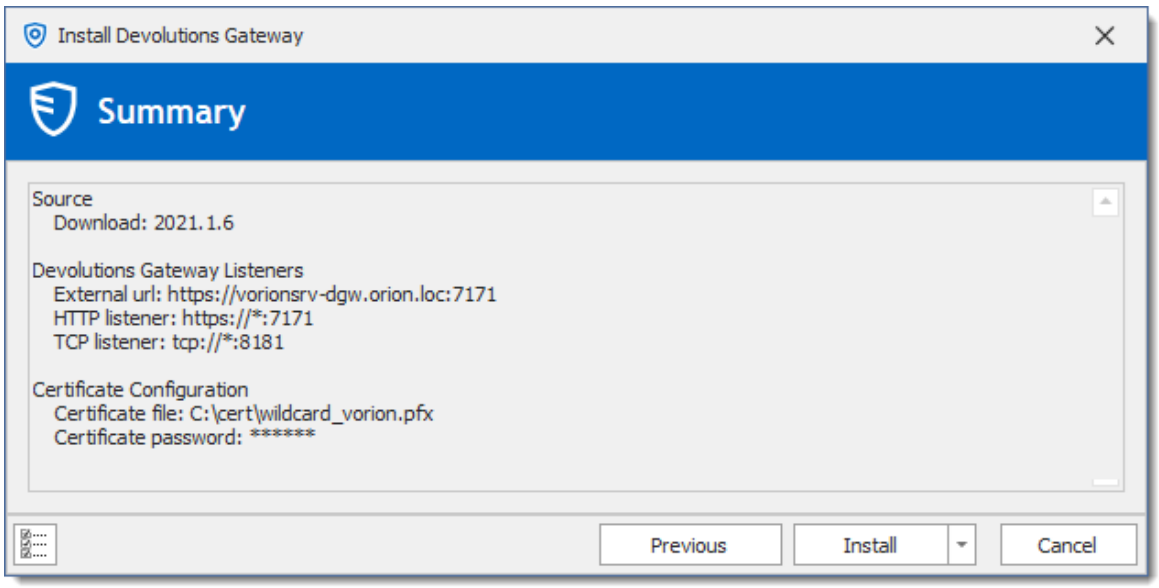
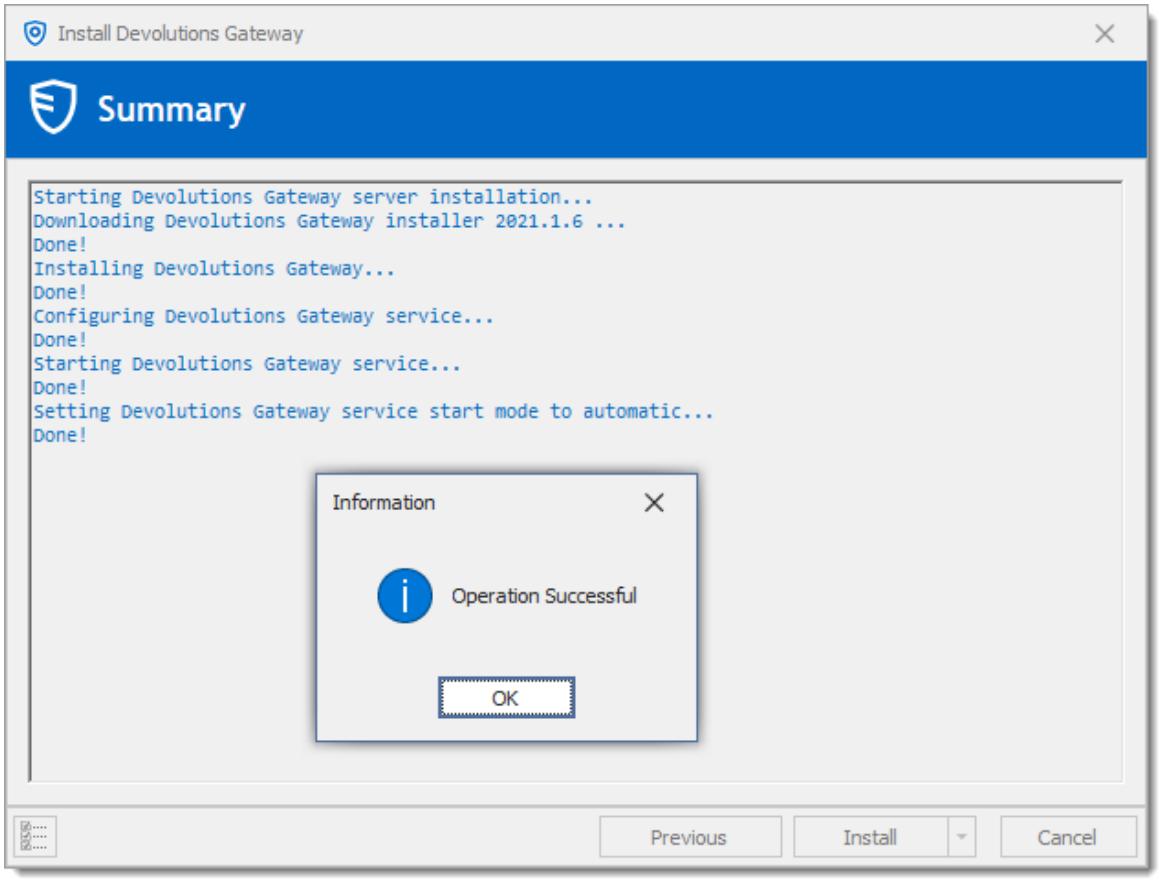


6. The Devolutions Gateway service will then be installed.



7. On the Devolutions Server web interface, connect with an administrative account.

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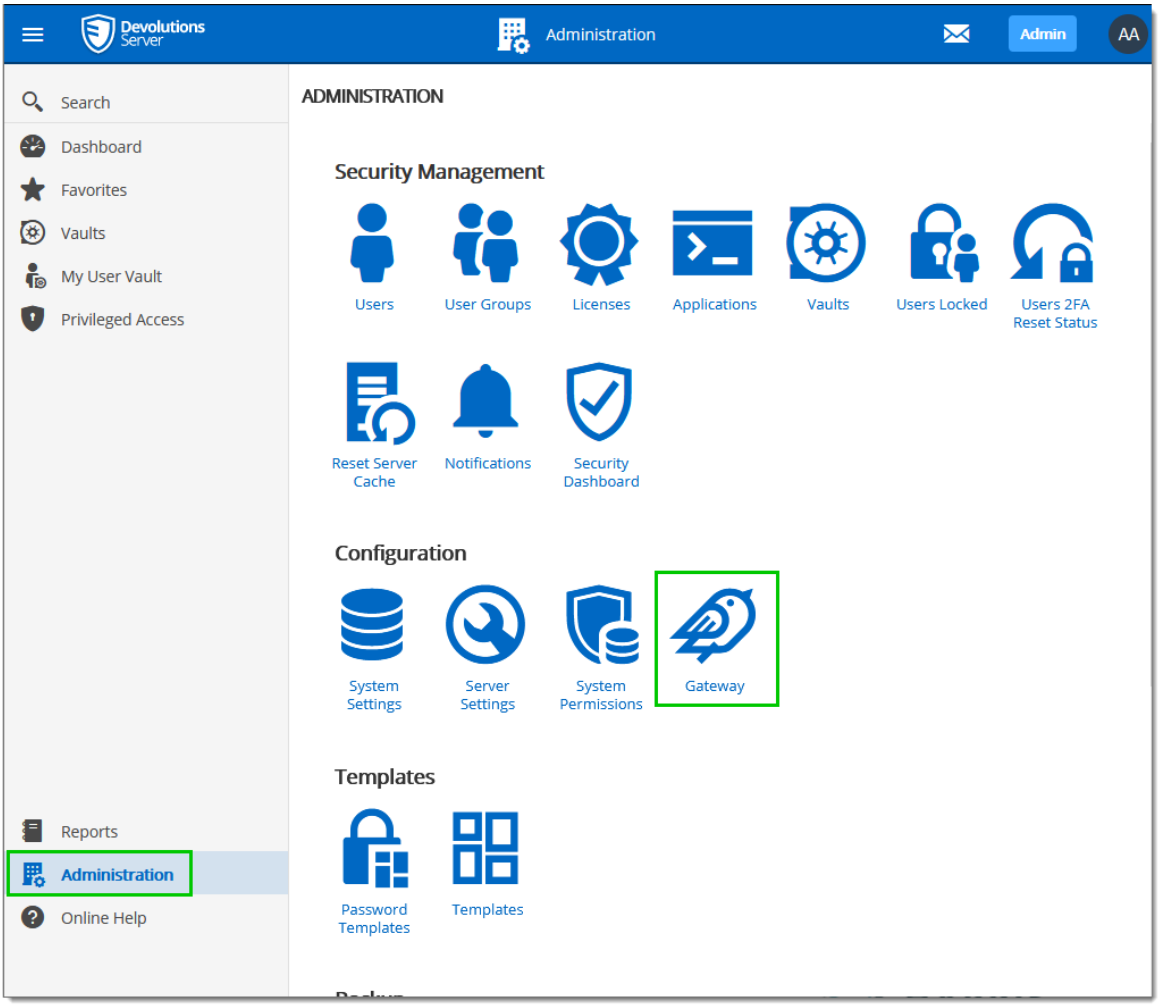
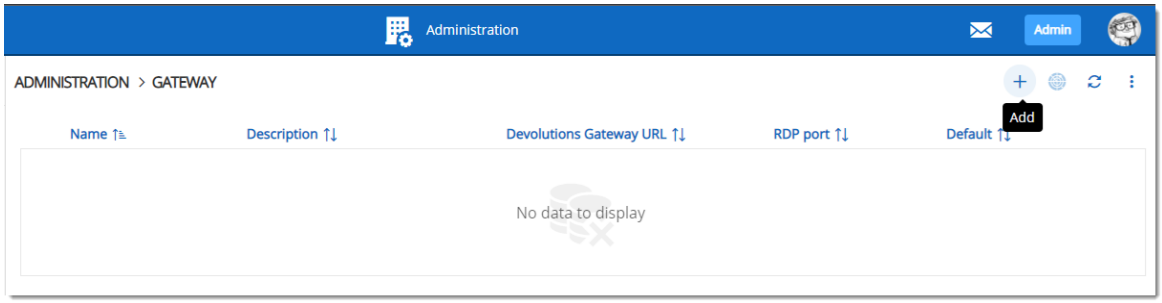
8. Go in Administration - Gateway.



Administration

9. Click on the Add button on the top right corner.



Administration - Gateway

10. Enter the following information.

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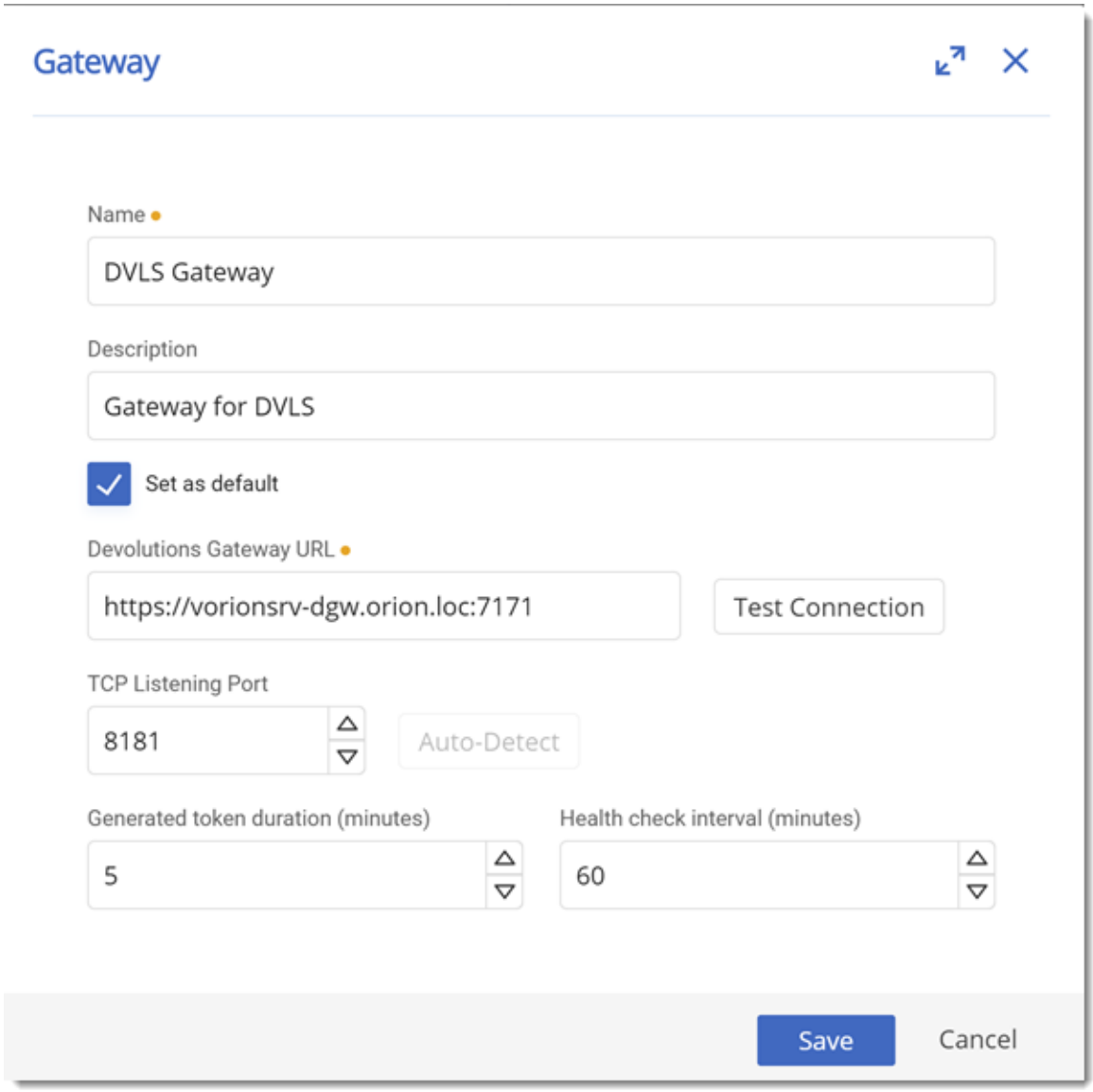
a. Name : Name of the Devolutions Gateway that will be displayed in Remote Desktop Manager.

b. Description : Description of the gateway.

c. Set as default : If enabled, this gateway will be selected when configuring Remote Desktop Manager.

d. Devolutions Gateway URL : Use the same URL configured in the PowerShell script with Set-DGatewayHostname cmdlet (see above step 4).

e. TCP Listening Port: Set the port with the same TCP port value configured in the console



Gateway configuration dialog

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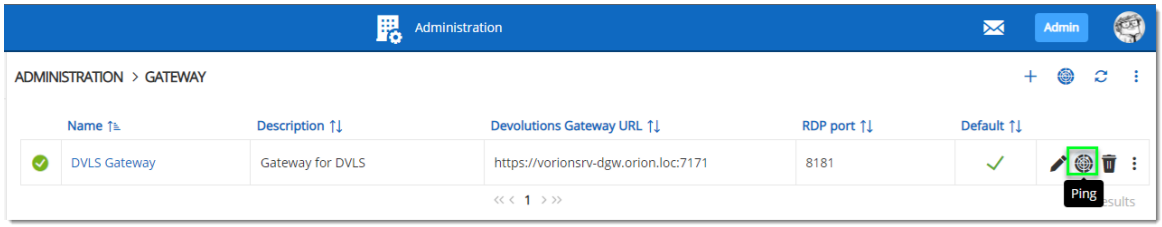
11. Click on Save.

12. The Devolutions Gateway should now be visible in the list. It is possible to verify the status of the gateway with the Ping button.



Administration - Gateway

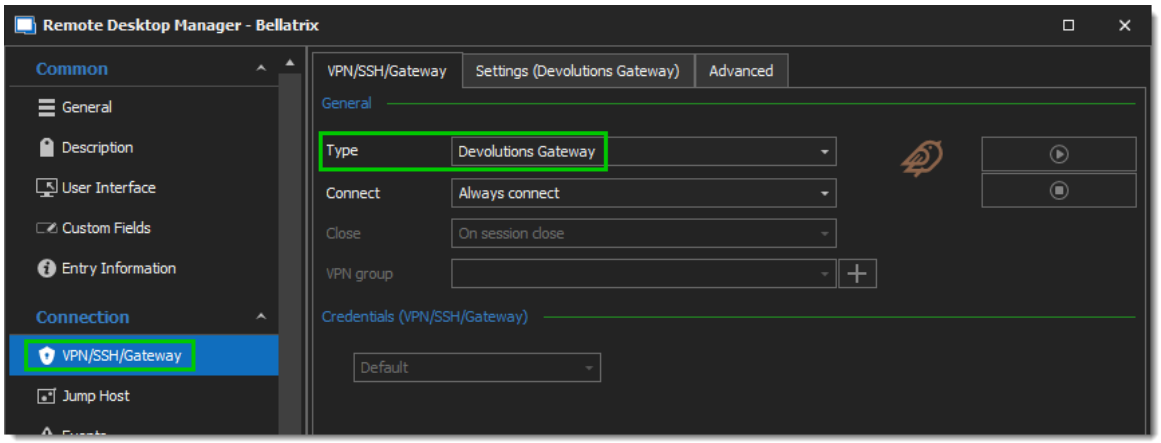
7.3 Remote Desktop Manager Configuration

DESCRIPTION

The following instructions explain how to use Devolutions Gateway in a RDP session.

STEPS

1. Select an RDP session and open its properties dialog.
2. Go in VPN/SSH/Gateway
3. In the VPN/SSH/Gateway tab, set the ***Type*** option to Devolutions Gateway.



VPN/SSH/Gateway

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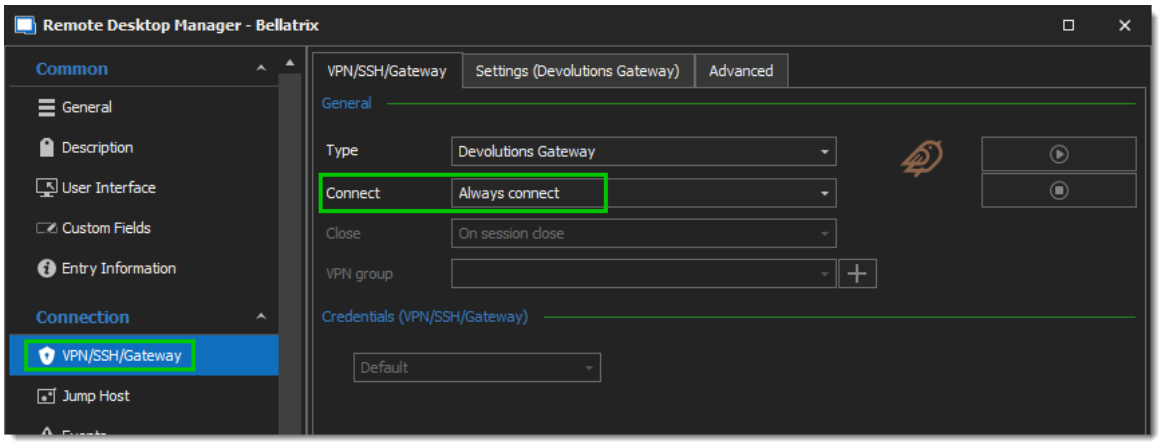
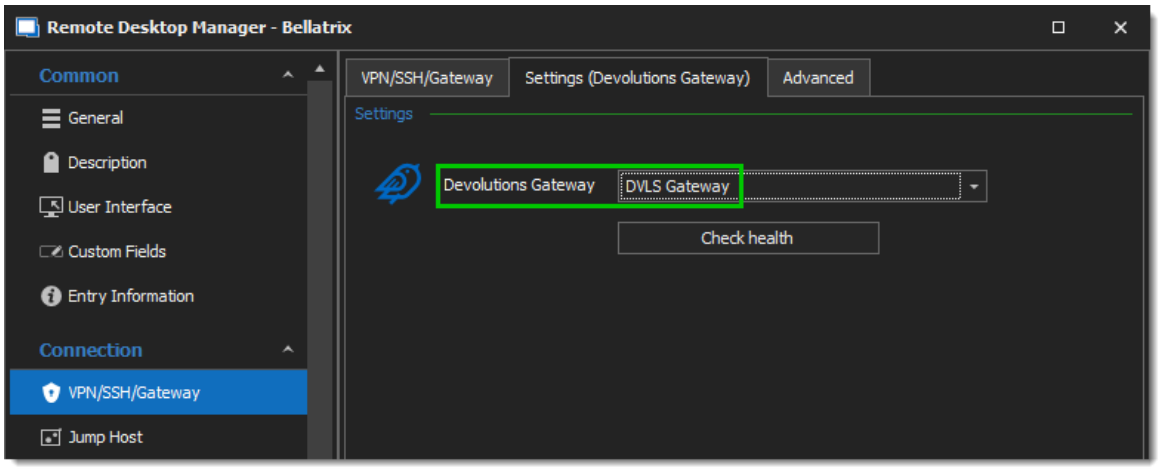
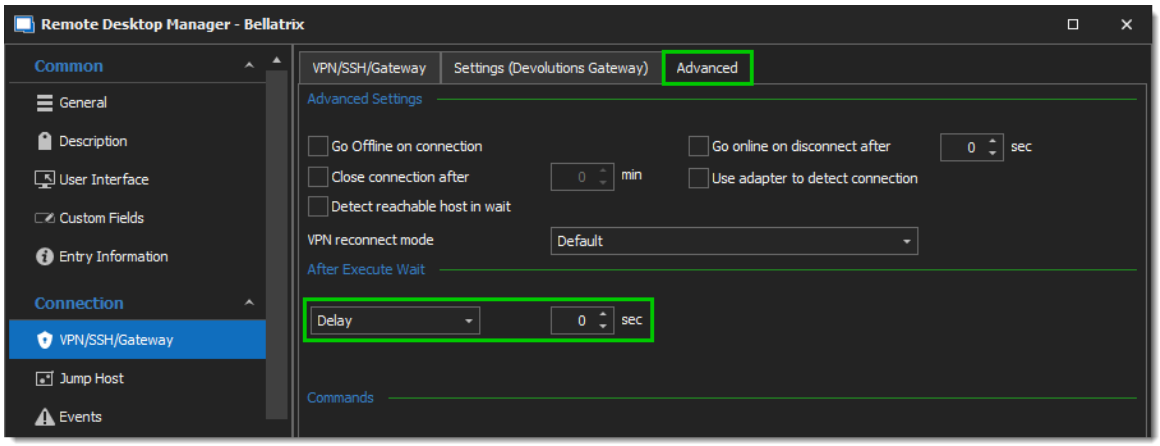
4. In the VPN/SSH/Gateway tab, set the ***Connect*** option to Always connect.



5. In the Settings (Devolutions Gateway) tab, select the gateway configured in Devolutions Server Configuration.



6. To remove the 5 seconds delay when opening a connection, set the Delay value to 0 in the Advanced tab.



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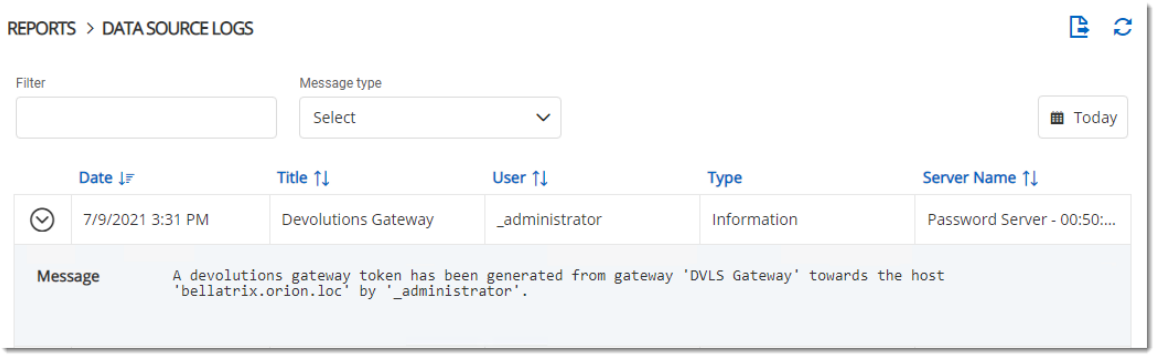
7. Once the RDP session is connected, the following log entry should be in the Devolutions Server Data Source Logs.



Reports - Data Source Logs

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Devolutions Web Login

Part

8 Devolutions Web Login

8.1 Overview

DESCRIPTION

Devolutions Web Login is a web browser password plugin used in conjunction with Remote Desktop Manager, Devolutions 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 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 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.

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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:

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.

Safe usage of **DWL** requires a manual configuration of both **RDM** and **DWL** on each user profiles. For more information about the subject visit our Secure Devolutions Web Login topic.

8.2 Installation

DESCRIPTION

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
- Edge
- Opera

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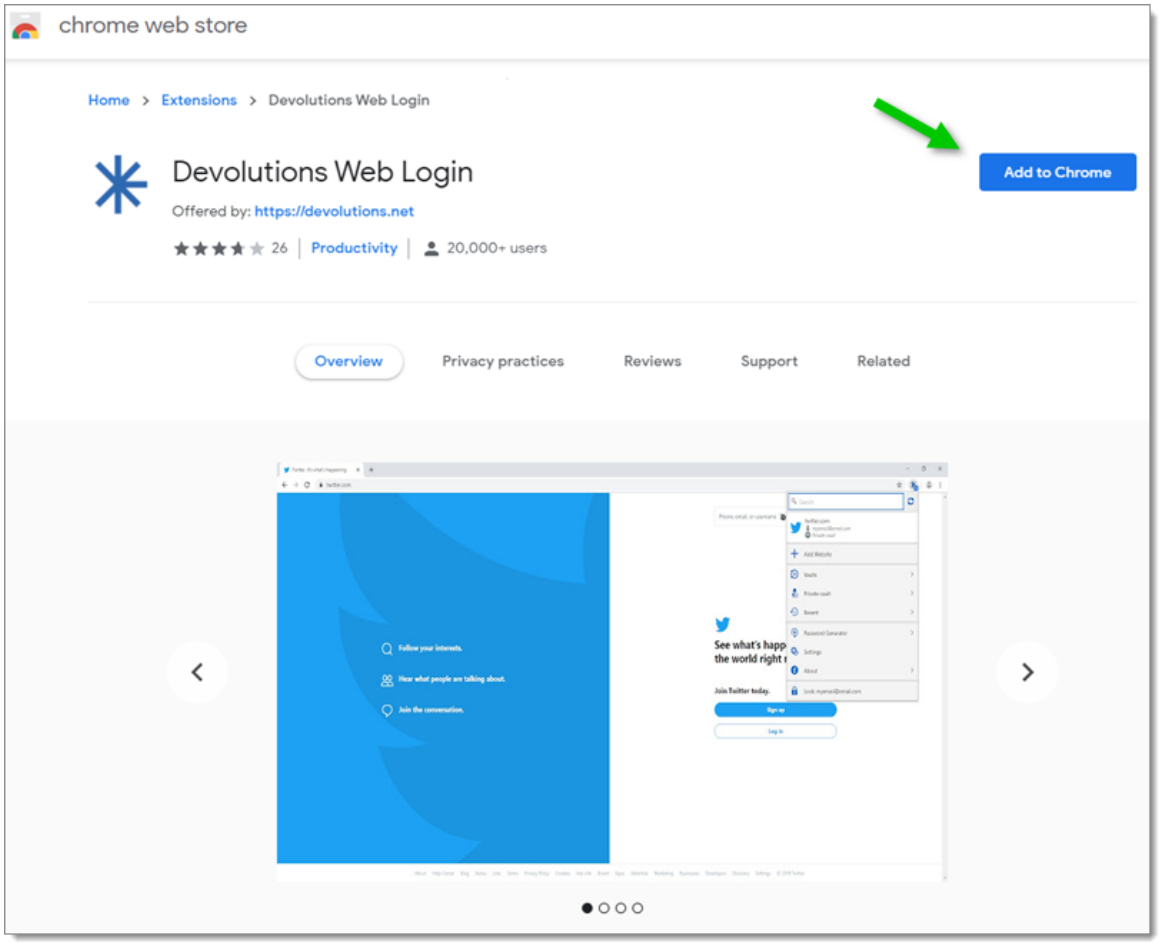
8.2.1 Chrome

DESCRIPTION

Follow the steps below to complete the installation of Devolutions Web Login in the Chrome web browser.

1. Open Chrome.
2. Navigate to Devolutions Web Login extension or use the link from our Website.
3. Click the ***Add To Chrome*** button.



Devolutions Web Login Chrome Web Store

4. Click ***Add extension*** in the confirmation dialog.

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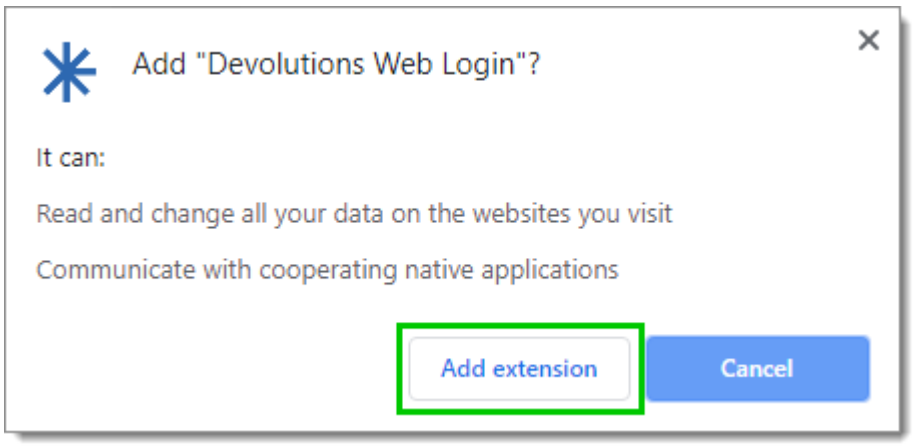
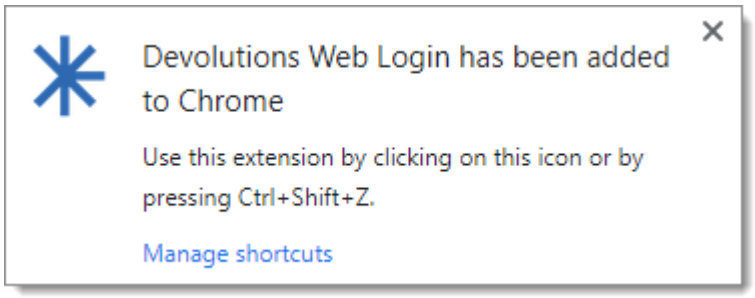
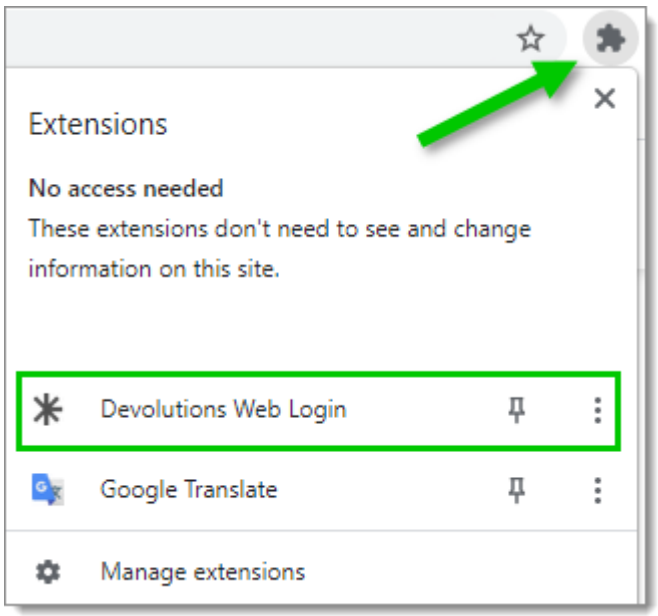


Extension Installation Confirmation

Once installed a confirmation box will appear.



5. Click the Chrome extension button and ***Pin*** Devolutions Web Login to finish the installation.



Devolutions Web Login Extension Button

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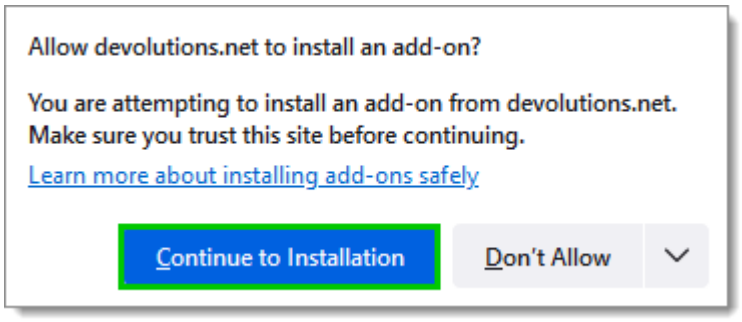
8.2.2 Firefox

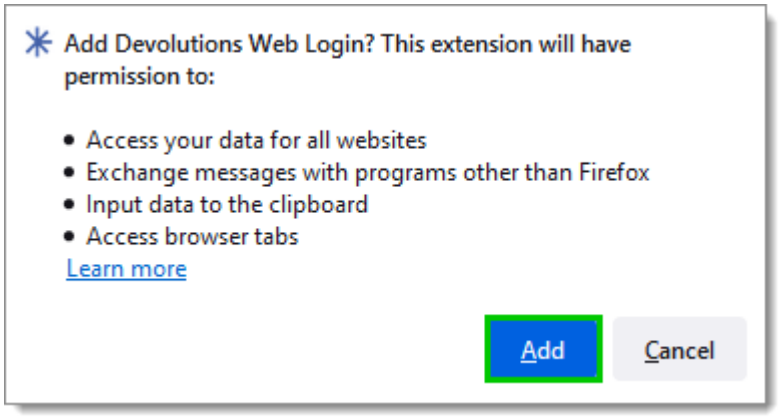
DESCRIPTION

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 website page.
3. Click ***Continue to Installation*** in the confirmation dialog.



4. Click ***Add***, when prompted to add Devolutions Web Login to the extension.



Add the Extension

5. Once installed, access the extension by clicking ✳ in the top-right corner of Firefox.

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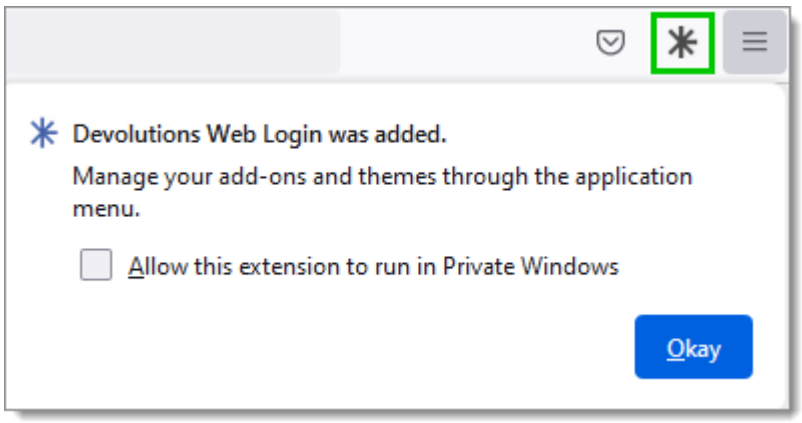


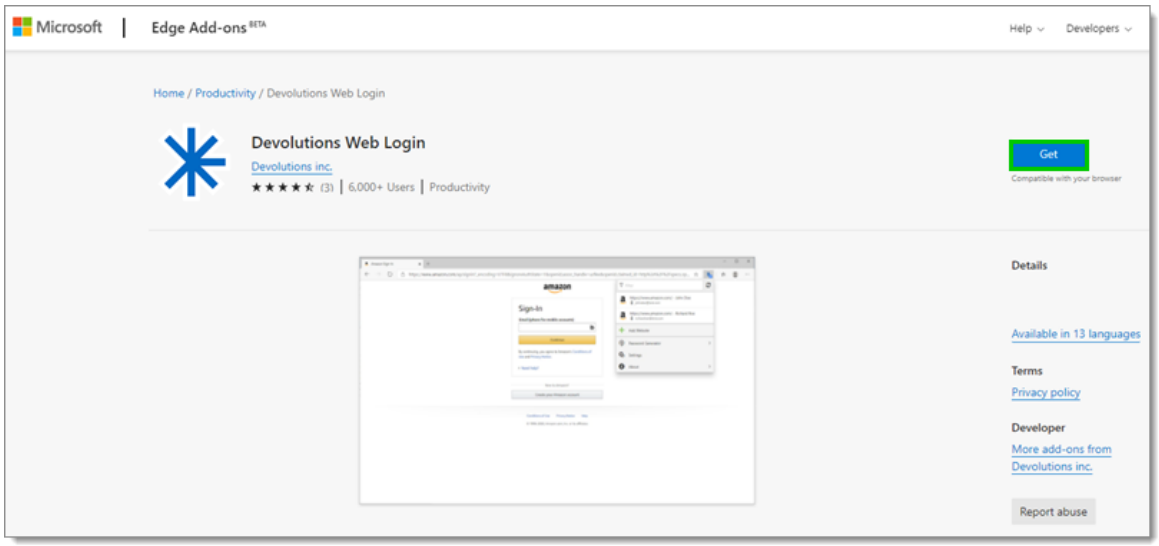
Devolutions Web Login Extension Button

8.2.3 Edge

DESCRIPTION

Here are the steps to install Devolutions Web Login on Microsoft Edge.

1. Open a Microsoft Edge window.
2. Download the extension from Devolutions Web Login website page.
3. Click ***Get***.



Chrome Web Store

4. Add the extension to Microsoft Edge.

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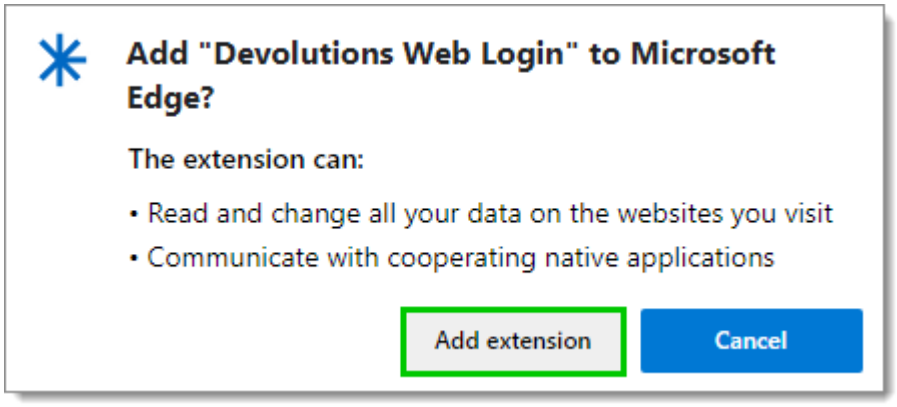


Add Devolutions Web Login to Microsoft Edge Beta

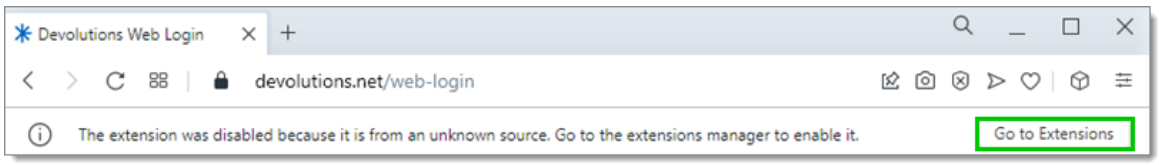
The extension is installed. Access it by clicking ✳ in the top-right corner of the Microsoft Edge web browser.

8.2.4 Opera

DESCRIPTION

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. Click on ***Go to Extension*** from the information panel at the top or click on the Extension button



Opera Extensions Enabling

4. Click ***Install*** and the ***Yes, install*** pop up.

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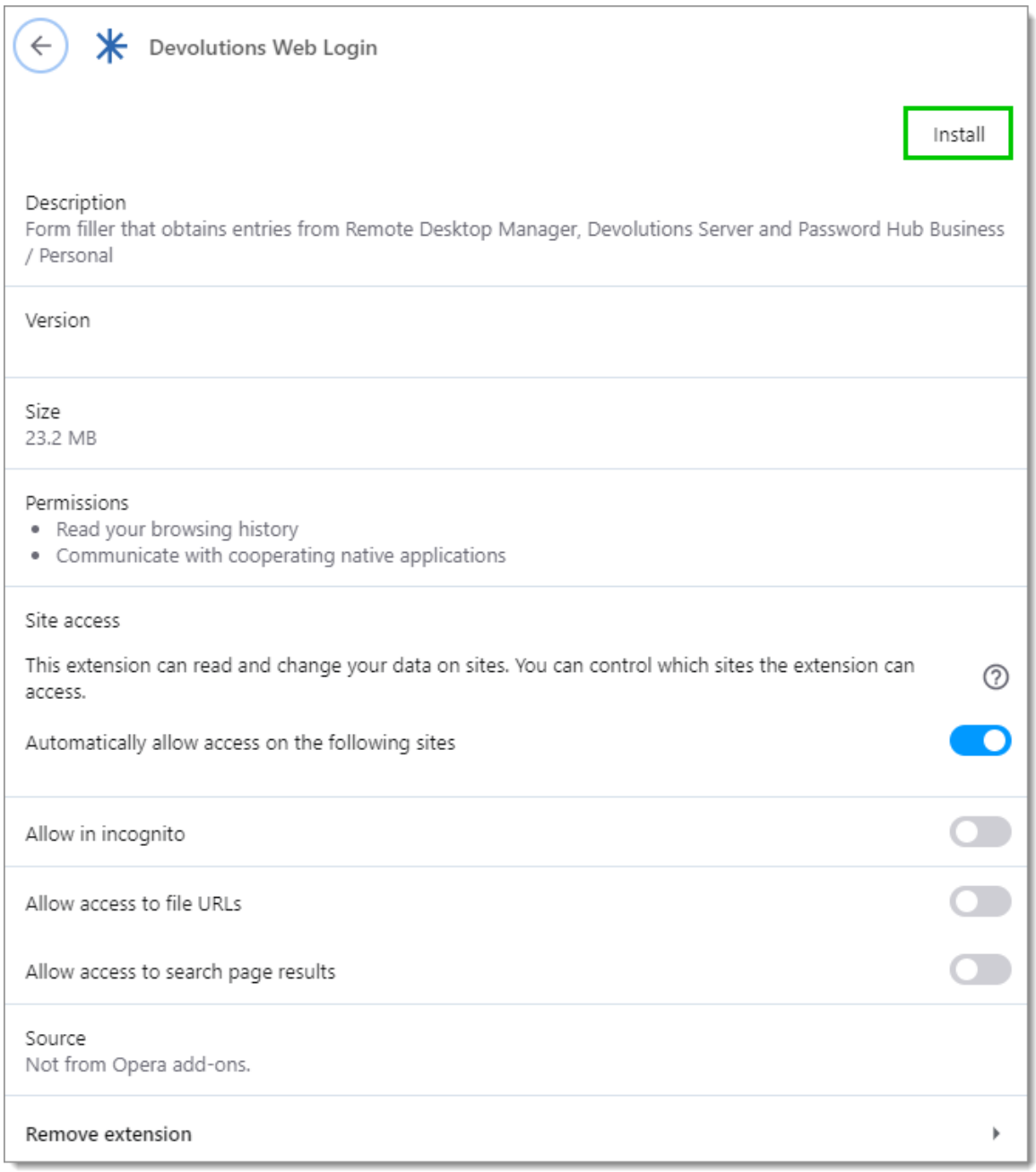

Opera Install Window

5. Click on the ***Extensions*** button of the browser and ***Pin*** the Devolutions Web Login extension.

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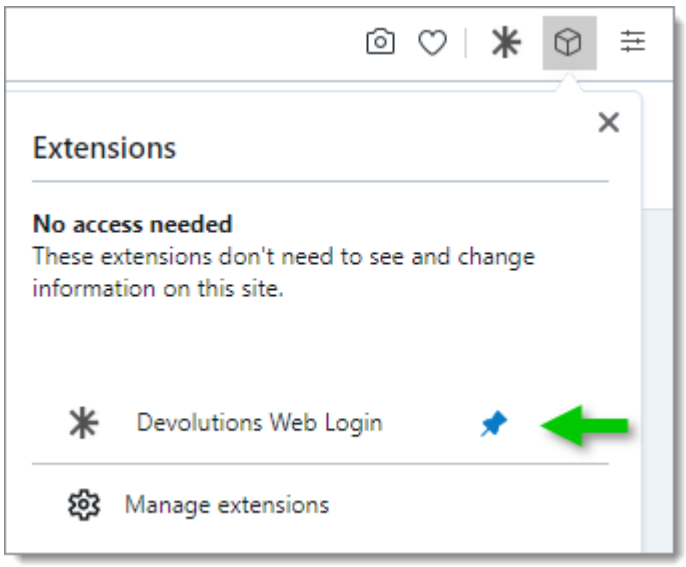

Access the extension by clicking ✳ in the top-right corner of Opera.

8.3 First Login

8.3.1 Password Hub Business Login

DESCRIPTION

FIRST LOGIN WITH DEVOLUTIONS WEB LOGIN

Follow these steps to connect Devolutions Password Hub Business to Devolutions Web Login extension:

1. Click on ***Devolutions Web Login*** ✳ extension at the top right corner of your browser.

   A Devolutions Password Hub Business access is required to continue.

2. Choose ***Devolutions Password Hub Business*** in the list and ***Save***.

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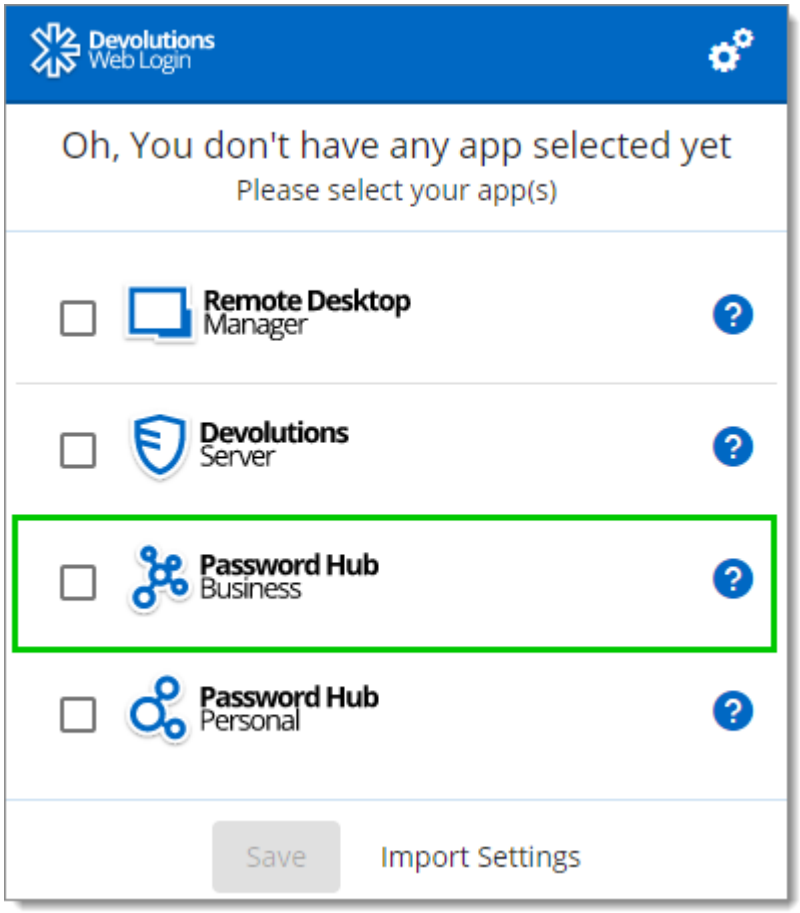
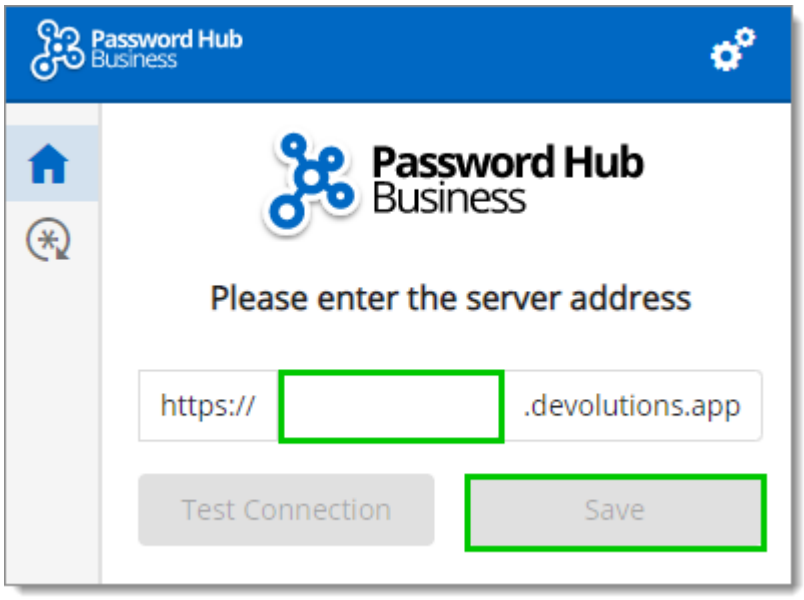


First Login

3. Enter your Devolutions Password Hub Business server address and ***Save***.



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4. ***Log in*** to your Devolutions account.

Log In

5. Enter the credentials from your Devolutions Account to continue.

Devolutions Account Login

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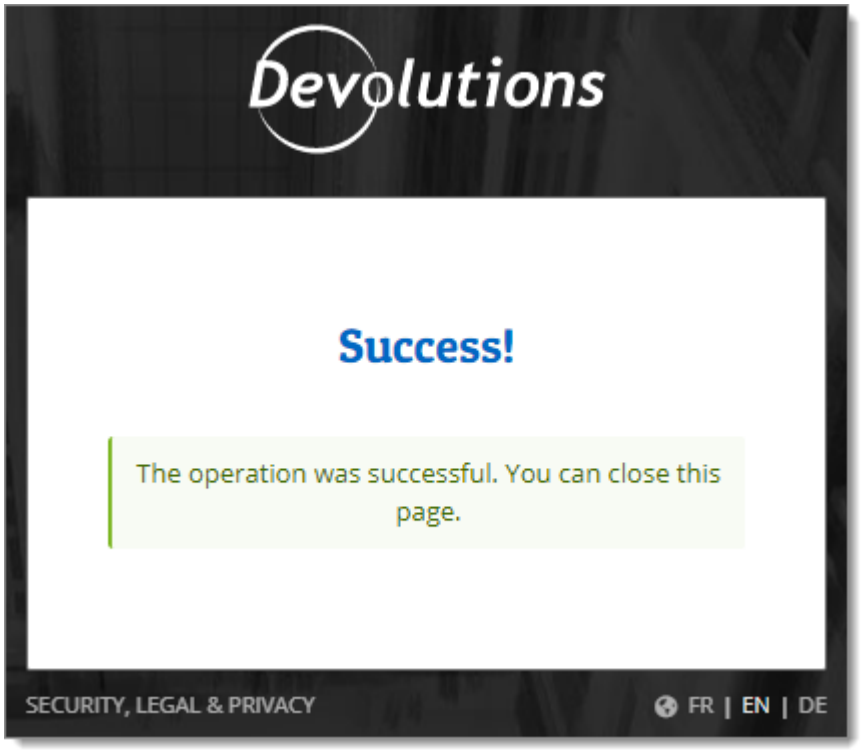
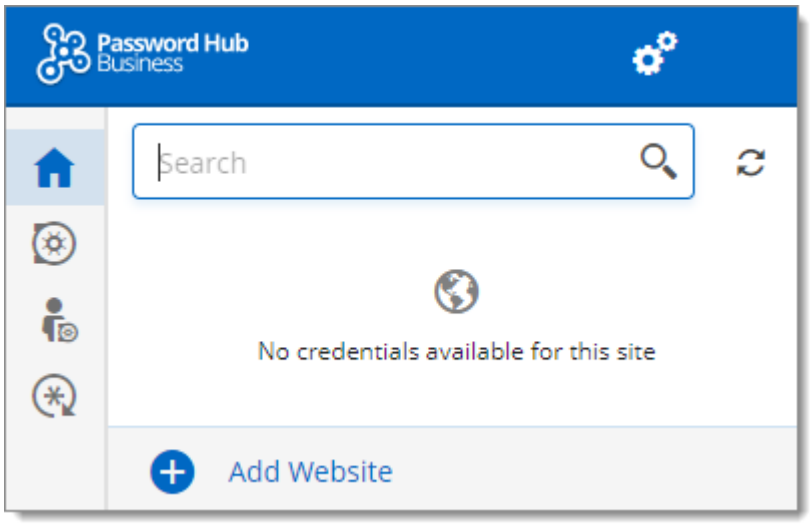
6. When complete, a log in confirmation message will appear.



7. If you click on the ✳ icon, you can validate that Devolutions Web Login is now connected to your Devolutions Password Hub Business.



Devolutions Web Login Connected to Devolutions Password Hub Business

8. To select the vaults to be synchronized, click on the ***Vaults*** icon and the ***Select Vaults to Sync*** button. Afterward, you click on the ***Select all*** button, or refine your view by adding a check mark next to the specific vaults to synchronize.

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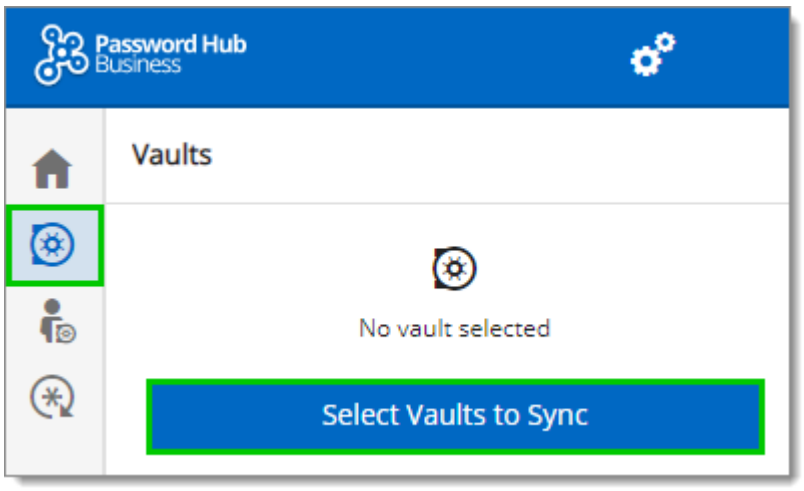
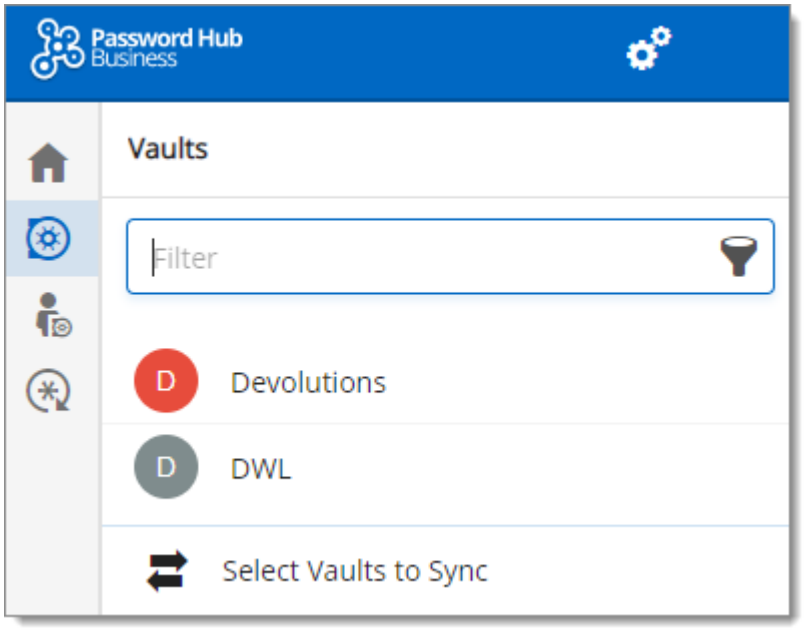


9. When done selecting your vaults, click on the ***Select Vaults to Sync*** at the top of the panel, to get the following view.



8.3.2 Password Hub Personal Login

DESCRIPTION

FIRST LOGIN WITH DEVOLUTIONS WEB LOGIN

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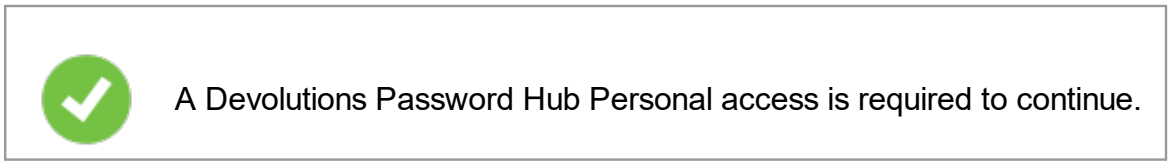
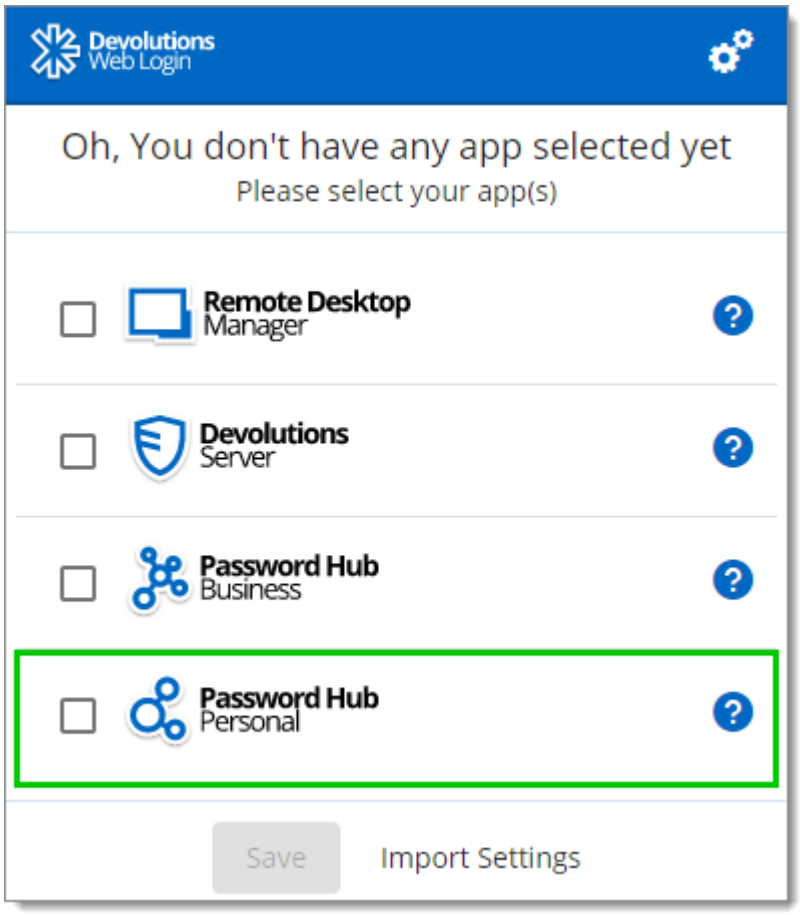
Follow these steps to connect Devolutions Password Hub Personal to Devolutions Web Login extension:

1. Click on ***Devolutions Web Login*** extension at the top right corner of your browser.



2. Choose ***Devolutions Password Hub Personal*** in the list and ***Save***.



3. ***Log in*** to your account.

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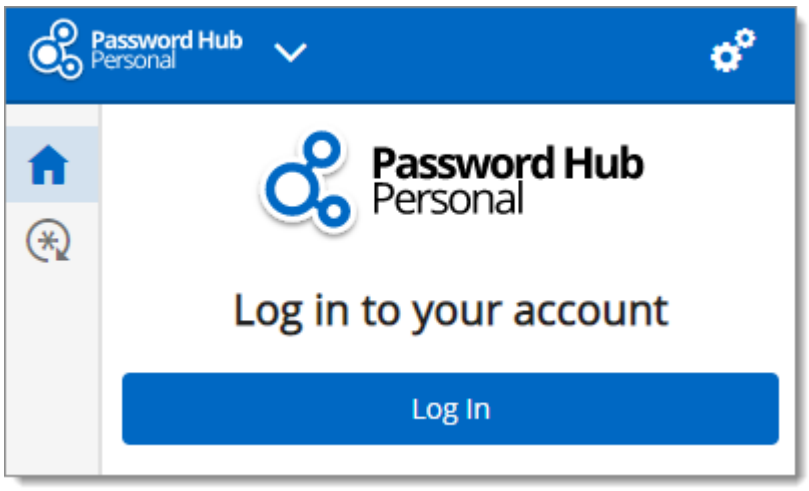

4. Enter the credentials from your Devolutions Account to continue.

Devolutions Account Login

5. When complete, a log in confirmation message will appear.

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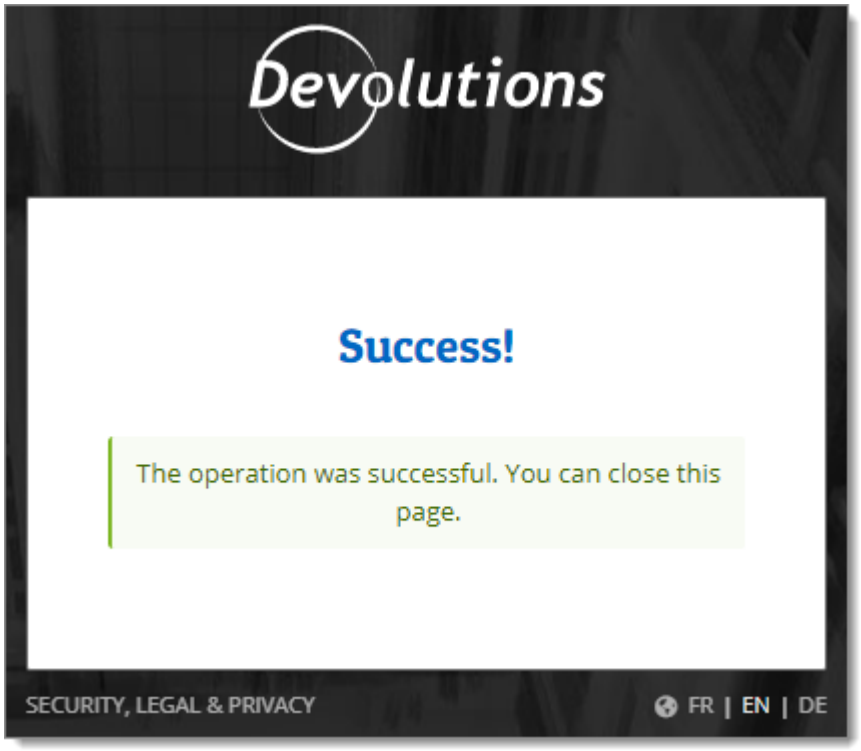
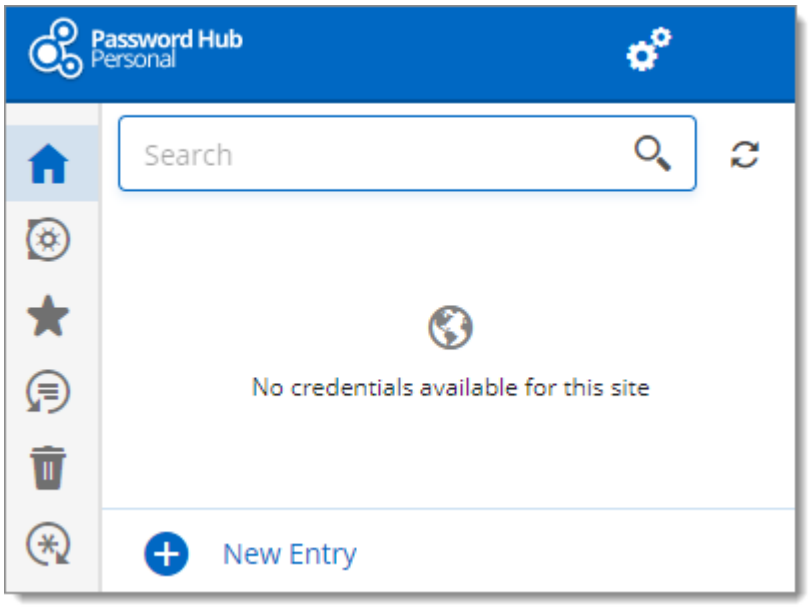


6. If you click on the ✳ icon, you can validate that Devolutions Web Login is now connected to your Devolutions Password Hub Personal.



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8.3.3 Devolutions Server Login

DESCRIPTION

FIRST LOGIN WITH DEVOLUTIONS WEB LOGIN

Follow these steps to connect Devolutions Server to Devolutions Web Login extension:

1. Click on ***Devolutions Web Login*** extension at the top right corner of your browser.

A Devolutions Server access is required to continue.

2. Choose ***Devolutions Server*** in the list and ***Save***.

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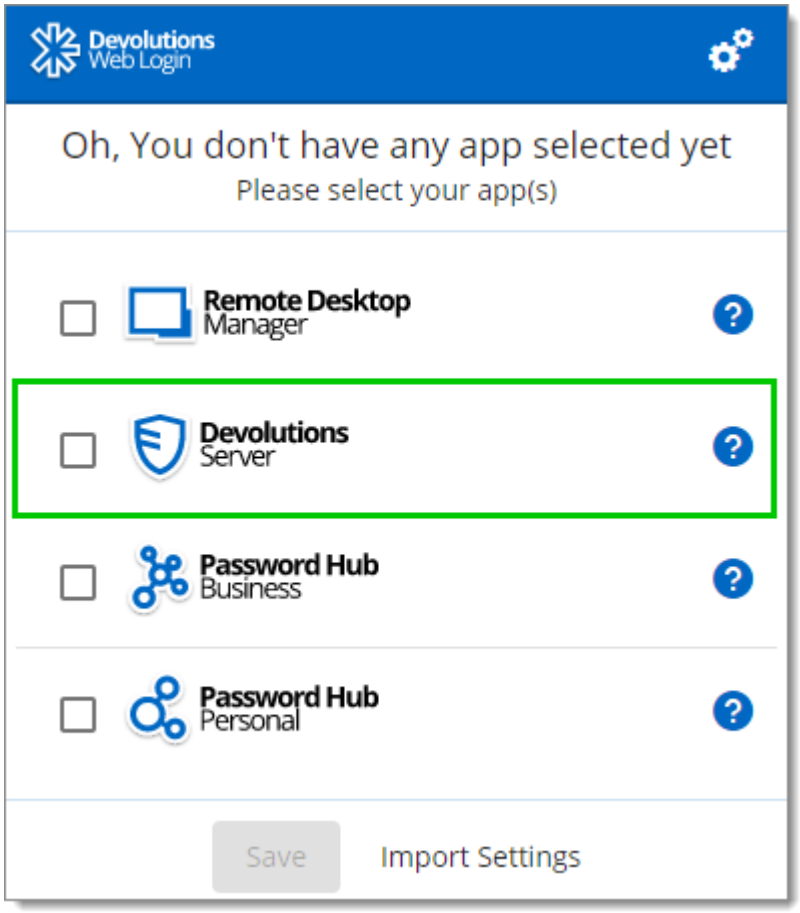

First Login

3. Enter the address of your server. You will need to input the same information that you would use to connect to the web interface of your Devolutions Server. Test the connection to validate it, then ***Save***.

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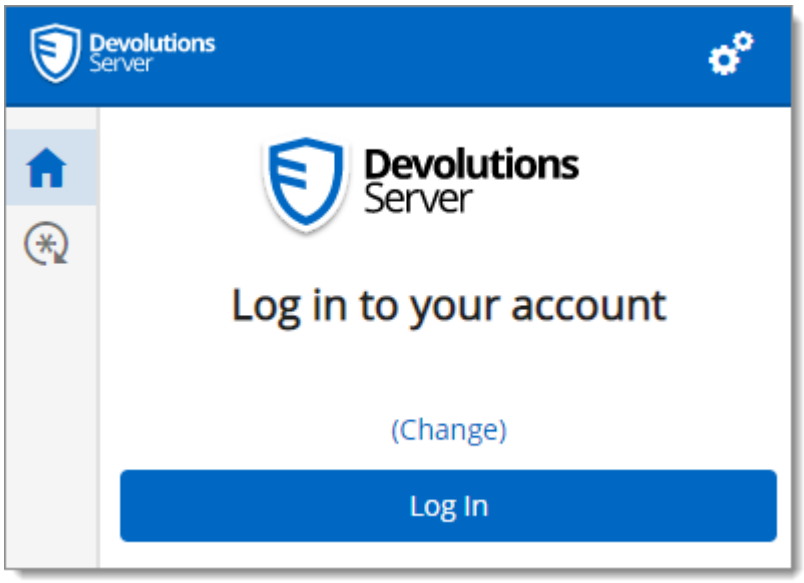
Server Address

4. Click ***Log In***.



Devolutions Web Login Login

5. Enter your Devolutions Server credentials and click ***Log in***.

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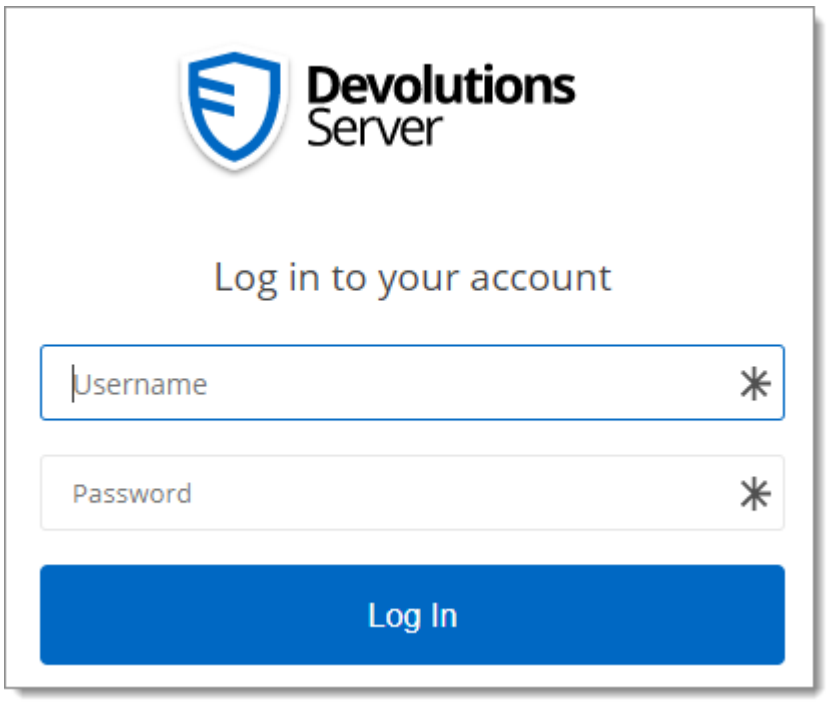
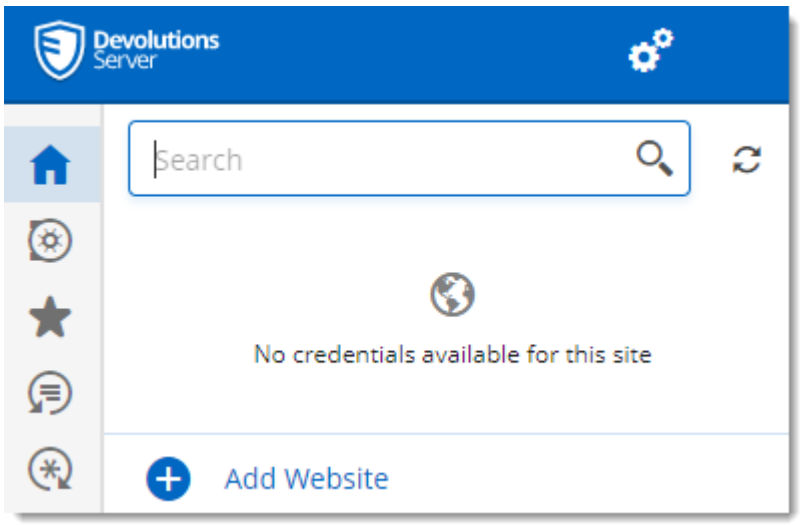


Devolutions Server Login

6. If you click on the ✳ icon, you can validate that Devolutions Web Login is now connected to your Devolutions Server.



Devolutions Web Login Connected

7. To select the vaults to be synchronized, click on the ***Vaults*** icon and the ***Select Vaults to Sync*** button. Afterward, you click on the ***Select all*** button, or refine your view by adding a check mark next to the specific vaults to synchronize.

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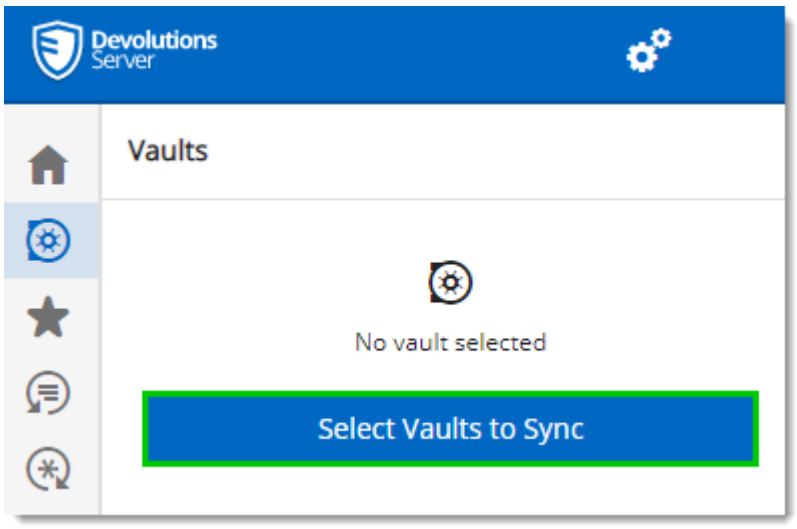
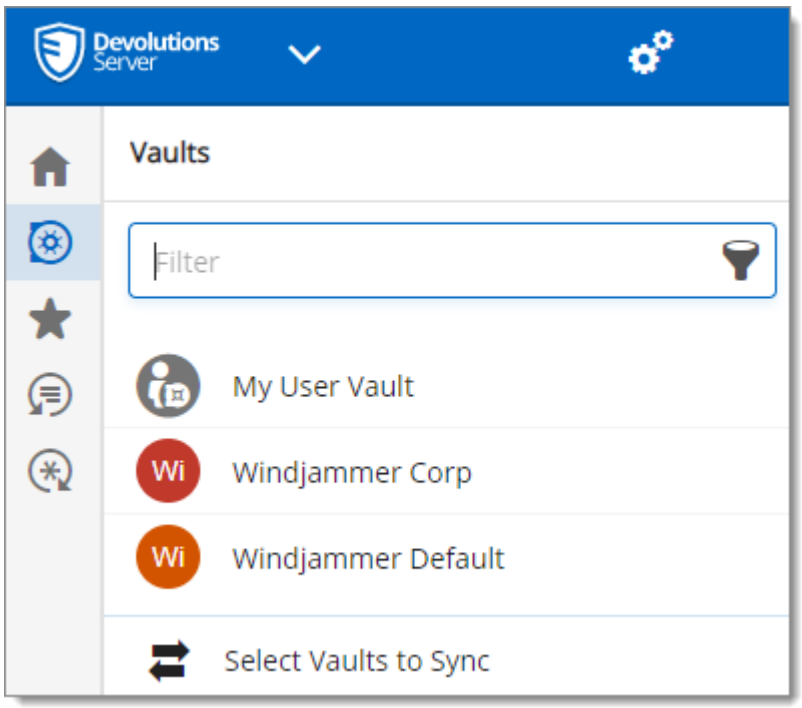


8. When done selecting your vaults, click on the ***Select Vaults to Sync*** at the top of the panel, to get the following view.



8.3.4 Remote Desktop Manager Login

DESCRIPTION

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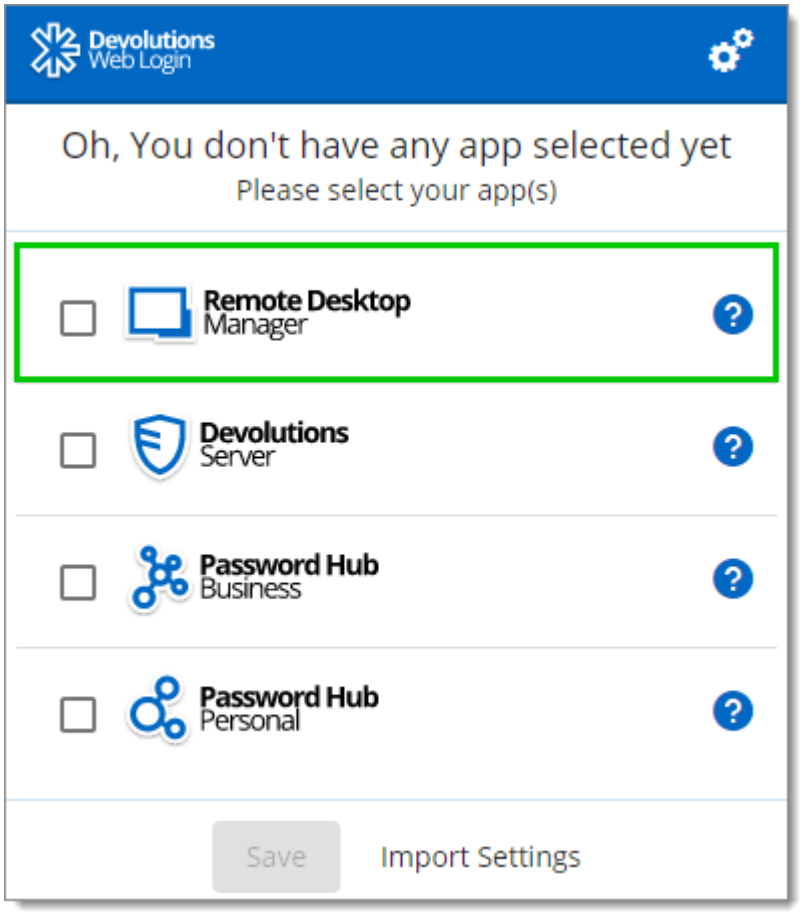
FIRST LOGIN WITH DEVOLUTIONS WEB LOGIN

Follow these steps to connect your Remote Desktop Manager to Devolutions Web Login extension, you will be prompted to pair the two applications.

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***.



3. Enter a name, for this association, in the text box.

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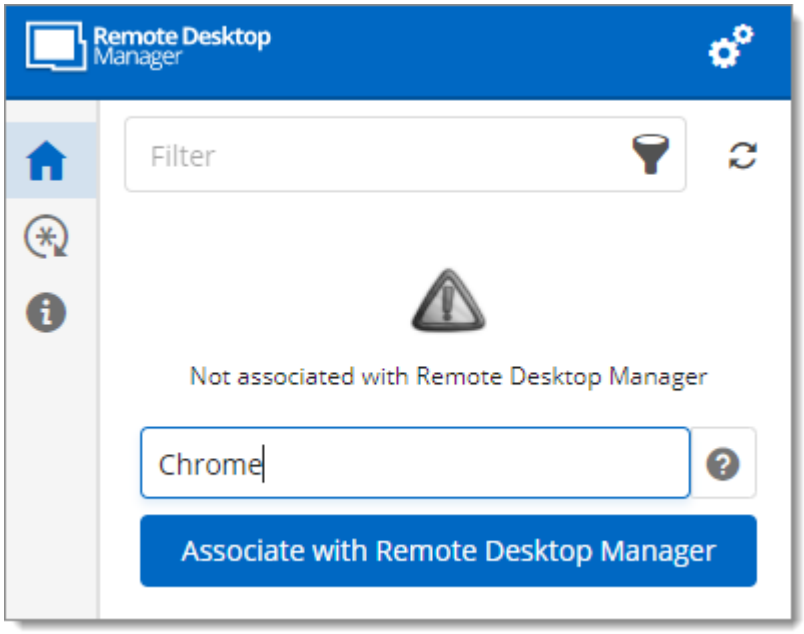
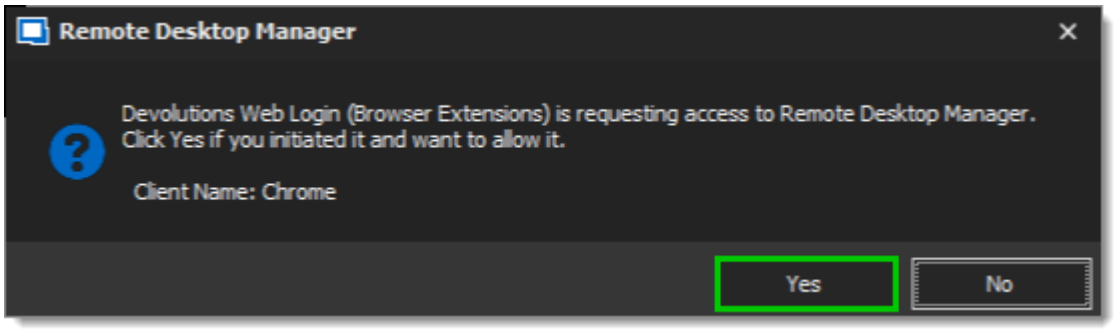
This name can be used to identify a particular association and to deny access to it from Remote Desktop Manager. The default name is the name of the web browser running Devolutions Web Login.



4. Click on ***Associate with Remote Desktop Manager***.

A popup window should appear on Remote Desktop Manager asking if the request was actually sent by you.

5. Click ***Yes*** in Remote Desktop Manager to accept the association request.



6. If you click on the ✳ icon, you can validate that Devolutions Web Login is now paired to your Remote Desktop Manager.

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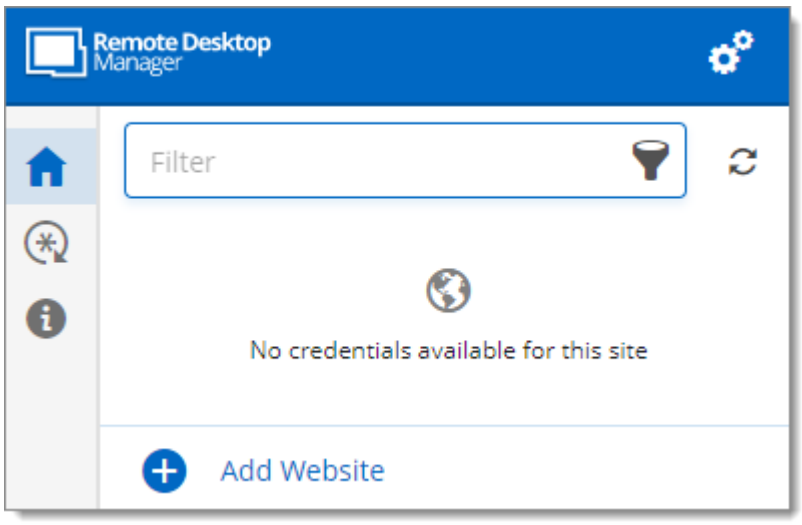

Note that, while Remote Desktop Manager can handle multiple associations (e.g., multiple browsers), Devolutions Web Login can only be paired to a single instance of RDM at any time.

8.4 Exploring Devolutions Web Login

8.4.1 Menu

DESCRIPTION

The user interface **Devolutions Web Login** is slightly different in appearance when connected to Remote Desktop Manager, Devolutions Server or Devolutions Password Hub Business and Personal.

See below a list of the menu and information available from the Devolutions Web Login extension:

- Refine the credential list available with the ***Filter*** search bar.
- ***Add Website*** from Devolutions Web Login in a specific folder located in a vault or your User Vault.
- **Visualize the credential** stored in the vaults if you are connected with Devolutions Server or Devolutions Password Hub.
- Browse ***Recent*** entry or ***Favorites***.

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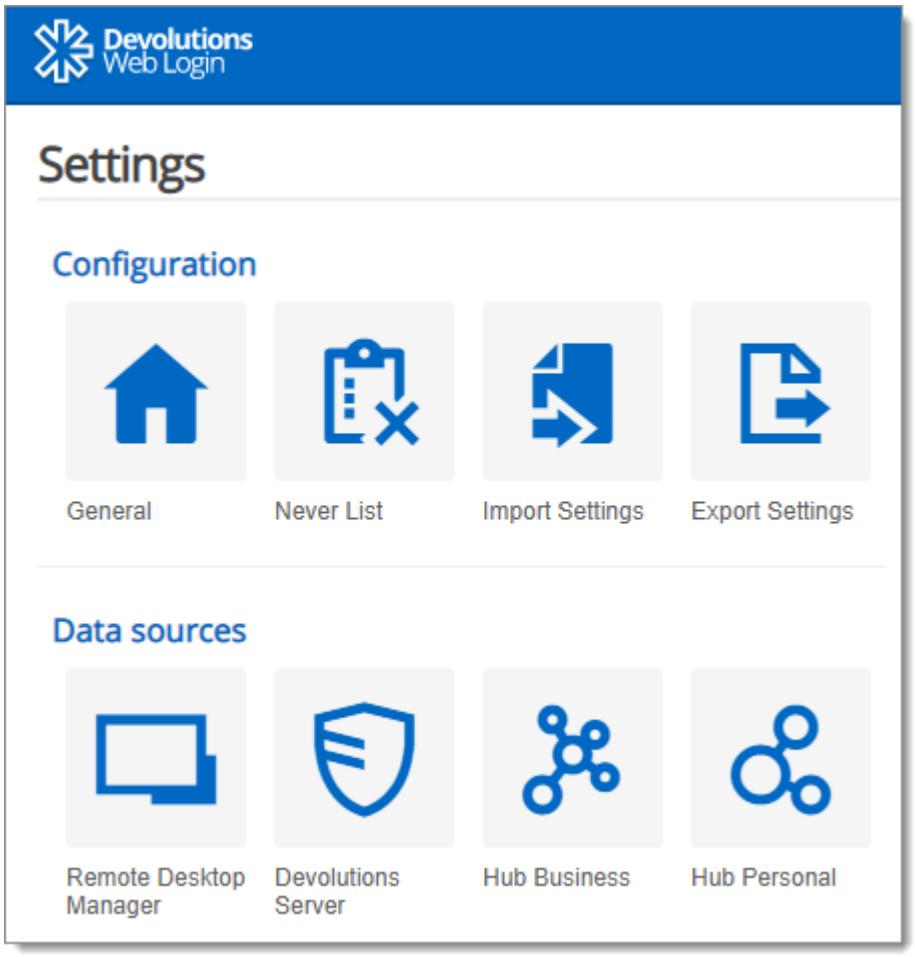
- Use the ***Password generator*** to create custom and more secure credentials.
- Set Devolutions Web Login ***Settings***.

8.4.1.1 Settings

DESCRIPTION

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.

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- 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
- Set the color ***Theme*** of the application.
- Disable the analytics telemetry 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*** to ***Never show icons in fields***.
- Matching options are: ***Base domains, Host, Starts with, RegEx*** and ***Exact***.

The ***Import / Export Settings*** 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 Server and Devolutions Password Hub Business or Personal.

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.

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GENERAL OPTIONS	DESCRIPTION
Add entry in User Vault by default	Save new entries in the User 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.

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ADVANCED OPTIONS	DESCRIPTION
Use legacy API	Use the old browser extension API for compatibility with older versions of Remote Desktop Manager.

DEVOLUTIONS SERVER

GENERAL OPTIONS	DESCRIPTION
Enable Devolutions Server	Retrieve entries from Devolutions Server.
Destination folder	Choose the folder where the credentials are stored in the vault.
Server URL	Enter the URL of the Devolutions 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.

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ADVANCED OPTIONS	DESCRIPTION
Default compare type	Set a default comparing option type.
Sync all available vaults	Enable to synchronize all the available vaults from Devolutions Server.

DEVOLUTIONS PASSWORD HUB BUSINESS AND PERSONAL

GENERAL OPTIONS	DESCRIPTION
Enable Devolutions Password Hub	Retrieve entries from Devolutions Password Hub.
Server URL (Business only)	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.
Default compare type	Set a default comparing option type.

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ADVANCED OPTIONS	DESCRIPTION
Sync all available vaults (Business only)	Enable to synchronize all the available vaults from Devolutions Server.

8.4.2 Retrieve Credentials

DESCRIPTION

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 of the browser to fill in the login information and connect to the website.

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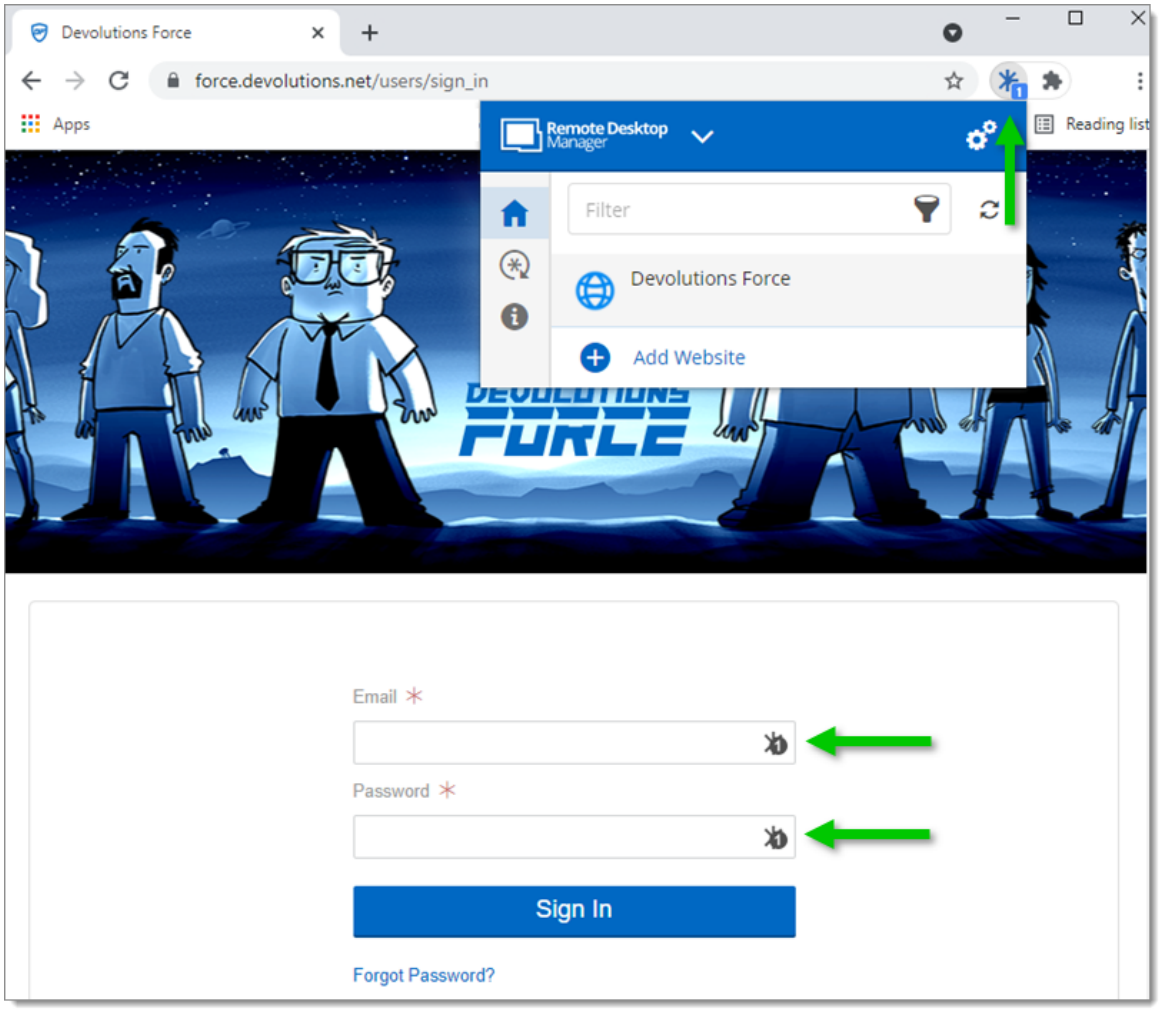

Automatic Log In

8.4.2.1 Enable Devolutions Web Login

DESCRIPTION

Checkmark ***Enable Devolutions Web Login*** in Remote Desktop Manager entries to allow Devolutions Web Login extension to retrieve the credentials when connecting to its respective website.

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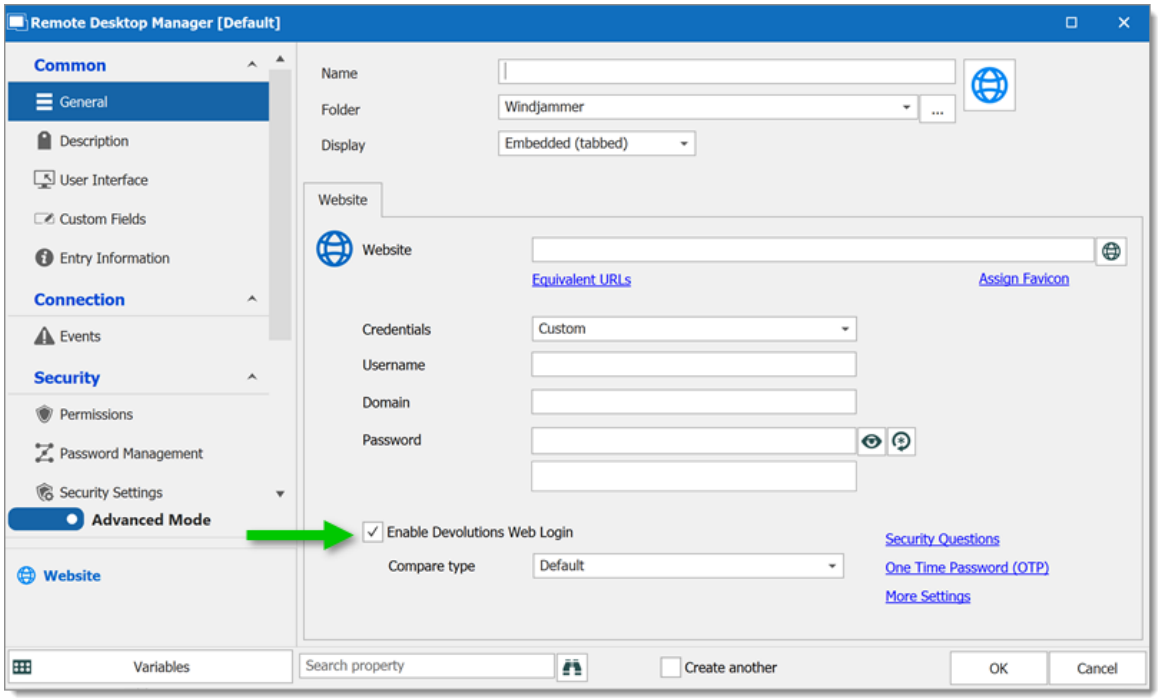

Enable Devolutions Web Login

8.4.3 Secure Devolutions Web Login

DESCRIPTION

In Remote Desktop Manager version 2021.1 and higher, we changed how our browser extension, Devolutions Web Login, communicates with Remote Desktop Manager to fill in credentials inside web pages. We did these changes to increase the security of this feature. Follow this link for the steps.

If you are using a version prior to 2021.1 and 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.

If you insist on using it, it is critical that each user is assigned a distinct port. 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. Follow this link for the steps.

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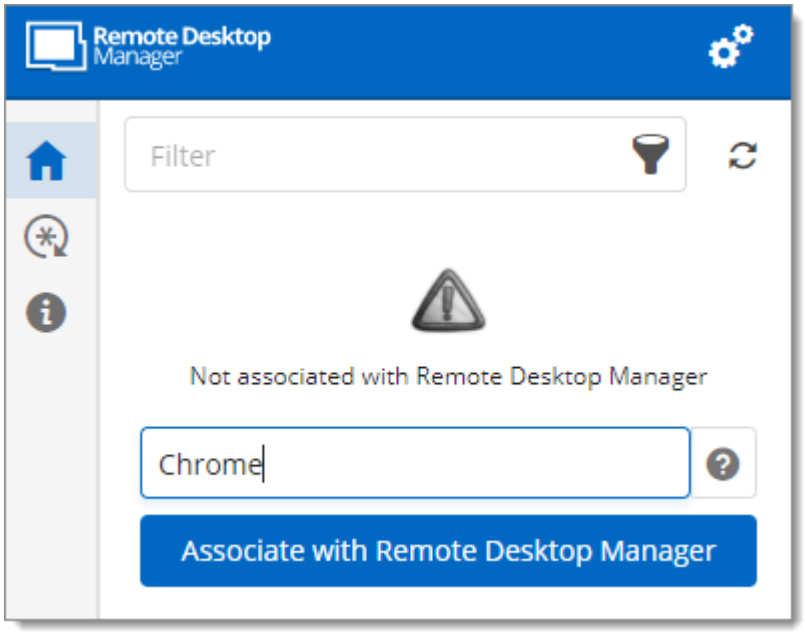
HOW TO SET UP DEVOLUTIONS WEB LOGIN FOR VERSION 2021.1 AND HIGHER

An application key is mandatory if you are using Devolutions Web Login on a Terminal server. Please follow the steps describe here.

When you will first open Devolutions Web Login and choose to use it with Remote Desktop Manager, you will be prompted to pair the two applications.

1. Enter a name, for this association, in the text box.



This can be used to identify a particular association and to deny access to it from Remote Desktop Manager. The default name is the name of the web browser running Devolutions Web Login.

2. Click on ***Associate with Remote Desktop Manager***.

A popup window should appear on Remote Desktop Manager asking if the request was actually sent by you.

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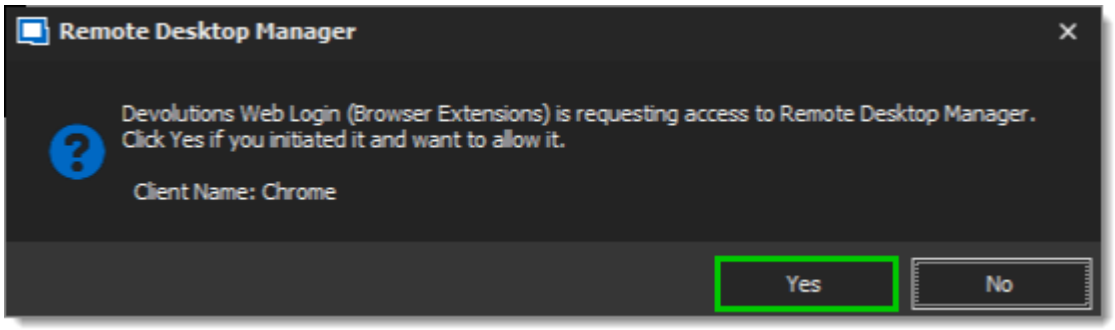
3. Click ***Yes*** to accept the association request.



You are now paired.

Note that, while Remote Desktop Manager can handle multiple associations (e.g., multiple browsers), Devolutions Web Login can only be paired to a single instance of RDM at any time.

HOW TO SET UP DEVOLUTIONS WEB LOGIN FOR VERSION LOWER THAN 2021.1 AND FOR TERMINAL SERVER

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. Click ***Default*** to enter a custom port and ***OK*** when done.

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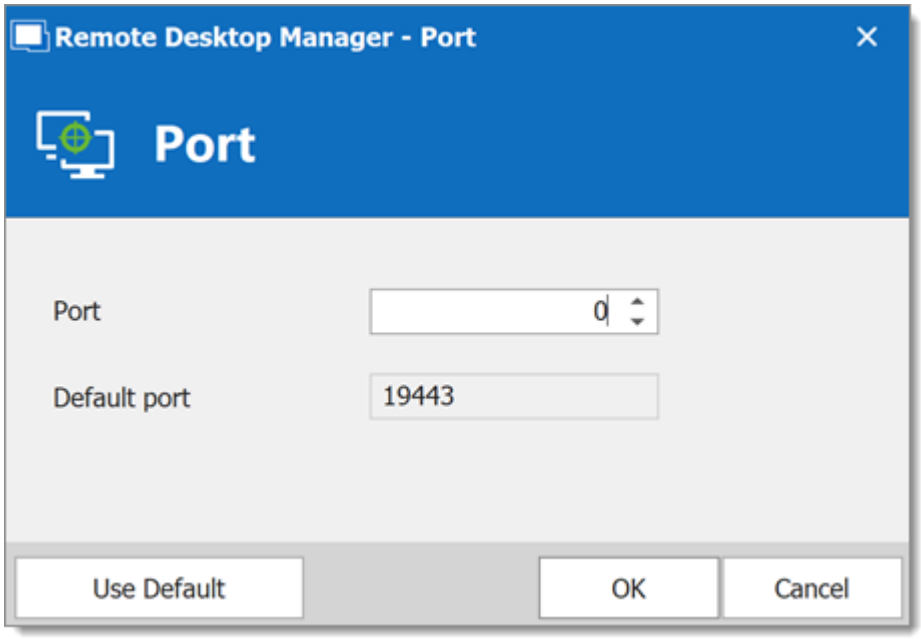
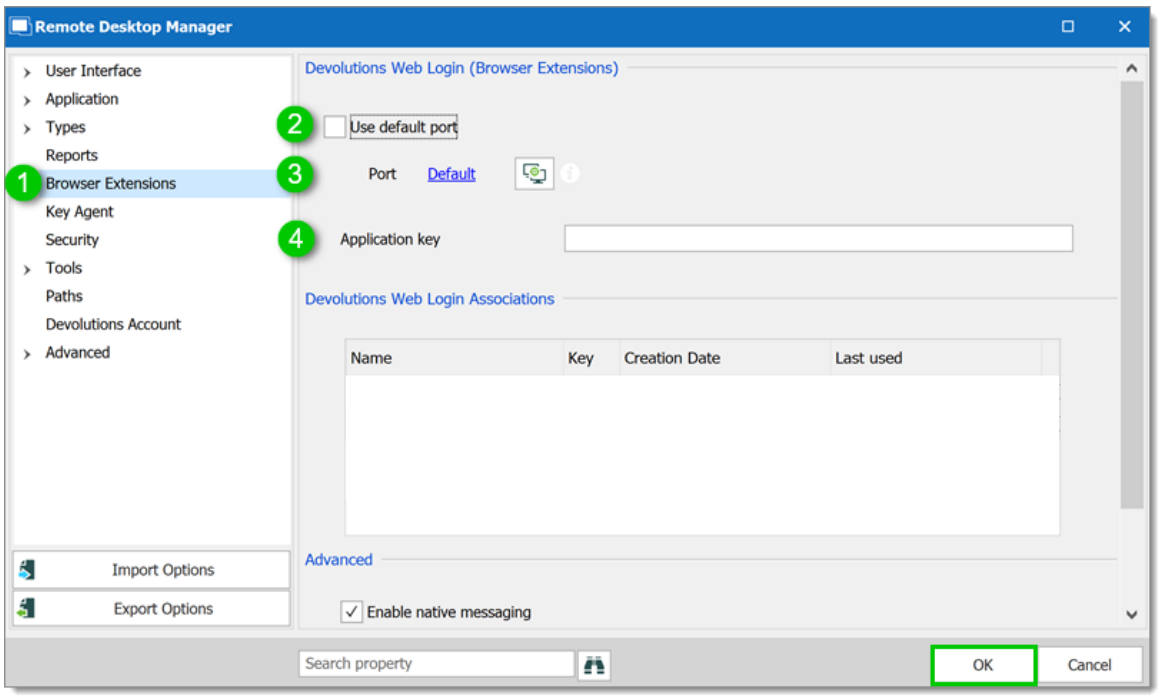


4. Type an ***Application key*** then click ***OK*** to save***.***



Remote Desktop Manager Browser Extensions Options

5. In your browser, click the Devolutions Web Login icon ✳ and go to ***Settings - Data sources - Remote Desktop Manager***.

6. Disable ***Use default port***.

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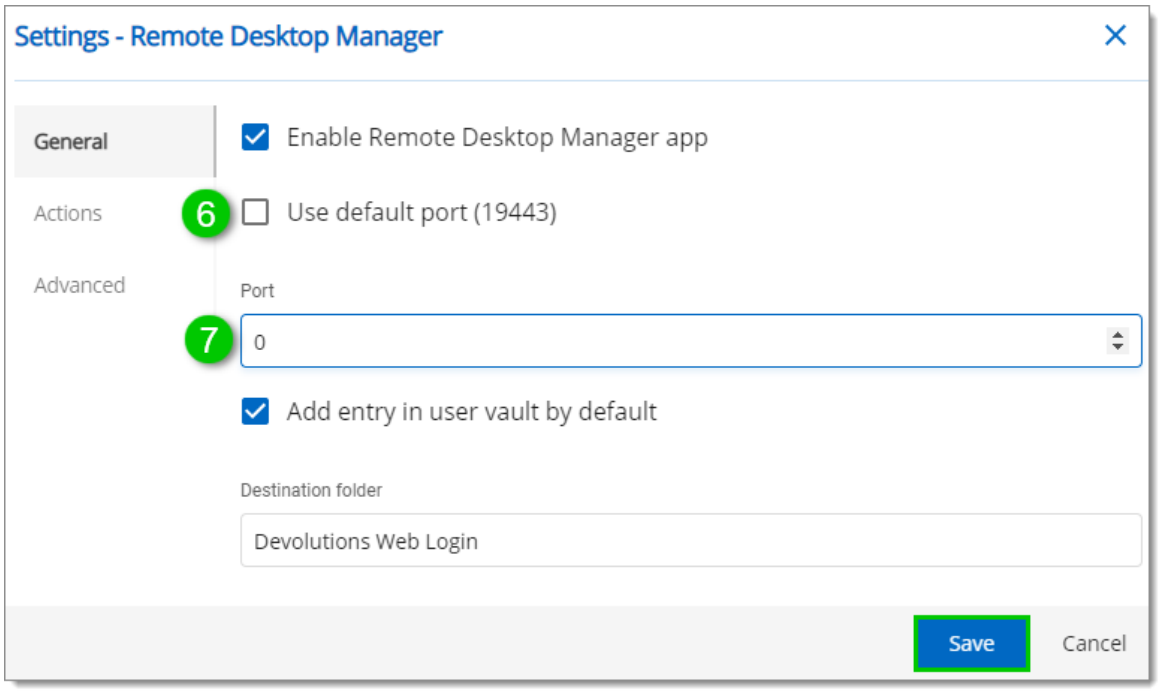
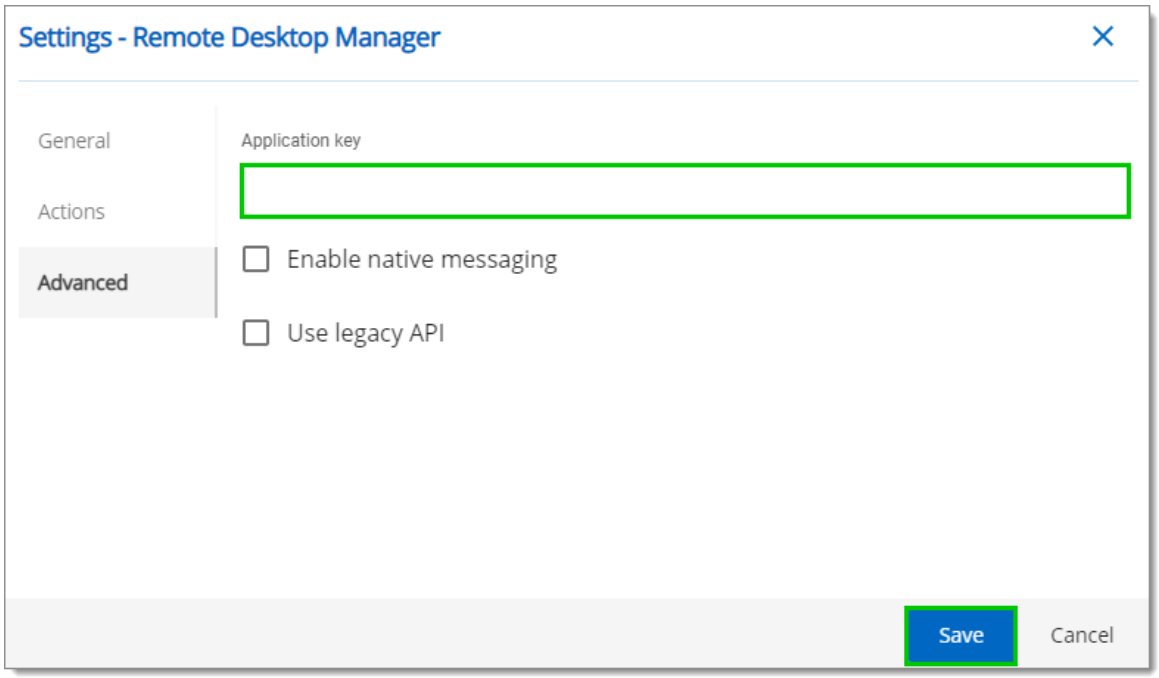
7. Enter the custom port created earlier in Remote Desktop Manager and ***Save***.



8. Click ***Advanced*** and enter the same ***Application key*** as Remote Desktop Manager, ***Save***.



Devolutions Web Login Settings for Remote Desktop Manager

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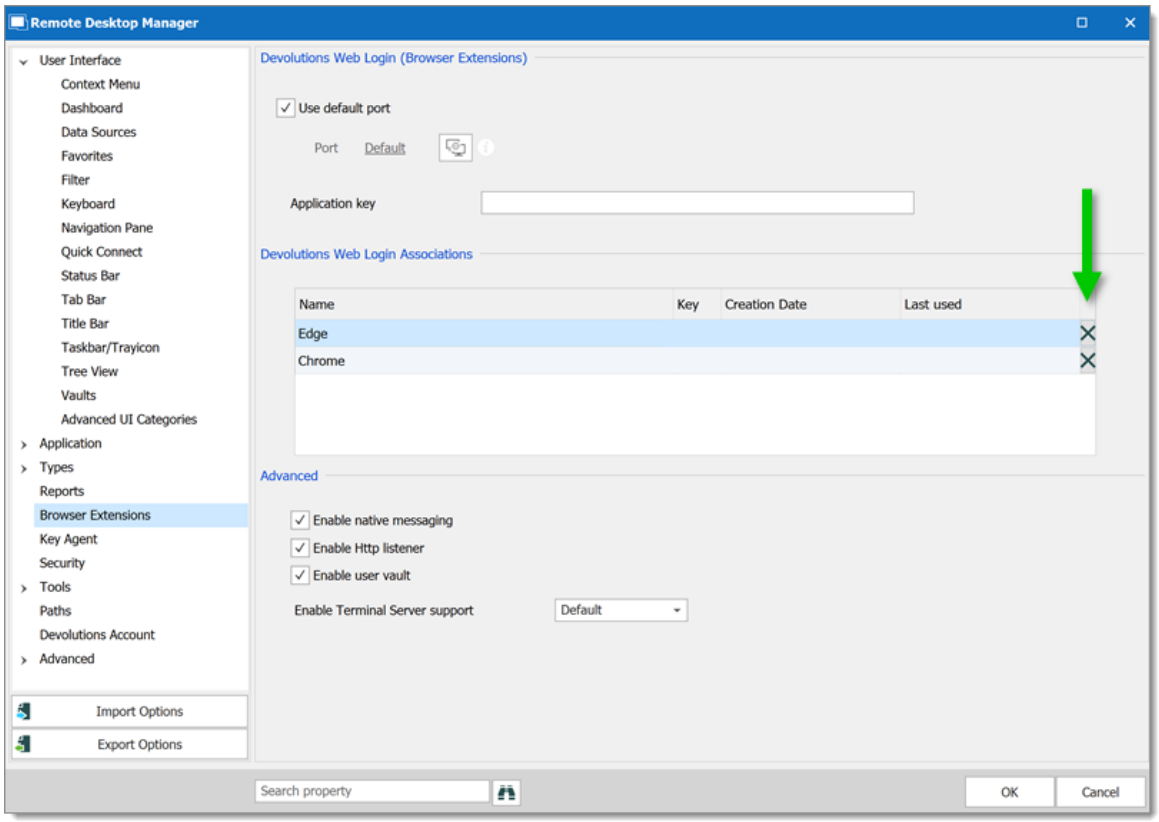
8.4.3.1 Unpair a Browser Extension

DESCRIPTION

In the event you want to deny access to Remote Desktop Manager from a previously paired browser extension, you need to delete it from Remote Desktop Manager.

1. In RDM go to ***File - Options - Browser Extensions***.
2. In the ***Devolutions Web Login Associations*** section click the ***X*** button of the entry in the list and click ***OK*** to save the modifications.

> In the ***Devolutions Web Login Associations*** section, you will find a list of each association made to Remote Desktop Manager including some information to identify them. This includes the name specified at the time of association (which defaults to the web browser's name), a part of the encryption key used between the two, it's creation date and the date when it was last used.



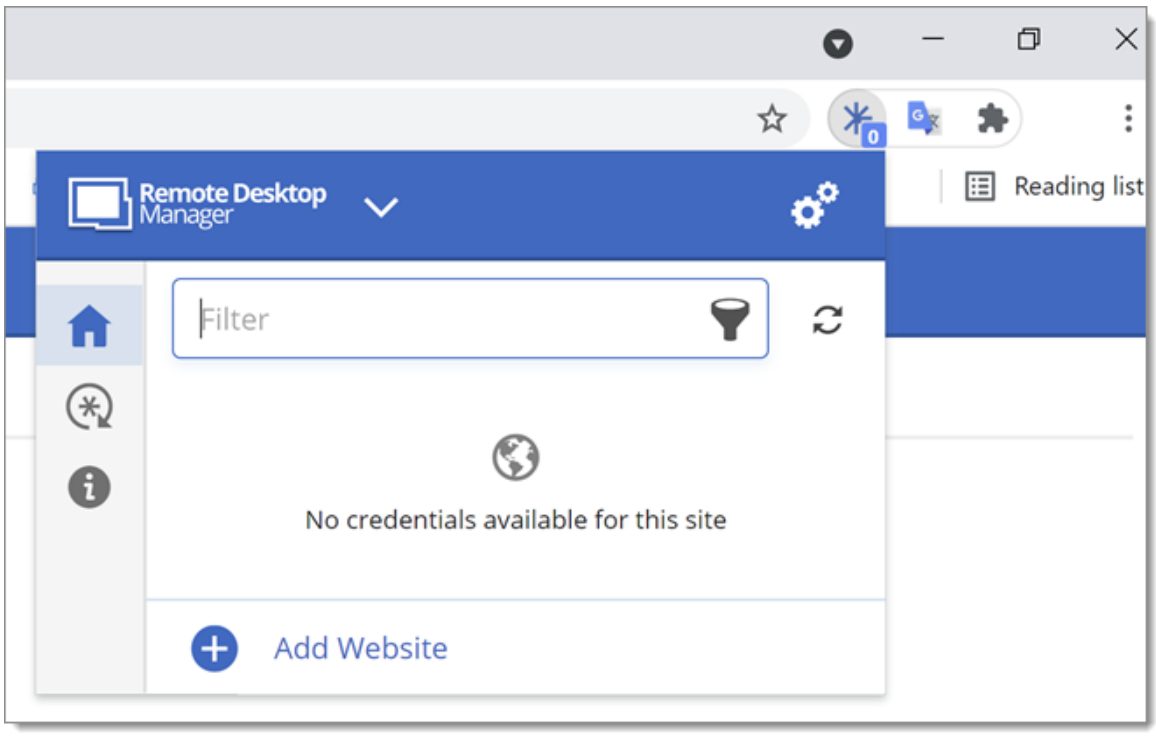
8.4.4 Keyboard Shortcuts

DESCRIPTION

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 autofill your credential when only one is available for an entry.

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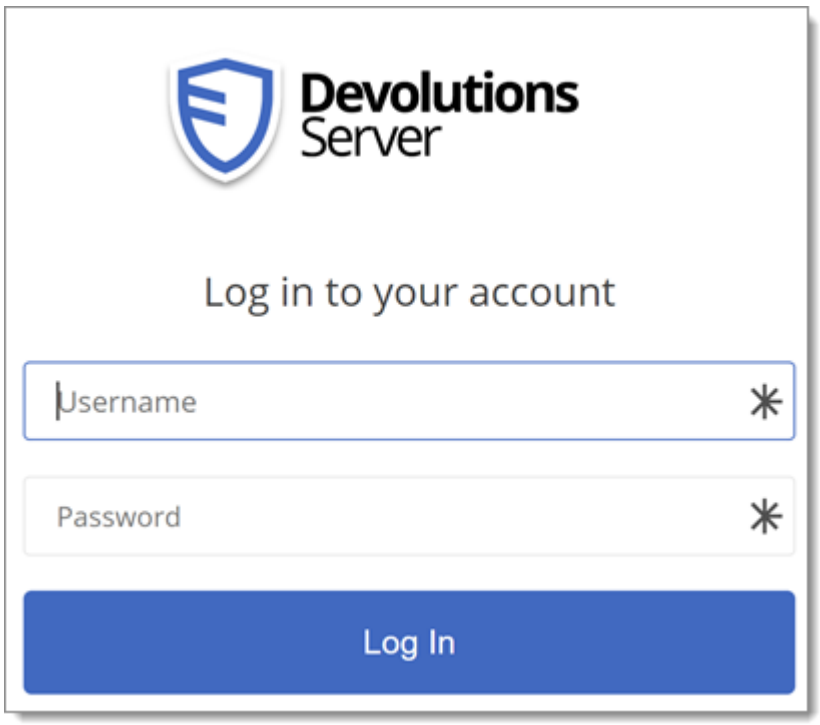

One Credential Login with Devolutions Web Login

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Devolutions Launcher

Part

9 Devolutions Launcher

9.1 Overview

DESCRIPTION

Devolutions Launcher is a companion tool for Devolutions Server and Devolutions Password Hub Business. It can launch multiple remote sessions simultaneously, while giving system administrators full control. It is available on Windows only.

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Devolutions Server Secure, Manage and Monitor access to Privileged Accounts	**Devolutions Password Hub Business** Vault and Manage business-user Passwords
Devolutions Server is an on-premise vault for storing and sharing information across your whole organization. Manage remote connections, credentials, and sensitive information with ease.	Devolutions Password Hub Business is a cloud-based solution created for IT administrators and their users to store and share information across the whole organization. You can access and manage sensitive information in your vaults from anywhere, with any supported web browser.

9.2 Installation

9.2.1 Prerequisites

DESCRIPTION

MINIMUM GENERAL REQUIREMENTS

Devolutions Server 2019.1.X.X or later.

Most recent browsers are supported and so is Internet Explorer 11 or above.

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MINIMUM PLATFORM REQUIREMENTS

WINDOWS

- Windows 8 or later
- Microsoft .NET Framework 4.7.2
- 1GHz or faster processor
- 2GB of RAM
- 100MB hard drive space

9.2.2 Download and Installation

DESCRIPTION

Follow these steps to download and install Devolutions Launcher:

1. Download Devolutions Launcher or search the companion tools in the products section of our Devolutions website.

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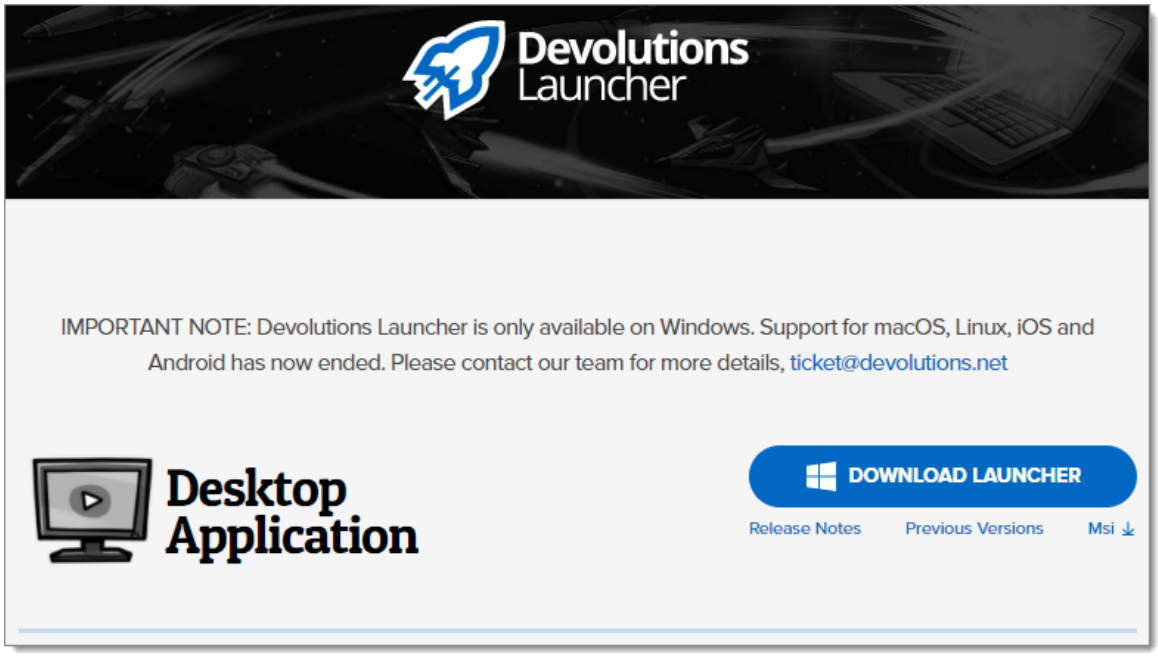
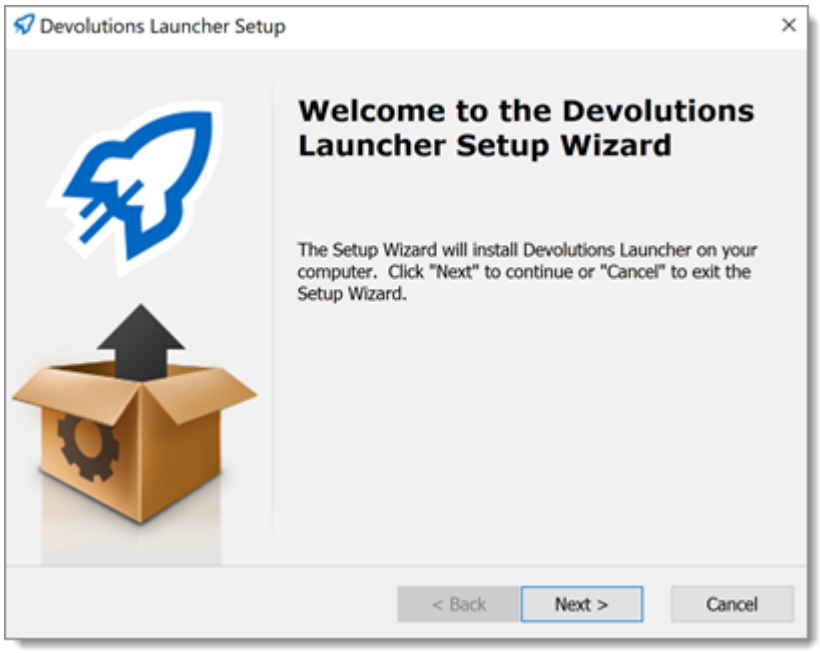


2. Launch the executable file.

3. Click ***Next*** on the welcome page.



4. Choose the setup type.

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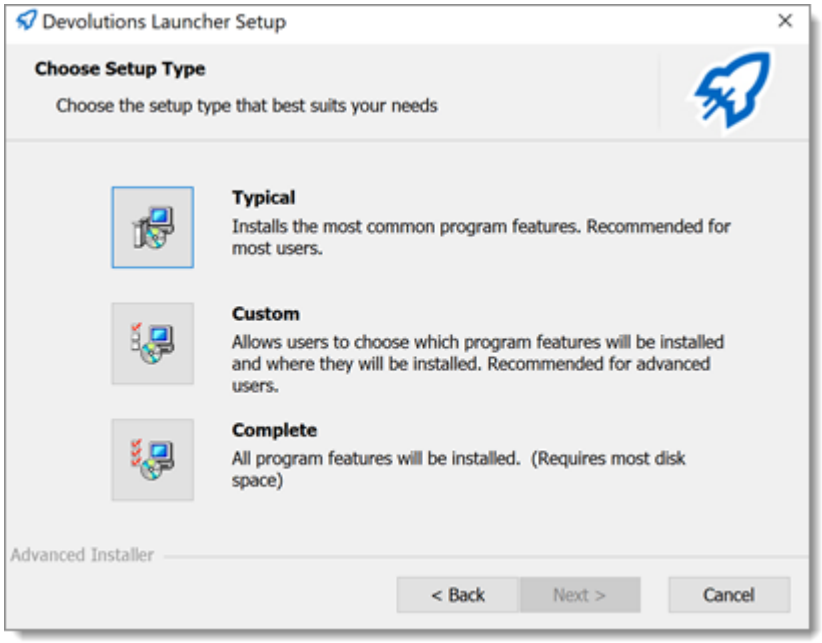
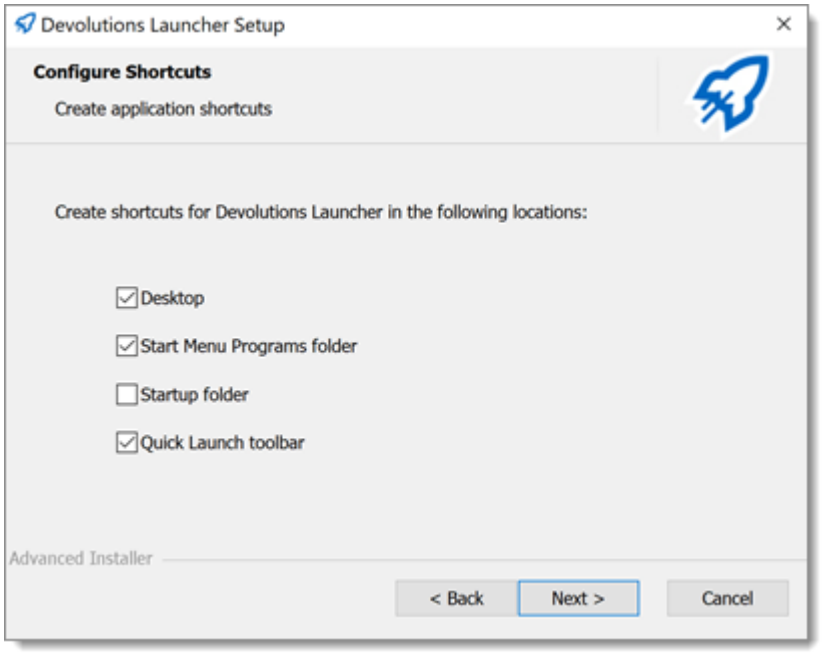


5. Select the shortcuts for Devolutions Launcher.



6. Accept the terms of the license agreement and click ***Next***.

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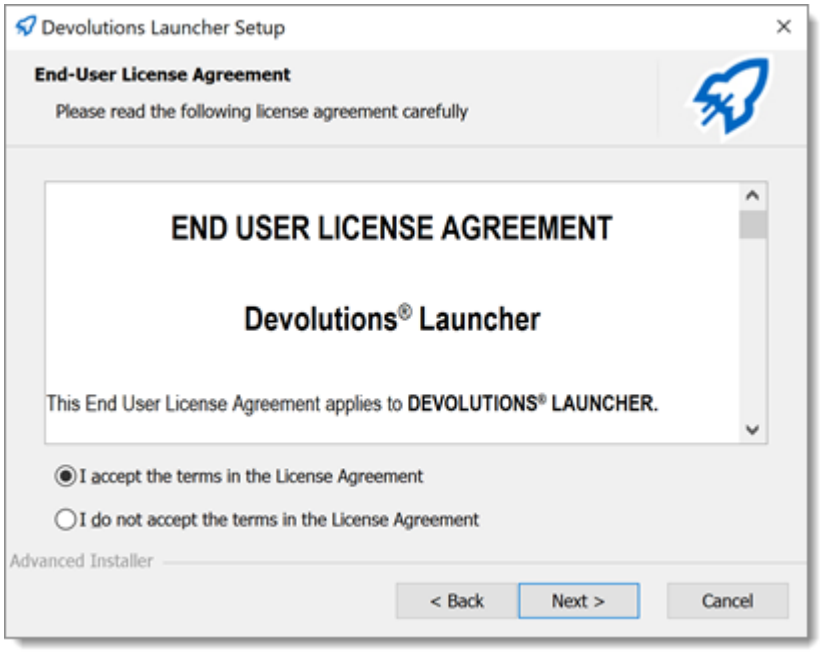
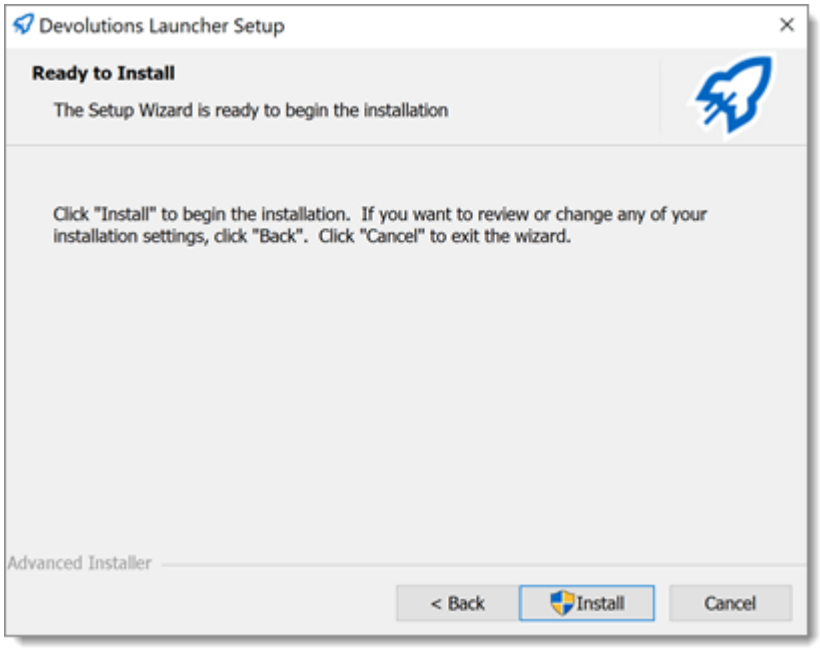


7. Click ***Install***.



8. Click ***Finish*** to complete the installation.

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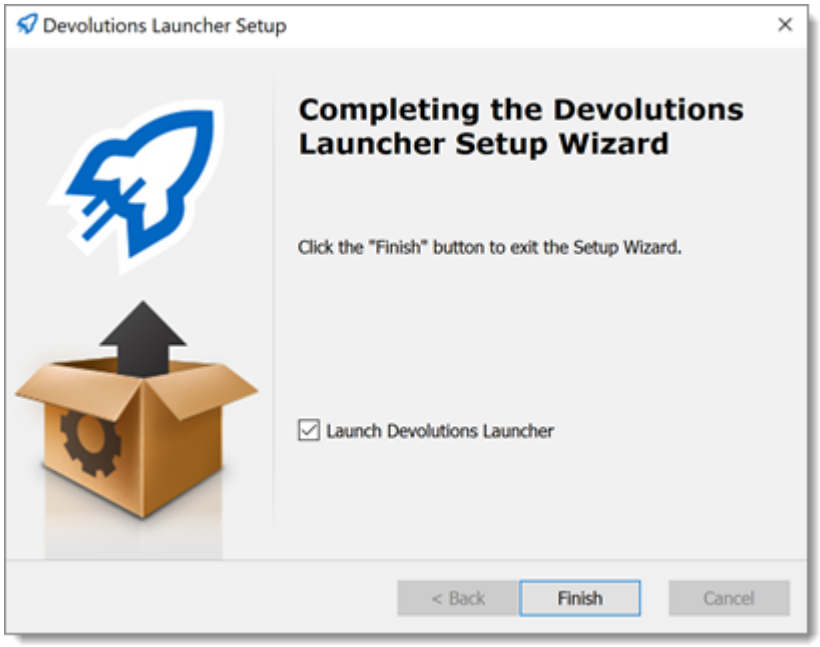

9.3 Configuration and Settings

9.3.1 Devolutions Server

9.3.1.1 Launcher License Registration

DESCRIPTION

Register your Devolutions Launcher CAL license serial in the web interface of Devolutions Server ***Administration - Server Settings - General - Serial***.

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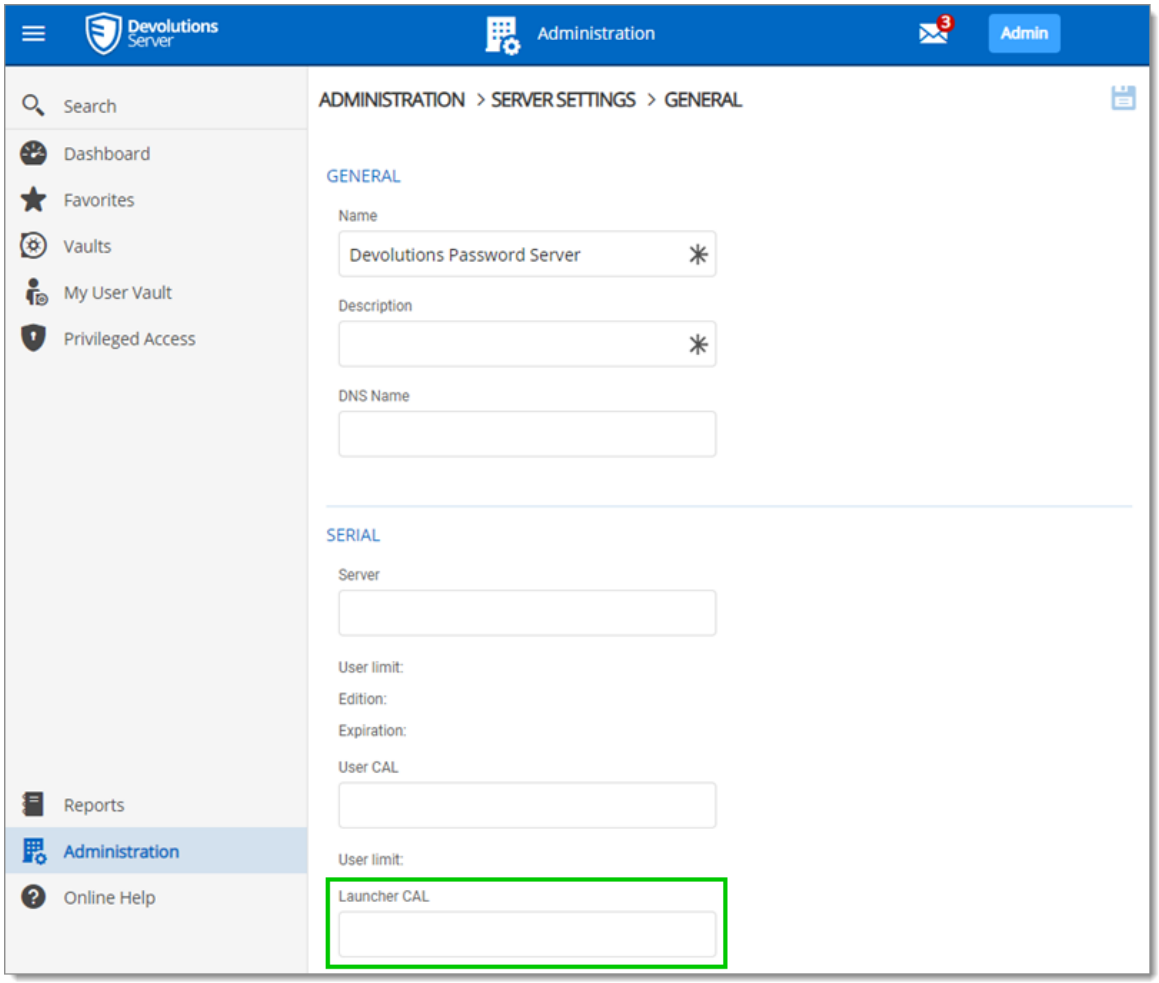

9.3.1.2 DVLS Source Selection

DESCRIPTION

When you finish the installation of Devolutions Launcher, you are prompted to choose a web source between Devolutions Password Hub and Devolutions Server.

Web Source Selection is available in the ***Settings - Source*** of Devolutions Launcher.

1. Choose ***DPS*** for Devolutions Server.

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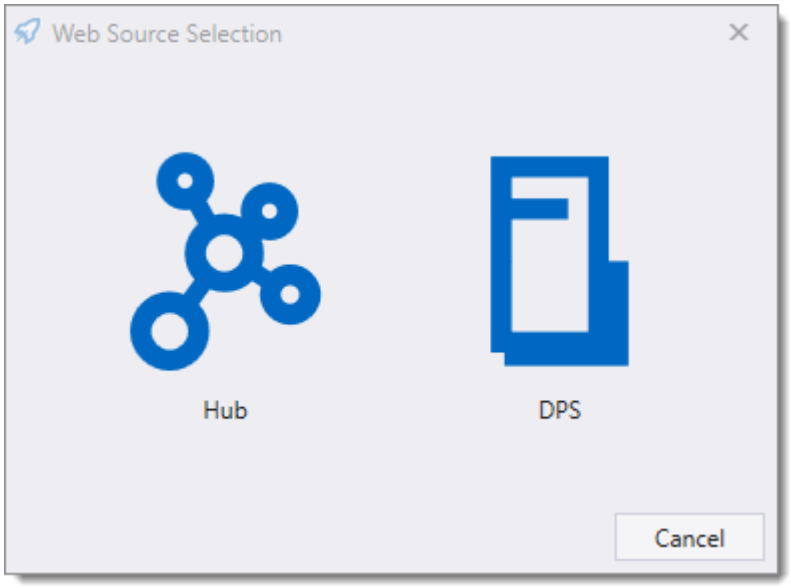
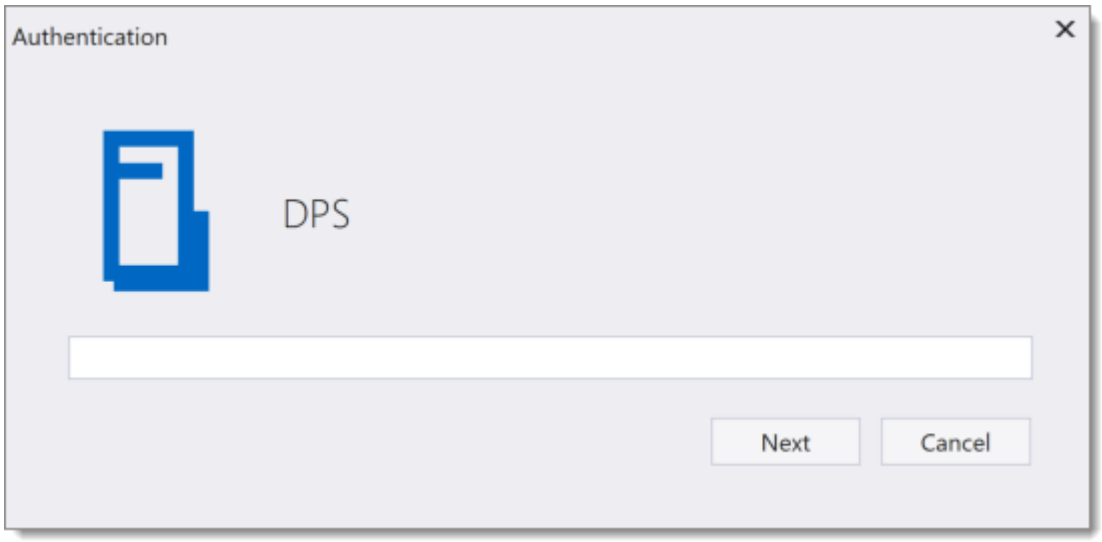


Choose a web source

2. Enter the Devolutions Server web address and click ***Next***.



Devolutions Server Web Address

3. Fill in your Devolutions Server credentials and click ***Next***.

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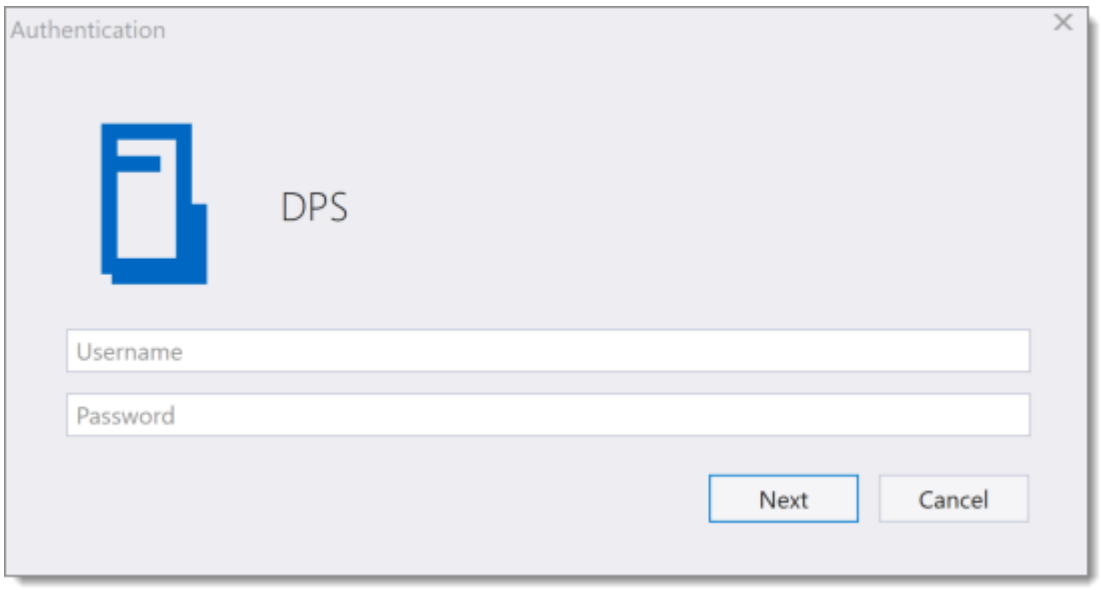

You are now connected to your Devolutions Server with Launcher.

9.3.1.3 Launcher and DVLS Synchronization

DESCRIPTION

Devolutions Launcher and Devolutions Server must be configured together to work. Launch connections can be set for all users in ***Devolutions Server Server Settings*** or individually in ***Account Settings***.

> You need to at least log in once to Devolutions Launcher for the companion tool to launch your sessions from Devolutions Server.

SERVER SETTINGS

This method sets how all users launch remote connections.

In ***Administration - Server Settings - Advanced*** use the ***Launch connection with*** the drop-down menu to select ***Devolutions Launcher***.

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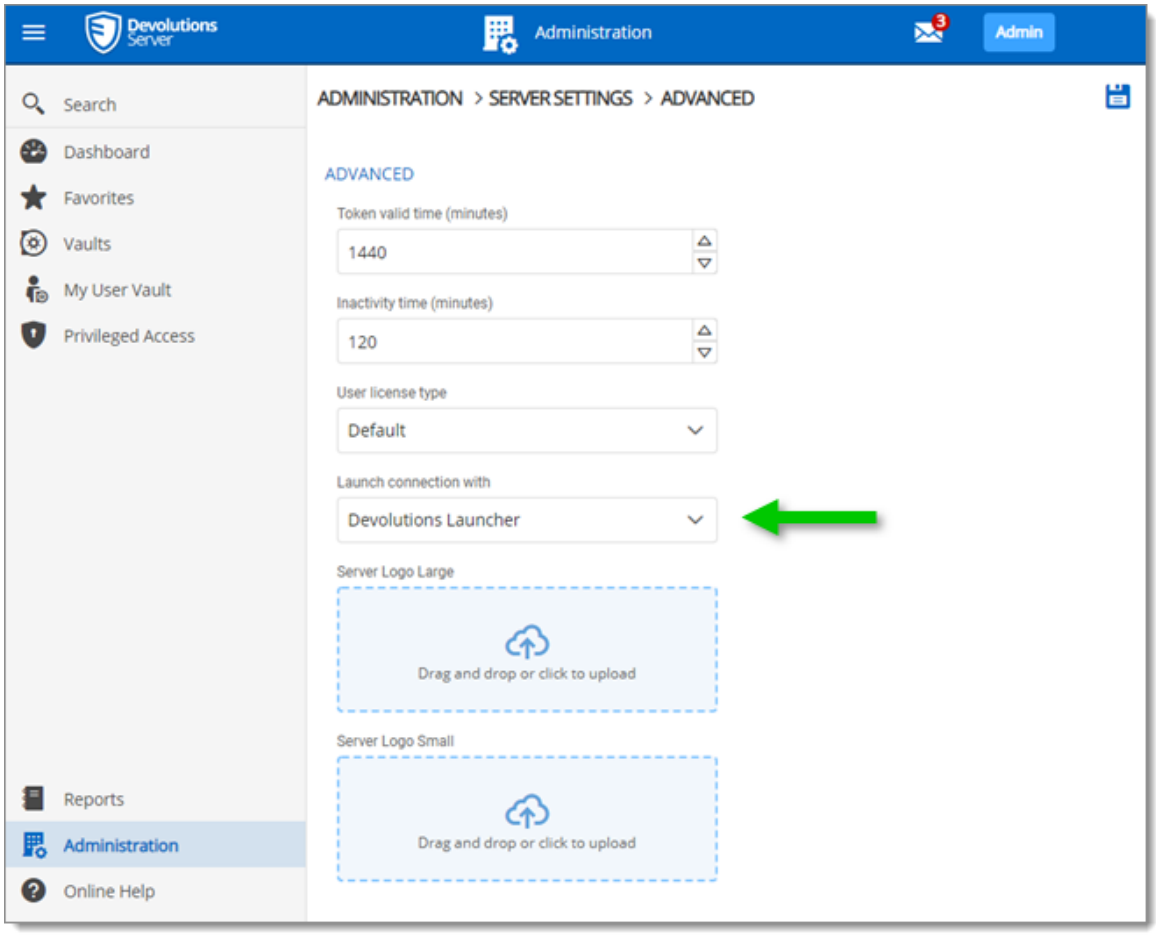

Administration - Server Settings - Advanced

ACCOUNT SETTINGS

This method sets how individual users open remote connections.

1. Click the ***User avatar*** in the upper right corner.
2. Click ***Settings***.

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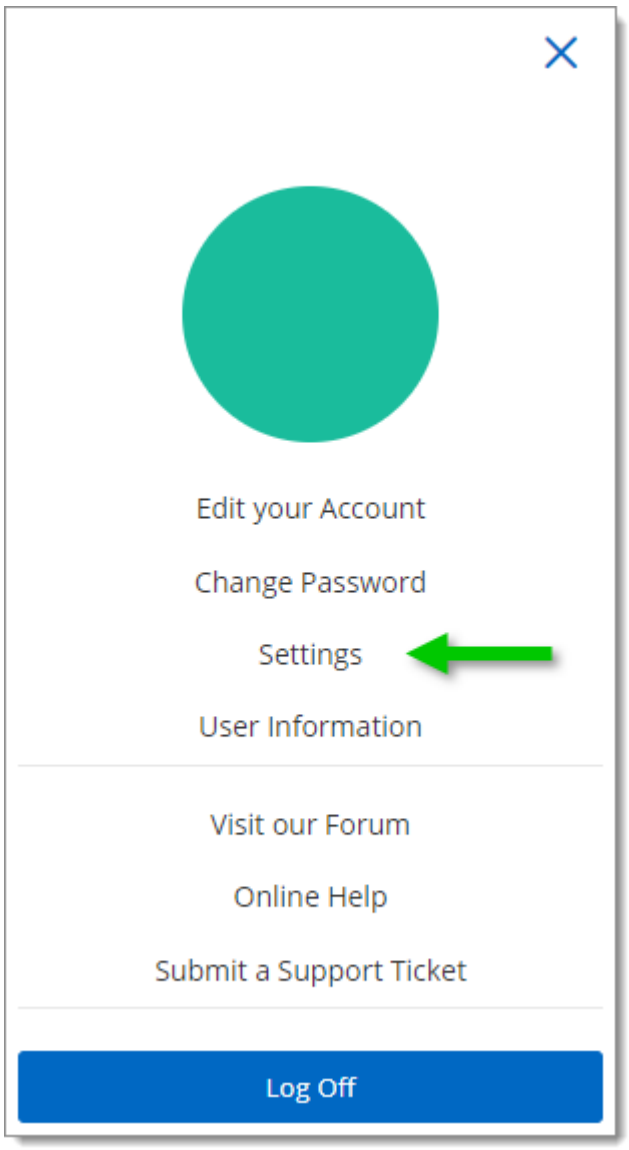

User Settings

3. Choose ***Devolutions Launcher*** from the drop-down menu ***Launch connection with*** and ***Save***.

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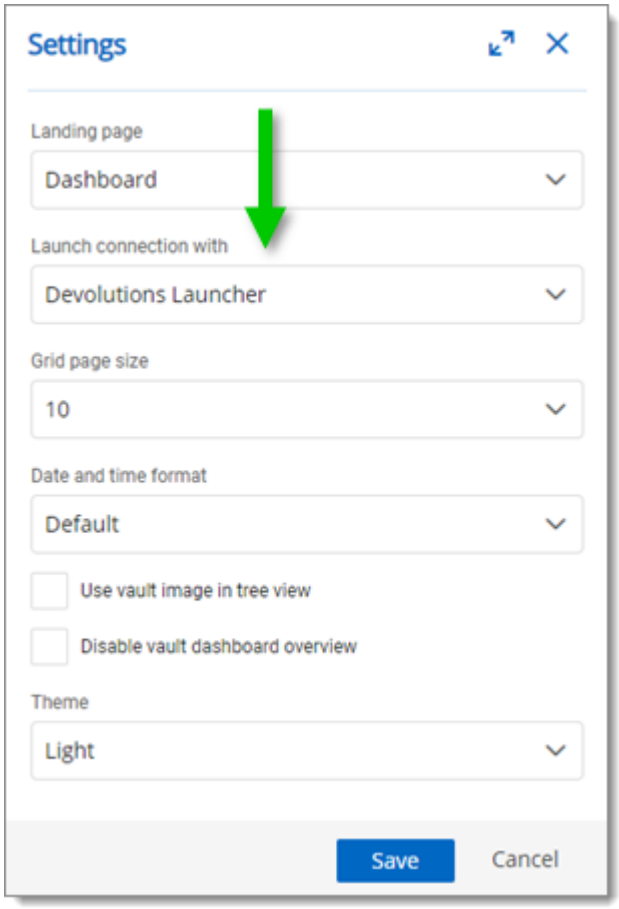

Settings - Launch connection with Devolutions Launcher

9.3.2 Devolutions Password Hub

9.3.2.1 Hub Source Selection

DESCRIPTION

When you finish the installation of Devolutions Launcher, you are prompted to choose a web source between Devolutions Password Hub and Devolutions Server.

Web Source Selection is available in the ***Settings - Source*** of Devolutions Launcher.

1. Choose ***Hub***.

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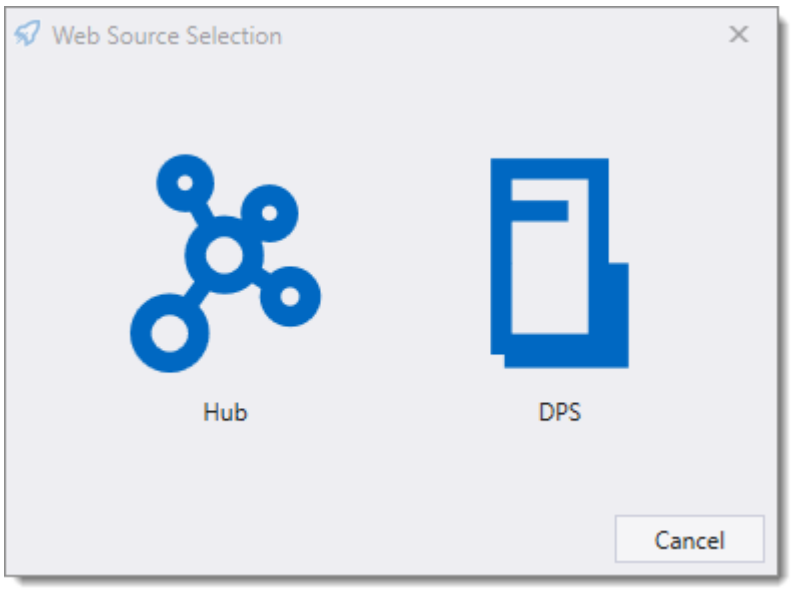
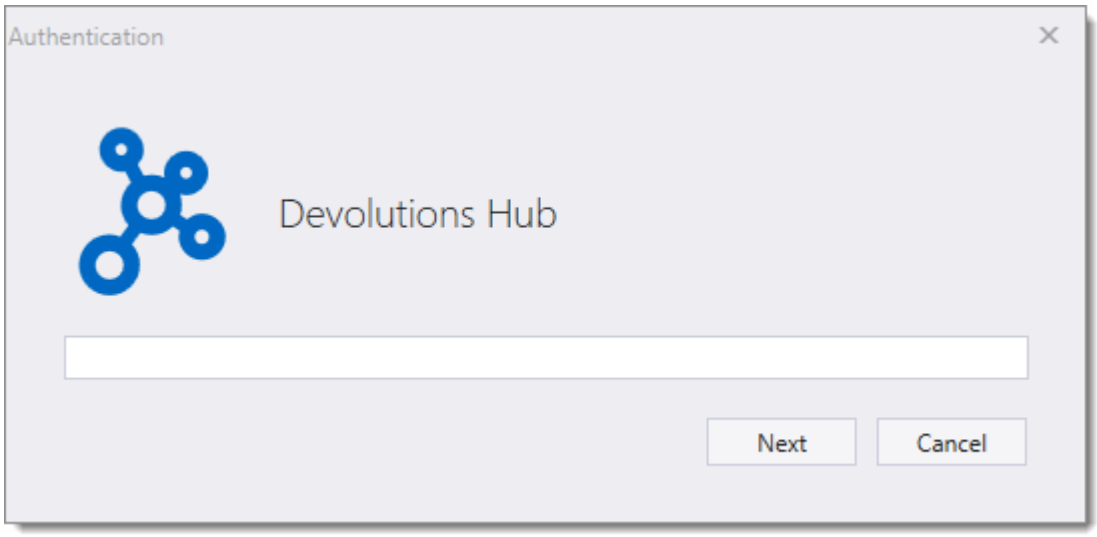


Choose a web source

2. Enter the Devolutions Password Hub web address and click ***Next***.



Devolutions Password Hub Web Address

3. Fill with your Devolutions Account credentials and ***Continue***.

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You are now connected to your Devolutions Password Hub Business with Launcher.

9.3.3 Launcher Settings

DESCRIPTION

GENERAL

In the ***General*** section, you can personalize the following options:

- Use Active X to open RDP sessions. When unchecked, RDP sessions will open using FreeRDP protocol.
- Choose the color theme of Devolutions Launcher.
- Choose between the available languages. Close the application and in the tray icon to activate the new setting.

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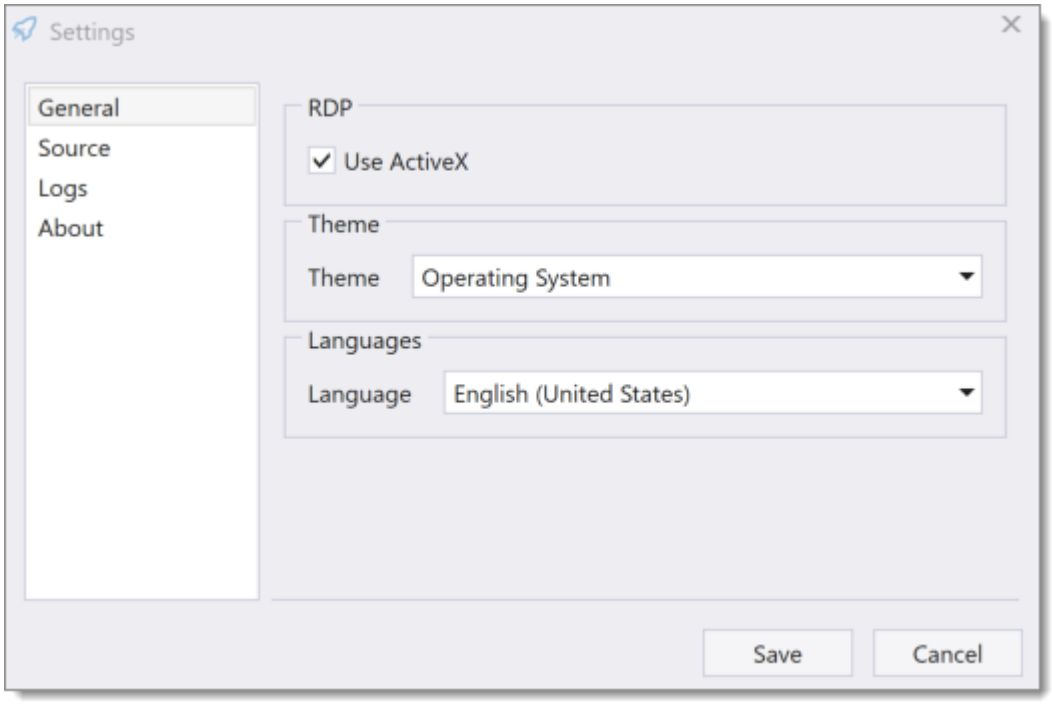

Devolutions Launcher Settings - General

SOURCE

Log in or out of your connected source.

LOGS

The information in the ***Logs*** section is primarily for administrators and application developers.

The log records events into a text file.

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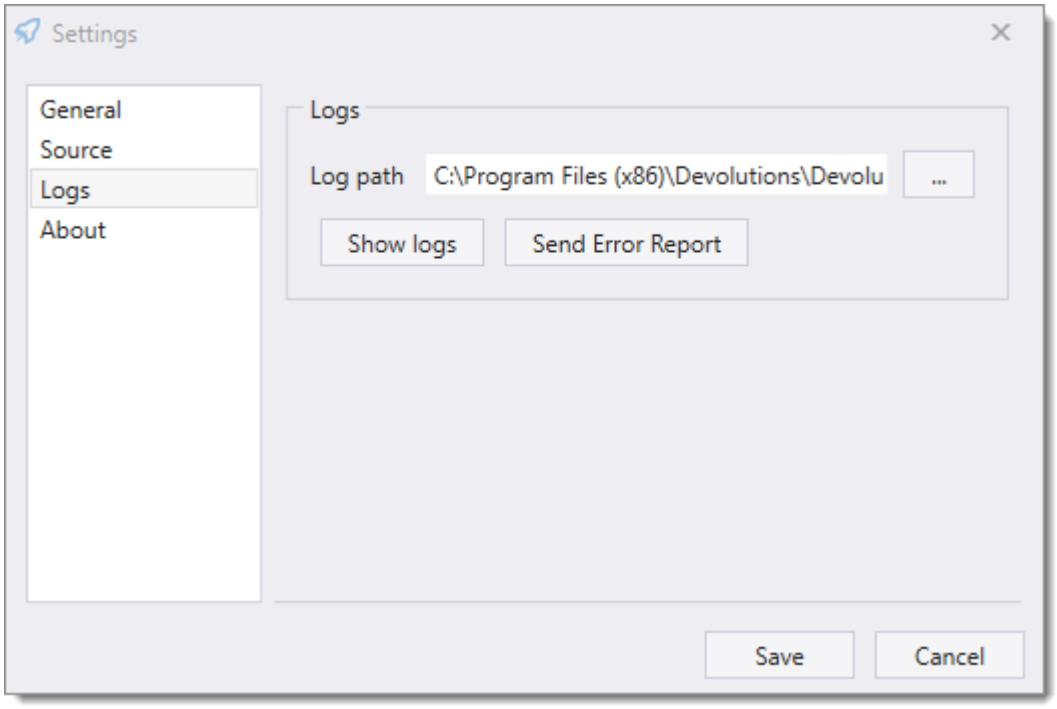

Devolutions Launcher Settings - Logs

1. Create a new log file (it can be a text document) before choosing the path.
2. Click the ellipsis button to select the path to save the log file, then save.

ABOUT

View Devolutions Launcher version and check for updates.

9.3.4 Launcher Session Settings

DESCRIPTION

DOCKING

Undock or float a session by double clicking the tab.

Click and hold the header of the undock window to move it around.

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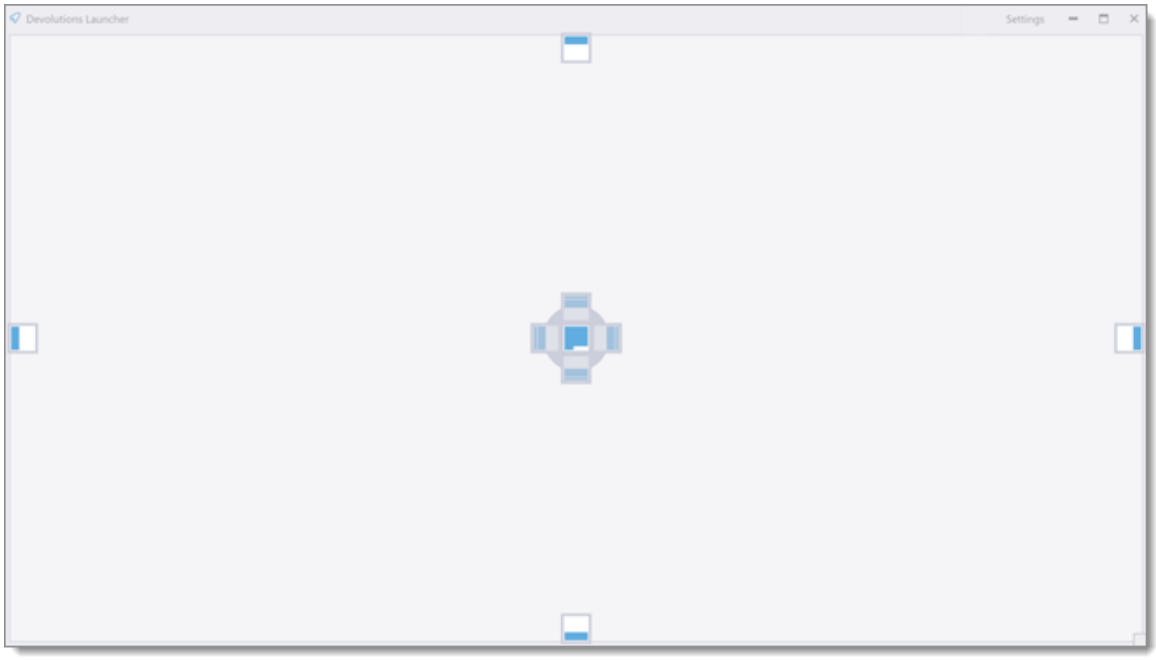
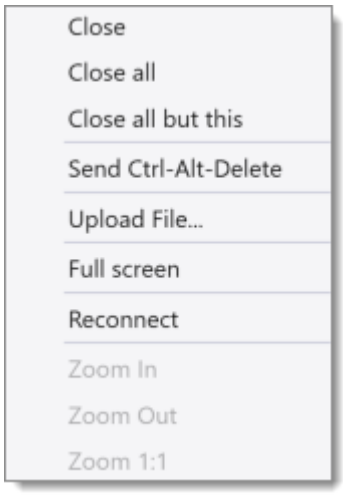
Dock to a selected area by clicking and holding the header of the undock window, releasing it on one of the areas of the Devolutions Launcher window.



SESSION MENU

To use the shortcut Ctrl-Alt-Delete in a session, right-click on the session tab to open the menu and click on the ***Send Ctrl-Alt-Delete*** button.



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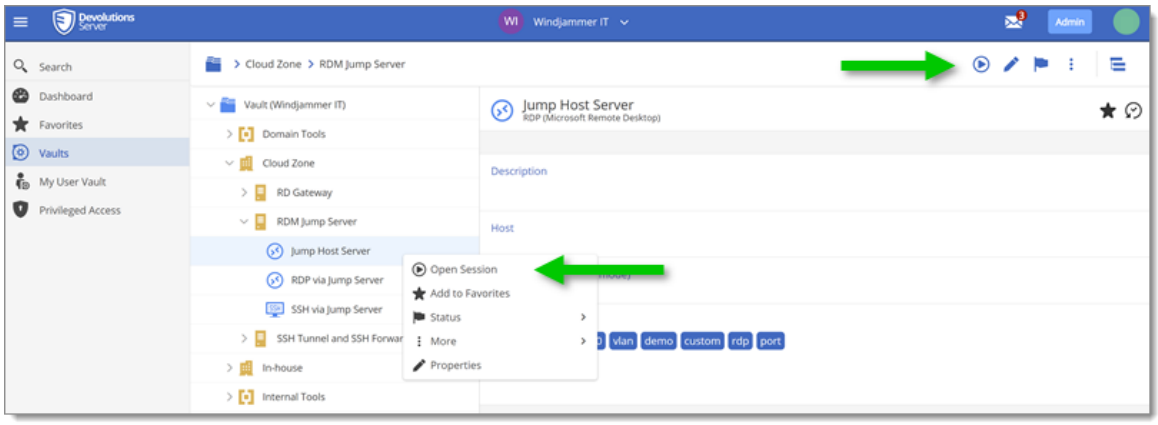
9.4 Utilization

9.4.1 How to Open a Session

DESCRIPTION

OPEN A SESSION WITH DEVOLUTIONS SERVER

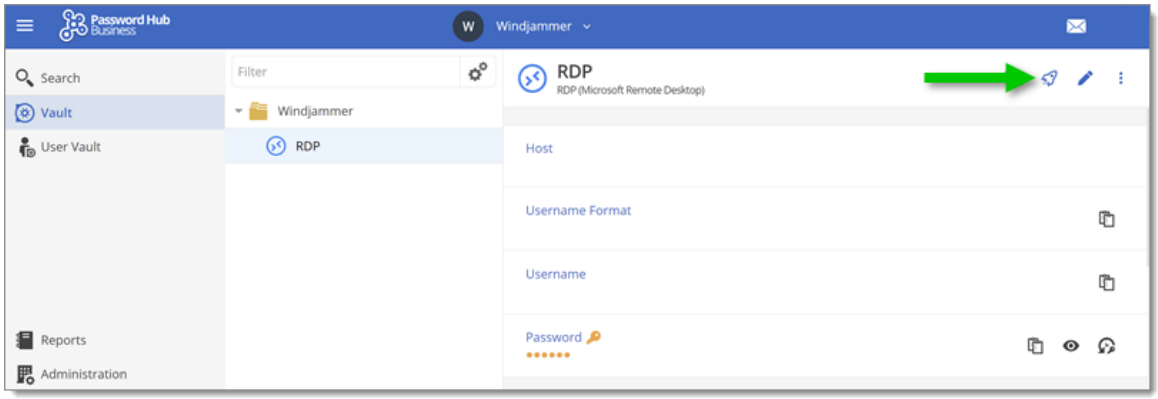
Select an entry and click the ***Open session*** button or right-click to get the contextual menu with the same option.



Open a Devolutions Server session

OPEN A SESSION WITH DEVOLUTIONS PASSWORD HUB

Select an entry and click the ***Devolutions Launcher*** icon.



Open a Devolutions Password Hub session

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Support/Resources

Part

10 Support/Resources

10.1 FAQ (Frequently Asked Questions)

WHAT IS DEVOLUTIONS SERVER?

Devolutions Server is a specialized data source for our various client applications of the **Remote Desktop Manager** platform.

WHY BUY DEVOLUTIONS SERVER?

Ideal for businesses that would prefer to store their data in-house, want to deploy their own SSL certificate or firewall or who need Active Directory integration with user groups management.

WHAT ARE THE KEY BENEFITS OF DEVOLUTIONS SERVER?

Devolutions Server is installed on your hardware, in your environment, or with your ISP to give you total control of everything, including:

- Active Directory integration
- User groups management
- Hardware
- Operating System
- Firewall / Application Delivery
- Load Balancing / Fault tolerant environment for the web server layer.
- Database, including clustering / failover capabilities.
- Backups
- SSL certificates

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Devolutions Server also offers an improved security model, as database access is limited to the server and no direct connection is established. This secure architecture is a significant improvement over standard client-server architecture. (SQL Server data source)

CAN I GET A TRIAL OF DEVOLUTIONS SERVER?

Yes - Request a trial

DOES DEVOLUTIONS SERVER INCLUDE A CLIENT LICENSE OF REMOTE DESKTOP MANAGER?

Devolutions Server does not include any client licenses.

IS DEVOLUTIONS SERVER SUBSCRIPTION BASED?

Yes, Devolutions Server is subscription based. You can subscribe for one (1) year or three (3) years at a time. Giving you unlimited client connectivity for that period of time.

WHAT IF I NO LONGER WANT/NEED A DEVOLUTIONS SERVER? IS MY DATA STILL ACCESSIBLE?

Yes, once your Devolutions Server subscription is expired you can still access the data using one of our applications. However the Devolutions Server data source will no longer be accessible. You will need to reconfigure your clients to connect directly to the database using a SQL Server data source. Since Active Directory integration will not be allowed anymore, you will need to reassign user permissions.

CAN I UPGRADE FROM A SQL SERVER DATA SOURCE TO DEVOLUTIONS SERVER?

Yes, the underlying SQL server database structure for the SQL Server data source is a subset of the Devolutions Server database structure. When installing/configuring the Devolutions Server simply specify the existing database and choose upgrade.

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Note: Before executing any database modification it is always a good idea to make sure you have a proper backup of the database.

10.2 Previous Versions

DESCRIPTION

Here are the links to the pdf manuals of past releases.

Devolutions Server 4.6

Devolutions Server 4.5

Devolutions Server 4.0

Devolutions Server 3.2

Devolutions Server 3.0

Devolutions Server 2.5

10.3 Technical Support

Hours:	Monday to Friday 7:30 a.m. to 6:00 p.m. EST
Knowledge Base:	Find helpful information's and procedures regarding our products.
Email:	ticket@devolutions.net
Forum:	https://forum.devolutions.net/
Language:	English-Français-Deutsch
Phone:	+1 844 463.0419

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EXTENDED AND PREMIUM SUPPORT PLANS

Subscribers of a paid support plan receive a plan ID. You should send your include your plan ID in your tickets.

Please consult our Support Policy for more information.

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Devolutions

Contact Us

For any questions, feel free to contact us:

Support: ticket@devolutions.net
Phone: +1 844 463.0419
Monday to Friday 7:30 a.m. to 6 p.m. EST

Head Office

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

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