ONE IDENTITY

by Quest

One Identity Safeguard for Privileged
Sessions 7.5

One Identity Safeguard Power BI
Connector Tutorial

Contents

This document describes how to use the One Identity Safeguard Power BI Connector (Power BI Connector) to import and visualize audit data from One Identity Safeguard for Privileged Sessions (SPS) in the Power BI Desktop reporting application.

The Power BI Connector automatically authenticates to the SPS REST API, then makes the appropriate calls on the appropriate endpoints to retrieve all audit data matching your filter queries.

Prerequisites and limitations to using the One Identity Safeguard Power BI Connector

Using the One Identity Safeguard Power BI Connector (Power BI Connector) to import and visualize your audit data in the Power BI Desktop reporting application has the following prerequisites and limitations.

Prerequisites

- Download the Microsoft Power BI Desktop application.

- Enable loading third party connectors.

- In One Identity Safeguard for Privileged Sessions (SPS), under **Basic Settings** > **Management** > **SSL certificates**, download the CA X.509 certificate of SPS to the Windows machine on which you are running the Power BI Desktop application, and import it to the local computer's certificate store as a trusted root certification authority.

  NOTE: One Identity recommends that when you download your CA X.509 certificate, you use the DER format instead of using the PEM format.

- Download the Power BI Connector version that is compatible with your SPS version.

Limitations

- The Power BI Connector is supported from SPS version 7.3. For more information about versions and compatibility, see the product's Releases page on GitHub.

- You cannot use the Power BI Connector report template in the Power BI Desktop application without the Power BI Connector.

How to get the One Identity Safeguard Power BI Connector

One Identity recommends that you make sure you meet the prerequisites to using the One Identity Safeguard Power BI Connector (Power BI Connector) before you proceed to download the application.

Downloading the Power BI Connector

- For the whole GitHub project, visit the project page on GitHub.

- For the general releases page, and more information about Power BI Connector versions and their compatibility with SPS versions, visit the Releases page on GitHub.

- For more information about the product's release policies and release frequency, see the relevant section in the README.md file on GitHub.

Import data to the Power BI Desktop application using the One Identity Safeguard Power BI Connector

One Identity recommends that when importing your data to the Power BI Desktop application using the One Identity Safeguard Power BI Connector (Power BI Connector), you proceed in the following order.

1. **Include the MEZ file in the appropriate local folder**

   After you download the MEZ file of the Power BI Connector from the release assets of the GitHub source repository, copy the MEZ file to your `This PC\Documents\Power BI Desktop\Custom Connectors` folder.

   NOTE: For a newly installed Power BI Connector, this folder does not exist, but you can create it manually for the path above.

2. **Enable the Power BI Desktop application to use the Power BI Connector**

   To enable the Power BI Desktop application to use the Power BI Connector

   1. Navigate to **File** > **Options and settings** > **Options** > **Security** > **Data extensions**, and select **(Not recommended) Allow any extension to load without validation or warning**.

   2. Navigate to **Home** > **Get data**, and use the search bar to find the Power BI Connector.

      TIP:The connector is named **Safeguard for Privileged Sessions (Beta)**, so One Identity recommends that you begin typing `Safeguard`.

   3. Select the connector and click **Connect**.

   4. A popup window appears.

      Enter the input query parameters for the Power BI Connector, then click **OK**.

      NOTE: The only required field is **SPS IP**, where you specify the IP address of the SPS appliance that you want to fetch session data from.

      NOTE: You can use the optional fields to filter the data you want to fetch.

      For more information, see List of available search queries in the *One Identity Safeguard for Privileged Sessions Administration Guide*.

      A popup window appears.

   5. Enter a username that is a valid username on SPS with the corresponding valid SPS password, then click **Connect**.

NOTE: To successfully authenticate and fetch data from SPS, you must have search access rights.

NOTE: If you have not previously imported your CA X.509 certificate of SPS, you may see the following notification:

> **Unable to connect**
>
> We encountered an error while trying to connect. Details: "The underlying connection was closed: Could not establish trust relationship for the SSL/TLS secure channel."

In this case, download your SPS CA X.509 certificate and import it to your certificate store.

NOTE: You may get the following message:

```
Your version of the connector (ConnectorVersion) is not compatible
with your SPS version (SPSVersion). For a connector version that is
compatible with your SPS version, visit the official release page
of the connector:
https://github.com/OneIdentity/SafeguardPowerBI/releases
```

Possible reason: SPS or Power BI Connector was upgraded.

Solution: Check and upgrade Power BI Connector. For more information, see Upgrading your Power BI Connector.

The **Navigator** data preview window appears.

6. Use the **Info** and **Sessions** table options to preview your fetched session data.

⚠ **CAUTION:**

One Identity strongly recommends that you check both the Info and Sessions table options to facilitate debugging with more detailed information, even if trace logs are not enabled.

NOTE: If you have previously used the Power BI Connector with the same input parameters, the Power BI Connector may fetch data from cache memory in the **Preview** popup window. To avoid this, click **Refresh**.

NOTE: In the **Preview** popup window, the Power BI Connector starts loading data, but may not fetch and display all data successfully. After you click **Load**, the data fetch process begins and the Power BI Connector fetches audit data from SPS. After the fetch process is successfully completed, you can start creating your reports. One Identity provides a preconfigured report template that you can use to visualize your imported audit data in the Power BI Desktop application.

Upgrading the Power BI Connector and refreshing your preloaded data

This section describes how you can upgrade the One Identity Safeguard Power BI Connector (Power BI Connector) and refresh your preloaded data using .pbix files.

NOTE: If you have not used the Power BI Connector before, One Identity recommends that you read the following sections first:

- Prerequisites and limitations to using the One Identity Safeguard Power BI Connector
- How to get the One Identity Safeguard Power BI Connector
- Import data to the Power BI Desktop application using the One Identity Safeguard Power BI Connector

NOTE: You can only upgrade to a newer version of the Power BI Connector if you are using a supported version of One Identity Safeguard for Privileged Sessions (SPS). For the list of supported SPS versions, see the Releases page on GitHub.

How to refresh your preloaded data in the Power BI Connector

This section describes how you can refresh your preloaded data in the One Identity Safeguard Power BI Connector (Power BI Connector).

NOTE: If you have not used the Power BI Connector before, One Identity recommends that you read the following sections first:

- Prerequisites and limitations to using the One Identity Safeguard Power BI Connector
- How to get the One Identity Safeguard Power BI Connector
- Import data to the Power BI Desktop application using the One Identity Safeguard Power BI Connector

If you want to upgrade your Power BI Connector, see Upgrading your Power BI Connector.

To refresh your preloaded data in the Power BI Connector

1. In Power BI Desktop, open your previously saved .pbix file.
2. In Power BI Desktop, navigate to **Home**, and click **Refresh**.

   NOTE: You may encounter the following issues:

- Issue: you may get the following message when you are trying to refresh your data:

```
Your version of the connector (ConnectorVersion) is not compatible
with your SPS Version. For a connector version that is compatible
with your SPS Version, visit the official release page of the
connector: https://github.com/OneIdentity/SafeguardPowerBI/releases
```

  Possible reason: you upgraded to an unsupported SPS or Power BI Connector version.

  Solution: repeat the upgrade process. For more information, see Upgrading your Power BI Connector.

- Issue: an error occurs after refreshing your preloaded data.

  Solution:

  One Identity strongly recommends that you discard your changes to keep your data intact.

Upgrading your Power BI Connector

This section describes how you can upgrade your One Identity Safeguard Power BI Connector (Power BI Connector).

NOTE: If you have not used the Power BI Connector before, One Identity recommends that you read the following sections first:

- Prerequisites and limitations to using the One Identity Safeguard Power BI Connector
- How to get the One Identity Safeguard Power BI Connector
- Import data to the Power BI Desktop application using the One Identity Safeguard Power BI Connector

NOTE: You can only upgrade to a newer version of the Power BI Connector if you are using a supported version of One Identity Safeguard for Privileged Sessions (SPS). For the list of supported SPS versions, see the Releases page on GitHub.

To upgrade your Power BI Connector

1. Get a connector MEZ file that is compatible with your SPS version.

   TIP: You can get a MEZ file by one of the following methods:

   - Download the file from the Releases page of the GitHub project.
   - Build it from source code by following the steps described in the Contribution guide of the GitHub project.

2. Copy the MEZ file to your %USERPROFILE%\Documents\Power BI Desktop\Custom Connectors folder.

NOTE: You may encounter the following issue:

- Issue: you may get the following message after you have successfully upgraded your custom connector and tried to fetch data:

  > Your version of the connector (ConnectorVersion) is not compatible with your SPS version (SPSVersion). For a connector version that is compatible with your SPS version, visit the official release page of the connector: https://github.com/OneIdentity/SafeguardPowerBI/releases

  Possible reason: you upgraded to an unsupported SPS or Power BI Connector version.

  Solution: repeat the upgrade process.

How to use mashup engine trace logs for troubleshooting

Mashup engine trace logs contain diagnostic information about the performed actions of the One Identity Safeguard Power BI Connector (Power BI Connector). Collecting mashup engine trace logs is not enabled by default in the Power BI Connector, and One Identity recommends that you enable collecting them if you have previously encountered any issues using the Power BI Connector.

How to enable mashup engine trace logs in your Power BI Desktop application and where to find them

To enable mashup engine trace logs in your Power BI Desktop application, follow the procedure in Collecting mashup traces in the online *Power BI get started documentation*.

> NOTE: Including the contents of the `Traces\Performance` folder is not required for the ZIP file you send for troubleshooting.

> NOTE: If you close and reopen the Power BI Desktop application, this setting resets, so you have to enable trace logs again.

How to use mashup engine trace logs for troubleshooting

If you encounter any issues with the Power BI Connector, One Identity Support can help you with troubleshooting if you have mashup engine trace logs enabled and collected.

To use mashup engine trace logs for troubleshooting

1. Enable mashup engine trace logs in your Power BI Desktop application.
2. Reproduce the issue and compress the required contents into a ZIP file.
3. Create a One Identity Technical case.
4. Attach the ZIP file to the newly created technical case.

The One Identity Power BI report template

You can use the One Identity Power BI report template (report template) to visualize your imported audit data in the Power BI Desktop application. The report template is a preconfigured report template in PBIT format, with built-in report functions, visualization elements, and charts. The report template automatically detects and uses the One Identity Safeguard Power BI Connector (Power BI Connector).

Where to find the One Identity Power BI report template

Prerequisites and limitations to using the One Identity Power BI report template

How to start using the One Identity Power BI report template

The report pages of the One Identity Power BI report template

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In addition to the source code and the MEZ file, you can download the report template for a specific Power BI Connector release from the **Assets** section of that particular release from the GitHub source repository.

NOTE: Report templates and the reports that you create using them are not only compatible with the Power BI Connector available in that particular release. They are also compatible with Power BI Connectors that have the same major release version.

For more information about Power BI Connector release versioning, see our product release policies.

For more information about the prerequisites and limitations about using the report template, see Prerequisites and limitations to using the One Identity Power BI report template.

For more information about how to start using the report template, see How to start using the One Identity Power BI report template.

For more information about the available report pages of the report template, see The report pages of the One Identity Power BI report template.

Prerequisites and limitations to using the One Identity Power BI report template

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For more information about where you can find the report template, see Where to find the One Identity Power BI report template.

For more information about how to start using the report template, see How to start using the One Identity Power BI report template.

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To start using the report template in the Power BI Desktop application

1. Follow the instructions of the Using report templates section of the *Power BI online documentation* to open your report template.

2. Configure your input query parameters, then click **Load** to start data fetching from SPS.

For more information about where you can find the report template, see Where to find the One Identity Power BI report template.

For more information about the prerequisites and limitations about using the report template, see Prerequisites and limitations to using the One Identity Power BI report template.

For more information about the available report pages of the report template, see The report pages of the One Identity Power BI report template.

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The report template has the following report pages:

- **Fetch result**: This report page contains information about your most recent data fetch and if the process was successful.

  NOTE: Consider the following on the **Fetch result** report page:

  - The value of **Expected sessions count** indicates the total number of sessions you can fetch with the input query parameters you specified. If the returned value is more than the returned value of **Fetched session count**, your data fetch process may be interrupted (for example, because SPS disconnected during the fetch process).

  - If your the returned value of **Fetch status** is other than `Success`, and the returned value of **Fetch message** is other than `Data fetch succeeded`, carefully read the information in the fetch message for further details.

- **Users**: This report page contains statistical data tables about:

  - The users who initiated sessions.

  - The client machines from which the users initiated sessions.

  - The servers to which the users initiated sessions.

  TIP: Clicking on a particular data field in the summary table highlights the selected data in the diagrams of the report page. To clear this selection, click on the selected data field once more, or click **Clear Filters**.

- **Assets**: This report page contains detailed information about the sessions, including distribution diagrams. On this report page, an asset is a session.

- **Interesting events**: This page contains a table of every unusual event during the sessions in your data fetch results.

  NOTE: If you want choose an unusual event from the **Interesting events** table and display the corresponding user or asset data on their respective report pages, right-click the unusual event, then select **Drill through** > **Users** | **Assets**. To reset your selection, click **Clear Filters** on the report page where you filtered with the **Drill through** option (that is, on the **Assets**, or the **Users** report page).

For more information about where you can find the report template, see Where to find the One Identity Power BI report template.

For more information about the prerequisites and limitations about using the report template, see Prerequisites and limitations to using the One Identity Power BI report template.

For more information about how to start using the report template, see How to start using the One Identity Power BI report template.

About us

One Identity solutions eliminate the complexities and time-consuming processes often required to govern identities, manage privileged accounts and control access. Our solutions enhance business agility while addressing your IAM challenges with on-premises, cloud and hybrid environments.

Contacting us

For sales and other inquiries, such as licensing, support, and renewals, visit https://www.oneidentity.com/company/contact-us.aspx.

Technical support resources

Technical support is available to One Identity customers with a valid maintenance contract and customers who have trial versions. You can access the Support Portal at https://support.oneidentity.com/.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to videos at www.YouTube.com/OneIdentity
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product