Qlik Connector for use with SAP NetWeaver

Installation guide for release 7.0.5

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General configuration

The purpose of this document is to guide you through the installation and configuration of the Qlik Connector for use with SAP NetWeaver. For information about how to use the connectors, please consult the online help: SAP NetWeaver Connector.

Installing the connectors

This release can only be used in SaaS editions of Qlik Sense. It contains transports to be used with the SAP BW Connector for SaaS editions of Qlik Sense. The SAP BW Connector combines and improves the functionality of the SAP Bex and SAP InfoProvider connectors for Qlik Sense Enterprise on Windows.

You must have a valid Enterprise license for using the SAP connectors in SaaS editions of Qlik Sense.

The connector is automatically installed in your Qlik Sense deployment. However, you must install SAP transports. Please see the 'SAP Transports' section for more information.

Prerequisites
See the online help: SAP NetWeaver Connector.

Backwards compatibility

The following table shows the current backwards compatibility of the connectors available in SaaS editions of Qlik Sense.

Connectors	Client	SAP transport (data extraction)
SQL connector	SaaS editions of Qlik Sense December 2019 or later	6.1.2 or later
BW connector	SaaS editions of Qlik Sense February 2021 or later	7.0.5

Installing and updating the license

See the online help: Licensing your deployment.

SAP Installation

All the connectors except OLAP and DSO use Qlik objects in the SAP system for communicating between the client and the SAP parts of the connectors and for extracting data. The Qlik connector objects are stored in two SAP packages: /QTQVC/QTDEV and /QTQVC/QTDEV_BW (for the BW, Bex, and InfoProvider connectors). All objects are prefixed with the Qlik-reserved namespace at SAP, /QTQVC/. This makes the objects unique for Qlik.

After the objects have been imported into an SAP system, it is possible to import a Qlik deletion transport to remove them (if they should not be used anymore).

Qlik also provides roles that must be assigned to the SAP user ID to authorize it for use with the connectors. The SAP connector roles contain the required authorization objects. Authorization objects may be checked both by the Qlik SAP connector objects and by standard SAP objects called from the Qlik objects. The Qlik roles are not mandatory, and you can copy or modify the Qlik roles if necessary. You can also create your own authorizations.

The Qlik objects and roles are distributed to customers in SAP transports. There are two types of Qlik SAP connector transports. One type contains the Qlik SAP connector objects such as ABAP programs, function modules and dictionary objects (used for data extraction), and the other contains the Qlik SAP connector roles (used for user profile).

The transports are imported into the SAP system with the SAP transport management system.

See: Import transports.

Qlik SAP connectors and SAP user IDs

Creating and maintaining an SAP User ID

Create one or more SAP user IDs that will be used for back-end jobs for Qlik and for administration tasks in the SAP system. These users are not intended as Qlik end-users, so only a limited number of SAP users should be created. Creating multiple users increases traceability and enables you to give them different authorizations.

Do the following:

1. In the SAP system, go to transaction SU01.
2. Click **Create** (**F8**).
3. Give the user a name and a password.
4. On the **Logon data** tab, assign the user to **User Type: Service**.
5. Click **Save**.

If the installation is an upgrade from a previous version and any of the Qlik roles have been updated, update all users assigned to that role:
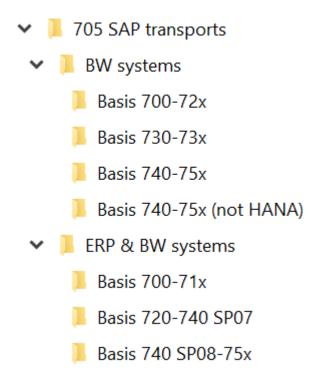
1. Go to transaction *PFCG*.
2. Enter the role name and click **Change Role**.
3. On the **User** tab, enter the name of the user(s) created above.
4. Click **User comparison**.

5. Click **Complete comparison**.
6. Click **Save**.

After SAP user IDs have been created, each of the Qlik Connectors for SAP can be configured. See <u>BW connector configuration</u>.

SAP Transports

The SAP transports are found on the <u>Qlik Download site</u>. Download and extract the file '705 SAP transports.zip'. The zip file has the following content:

- 705 SAP transports
  - BW systems
    - Basis 700-72x
    - Basis 730-73x
    - Basis 740-75x
    - Basis 740-75x (not HANA)
  - ERP & BW systems
    - Basis 700-71x
    - Basis 720-740 SP07
    - Basis 740 SP08-75x

The transports must be imported in the correct order:
1. Data extraction transports
2. Role transports (user profile)

The Data extraction transport is cross-client. It must be imported into the base client. The Role transports are client-specific and must be imported into all clients where they will be used.

See: <u>Import transports</u>.

Transports for release 7.0.5

NOTE: The transports for SAP ERP & BW (SQL, Report, SAP Query, BAPI, and Extractor connectors) in release 7.0.5 are the same as in release 7.0.3 and 7.0.4, so those transports may already be imported.
It is necessary to install SAP ERP & BW transports before installing SAP BW transports (note that only the SQL connector from those transports can be used in SaaS editions of Qlik Sense).

Information about which transports to import can be found in the online help: <u>Installing the SAP transports on SaaS editions of Qlik Sense</u>.

Import transports

It is recommended that the transports are imported into the SAP system by SAP Basis experts.
There is normally no need to delete the Qlik objects from a previous release before import, because the objects from the latest transport overwrites previous ones.
Depending on SAP Basis, the following options might need to be selected in transaction **STMS**:

After import, check the transport log like below.

Put the cursor on the transport and press the 'Logs' button .
The log example below illustrates a successful import. Warnings normally do not indicate a problem, but if the log lists errors, they must be corrected.

Passing through a Message server

If passing through a Message server, an entry may have to be added in the 'services' file (`C:\Windows\System32\drivers\etc\services`). Add `sapmsxxx 36nn/tcp`, where *xxx* is the system ID and `nn` is the system number. If it is the last line in the file, add a new line break after the entry.

As an alternative to updating the 'services' file, you can enter the Message server port number directly, instead of the System ID, when creating the connector connection. The port number is of the form `36nn` where `nn` is the system number.

Passing through a Firewall

If there is a firewall between the connector and the SAP system, port `33nn` must be open (where `nn` = system number of the SAP system).

BW connector configuration

Assign roles to Qlik SAP user

Authorizations are required to use the BW connector. Qlik provides three roles that contain the necessary authorizations. It is possible to assign different roles to different users dependent of need, or all roles can be assigned to one user. The roles are:
1. QTQVCADMIN: There are some Qlik transactions in the SAP GUI. Most of them require that this role is assigned to the user.
2. QTQVCACCESS: To be used by a connector back-end user for doing extraction jobs from Qlik.
3. QTQVCBWACCESS: To be used by the OLAP, DSO/ODS, BEx, InfoProvider, and BW Connectors back-end user for doing extraction jobs on an SAP BI/BW system.

To assign role(s) to a user ID, do the following:
1. In the SAP system, go to transaction *SU01*.
2. Enter User ID and click **Change** (**Shift + F6**).
3. On the **Roles** tab, add the desired role(s).
4. Click **Save**.

If the installation is an upgrade from a previous version and any of the Qlik roles have been updated, please see: Creating and maintaining a SAP User ID.

SQL connector configuration

Assign roles to Qlik SAP user

Authorizations are required to use the SQL connector. Qlik provides two roles that contain the necessary authorizations. You can assign different roles to different users, depending on need, or both roles can be assigned to one user. The roles are:

QTQVCADMIN
There are some Qlik transactions in the SAP GUI. Most of them require that this role is assigned to the user.

QTQVCACCESS
To be used by a connector back-end user for doing extraction jobs from Qlik.
To assign role(s) to a user ID, do the following:
1. In the SAP system, go to transaction *SU01*.
2. Enter User ID and click **Change** (**Shift + F6**).
3. On the **Roles** tab, add the desired roles.
4. Click **Save**.

If the installation is an upgrade from a previous version and any of the Qlik roles have been updated, please see: Creating and maintaining a SAP User ID.

Testing SQL statements

The **/n/QTQVC/SQL** transaction allows testing of **SQL SELECT** statements. After installing the transports and creating a user, test that everything has been correctly installed.

Do the following:

1. Log on with Qlik SAP user ID and execute the transaction **/n/QTQVC/SQL**.

2. Enter the **SQL** statement.

3. Click **Open Stream** to start the job. Then either:

   a. Click **Fetch Stream** to display one page of the result. Click the **Back** arrow. Click **Close Stream** to end the job.

   or:

   b. Click **all Data** to execute the complete job and get the run-time statistics.

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About Qlik

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