

Release notes Qlik Connector for use with SAP NetWeaver 6.1.2

Release

This document covers changes in Qlik Connector for SAP 6.1.2.

Affected modules

As a general rule, virtually all components are recompiled for any new release. It is recommended to always update both the SAP and Windows side. However there is a backward compatibility towards SAP code starting from the SAP code of release 5.80 SR2. This makes it possible to install the Windows part of the Connectors for a new release without installing the corresponding SAP transports (new functionality dependent on changes in the SAP code cannot be used in that case).

The BEx connector and the SQL connector of release 6.1.2 are based on a new framework on the Windows side. For them the backward compatibility will start with the SAP code of release 6.1.1.

The following table shows the current backwards compatibility of the components of the connector package.

Connectors	Windows files	SAP transport (data extraction)
SQL connector	6.1.2	6.1.1
BEx connector	6.1.2	6.1.1
Query connector	6.1.2	5.80 SR2 or later
Report connector	6.1.2	5.80 SR2 or later
Extractor connector	6.1.2	5.80 SR2 or later
BAPI connector	6.1.2	5.80 SR2 or later

If you only intend to use the QV OLAP Connector and/or the DSO Connector, no transports need to be installed or updated on the SAP system(s).

Version 6.1.2 overwrites any previous version.

Follow link for more information about [Custom Connectors](#).

Important information for version – 6.1.2

Installation package

- If you have previously installed version 6.1.2 Beta, please do the following:
 1. Manually uninstall the Windows part of the SAP connectors (from the Control panel).
 2. Install the official version 6.1.2 installation package.
 3. Import the new SAP transport(s) to overwrite the previous transports, as normal.

New Features in version – 6.1.2

SQL Connector

- Significant performance improvement for reload times.
- The parameter RemoveThousandSeparator is not used anymore. Thousand separators are always removed before sending the data from SAP to Qlik. If the parameter is present in old scripts, it will not be used.

- New 'wideselect' functionality. SAP database fields with a column width exceeding 800 characters cannot be extracted by the current SQL connector. With the 'wideselect' functionality there is no limitation to column width. It is possible to extract one wide field column at a time together with a number of associated key fields. Please see the manual for more details.

The advanced properties "RemoveAllBlanks" and "ReplaceNullValue" do not have any effect on fields loaded with Wideselect. To handle blank field values and/or null values coming from the SAP system, it is recommended to use QlikView's built-in script functions in a preceding load statement, regardless if you use Wideselect or a regular Select statement. For more information and examples, see Appendix 1.

Extractor Connector

- New optional parameter "*SocketTimeout*", used to fine tune the timeout triggered by the first connection to the Qlik SAP Network Server. Default value is 900 (seconds). The parameter can be added to the connection string. (Example: SocketTimeout=500).

BEx Connector

- Variables maintained in the Default Values section in BEx Query Designer are now available in the variables section in the BEx connector select window. Those variables were previously not included for use in the connector.

Bugs corrected in version – 6.1.2

SQL Connector

- An extraction of an empty field of the SAP datatype String (STRG) could cause the field content of another extracted field to become corrupt. This does not happen if the String field was the last one of the extracted fields or if the String field had content. The error is now corrected.
- Usage of SAP system variables like SY-DATUM could cause errors. It is now working as expected.
- SAP 'conversion routines' used for numeric fields could cause errors. The solution, in the connector, is not to apply conversion routines for numeric fields when sending the data from SAP. Formatting can instead be applied in QlikView or Qlik Sense.
- SAP fields of the datatype FLTP (Floating point) could get erroneous values in Qlik if decimal notation 'comma' was used in SAP. This is now corrected.
- A small number of customers had experienced problems with parsing of the conditions 'IN' and 'BETWEEN' in select statements. The issue has now been resolved.
- No specific formatting enforced for Date & Time types, formatting is now entirely controlled from QlikView or Qlik Sense.
- The implication of Date & Time changes are that data is always sent as numeric values and when using advanced property NullDate=0, the value "00000000" is now interpreted as 12/30/1899 as a numeric value, compared to "0000-00-00" as a string before. Further, if the date field contains other values, such as strings they will be also be interpreted as NULL values, compared to being sent as strings before.

Example:

Legacy connector, NullDate=1		
--		14294
		106
	4/9/1998	3
	10/1/2001	1
	8/9/2004	1

New connector, NullDate=1		
ThisIsNull		14400
	4/9/1998	3
	10/1/2001	1
	8/9/2004	1

Legacy connector, NullDate=0		
--		106
0000-00-00		14294
	4/9/1998	3
	10/1/2001	1
	8/9/2004	1

New connector, NullDate=0		
ThisIsNull		106
	12/30/1899	14294
	4/9/1998	3
	10/1/2001	1
	8/9/2004	1

It is possible to display null values as a selectable value by using the QlikView/Qlik Sense variable "NullDisplay".

For more information, see: [Value handling variables](#)

BEx Connector

- If the SAP BW system contained inconsistencies in query and InfoProvider tables it could cause the connector to display error messages or crash. The metadata read of query data is now carried out without evaluation of consistency to prevent these problems.
- The dimensions are now called in the order they appear in the QV script. This gives the user the ability to control the compounding behavior of compounded InfoObjects which previously could prevent the user from extracting the uncompounded variant of an InfoObject.
- The field length for compounded InfoObjects has been prolonged to prevent the risk of truncated data. Previously, if the compounded value had a field length that exceeded the length of the main InfoObject, the exceeding characters were cut off when the field data was loaded to QV.
- The handling of non-navigational attributes and their texts has been improved so that the data extracted is not affected by the display setting of the main InfoObject. Previously, not all requested fields were extracted if the display setting of the main InfoObject was 'Text' or 'Key'.

Extractor Connector

- For some customers running QlikView Publisher, the connector occasionally hung when starting a new extraction job and thereby triggered a timeout. This was due to a deadlock condition in one of the included DLLs. This has now been resolved.
- For customers running QlikView Publisher: When a timeout was triggered (as in the previous point), the notification was not propagated. This prevented the failed task restarting properly. This issue has now been fixed.
- When a script contains multiple connection strings (e.g. one for each job), an error was sometimes raised from SAP, the "100 conversations exceeded". This error prevented the Extractor Connector Service 'Qlik SAP Network Server' from accepting new extraction jobs. This has now been fixed.
- A code addition to the Extractor Connector in the previous version contained a bug that caused the Extractor Connector Service 'Qlik SAP Network Server' to hang when running parallel jobs to the same logical system. The workaround was to run the extraction jobs in sequence. This has now been fixed.

Important information for version – 6.1.1

SAP transports

- When upgrading from connector version 6.1 IR to 6.1.1, it is not necessary to import the SAP data transport for the BEx connector again. It is the same for both versions. However the data transport for the other connectors must be imported into all systems (including the systems where the BEx connector is used). The role transports are the same as in release 6.1. No need to import them again.

Bugs corrected in version – 6.1.1

SQL Connector

- A small number of customers had experienced an issue with the parameter 'TimeOutFetch' which had caused a trigger to terminate the job before completion in some cases. The workaround would be to put a high value in the parameter. The issue has now been resolved and the parameter is now working as expected.
- There was a performance degrade in release 6.1. The issue has now been resolved.

Important information for version – 6.1 IR

SQL Connector

- When upgrading from a previous connector version to 6.1, you are required to replace Provider 'QvSAPConnector.dll' with 'QvSAPSqlConnector.exe' in any existing connection string that has been generated by previous versions of the SQL connector, like:
Old connection string for QlikView: **CUSTOM CONNECT TO "Provider=QvSAPConnector.dll;...**
New connection string for QlikView: **CUSTOM CONNECT TO "Provider=QvSAPSqlConnector.exe;...**
This is a one time process, and enables Qlik to support both QlikView and Qlik Sense with a single connector build.
Connections in Qlik Sense should be stored in a so called "Data connection", for more information around this, please consult the online help for Qlik Sense.
- The SAP data types CHAR (character) and NUMC (numeric character) were previously interpreted (in the Qlik script) as 'numeric' if they contained only digits. Leading zeroes were removed. (0000141000 became 141000).
Now they are always interpreted as 'text'. Leading zeroes are kept. These data types are not often used in calculations, but if they are the new behavior might require script changes since calculations expects numeric values
Please consult the QlikView/Sense documentation on how to work with number and text formatting in QlikView/Sense. <http://help.qlik.com/>

Extractor Connector

- **If upgrading from a previous release of Qlik Connector for SAP**, please note that some additional setup is necessary in the SAP system. For all Logical systems use the option 'Modify' in transaction /n/QTQVC/EXTRACTOR_ADM. See instructions in the manual under: **SAP > 6.1 > Connector configuration > SAP Extractor connector user configuration > Setting up Qlik extractor administration.**

New Features in version – 6.1 IR

SQL Connector

- The SQL connector is available in Qlik Sense. Please read about backward compatibility above.
- The parameters 'Log', 'Logpath' and 'LogFile' have been removed. The path to the log is specified in the manual and the name of the log is not possible to change. To configure the log settings, please see the manual under: **SAP > 6.1 > Connector clients > Using the SAP SQL connector > SAP SQL connector log**
- Now possible to decide how many buffers of data to fetch from SAP. Can be used as a preview. The parameter FetchBuffers is used. It can be combined with the parameter PacketSize which decides how many rows there should be in each buffer. To fetch one buffer with 100 rows, set the parameters like:
FetchBuffers=1
PacketSize=100

BEx Connector

- Please read about backward compatibility above.
- Descriptions for InfoProviders are now displayed in the same manner as for Queries.

Extractor Connector

- Bad performance has been observed in clustered Publisher environments on servers where the Extractor connector Service 'Qlik SAP Network Server' is not running. This was due to a small default buffer size when sending data packages between the Publisher server where the Extractor job was executed and the Service. Now the default buffer size has been increased. It is also possible to manually adjust the buffer size. Use the parameter 'TCPBufSize' (please see the manual for more information).

The Manual

- The PDF manual is replaced by online documentation. It can be called from inside the connectors and a link is also available in the 'Documentation' folder in Windows.

Bugs corrected in version – 6.1 IR

SQL Connector

- There was a limitation of 800 characters for field width. This is now increased to 8192 characters.
- Row based security bug fixed. An error could occur when using many values in the same value field.

BEx Connector

- The SAP structure BAPI6111STT is not available in SAP basis 7.00, causing syntax errors. It is not used anymore by the connector.
- It is now allowed to have all dimensions as free characteristics in the Bex Query. Previously this would cause SAP to dump
- Now possible to extract texts from SAP systems using a multibyte character set like Chinese or Korean.

Extractor connector

- Sometimes data packets got stuck in SAP, never reaching the connector. This was often related to Message Server Host connection. New functionality will ensure that this is not happening anymore.

- When extracting hierarchies with both data and text, the connector sometimes failed to finish the job correctly. This was more likely to happen when many texts were extracted. The error is now corrected.

Appendix 1

Wideselect (advanced properties)

In a new connection string, the default settings for "RemoveAllBlanks" and "ReplaceNullValue" are "RemoveAllBlanks=false", "ReplaceNullValue=true".

In a field read with a Select statement, null values will, in this case, be replaced with spaces. While in a field read with a Wideselect statement, the null values will not be replaced.

To ensure that null values are handled the same way in both a Select and a Wideselect statement, it is recommended to apply QlikView functionality to the relevant field as in the following example:

For Select:

```
LOAD
MYKEY,
if(Ord(Trim(MYFIELD))<>0,MYKEY,'NEW_VALUE') as MYNEWFIELD;
SELECT MYKEY, MYFIELD FROM MYTABLE;
```

For Wideselect:

```
LOAD
MYKEY,
if(Ord(Trim(MYFIELD))<>0,MYKEY,'NEW_VALUE') as MYNEWFIELD;
SQL WIDeselect MYKEY, WIDE(MYFIELD) FROM MYTABLE;
```

What happens here, is that in a preceding load, we apply QlikView specific functions that check for empty values and replace those with "NEW_VALUE". For specific information about each function, please consult the QlikView manual.

An important note here is that, in general, it is always best practice to control any kind of value handling and formatting with QlikView's own functions.

Select/Wideselect comparison of the handling of null values and blanks:

SELECT:

SAP Source Table	ReplaceNull Value	RemoveAllBlanks	Tranferred from SAP	Interpretation by Connector	Result in QlikView
NULL (ASCII 0)	TRUE (default)	FALSE (default)	Whitespace (ASCII 32)	Whitespace (ASCII 32)	Whitespace (ASCII 32)
		TRUE	Whitespace (ASCII 32)	Empty string (ASCII 0)	Empty string (ASCII 0)
	FALSE	FALSE	NULL (ASCII 0)	Empty string (ASCII 0)	Empty string (ASCII 0)
		TRUE	NULL (ASCII 0)	Empty string (ASCII 0)	Empty string (ASCII 0)
Whitespace (ASCII 32)	TRUE (default)	FALSE (default)	Whitespace (ASCII 32)	Whitespace (ASCII 32)	Whitespace (ASCII 32)
		TRUE	Whitespace (ASCII 32)	Empty string (ASCII 0)	Empty string (ASCII 0)
	FALSE	FALSE	Whitespace (ASCII 32)	Whitespace (ASCII 32)	Whitespace (ASCII 32)
		TRUE	NULL (ASCII 0)	Empty string (ASCII 0)	Empty string (ASCII 0)

WIDeselect:

SAP Source Table	ReplaceNull Value	RemoveAllBlanks	Tranferred from SAP	Interpretation by Connector	Result in QlikView
NULL (ASCII 0)	TRUE (default)	FALSE (default)	NULL (ASCII 0)	Empty string (ASCII 0)	Empty string (ASCII 0)
		TRUE	NULL (ASCII 0)	Empty string (ASCII 0)	Empty string (ASCII 0)
	FALSE	FALSE	NULL (ASCII 0)	Empty string (ASCII 0)	Empty string (ASCII 0)
		TRUE	NULL (ASCII 0)	Empty string (ASCII 0)	Empty string (ASCII 0)
Whitespace (ASCII 32)	TRUE (default)	FALSE (default)	NULL (ASCII 0)	Empty string (ASCII 0)	Empty string (ASCII 0)
		TRUE	Whitespace (ASCII 32)	Empty string (ASCII 0)	Empty string (ASCII 0)
	FALSE	FALSE	Whitespace (ASCII 32)	Empty string (ASCII 0)	Empty string (ASCII 0)
		TRUE	Whitespace (ASCII 32)	Empty string (ASCII 0)	Empty string (ASCII 0)