Transferring Data with DB Connect

Release 30B

SAP
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Icons

<table>
<thead>
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<th>Icon</th>
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<tr>
<td>⚠️</td>
<td>Caution</td>
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<tr>
<td>📊</td>
<td>Syntax</td>
</tr>
</tbody>
</table>

Typographic Conventions

<table>
<thead>
<tr>
<th>Type Style</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Example text</em></td>
<td>Words or characters that appear on the screen. These include field names, screen titles, pushbuttons as well as menu names, paths and options. Cross-references to other documentation.</td>
</tr>
<tr>
<td><strong>Example text</strong></td>
<td>Emphasized words or phrases in body text, titles of graphics and tables.</td>
</tr>
<tr>
<td><strong>EXAMPLE TEXT</strong></td>
<td>Names of elements in the system. These include report names, program names, transaction codes, table names, and individual key words of a programming language, when surrounded by body text, for example, SELECT and INCLUDE.</td>
</tr>
<tr>
<td><em>Example text</em></td>
<td>Screen output. This includes file and directory names and their paths, messages, source code, names of variables and parameters as well as names of installation, upgrade and database tools.</td>
</tr>
<tr>
<td><strong>EXAMPLE TEXT</strong></td>
<td>Keys on the keyboard, for example, function keys (such as F2) or the ENTER key.</td>
</tr>
<tr>
<td><em>Example text</em></td>
<td>Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.</td>
</tr>
<tr>
<td><code>&lt;Example text&gt;</code></td>
<td>Variable user entry. Pointed brackets indicate that you replace these words and characters with appropriate entries.</td>
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</table>
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Transferring Data with DB Connect

Purpose

By default, the system opens a connection to the database on which the SAP system runs when initiating a BW Application Server from the SAP kernel. From now on, this connection is referred to as the (SAP) default connection. All SQL commands- irrespective of whether Open or Native SQL- submitted by the SAP kernel or ABAP programs, automatically relate to this default connection. That is, they are run in context of the database transaction active in this connection. Connection data, such as database user name, user password or database name are either taken from profile parameters or from the corresponding environment variables (this is database-specific).

You can use DB Connect to open other database connections in addition to the default connection. You can use these connections to transfer data from tables or views into a BW system.

See also:

DB Connect Architecture [Seite 7]

Implementation Considerations

To use a connection to an external database, you need appropriate knowledge and experience of the source database in the following areas:

- Tools
- Database-specific SQL syntax
- Database-specific functions

In addition, you also need appropriate knowledge of the source application, in order to be able to transfer semantically utilizable data into the BW.

To be able to use the DB Connect functions, you need to have installed a database-specific DB Client for the respective source-database management system (DBMS) on the BW Application Server, providing that the BW DBMS and the source DBMS are different.

In all cases, you need to license the database-specific DB Client with the database manufacturer. You get information about the database-specific DB client from the respective database manufacturer.

In addition, the SAP-specific part of the database interface- the Database Shared Library (DBSL) must be installed for the corresponding source database management system on the BW Application Server. You can find additional information under Installing the Database Shared Library (DBSL) [Seite 9].

The information contained within the DB Connect documentation is subject to change. For this reason, read the SAP notes referred to in the documentation. DB Connect documentation is updated when required on the BW pages in the SAP Service Marketplace (http://service.sap.com/bw), under Documentation → Documentation Enhancements.

Integration

BW DB Connect offers flexible options for direct data extraction into the BW from tables/views in database management systems that are connected additionally to default connections. You can
use tables and views from the SAP supported database management systems to transfer data. DataSources are used to make data known to the BW, where it is then processed in the same way as data from all other sources.

Functions
With DB Connect, you can load data from a database system supported by SAP, by:

- linking a database to the BW as a source system, thus creating a direct access point to external relational database management systems (RDBMS).
- making metadata known to the BW by generating a DataSource.
Example

A purchasing application runs on a system based on a database, DBMS X. To be able to analyze data for the purchasing application, the data must be loaded into a BW system that is based on a DBMS Y. DBMS Y can be the same as or different to DBMS X. When DBMS Y is the same as DBMS X, you do not need to install the database-specific Client and database-specific DBSL. DB Connect allows you to connect the DBMS for the purchasing application, and to extract data from the database tables or views and transfer it into the BW.

DB Connect Architecture

With the multiconnect function delivered as a mySAP technology component, you can open more database connections in addition to the SAP default connections. Also, you can use these connections to access the external databases.

You can find additional information about this in SAP Note 323151 – Multi-DB Connections with Native SQL.

Furthermore, DB Connect offers you the option of using such a connection as a source system connection for the BW system, as well as the option of using tables or views from a database catalog for generating DataSources. DB Connect thereby also includes mapping database data types to ABAP dictionary data types. The database interface enhancement through DB Connect enables you to transfer data from external applications from the respective database tables or views directly into the BW system.
For the default connection, the DB Client and DBSL are already installed for the database management system. If you want to transfer data into the BW system from other database management systems using DB Connect, you need to install both the database-specific DB Client as well as the database-specific DBSL for each BW application server.

In the following graphic, the BW runs on the DBMS Y. Therefore, DBSL and DB Client does not need to be installed for the source DBMS Y. However, if you want to load data from a DBMS X table/view, DBSL and BD Client must be installed for DBMS X.
Installing the Database Shared Library (DBSL)

Purpose

The database-dependent part of the SAP database interface can be found in its own library that is dynamically linked to the SAP kernel. This database library contains the Database Shared Library (DBSL), as well as libraries belonging to the corresponding database manufacturer. These are either statically or dynamically linked to the database library.

When initiating an SAP system, the database-dependent database library is loaded before the DBSL is called up for the first time. The system searches for the library in the directory indicated by the environment variable `DIR_LIBRARY` (for example, `/usr/sap/<SAPSID>/SYS/exe/run`). The environment variable `dbms_type` contains the name of the required database management system. When the system is initiated, an attempt is made to load the library belonging to the required database management system from the directory indicated by the environment variable `DIR_LIBRARY`.

![Tip]

You can find additional information about the database library in the SAP note 400818 - Information about the R/3 Database Library.

One of the advantages of this architecture is that a work process can include connections for several different databases belonging to different manufacturers.

To be able to transfer DB Connect data into a BW, you need to have installed the SAP-specific part of the database interface – the DBSL for the corresponding source-database management system for each BW application server.

Process

The database library is made available in the SAP Service Marketplace in the SAR archives `LIB_DBSL.SAR`, in the patch directories, which are independent of database manufacturer.


2. Load the file into the directory indicated by the environment variable `DIR_LIBRARY`.

   ![Tip]

   The file `LIB_DBSL.SAR` forms a complete SAP kernel patch together with the database-independent `DW.SAR` archive. (SAP Note 19466 - Downloading SAP Kernel Patches describes how kernel patches are imported).

3. Next, unpack the SAR archive with the `SAPCAR` tool. Before doing so, refer to note 212876 - The New Archiving Tool `SAPCAR`

   ![Tip]

   We recommend you also download the latest DBSL from the SAP Service Marketplace for SAP DB databases.

Result

In the directory defined in the environment variable of the BW Application server, you can find the library `db<dbs>slib.<ext>`, where `<dbs>` is the SAP-specific ID for the database management
system and `<ext>` stands for the enhancement of the shared libraries in the respective operating system.

The database library for the Oracle database management system in Windows is called `dborarslib.dll`.

After the database-specific DB Client has been installed, all installation prerequisites for using DB Connect are met. You get information about the database-specific DB client from the respective database manufacturer.

## Supported Databases

A basic rule for DB Connect is that those only BW application servers can be supported with operating system versions, for which an SAP Database Shared Library (DBSL) has been released for the BW database and source database.

The following information is subject to change. For this reason, read the aforementioned SAP notes. DB Connect documentation is updated when required on the BW pages in the SAP Service Marketplace (http://service.sap.com/bw), under Documentation → Documentation Enhancements.

<table>
<thead>
<tr>
<th>Supported Database Management Systems</th>
<th>Database Source System Requirements</th>
<th>BW System Requirements</th>
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</thead>
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<tr>
<td>SAP DB (ada)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refer to SAP note 520647</td>
<td>Minimum version SAP DB 7.2.5 Build 3</td>
<td>BW 3.0B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mySAP Technology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Components (Basis)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6.20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DB Client: as of SAP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DB Client Version SAP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DB 7.3.1</td>
</tr>
</tbody>
</table>

| Informix (inf)                        |                                     |                        |
| Refer to SAP note 520496             | All IDS versions, 7 and 9 series    | BW 3.0B                |
|                                       | that are maintained by IBM/Informix.|                        |
|                                       |                                     | mySAP Technology      |
|                                       |                                     | Components (Basis)    |
|                                       |                                     | 6.20: Support Package 2|
|                                       |                                     | DB Client: as of Informix|
|                                       |                                     | Client version I-connect|
|                                       |                                     | 2.70                   |

<p>| Microsoft SQL Server (mss)           |                                     |                        |
| Refer to SAP note 512739            | Windows NT Application Server       | BW 3.0B                |
|                                       | MS SQL Server 7.0 and MS SQL Server|                        |
|                                       | 2000                                | mySAP Technology      |
|                                       |                                     | Components (Basis)    |
|                                       |                                     | 6.20: Support Package 2|
|                                       |                                     | Application server:   |
|                                       |                                     | Windows NT            |</p>
<table>
<thead>
<tr>
<th>Database</th>
<th>Recommended Version</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft SQL Server</td>
<td>MS SQL 2000s highest service pack (see SAP Note 62988 – Service Packs for MS SQL Server)</td>
<td>We recommend you use MS SQL 2000s highest service pack (see SAP Note 62988 – Service Packs for MS SQL Server).</td>
</tr>
<tr>
<td>Oracle (ora)</td>
<td>Oracle 8.1.7.3 and higher (Clients are compatible upwards)</td>
<td>It is possible that the connection also works with earlier versions than Oracle 8.1.7.3. However, these versions are not supported by Oracle.</td>
</tr>
<tr>
<td>IBM DB2/390 (db2)</td>
<td>from DB2/390 V6 Refer to SAP note 81737 – DB2/390 APAR List.</td>
<td>BW 3.0B mySAP Technology Components (Basis) 6.20: Support Package 2 DB Client: as of Oracle 8.1.7.3 (delivered with SAP Web Application Server 6.20)</td>
</tr>
<tr>
<td>IBM DB2/400 (db4)</td>
<td>from DB2/400 V4R5 Both EBCDIC and ASCII data can be transferred</td>
<td>BW 3.0B mySAP Technology Components (Basis) 6.20: Support Package 3 Application server: Windows NT</td>
</tr>
</tbody>
</table>

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Database Tables/ Views Requirements

Table-, view- and field names

Generally speaking, the name conventions for table and field names for the ABAP dictionary also apply here.

⚠️ Naming convention for tables and views

Note that you must only use tables/views whose technical name is only made up of upper case letters, numbers and the character _ in the extraction process. Using other characters can lead to problems.

A DataSource is generated from the table/view, whose technical name is composed of the prefix 6DB_ plus the technical name of the table/view. Since the DataSource name in BW is limited to 30 characters, the technical name of the database tables/views cannot be longer than 26 characters. Tables/views with longer technical names are therefore not available for extraction.

⚠️ Naming convention for fields

Note that the technical field name cannot be longer than 16 characters and can only consist of upper case letters, numbers and the underscore character. Using other characters can lead to problems. You also cannot use fields with reserved field names, such as COUNT. Fields that do not meet these restrictions are not available for extraction.
We recommend you use database views when accessing the tables, so that you can convert the original names into upper case letters. You can find additional information in the section Creating Database Management Systems as Source Systems [Seite 14], under Prerequisites.

**Code page and sort order for the source system**

SAP-kernel based systems, such as the BW system, work on the assumption that the used database was created with the code page cp850, using the sort sequence ‘bin’. The source system configuration may differ from this. Diverging sort orders may result in operations for sample search (like) and area search (between, >,<) returning divergent results in character fields.

Using multibyte code pages in the source system to store data when using character records with more than 256 characters (kanji, hiragana, Korean, Chinese, and so on) can result in characters being corrupted.

We recommend you use the same code page in both the database source system and in the BW, as data conversion problems and unexpected sort results are likely to arise when different code pages are used.

You can check the extraction result for such problems when generating the DataSource. Also refer to Generating DataSources [Seite 19], step 3

**DB Data Types**

Generally speaking, only those data types can be supported that can be modeled on ABAP Dictionary data types.

We recommend you use database views when accessing the tables, so that you can convert the data types supported by ABAP Dictionary.

When using the DB Connect data types, refer to the database-specific SAP notes for DB Connect, as shown below.

**List of database-specific notes**

When using an MSS database, read SAP note 512739.

When using an Oracle database, read SAP note 518241.

When using an Informix database, read SAP note 520496.

When using an SAP DB database, read SAP note 520647.

When using an IBM DB2/390 database, read SAP note 523552.

When using an IBM DB2/400 database, read SAP note 523381.

When using an IBM DB2 UDB database, read SAP note 523622.
Creating Database Management Systems as Source Systems

Use

With DB Connect, you have the option of opening additional database connections in addition to the SAP default connection and using them to access these databases during BW extraction, with the aim of transferring data into a BW system. To do this, you have to create a database source system in which the connection data, which is necessary for identifying the source database and for authentication compared with this database, is determined. In doing so, the connection data is made known to the ABAP runtime environment.

Prerequisites

You have made the following settings in the BW Customizing Implementation Guide, under Business Information Warehouse → Connections to Other Systems.

- General connection settings,
- Verify workflow customizing.

As a rule, no system changes are ever permitted in productive systems. Connecting a system as a source system to a BW or connecting a BW to a new source system will, however, mean changes as far as the system change option is concerned. Therefore, in the clients involved in the BW system, you have made sure that the following changes are permitted during the source system connection:

- Cross-client Customizing and Repository changes
  In the BW Customizing Implementation Guide, select the relevant client under Business Information Warehouse → Connections to Other Systems → General Connection Settings → Assign Logical System to Client, then choose Goto → Detail. Choose the entry Changes to Repository and Cross-Client Customizing Permitted in the field Changes to Cross-Client Objects.

- Changes to the software components Local Developments and Business Information Warehouse.
  You can set up the changeability with Transaction SE03 (Organizer Tools). Choose Organizer Tools → Administration → Set Up System Change Option, then Execute. Make the settings in the subsequent screen.

- Changes in the customer name range
  Again, you can set up the changeability for the customer name area with Transaction SE03.

- Changes to BW namespaces /BIC/ and /BI0/
  Again, you can set up the changeability of the BW namespace with Transaction SE03.

In the case where the source DBMS and BW DBMS are different:

- You have installed the database-specific DB client software on your BW application server. You get information about the database-specific DB client from the respective database manufacturer.
- You have installed the database-specific DBSL on your BW application server [Seite 9].

Create a username with a password in the database system, via which the connection is to run. You access a specific database schema by using the user names. By using the database schema as a collection of database objects, you determine which tables and views the user can read/use.
Database users and the database schema have the same name. We recommend accessing the tables by using views that include format conversions, if necessary, to adjust the data to the BW requests. The views must be in the same database schemas as the user. You can use these views to access tables in other schemas provided that the database user has read access for these tables and write access for views in his schema. Accessing using views as an interface between physical tables and the BW gives you the advantage that table modifications can be made with conversion commands in the view that have no affect on the view.

**Procedure**

Before you can open a database connection, you have to make all connection data necessary for identification of the source database and for authentication for this database, known to the ABAP runtime environment. For this you need to specify the connection data for each database connection, which also needs to be created to the SAP default connection.

1. To do this, choose in the source system tree for the BW Administrator Workbench – Modeling Source Systems (Root Nodes) → Context Menu (right mouse click) → Create.
2. In the following dialog box, choose the source system type Database Source System and choose Transfer.
3. In the following screen enter the logical system name (= DB connection) and a descriptive text for the system, then choose Continue.

You get to the screen Change View “Description of Database Connections”: Detail.
4. Select the database management system (DBMS) with which you want to manage the database. With this entry you determine the database platform this connection concerns.
5. Specify the database user under whose name the connection needs to be opened.
6. Enter the DB Password twice for the user for authentication across from the database when creating the connection. This password is encrypted and stored.
7. Enter the technical information for opening the database connection. This information, which is necessary for creating a connection with NATIVE SQL, depends on the database platform and encompasses the database names in general, as well as the database host on which the database runs. The string displays the respective client library to which the database needs to create the connection.

**Connection information that depends on the database platform**

<table>
<thead>
<tr>
<th>Supported Database</th>
<th>CON_ENV Connection Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP DB (ada)</td>
<td>&lt;server_name&gt;-&lt;db_name&gt;</td>
</tr>
<tr>
<td>Informix (inf)</td>
<td>&lt;db_name&gt;@&lt;informixserver&gt;</td>
</tr>
<tr>
<td></td>
<td>(See SAP Note 181989 – Multiconnect under EXEC SQL Informix)</td>
</tr>
<tr>
<td>Microsoft SQL Server (mss)</td>
<td>MSSQL_SERVER=&lt;server_name&gt;</td>
</tr>
<tr>
<td></td>
<td>MSSQL_DBNAME=&lt;db_name&gt;</td>
</tr>
<tr>
<td></td>
<td>MSSQL_SERVER=10.17.34.80</td>
</tr>
<tr>
<td></td>
<td>MSSQL_DBNAME=Northwind</td>
</tr>
<tr>
<td></td>
<td>(See SAP Note 178949 - MSSQL: Database MultiConnect with EXEC SQL)</td>
</tr>
<tr>
<td>Oracle (ora)</td>
<td>TNS Alias</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------</td>
</tr>
<tr>
<td>(See SAP Note 339092 - DB-MultiConnect with Oracle as a secondary database)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DB2/390 (db2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PORT=4730;SAPSYSTEMNAME=D6B;SSID=D6B0; SAPSYSTEM=71;SAPDBHOST=ihsapfc; ICLILIBRARY=/usr/sap/D6D/SYS/exe/run/ibmiclic.o</td>
</tr>
<tr>
<td>The parameters describe the target system for the connection (see installation handbook DB2/390).</td>
</tr>
<tr>
<td>The individual parameters (PORT=... SAPSYSTEMNAME=... ...) must be separated with ',', ';' or ';'.</td>
</tr>
<tr>
<td>(See SAP Note 160484 - DB2/390: Database MultiConnect with EXEC SQL)</td>
</tr>
</tbody>
</table>
**DB2/400 (db4)**

<parameter_1>=<value_1>;...;<parameter_n>=<value_n>;

The following parameters can be specified:

- **AS4_HOST**: Host name for the Remote DB Server. The host name has to be specified in the same form recognized under TCP/IP or OptiConnect, according the connection type used.
  
  You have to specify the AS4_HOST.

- **AS4_DB_LIBRARY**: Library that the DB server job needs to use on the remote DB server as the current library.
  
  The AS4_DB_LIBRARY parameter has to be specified.

- **AS4_CON_TYPE**: Connection type, permitted values are OPTICONNECT and SOCKETS. SOCKETS means that a connection is used using TCP/IP sockets.
  
  The AS4_CON_TYPE connection is optional. If it is not specified, then the SOCKETS connection type is used.

For a connection to the remote DB server as0001 on the RMTLIB library using TCP/IP sockets, the entry has to appear as follows:

```
AS4_HOST=as0001;AS4_DB_LIBRARY=RMTLIB;AS4_CON_TYPE=SOCKETS;
```

The syntax has to appear exactly as described above. This means that you cannot have any additional empty characters between the entries, and that each entry has to end with a semicolon. Only the AS4_CON_TYPE=SOCKETS optional parameter can be omitted.

(See SAP Note 146624 - AS/400: Database MultiConnect with EXEC SQL)

(For DB MultiConnect from Windows AS to iSeries, see Note 445872)
8. Specify whether your database connection needs to be Permanent or not.

If you set this indicator, this will have an affect if you lose an open database connection, through a break down in the database itself or in the connection (network) to it.

Regardless of whether the indicator is set, the SAP work process tries to reinstate the lost connection. If this fails, the following occurs:

   a. The database connection is not permanent, which means that the indicator is not set:

      The failure is ignored, and the transaction called is started. However, if this transaction accesses the connection that is not available, the transaction is canceled.

   b. The database connection is permanent, which means that the indicator is set:

      After the first connection termination, each transaction is checked to see if the connection can be reinstated. If this is not possible, the transaction is not started – independently of whether the current transaction could be accessed from this special connection or not. The SAP system can only be used again once all DB permanent type connections have been reestablished.

We recommend setting the indicator if an open DB connection is essential or if it is accessed often.

9. Save your entry and go back.

10. You get to the screen Change View “Description of Database Connections”: Overview. Here the entry to your database connection is displayed in the table.

11. Go back.

**Result**

IDoc basic types, port descriptions, and partner agreements are created. When you use the created destinations, the ALE settings, which are necessary for communication between a BW system and an external system, are created in BW in the background. In addition, the BW settings for the new connection are created in the BW and the access paths from the BW system to the database are stored.

You have thus created the connection to a database source system. You find the respective entry in the source system tree. You can now generate DataSources for the database tables or views.
Generating DataSources

Use

In order to be able to transfer data from a database source system, the metadata, meaning the tables or view and field information in BW, has to first exist in the form of a DataSource.

You generate a DataSource for a database source system using the context menu for a database source system → Select Database Tables. First of all, you make a table selection first for a database source system and create a connection to the database source system. In the second step, you select the table fields for a specific table for the database source system and specify whether these need to be available for selection in the BW system. Afterwards, you generate the DataSource. This includes the set of fields that need to be read from the database source system during extraction.

Prerequisites

See Database Tables/ Views Requirements.

Procedure

You arrive in the screen DB Connect: Table and Views Overview.

1. In the first step, select a table or view catalog from a database source system.
   a. Select the database source system from which you want to transfer data. The database source system or database connection is uniquely identified by the name of the logical system.
   b. Select whether tables and/or views need to be displayed for selection.
   c. Select whether tables and/or views need to be displayed for selection.
We recommend accessing the tables by using views that include format conversions, if necessary, to adjust the data to the BW requests. Accessing using views as an interface between physical tables and the BW gives you the advantage that table modifications can be made with conversion commands in the view that have no affect on the view. Furthermore, using views simplifies error localization, and allows you to control access rights for tables.

d. Choose \(\text{\textcolor{blue}{Execute}}\).

The database connection is created and the database tables are read. In the following screen, the database tables/views are displayed that are stored in the database schema that is assigned to your DB user name.

The technical name, type, and database schema for a table or a view are displayed in the Selection of Database Tables/Views. The entry in the field \(\text{Table Information}\) displays whether the table or view is available for extraction. \(\square\) indicates tables/views that are not available for extraction. Tables/views for which this field has no entry are available for extraction. In the DataSource Name field you identify whether a DataSource has already been generated for a table or a view.

- Note that you must only use tables/views whose technical name is only made up of upper case letters, numbers and the character \_\_ in the extraction process. Using other characters can lead to problems.
- A DataSource is generated from the table/view, whose technical name is composed of the prefix 6DB_ plus the technical name of the table/view. Since the DataSource name in BW is limited to 30 characters, the technical name of the database tables/views cannot be longer than 26 characters. Tables/views with longer technical names are therefore not available for extraction.

2. In the second step, you determine the table fields for the DataSource to be generated.

a. In the overview, select a table or a view and choose \(\text{\textcolor{blue}{Edit DataSource}}\).

You get to the DB Connect: Select Fields screen. Here, the following are displayed:

- database information,
- information about the DataSource to be generated, and
- the fields for the table or view

b. For the DataSource to be generated, specify under which application component in the source system tree for the AWB it should be classified. For the database source system, this application component hierarchy corresponds to the hierarchy in the InfoSource tree. In the standard setting, the DataSource is assigned to the application component NODESNOTCONNECTED (non-assigned nodes).

c. Select the DataSource type.

The overview of the database fields gives you information about which fields are key fields, the length of the field in the database and in the ABAP data dictionary, and the field type in the database and the ABAP dictionary. It also gives you additional information to support you in checking the consistency of your data.
Be aware of the database-specific features when using data types. You can find additional information in the database-specific notes already mentioned here, under Database Tables/Views Requirements [Seite 12].

d. By setting the Selection indicator, select the table/view fields that need to be available for extraction from this table or view.

  - The entry in the field Information displays whether the field for extraction is available. indicates fields that are not available for extraction. Table/view fields for which this field has no entry are available for extraction.
  - Note that the technical field name cannot be longer than 16 characters and can only consist of upper case letters, numbers and the underscore character. Using other characters can lead to problems. You also cannot use fields with reserved field names, such as COUNT. Fields that do not meet these restrictions are not available for extraction.

e. Select the fields for which the definition of selection criteria needs to be enabled when scheduling a data request in the BW scheduler. Data for such a field is then transferred in accordance with the scheduler selection criteria.

  To improve extraction performance, we recommend that you only select using key fields and fields for which the secondary index is X.

3. If you choose Display Table Contents, a maximum of 20 data records are respectively displayed for field selection.

   With this function you have the option of checking whether the data formats and data are correct.

4. Check the DataSource.

   The field names are checked for upper and lower case and special characters, as well as field length. The system also checks whether an assignment for an ABAP data type exists for the fields.

5. Generate the DataSource.

Result

The DataSource is generated and is visible in the DataSource overview for a database source system in the AWB in the assigned application component.

After you have assigned the DataSource to an existing or a new InfoSource, and the DataSource fields to InfoObjects, and you have activated the transfer rules, create an InfoPackage by defining the selections for the data request. You can only load the data via a PSA. You cannot use the Delta Update method with DB Connect. In this case, a delta request is possible using the selections (time stamp, for example).