

# Server Connectivity and Data Load from Non SAP System to BW



## Applies to:

SAP NetWeaver 2004 and SAP NetWeaver 2004s. BW 3.5 & BI 7.0  
For more information, visit the [Business Intelligence homepage](#).

## Summary

This document describes how to use DB Connect to connect Non SAP system to BW system. To be able to analyze data for the application, the data must be loaded into a BW system and DB Connect allows connecting the DBMS for the logistic application to extract data from the database tables or views.

DB Connect specifically deals with non-SAP Oracle database as well as non-SAP DB2 database. Data get extracted from a non-SAP database and transferred into the PSA. The verification process has performed by comparing the data in the original databases against the one stored in the PSA.

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## Author Bio



Sukhada Deshpande is working in L&T Infotech as SAP BI consultant for the last 1.5 year.

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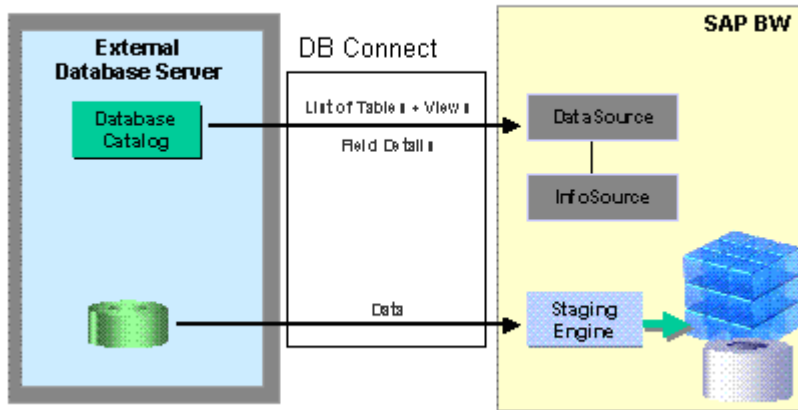
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## Introduction

The multi-connect functions that are delivered as a SAP Net Weaver component, allows opening extra database connections in addition to the SAP default connection, and using these connections to access external databases.

DB Connect offers us the option of using this type of connection as a source system connection for a BW system and of using tables or views from a database to generate Data Sources.

DB Connect also allows mapping database data-types to data types in the ABAP dictionary. The enhancement that DB Connect makes to the database interface enables to transfer data from external applications in the respective database tables or views directly into the BW system.



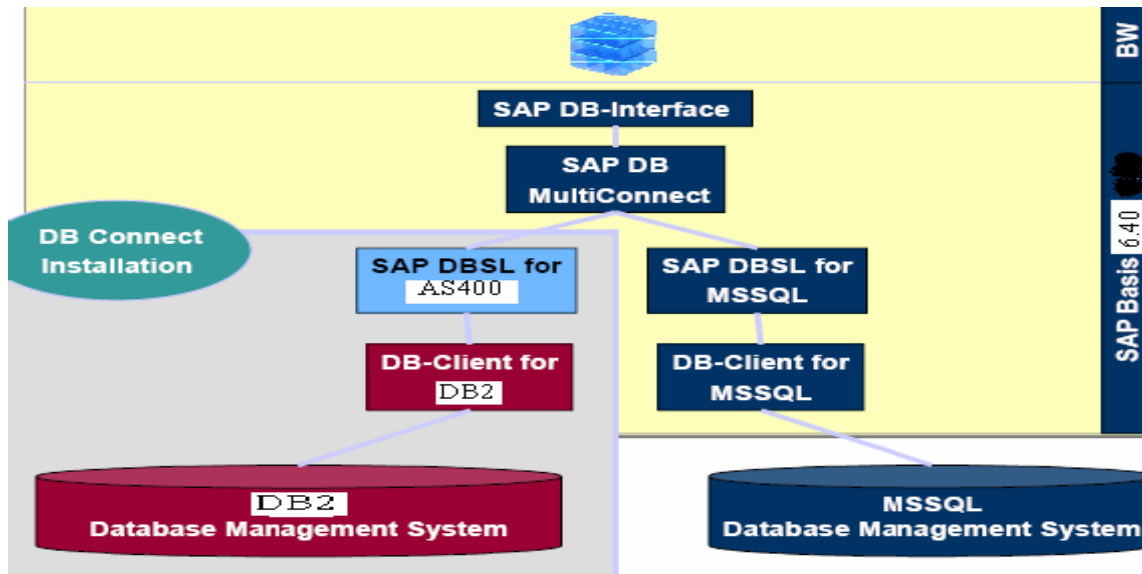
With DB Connect, we can load data from a database system that is supported by SAP, by

- Linking a database to the BW as a source system, thereby creating a direct point of access to external Relational Database Management Systems (RDBMS).
- Making metadata known to the BW by generating a Data Source.

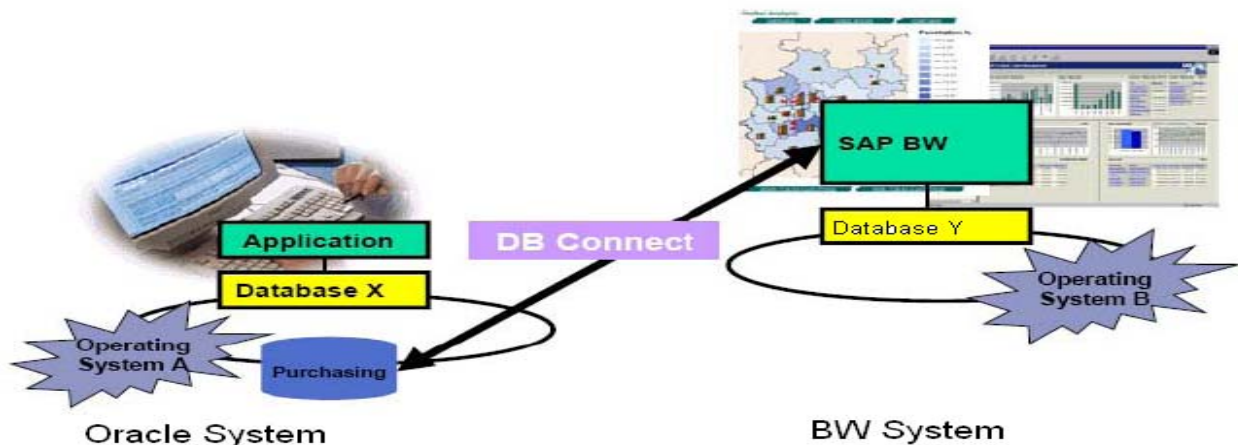
## Architecture of DB Connect

To be able to use the DB Connect functions, a database-specific DB Client for the respective source-database management system (DBMS) on the BW Application Server must be installed. Note: Installation must be done only if the BW DBMS and the source DBMS are different.

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.



## Example



A purchasing application runs on a system that is based on a DBMS X. Before you are able to analyze the data in the purchasing application, the data must be loaded into a BW system that is based on a DBMS Y. The DBMS Y can be the same as or different to the DBMS X. If DBMS Y is the same as DBMS X, no need to install the database-specific client and the database-specific DBSL. DB Connect allows to connect the DBMS of the purchasing application and to extract the data from the database tables or views to transfer it into the BW.

## Step by Step Procedure

### Configuration

For configuration following steps to be executed:

#### Installing the client software on an BW application server

Oracle setup program has used of the database CD (run Installer on UNIX) to start the Oracle Installer. By following the program instructions and the DB installation instructions for installing the Oracle Client software on BW.

Dbsoraslib library also must be copied to the BW run directory, so that the underlying kernel finds the Oracle libraries.

#### Installing Testing Connection setup from BW to Q

After installation of client software on BW, try to set up a connection from BW to the server on Q. it may need to adjust the tnsnames.ora or sqlnet.ora files for this, to introduce the Oracle systems (to which contact should be made) to BW. Connection can be tested by executing the command "tnsping QDB" on BW to check whether the client has established contact to the QDB database on the Q system.

#### Installing creating a separate User name in Q

It's always recommend that separate U user in Q should be created for connection to BW. This means that authorization and administration questions can be solved centrally.

#### Creating DBCON entry

Each connection that wants to call a source system using the DB Connect must be described by a record in the DBCON table. This entry is generated when the source system is created in the Administrator workbench. Alternatively, transaction SM30 can be used to create this entry in advance.

For the connection with an Oracle database, Need to set the attributes of the DBCON table as follows:

- DB connection (CON\_NAME): a connection name of own choice. This will appear as name of the source system.
- DBMS: ORA (Specific as per source system e.g. ORA for Oracle).
- User name (USER\_NAME): User name required for entering in source system.
- DB password (PASSWORD): The password of the Oracle user. The password must be entered in upper case.
- Conn. Info (CON\_ENV): This field contains information that is required to set up a connection. The details of which are as follows:
  - AS4\_HOST: The host name of the remote DB server.
  - AS4\_DB\_LIBRARY: The name of the library in the source database that contains the required data.

The screenshot shows the 'New Entries: Details of Added Entries' dialog box in SAP. The fields are as follows:

DB Connection	Oracle BI7
DBMS	ORA
User Name	System
DB password	***** / *****
Conn. info	E16
Permanent	<input type="checkbox"/>
Connection Limit	<input type="checkbox"/>
Optimum Conns	<input type="checkbox"/>

### Extraction of data

After connecting to Oracle database, ensure that the required tables and views are present in the library. This will help the user to pull data from it.

### Generating data source

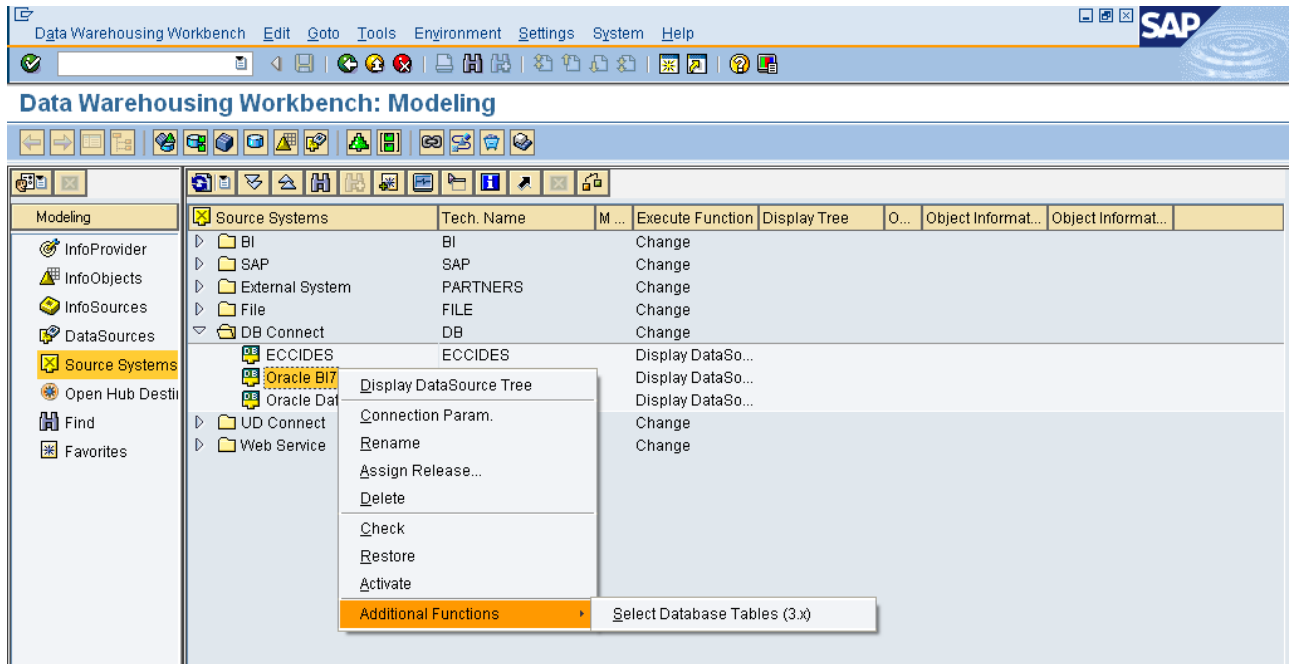
After making connection we have to make DataSource in which we can pull data. Data source will be first place where data could be check after PSA.

- Go to transaction “**RSDBC**”.
- Enter source system which you have made (e.g. Oracle BI7).
- Click execute if you don't know table or view name.
- Now you will be able to see all tables reside in source system.

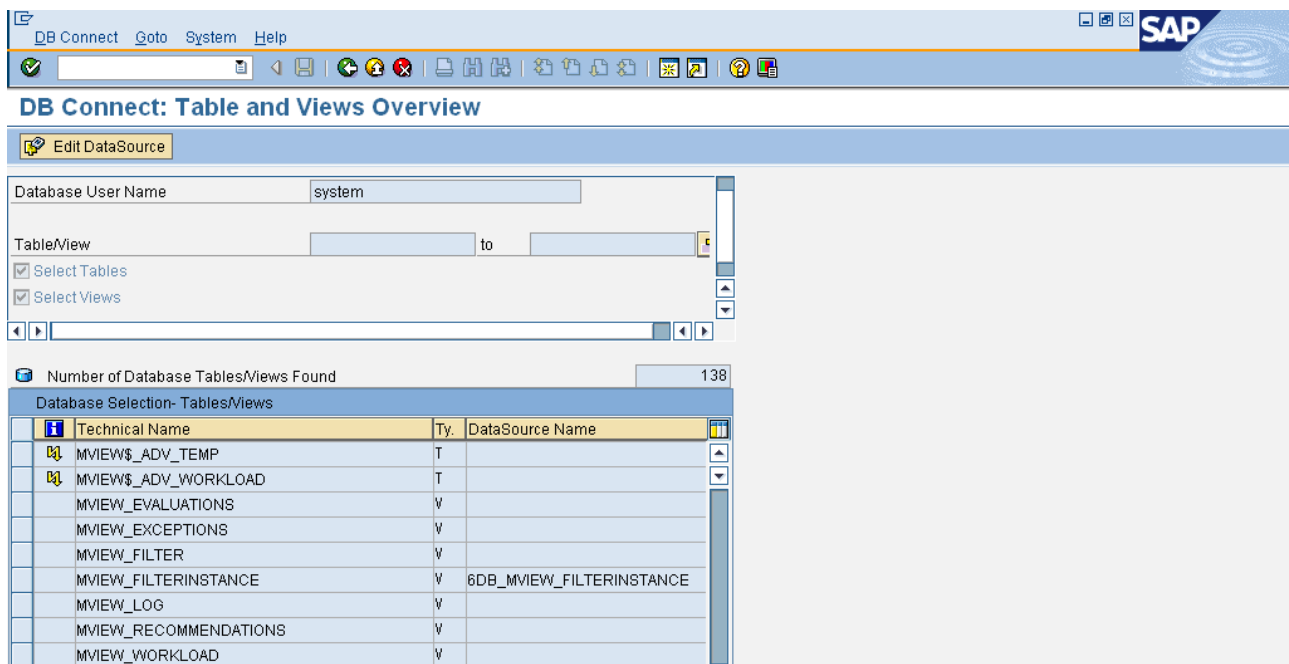
The screenshot shows the 'DB connect: Select Tables and Views (Object Catalog)' dialog box in SAP. The fields and options are as follows:

Source system	Oracle BI7	Database System	ORA
Table/View		to	
<input checked="" type="checkbox"/> Select Tables			
<input checked="" type="checkbox"/> Select Views			

You can select table directly from source system option.



- Now you will get list of all tables and views available in source system.



- Now select table (It could be view also) and double click on it. If there has not been any DataSource for table, it will ask to generate Data Source.
- Select fields which you need in DataSource of source system table.
- Click 'Generate DataSource'.

DB Connect Goto System Help

DB Connect: Select Fields

Check DataSource Generate DataSource Display Table Contents

Logical System: BL5 Database System: ORA  
 Table/View: MVIEW\_FILTERINSTAN... DB User: system

DataSource: 6DB\_MVIEW\_FILTERINSTAN... Language: English  
 Description: Database: BL5 Table: MVIEW\_FILTERINSTAN...  
 Application Comp.: NODESNOTCONNECTED DataSource Type: Transaction data

Database Fields

Tr...	S...	P...	S...	Field Name	Databas...	Len...	Pre...	Sca...	Z...	Type...	Len...	De...	Unit
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	RUNID	NUMBER	22	0	0		FLTP	8	0	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FILTERID	NUMBER	22	0	0	X	FLTP	8	0	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SUBFILTERNUM	NUMBER	22	0	0	X	FLTP	8	0	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SUBFILTERTYPE	VARCHA...	12	0	0	X	CHAR	12	0	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	STR_VALUE	VARCHA...	1028	0	0	X	STR6	0	0	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NUM_VALUE1	NUMBER	22	0	0	X	FLTP	8	0	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NUM_VALUE2	NUMBER	22	0	0	X	FLTP	8	0	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DATE_VALUE1	DATE	7	0	0	X	DATS	8	0	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DATE_VALUE2	DATE	7	0	0	X	DATS	8	0	

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.

For the DataSource to be generated, specify the source system tree for the AWB under which 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).

### Create Info Package

The DataSource is generated and is visible in the DataSource overview for a database source system in the AWB. After assigning the DataSource to an existing or a new InfoSource, and the DataSource fields to InfoObjects, activate the transfer rules and create an InfoPackage by defining the selections for the data request.

Create InfoPackage by right clicking in DataSource.

Create InfoPackage

Source system: BL5

InfoPackage Description: InfoPackage for Oracle and BW

DataSource

Name	Technical Name	Push InfoP...	Real-Time ...	Data Type for the DataSource
Database: BL5 Table: PRODUCT_PRIVS	6DB_PRODUCT_PRIVS		<input type="checkbox"/>	Transaction data

Save



By execute info package data will load in BW system.

InfoPackage	InfoPackage for Oracle and BW(ZPAK_D4HXM2K14UVSM5RMH2QH4BUO...		
DataSource	Database: BL5 Table: PRODUCT_PRIVS(6DB PRODUCT_PRIVS)		
Data Type	Transaction Dat		
Source System	ORACLE-BL5(BL5)		
Last Changed By	ALURI	Date	14.11.2008 Time 11:29:42

Start Data Load Immediately  
 Start Later in Background

Job Name Prefix/Suffix: BI\_BTCH

Request Batch Process Runs Until All Data Has Been Updated in BW

After loading data check data in PSA.

## Related Content

- [Note 518241 – DB Connect in BW for an external Oracle database.](#)
- [Note 445872 - DB multiconnect from Windows / LinuxPPC to iSeries](#)
- [Note 323151 - Several DB connections with Native SQL](#)
- For more information, visit the [Business Intelligence homepage](#).

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