

Installation of SAP Unifier for BW



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Icons

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

Typographic Conventions

Type Style	Description
<i>Example text</i>	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.
Example text	Emphasized words or phrases in body text, titles of graphics and tables.
EXAMPLE TEXT	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.
Example text	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.
EXAMPLE TEXT	Keys on the keyboard, for example, function keys (such as F2) or the ENTER key.
Example text	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
<Example text>	Variable user entry. Pointed brackets indicate that you replace these words and characters with appropriate entries.

Contents

Installation of SAP Unifier for BW	5
Pre-installation Activities	6
Changing the Activation Mode of the SAP DCOM Component Connector	8
Running the Unifier Setup Wizard.....	9
Unifier Integration into SAP Enterprise Portal.....	10
Unifier Integration Workflow	11
Configuring Portal Settings	13
Configuring the Portal Systems.xml File	14
Configuring BW System Settings	18
Configuring Client Machine Settings	19
Uninstalling the Unifier for BW	20



Installation of SAP Unifier for BW

Purpose

This document details the installation of SAP Unifier for BW, an application that makes it possible to integrate the BW environment into SAP Enterprise Portal.

Integration

You install the BW Unifier on Unification Server. After setting the appropriate parameters, you create a project that accesses SAP Business Information Warehouse (BW) from the portal.

Portal end users working with the imported BW InfoObjects can retrieve the BW data necessary for their working experience.

See:

[Pre-installation Activities \[Page 6\]](#)

[Running the Unifier Setup Wizard \[Page 9\]](#)

[Unifier Integration into SAP Enterprise Portal \[Page 10\]](#)



Pre-installation Activities

Purpose

An SAP Unifier for BW runs on Unification Server. In addition to Unification Server, there are other components that you need to install, activities you need to perform, and settings you need to configure on your system before installing the BW Unifier.

Process Flow

1. Install SAP Unification Server 5.0 SP4 Patch 3 on the same domain as your portal. If that is not possible, see SAP note 442401.

Installing SAP Unification Server 5.0 is located in *SAP Enterprise Portal 6.0 Installation Guide* at <http://service.sap.com/ep60> → *Documentation & More* → *Installation*.

In order to support the SAP Unifier for BW, your Unification Server configuration should have Windows 2000 + the latest SP, SQL Server 2000 + SP2, and Microsoft FrontPage 2000 server extensions.

Check the central SAP Note 448316 for SAP Unification Server to keep updated about changes and patch releases.

2. Download and install the Microsoft SQL Patch for dealing with access violations that result when using distributed queries. The patch is available at:

http://ftp.microsoft.com/bussys/sql/transfer/sql80/sqlservr/356450_ENU_i386.exe

Proceed as follows:

- Copy the above self-extracting archive file and execute the program.
- When prompted for a password, enter *co-BNuLPO*.

The extracted **README.TXT** file provides all remaining instructions.

3. Install the SAP DCOM Component Connector (DCOM CC) from the Server Components CD (Compilation 4.6D or higher) on the machine on which you intend to generate the BW Unifier project. DCOM Connectors can also be downloaded from <http://service.sap.com/connectors> → *SAP DCOM Connector*.
 - The SAP DCOM CC serves as the connection layer between the BW Unifier and BW data.
 - During project generation, a DCOM destination is created on the unifier machine.
 - There must be an SAP DCOM CC installed on the BW/OLE DB machine, as well, if the OLE DB Provider is not on the same machine as the BW Unifier.
4. Decide whether the OLE DB Provider for BW is to be installed on the unifier machine or on a different machine.
 - If you choose to install the OLE DB Provider on a different machine, the installation package contains a separate installer just for the OLE DB Provider, enabling you to install it on any other machine that has a MS/SQL server with SP2 installed. **Make sure that the SAP DCOM CC is also installed on this machine.**
5. Change the activation mode of the SAP DCOM CC to support connection pooling; see [Changing the Activation Mode of SAP DCOM Component Connector \[Page 8\]](#).

6. Install the correct BW system support package.
 - If your BW system is BW 3.0A, the minimum BW Support Package is SP7 or higher. The recommended BW Support Package is SP12.
 - If your BW system is BW 3.0B, the minimum requirement is any BW Support Package. The recommended BW Support Package is SP5 or higher.

Result

You are now ready to install SAP Unifier for BW.

See:

[Running the Unifier Setup Wizard \[Page 9\]](#)



Changing the Activation Mode of the SAP DCOM Component Connector

Use

To enable SAP Unifier for BW to work with no user logged on to the server machine, change the activation mode of SAP DCOM Component Connector (DCOM CC).

When you install SAP DCOM CC, you automatically install the package *BW DCOM Connector*. By default, the activation mode of the package is *Server Application*.

Procedure

To change the SAP DCOM CC activation mode:

1. From *Windows Start* → *Programs* → *Administrative Tools*, select *Component Services* to launch the *Component Services Manager*.
2. Expand *Computers* → *My Computer* → *COM+Applications*.
3. Right-click *SAP R3 DCOM Connector* and select *Properties*.
4. In the displayed *DCOM Connector Properties* screen, select the *Activation* tab.
5. In the *Activation type* frame, select *Library Application* and choose *OK*. If a warning dialog is displayed, choose *OK*.

Result

The SAP Unifier for BW can now run in Log Off mode.



Running the Unifier Setup Wizard

Prerequisites

You have installed and configured the required supporting software, as described in *Pre-installation Activities*.

Procedure

To install the SAP Unifier for BW:

1. Insert the Unification CD-ROM into your machine drive.
The *Welcome* screen should display automatically. If it does not:
 - a. From the CD-ROM root folder, double-click the *Start.hta* file.
 - b. Click the *BW Unifier* link to launch the setup wizard.
2. In the *Welcome* screen, choose *Next* to start installing the BW Unifier.
3. After verifying the current selected settings, choose *Next* in the *Start Copying Files* screen to begin installing the program files.
A *Setup Status* screen appears indicating which files are being installed.
4. After the wizard has finished copying the program files, choose *Finish* to complete the installation of the BW Unifier.



If during installation you are prompted with messages telling you that certain files are already installed and asking if you want to overwrite them, confirm that you do by choosing *OK*. These are files that were installed with Unification Server, are needed by the unifier as well, and are now recognized by the unifier.

Result

The wizard installs a BW Project Generator icon on the Unifier Management Console, allowing you to create a BW Unifier project.



Unifier Integration into SAP Enterprise Portal

Purpose

SAP Unifier for BW can run as a standalone application, allowing you to create any number of projects that retrieve BW system information. However, if you want to access your unifier projects through SAP Enterprise Portal, and Drag&Relate the data of various projects, you need to integrate the unifier into the portal.

The portal provides a single gateway to all unifier projects based on different information sources. This section explains how to integrate the SAP Unifier for BW into SAP Enterprise Portal 5.0 or 6.0 to enable portal users to work with BW reports from their portal.

Integration

Integrating SAP Unifier for BW entails, among other operations, configuring both the portal system and the BW system to enable Drag&Relate. For more information, see [Unifier Integration Workflow \[Page 11\]](#).



Unifier Integration Workflow

Purpose

You need to integrate the SAP Unifier for BW into your portal to enable a BW Unifier project to retrieve BW data that is Drag&Relate enabled.

Prerequisites

You have installed an SAP Unifier for BW on Unification Server.

Process Flow

- Install either SAP Enterprise Portal 5.0 SP4 Patch 2 or higher, or SAP Enterprise Portal 6.0, on the same domain as your Unification Server.

For more information, consult the documentation of the appropriate portal version:

- *SAP Enterprise Portal Installation Guide* at <http://service.sap.com/epinstall> → *EP 5.0 SPx Roadmap* → *Installation, Upgrades, and Patches*
- *SAP Enterprise Portal Installation Guide* at <http://service.sap.com/ep60> → *Documentation & More* → *Installation*
- If the BW server is on a different domain than the portal and Unification Server, see SAP note 442401.
- Configure the portal system for integration of the BW Unifier, and for Drag&Relate functionality of BW data

In the portal that lists the organization's available SAP systems and their properties, do the following, depending on your portal release.

- **Portal 5.0:** Configure the *systems.xml* file. For information, see [Configuring Portal Settings \[Page 13\]](#).
Generic details about configuring the *systems.xml* file are available at:
<http://help.sap.com> → *SAP NetWeaver* → *SAP Enterprise Portal* → *Administration Guide* → *Integration of Applications and Data Sources* → *Integration of SAP Systems* → *System Landscape* → *Defining Component Systems*.
- **Portal 6.0:** Define the unifier as a portal system in the Portal Content Directory (PCD)
For information about the PCD see: <http://help.sap.com> → *SAP NetWeaver* → *SAP Enterprise Portal* → *Administration Guide* → *Integration of Applications and Data Sources* → *Integration of SAP Systems* → *System Landscape*.
- **Both releases:** *Business Information Warehouse (SAP BW 30B)* → *Business Explorer* → *Collaboration & Distribution: Enterprise Portal Integration* → *Integration of BW and Portal*

- Configure the BW System for Drag&Relate functionality of BW data through the BW Unifier.

In the BW System, you set the Security configurations and the Web Application configurations.

See:

- [Configuring BW System Settings \[Page 18\]](#)
- *Business Information Warehouse (SAP BW 30B) → Business Explorer → Collaboration & Distribution: Enterprise Portal Integration → Drag&Relate with the BW Unifier*
- Configure Client Settings

Client machines need to be configured to run their portals and to enable working with Workbooks. For information, see [Configuring Client Machine Settings \[Page 19\]](#).
- Establish a trust relationship between the BW server and the Crystal Reports server

The portal communicates with the Crystal Reports server through the BW Web server. To enable single sign-on to the Crystal Reports server from SAP Enterprise Portal, the BW administrator needs to establish a trust relationship with the Crystal Reports server. If this is not done, the user will need to provide a user name and password when launching Crystal Reports components from the portal navigation panel.

Result

The end user will have in the portal navigation panel various BW InfoObjects, such as Web Applications, Workbooks, Crystal Reports, and queries, which can be launched to retrieve data from the BW database repository.



Configuring Portal Settings

Use

This section is relevant only if you are working on an SAP Enterprise Portal 5.0 installation.

Systems.xml is a file in the Portal Content Directory (PCD) that contains the defined attributes of external systems, such as SAP R/3 or SAP BW, enabling connection to those systems through the portal. The *systems.xml* file stores the attributes of the BW system that you want to access through SAP Unifier for BW. This file must be configured before you create a BW Unifier project.

Procedure

The following are the main sections of a *systems.xml* file that are relevant for defining a BW system. Configure them as described in the linked example:

1. Configure the System section.
2. Configure the Attributes section.
3. Configure the Web Access Points section.
4. Configure any optional sections.

Example

[Configuring the Portal Systems.xml File \[Page 14\]](#)



Configuring the Portal *Systems.xml* File

This section is relevant only if you are working on an SAP Enterprise Portal 5.0 installation.

Below is an example of portal settings that you need to configure before generating an SAP Unifier for BW project.

Structure

The following are the main sections of a *systems.xml* file that are relevant for defining a BW system:

- **System.** This section names and describes the BW system to which you are connecting.
 - The `<name>` parameter **must be the logical system name as defined in the BW system** itself. The logical system is specified in **table T000** in the BW system.
 - The `<TitleText>` parameter is the user-friendly name.
 - The `<Description>` parameters include such information as whether there is multi-language support, and the description texts of the two main languages, English and German.
- **Attributes.** This section defines the connection to the BW system. Four types of connection are possible: through the Application server, with or without a connection string, and through the Message server, with or without a connection string.
 - A version of each type of connection is provided in the example below.
 - Notice the group of attributes that must be maintained for each version.
 - The R/3 name and language are optional attributes.
 - If you choose to use the connection string option, you do not need the `<ServerPort>` and `<Group>` attributes.
 - The `<value>` of the `<SystemType>` attribute must be defined exactly as written below.
 - The system host value obviates the need for a router.
- **Web Access Points.** This section defines the Web Application Server and the Drag&Relate (DRS) server.
 - As in the System section, there are user-friendly name attributes, as well as various description attributes.
 - Other attributes deal with server protocol and the server address.
- There may also be optional sections dealing with issues such as user mapping, and so on.

Example

System :

```
<System name="QB6CLNT003">
  <Title multilingual="true">
    <pcd:TitleText language="DE">QB6 Mandant 003</pcd:TitleText>
    <pcd:TitleText language="EN">QB6 Client 003</pcd:TitleText>
  </Title>
  <Description multilingual="true">
    <pcd:DescriptionText language="de">QB6 Client 003
  </pcd:DescriptionText>
    <pcd:DescriptionText language="en">QB6 Client 003
  </pcd:DescriptionText>
  </Description>
  <Accessibility value="true"/>
</System>
```

Attributes:

Notice the group of attributes that must be maintained for each version. The `<value>` of the `<SystemType>` attribute must be defined exactly as written below.

Version 1A: Application server, without a connection string. Necessary attributes are `<ApplicationServer>`, `<ServerPort>` and `<SystemNumber>`

```
<Attributes>
  <pcd:Attribute name="Type" value="3"/>
  <pcd:Attribute name="ApplicationServer" value="pdf0647.sap-
ag.de"/>
```

In the example shown here, the system number is defined by the `<SystemNumber>` attribute and has a value of 28.

```
<pcd:Attribute name="ServerPort" value="3228"/>
<pcd:Attribute name="Lang" value="EN"/>
<pcd:Attribute name="Client" value="003"/>
<pcd:Attribute name="SystemNumber" value="28"/>
<pcd:Attribute name="SystemType" value="SAP_R3"/>
```

Version 1B: Message server, without a connection string. Necessary attributes are `<MessageServer>`, `<ServerPort>` and `<Group>`.

```
<Attributes>
  <pcd:Attribute name="Type" value="3"/>
  <pcd:Attribute name="MessageServer" value="pdf0647.sap-ag.de"/>
```

The `<ServerPort>` value does not need for the last two digits to be the system number.

```
<pcd:Attribute name="ServerPort" value="8047"/>
<pcd:Attribute name="Lang" value="EN"/>
<pcd:Attribute name="Client" value="003"/>
```

```
<pcd:Attribute name="Group" value="SPACE"/>
<pcd:Attribute name="SystemType" value="SAP_R3"/>
```

Version 2A: Connection string for Application server. Necessary attribute is *<ConnectionString>*. In this example of the connection string, the */H/* represents the host server and the */S/* identifies the server port.

```
<pcd:Attribute name="Type" value="3"/>
<pcd:Attribute name="ConnectionString" value="/H/pwdf0647.sap-
ag.de/S/3228"/>
<pcd:Attribute name="Lang" value="EN"/>
<pcd:Attribute name="Client" value="003"/>
<pcd:Attribute name="SystemNumber" value="28"/>
<pcd:Attribute name="SystemType" value="SAP_R3"/>
```

Version 2B: Connection string for Message server. Necessary attribute is *<ConnectionString>*. In this example of the connection string, the */M/* represents the Message server, the */S/* identifies the server port, and the */G/* is the Group attribute.

```
<Attributes>
<pcd:Attribute name="Type" value="3" />
<pcd:Attribute name="ConnectionString" value="/M/pwdf0647.sap-
ag.de/S/8047/G/SPACE" />
<pcd:Attribute name="SystemNumber" value="28" />
<pcd:Attribute name="Lang" value="EN" />
<pcd:Attribute name="Client" value="003" />
<pcd:Attribute name="SystemType" value="SAP_R3" />
```

The next two attributes enable you to define user mapping to the system to which you are connecting. They are necessary only if you want to define user mapping through the portal. The first concerns the entry point to the User Mapping interface of SAP Enterprise Portal. The second attribute defines a specific user in the R/3 system.

```
<pcd:Attribute name="UserMappingType" value="admin,user"/>
<pcd:Attribute name="r3username" value="1"/>
</Attributes>
```

WebAccess Points: You must maintain an SAP Web Application Server as a WebAccessPoint. The Web Application Server enables the launching of BW iPanel components.

```
<WebAccessPoints>
<WebAccessPoint category="WAS">
  <Title multilingual="true">
    <pcd:TitleText language="de">Web Application
    Server</pcd:TitleText>
    <pcd:TitleText language="en">Web Application
    Server</pcd:TitleText>
  </Title>
  <Description multilingual="true">
    <pcd:DescriptionText language="de">Web Application
    Server</pcd:DescriptionText>
```

```

        Server</pcd:DescriptionText>
        <pcd:DescriptionText language="en">Web Application
        Server</pcd:DescriptionText>
    </Description>
    <Protocol>HTTP</Protocol>
    <HostName>pdf0647.wdf.sap-ag.de:1080</HostName>
    <Path>/sap/bw/bex</Path>
</WebAccessPoint>

<WebAccessPoint category="DRS">
    <Title multilingual="true">
        <pcd:TitleText language="de">ITS-Webserver</pcd:TitleText>
        <pcd:TitleText language="en">ITS web server</pcd:TitleText>
    </Title>
    <Description multilingual="true">
        <pcd:DescriptionText language="de">ITS-
        Webserver</pcd:DescriptionText>
        <pcd:DescriptionText language="en">ITS web
        server</pcd:DescriptionText>
    </Description>

```

The Drag&Relate server runs on HRNP protocol.

```
<Protocol>hrnp</Protocol>
```

The following attribute defines the unifier server name and its port. This is the machine on which the unifier project is running.

```

        <HostName>bw-ups.wdf.sap-ag.de:1234</HostName>
    </WebAccessPoint>
</WebAccessPoints>

<LogonLanguages>
    <LogonLanguage value="DE"/>
    <LogonLanguage value="EN"/>
</LogonLanguages>
</System>

```



Configuring BW System Settings

Use

This set of procedures integrates the SAP Unifier for BW into SAP Enterprise Portal. The procedure in **Setting Security** enables portal users to utilize single sign-on when working in a BW Unifier project, while the procedure in **Setting Drag&Relate** enables adding HRNP links to BW data.

Setting Security

1. Install *SAPSECULIB* on every application server of the BW System (refer to SAP note 354819).
2. Utilizing transaction *STRUSTSSO2*, the portal certificate imports the *verify.der* file using the *Certificate/Import* menu command.

For example:

- **Path in JRun:** c:\irj\WEB-INF\plugins\portal\services\usermanagement\data\verify.der
 - **Path in SAP J2EE Engine:**
c:\SAP_J2EE_Engine_6.20\alone\services\servlet_jsp\work\jspTemp\irj\root\WEB-INF\plugins\portal\services\usermanagement\data\verify.der
3. Add the certificate in the SSP access control list (ACL) by choosing *Edit/Certificate in ACL*. In the case of an EP 5.0 system you can enter as *WPS System WP3* and *Client 000*. If necessary, you can distribute the settings to all application servers by using the *Distribute* switch.



With an EP 6.0 installation, it is not necessary to modify the *verify.der* file since its BW system parameters are defined during the SAPinst installation. You can change these parameters only through the portal UI.

Setting Drag&Relate

This procedure sets a parameter in BW 3.0A Web Applications that enables adding Drag&Relate links to BW reports. This setting is relevant if you want to perform Drag&Relate navigation with BW data in the context of a BW Unifier project.

1. Go to the IMG (transaction *SPRO*).
2. In *SAP Reference IMG* → *BW Customizing Implementation Guide* → *Business Information Warehouse* → *Reporting-relevant Settings* → *Web-based Settings* → *Drag&RelateSettings*, select the *BW Unifier* checkbox.
3. Save your change and exit the IMG.



Configuring Client Machine Settings

Portal Web Browser

The Web browser in which your portal runs should have activated or should allow the following settings:

- Cookie
- Java script
- Navigate sub-frames across different domains (Internet Explorer)
- ActiveX controls and plug-ins (Internet Explorer)

In the Internet Explorer you can find these settings under *Tools* → *Internet Options* → *Security* → *Custom Level*.

Launching BW Workbooks

BW Workbooks are Microsoft Excel-based BW reports. Launching a BW Workbook opens an SAP GUI, which in turn launches the Excel application.

To open Workbook components, a client machine must have installed the latest version of SAP Frontend (including BW add-on) and Excel 2000.



Uninstalling the Unifier for BW

Use

Use this procedure to remove SAP Unifier for BW from your Unification Server installation.

Prerequisites

You have removed all existing projects that you generated with the BW Unifier.

Procedure

1. From the Windows Control Panel, choose *Add/Remove* → *SAP Unifier BW*.
2. Follow the screen instructions for removing the unifier.

Result

If this is the only instance of a Unifier for BW that is installed on your Unification Server, you now cannot generate a BW Unifier project.

To reinstall the unifier, see [Installation of SAP Unifier for BW \[Page 1\]](#).