



INSTALLATION GUIDE | CUSTOMER

SAP EPM solutions, add-in for Microsoft Office

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EPM Add-in for Microsoft Office Installation Guide

Content

1	What's New in the EPM Add-in for Microsoft Office Installation Guide.	4
2	Architecture.	9
2.1	Architecture Overview.	9
2.2	Software Units.	11
2.3	Protocols Used in the EPM Add-in for Microsoft Office Software Architecture.	13
2.4	Hardware and Software Recommendations.	13
3	Installing the EPM Add-in for Microsoft Office.	16
3.1	For which EPM solution installing the EPM add-in.	16
3.2	Installation Prerequisites for EPM Add-in.	16
3.3	Installing EPM Add-in for Microsoft Office in Silent Mode.	17
3.4	Prerequisites for Installing EPM Add-in for Microsoft Office from SAP BusinessObjects Planning and Consolidation, version for SAP NetWeaver.	19
3.5	Installing EPM Add-in for Microsoft Office from SAP BusinessObjects Planning and Consolidation	22
3.6	Installing EPM Add-in for Microsoft Office (standalone).	24
3.7	Configuring the BOE for using the EPM Add-in from the BI launch pad.	26
3.8	PDF Conversion.	27
4	Installing the EPM Connector.	28
4.1	Components Prerequisites.	28
4.2	To install the EPM Connector add-on.	28
5	Creating and Configuring Connections.	30
5.1	Creating Local Connections.	30
	Configuration Prerequisites for Creating Local Connections.	30
	Creating a Local Connection for Financial Consolidation with SSAS Cubes using XMLA or OLEDB Providers.	32
	Creating a Local Connection for Financial Consolidation with NetWeaver BW Cubes.	35
	Creating a Local Connection for Profitability and Cost Management.	38
	Creating a Local Connection for Planning and Consolidation for Microsoft.	41
	Prerequisites for creating a local connection for Planning and Consolidation version for SAP NetWeaver.	45
	Creating a Local Connection for Planning and Consolidation version for SAP NetWeaver.	48
	Creating a Local Connection for the SAP HANA Platform.	50
5.2	Creating Planning and Consolidation Connections.	53
	Creating a Planning and Consolidation Connection for the Microsoft Platform.	54
	Creating a Planning and Consolidation Connection for SAP NetWeaver.	55

5.3	Creating SAP BusinessObjects Enterprise Connections.	56
	Creating an EPM Connection for Financial Consolidation with SSAS Cubes in the Central Management Console.	56
	Creating an EPM Connection for Financial Consolidation with NetWeaver BW Cubes in the Central Management Console.	58
	Creating an EPM Connection for Profitability and Cost Management in the Central Management Console.	60
	Creating an EPM Connection for Planning and Consolidation version for SAP NetWeaver in the Central Management Console.	61
	Creating an EPM Connection for Planning and Consolidation version for Microsoft in the Central Management Console.	62
	Creating an SAP BusinessObjects Enterprise Connection.	63
5.4	Creating the SAP BW (INA Provider) Connection.	64
5.5	User Preferences Configuration.	66
6	Configuring the EPM Connector.	67
6.1	To configure the EPM Connector for Microsoft-based Solutions.	67
	Defining HTTP headers of the crossdomain.xml file under Windows 2003.	68
	Defining HTTP headers of the crossdomain.xml file under Windows 2008.	70
	Alternative configuration.	74
6.2	To configure the EPM Connector for SAP NetWeaver-based Solutions.	75
	Creating a Class on the SAP NetWeaver Server.	75
	Implementing the Interface on the BW Server.	77
	Creating the crossdomain Service.	79
7	Deploying the Same Options for Several Users.	86
8	EPM Add-in for Microsoft Office Technical Log Configuration	97
9	EPM Add-in Report Size Limitations.	100
10	General Limitations.	101
11	Disabling EPM Add-in for Faster Microsoft Office Applications Load Time.	102
12	Connecting to Untrusted Servers.	104
13	Troubleshooting.	105

1 What's New in the EPM Add-in for Microsoft Office Installation Guide

Links to information about the new features and documentation changes for the EPM Add-in for Microsoft Office.

What's New in Support Package 34 Documentation

What's new	Link to more information
Due to legal reasons, the following are no more embedded in the setup of the EPM add-in: Microsoft .Net framework, Microsoft Visual C++ Redistributable Packages, Microsoft XML parser	
Microsoft .Net framework: version 4.5 is no more supported; version 4.7.2 is now supported.	See Installation Prerequisites for EPM Add-in [page 16]
- Microsoft Visual C++ Redistributable Package (x86 for Microsoft Office 32-bit version): versions 2010, 2012 and 2013 no more supported; version 2015 and higher are now supported - Microsoft Visual C++ Redistributable Package (x64 for Microsoft Office 64-bit version): versions 2010, 2012 and 2013 no more supported; version 2015 and higher are now supported	See Installation Prerequisites for EPM Add-in [page 16]
Internet Explorer: version 10 is no more supported; version 11 only is supported.	See Hardware and Software Recommendations [page 13]
Versions of Microsoft Windows supported: - Microsoft Windows 7 Service Pack 1 - Microsoft Windows 8.1 - Microsoft Windows 10 Anniversary Update (version 1607) - Microsoft Windows Server 2008 R2 Service Pack 1 - Microsoft Windows Server 2012 R2 - Microsoft Windows Server 2016 (version 1709)	See Hardware and Software Recommendations [page 13]

What's New in Support Package 32 Documentation

What's new	Link to more information
Single Sign-On deactivation for Planning and Consolidation for the Microsoft Platform, connections	See Creating a Planning and Consolidation Connection for the Microsoft Platform [page 54]

What's New in Support Package 31 Documentation

What's new	Link to more information
Google Chrome and Microsoft Edge are now supported	See Hardware and Software Recommendations [page 13]

What's New in Support Package 30 Documentation

What's new	Link to more information
Connecting to any server - even the ones that are defined in the untrusted zone, is now possible, by using the new configuration key TrustUntrustedServerCertificates	See Connecting to Untrusted Servers [page 104]

What's New in Support Package 29 Documentation

What's new	Link to more information
Web authentication protocol of type saml 2 now supported for connections to Planning and Consolidation SAP NetWeaver	See Creating a Planning and Consolidation Connection for SAP NetWeaver [page 55]

What's New in Support Package 28 Patch 01 Documentation

What's new	Link to more information
Amyuni PDF Converter 5.5 is provided in the setup of the EPM add-in as of Support Package 28 Patch 01.	See PDF Conversion [page 27]

What's New in Support Package 28 Documentation

What's new	Link to more information
Secure Login solution for SAP Single Sign-On 3.0 is now supported. When creating a Planning and Consolidation connection, you can now choose to authenticate via a Secure Login profile, which generates a short-lived certificate.	See Creating a Planning and Consolidation Connection for the Microsoft Platform [page 54] and Creating a Planning and Consolidation Connection for SAP NetWeaver [page 55]
TLS 1.1 and TLS 1.2 versions for HTTPS connections are now supported. By default, TLS 1.0 is used.	To use TLS 1.1 or TLS 1.2, see the procedure described in SAP note 2415155.

What's New in Support Package 27 Documentation

What's new	Link to more information
New setups: • one for the 32-bit version of Microsoft Office • one for the 64-bit version of Microsoft Office	Installing EPM Add-in for Microsoft Office (standalone) [page 24]
Setups are full installers, no more .msp files to upgrade	
Now embedded in the setups: • Microsoft .Net framework 4.5 • Microsoft Visual C++ 2010, 2012 and 2013 Redistributable Package • Microsoft XML parser 6.0 SP1	Installation Prerequisites for EPM Add-in [page 16]
Microsoft Windows XP is no longer supported	

What's New in Support Package 25 Documentation

What's new	Link to more information
Microsoft Windows 10 and Microsoft Office 2016 are now supported	Hardware and Software Recommendations [page 13]

What's New in Support Package 22 Documentation

What's new	Link to more information
Microsoft Windows Server 2012 R2 is supported	Hardware and Software Recommendations [page 13]

What's New in Support Package 19 Documentation

What's new	Link to more information
Internet Explorer 11 is supported	Hardware and Software Recommendations [page 13]
Microsoft Windows 8.1 is supported	Hardware and Software Recommendations [page 13]

What's New in Support Package 18 Documentation

What's new	Link to more information
Microsoft Office 365 is supported	Hardware and Software Recommendations [page 13]

What's New in Support Package 16 Documentation

What's new	Link to more information
New chapter regarding the new connection for SAP BW (INA Provider)	Creating the SAP BW (INA Provider) Connection [page 64]

What's New in Support Package 15 Documentation

What's new	Link to more information
New chapter regarding the new local connection for the SAP HANA Platform	Creating a Local Connection for the SAP HANA Platform [page 50]
New option in the xml file: DeferLayoutUpdate	Deploying the Same Options for Several Users [page 86]
The already existing option MemberSelectorPagingSize: his equivalent option in the user interface is no more Members per page in Member Selector (that does not exist anymore)	Deploying the Same Options for Several Users [page 86]

What's new**Link to more information**

but Members Displayed on Node Expansion in Member Selector

What's New in Support Package 14 Documentation

What's new**Link to more information**

Microsoft Windows 8 and Microsoft Office 2013 are now supported

[Hardware and Software Recommendations \[page 13\]](#)

What's New in Support Package 13 Patch 02 Documentation

What's new**Link to more information**

Added information about the new BAPI connection type

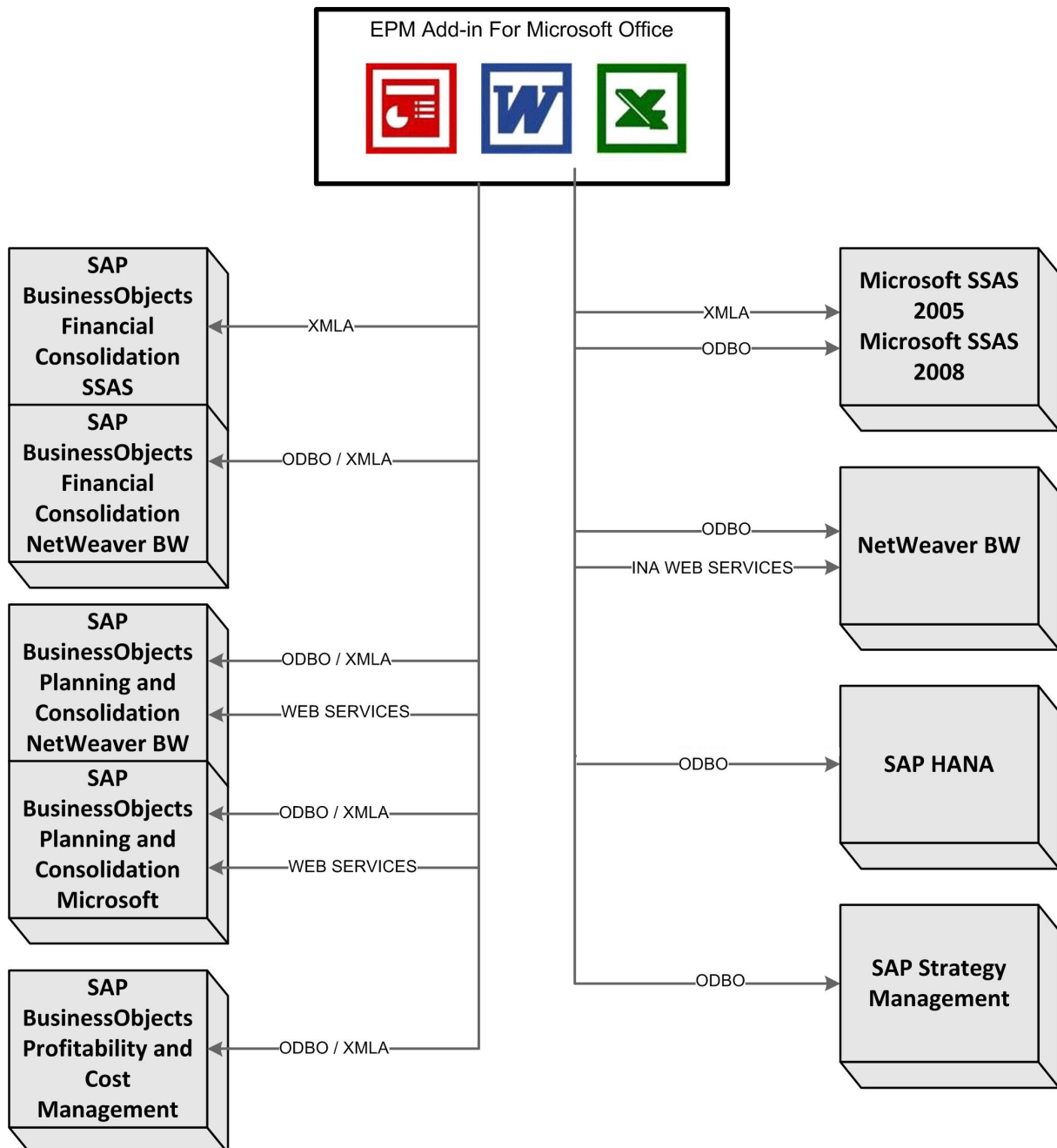
[Creating a Local Connection for Financial Consolidation with NetWeaver BW Cubes \[page 35\]](#)

2 Architecture

2.1 Architecture Overview

SAP BusinessObjects EPM Solutions, add-in for Microsoft Office provides business users the capability to analyze data from within supported SAP BusinessObjects EPM applications using Microsoft Office tools: Excel, Word or PowerPoint.

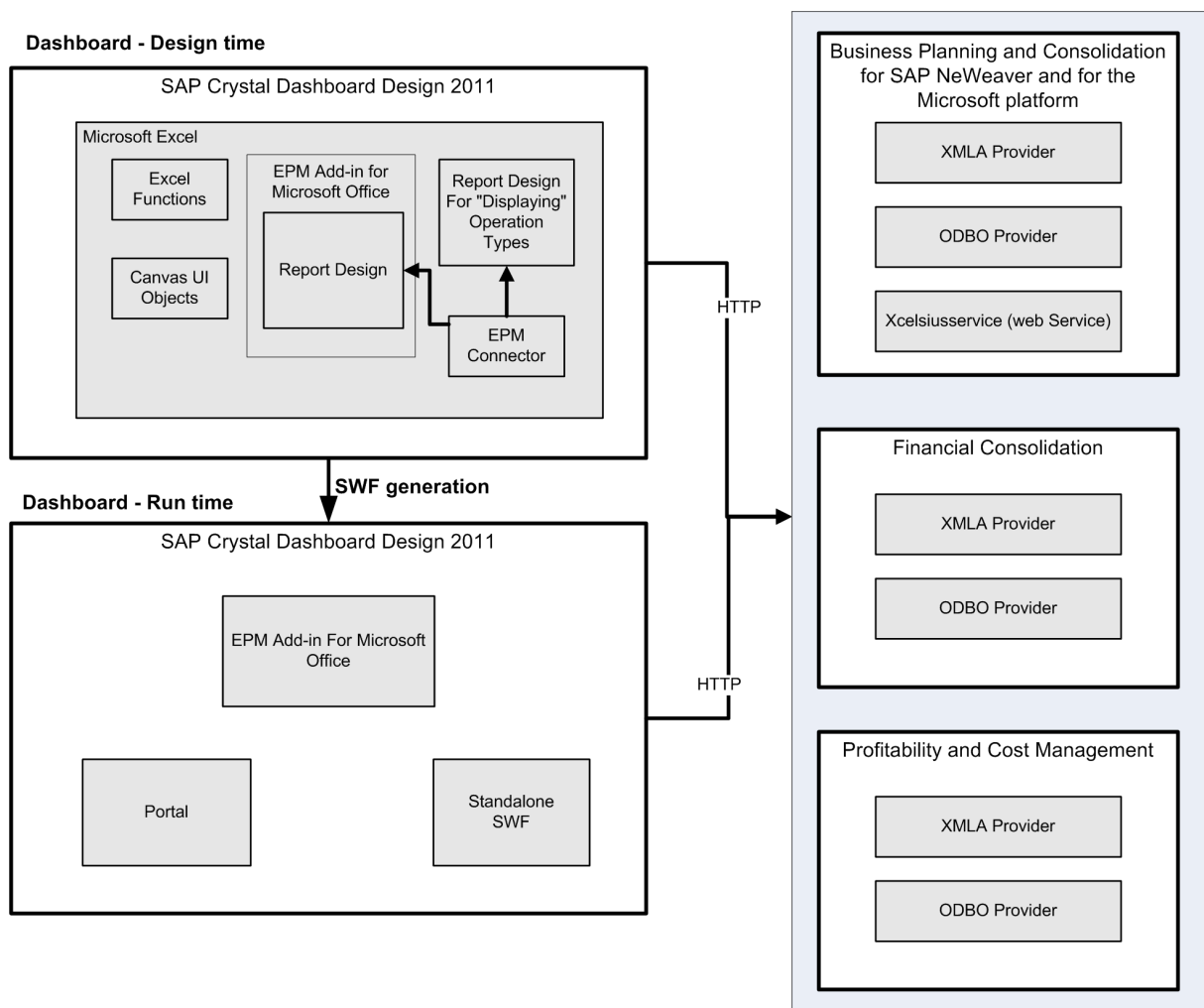
SAP BUSINESSOBJECTS EPM SOLUTIONS, EPM ADD-IN FOR MICROSOFT OFFICE



If you are using Dashboard Design, you can also convert EPM Add-in workbooks into Dashboard Design dashboards.

i Note

Dashboard Design dashboards are flash files.



2.2 Software Units

Function

The EPM Add-in for Microsoft Office:

- creates the reports that will be published on the SAP BusinessObjects Enterprise BI launch pad portal.
- allows OLAP analysis of cubes (drill-down, pivot axis, etc.).

Supported data sources

EPM Add-in for Microsoft Office creates the reports on and analyzes the data from the following cubes:

- SAP BusinessObjects Financial Consolidation 10 and 10.1:

- Financial Consolidation Microsoft SSAS cubes through the datapump component
- Financial Consolidation NetWeaver BW cubes
- SAP NetWeaver Business Warehouse (SAP NetWeaver BW) (Integrated Planning supported, from SAP NetWeaver BW 7.4 SP6)
- SAP BusinessObjects Planning and Consolidation 10 and 10.1, version for the Microsoft platform
- SAP BusinessObjects Planning and Consolidation 10 and 10.1, version for SAP NetWeaver
- SAP BusinessObjects Profitability and Cost Management 10
- SAP BusinessObjects Strategy Management 10 and 10.1
- SAP HANA
- Oracle Essbase 11.1.2.3 (load-balancing configurations are not supported)

i Note

In replacement of Extended Analytics Analyzer 7.5, you can use the EPM add-in 10.0 to retrieve and analyze data that comes from the following 7.5 data sources:

- SSAS cubes created with SAP BusinessObjects Financial Consolidation, cube designer
- SAP NetWeaver BW InfoCubes created with SAP BusinessObjects Financial Consolidation, cube designer
- SAP BusinessObjects Planning and Consolidation, version for SAP NetWeaver, models
- SAP BusinessObjects Planning and Consolidation, version for the Microsoft platform, models

You can connect to the EPM Add-in for Microsoft Office through:

- the SAP BusinessObjects Enterprise BI launch pad portal
- the SAP BusinessObjects Planning and Consolidation web portal
- the administration console of SAP BusinessObjects Planning and Consolidation, version for the Microsoft platform
- a local mode using Microsoft Office Excel, Word or PowerPoint

Coexistence with other add-ins

The EPM add-in can coexist with all other Microsoft Office add-ins, even non-SAP ones.

Related Information

[Installation Prerequisites for EPM Add-in \[page 16\]](#)

2.3 Protocols Used in the EPM Add-in for Microsoft Office Software Architecture

XMLA

XML for Analysis Services is the Microsoft standard protocol for accessing SSAS.

ODBO

ODBO (OLE DB for OLAP) extends the ability of OLE DB to access multi-dimensional (OLAP) data stores.

2.4 Hardware and Software Recommendations

For hardware and software recommendations on BusinessObjects Enterprise XI 4.0 or 4.1 platform and SAP NetWeaver Business Warehouse platform, refer to their respective guides, which are available on the SAP Help Portal.

Category	Supported configuration	Recommended configuration
Processor	Intel Pentium processor 1,5 GHz or a Pentium compatible processor	
RAM	At least 512 MB (depending on the operating system)	2 GB
Disk space	1 GB	
Screen resolution	1024 X 768	
Operating system	Microsoft Windows 7 Service Pack 1 Microsoft Windows 8.1 Microsoft Windows 10 Anniversary Update (version 1607)	

i Note

Windows 10 provides various maintenance options. As a rule, all of these maintenance options are supported by the EPM add-in as long as they are supported by Microsoft. However, the maintenance option "Current

Category	Supported configuration	Recommended configuration
	Branch" is supplied with corrections and further developments by Microsoft at a high frequency. There is no option for checking updates individually before they are applied. SAP does not check these corrections and enhancements, either. For this reason, the use of "Current Branch" poses a certain risk for the operation (in the case of errors or incompatibilities in a new version). We therefore explicitly recommend the use of one of the other two maintenance options. Microsoft Windows Server 2008 R2 Service Pack 1 Microsoft Windows Server 2012 R2 Microsoft Windows Server 2016 (version 1709) i Note EPM add-in supports Citrix XenApp 6.5 and higher versions in both desktop and streaming to server modes. ⚠ Caution IA 64-bit (Itanium) versions are not supported.	
Software components	Internet Explorer 11 Mozilla Firefox version 57 Google Chrome version 63 Microsoft Edge version 38 Supported versions of Microsoft Office Excel, Word or PowerPoint: - Microsoft Office 2010 Professional - Microsoft Office 2013 Professional - Microsoft Office 2016 Professional	Internet Explorer 11 ⚠ Caution You cannot run Internet Explorer 64-bit with a 32-bit edition of Microsoft Office.

Category	Supported configuration	Recommended configuration
	Microsoft Office 365 Desktop Business ! Restriction Please note that Microsoft Office editions that contain the term Home, Personal, Student and University are not supported. Windows Installer 3.1 (installed with the EPM add-in setup) Microsoft SQL Server OLEDB Provider 2005, 2008 or higher Adobe Flashplayer 10.1 or higher EPM Add-in + EPM Connector up to version 10.0 SP13 Patch 03 supports Dashboard Designer 4.0 EPM Add-in + EPM Connector from version 10.0 SP13 Patch 04 supports Dashboard Designer 4.0 SP05	
Network connection	128 Kbps connection or higher dedicated to daily operations By default, the HTTP flow is compressed	An ADSL connection or equivalent can improve performance

Caution

In the case of complex configurations, the client computer's performance (available RAM and processor performance) can have a significant impact on the application's performance.

3 Installing the EPM Add-in for Microsoft Office

3.1 For which EPM solution installing the EPM add-in

Installing the EPM add-in is mandatory for the following applications:

- Planning and Consolidation for the Microsoft Platform
- Planning and Consolidation for SAP NetWeaver

i Note

When using SAP BusinessObjects Planning and Consolidation, version for SAP NetWeaver, models - version 10.1 with SAP BW (INA Provider) connections, it is recommended to use EPM add-in Support Package 26 with SAP BW 7.4 SP11. However, if you use a version lower than SAP BW 7.4 SP08 with EPM Add-in Support Package 20 and higher, then you must add the following key and set it to True, in the FPMXLClient.dll.config: UseOldMasterDataServiceForPAK key= True.

Installing the EPM add-in is optional for the following applications:

- SAP BusinessObjects Financial Consolidation
- SAP Profitability and Cost Management
- SAP Strategy Management

3.2 Installation Prerequisites for EPM Add-in

Required Components

The following must be already installed on your machine before you install the EPM add-in, so that the EPM add-in can function properly:

- Microsoft .Net framework 4.7.2
- Microsoft XML parser 6.0 SP1
- Microsoft Office, 2010, 2013, 2016 or Microsoft Office 365 Desktop Business
- If you install the [EPM_Add-in_x32.exe](#) file: Microsoft Visual C++ Redistributable Package (x86 for Microsoft Office 32-bit version) 2015 or higher
- If you install the [EPM_Add-in_x64.exe](#) file: Microsoft Visual C++ Redistributable Package (x64 for Microsoft Office 64-bit version) 2015 or higher

Required components for the EPM Connector

- Dashboard Design 4.0
- Adobe Flash Player 10.1

Optional Components

Certain components need to be installed so that the EPM add-in functions properly, depending on your use case.

- To connect to SAP HANA via ODBO, install the SAP HANA MDX provider.
- To connect via XMLA to SAP HANA, Microsoft SSAS, or any other data source that is XMLA-compatible, install the XMLA provider.
- To connect to SAP Planning and Consolidation for Microsoft Office via ODBO, install the SAP BusinessObjects Planning and Consolidation provider.
- To connect to BW cubes via ODBO, install the SAP BW OLEDB Provider.
- To connect to SAP Profitability and Cost Management via ODBO, install Profitability and Cost Management Core Components and Connectivity Pack.
- To connect to Microsoft SSAS via ODBO, install the Microsoft OLEDB Provider for Analysis Services.

If you are using the BOE platform (SAP BusinessObjects Enterprise XI 4), you must install the Microsoft Web Services Enhancement 3.0 (WSE 3.0) component, in one of the following cases:

- When opening Microsoft Excel from the BOE.
- When using local connections and when a value has been entered in the [SAP BusinessObjects Enterprise Server](#) field in the [User Options](#) dialog box of the EPM Add-in.

3.3 Installing EPM Add-in for Microsoft Office in Silent Mode

You can install the EPM add-in in silent mode by entering the following command line:

Caution

\ " escaping characters are mandatory when using an argument containing spaces (for example: c : \Program Files).

```
"[EPM add-in .exe file name]" /S/v"INSTALLDIR=\"[install path]\"
SETUPPHASE=Install CT_PROFILE=[application name] CT_LANGUAGES=\"[language]\"
/l*v [log file path] MSIINSTALLPERUSER=[installation scope]
EPMLAUNCHER_ENABLE_REGISTRATION_OPTION=[set as default launcher]
EPMLAUNCHER_INSTALL_SHORTCUT_EXCEL=[create excel shortcut]
EPMLAUNCHER_INSTALL_SHORTCUT_PPT=[create powerpoint shortcut]
EPMLAUNCHER_INSTALL_SHORTCUT_WORD=[create word shortcut] /qn"
```

You must specify the following parameters (between [] above):

- install path: path to the folder in which you want to install the EPM add-in.
- application name: the EPM Solution you require. Enter one of the following applications:
 - FINANCE
 - BPCMS
 - BPCNW
- language: the default application language. Enter one of the following languages:
 - Danish
 - German
 - English
 - Spanish
 - French
 - Italian
 - Japanese
 - Korean
 - Norwegian
 - Dutch
 - Polish
 - Portuguese
 - Russian
 - Swedish
 - Thai
 - Chinese (Simplified)
 - Chinese (traditional)
- log file path: path to the folder in which you want the installer to write the setup logs.
- installation scope: specifies whether the EPM add-in will be installed for the current user only or for all users. Enter one of the following options:
 - 0: for all users, meaning anyone who uses the computer (this is the default value if the parameter is not specified).
 - 1: for the current user only.
- set as default launcher: sets the EPM Launcher as the default launcher. Enter one of the following options:
 - False (this is the default value if the parameter is not specified)
 - True
- create shortcuts: creates an EPM add-in shortcut in the Windows Start Menu for each Office Application. Enter one of the following options for each Office application:
 - EPMLAUNCHER_INSTALL_SHORTCUT_EXCEL
 - False (this is the default value if the parameter is not specified)
 - True
 - EPMLAUNCHER_INSTALL_SHORTCUT_PPT
 - False (this is the default value if the parameter is not specified)
 - True
 - EPMLAUNCHER_INSTALL_SHORTCUT_WORD
 - False (this is the default value if the parameter is not specified)
 - True

❖ Example

```
"[EPM add-in .exe file name]" /S /v"INSTALLDIR=\"C:\Program files\SAPBOBJ\PC\"
SETUPPHASE=Install CT_PROFILE=FINANCE CT_LANGUAGES=\"Chinese (Simplified)\" /
l*v \"
c:\epmAddin_Install.log\" MSIINSTALLPERUSER=1
EPMLAUNCHER_ENABLE_REGISTRATION_OPTION=True
EPMLAUNCHER_INSTALL_SHORTCUT_EXCEL=True /qn"
```

To verify that the add-in has been installed, open your Microsoft Office application. The *EPM* tab should appear in the ribbon.

3.4 Prerequisites for Installing EPM Add-in for Microsoft Office from SAP BusinessObjects Planning and Consolidation, version for SAP NetWeaver

Prerequisites

i Note

The following procedure applies only to SAP BusinessObjects Planning and Consolidation, version for SAP NetWeaver.

Before installing the EPM add-in for Microsoft Office from SAP BusinessObjects Planning and Consolidation, version for SAP NetWeaver, you must perform the following procedure to upload the setup files on the NetWeaver server.

⚠ Caution

If you do not perform this procedure, the EPM add-in for Microsoft Office setup files will not be available on the NetWeaver server and will therefore not be executable through the Planning and Consolidation Administration.

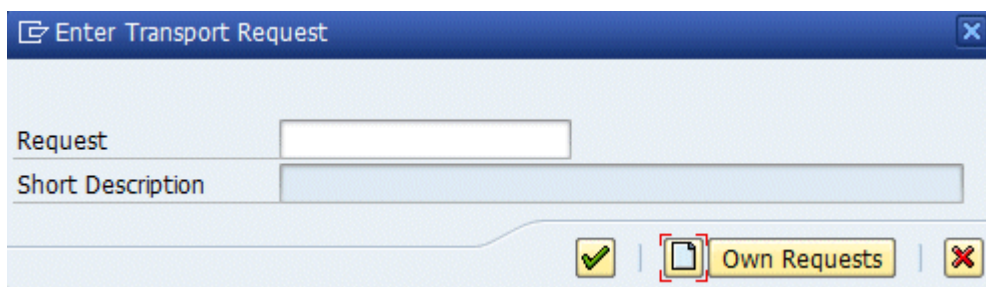
Procedure

1. Do one of the following:
 - If your version of SAP NetWeaver BW is prior to the SAP_BW Release 730 SP3, you must implement the following SAP Notes: 1558149, 1553052, 1578760 and 1547050.
 - If your version of SAP NetWeaver BW is 740, 750, 800, 801 or 810, you must implement the following SAP Note: 2369339.
 - If you need to install EPM add-in Support Package 27 or upper versions for the x64 edition, from the Planning and Consolidation web client, please upgrade Planning and Consolidation accordingly. See SAP note 2403723.

2. Log on to SAP NetWeaver and execute the [RSBPCLD](#) transaction.
3. In the [Program](#) field, enter [UJO_FILE_UPLOAD](#) and click [Execute](#) (F8).
The [Upload](#) window opens.
4. In the [Option and version](#) section, select the type of update you want to perform depending on whether or not the support package is mandatory.

Option	Description
Force update	When updates are defined as "force update", a message pops up on your local machine, prompting you to install the update. If you do not install the update, you will not be able to use the EPM add-in. The version XXX of the EPM Add-in is now available. It must be installed before you can use the EPM Add-in
Auto update	When updates are defined as "auto update", a message pops up every time an update is available, prompting you whether you want to install it now or later. "Version xxx of the EPM Add-in is now available. Do you want to install it?"
User update	When updates are defined as "user update", if you choose the Notify me when updates are available option, a message pops up every time an update is available, prompting you whether you want to install it now or later. "Version xxx of the EPM Add-in is now available. Do you want to install it?" You can choose to select the Do not show this message again option.

5. In the [File version](#) field, enter the EPM Add-in version number (for example: 10.0.0.5054).
6. Select the [Full Installer](#) type.
7. In the [Upload](#) section, click [Browse](#) to select the EPM Add-in.exe file and then click [Upload](#).
The [Enter Transport Request](#) dialog box opens.



8. Click the New icon.
The [Select Request Type](#) dialog box opens.



9. Select *Customizing Request* and validate.
The *Create Request* dialog box opens.

10. Enter a short description text and click the Save icon.
11. In the *Enter Transport Request* dialog box, click the Validate icon.
12. Once the transport has been created, open the *Transport Management System*.
13. In the *Import Queue* of your system, select the transport you created and click *Import*.

Next Steps

To perform an upgrade of the EPM add-in on the server, follow the same procedure.

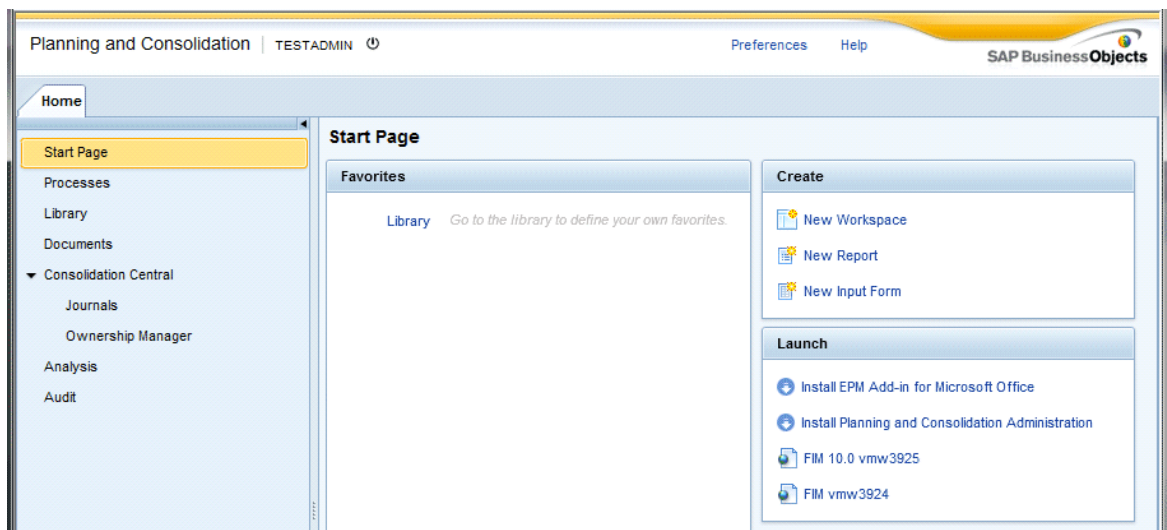
3.5 Installing EPM Add-in for Microsoft Office from SAP BusinessObjects Planning and Consolidation

Prerequisites

The procedure to install EPM Add-in for Microsoft Office from Planning and Consolidation is the same for both versions of SAP BusinessObjects Planning and Consolidation: version for SAP NetWeaver or Microsoft.

Procedure

1. Log in to Planning and Consolidation.

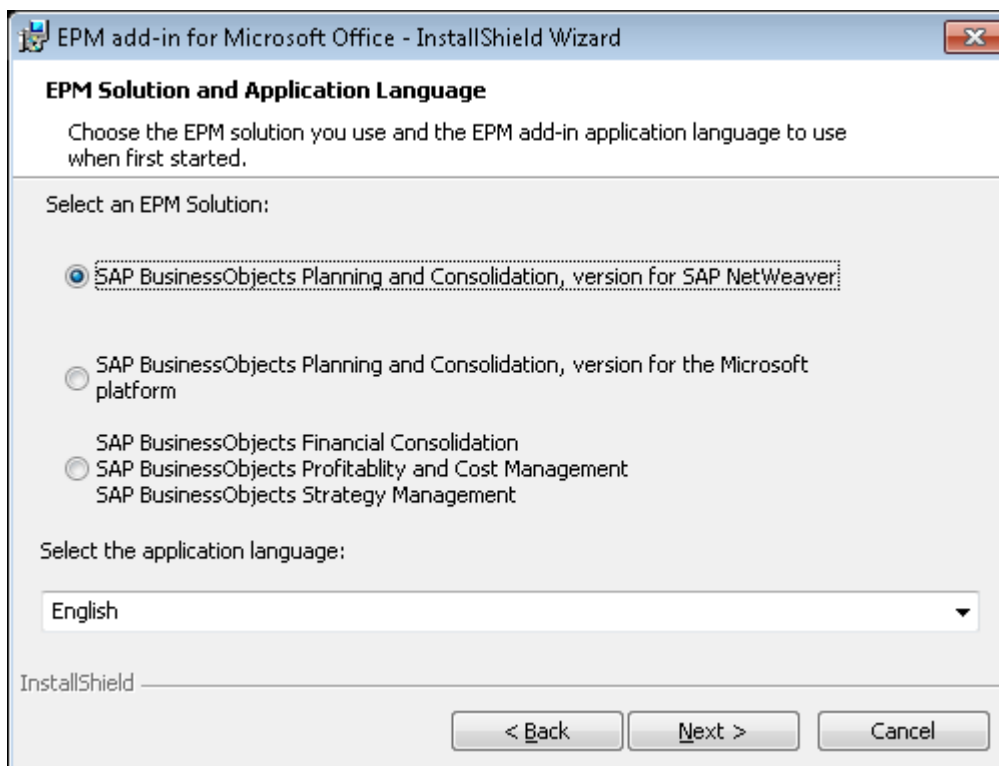


2. In the **Launch** pane of the window, click *Install EPM Add-in for Microsoft Office*.
Two links are available, one for each version of Microsoft Office: 32-bit version or 64-bit version.
A download dialog box opens.
3. Click *Run* then *Next*.
The License agreement dialog box opens.
4. Click *I accept the terms in the license agreement* and click *Next*.
Once all of the requirements are installed, the Welcome dialog box opens.
5. Specify a *User Name* and your *Organization* and check the *Anyone who uses this computer (all users)* option.

⚠ Caution

If you install the EPM Add-in on Windows 7 and you select the *Only for me* installation option, do not execute Microsoft Office Excel, Microsoft Office Word or Microsoft Office PowerPoint with the "Run as admin" option enabled; otherwise these applications will not function.

6. Click [Next](#).
The following dialog box opens.



i Note

The EPM Add-in installed is the same regardless of the solution you select. However, your selection determines the pre-configuration of the EPM Add-in.

i Note

When opening the EPM add-in, the [EPM](#) tab in the ribbon displays only the commands that are relevant for the application(s) you have specified. You can change the display afterwards by selecting [► EPM ► Options ► Command Display Options ►](#).

7. Select the EPM Solution you require and click [Next](#).
8. Select the application language and click [Next](#).
9. Select the Destination folder of the application and click [OK](#).
10. Click [Install](#) to begin installing the EPM add-in.
11. Once the installation is complete, click [Finish](#).

Next Steps

To verify that the add-in has been installed, open Microsoft Office Excel, Microsoft Office Word or Microsoft Office PowerPoint. The [EPM](#) tab should appear in the ribbon.

3.6 Installing EPM Add-in for Microsoft Office (standalone)

Prerequisites

At least one of the following applications must be installed on your machine: Microsoft Office Excel, Microsoft Office Word or Microsoft Office PowerPoint.

Context

If you are using SAP BusinessObjects EPM solutions, add-in for Microsoft Office with the SAP BusinessObjects Information Platform Services, you can install the add-in directly from the installation folder.

i Note

To improve performance when you launch the EPM Add-in, it is recommended that you run the installation in Administrator mode.

i Note

If certain redistributables that need to be installed or updated are not, the installation of the EPM add-in may not be completed. A user with administrator privileges must perform the installation or update before launching the setup of the EPM add-in.

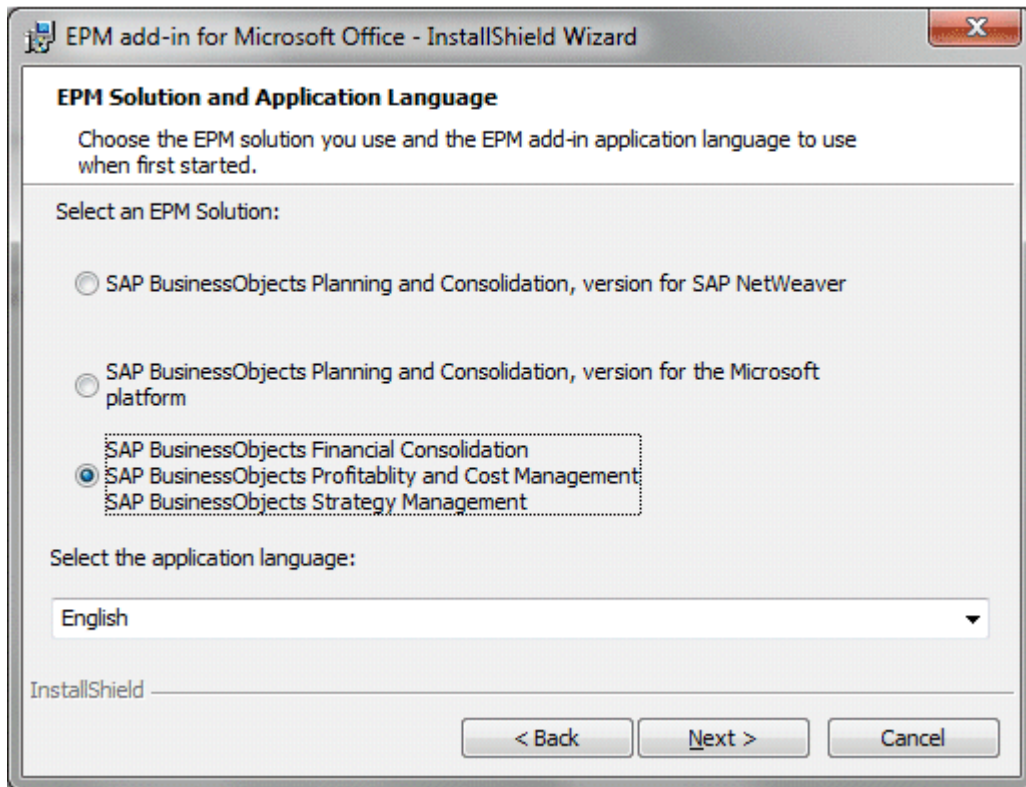
Procedure

1. Execute the appropriate setup located in the `SAP BusinessObjects\EPM Add-In` installation folder.
 - a. If your computer is running a 32-bit version of the Microsoft Office, execute the *EPM_Add-in_x32.exe* file.
 - b. If your computer is running a 64-bit version of Microsoft Office, execute the *EPM_Add-in_x64.exe* file.
2. Click *Next*.
3. Click *I accept the terms in the license agreement* and click *Next*.
4. Specify a *User Name* and your *Organization* and check the *Anyone who uses this computer (all users)* box.

⚠ Caution

If you install the EPM Add-in on Windows 7 and you select the *Only for me* installation option, do not execute Microsoft Office Excel, Microsoft Office Word or Microsoft Office PowerPoint with the "Run as admin" option enabled; otherwise these applications will not function.

5. Click *Next*.
6. Specify the application(s) you use.



i Note

The EPM Add-in installed is the same regardless of the solution you select. However, your selection determines the pre-configuration of the EPM Add-in.

i Note

When opening the EPM add-in, the [EPM](#) tab in the ribbon displays only the commands that are relevant for the application(s) you have specified. You can change the display afterwards by selecting [EPM > Options > Command Display Options](#).

7. Select the application language you require. You can change the language afterwards by selecting [EPM > Options > User Options](#).
8. Click [Next](#).
9. Specify if you want a shortcut to be created in the Windows Start menu so that you can launch the EPM add-in in each of the following: Microsoft Excel, Word, or PowerPoint.
10. If you use SAP BusinessObjects Planning and Consolidation and if you use a web browser that is not Microsoft Internet Explorer, please select [Set the EPM add-in launcher as the default launcher](#).

i Note

if you use a web browser that does not support ActiveX (such as Mozilla Firefox, Google Chrome and Microsoft Edge) and you do not select this option, you will not be able to open a Business Process Flow in the EPM add-in from the Planning and Consolidation web client. If you use Internet Explorer, you do not need to select this option.

11. Select the folder in which you want to install the application and click [Next](#).
12. Click [Install](#) to begin installing the EPM add-in.
13. Once the installation is completed, click [Finish](#).

Next Steps

To verify that the add-in has been installed, open Microsoft Office Excel, Microsoft Office Word or Microsoft Office PowerPoint. The [EPM](#) tab should appear in the ribbon.

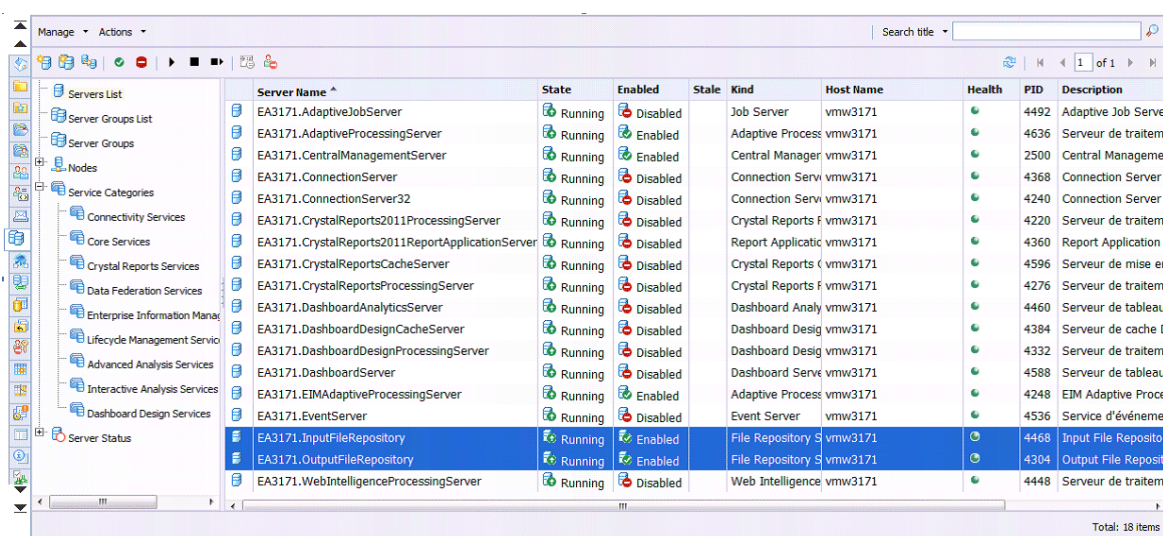
3.7 Configuring the BOE for using the EPM Add-in from the BI launch pad

Context

If you want to publish EPM Add-in work books from the BI launch pad, you need to activate the following services from the BOE platform.

Procedure

1. Connect to the Central Management Console.
 2. In the [Organize](#) section, click [Servers](#).
 3. Expand the [Service Categories](#) node.
- The following window opens.



Server Name	State	Enabled	Stale	Kind	Host Name	Health	PID	Description
EA3171.AdaptiveJobServer	Running	Disabled		Job Server	vmw3171	Green	4492	Adaptive Job Serve
EA3171.AdaptiveProcessingServer	Running	Enabled		Adaptive Process	vmw3171	Green	4636	Serveur de traitem
EA3171.CentralManagementServer	Running	Enabled		Central Manager	vmw3171	Green	2500	Central Manageme
EA3171.ConnectionServer	Running	Disabled		Connection Servi	vmw3171	Green	4368	Connection Server
EA3171.ConnectionServer32	Running	Disabled		Connection Servi	vmw3171	Green	4240	Connection Server
EA3171.CrystalReports2011ProcessingServer	Running	Disabled		Crystal Reports F	vmw3171	Green	4220	Serveur de traitem
EA3171.CrystalReports2011ReportApplicationServer	Running	Disabled		Report Applicatic	vmw3171	Green	4360	Report Application
EA3171.CrystalReportsCacheServer	Running	Disabled		Crystal Reports <	vmw3171	Green	4596	Serveur de mise er
EA3171.CrystalReportsProcessingServer	Running	Disabled		Crystal Reports F	vmw3171	Green	4276	Serveur de traitem
EA3171.DashboardAnalyticsServer	Running	Disabled		Dashboard Analy	vmw3171	Green	4460	Serveur de tableau
EA3171.DashboardDesignCacheServer	Running	Disabled		Dashboard Desig	vmw3171	Green	4384	Serveur de cache t
EA3171.DashboardDesignProcessingServer	Running	Disabled		Dashboard Desig	vmw3171	Green	4332	Serveur de traitem
EA3171.DashboardServer	Running	Disabled		Dashboard Serv	vmw3171	Green	4588	Serveur de tableau
EA3171.EIMAdaptiveProcessingServer	Running	Enabled		Adaptive Process	vmw3171	Green	4248	EIM Adaptive Proce
EA3171.EventServer	Running	Disabled		Event Server	vmw3171	Green	4536	Service d'événeme
EA3171.InputFileRepository	Running	Enabled		File Repository S	vmw3171	Green	4468	Input File Reposit
EA3171.OutputFileRepository	Running	Enabled		File Repository S	vmw3171	Green	4304	Output File Reposit
EA3171.WebIntelligenceProcessingServer	Running	Disabled		Web Intelligence	vmw3171	Green	4448	Serveur de traitem

Total: 18 items

4. Select *Core Services*.
5. In the right pane, select the following services:
 - *InputFileRepository*
 - *OutputFileRepository*
6. Right-click on them and select *Enable Server*.

3.8 PDF Conversion

The book publication functionality requires conversion of workbooks to PDF.

- By default, Microsoft Office Excel handles the PDF conversion.
- Alternatively, you can install Amyuni PDF Converter 5.5.

Installing Amyuni PDF Converter 5.5

Amyuni PDF Converter 5.5 is provided in the setup of the EPM add-in as of Support Package 28 Patch 01.

When you execute the EPM add-in setup, the file "PDF Converter Printer Driver.zip" is copied in your installation folder.

If you want to install Amyuni PDF Converter 5.5, please do the following before launching the installation:

- Uninstall the version of Amyuni PDF Converter that is currently installed on your machine.
- In the FPMXLClient.dll.config file, set to "true" the key "UseAmyuni".

To install Amyuni PDF Converter 5.5, unzip "PDF Converter Printer Driver.zip" and double-click the file "install.exe". Once installed, the virtual printer is called "SAP EPM Amyuni PDF Converter".

4 Installing the EPM Connector

4.1 Components Prerequisites

If you want to use the EPM Connector, you need to install on your local machine the following components:

- Dashboard Design 4.0
- Adobe Flash Player 10.1

The SAP BusinessObjects EPM Connector add-on file is included in the SAP BusinessObjects EPM Add-in for Microsoft Office setup. The setup installs and copies the EPMConnector.xlsx file in the EPMConnector sub-folder of the EPM Add-in installation folder (C:\Program Files\SAP BusinessObjects\EPM Add-In\EPMConnector).

If you want to connect to SAP BusinessObjects Financial Consolidation SSAS cubes, you do not need to install anything, as you connect through the XMLA provider.

If you want to connect to SAP BusinessObjects Financial Consolidation NetWeaver cubes, you need to install the SAP BW OLEDB Provider.

4.2 To install the EPM Connector add-on

Prerequisites

You can perform the following procedure once you have installed the appropriate components.

Procedure

1. Open Dashboard Design.
2. Select **File > Manage Add-Ons**.
The *Add-On Manager* dialog box opens.
3. Click *Install Add-On*.
The *Open* dialog box opens.
4. Select the EPMConnector.xlsx file.

i Note

The EPMConnector.xlsx file is located in the EPM Connector sub-folder of the EPM Add-in installation folder. For example, in C:\Program Files\SAP BusinessObjects\EPM Add-In\EPMConnector.xlsx.

i Note

If you installed the EPM Add-in with the *Only for me* option, the installation path may be different. For example, C:\Users\<PROFILE>\AppData\Local\Programs\SAP BusinessObjects\EPM Add-In\EPMConnector.

5. Select *Open*.
6. In the *Add-On Manager* dialog box, select *Close*.
The *Dashboard Design Needs to Restart* dialog box opens.
7. Click *Exit*.
8. Re-open Dashboard Design.

5 Creating and Configuring Connections

This section explains how to create connections in the EPM Add-in for Microsoft Office. You can create three types of connections:

- Local connections
- Planning and Consolidation connections
- SAP BusinessObjects Enterprise connections

Caution

You cannot create two connections with the same name.

5.1 Creating Local Connections

Creating a Local connection enables you to analyze the data of the following OLAP data sources:

- SSAS cubes created with SAP BusinessObjects Financial Consolidation, cube designer
- SAP NetWeaver BW InfoCubes created with SAP BusinessObjects Financial Consolidation, cube designer
- SAP BusinessObjects Profitability and Cost Management
- SAP BusinessObjects Planning and Consolidation, version for SAP NetWeaver
- SAP BusinessObjects Planning and Consolidation, version for the Microsoft platform
- SSAS cubes
- SAP NetWeaver Cubes
- SAP HANA MDX Provider

5.1.1 Configuration Prerequisites for Creating Local Connections

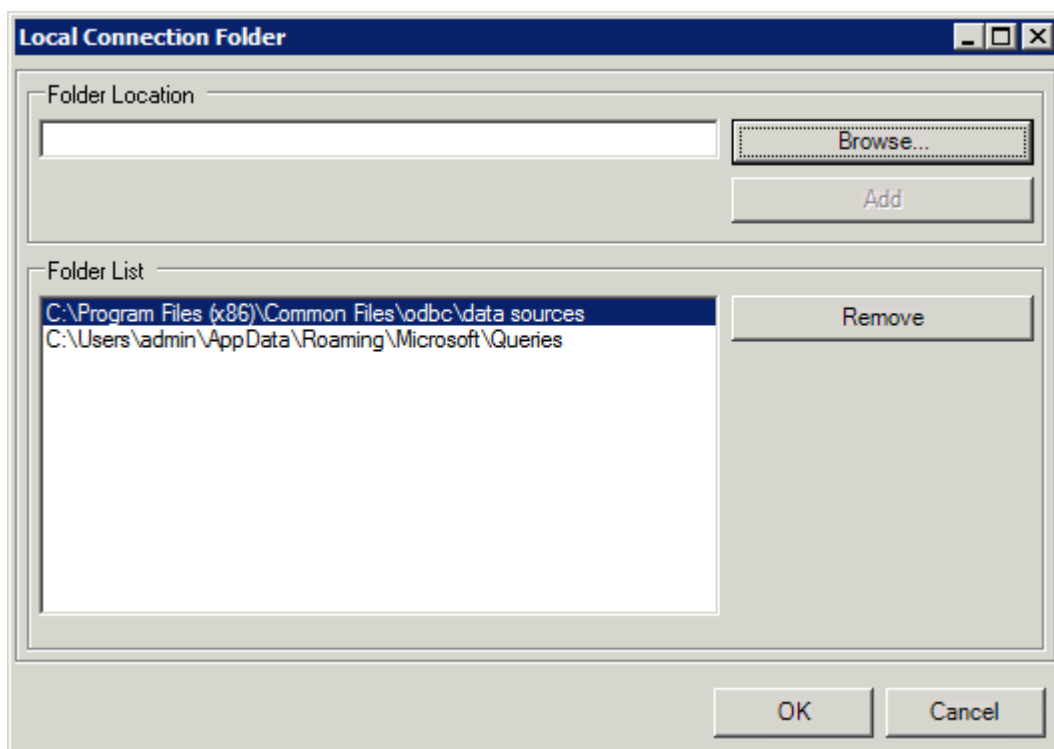
Prerequisites

The connections you create are OQY queries, stored in `.oqy` files on your local disc.

When creating these connections, you must indicate in which folder these files will be stored.

Procedure

1. Open Microsoft Office Excel, Microsoft Office Word, or Microsoft Office PowerPoint.
2. Select the *EPM* tab.
3. Click the *Log On* button.
The *EPM - Logon* dialog box opens.
4. Click the browse button next to the *Connection* area.
The *Connection Manager* opens.
5. Click the *Display Local Connections* option.
6. Click the *Local Connection Folder* button.
The *Local Connection Folder* dialog box opens.



7. Make sure that:
 - the folders listed in this dialog box exist in your Windows Explorer,
 - you have Write permission on these folders.

i Note

If you run Windows Terminal Services or Citrix and you want all users to see connections, you must put the .logy files in a folder every user can read, for example `C:\Program Files (x86)\Common Files\ODBC\data source`. Alternatively, you can add another folder.

5.1.2 Creating a Local Connection for Financial Consolidation with SSAS Cubes using XMLA or OLEDB Providers

Context

You can also use the XMLA provider to connect to a SAP HANA database. To do so, you need to add the "REPOSITORY_REST" object privilege for each HANA user.

Procedure

1. Open Microsoft Office Excel, Microsoft Office Word, or Microsoft Office PowerPoint.
2. Select the *EPM* tab.
3. Select **Options > User Options**.
The *EPM - User Options* dialog box opens.

The screenshot shows the 'EPM - User Options' dialog box. The 'Navigation' tab is selected. The 'SAP BusinessObjects Enterprise Server' section has a text box with 'http://vmw4057:8080' and a 'Check Server' button. The 'SAP Portal' section has a text box with 'http://dewdfv00705q.dhcp.pgdev.sap.corp:50000/irj/portal' and a 'Check Portal' button. Below these is an 'Options' button. The 'User Name Parameter' is 'i_username' and the 'Password Parameter' is 'i_password'. The 'SMTP Server Configuration' section has fields for 'Server Address', 'Server Port' (set to 0), 'Authentication Type' (set to Anonymous), and a checkbox for 'Enable SSL'. Below this is an 'Authentication' section with fields for 'User Name', 'Password', and 'Confirm Password'. At the bottom, there is a 'Default Folder for Local Open/Save' field with browse and delete buttons. 'OK' and 'Cancel' buttons are at the bottom right.

4. Select the *Server Configuration* tab.
5. In the *SAP BusinessObjects Enterprise Server*, enter the address of the SAP BusinessObjects Enterprise platform and click *Check Server*.

i Note

The correct syntax is the following: `http://<server_name><port_number>`. You must not enter `/BOE/CMC` at the end of the URL.

6. Click *OK*.
7. Then select the *EPM* tab and click the *Log On* button.

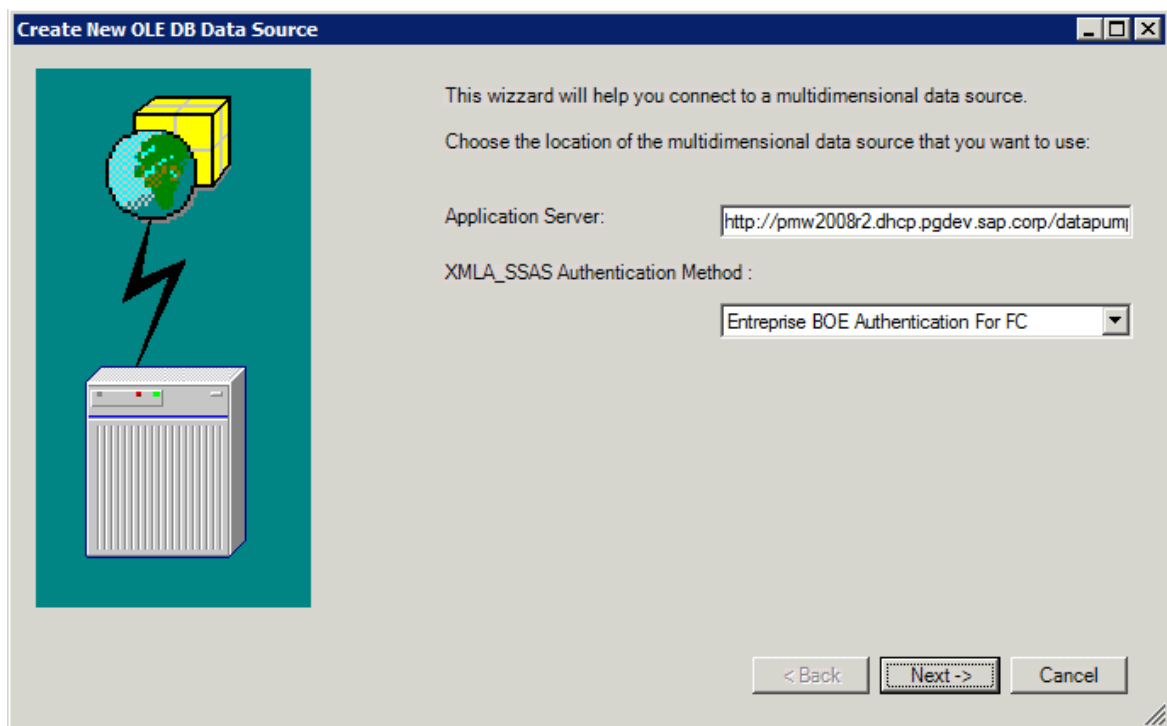
i Note

If a connection is already used on the file, select the *EPM* tab and then ► *Report Actions* ► *Manage Connections* ►. The *Connection Manager* opens.

The *EPM - Logon* dialog box opens.

8. Click the browse button next to the *Connection* area.
The *EPM - Connection Manager* opens.
9. Click the *Create* button.
The *Create Connection* dialog box opens.
10. In the *Connection Type* list, select the *Local* option.
11. In the *Local Connection* area, select one of the following providers and click the *Connect* button.
 - *Use XMLA to connect to a Microsoft Analysis Source*
 - *Microsoft OLEDB Provider for Analysis Services 10.0*
 - *Microsoft OLEDB Provider for Analysis Services 9*

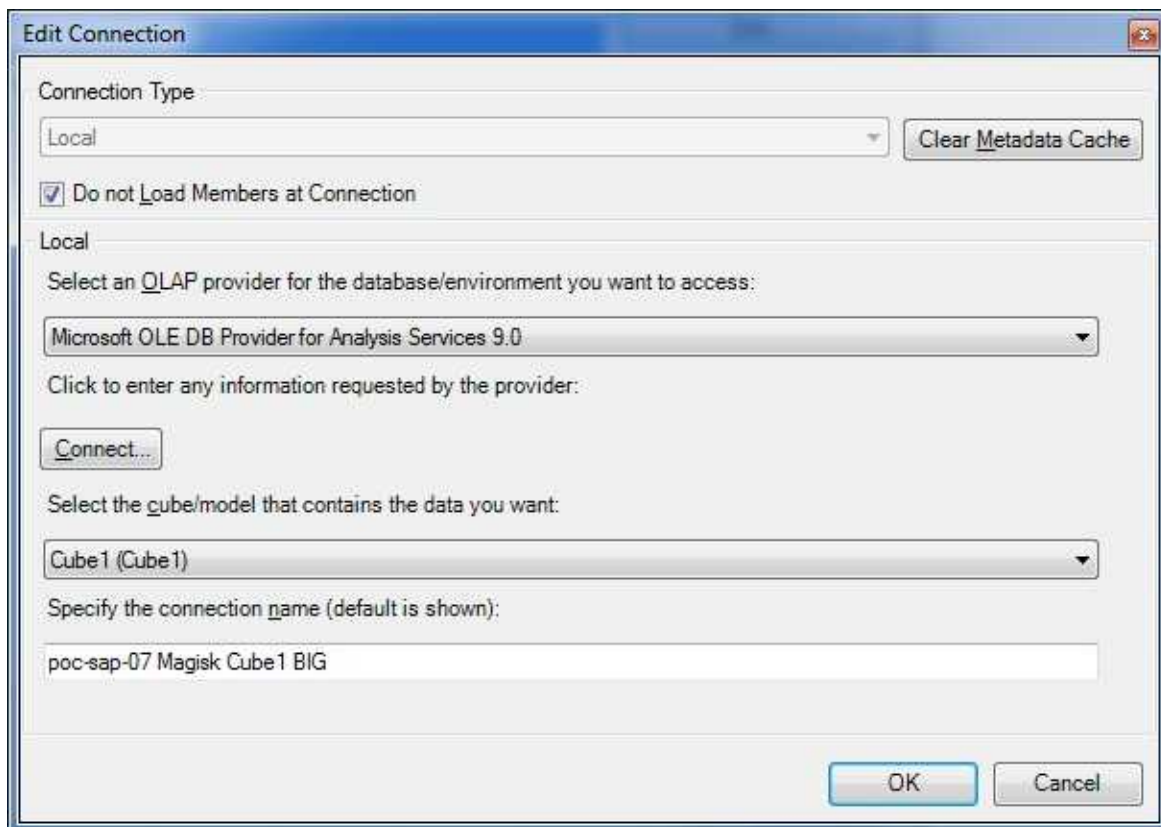
The *Create New OLEDB Data Source* dialog box opens.



12. In the *Application Server* area, enter the URL to the datapump.

For example: `http://pmw2008r2.dhcp.pgdev.sap.corp/datapump/msmdpump.dll`.

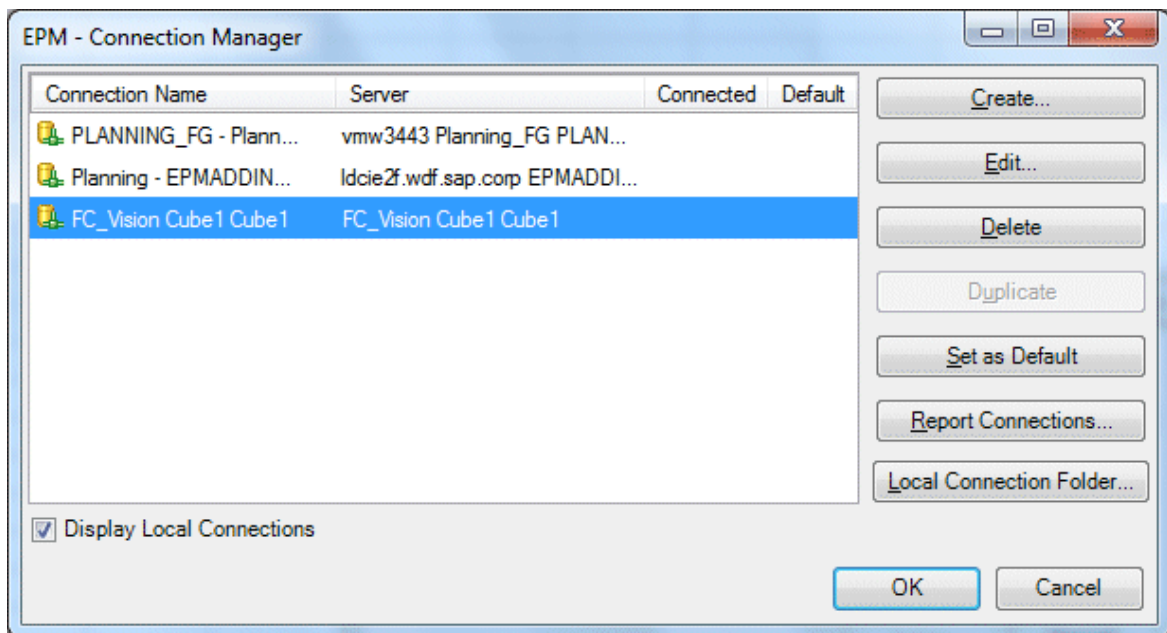
13. In the *XMLA SSAS Authentication Method* dropdown list, select the authentication method you require (for example, *Enterprise BOE Authentication for FC*).
14. Click *Next*.
The *EPM - Logon* dialog box opens.
15. Enter the user name and password for the SAP BusinessObjects Enterprise platform and click *Log on*.
16. Back in the *Create Connection* dialog box, select an SSAS cube.



17. Enter a name for the connection.
The name appears in the *Connection Manager* list of connections.

i Note

If the data source for which you are creating or editing the local connection is a large volume data source, select the *Do not Load Members at Connection* option.



5.1.3 Creating a Local Connection for Financial Consolidation with NetWeaver BW Cubes

Procedure

1. Open Microsoft Office Excel, Microsoft Office Word, or Microsoft Office PowerPoint.
2. Select the *EPM* tab.
3. Click *Log On*.
The *EPM - Logon* dialog box opens.
4. Click the browse button next to the *Connection* area.
The *EPM - Connection Manager* opens.
5. Click *Create*.
The *Create Connection* dialog box opens.

Create Connection

Connection Type
 Local ▼ Clear Metadata Cache

☒ Do not Load Members at Connection

Local

Select an OLAP provider for the database/environment you want to access:
 BAPI provider for BW NW ▼

☒ Use Navigation Attribute
 Click to enter any information requested by the provider:
 Connect...

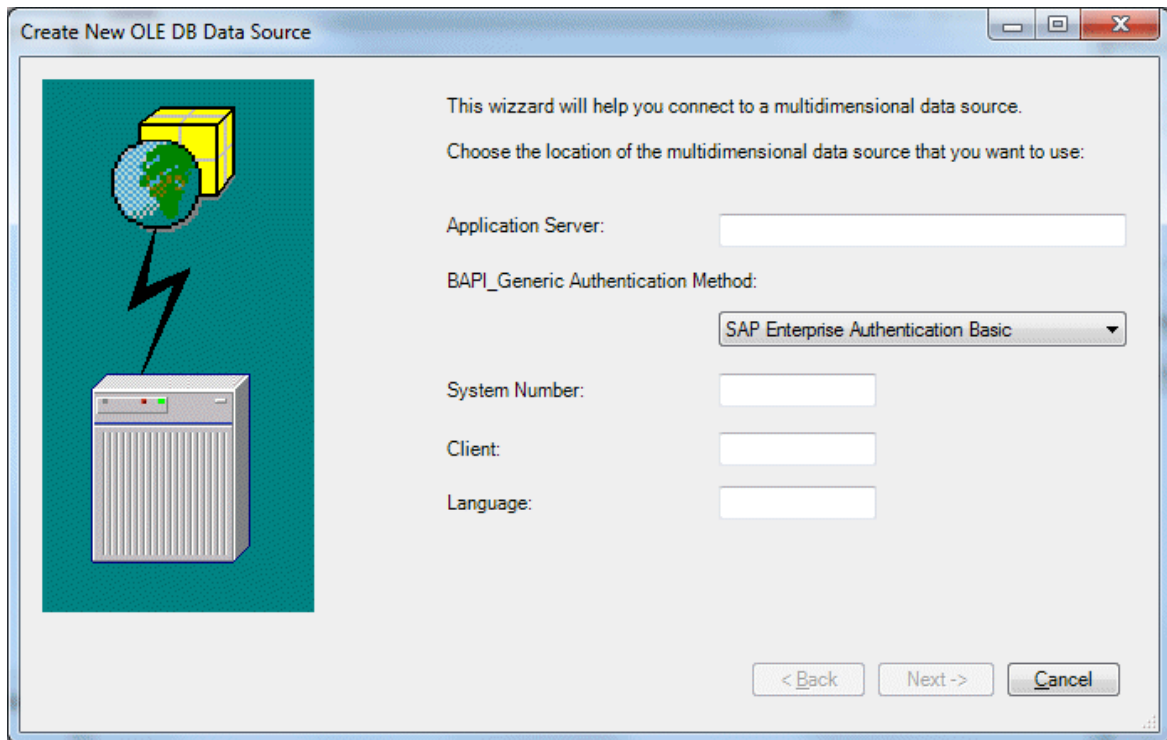
Select the cube/model that contains the data you want:
 ▼

Specify the connection name (default is shown):

OK Cancel

6. In the *Connection Type* list, select the *Local* option.
7. In the *Local Connection* area, select one of the following provider:
 - the *SAP BW OLEDB Provider*.
 - or the *BAPI provider for BW NW* if you want to connect to a large volume data source. In that case, you can click the *Use Navigation Attribute* option if you want to retrieve navigation attributes from your SAP NetWeaver environment.

The *Create New OLEDB Data Source* dialog box opens.



8. Click [Connect](#).
9. In the [Application Server](#) field, enter the name of the BW server.
10. Depending on the provider you selected at step 7, select the appropriate authentication method in the [MDrmSap.2 Authentication Method](#) or [BAPI_Generic Authentication Method](#) dropdown list.
11. If you selected a BAPI provider, select one of the following authentication method:
 - [SAP BW Authentication Basic](#)
 - [SAP Enterprise Authentication Basic](#): use this option if you have access to a dedicated SAP Portal.

i Note

You must enter the address of the SAP Portal in the SAP Portal area of the [EPM - User Options](#) dialog box.

12. In the [System Number](#) field, enter the system number of your SAP NetWeaver server.
13. In the [Client](#) field, enter your client number.
14. In the [Language](#) field, enter the language of your BW system.
15. Click [Next](#).
The [Logon](#) dialog box opens.
16. Enter the user name and password and click [Log on](#).
17. In the [Create Connection](#) dialog box, select the model you want to use.
18. Enter a name for the connection.
The name appears in the [Connection Manager](#) list of connections.
19. Click [OK](#).

5.1.4 Creating a Local Connection for Profitability and Cost Management

Prerequisites

When installing the SAP Profitability and Cost Management application, you must install the following components:

- Core Components
- Connectivity Pack

Procedure

1. Open Microsoft Office Excel, Microsoft Office Word, or Microsoft Office PowerPoint.
2. Select the *EPM* tab.
3. Select **Options > User Options**.
The *User Options* dialog box opens.

EPM - User Options

Navigation | **Server Configuration** | Display | Others

SAP BusinessObjects Enterprise Server
http://vmw4057:8080 Check Server

SAP Portal
http://dewdftv00705q.dhcp.pgdev.sap.corp:50000/ij/portal Check Portal
Options

User Name Parameter: i_username Password Parameter: i_password

SMTP Server Configuration
Server Address:
Server Port: 0 ☐ Enable SSL
Authentication Type: Anonymous
Authentication
User Name:
Password:
Confirm Password:

Default Folder for Local Open/Save
 ... X

OK Cancel

4. In the *SAP BusinessObjects Enterprise Server* field, enter the address of the SAP BusinessObjects Enterprise platform and click *Check Server*.

i Note

You must enter the SAP BusinessObjects Enterprise platform server address only if you want to authenticate through the BOE platform.

i Note

The correct syntax is the following: `http://<server_name><port_number>`. Do not enter `/BOE/CMC` at the end of the URL.

A message pops up, indicating if the server has responded.

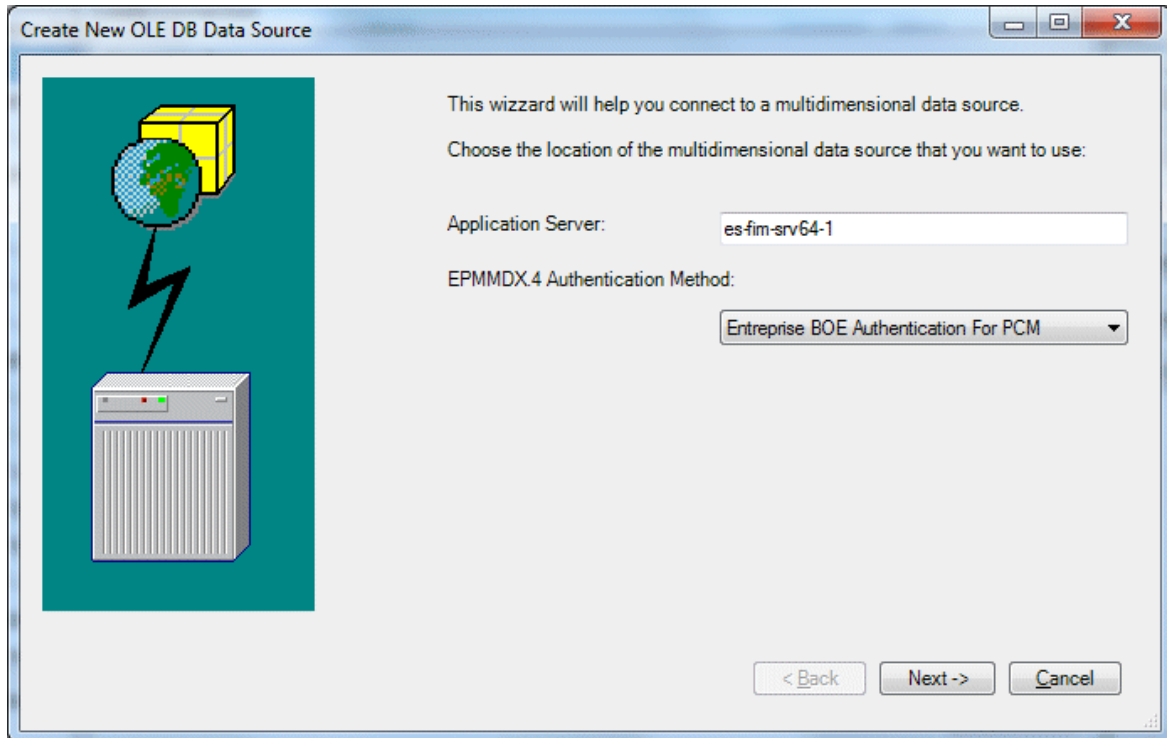
5. Click *OK*.
6. Select the *EPM* tab and click the *Log On* button.

i Note

If a connection is already used on the file, select the *EPM* tab and then ► *Report Actions* ► *Manage Connections* ► and the *Connection Manager* opens.

The *EPM - Logon* dialog box opens.

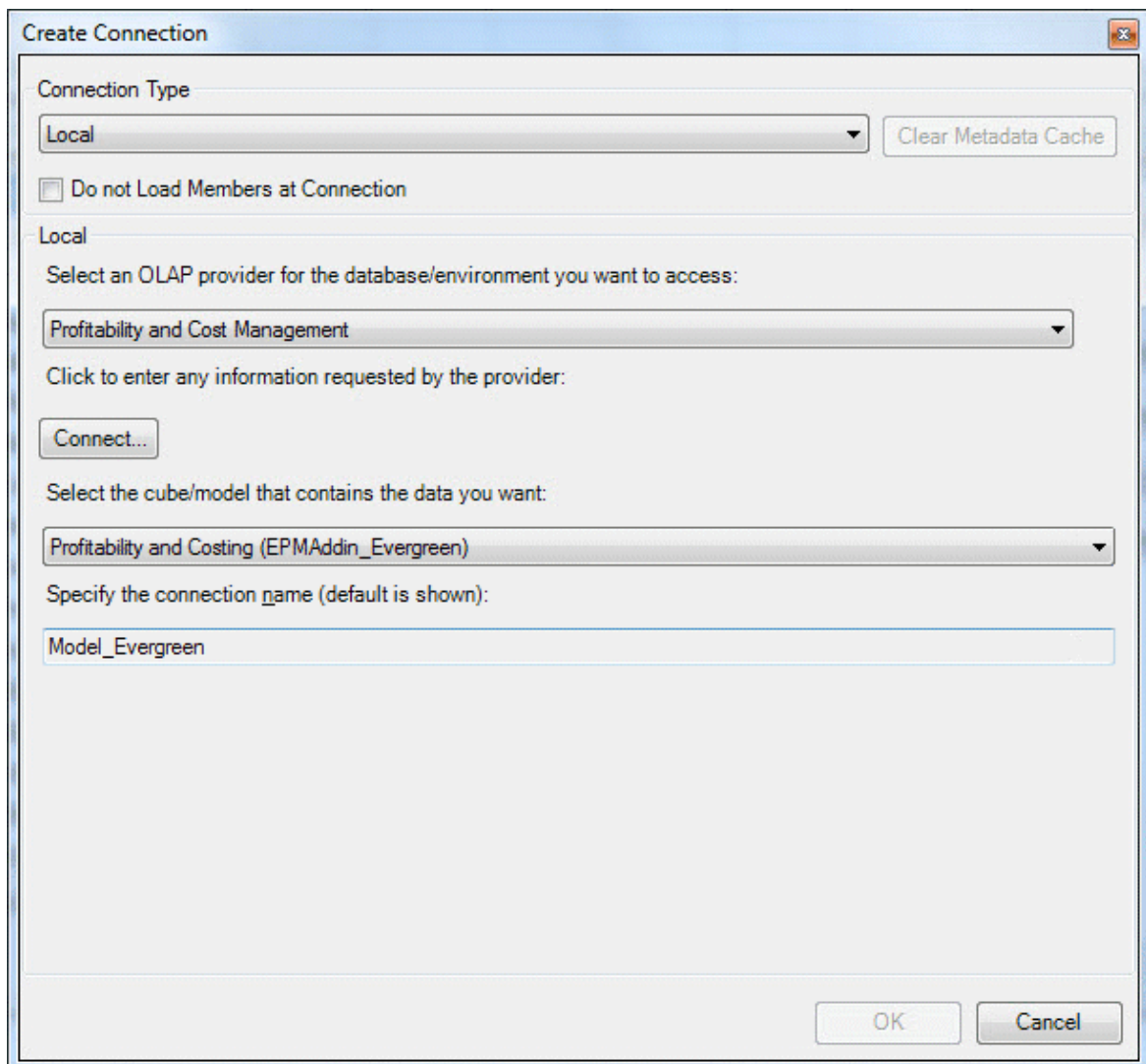
7. Click the browse button next to the *Connection* area.
The *Connection Manager* opens.
8. Click *Create*.
The *Create Connection* dialog box opens.
9. Select the *Local* option.
10. Select the *Profitability and Cost Management* provider from the drop-down menu and click *Connect*.
The *Create New OLEDB Data Source* dialog box opens.



11. In the *Application Server* field, enter the name of your Profitability and Cost Management server.
12. In the *EPMDX.4 Authentication Method* dropdown list, select the appropriate authentication method.
13. Click *Next*.
The *Log on* dialog box opens.
14. Enter the user name and password and click *Logon*.
15. Back in the *Create Connection* dialog box, select the model you want to use.
16. Specify a connection name and click *OK*.

i Note

If the data source for which you are creating or editing the local connection is a large volume data source, select the *Do not Load Members at Connection* option.



5.1.5 Creating a Local Connection for Planning and Consolidation for Microsoft

Procedure

1. Open Microsoft Office Excel, Microsoft Office Word, or Microsoft Office PowerPoint.
2. Select the *EPM* tab.
3. Select **Options** > *User Options* .
The *User Options* dialog box opens.
4. In the *SAP BusinessObjects Enterprise Server*, enter the address of the SAP BusinessObjects Enterprise platform and click *Check Server*.

i Note

You must enter the SAP BusinessObjects Enterprise platform server address only if you want to authenticate through the BOE platform.

i Note

The correct syntax is the following: `http://<server_name><port_number>`. Do not enter `/BOE/CMC` at the end of the URL.

EPM - User Options

Navigation | **Server Configuration** | Display | Others

SAP BusinessObjects Enterprise Server
http://vmw4057:8080 Check Server

SAP Portal
http://dewdftv00705q.dhcp.pgdev.sap.corp:50000/inj/portal Check Portal

Options

User Name Parameter: i_username Password Parameter: i_password

SMTP Server Configuration
Server Address:
Server Port: 0 ☐ Enable SSL
Authentication Type: Anonymous
Authentication
User Name:
Password:
Confirm Password:

Default Folder for Local Open/Save ... X

OK Cancel

A message pops up, indicating if the server has responded.

5. Click **OK**.
6. Then select the **EPM** tab and click **Log On**.

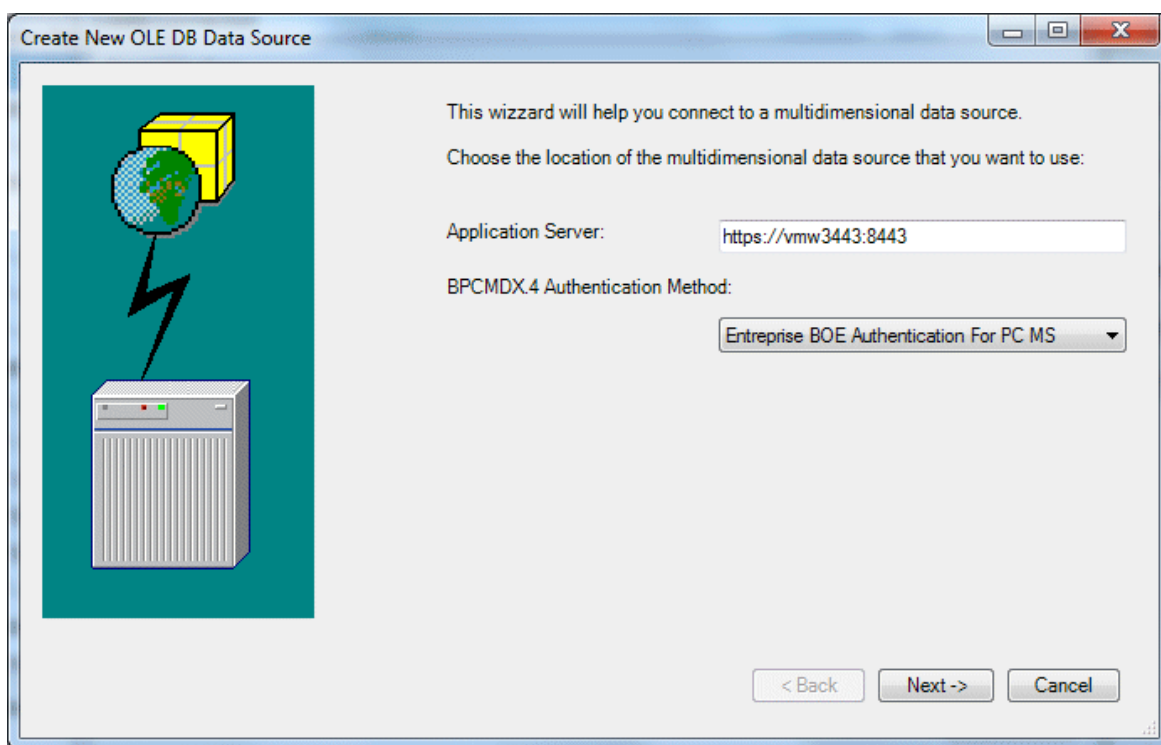
i Note

If a connection is already used on the file, select the **EPM** tab and then **Report Actions** > **Manage Connections**. The **Connection Manager** opens.

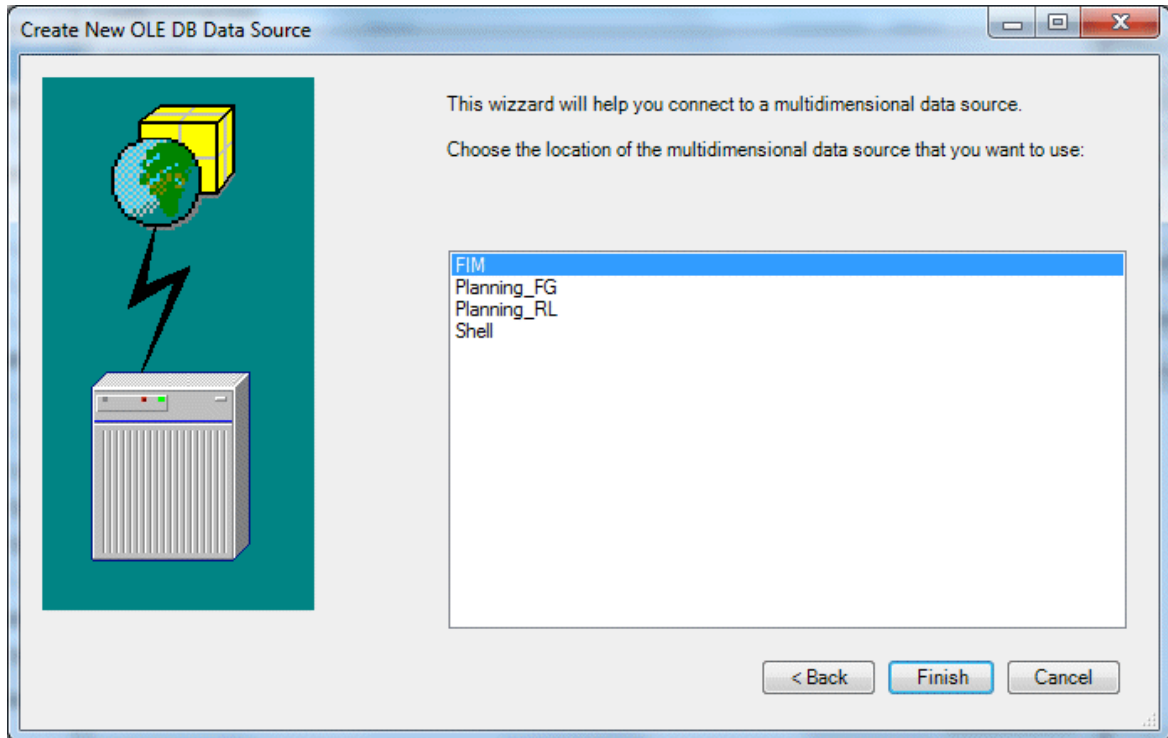
The **EPM - Logon** dialog box opens.

7. Click the browse button next to the **Connection** area.
The **EPM - Connection Manager** opens.

8. Click *Create*.
The *Create Connection* dialog box opens.
9. In the *Connection Type* area, select the *Local* option.
10. In the *Local Connection* area, select the *SAP BusinessObjects Planning and Consolidation* option and click *Connect*.
The *Create New OLEDB Data Source* dialog box opens.



11. In the *Application Server* field, enter the name of the BW server.
12. In the *BPCMDX.4 Authentication Method* dropdown list, select the appropriate authentication method.
13. Click *Next*.
The following dialog box opens.



14. Select the data source that you require.
15. Click *Finish*.
16. In the *Create Connection* dialog box, select the model you require.

Create Connection

Connection Type

☐ Planning and Consolidation
☐ SAP BusinessObjects Enterprise
☒ Local

Clear Metadata Cache

Local Connection

Select an OLAP provider for the database/environment you want to access:

SAP BusinessObjects Planning and Consolidation

Click to enter any information requested by the provider:

Connect...

Select the cube/model that contains the data you want:

Consolidation (Consolidation)

Specify the connection name (default is shown):

https: vmw3443:8443 FIM Consolidation

OK Cancel

17. Enter a name for the connection.

The name appears in the [Connection Manager](#) list of connections.

18. Click [OK](#).

5.1.6 Prerequisites for creating a local connection for Planning and Consolidation version for SAP NetWeaver

Prerequisites

Once the BW cube has been generated and before creating a local connection for Planning and Consolidation, version for SAP NetWeaver, from the EPM Add-in, the following procedure is required.

Procedure

1. Log in to Planning and Consolidation.

- In the *Features Used with the Model* section, select the *Use as Source of Data for External Applications* option.

i Note

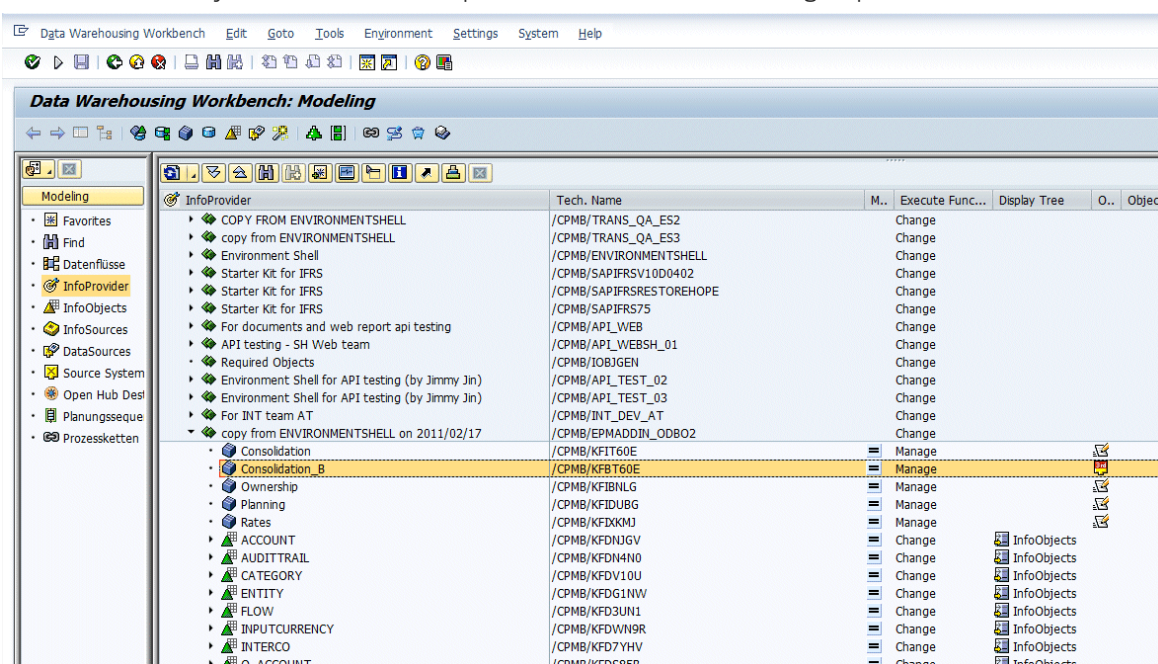
Selecting this option is creating a virtual provider in the SAP NetWeaver application.

- Click *Save* and *Close*.

i Note

The next steps are not mandatory. They are intended only if you want to verify the creation of the virtual provider in the SAP NetWeaver application.

- Open the SAP NetWeaver application.
- Execute the *RSA1* transaction.
The *DataWarehousing Workbench* opens.
- In the left pane, expand the environment and click *InfoProvider*.
- Under this section, you will find the virtual provider that was created during step 5.



i Note

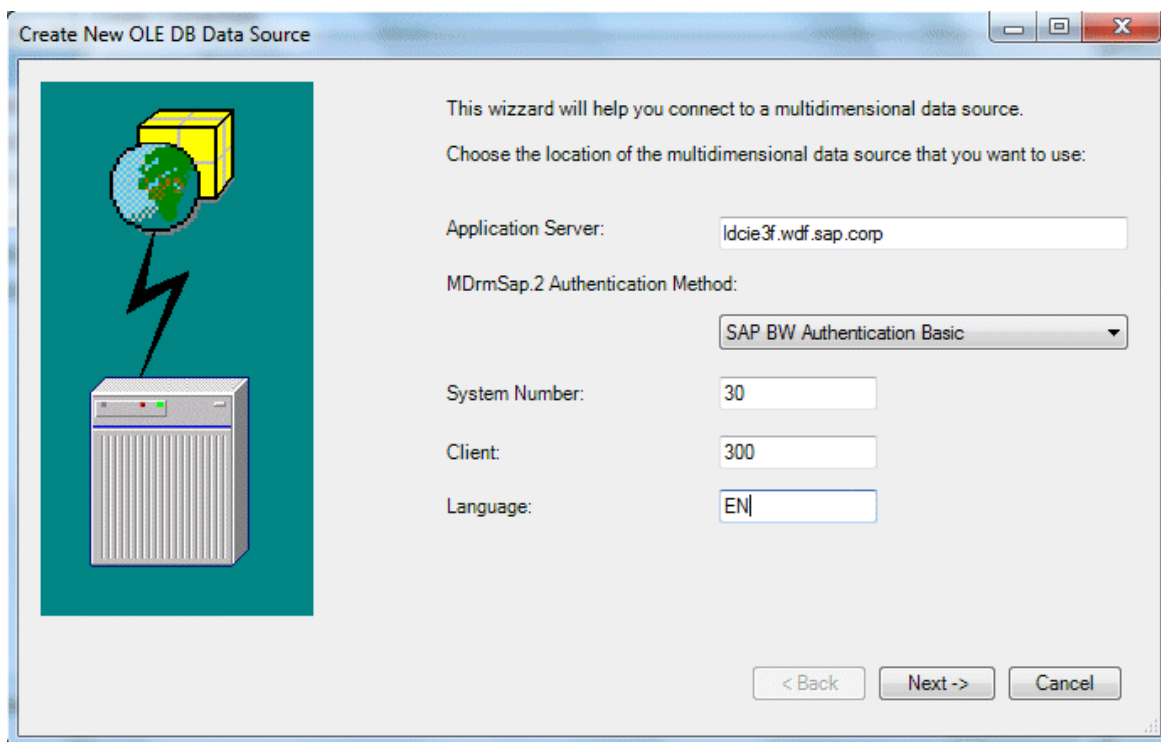
The virtual provider name is suffixed by the letter B. In this example: *Consolidation_B*, as the provider itself has no suffix.

- You can now exit the NetWeaver application.

5.1.7 Creating a Local Connection for Planning and Consolidation version for SAP NetWeaver

Procedure

1. Open Microsoft Office Excel, Microsoft Office Word, or Microsoft Office PowerPoint.
2. Select the *EPM* tab.
3. Click *Log On*.
The *EPM - Logon* dialog box opens.
4. Click the browse button next to the *Connection* area.
The *EPM - Connection Manager* opens.
5. Click *Create*.
The *Create Connection* dialog box opens.
6. In the *Connection Type* area, select the *Local* option.
7. In the *Local Connection* area, select the *SAP BW OLEDB Provider* option and click *Connect*.
The *Create New OLEDB Data Source* dialog box opens.

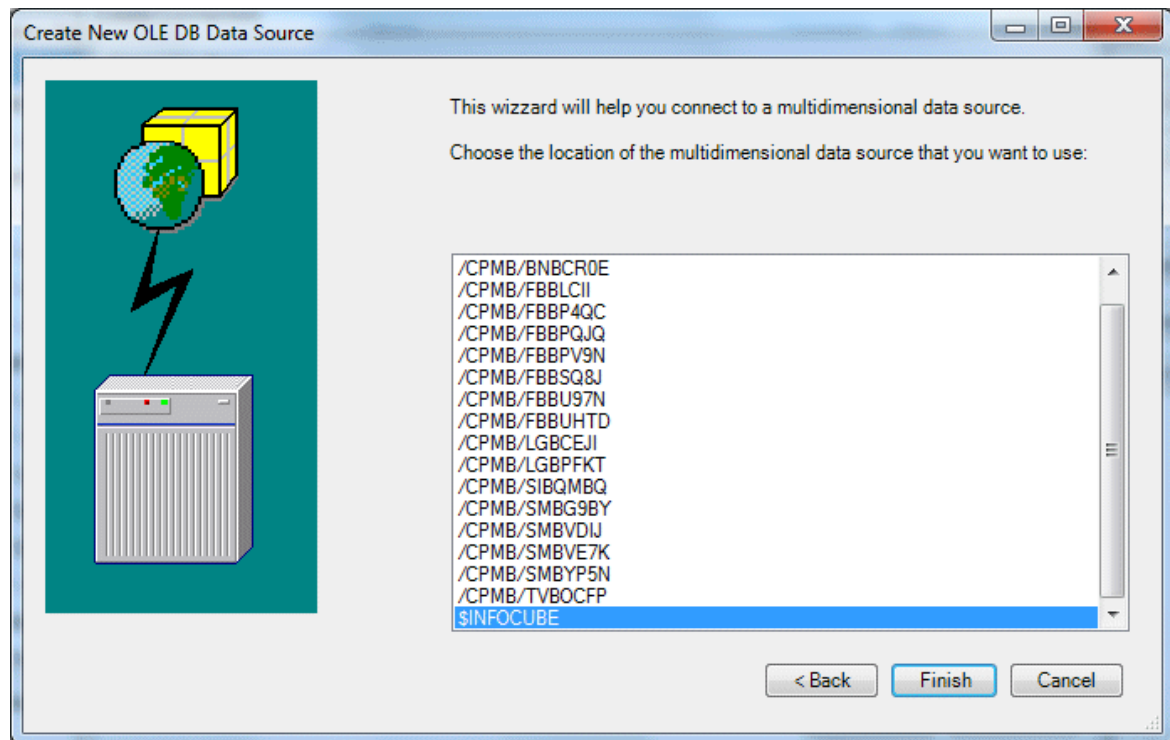


8. In the *Application Server* field, enter the name of the BW server.
9. In the *MDrmSAP.2 Authentication Method* dropdown list, select the appropriate authentication method.
10. In the *System Number* field, enter the system number of your SAP NetWeaver server.
11. In the *Client* field, enter your client number.
12. In the *Language* field, enter the language of your BW system.
13. Click *Next*.
The *Logon* dialog box opens.

14. Enter the user name and password and click [Log on](#).

15. Click [Next](#).

The following dialog box opens.



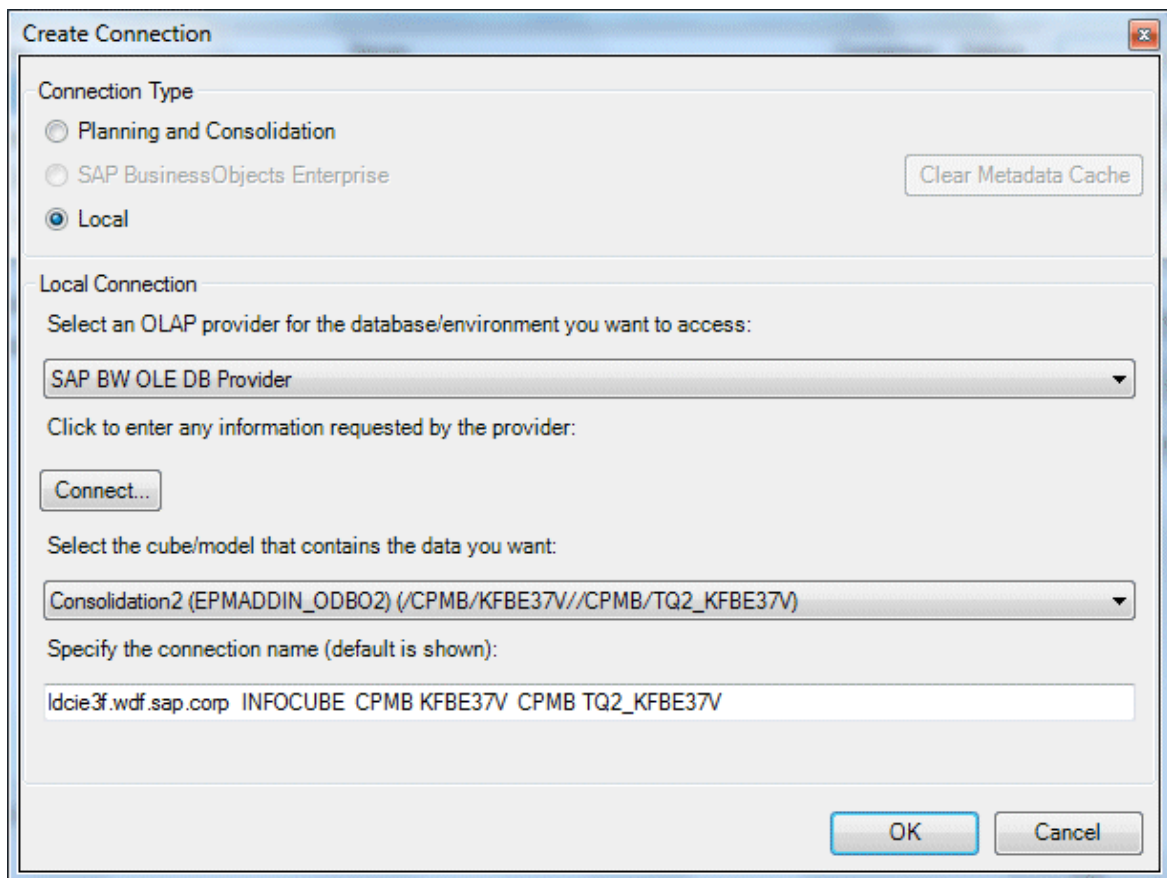
You can see the list of all the virtual providers that have been created on the SAP NetWeaver server.

16. Select the [\\$INFOCUBE](#) data source and click [Finish](#).

17. In the [Create Connection](#) dialog box, select a cube that contains [TQ2_](#).

18. Enter a name for the connection.

The name appears in the [Connection Manager](#) list of connections.



19. Click **OK**.

5.1.8 Creating a Local Connection for the SAP HANA Platform

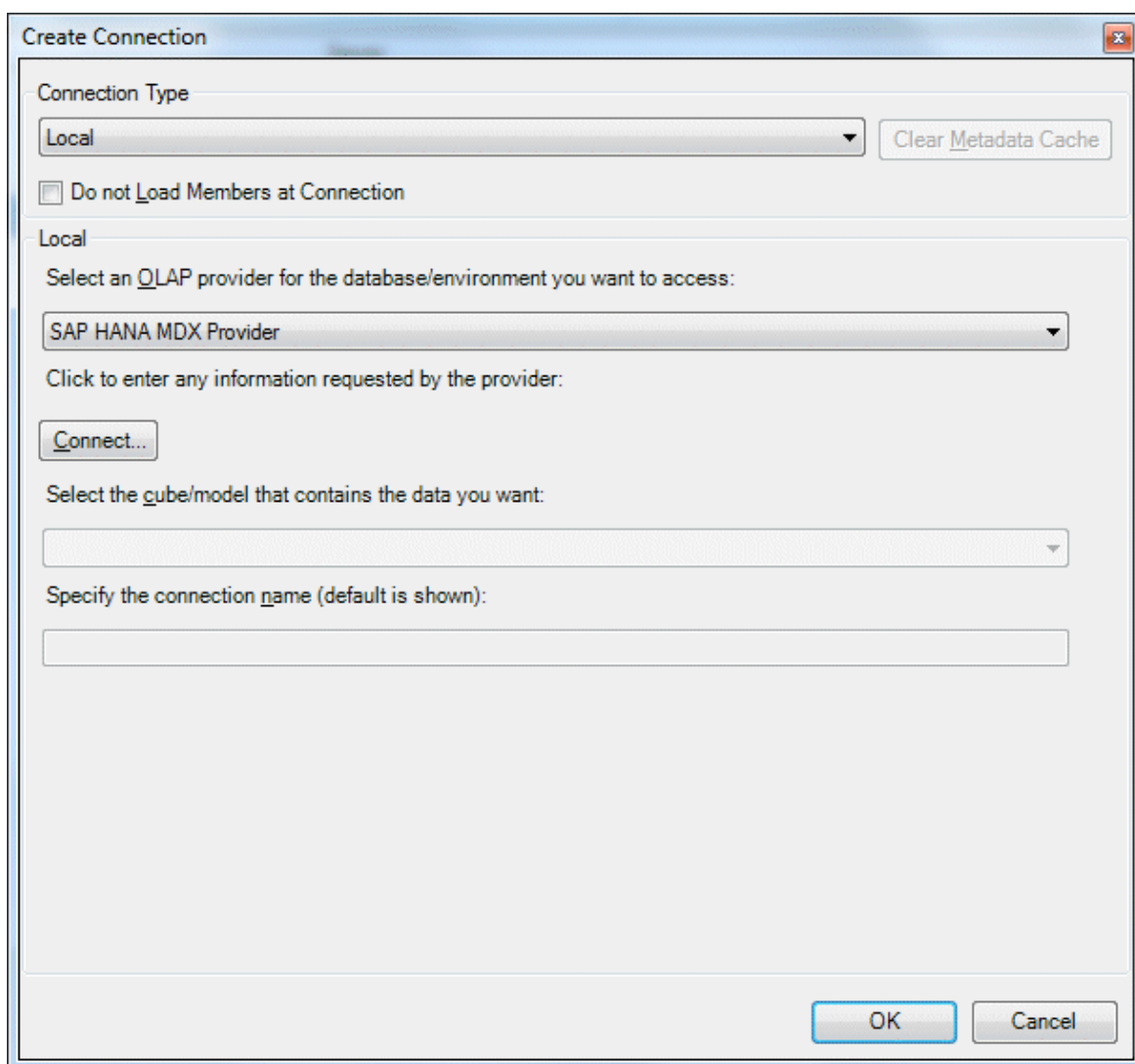
Context

- For better performances with the SAP HANA platform, we recommend that you use the XMLA SSAS Authentication Method provider. See [Creating a Local Connection for Financial Consolidation with SSAS Cubes using XMLA or OLEDB Providers \[page 32\]](#).
- Prerequisites to the creation of a local connection for the SAP HANA Platform: before creating the connection as explained below, you must have installed the MDX Provider for SAP HANA.

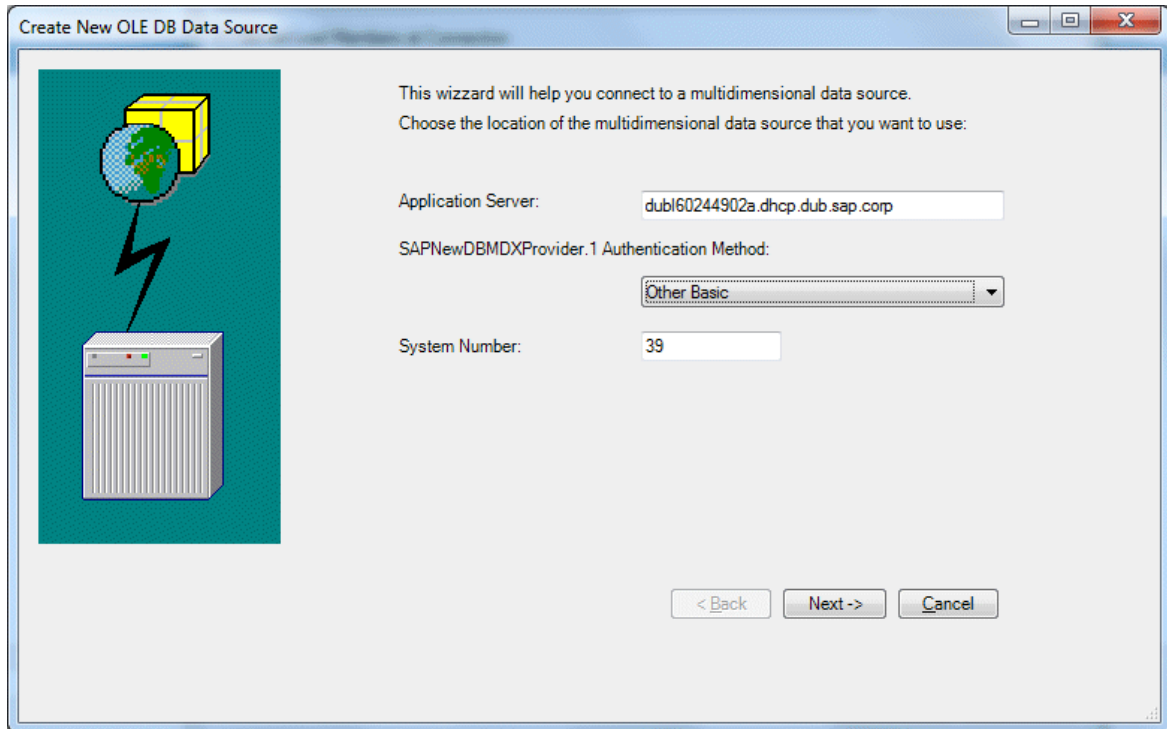
Procedure

1. Open Microsoft Office Excel, Microsoft Office Word, or Microsoft Office PowerPoint.
2. Select the **EPM** tab.

3. Click [Log On](#).
The *EPM - Logon* dialog box opens.
4. Click the browse button next to the [Connection](#) area.
The *EPM - Connection Manager* opens.
5. Click [Create](#).
The *Create Connection* dialog box opens.



6. In the [Connection Type](#) list, select the [Local](#) option.
7. In the [Local](#) connection area, select the [SAP HANA MDX Provider](#) and click [Connect](#).
The *Create New OLEDB Data Source* dialog box opens.



8. In the *Application Server* field, enter the name of the SAP HANA server.
9. In the *SAPNewsDBMDXProvider Authentication Method*, select the *Other Basic* method.
10. In the *System Number* field, enter the system number of your SAP HANA server.
11. Click *Next*.
The *Logon* dialog box opens.
12. Enter the user name and password and click *Log on*.
13. In the *Create Connection* dialog box, select the HANA view you want to use.
14. Enter a name for the connection.
The name appears in the *Connection Manager* list of connections.

Create Connection

Connection Type
 Local ▼ Clear Metadata Cache

☐ Do not Load Members at Connection

Local

Select an OLAP provider for the database/environment you want to access:
 SAP HANA MDX Provider ▼

Click to enter any information requested by the provider:
 Connect...

Select the cube/model that contains the data you want:
 All Goods Volume Cube (CV_PRODUCTION_VOLUME) ▼

Specify the connection name (default is shown):
 dubl60244902a.dhcp.dub.sap.corp sap.tdma.main.outputs CV_PRODUCTION_VOLUME

OK Cancel

5.2 Creating Planning and Consolidation Connections

Creating a Planning and Consolidation connection enables you to enter data on the following models of:

- SAP BusinessObjects Planning and Consolidation, version for the Microsoft platform
- SAP BusinessObjects Planning and Consolidation, version for SAP NetWeaver

5.2.1 Creating a Planning and Consolidation Connection for the Microsoft Platform

Procedure

1. Open Microsoft Office Excel, Microsoft Office Word, or Microsoft Office PowerPoint.
 2. Select the *EPM* tab.
 3. Click *Log On*.
The *EPM - Logon* dialog box opens.
 4. Click the browse button next to the *Connection* area.
 5. Click *Create*.
The *Create Connection* dialog box opens.
 6. In the *Connection Type* area, select *Planning and Consolidation, version for the Microsoft platform*.
 7. In the *Server URL* area, enter the Planning and Consolidation server URL. For example: `https://vmw3443:8443/sap/bpc/`.
 8. Choose one of the following options to connect to the Planning and Consolidation server:
 - Connect directly by clicking *Connect*. In the login dialog box that opens, enter your *User Name* and *Password* and click *Logon*.
 - Use a single sign-on client certificate. Select the option *Client Certificate*, then select a certificate that has been generated by your administrator. Note that this is not valid if you connect through a BusinessObjects Enterprise XI platform.
- #### i Note
- If you encounter an issue with single sign-on, you can deactivate it by setting the key `IgnoreWindowsAuthenticationInBPCMS` to "true" in the file `FPMXLClient.dll.config`.
- For enhanced security, use a single sign-on short-lived certificate by clicking *SAP Secure Login Profile*. When you select this option, the authentication is managed by SAP Secure Login Client (as part of the SAP Single Sign-On solution). Then, select a client profile. A client profile consists of a user authentication scheme with one or more authentication mechanisms: Kerberos, ADS, LDAP, RSA SecurID, 2-factor authentication (with a password and a one-time password). Then, click connect and enter the user name, password (and one-time password if you are using a 2-factor authentication profile) in the *SAP Secure Login Client* login dialog box. A short-lived certificate is created on your local machine and as long as the certificate is valid, you can log off and log in again as many times as you want and you will not have to authenticate each time. For more information on SAP Secure Login, see the *Secure Login for SAP Single Sign-On Implementation Guide*. Note that you need to buy a license to use SAP Single Sign-On.
9. Select an *Environment* and a *Model*.
 10. Click *Generate Connection Name* or manually enter a connection name.

5.2.2 Creating a Planning and Consolidation Connection for SAP NetWeaver

Procedure

1. Open Microsoft Office Excel, Microsoft Office Word, or Microsoft Office PowerPoint.
2. Select the *EPM* tab.
3. Click *Log On*.
The *EPM - Logon* dialog box opens.
4. Click the browse button next to the *Connection* area.
The *EPM - Connection Manager* opens.
5. Click *Create*.
The *Create Connection* dialog box opens.
6. In the *Connection Type* area, select *Planning and Consolidation, version for SAP NetWeaver*.
7. In the *Server URL* area, enter the Planning and Consolidation server URL. For example: `http://serveur:port/sap/bpc/`.
8. Choose one of the following options to connect to the Planning and Consolidation server:
 - Connect directly by clicking *Connect*. In the login dialog box that opens, enter your *User Name* and *Password* and click *Logon*.
 - Use a single sign-on client certificate. Select the option *Client Certificate*, then select a certificate that has been generated by your administrator. Note that this is not valid if you connect through a BusinessObjects Enterprise XI platform.
 - If the server does not use any of the protocols that are natively supported by the EPM add-in (that is: Basic, Client Certificate and Windows), but use a protocol of type saml 2 (that is a protocol that requires html and javascript technologies), select the *Web Authentication Protocol* option. Note that the option is taken into account only for versions 10.1 and 11.0 of Planning and Consolidation SAP NetWeaver.
 - For enhanced security, use a single sign-on short-lived certificate by clicking *SAP Secure Login Profile*. When you select this option, the authentication is managed by SAP Secure Login Client (as part of the SAP Single Sign-On solution). Then, select a client profile. A client profile consists of a user authentication scheme with one or more authentication mechanisms: Kerberos, ADS, LDAP, RSA SecurID, 2-factor authentication (with a password and a one-time password). Then, click connect and enter the user name, password (and one-time password if you are using a 2-factor authentication profile) in the *SAP Secure Login Client* login dialog box. A short-lived certificate is created on your local machine and as long as the certificate is valid, you can log off and log in again as many times as you want and you will not have to authenticate each time. For more information on SAP Secure Login, see the *Secure Login for SAP Single Sign-On Implementation Guide*. Note that you need to buy a license to use SAP Single Sign-On.

i Note

If you use the SAP Portal credentials to create your Planning and Consolidation Connection for SAP NetWeaver connection, the authentication is performed directly at the SAP Portal level and not at the Planning and Consolidation server level. Beforehand, you must enter the SAP Portal parameters in the *Server Configuration* tab of the *EPM - User Options* dialog box.

9. Select an [Environment](#) and a [Model](#).
10. Click [Generate Connection Name](#) or manually enter a connection name.

5.3 Creating SAP BusinessObjects Enterprise Connections

Creating an SAP BusinessObjects Enterprise connection enables you to analyze the data of the OLAP data sources below:

- SSAS cubes created with SAP BusinessObjects Financial Consolidation, cube designer
- SAP NetWeaver BW InfoCubes created with SAP BusinessObjects Financial Consolidation, cube designer
- SAP BusinessObjects Profitability and Cost Management models
- SAP BusinessObjects Planning and Consolidation, version for SAP NetWeaver
- SAP BusinessObjects Planning and Consolidation, version for the Microsoft platform
- SSAS Cubes
- SAP NetWeaver BW Cubes

To create SAP BusinessObjects Enterprise connections, you must:

- Create an EPM Connection in the EPM Connection Manager in the Central Management Console,
- Create a BOE connection in the EPM Add-in.

5.3.1 Creating an EPM Connection for Financial Consolidation with SSAS Cubes in the Central Management Console

Prerequisites

- You must install the EPM Connection Manager on the SAP BusinessObjects Enterprise platform before creating an EPM connection.
- Install the web services. To find out more about the installation procedure, see the *SAP BusinessObjects Financial Consolidation Installation documentation*.

Procedure

1. Log on to the Central Management Console.
2. In the [Organize](#) section, click [EPM Connections](#).
3. Click [New Connection](#).
The following window opens.

Edit EPM Connection

Name:

Description:

Source Application:

Provider:

Server Information:

- Server address:
- Server Name:
Enter the server name following the format server\instance
- Catalog:

Web services URL:

4. Enter a name for the connection.
5. In the *Source Application* field, select the *SAP BusinessObjects Financial Consolidation* application.
6. In the *Provider* field, select *Microsoft Analysis Services 2005* or *Microsoft Analysis Services 2008*.
7. In the *Server address* field, enter the URL of the datapump located on the SSAS Server.
8. In the *Server Name* field, enter the name of the SSAS server. If you installed it with a named instance, do not forget to indicate the name of the instance.
9. In the *Catalog* field, select the SSAS database you are going to use.

⚠ Caution

You must select a catalog (an SSAS database) that is only created and used by Cube Designer.

i Note

When creating the EPM connection, a message appears "database not found". This is normal as the database is only created after the first solution is deployed.

10. In the *Web services URL* field, enter the URL of the SAP BusinessObjects Financial Consolidation Web Services.
11. Click *Save*.

Once the connection is created, you must define the appropriate security in the Central Management Console.

The user must be granted the following rights:

- View right on connections,
- Publish right, if you want the user to publish workbooks in the BI launch pad.

5.3.2 Creating an EPM Connection for Financial Consolidation with NetWeaver BW Cubes in the Central Management Console

Prerequisites

- You must install the EPM Connection Manager on the SAP BusinessObjects Enterprise platform before creating an EPM connection.
- Install the web services. To find out more about the installation procedure, see the *SAP BusinessObjects Financial Consolidation Installation documentation*.

Procedure

1. Log on to the Central Management Console.
2. In the [Organize](#) section, click [EPM Connections](#).
3. Click [New Connection](#).
The following window opens.

Edit EPM Connection

Name:

Description:

Source Application:

Provider:

Server Information:

- Application Server:
- System Number:
- Client:

Web services URL:

4. Enter a name for the connection.
5. In the *Source Application* field, select the *SAP BusinessObjects Financial Consolidation* application.
6. In the *Provider* field, select *ODBO Provider for NetWeaver BW*.
7. In the *Application Server* field, enter the URL of the SAP NetWeaver server.
8. In the *System Number* field, enter the system number of your SAP NetWeaver server.
9. In the *Client* field, enter your client number.
10. In the *Web services URL* field, enter the URL of the SAP BusinessObjects Financial Consolidation Web Services.
11. Click *Save*.

Once the connection is created, you must define the appropriate security in the Central Management Console.

The user must be granted the following rights:

- View right on connections,
- Publish right, if you want the user to publish workbooks in the BI launch pad.

5.3.3 Creating an EPM Connection for Profitability and Cost Management in the Central Management Console

Context

You must install the EPM Connection Manager on the SAP BusinessObjects Enterprise platform before creating an EPM connection.

Procedure

1. Log on to the Central Management Console.
2. In the [Organize](#) section, click [EPM Connections](#).
3. Click [New Connection](#).
The following window opens.

Edit EPM Connection ?

Name: PCM

Description: PCM connection

Source Application: SAP BusinessObjects Profitability and Cost Management

Provider: ODBO Provider for PCM

Server Information:

- Server address: es-fim-srv64-1
- Catalog: EPM

Save Cancel

4. Enter a name for the connection.
5. In the [Source Application](#) field, select the [SAP BusinessObjects Profitability and Cost Management](#) application.
6. In the [Provider](#) field, select [ODBO Provider for PCM](#).
7. In the [Server address](#) field, enter the URL of the Profitability and Cost Management application server.
8. In the [Catalog](#) field, enter **EPM**.
9. Click [Save](#).

Once the connection is created, you must define the appropriate security in the Central Management Console.

The user must be granted the following rights:

- View right on connections,
- Publish right, if you want the user to publish workbooks in the BI launch pad.

5.3.4 Creating an EPM Connection for Planning and Consolidation version for SAP NetWeaver in the Central Management Console

Prerequisites

You must install the EPM Connection Manager on the SAP BusinessObjects Enterprise platform before creating an EPM connection.

Procedure

1. Log on to the Central Management Console.
2. In the *Organize* section, click *EPM Connections*.
3. Click *New Connection*.

The following window opens.

Edit EPM Connection

Name: BPC_NW

Description: BPC_NW connection

Source Application: SAP BusinessObjects Planning and Consolidation for SAP NetWeaver

Provider: ODBO Provider for NetWeaver BW

Server Information:

- Application Server: vmw3037.wdf.sap.corp
- System Number: 26
- Client: 600

Web services URL: https://es-ana-fin64-2:1443/ANA_PRO_MAGISK_1000_SQL2K8/Services.

Save Cancel

4. Enter a name for the connection.
5. In the *Source Application* field, select the *SAP BusinessObjects Planning and Consolidation for SAP NetWeaver* application.
6. In the *Provider* field, select *ODBO Provider for NetWeaver BW*.
7. In the *Server address* field, enter the URL of the SAP NetWeaver server.
8. In the *System Number* field, enter the system number of your SAP NetWeaver server.
9. In the *Client* field, enter your client number.
10. Click *Save*.

Once the connection is created, you must define the appropriate security in the Central Management Console.

The user must be granted the following rights:

- View right on connections,
- Publish right, if you want the user to publish workbooks in the BI launch pad.

5.3.5 Creating an EPM Connection for Planning and Consolidation version for Microsoft in the Central Management Console

Context

You must install the EPM Connection Manager on the SAP BusinessObjects Enterprise platform before creating an EPM connection.

Procedure

1. Log on to the Central Management Console.
 2. In the *Organize* section, click *EPM Connections*.
 3. Click *New Connection*.
- The following window opens.

Edit EPM Connection

Name: BPC_MS

Description: BPC_MS connection

Source Application: SAP BusinessObjects Planning and Consolidation for Microsoft ▼

Provider: ODBO Provider for BPC M ▼

Server Information:

- Server address: https://vmw3443:8443
- Catalog: MODELS_FG

Save Cancel

4. Enter a name for the connection.
5. In the *Source Application* field, select the *SAP BusinessObjects Planning and Consolidation for Microsoft* application.
6. In the *Provider* field, select *ODBO Provider for BPC MS*.
7. In the *Server address* field, enter the URL of the Planning and Consolidation application server.
8. In the *Catalog* field, enter the environment you are going to use.
9. Click *Save*.

Once the connection is created, you must define the appropriate security in the Central Management Console.

The user must be granted the following rights:

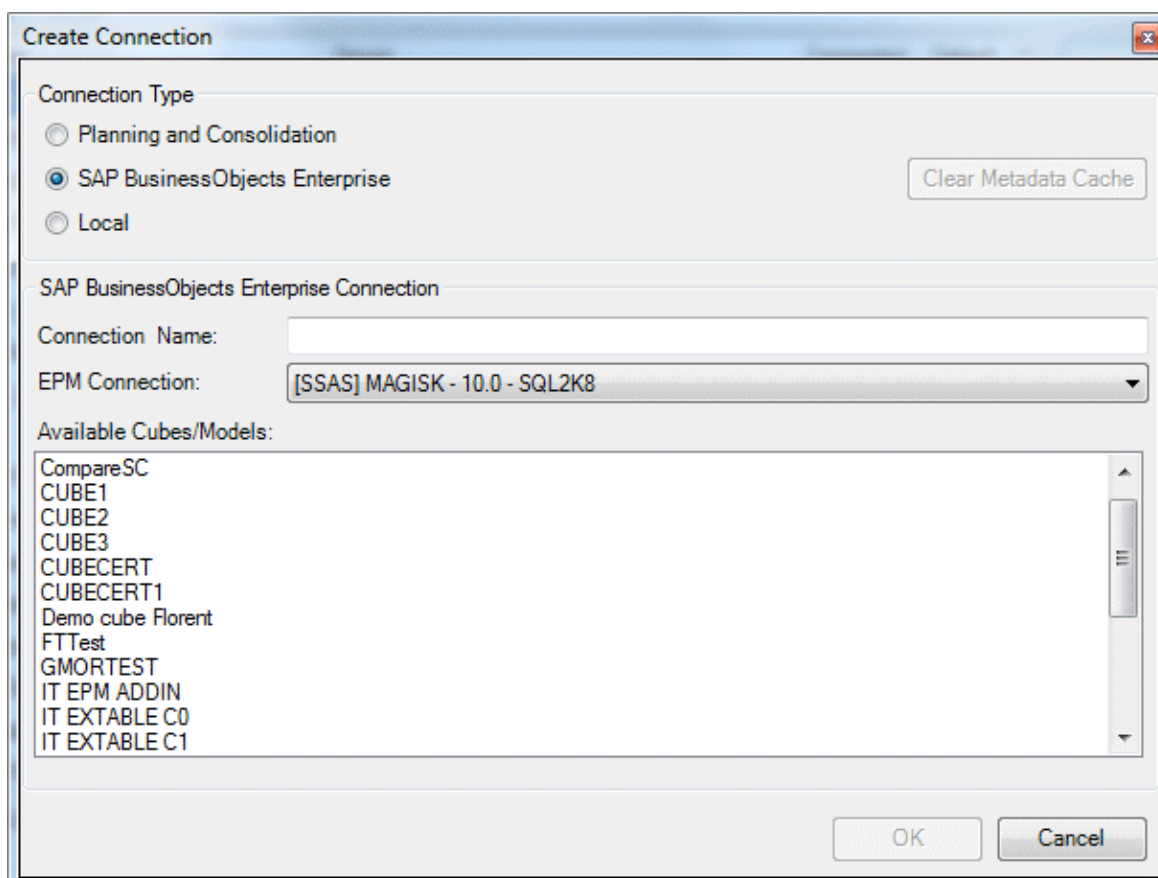
- View right on connections,
- Publish right, if you want the user to publish workbooks in the BI launch pad.

5.3.6 Creating an SAP BusinessObjects Enterprise Connection

Procedure

1. Open the BI launch pad.

2. Click the [Documents](#) tab.
3. Click [New](#) > [EPM Workbook](#) (or EPM Document or EPM Presentation)
The corresponding Microsoft Office application opens.
4. In the [EPM - Logon](#) dialog box, click the browse button next to the [Connection](#) area.
The [EPM - Connection Manager](#) opens.
5. Click [Create](#) and in the [Connection type](#) area, select [SAP BusinessObjects Enterprise](#).
6. Select the EPM Connection you want to use. To find out more about the EPM Connection creation, see the [Creating an EPM Connection in the Central Management Console](#) sections of this documentation.
The list of [Available Cubes/Models](#) opens.



7. Select the cube or model you want to use.
8. Enter a [Connection Name](#) and click [OK](#).

5.4 Creating the SAP BW (INA Provider) Connection

Procedure

1. Open Microsoft Office Excel, Microsoft Office Word, or Microsoft Office PowerPoint.
2. Select the [EPM](#) tab.

3. Click [Log On](#).
The *EPM - Logon* dialog box opens.
4. Click the browse button next to the [Connection](#) area.
The *EPM - Connection Manager* opens.
5. Click [Create](#).
The *Create Connection* dialog box opens.

Edit Connection

Connection Type: SAP BW (INA Provider) Clear Metadata Cache

☒ Do not Load Members at Connection

SAP BW (INA Provider)

Connection Name: [BZH PUBLIC - Id9460.wdf.sap.corp - 0AHF - (JD_TEST, (JD_TEST, 0AHF))]

Custom System | SAP Logon

System Name: [BZH PUBLIC]

Server Name: [Id9460.wdf.sap.corp]

Authentication Method: BASIC

HTTP protocol: HTTPS

Port Number: 44120

Client Number: 003

Connect i

Environment:

Model:

Generate Connection Name

OK Cancel

6. In the [Connection Type](#) area, select the *SAP BW (INA Provider)* option.
7. In the [Custom System](#) area, enter a [System Name](#) and a [Server Name](#).
8. Select the *BASIC* Authentication Method.
9. Select the protocol you want to use, enter a [Port Number](#) and a [Client Number](#).
10. Click [Generate Connection Name](#).
11. If you work with SAP Business Planning and Consolidation 10.1, version for SAP NetWeaver or higher, and you want to make the work status feature available, click [Connect](#), then select an Environment and a Model.
12. Click [OK](#).

5.5 User Preferences Configuration

Information about connections and user preferences is stored in different files, which are located in \ %userprofile%\AppData\Local\EPMOfficeClient\.

i Note

These files are not deleted when upgrading your version with a patch or support package, or installing a new version.

These files are:

- *Connections.xml*: contains the list of all the Planning and Consolidation and SAP BusinessObjects Enterprise connections.
- *EPMXLClientPreference.XML*: contains the user preferences (options and context values).

i Note

By default, the EPMXLClientPreference.xml and Connections.xml files are stored in C:\Users\<user>\AppData\Local\EPMOfficeClient. However, you can now add the key as follows in the EPMXLCLIENT.dll.config file and set the key to "true": "<add key='ConnectionDefinitionInRoamingUserProfiles' value='true'/>". The EPMXLClientPreference.XML and Connections.xml files will be stored in C:\Users\<user>\AppData\Roaming\EPMOfficeClient.

- *.oqy* files: contain all the local connections you have created in the EPM add-in and are stored in the Local Connections folder.

→ Tip

The content of the files can be exported to other machines if you want to deploy the same connections and user preferences for several users.

6 Configuring the EPM Connector

6.1 To configure the EPM Connector for Microsoft-based Solutions

Context

Dashboard Design is a Flash application and by default, Flash does not allow you to retrieve data from URLs that are not from the same DNS domain. To find out more, consult the following URL: <http://www.senocular.com/pub/adobe/crossdomain/policyfiles.html> .

To authorize access to URLs, you need to create crossdomain.xml files and add them to each XMLA provider.

Procedure

1. Create one file named `crossdomain.xml` in each XMLA provider folder, with the following content:

- For HTTPS:

```
<?xml version="1.0"?>
<!DOCTYPE cross-domain-policy SYSTEM "http://www.adobe.com/xml/dtds/cross-
domain-policy.dtd">
<cross-domain-policy>
<allow-http-request-headers-from domain="*.mydomain.com" headers="*" />
<allow-access-from domain="*.mydomain.com" to-ports="443" />
</cross-domain-policy>
```

- For HTTP:

```
<?xml version="1.0"?>
<!DOCTYPE cross-domain-policy SYSTEM "http://www.adobe.com/xml/dtds/cross-
domain-policy.dtd">
<cross-domain-policy>
<allow-http-request-headers-from domain="*.mydomain.com" headers="*"
secure="false" />
<allow-access-from domain="*.mydomain.com" to-ports="80" secure="false" />
</cross-domain-policy>
```

2. Modify the `domain` parameter depending on the initial domain of the Financial Consolidation or Planning and Consolidation server or the local machine where the EPM Add-in is installed. For example:

`*.sap.corp.`

For example, your environment is composed of the following:

- one FC XMLA provider (`http://FCserver-domain.com/datapump`) or
- one PC XMLA provider (`http://PCserver-domain.com:[port]/sap/bpc/`)
- all users are in the DNS domain named `client-domain.com`.

For each XMLA provider, you must create a `crossdomain.xml` file like the following:

For FC

```
<?xml version="1.0"?>
<!DOCTYPE cross-domain-policy SYSTEM "http://www.adobe.com/xml/dtds/cross-
domain-policy.dtd" >
<cross-domain-policy>
  <allow-http-request-headers-from domain="FCserver-domain.com"
headers="*"secure="false"/>
  <allow-access-from domain="FCserver-domain.com" to-ports="80"secure="false"/>
  <allow-http-request-headers-from domain="*.client-domain.com"
headers="*"secure="false"/>
  <allow-access-from domain="*.client-domain.com" to-ports="80"secure="false"/>
</cross-domain-policy>
```

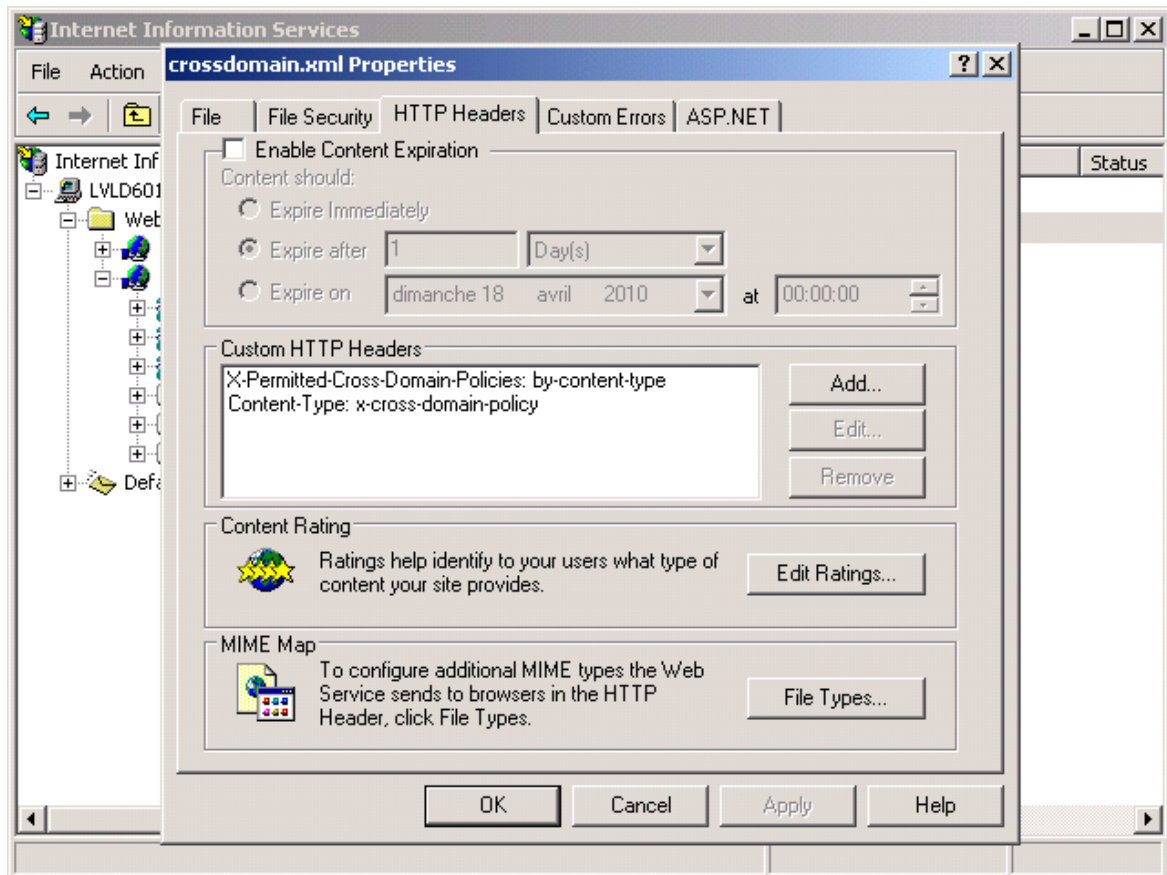
For PC

```
<?xml version="1.0"?>
<!DOCTYPE cross-domain-policy SYSTEM "http://www.adobe.com/xml/dtds/cross-
domain-policy.dtd" >
<cross-domain-policy>
  <allow-http-request-headers-from domain="PC.sever-domain.com"
headers="*"secure="false"/>
  <allow-access-from domain="PCserver-domain.com" to-ports="80"secure="false"/>
  <allow-http-request-headers-from domain="*.client-domain.com"
headers="*"secure="false"/>
  <allow-access-from domain="*.client-domain.com" to-ports="80"secure="false"/>
</cross-domain-policy>
```

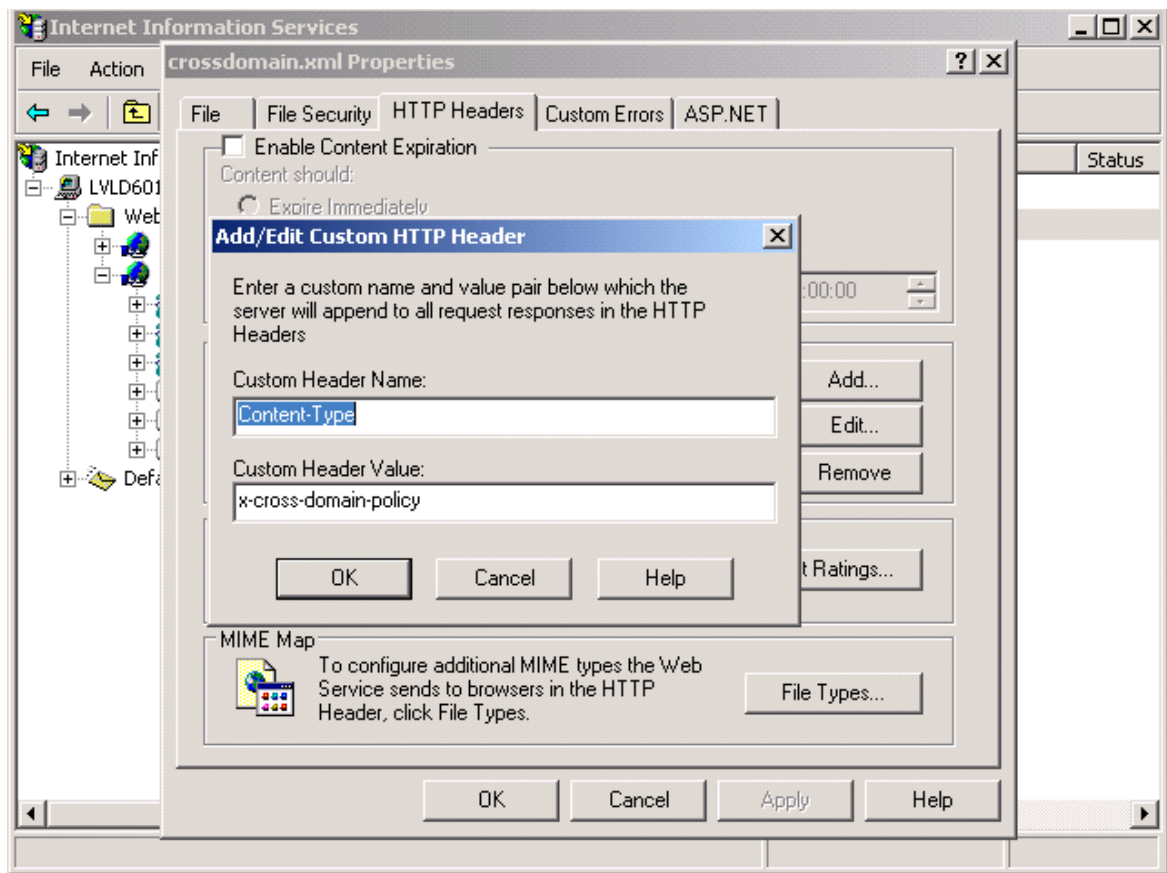
6.1.1 Defining HTTP headers of the crossdomain.xml file under Windows 2003

Procedure

1. Open the IIS server administration console.
2. Right-click on the *crossdomain.xml* file and select *Properties*
3. In the *HTTP Headers* tab, click *Add*.
4. In the *Custom Header Name* area, enter *X-Permitted-Cross-Domain-Policies*.
5. In the *Custom Header Value* area, enter *by-content-type*.



6. Click **OK**.
7. Click **Add** again.
8. In the **Custom Header Name** area, enter *Content-Type*.
9. In the **Custom Header Value** area, enter *x-cross-domain-policy*.

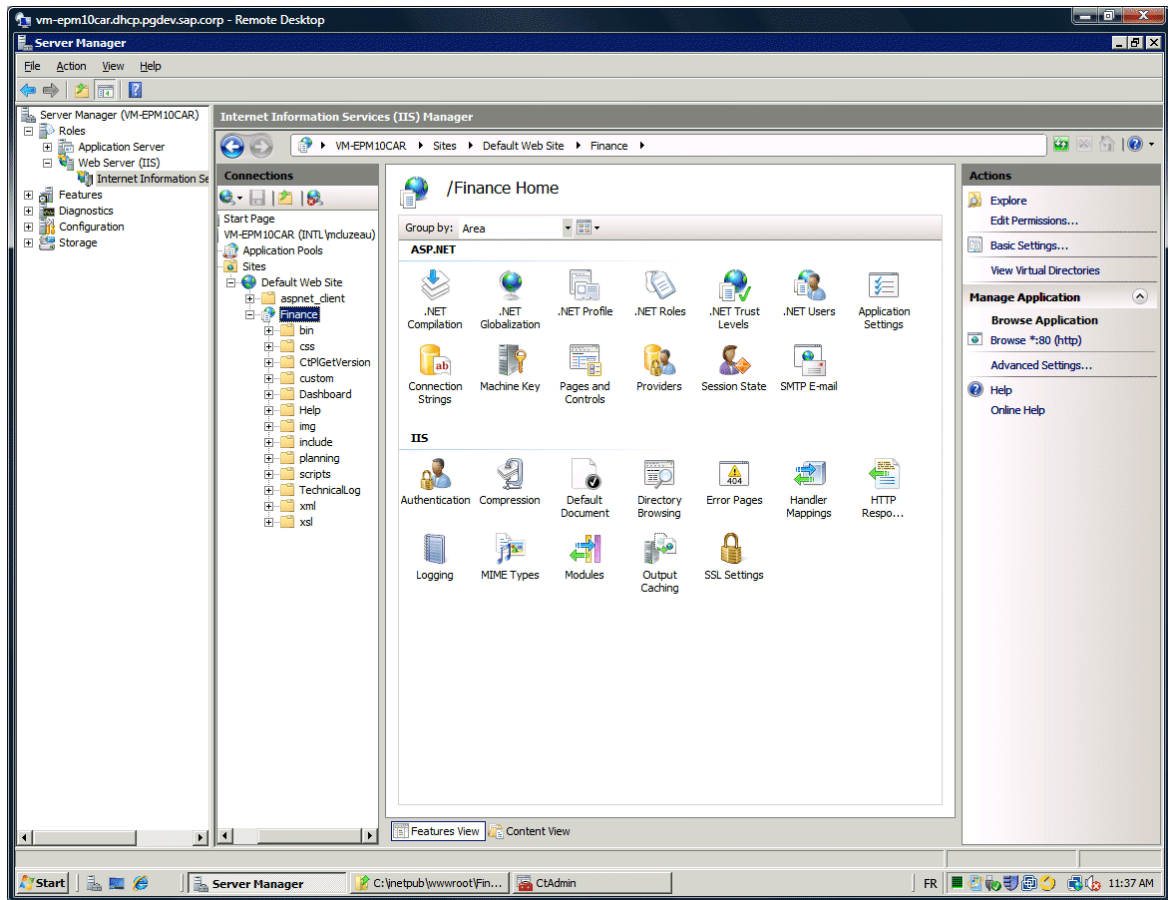


10. Click [OK](#).

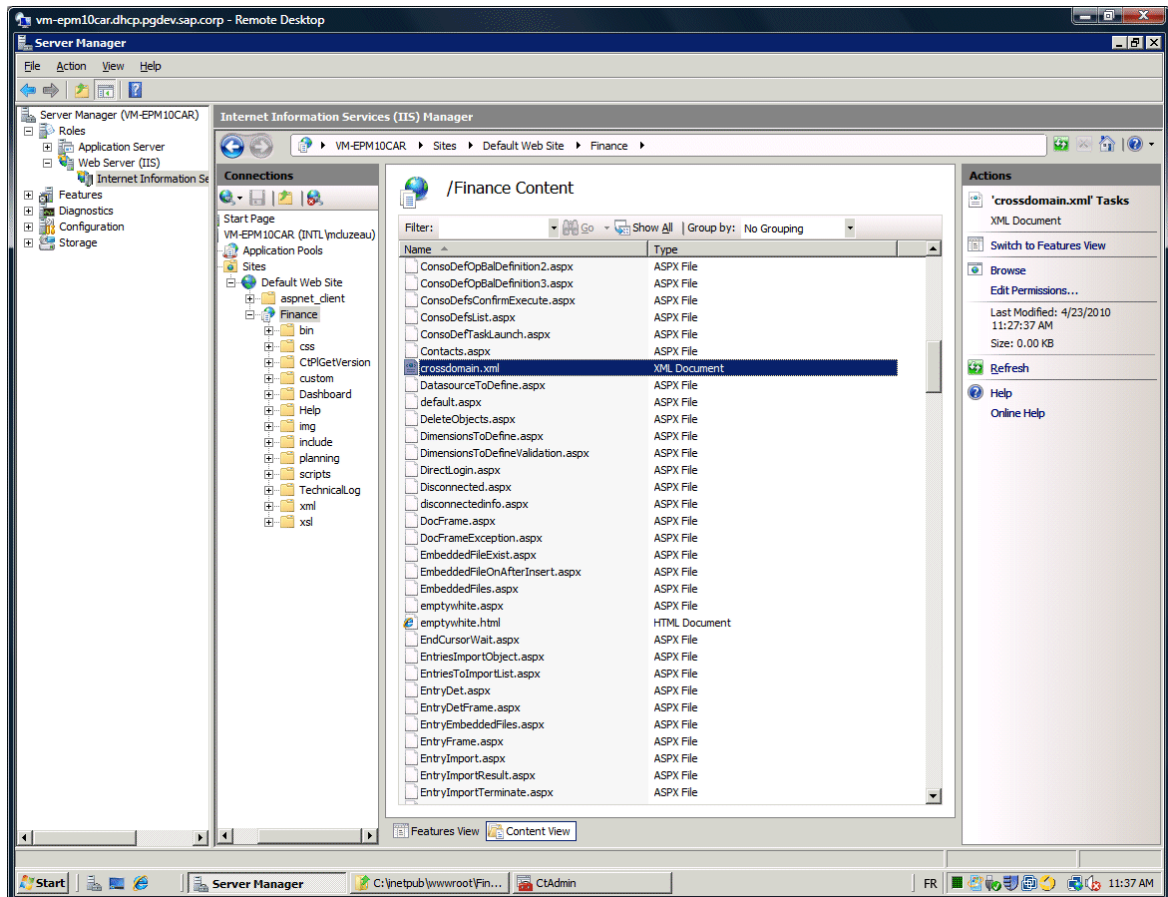
6.1.2 Defining HTTP headers of the crossdomain.xml file under Windows 2008

Procedure

1. Open the IIS Manager.
2. Select the site of your XMLA provider and in the right pane, click [Content View](#).

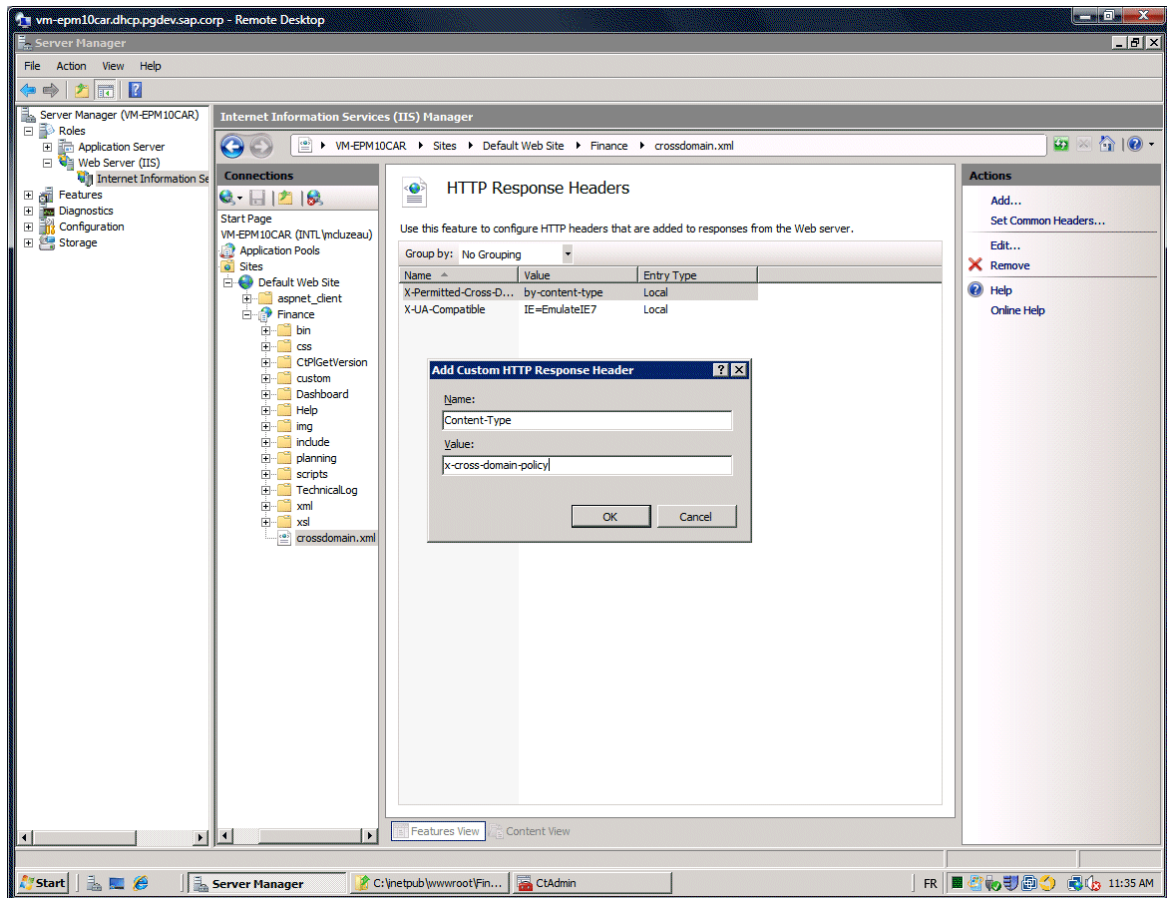


3. In the *Content View* list, select the *crossdomain.xml* file and in the *Actions* pane, click *Switch to Features View*.

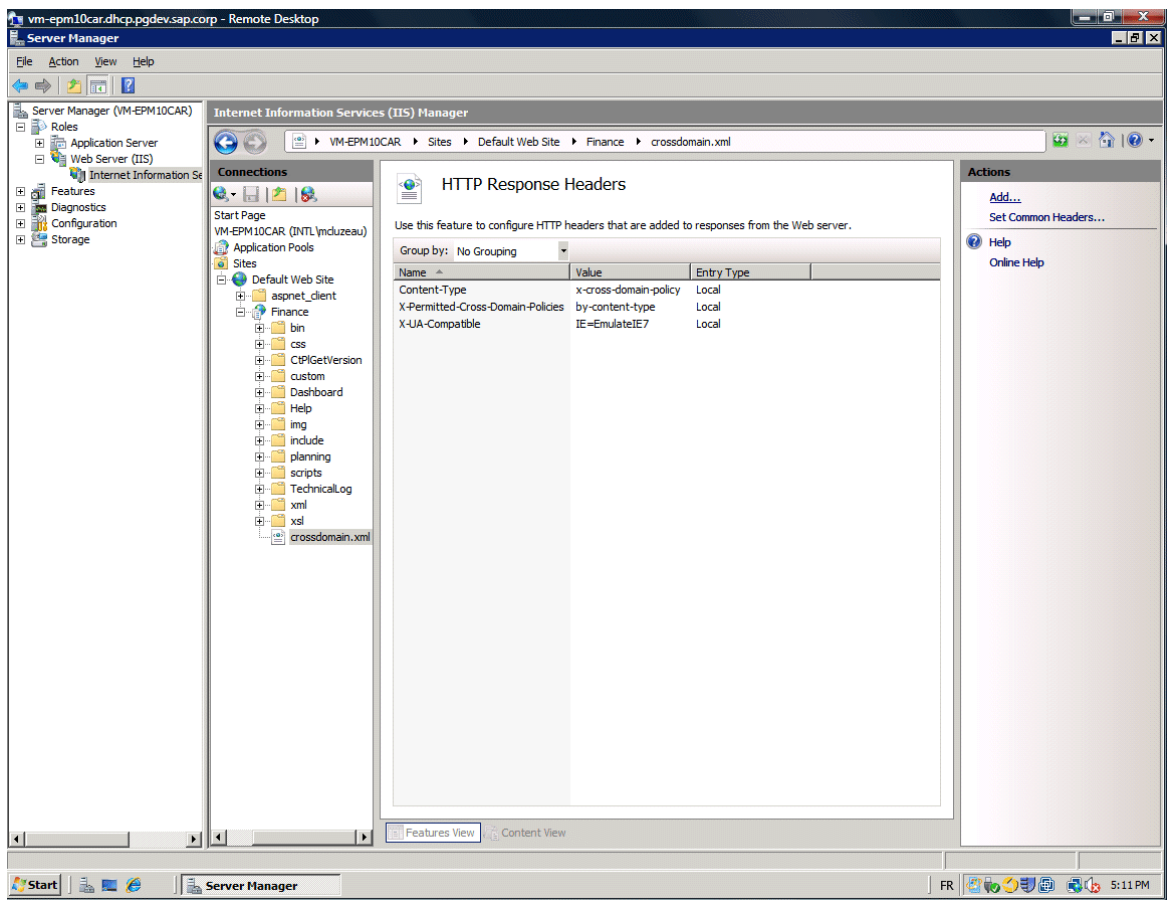


4. In the *Features View*, double-click the *HTTP Response Header* icon.

The *Add Custom HTTP Response Header* dialog box opens.



5. In the *Actions* pane, click *Add*.
6. In the *Name* field, enter *Content-Type*.
7. In the *Value* field, enter *x-cross-domain-policy*.
8. Click *OK*.
9. Click *Add* again.
10. In the *Name* field, enter *X-Permitted-Cross-Domain-Policies*.
11. In the *Value* field, enter *by-content-type*.
12. Click *OK*.



6.1.3 Alternative configuration

Note

Alternatively, you can also configure the meta-policy in a different way if you create the `crossdomain.xml` file in the web server root folder (`wwwroot` in IIS). In this case, the file must contain the following:

```
<?xml version="1.0"?>
<!DOCTYPE cross-domain-policy SYSTEM "http://www.adobe.com/xml/dtds/cross-
domain-policy.dtd" >
<cross-domain-policy>
<site-control permitted-cross-domain-policies="all" />
</cross-domain-policy>
```

Caution

This configuration could be helpful if you put all the XMLA provider on the same machine. However, note that this configuration will apply to all applications deployed on this server. This method is recommended only for testing and development environments ; as such, there are less restrictions.

6.2 To configure the EPM Connector for SAP NetWeaver-based Solutions

Context

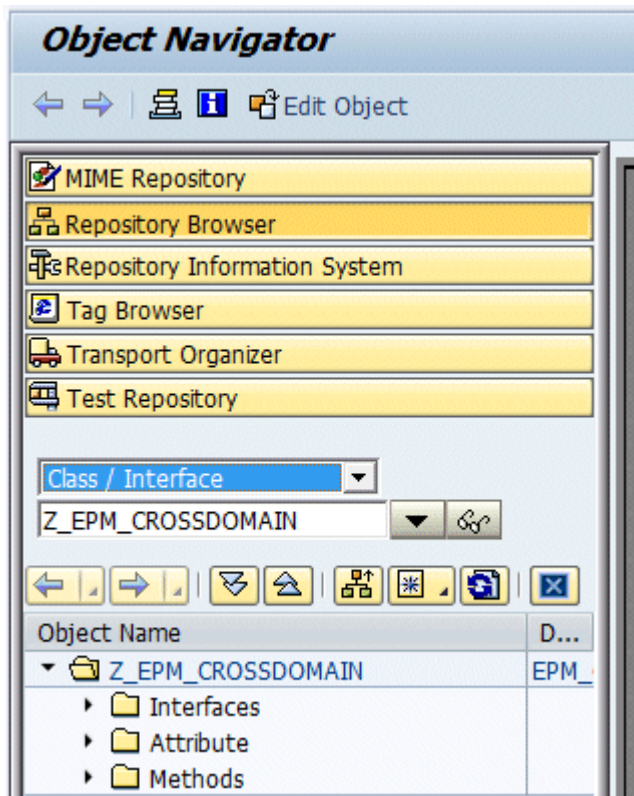
Configuring the EPM Connector for SAP NetWeaver-based solutions consists of the following three steps:

- Creating a class
- Implementing the interface
- Creating the crossdomain service

6.2.1 Creating a Class on the SAP NetWeaver Server

Procedure

1. Log on to SAP NetWeaver and execute the [SE80](#) transaction to open the ABAP editor.
2. Open the [Repository Browser](#).
3. Select the [Class / Interface](#) repository and enter a class name (in this example: Z_EPM_CROSSDOMAIN).



A confirmation message opens (Create Object).

4. Click [Yes](#).
5. In the *Object type* dialog box, select the *Class type* and validate. The *Create Class* dialog box opens.

Create Class Z_EPM_CROSSDOMAIN

Class:

Description:

Instantiation:

Class Type

☒ Usual ABAP Class

☐ Exception Class

☐ With Message Class

☐ Persistent class

☐ Test Class (ABAP Unit)

☒ Final

6. Enter a description and click [Save](#). The *Create Object Directory Entry* dialog box opens.
7. Select the options corresponding to your environment and click [Save](#).

Create Object Directory Entry

Object:

Attributes

Package:

Person Responsible:

Original System:

Original Language: English

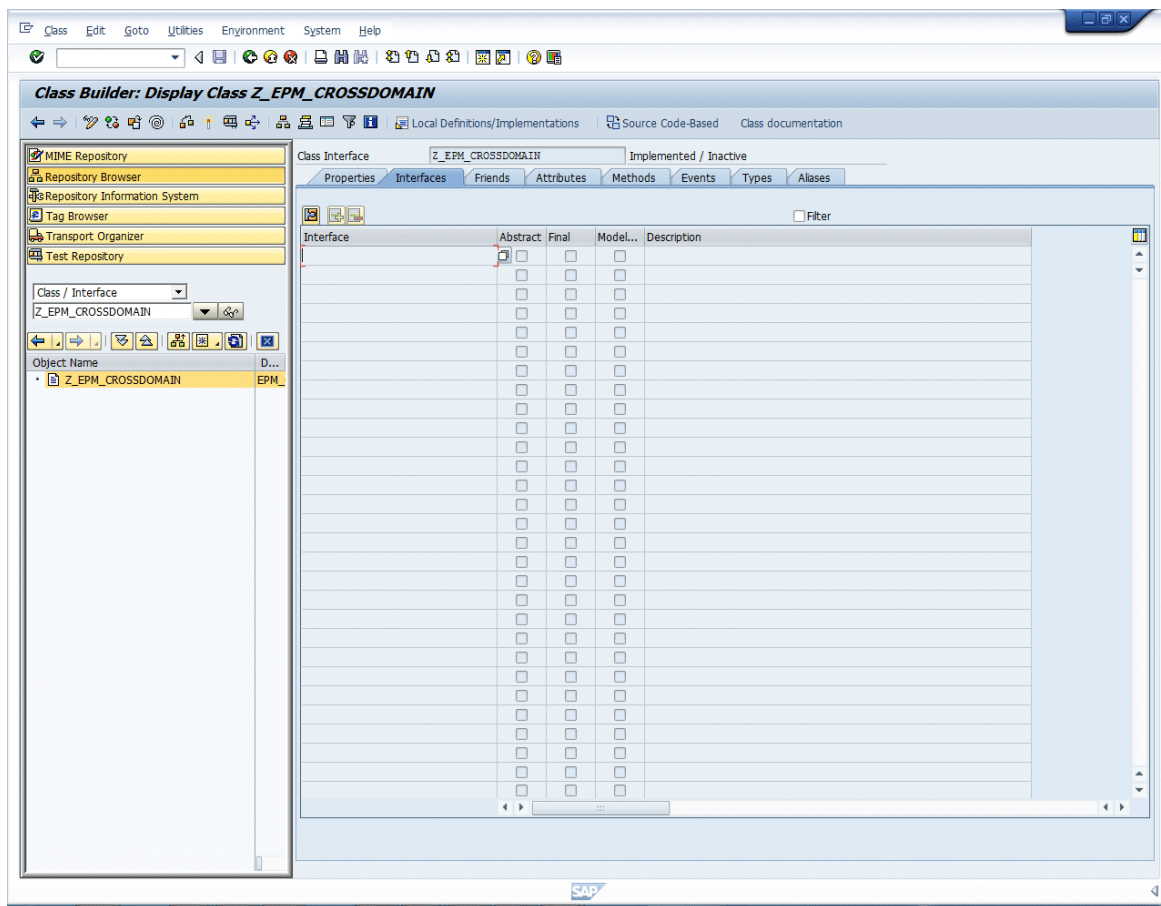
Created On:

8. Open the new class you just created; in this example: Z_EPM_CROSSDOMAIN.

6.2.2 Implementing the Interface on the BW Server

Procedure

1. Open the new class you just created: in this example, Z_EPM_CROSSDOMAIN.
2. Select the *Interface* tab.
3. Click *Display Change* (Ctrl F1) to edit the interface.



4. In the *Method* field, enter IF_HTTP_EXTENSION and press [enter] to search for the method.
5. Select the *Method* tab.
6. Double-click the IF_HTTP_EXTENSION~HANDLE_REQUEST method to open it.
7. Paste into this method the following code lines:

```
*
<SIGNATURE>-----
-----+
* | Instance Public Method Z_EPM_XC_XD->IF_HTTP_EXTENSION~HANDLE_REQUEST
*
+-----+
* | [--->] SERVER                                TYPE REF TO IF_HTTP_SERVER
*
+-----+
-----</SIGNATURE>
method IF_HTTP_EXTENSION~HANDLE_REQUEST.
    DATA: l_crossdomain_xml TYPE string,
```

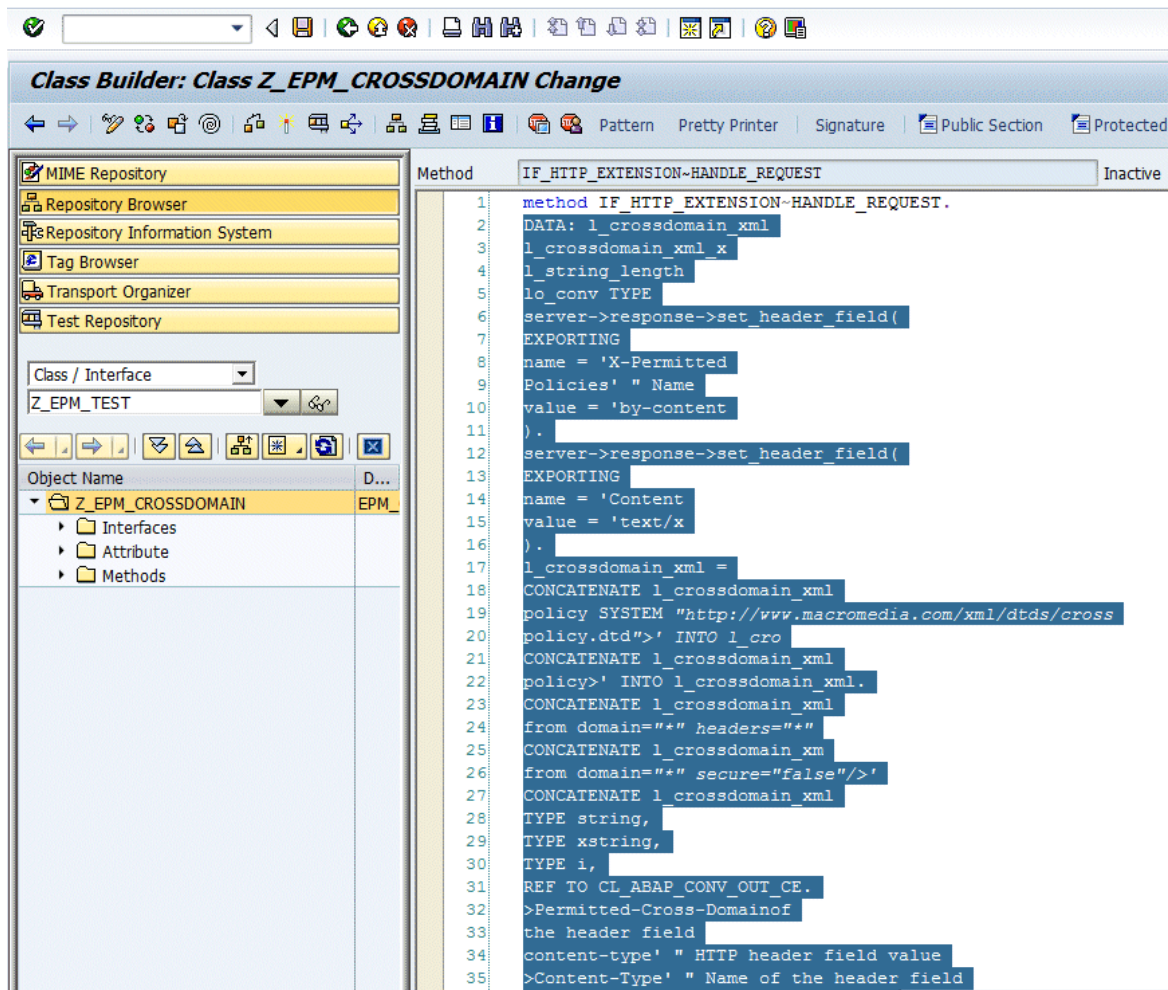
```

        l_crossdomain_xml_x TYPE xstring,
        l_string_length TYPE i,
        lo_conv TYPE REF TO CL_ABAP_CONV_OUT_CE.
server->response->set_header_field(
    EXPORTING
        name = 'X-Permitted-Cross-Domain-Policies'      " Name of the header
field
        value = 'by-content-type'      " HTTP header field value
    ).
server->response->set_header_field(
    EXPORTING
        name = 'Content-Type'      " Name of the header field
        value = 'text/x-cross-domain-policy'      " HTTP header field value
    ).
l_crossdomain_xml = '<?xml version="1.0"?>'.
CONCATENATE l_crossdomain_xml '<!DOCTYPE cross-domain-policy SYSTEM "http://
www.macromedia.com/xml/dtds/cross-domain-policy.dtd">' INTO l_crossdomain_xml.
CONCATENATE l_crossdomain_xml '<cross-domain-policy>' INTO
l_crossdomain_xml.
CONCATENATE l_crossdomain_xml '<allow-http-request-headers-from
domain="*.mydomain.com" headers="*" secure="false" />' INTO l_crossdomain_xml.
CONCATENATE l_crossdomain_xml '<allow-access-from domain="*.mydomain.com"
secure="false"/>' INTO l_crossdomain_xml.
CONCATENATE l_crossdomain_xml '</cross-domain-policy>' INTO
l_crossdomain_xml.
lo_conv = CL_ABAP_CONV_OUT_CE=>create( ).
call method lo_conv->convert
    exporting
        data = l_crossdomain_xml
    importing
        buffer = l_crossdomain_xml_x
        len = l_string_length.
server->response->set_data(
    EXPORTING
        data = l_crossdomain_xml_x      " Binary Data *      offset = 0      "
Offset into binary data
        length = l_string_length      " Length of binary data
    ).
endmethod.
ENDCLASS.

```

i Note

Do not forget to enter the domain name in the "*.mydomain.com" parameter.



8. Save the method.
A message appears indicating that the IF_HTTP_EXTENSION~HANDLE_REQUEST method has been saved.
9. Exit and return to the main screen.

6.2.3 Creating the crossdomain Service

Procedure

1. In the SAP NetWeaver main screen, execute the *SICF* transaction.
The *Maintain Services* window opens.

Maintain Services

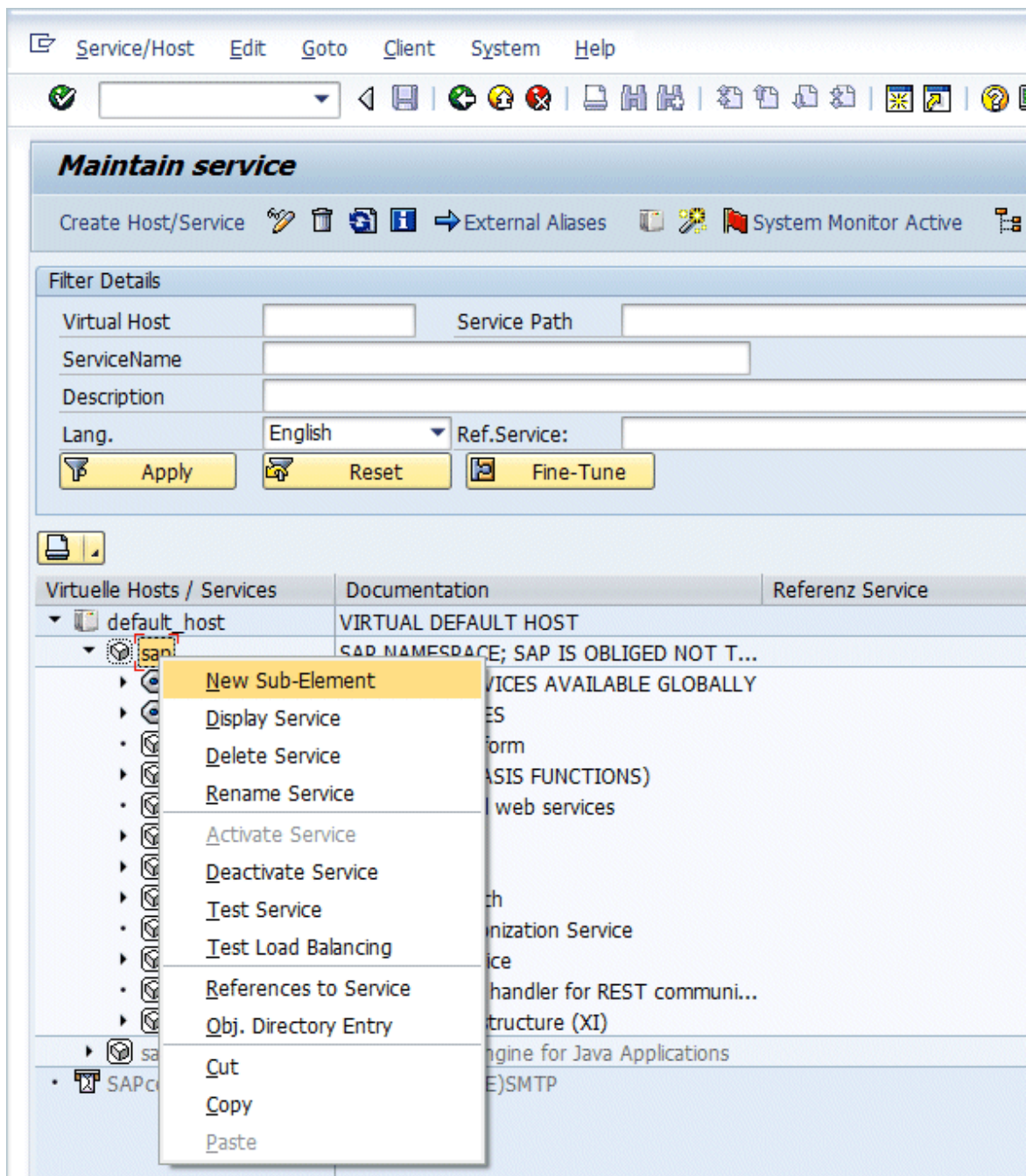
Filter for Calling ICF Hierarchy

Hierarchy Type	SERVICE
Virtual Host	
Service Path	
Service Name	
Reference Service	
Description	
Language	English

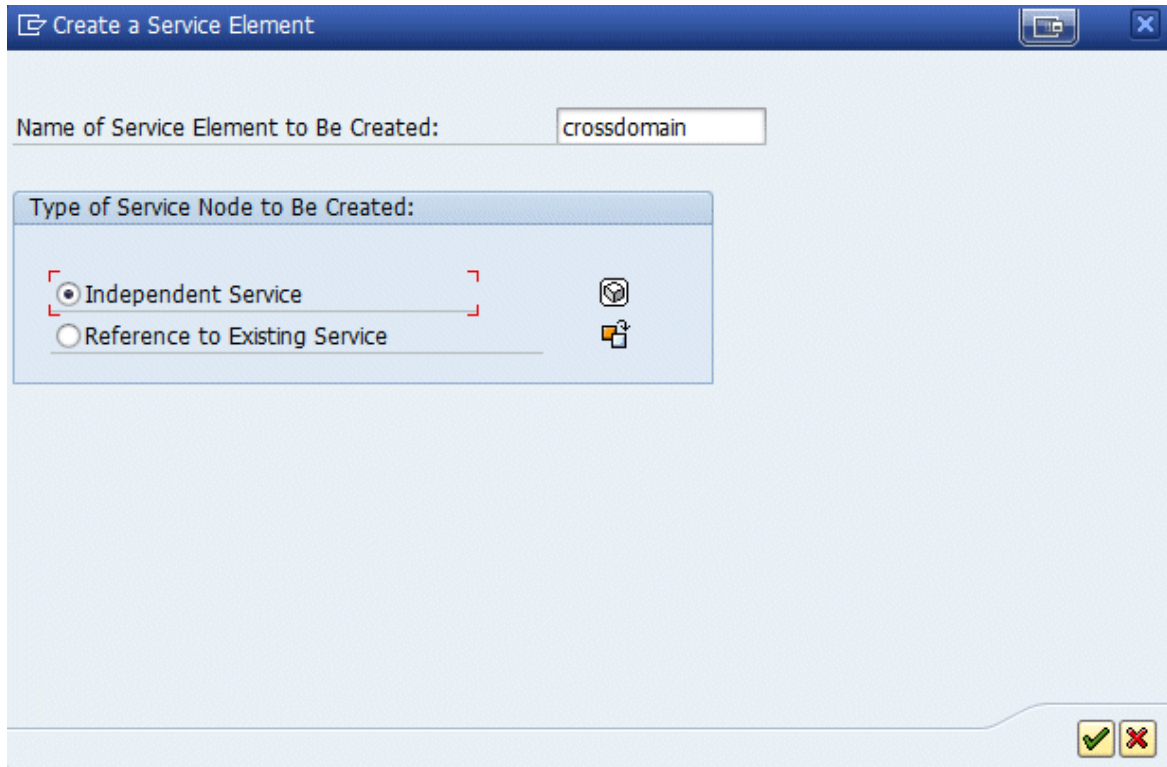
Filter for Detail Information

Created By		
Created On		to
Last Changed By		
Changed On		to

2. In the *Hierarchy Type* field, enter `SERVICE` and click *Execute* (F8).
The *Create Host/Service* window opens.
3. In the *Virtual hosts/Services* zone, expand the services list under *default_host*.
4. Right-click *sap* and select *New Sub-Element*.



The *Create a Service Element* opens.

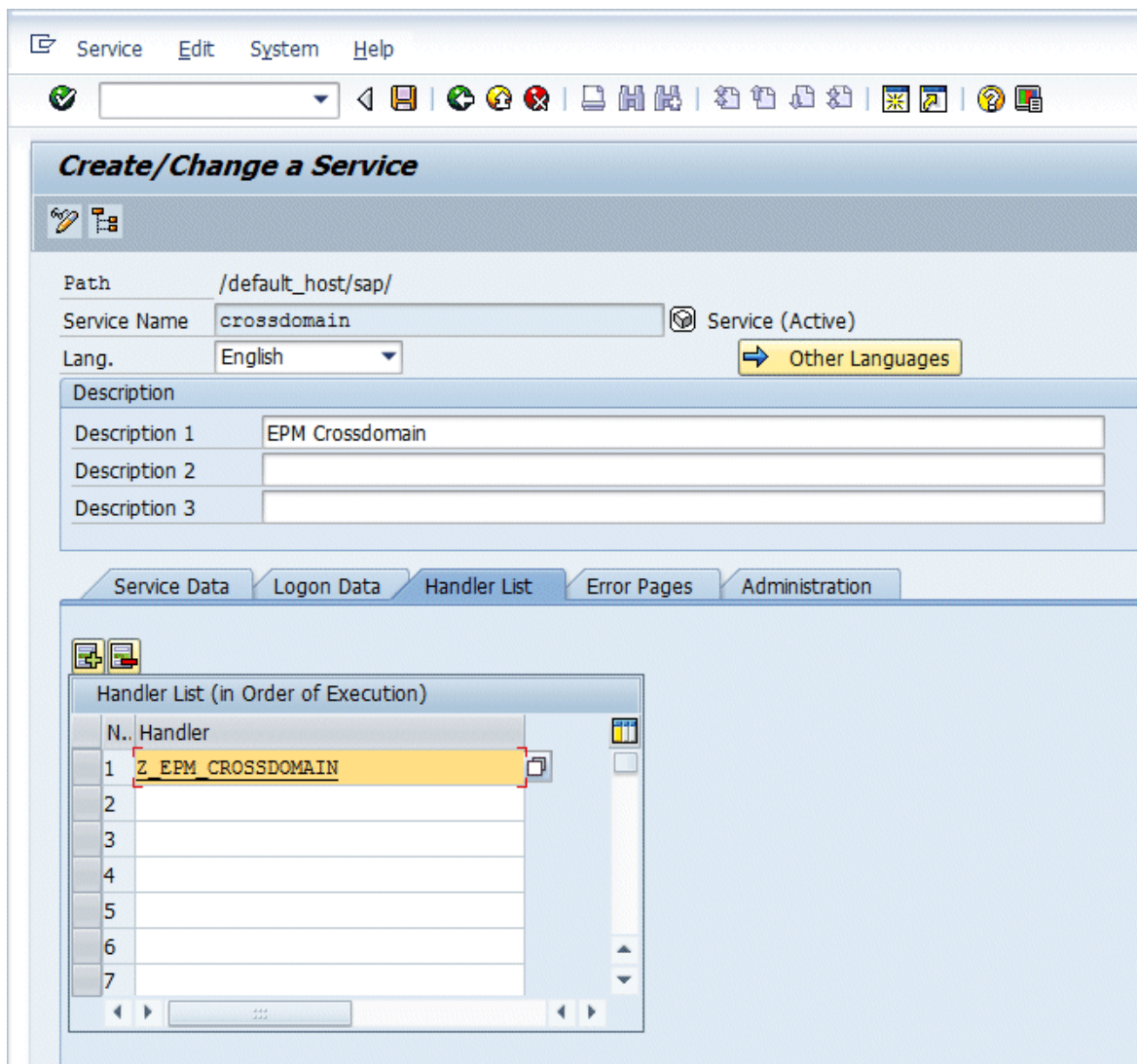


5. In the *Name of service Element to Be Created*, enter `crossdomain` and leave the default other options.

Caution

You must enter `crossdomain` as the service name, otherwise it will not function.

6. Click *Validate*.
The *Create/Change Service* dialog box opens.
7. In the *Description* field, enter `EPM crossdomain`.



10. Click [Save](#) and exit.
The *Create Object Directory Entry* dialog box opens.

Create Object Directory Entry

Object: R3TR SICF CROSSDOMAIN DFFAEATGKMFLCDXQ04F0J7FXK

Attributes

Package: []

Person Responsible: LYR

Original System: E3F

Original Language: []

Created On: []

Local Object Lock Overview

11. Click [Local Object](#).
12. Back in the [Create / Change a Service](#) dialog box, click [Save](#).
13. Click [Back \(F3\)](#) to go back to the [Maintain Service](#) window.
You can see that the crossdomain service has been created but not yet activated.
14. Right-click [crossdomain](#) and click [Activate Service](#).
A confirmation message opens.
15. Click [Yes](#).
The crossdomain service is now activated.
16. To restart the service, right-click [Deactivate Virtual Host](#) and then [Activate Virtual Host](#).
17. If you want to test that the service has been correctly created, open a browser and enter the following URL:
`http://<your_netweaver_server.domain.corp:<port_number>/sap/crossdomain`.

The following XML file opens:

```
<?xml version="1.0"?><!DOCTYPE cross-domain-policy SYSTEM "http://
www.macromedia.com/xml/dtds/cross-domain-policy.dtd">
<cross-domain-policy>
<allow-http-request-headers-from domain="*.mydomain.com" headers="*"
secure="false" />
<allow-access-from domain="*.mydomain.com" secure="false"/></cross-domain-
policy>
```

7 Deploying the Same Options for Several Users

If you want to deploy the same options for several users, you can export the content of the EPMXLClientPreference.xml to several machines.

The table below lists the options contained in the EPMXLClientPreference.xml file and the corresponding options in the user interface:

- The user options that are in ► [Options](#) ► [User Options](#) ►.
- The sheet options that are saved as default options when clicking [Save as Default](#) in ► [Options](#) ► [Sheet Options](#) ►.
- The command display options that are in ► [Options](#) ► [Command Display Options](#) ►.

Note

Some options are no longer used and are noted as "deprecated".

in .xml	on the interface	where
! Restriction This option applies to BPC NetWeaver connections only ActivateMemberSetMode Values: True or False (False is the default value) When set to True, and provided that the server recognizes the relationship, the server performs the member expansion, not the client. If the server does not recognize the relationship (for example, the Offset relationship), the client performs the expansion. Setting this option to True improves performance.	(no equivalent option in the EPM add-in interface)	
 Caution We recommend not to set this option to True before you install Planning and Consolidation for NetWeaver 10.0 Support Package 10.		

in .xml	on the interface	where
! Restriction This option applies to BPC NetWeaver connections only ActivateMemberSetModeForBaseLevel Values: True or False (False is the default value) When set to True, and when the <i>Base Level</i> relationship is used, the server performs the expansion of the base level members, not the client. Setting this option to True improves performance. ⚠ Caution We recommend not to set this option to True before you install Planning and Consolidation for NetWeaver 10.0 Support Package 10.		
AlwaysAutoUpdateCharts	<i>Refresh Charts Automatically</i>	► <i>User Options</i> ► <i>Navigation</i> ►
Values: True or False		
AutoFitColumns	<i>Auto Fit Column Width</i>	► <i>Sheet Options</i> ► <i>Formatting</i> ►
Values: True or False		
AutoFitRefresh (deprecated)	(deprecated)	
AutomaticRefresh	<i>Automatic Refresh on Context Changes</i>	► <i>User Options</i> ► <i>Navigation</i> ►
Values: True or False		
AutoUpdateWarning	<i>Notify me when updates are available</i>	► <i>User Options</i> ► <i>Others</i> ►
Values: True or False		
BOEServer	<i>SAP BusinessObjects Enterprise Server</i>	► <i>User Options</i> ► <i>Server Configuration</i> ►
Values: server		
CacheValidityDuration	<i>Clear Metadata Cache Frequency</i> data entry field	► <i>User Options</i> ► <i>Navigation</i> ►
Values: integer		
Default value: 0		
Enter a number to specify the number of days		
CalculateParentsInHierarchy	<i>Calculate Parents in Hierarchies</i>	► <i>Sheet Options</i> ► <i>Refresh</i> ►

in .xml	on the interface	where
Values: True or False		
ClearDataOnSave	<i>Clear Data in the Whole File when Saving it</i>	► Sheet Options ► Refresh ►
Values: True or False		
ClearFormattingBeforeApplyDynForma tting	<i>Clear Report Format before Applying Dynamic Formatting</i>	► Sheet Options ► Formatting ►
Values: True or False		
ColumnAxisTotalsRefresh (deprecated)	(deprecated)	
CustomExpand/Apply	Custom Expand	► Sheet Options ► General ►
Values: True or False		
CustomExpand/ExpansionType	Button <i>Define Custom Expand</i>	► Sheet Options ► General ►
Values:	• Down to Level • From Level to Level • Only Level • Only Base Level	
• UntilLevel • LevelsRange • OneLevel • BaseLevel		
CustomExpand/IncludeMember	<i>Include Member</i>	► Sheet Options ► General ►
Values: True or False		
DataLinkColor	<i>Data Link Symbol Color</i> button	► User Options ► Others ►
Values: integer		
Default value: 0		
Use ARGB color values		
DeactivateSumbitAndRefresh (deprecated)	(deprecated)	
Values: True or False		
DefaultForEmptyComment	<i>Empty Comment</i>	► User Options ► Others ►
Values: string		
Default Value: ...		
Enter the characters that you want to be saved for empty comments.		
DefaultLocalMemberRecognitionOn (deprecated)	(deprecated)	
DefaultMemberRecognitionOn (deprecated)	(deprecated)	
DefaultNotAnEPMSheet (deprecated)	(deprecated)	
DeferLayoutUpdate	<i>Defer Layout Update</i>	EPM tab

in .xml	on the interface	where
Values: True or False		
DisplayCommentsUsingExcel	<i>Show as Microsoft Excel Comments</i>	► Sheet Options ► General ►
Values: True or False		
DisplayDeprecatedFunctions	<i>Load EV Functions</i>	► User Options ► Others ►
Values: True or False		
DisplayName	<i>Display Name options</i>	► User Options ► Formatting ►
Values:		
- to display the member captions, enter SoDnCaption - to display the member captions, enter SoDnFullUniqueName		
DisplayUnrecognizedMembers (deprecated)	(deprecated)	
DoNotStoreModelWarning	<i>Warn if Connection or Environment in the Connection is not Stored</i>	► User Options ► Navigation ►
Values: True or False		
DoubleClick	<i>Enable Double-Click</i>	► User Options ► Navigation ►
Values: True or False		
EliminateEmptyAndZeroColumns	<i>Remove Empty and Zero Values</i>	► Sheet Options ► General ► Columns ►
Values: True or False		
EliminateEmptyAndZeroRows	<i>Remove Empty and Zero Values</i>	► Sheet Options ► General ► Rows ►
Values: True or False		
EliminateEmptyColumns	<i>Remove Empty</i>	► Sheet Options ► General ► Columns ►
Values: True or False		
EliminateEmptyRows	<i>Remove EmptyRemove Empty</i>	► Sheet Options ► General ► Rows ►
Values: True or False		
EmptyValueReplacement	<i>Empty Cell Default Value</i>	► Sheet Options ► Formatting ►
Values: integer or string		
You can also leave a blank. The cells that have no data will be left blank.		
ExpandCollapse	<i>Expand/Collapse on Single Member</i>	► User Options ► Navigation ►
Values: True or False		
ExpandToLowerLevel	<i>Expand Options</i>	► Sheet Options ► General ►
Values:		

in .xml	on the interface	where
- To expand Member and Children, enter SoZiMemberChildren. - To expand Children, enter SoZiChildren. - To expand Member and Descendants, enter SoZiMemberDescendants. - To expand Descendants, enter SoZiDescendants.		
ForceBasicWrite Values: True or False	<i>Apply only Report Editor Definition for Faster Refresh</i>	► Sheet Options ► Refresh ►
ForceSymetricQueryWhenNecessary Values: True or False	<i>Force Symmetric Refresh for Large Asymmetric Axis</i>	► User Options ► Others ►
HideEmptyAndZeroColumns Values: True or False	<i>Hide Empty and Zero Values</i>	► Sheet Options ► General ► Columns ►
HideEmptyAndZeroRows Values: True or False	<i>Hide Empty and Zero Values</i>	► Sheet Options ► General ► Rows ►
HideEmptyColumns Values: True or False	<i>Hide Empty</i>	► Sheet Options ► General ► Columns ►
HideEmptyRows Values: True or False	<i>Hide Empty</i>	► Sheet Options ► General ► Columns ►
HideGhostConnect	(no equivalent option in the EPM add-in interface)	
HideLinks	(no equivalent option in the EPM add-in interface)	
HideMatrixSecurityWarning Values: True or False	<i>Display Matrix Security Warning</i> ⚠ Caution - When set to True, the option is unchecked. - When set to False, the option is checked.	► User Options ► Others ►
HideRefreshWarning Values: True or False	<i>Display Warning when Process Takes Time</i> ⚠ Caution When set to True, the option is unchecked.	► User Options ► Others ►

in .xml	on the interface	where
	When set to False, the option is checked.	
HideSubmitWarning Values: True or False	<i>Display Warning when Saving Data or Comment</i> Caution - When set to True, the option is unchecked. - When set to False, the option is checked.	► <i>User Options</i> ► <i>Others</i> ►
IntelligentFormatting Values: True or False	<i>Apply Dynamic Formatting</i>	► <i>Sheet Options</i> ► <i>Formatting</i> ►
IntelligentFormattingSheet Values: name of the worksheet Default value: EPMFormattingSheet	<i>Default Formatting Sheet</i>	► <i>Sheet Options</i> ► <i>Formatting</i> ►
IsNotAnEPMSheet Values: True or False	<i>EPM Worksheet</i> Caution - When set to True, the option is unchecked. - When set to False, the option is checked.	► <i>Sheet Options</i> ► <i>General</i> ►
KeepEliminate Values: True or False	<i>Keep/Exclude on Single Member</i>	► <i>User Options</i> ► <i>Navigation</i> ►
KeepFormulaAfterRefresh Values: True or False	<i>Keep Formula on Data</i>	► <i>Sheet Options</i> ► <i>General</i> ►
LanguageEdition Values: ISO 639-1 language codes For example, en stands for English	<i>Application Language</i>	► <i>User Options</i> ► <i>Others</i> ►
LanguageIsoCode Values: ISO 639-1 language codes For example, en stands for English	<i>Data Language</i>	► <i>User Options</i> ► <i>Navigation</i> ►
LinksIsLocal Values: True or False	<i>Workbook Location</i> options	► <i>User Options</i> ► <i>Others</i> ►
LocalAndCustomMemberRecognition	<i>Activate Local Member Recognition</i>	► <i>Sheet Options</i> ► <i>General</i> ►

in .xml	on the interface	where
Values: True or False		
LocalMemberAsCellPosition	<i>Use Position in Axis</i>	► Sheet Options ► General ►
Values: True or False		
MeasureDisplayFormat (deprecated)	(deprecated)	
MemberLinkColor	<i>Member Link Symbol Color</i> button	► User Options ► Navigation ►
Values: integer		
Default value: 0		
Use ARGB color values		
MemberSelectorPagingSize	<i>Members Displayed on Node Expansion in Member Selector</i>	► User Options ► Navigation ►
Values: integer		
Default value: 1000		
Enter the maximum number of members to display when expanding a node in the member selector		
NoMatchInMasterAxisValueReplacement	<i>Member not Found Default Value</i>	► Sheet Options ► Formatting ►
Values: text		
Default value: #NOMEMBERFOUND		
Enter the text to be displayed in the cells when a member is not found for the following reason.		
NumberFormat	<i>Number Format</i>	only in Microsoft PowerPoint and Word: ► Presentation Options ► Formatting ► and ► Document Options ► Formatting ►
Values: number		
Default value: 0.##		
OnTheFlyMemberRecognition	<i>Activate Member Recognition</i>	► Sheet Options ► General ►
Values: True or False		
OverrideEmptyValue	<i>Set Default Value in Empty Cell</i>	► Sheet Options ► Formatting ►
Values: True or False		
OverrideNoMatchInMasterAxisValue	<i>Set Default Value when Member not Found in Shared Axis</i>	► Sheet Options ► Formatting ►
Values: True or False		
OversizeQueryLimit	<i>cells</i> entry area	► User Options ► Others ►
Values: integer		
Default value: 0		

in .xml	on the interface	where
PauseRefresh Values: True or False	<i>Freeze Data Refresh</i>	► User Options ► Navigation ►
RefreshOnOpen Values: True or False	<i>Refresh Data in the Whole File when Opening it</i>	► Sheet Options ► Refresh ►
RefreshOnlyDataAfterSubmit Values: True or False	<i>Refresh only Data on "Save & Refresh Data"</i>	► User Options ► Others ►
RefreshOnlyExpandedMembers Values: True or False	<i>Refresh only Expanded and Inserted Members</i>	► User Options ► Navigation ►
RemoveWorksheetBeforeGeneration Values: True or False	<i>Remove EPM Worksheets Before Generation</i>	► User Options ► Others ►
ReportLinkColor (deprecated)	(deprecated)	
RestoreDynamicOnRefresh (in the <DefaultSheetOptions> section) Values: True or False	<i>Restore Dynamic Selection on Refresh after Navigation</i>	► Sheet Options ► Refresh ►
RepeatColumnHeaders Values: True or False	<i>Repeat Columns Headers</i>	► Sheet Options ► Formatting ►
RepeatRowHeaders Values: True or False	<i>Repeat Row Headers</i>	► Sheet Options ► Formatting ►
RestoreDynamicOnRefresh (not in the <DefaultSheetOptions> section: deprecated)		
RowAxisTotalRefresh	(deprecated)	
RowHeaderIndentation Values: • To indent children, enter SoRhiChildren • To indent parents, enter SoRhiParents • To specify no indentation, enter SoRhiNone	<i>Row Header Indentation options</i>	► Sheet Options ► Formatting ►
SheetLocked (do not use)	(do not use)	
SheetPwd (do not use)	(do not use)	
SheetProtectionOptions (do not use)	(do not use)	
ShowDataComments Values: True or False	<i>Show Source Data in Comments</i>	► Sheet Options ► Refresh ►

in .xml	on the interface	where
ShowCurrentViewPane Values: True or False	<i>Display EPM Context Bar</i>	► User Options ► Others ►
ShowCurrentViewVertical Values: True or False	<i>Display Context inside EPM Pane</i>	► User Options ► Others ►
ShowLocalConnections Values: True or False	<i>Display Local Connections</i>	► User Options ► Others ►
ShowReportEditionPane Values: True or False	<i>Display EPM Pane</i>	► User Options ► Others ►
ShowUnrecognizedMemberWarning Values: True or False	<i>Warn if Rows and Columns of Unrecognized Members Will be Kept</i>	► User Options ► Navigation ►
SmtpConfiguration/Address	<i>Server Address</i>	► User Options ► Server Configuration ►
SmtpConfiguration/AuthenticationType Values: • enter 0 for <i>Anonymous</i> • enter 1 for <i>Basic</i> • enter 2 for <i>NTLM</i>	<i>Authentication Type</i>	► User Options ► Server Configuration ►
SmtpConfiguration/EnableSsl Values: True or False	<i>Enable SSL</i>	► User Options ► Server Configuration ►
SmtpConfiguration/Port	<i>Server Port</i>	► User Options ► Server Configuration ►
SmtpConfiguration/User	<i>User Name</i>	► User Options ► Server Configuration ►
TopMostDialog Values: True or False If you enter True , any EPM add-in dialog box will be displayed on top of any other application window.	(no equivalent option in the EPM add-in interface)	
TotalsAtTheLeft Values: True or False	<i>Left and Right</i>	► Sheet Options ► General ► Totals Placement ►
TotalsAtTheTop Values: True or False	<i>Top and Bottom</i>	► Sheet Options ► General ► Totals Placement ►
UnauthorizedCellsText	<i>Unauthorized Cell Text</i>	► User Options ► Others ►

in .xml	on the interface	where
Values: text Enter the text to display in cells containing data that you are not authorized to view. Default value: #Unauthorized		
UnrecognizedMemberManagement Values: True or False	<i>Keep Rows and Columns of Unrecognized Members</i>	► User Options ► Navigation ►
UseAsInputForm Values: True or False	<i>Use as Input Form</i>	► Sheet Options ► General ►
UseCacheValidityDuration Values: True or False	<i>Clear Metadata Cache Frequency</i>	► User Options ► Navigation ►
UseCustomDataLinkColor Values: True or False	<i>Data Link Symbol Color</i>	► User Options ► Others ►
UseCustomMemberLinkColor Values: True or False	<i>Member Link Symbol Color</i>	► User Options ► Others ►
UseCustomReportLinkColor (deprecated)	(deprecated)	
UseEPMMemberIDInEVFormulas Values: True or False	<i>Use EPMMemberID in EPM Formulas</i>	► User Options ► Others ►
UseMetaDataCache Values: True or False	<i>Activate Metadata Cache</i>	► User Options ► Navigation ►
VisibilityCollaborationAll Values: True or False	<i>All Buttons</i>	► Command Display Options ► Collaboration Group ►
VisibilityDataAnalysisAll Values: True or False	<i>All Buttons</i>	► Command Display Options ► Data Analysis Group ►
VisibilityDataManager Values: True or False	<i>All Buttons</i>	► Command Display Options ► Data Manager Group ►
VisibilityReportAndAnalysisOpenSave Values: True or False	<i>Open/Save</i>	► Command Display Options ► Reports Group ►
VisibilitySubmitDataAll Values: True or False	<i>All Buttons</i>	► Command Display Options ► Data Input Group ►
VisibilityToolsCustomMembers Values: True or False	<i>Custom Members</i>	► Command Display Options ► Tools Group ►

in .xml	on the interface	where
VisibilityToolsOffLineMode Values: True or False	<i>Offline Mode</i>	▶ <i>Command Display Options</i> ▶ <i>Tools Group</i> ▶
VisibilityToolsQuickLinks Values: True or False	<i>Quick Links</i>	▶ <i>Command Display Options</i> ▶ <i>Tools Group</i> ▶
VisibilityUndo Values: True or False	<i>All Buttons</i>	▶ <i>Command Display Options</i> ▶ <i>Undo Group</i> ▶
VisualizeUnauthorizedCells Values: True or False	<i>Show Unauthorized Cell Text</i>	▶ <i>Sheet Options</i> ▶ <i>Refresh</i> ▶
WarmDynamicRefresh Values: True or False	<i>Warn if Navigation Will Break Dynamic Selection</i>	▶ <i>User Options</i> ▶ <i>Navigation</i> ▶
WarnIfQueryIsTooBig Values: True or False	<i>Warn if Report Exceeds</i>	▶ <i>User Options</i> ▶ <i>Others</i> ▶

8 EPM Add-in for Microsoft Office Technical Log Configuration

You configure the EPM Add-in technical log in the following files:

- [FPMXLClient.dll-ExcelLogConfig.xml](#) for Microsoft Excel
- [FPMXLClient.dll-PowerPointLogConfig.xml](#) for Microsoft PowerPoint
- [FPMXLClient.dll-WordLogConfig.xml](#) for Microsoft Word

The log categories are listed below:

Log Category	Explanation
FPMXLClient.AnalyzerOne	Default for the entry point of the product
FPMXLClient.AnalyzerOne.Automation	"Regular" EPMAAddIn automation operations
FPMXLClient.AnalyzerOne.EPMExcelClientDMAutomation	DataManager EPMAAddIn automation operations
FPMXLClient.AnalyzerOne.EPMExcelClientUIMacro	EPMAAddIn automation operations displaying a UI
FPMXLClient.AnalyzerOne.EVFunctions	EPMAAddIn Excel function operations
FPMXLClient.AnalyzerOne.ExcelEvents	Excel event handling operations
FPMXLClient.AutoUpdate	EPMAAddIn AutoUpdate operations
FPMXLClient.BOEIntegration	BOE communication operations
FPMXLClient.Books	BPC Publication operations
FPMXLClient.BPCProxy	Communication with BPC MS/NW default category
FPMXLClient.BPCProxy.Datamanager	Communication with BPC MS/NW Datamanager operations
FPMXLClient.BPCProxy.Dataservice	Communication with BPC MS/NW Dataservice operations
FPMXLClient.BPCProxy.Drillthrough	Communication with BPC MS/NW Drillthrough operations
FPMXLClient.BPCProxy.DynamicHierarchy	Communication with BPC MS/NW Dynamic hierarchy operations
FPMXLClient.BPCProxy.Filters	Communication with BPC MS/NW Filter operations
FPMXLClient.BPCProxy.Metadata	Communication with BPC MS/NW Metadata operations
FPMXLClient.BPCProxy.Session	Communication with BPC MS/NW Session operations

Log Category	Explanation
FPMXLClient.BPCProxy.User	Communication with BPC MS/NW User operations
FPMXLClient.BPCProxy.Workstatus	Communication with BPC MS/NW Workstatus operations
FPMXLClient.BPF	BPF related operations
FPMXLClient.Connection	Connection mechanism common operations
FPMXLClient.Connection.ADONET_ODBOConnection	Connection mechanism ADO.NET specific operations
FPMXLClient.Connection.BPC10Connection	Connection mechanism BPC10 operations
FPMXLClient.Connection.ODBOConnection	Connection mechanism ODBO operations
FPMXLClient.Connection.XMLAConnection	Connection mechanism XMLA operations
FPMXLClient.Datamanagement	Document data handling operations
FPMXLClient.DataManager	BPC DataManager operations
FPMXLClient.DataManager.TransformationFile	BPC DataManager Transformation/Conversion files operations
FPMXLClient.DynamicCharts.ChartObject	Charts related operations
FPMXLClient.EVDRE	EVDRE default category
FPMXLClient.EVDRE.Formatting	EVDRE formatting related operations
FPMXLClient.EVDRE.Suppress	EVDRE suppress related operations
FPMXLClient.FilesManagement	Document / File management operations
FPMXLClient.Flash	Flash related operations
FPMXLClient.Logon	Logon related operations
FPMXLClient.Migration	Migration default category
FPMXLClient.Persistence	Preference default category
FPMXLClient.Persistence.MetadataPersistenceManager	Cache related operation
FPMXLClient.ReportManagement	Report management related operation default category
FPMXLClient.REST	REST connection related operations
FPMXLClient.Ribbon	Uses EPM Add-In Office Ribbon related operation
FPMXLClient.UILayer	UI default category

Log Category	Explanation
FPMXLClient.UILayer.DataManager	UI DM related operations
Performance	Performance default category

9 EPM Add-in Report Size Limitations

The following Report Size Limitations apply to the EPM Add-in:

- The maximum memory that can be allocated to the Microsoft Excel 32-bit application is 1.2 GB. This means that :
 - The EPM Add-in report size is limited to 200,000 rows and two million cells
 - Each data source is limited to 2 million members: this amount of 2 million = sum (for each dimension, number of dimension members * number of hierarchies).

i Note

Both limits above do not apply for Microsoft Excel 64-bit application.

- The maximum memory that can be allocated to the Microsoft Excel application is 1.2 GB. This means that the EPM Add-in report size is limited to:
 - 200,000 rows and two million cells,
 - For 32-bit operating systems, 2 million members for each data source: this amount of 2 million = sum (for each dimension, number of dimension members * number of hierarchies).
- When importing data with the Data Manager, you cannot import more than 30,000 members at the same time.
- The maximum size of a file you can upload or download for the Data Manager is 800 MB. Beyond this size limit, we suggest that you upload or download files directly on the Planning and Consolidation server, that is without using the EPM add-in.
- An amount coming from BPC NetWeaver can have a maximum of 13 digits before the comma and seven digits after.
- You cannot have more than 20 EPM Add-in reports in a single Excel sheet.
- Cell-based formula parameters cannot exceed 255 characters (this is a Microsoft Excel limitation).
- In the *Insert Member* dialog box, the option at Selected Cell is not supported in a report axis containing more than 150000 rows.
- Performing a multi-selection when the Page-axis option is enabled increases the refresh time of the EPM Add-in, especially for large reports (since this calculation is performed on the client side and not on the server side.)
- Regarding asymmetric reports:
 - The number of dimension members in an axis before applying a *remove empty* or *zero values* option cannot exceed 150,000 rows or columns.
 - When the *Force Symmetric Refresh for Large Asymmetric Axis* option is enabled, the number of members in each nested dimension in a report axis, when multiplied by themselves and before applying the *remove empty* or *zero values* option, cannot exceed 9,223,372,036,854,775,807.
 - If the excluded members feature is used in this report axis, the *Force Symmetric Refresh for Large Asymmetric Axis* option cannot be used and the limit of 150,000 rows or columns is applied.

10 General Limitations

Cell Functions

The following cell functions have to be used for ad hoc data. They must not be used instead of, or as, an EPM report. If a performance issue occurs when using the cell functions, please design an EPM report instead:

- EPMRetrieveData
- EPMScaleData
- EPMSaveData
- EPMSaveDataOnly
- EVGET
- EVGTS
- EVSND

Calculation

To ensure calculation accuracy in the EPM add-in, please do not use the Microsoft Excel “manual calculation” feature.

If you use manual calculation, we cannot guarantee the data integrity.

Microsoft Excel, Word and PowerPoint Embedded Mode

The EPM add-in does not support Microsoft Excel, Word and PowerPoint in embedded mode.

11 Disabling EPM Add-in for Faster Microsoft Office Applications Load Time

Context

You can disable the EPM Add-in for Microsoft Office so that the Microsoft Office applications Excel, Word or PowerPoint open faster.

This procedure contains two main steps:

- Create a .bat file to remove two registry keys that are created by default by the setup.
- Use the [UnloadEPMAddin.reg](#) or the [LoadEPMAddin.reg](#) files, depending on whether you want to disable or enable the EPM Add-in.

Below is the detailed procedure:

Procedure

1. Close all Microsoft Office applications that might be open: Microsoft Excel, Word PowerPoint and Outlook.
2. Create and execute the following .bat file:

```
echo off
REM All Users
set var=
for /F "tokens=3" %i in ('REG QUERY "HKLM\SOFTWARE\Microsoft\Office\Excel\AddIns\FPMXLClient.Connect" /v Description') do set var=%i
if not "%var%"==" " REG DELETE HKLM\SOFTWARE\Microsoft\Office\Excel\AddIns\FPMXLClient.Connect /f
set var=
for /F "tokens=3" %i in ('REG QUERY "HKLM\SOFTWARE\Microsoft\Office\Word\AddIns\FPMXLClient.Connect" /v Description') do set var=%i
if not "%var%"==" " REG DELETE HKLM\SOFTWARE\Microsoft\Office\Word\AddIns\FPMXLClient.Connect /f
set var=
for /F "tokens=3" %i in ('REG QUERY "HKLM\SOFTWARE\Microsoft\Office\PowerPoint\AddIns\FPMXLClient.Connect" /v Description') do set var=%i
if not "%var%"==" " REG DELETE HKLM\SOFTWARE\Microsoft\Office\PowerPoint\AddIns\FPMXLClient.Connect /f
set var=
for /F "tokens=3" %i in ('REG QUERY "HKLM\SOFTWARE\Wow6432Node\Microsoft\Office\Excel\AddIns\FPMXLClient.Connect" /v Description') do set var=%i
if not "%var%"==" " REG DELETE HKLM\SOFTWARE\Wow6432Node\Microsoft\Office\Excel\AddIns\FPMXLClient.Connect /f
set var=
for /F "tokens=3" %i in ('REG QUERY "HKLM\SOFTWARE\Wow6432Node\Microsoft\Office\Word\AddIns\FPMXLClient.Connect" /v Description') do set var=%i
if not "%var%"==" " REG DELETE HKLM\SOFTWARE\Wow6432Node\Microsoft\Office\Word\AddIns\FPMXLClient.Connect /f
set var=
for /F "tokens=3" %i in ('REG QUERY "HKLM\SOFTWARE\Wow6432Node\Microsoft\Office\PowerPoint\AddIns\FPMXLClient.Connect" /v Description') do set var=%i
if not "%var%"==" " REG DELETE HKLM\SOFTWARE\Wow6432Node\Microsoft\Office\PowerPoint\AddIns\FPMXLClient.Connect /f
```

i Note

These keys allow you to execute the EPM Add-in for Microsoft Office for all users on this machine. Once the keys are deleted, the EPM Add-in can no longer be executed on this machine.

3. To enable the EPM Add-in, execute the [LoadEPMAddin.reg](#) file.
The EPM tab in the Excel, Word or PowerPoint application becomes available for the current user only.
4. To disable the EPM Add-in, execute the [UnLoadEPMAddin.reg](#) file.

This file is located in the EPM Add-in installation directory. For example, in `C:\Program Files (x86)\SAP BusinessObjects\EPM Add-In`.

The EPM tab is no longer available for the current user only in the Microsoft Excel, Word or PowerPoint ribbon.

12 Connecting to Untrusted Servers

For test or debug purposes, the administrator can specify that a client machine can access any server, even the ones that are defined in the untrusted zone.

To enable a client machine to access any server, use the key "TrustUntrustedServerCertificates" located in the file FPMXLClient.dll.config and set it to "true". By default, the key is set to "false", meaning that the client machine can only access the servers that are defined in the trusted zone.

This applies to all types of connection that include "https" in the server address.

13 Troubleshooting

EPM Add-in fails to uninstall

If your computer software security policy does not allow you to remove programs from the Microsoft Windows Control Panel, you cannot uninstall the EPM add-in using the Control Panel. The following message is displayed when trying to uninstall the EPM add-in: "The system administrator has set policies to prevent this installation".

In order to uninstall the EPM add-in, the system administrator must set the computer software security policy accordingly.

Otherwise, you must do the following:

1. Run a windows command using "Run as administrator".
2. Enter the following command line: `msiexec.exe /x {2C342070-8569-41F7-9DB4-6FF7D63AACA2}`

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