

# **Installation Guide SAP BW Precalculation Service for Microsoft Excel**

**7.40**

**Version 1.0.0**

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# Contents

<b>1 Introduction .....</b>	<b>5</b>
<b>1.1 Before You Start .....</b>	<b>5</b>
<b>1.1.1 SAP Notes for the Installation .....</b>	<b>5</b>
<b>1.1.2 Information Available in SAP Service Marketplace .....</b>	<b>5</b>
<b>2 Preparation .....</b>	<b>6</b>
<b>2.1 Hardware and Software Requirements.....</b>	<b>6</b>
<b>2.2 Installation Preparations.....</b>	<b>6</b>
<b>3 Installation .....</b>	<b>7</b>
<b>3.1 Installing the Service on Windows.....</b>	<b>7</b>
<b>4 Post-Installation .....</b>	<b>9</b>
<b>4.1 Starting the Service .....</b>	<b>9</b>
<b>4.2 Using the Precalculation Service through the Portal .....</b>	<b>14</b>
<b>5 Additional Information .....</b>	<b>15</b>
<b>6 Upgrading the Service (7.x to 7.40).....</b>	<b>16</b>
<b>7 Removing the Service .....</b>	<b>17</b>
<b>8 Installation Check.....</b>	<b>17</b>

# 1 Introduction

## 1.1 Before You Start

The following sections provide information about:

- SAP Notes for the Installation
- Information Available on SAP Service Marketplace

### 1.1.1 SAP Notes for the Installation

You **must** read the following SAP Notes **before** you start the installation. These SAP Notes contain the most recent information on the installation, as well as corrections to the installation documentation.

Make sure that you have the up-to-date version of each SAP Note, which you can find in the *SAP Service Marketplace* at the Internet address:

**`service.sap.com/notes`**.

SAP Note Number	Title
1995531	BI 7.x tools in 740 - General Information & Limitations
1145589	BW/BI 7.X PreCalculation Service delivery schedule
1995537	BW 7.X Precalculation in 740 - General Info. & Limitations

### 1.1.2 Information Available in SAP Service Marketplace

Information on the following areas is available in the SAP Service Marketplace.

Description	Internet Address
SAP Notes	<b><code>service.sap.com/notes</code></b>
Released platforms	<b><code>service.sap.com/platforms</code></b>
Wiki	<a href="http://wiki.sdn.sap.com/wiki/x/CYe-Eg">http://wiki.sdn.sap.com/wiki/x/CYe-Eg</a>





Make sure that you read [Installation – Step by Step](#) before you start your installation

## 2 Preparation

### 2.1 Hardware and Software Requirements

The host machine must meet the following requirements:

SAP Note 1995532 - BI 7.x tools in 740 - HW\SW requirements

Requirement Type	Requirement
Hardware requirements	<ul style="list-style-type: none"><li>Your system should meet all requirements for Windows XP or Windows Servers (in case of Servers).</li></ul>
Software requirements	<p>The following softwares are supported:</p> <ul style="list-style-type: none"><li>Vista ,7 (32/64 BIT) , 8 (32/64 BIT), 8.1 (32/64 BIT)</li><li>Windows Server 2003 (32/64 BIT)</li><li>Windows Server 2008 (32/64 BIT)</li><li>Windows Server 2008 R2</li><li>Microsoft .Net Framework 2.0</li><li>Microsoft Excel 2003 or higher</li></ul> <p> Ensure that the installation source is available for the first precalculation, because Excel must be configured for the system user. More information is available in Microsoft Knowledge Base Article 257757.</p> <ul style="list-style-type: none"><li>SAP GUI 7.40</li></ul> <p> Precalculation may fail in case of Windows servers with Microsoft Excel 2007. For more details check note 1619110</p>

### 2.2 Installation Preparations

Perform the following prerequisite steps:

- Install Microsoft .Net Framework 2.0
- Install BW Frontend 7.X with SAP GUI 7.40. SAP is not delivering BW 3.5 Precalculation Server anymore. Please deinstall BW 3.5 Precalculation Server, if it is present in the system.
- Make sure to deinstall any previous installation of 7.X precalculation server. To know more about how to deinstall the server, please refer chapter 7.

## 3 Installation

### 3.1 Installing the Service on Windows

#### Use

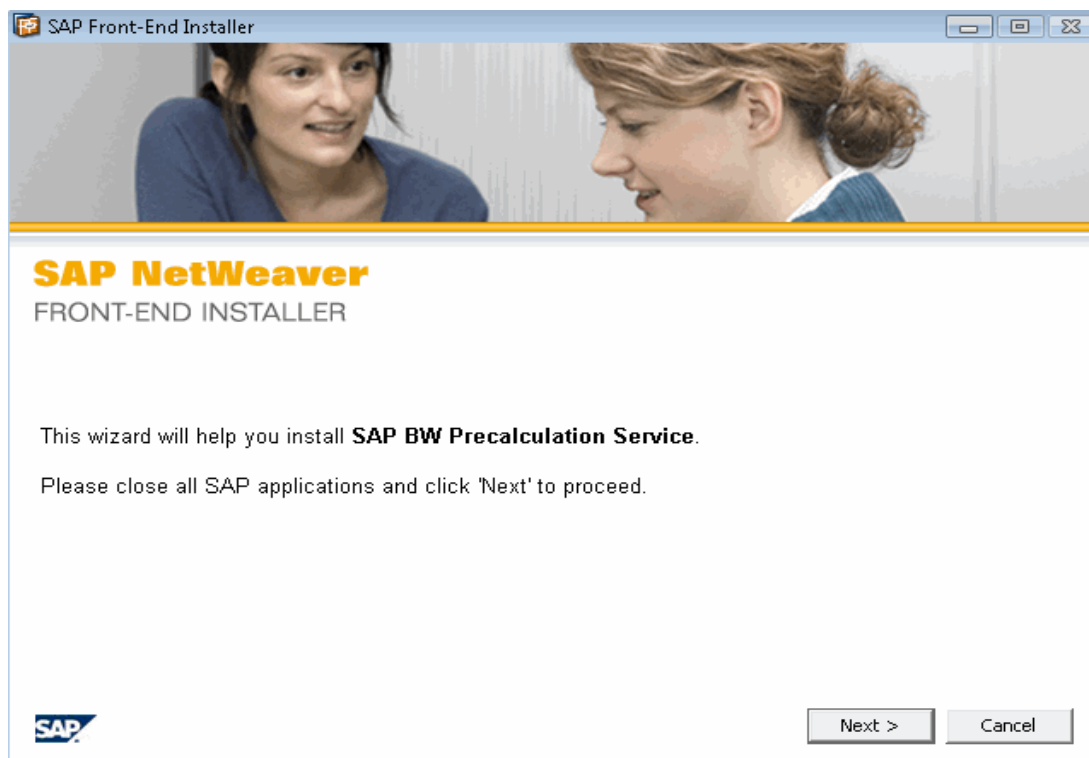
This section describes how to install the SAP component on released Windows platforms.

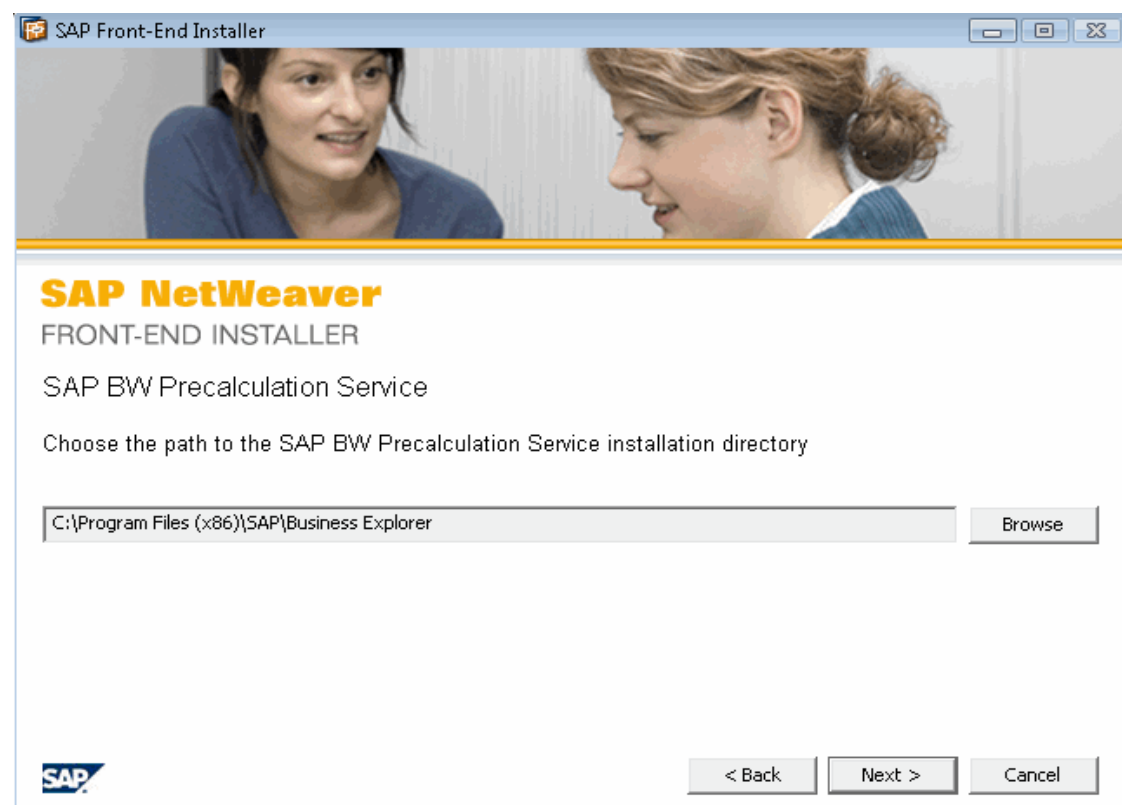
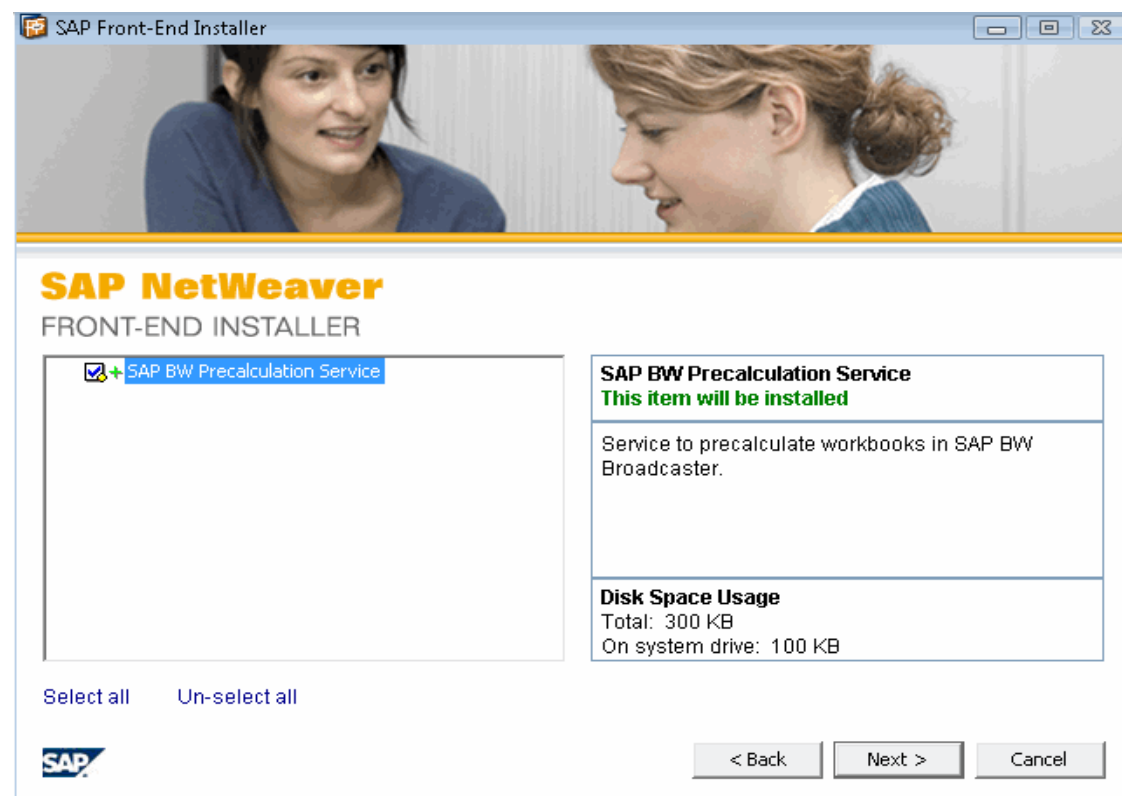
#### Prerequisites

Make sure that the .Net Framework 2.0 is installed on the destination system. Also a SAPGUI 740 and BW Frontend 7.X must be installed. Please go through Additional Information section to decide on installation decisions.

#### Procedure

1. Log on to your host as user with administration rights.
2. Start the *SapBiPcsSetup.exe* from NetWeaver Presentation DVD.
3. Choose *Next* to run through the screens of the wizard and finish the installation:



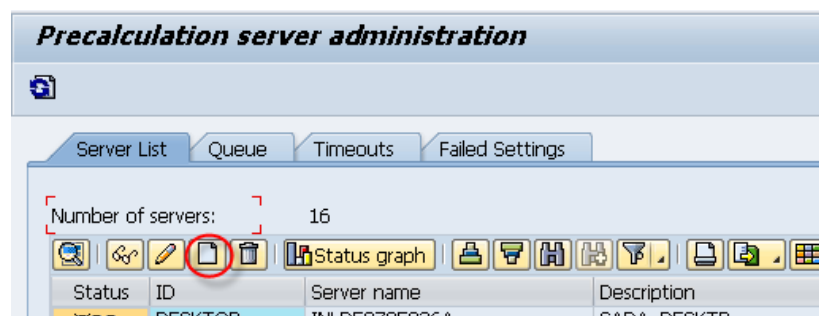




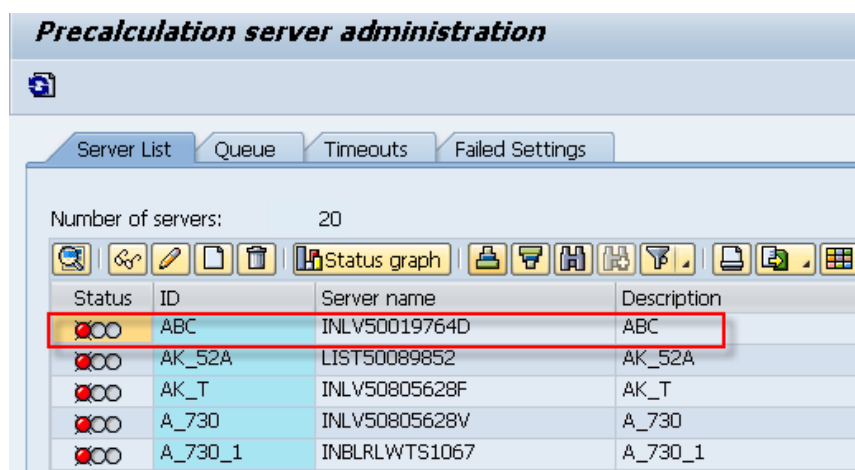
## 4 Post-Installation

### 4.1 Starting the Service

1. Log on to the BW backend from the system where you have installed the software, call transaction **RSPRECALADMIN**. It is still possible to use transaction RSPRECADMIN for precalculation administration. Perform the following steps:
  - a. Delete all previous 'instances of precalculation server' created on the same system. Make sure that note 1691677 is available in the system before deletion.
  - b. Choose the *Create* pushbutton. The following screen will appear to provide the details:



- c. Enter a name for the server. The maximum length is 10 Chars. Click on Save button. The server should appear on the screen. The server will be *Offline* as shown below, since the **service** is not started:



2. Please carry out an installation check at this point to confirm that installation was correct.  
Run the sapbexc.xla tool available with the DVD.

- a. There should be no RED flags. Also check the 2nd sheet 'Result PreCalc'. Please note that the below screenshot is just for example purpose.

	A	B	C	D
218				
219	Filename	File Version on PC	File Version delivered	Path
220				
221	<b>PreCalc Server Components</b>			
222	BEXPreCalcInstance.dll	7200.3.900.46	7200.3.500.46	C:\Program Files (x86)\SAP\Business Exp
223	BEXPreCalcRfcServer.dll	7200.3.900.44	7200.3.500.44	C:\Program Files (x86)\SAP\Business Exp
224	BEXPreCalcWindowsService.exe	7200.3.900.43	7200.3.500.43	C:\Program Files (x86)\SAP\Business Exp
225	BEXPreCalcWindowsServiceMulti.exe	7200.3.900.43	7200.3.500.43	C:\Program Files (x86)\SAP\Business Exp
226	BEXPreCalcWorker.exe	7200.3.900.44	7200.3.500.43	C:\Program Files (x86)\SAP\Business Exp
227	BEXPreCalcConsoleDispatcher.exe	7200.3.900.43	7200.3.500.43	C:\Program Files (x86)\SAP\Business Exp
228	BEXPreCalcConsoleWrapper.exe	7200.3.900.43	7200.3.500.43	C:\Program Files (x86)\SAP\Business Exp
229	SAP Connector.dll	2.0.0.26	2.0.0.26	C:\Program Files (x86)\SAP\Business Exp

- b. Following block shows the installed Precalculation Server instances. As recommend by SAP. The example shows 3 instances. If your result is empty then your installation is not correct.

If you see a hostname (eg. Bwp1.sap.com) instead if IPAddress(eg xxx.xxx.xxx) in column GWHOST(IP) implement note 1315171 and repeat step1

	A	B	C	D
246				
247	<b>PreCalc-Servers</b>	<b>GWHOST (IP)</b>	<b>GWSERVICE (Port)</b>	<b>PROGID</b>
248	OS_13/01_1	10.66.22.49	3369	BIPREC50F658CD47C1371CE1000000A
249	OS_13/01_2	10.66.22.49	3369	BIPREC50F6591A47C1371CE1000000A
250	OS_13/01_3	10.66.22.49	3369	BIPREC50F6594A47C1371CE1000000A
251				

- c. Go to SM59 and display the detail of the RFC destination under TCP/IP connection for the precalculation instance. Please compare the properties created in RFC destination with the information obtained in the installation

check for all the precalculation instances created in this system. In case you see any difference please repeat the step 1.

**RFC Destination PREC\_OS\_13/01\_1**

Connection Test Unicode Test

RFC Destination: PREC\_OS\_13/01\_1

Connection Type: T TCP/IP Connection Description

Description

Description 1: Generated RFC Destination for Precalculation

Description 2:

Description 3:

Administration Technical Settings Logon & Security MDMP & Unicode Special Op

Activation Type

☐ Start on Application Server ☒ Registered Server Program

☐ Start on Explicit Host

☐ Start on Front-End Work Station

Registered Server Program

Program ID: BIPREC50F658CD47C1371CE10000000A

Start Type of External Program

☒ Default Gateway Value

☐ Remote Execution

☐ Remote Shell

☐ Secure Shell

CPI-C Timeout

☒ Default Gateway Value

☐ Specify Timeout: 60 Defined Value in Seconds

Gateway Options

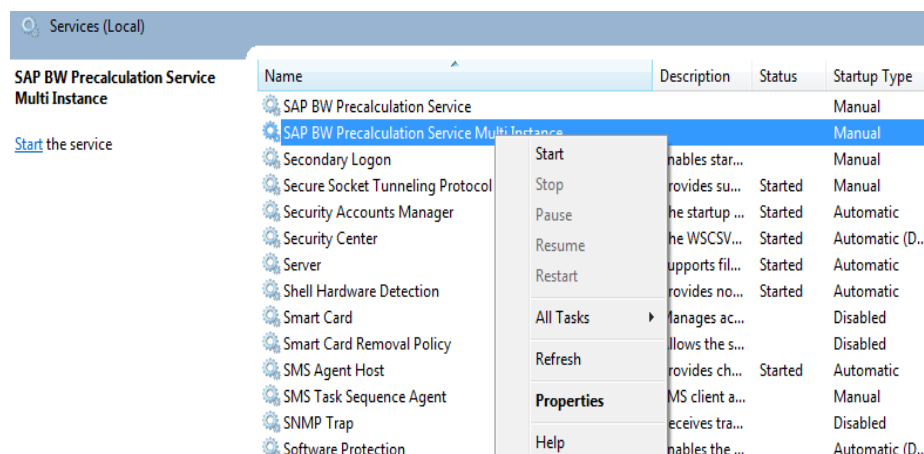
Gateway Host: 10.66.22.49

Gateway service: 3369

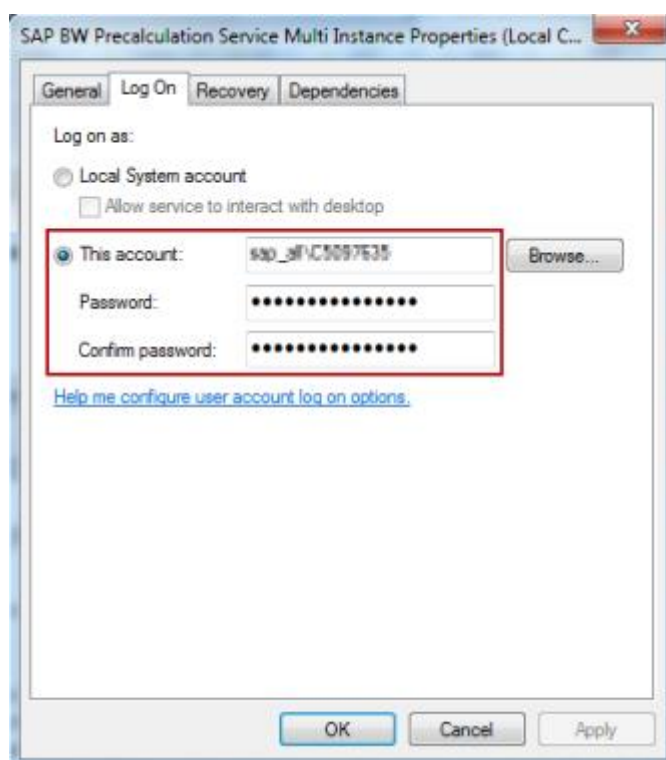
Delete

3. To start the service, go to the *Services* window of your operating system using `services.msc` in the *Run* command. Perform the following steps:

- a. Search for the service called SAP BW Precalculation Service Multi Instance ([Why Multi Instance?](#)):



- b. Open Properties dialog box double click on the service. In the *Log On* tab, select the radio button 'This Account' and provide the Logon details. Make sure that the "This account user" has full administrator rights. Do not run SAP BW Precalculation Service Multi-Instance with "Local system account"! Click on OK button.



- c. Right click on "SAP BW Precalculation Service Multi Instance" and choose "Start".

Issues you may encounter when starting the Precalculation Service:

- If you get below mentioned error then set/change the parameter 'ServicesPipeTimeout' to 180000 as mentioned in 1705387.




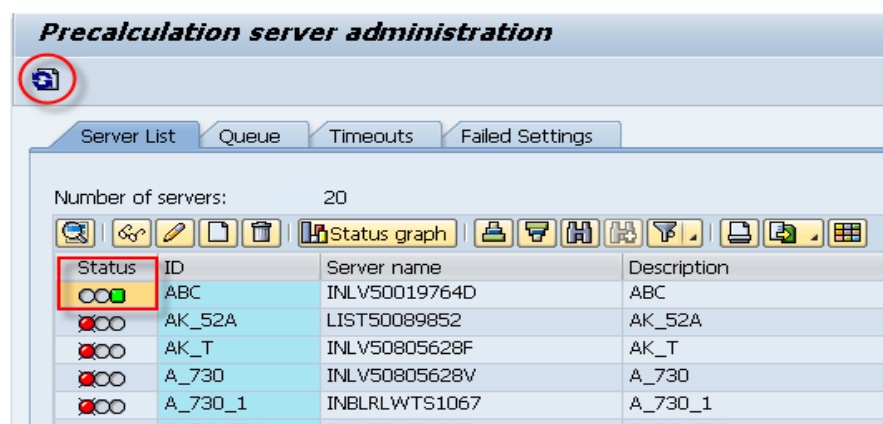
- If you get warning message *"The SAP BW Precalculation Service MultiInstance service on local computer started and then stopped. Some services stop automatically if they have no work to do, for example, Performance Logs and Alerts service."* follow the steps mentioned below:

Start → Control Panel → System and Security → Change User Account Control Settings, Set to *Low*.

Restart the System.

After performing the above steps, delete all the existing Precalculation server instances in the transaction *"RSPRECALCADMIN"* and recreate the Instance.

- After you refresh the view , the status display for the precalculation server in RSPRECALCADMIN displays a green traffic light. The precalculation server is now ready for use.



You can double click on the server (eg: ABC) to access the test execution screen. You can use this program only for testing the Precalculation Server.

**Display precalculation server**

Server data

Server name	INLV50019764D
Description	ABC
ID	ABC
Status	ON
Current Instances	10

Display statistics    Display log    **Test server**

**Test Precalculation Server**

Broadcasting Properties

Broadcast Setting	
Precalculation Server	ABC

Test Settings

<input type="checkbox"/> Keep Distributor
<input checked="" type="checkbox"/> Download File

Please use the program RSRD\_BROADCAST\_BATCH/  
RSRD\_BROADCAST\_STARTER(i.e.txn: RSRD\_START) for detailed testing  
and productive usage)

## 4.2 Using the Precalculation Service through the Portal

1. Log on to the portal of the system where you have created the server.
2. Go to *Buisness Intelligence* → *BEx Broadcaster* and select *Workbook*.
3. Create a new setting by selecting the target, and select the server you have created, as shown in the figure below. Use the option “Special Server” only for testing and once the test was successful it is recommended to use the option “Select Automatically” for load balancing. Make sure that the other instances are pointing to the current precalculation

service that you have installed now OR other precalculation service in another system which you have already tested.

The screenshot shows the 'Settings for Object Type' dialog box for 'Workbook'. The 'Setting New setting' tab is active. Under the 'Workbook Precalculation' section, the 'Precalculation Server' is set to 'Special Server' (selected with a radio button). The 'Server' dropdown menu shows 'ABC' selected, which is circled in red. Other options include 'Select Automatically' and 'As ZIP File'. At the bottom, there are buttons for 'Save', 'Save as...', 'Check', 'Schedule', 'Execute', and 'Close'.

4. Choose the *Execute* pushbutton.

## 5 Additional Information

- We recommend registering minimum one (Maximum 3) precalculation instances for **one** BW system.
- Please do not register precalculation instances from different BW system to the same Precalculation Server. **In other words do not configure Precalculation Server to be used by different BW system.**
- You should assign a specific user with **full Administrative right** to run the **SAP BW Precalculation Service Multi Instance**. Do not use 'Log on as' **LocalSystem** when using **SAP BW Precalculation Service Multi Instance**.
- Please use SAP BW Precalculation Service Multi-Instance with logon. Despite the recommendation of using SAP BW Precalculation Service Multi-Instance, if you want to use the windows service SAP BW Precalculation Service, then use with "Local system account" and the option "Allow service to interact with desktop". Again, it is recommended to use SAP BW Precalculation Service Multi Instance as it is more stable. If you want to use only one Precalculation Server Instance please use SAP BW Precalculation Service Multi-Instance and create only one Precalculation Server in Tx RSPRECALADMIN - this way should be preferred instead using SAP BW Precalculation Service.



- Start only one service at a time: SAP BW Precalculation Service Multi-Instance OR SAP BW Precalculation Service.

- **These parameters MUST be set in your BW system.**

RSADMIN parameter "BWPREC\_USE\_NEW\_LOAD" with value "X" as mentioned in note [1275837](#) for using SAP BW Precalculation Service Multi Instance. You can check this via Tx SE16 in table RSADMIN. If missing please use report SAP\_RSADMIN\_MAINTAIN via Tx SE38 to set the parameter in table RSADMIN.

Instance profile parameter "SAPLOCALHOSTFULL" with the full qualified host name of the server (= host name with appended domain name). Make sure that this parameter is set correctly for each ABAP application server:

start Tx SM51

double click the instance

start Tx RZ11

enter Param. Name "SAPLOCALHOSTFULL" and click "Display"

## 6 Upgrading the Service (7.x to 7.40)

Before you upgrade, you must first stop the SAP BW Precalculation Service Multi Instance/SAP BW Precalculation Service and uninstall the old version of the service.

### Stopping the SAP BW Precalculation Service

1. Choose *Start* → *Settings* → *Control Panel* → *Administrative Tools* → *Computer Management* → *Services and Applications* → *Services*.
2. Select the *SAP BW Precalculation Service Multi Instance/SAP BW Precalculation Service* and choose *Stop* from the context menu.

This stops the service.



If messages appear while you are stopping the service, proceed as follows:

1. Select *Terminal Service* and choose *Properties* from the context menu.
2. Change the *Startup Type* to *Manual*.
3. Choose *Apply* and then *OK*.
4. Select *SAP BW Precalculation Service Multi Instance* and choose *Properties* from the context menu.
5. Change the *Startup Type* to *Manual*.
6. Select *Apply* and then *OK*.
7. Restart the computer. This stops the SAP BW Precalculation Service.



The status display, which displays *Started* when the service has been started, will be blank once the service has been stopped successfully. Now you can start to remove the program.

### Removing the Old Version

1. Choose *Start* → *Settings* → *Control Panel* → *Add or Remove Programs* resp. *Programs and Features* (depending on the version of the operating system).
2. Choose *SAP BW Precalculation Service*.
3. Choose *Remove* resp. *Uninstall* (depending on the version of the operating system).
4. Once you have removed the program, restart your computer.

### Installing the New Version


1. Execute the *SapBiPcsSetup.exe* file from the NetWeaver Presentation DVD.
2. Follow the installation steps as described in chapter 3 and complete installation.

## 7 Removing the Service

To remove the SAP BW Precalculation Service, perform the following steps:

1. Log on to your host as a user with administration rights.
2. Start the *SapBiPcsSetup.exe* program from the DVD or go to the control panel → *Add/Remove programs* → *SAP BW Precalculation Service*. The welcome screen of the SAP GUI Setup wizard appears.
3. Select option *Uninstall*.
4. Confirm with *Finish*.

## 8 Installation Check

1. Any error/info messages about the SAP BW Precalculation Service are displayed in the management console of the operating system (*Start* → *Settings* → *Control Panel* → *Administrative Tools* → *Computer Management*) under *System Tools* → *Event Viewer*.
2. You can also select the server in the administration of the precalculation server (transaction SPRO: SAP Reference IMG → SAP NetWeaver → Business Intelligence → Settings for Reporting and Analysis → Settings for Information Broadcasting → Administrate Precalculation Server). Use  Information on the Server to display the current instances and the status of the server (online, offline). You can also display or delete the front-end log. The front-end log is a log file in which errors that have occurred are displayed.

You can also check BExPrecalcLog.txt file. The file is 'normally' located at C:\Users\<Precalculation Service - user>\AppData\Local\Temp\BW\Analyzer\Traces.

3. On Precalculation Server please run the installation check as per note [1229206](#).
  - Open the file SAPBExC-Rxx.xla contained in the attachment to this note [1229206](#).
  - Select 1st worksheet "PC Check" and press button "Start" to check the BW Front-End installation.
  - There should be no **RED** errors. Also check the 2nd sheet 'Result PreCalc'
  - Click here to understand the result file: [BEx Front-End Installation Check](#)