


# Deltek Maconomy® 2.4.5

## BPM Software Upgrade Guide

**September 20, 2019**



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## Overview

Welcome to the BPM Software Upgrade Guide. This document gives you step-by-step instructions for the process of upgrading the software used for Business Performance Management. This includes the following:

### BusinessObjects Business Intelligence Platform (Reporting)

- Upgrading BO Installation from BO 3.1 to BI 4.2
- Upgrading BO installation from BI 4.1 to 4.2
- Installing BPM Package
- Backing Up and Restoring CMS
- Backing Up and Restoring BPM Packages
- Migrating universes
- Remapping documents

Additionally, we include the [BI 4.2 Known Issues](#) section to flag known issues regarding the install and upgrade process and BI 4.2, and provide workaround information.

**Note:** You must install Patch Update 05 for both the client and server.

### Pentaho Data Integration (Analysis)

- Upgrading to Pentaho 8.2-GA Software
- Migrating from database repository to server repository
- Upgrading Data Warehouse
- Upgrading custom jobs and transformations
- Troubleshooting Pentaho Server installation

# Upgrade SAP Business Objects 3.1 to 4.2

This section describes how to upgrade SAP Business Objects (BO) 3.1 to Business Intelligence (BI) Platform version 4.2 SP05 Patch 05, which is needed for the latest version of BPM reports.

## Before You Begin

Before you begin, review requirements, including licenses, as well as other prerequisites.

## Prerequisites

- Ensure that BO XI 3.1 is completely uninstalled (Server + Client Tools)

**Warning:** Only systems with BO XI 3.1 shall have the current installation uninstalled.

- Perform a full Business Intelligence Archive Resource (BIAR) export of content from BO XI 3.1. Alternatively, import from another Live system (that is, Live-to-Live promotion)

## Installation Files

Files of the installers mentioned above are located at:

File	Path
4.2 SP05 Full for Server	<a href="#">\\d\\applications\\Released\\BPM\\Business Objects\\BO BI 4.2\\4.2 SP 5\\Windows\\Server\\Full\\</a>
4.2 SP05 Full for Client Tools	<a href="#">\\d\\applications\\Released\\BPM\\Business Objects\\BO BI 4.2\\4.2 SP 5\\Windows\\Client\\Full\\</a>
4.2 SP05 Full (Linux)	<a href="#">\\d\\applications\\Released\\BPM\\Business Objects\\BO BI 4.2\\4.2 SP 5\\Linux\\Server\\Full\\</a>
4.2 SP05 Patch 5 Update for Server	<a href="#">\\d\\applications\\Released\\BPM\\Business Objects\\BO BI 4.2\\4.2 SP 5\\Windows\\Server\\Patch 5\\</a>
4.2 SP05 Patch 5 Update for Client Tools	<a href="#">\\d\\applications\\Released\\BPM\\Business Objects\\BO BI 4.2\\4.2 SP 5\\Windows\\Client\\Patch 5\\</a>
4.2 SP05 Patch 5 Update (Linux)	<a href="#">\\d\\applications\\Released\\BPM\\Business Objects\\BO BI 4.2\\4.2 SP 5\\Linux\\Server\\Patch 5\\</a>

## Licenses

SAP Business Objects installation and Pentaho Installation require license keys and license files, respectively. All licenses can be requested by contacting Deltek Distribution at: [HQ-Distribution@deltek.com](mailto:HQ-Distribution@deltek.com).

## Create and Import BIAR Files

To create and import BIAR files, follow these steps:

1. In BO 3.1, create a BIAR file containing all universes and documents.
2. In BI 4.2, import BIAR using *Upgrade Management Tool*.

**Tip:** For instructions on how to use *Upgrade Management Tool*, see

- [Upgrade Management Tool instructional video](#)

## Install BI 4.2 SP5 Patch 05

To install patch 05 for SAP Business Objects 4.2 SP5:

1. Copy SAP Business Objects Business Intelligence platform 4.2 SP05 Patch 05 update installer to the desired folder.
2. Run the installer file. This extracts the contents of the files to a temporary folder and automatically launch the installer.
3. Accept the License agreement then click **Next**.
4. Enter CMS Name and Port of the Business Objects 4.2 SP05.
5. Enter the Administrator password of the CMS then click **Next**.
6. Select **Standard Installation**.
7. Select **Deploy web applications now**.
8. Select **Finish**.

**Note:** For further details, see official SAP documentation:

<https://help.sap.com/viewer/985b023e35754728a151792b367f4536/4.2.5/en-US>

## Install Client Tools

9. Copy SAP Business Objects Business Intelligence platform 4.2 SP05 Patch 05 Client Tools update installer to the desired folder.
10. Run the installer file. This extracts the contents of the files to a temporary folder and automatically launch the installer.
11. Accept the License agreement then click **Next**.
12. On the **Select Language Packs** page, select additional languages to install from the list.
13. On the **Configure Destination Folder** page, review the destination folder shown.
14. On the **Select Features** page, select the features to install from the list.
15. Select **Start Installation**.

When you complete the steps in this section, proceed to the [Install Standard BPM Package section](#).

**Note:** For further details, see official SAP documentation:

<https://help.sap.com/viewer/df8899896b364f6c880112f52e4d06c8/4.2.5/en-US>

## Configure Date Formats with an Oracle Database

Business Objects needs to know the Oracle database's configuration of date formats when it constructs and issues SQL statements with where clauses that contain dates. You configure this by doing the following steps:

1. Open the **oracle.prm** file, which is located in the following folder:

```
<BO Installation Directory >\BusinessObjects Enterprise  
12.0\win32_x86\dataAccess\connectionServer\oracle
```

2. Locate the following lines in the file:

```
<Parameter Name="USER_INPUT_DATE_FORMAT">'dd-MM-yy  
HH:mm:ss'</Parameter>  
  
<Parameter Name="DATABASE_DATE_FORMAT">DD-MM-YY HH24:MI:SS</Parameter>
```

3. Change the preceding lines to the following:

```
<Parameter Name="USER_INPUT_DATE_FORMAT">'dd-MMM-yy'</Parameter>  
  
<Parameter Name="DATABASE_DATE_FORMAT">DD-MON-YY</Parameter>
```

4. Save the file and restart Oracle for the configuration to take effect.



## Upgrade SAP BO 4.1 to BI 4.2

This section describes how to upgrade SAP BO Platform 4.1 SP07 to BI 4.2 SP05 Patch 05, which is needed for the latest version of BPM reports.

### Before You Begin

Before you begin, review requirements, including licenses, as well as other prerequisites.

### Prerequisites

- Existing installation of SAP Business Objects Business Intelligence platform 4.1 SP07

**Warning:** Succeeding versions of SAP BO (BI 4.x and above) will not be uninstalled in the server where the upgrade will be in place.

- SAP Business Objects Business Intelligence platform 4.2 SP05 upgrade installer for Server and Client Tools
- SAP Business Objects Business Intelligence platform 4.2 SP05 Patch 05 update installer for Server and Client Tools
- SAP Business Objects Business Intelligence platform 4.2 License Key

### Installation Files

Files of the installers mentioned above are located at:

File	Path
4.2 SP05 Upgrade for Server	<a href="\\d\\applications\\Released\\BPM\\Business Objects\\BO BI 4.2\\4.2 SP 5\\Windows\\Server\\Upgrade\\">\\d\\applications\\Released\\BPM\\Business Objects\\BO BI 4.2\\4.2 SP 5\\Windows\\Server\\Upgrade\\</a>
4.2 SP05 Upgrade for Client Tools	<a href="\\d\\applications\\Released\\BPM\\Business Objects\\BO BI 4.2\\4.2 SP 5\\Windows\\Client\\Upgrade\\">\\d\\applications\\Released\\BPM\\Business Objects\\BO BI 4.2\\4.2 SP 5\\Windows\\Client\\Upgrade\\</a>
4.2 SP05 Upgrade (Linux)	<a href="\\d\\applications\\Released\\BPM\\Business Objects\\BO BI 4.2\\4.2 SP 5\\Linux\\Server\\Upgrade\\">\\d\\applications\\Released\\BPM\\Business Objects\\BO BI 4.2\\4.2 SP 5\\Linux\\Server\\Upgrade\\</a>
4.2 SP05 Patch 5 Update for Server	<a href="\\d\\applications\\Released\\BPM\\Business Objects\\BO BI 4.2\\4.2 SP 5\\Windows\\Server\\Patch 5\\">\\d\\applications\\Released\\BPM\\Business Objects\\BO BI 4.2\\4.2 SP 5\\Windows\\Server\\Patch 5\\</a>
4.2 SP05 Patch 5 Update for Client Tools	<a href="\\d\\applications\\Released\\BPM\\Business Objects\\BO BI 4.2\\4.2 SP 5\\Windows\\Client\\Patch 5\\">\\d\\applications\\Released\\BPM\\Business Objects\\BO BI 4.2\\4.2 SP 5\\Windows\\Client\\Patch 5\\</a>
4.2 SP05 Patch 5 Update (Linux)	<a href="\\d\\applications\\Released\\BPM\\Business Objects\\BO BI 4.2\\4.2 SP 5\\Linux\\Server\\Patch 5\\">\\d\\applications\\Released\\BPM\\Business Objects\\BO BI 4.2\\4.2 SP 5\\Linux\\Server\\Patch 5\\</a>

## Licenses

SAP Business Objects installation and Pentaho Installation require license keys and license files, respectively. All licenses can be requested by contacting Deltek Distribution at:

[HQ-Distribution@deltek.com](mailto:HQ-Distribution@deltek.com).

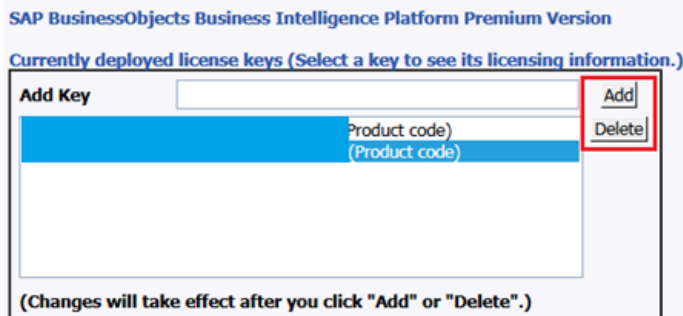
## Upgrade to BI 4.2 SP5

To upgrade SAP Business Objects to version 4.2 SP5:

1. Backup the CMS and File Store ([See Backup CMS and File Store](#))
2. Copy the SAP Business Objects Business Intelligence platform 4.2 SP05 upgrade installer to a desired location.
3. Run the installer file. This extracts the contents of the files to a temporary folder and automatically launches the installer.
4. The installer performs a prerequisites check. If it succeeds, click **Next**.
5. Enter the CMS name and password of the Administrator user of the existing Business Objects 4.1 SP07 installation.
6. Accept the license agreement and click **Next**.
7. Select Standard Installation. Click **Next**.

**Note:** SAP Business Objects will be inaccessible temporarily during installation.

8. Select **Deploy web applications now**.
9. After successfully upgrading to 4.2 SP05, log in to CMC and navigate to License Keys. Delete the existing SAP Business Objects 4.1 SP07 license key.
10. Add the new SAP Business Objects Business Intelligence platform 4.2 License Key.



11. Navigate to **Servers » Servers List** and enable all the necessary servers.

**Central Management Console**

Servers

Welcome:

Server Name	State	Enabled	Stale	Kind
.AdaptiveJobServer	Running	Enabled		Job Server
.AdaptiveJobServerServer	Running	Enabled		Adaptive Process
.CentralManagementServer	Running	Enabled		Central Managen
.ConnectionServer	Running	Enabled		Connection Serve
.ConnectionServer32	Running	Enabled		Connection Serve
.CrystalReports2016ProcessingServer	Running	Disabled		Crystal Reports F
.CrystalReports2016ReportApplicationServer	Running	Disabled		Report Applicatio
.CrystalReportsCacheServer	Running	Disabled		Crystal Reports C
.CrystalReportsProcessingServer	Running	Enabled		Crystal Reports F
.DashboardsCacheServer	Running	Enabled		Dashboards Cach
.DashboardsProcessingServer	Running	Disabled		Dashboards Proc
.EventServer	Running	Enabled		Event Server
.InputFileRepository	Running	Enabled		File Repository S
.OutputFileRepository	Running	Enabled		File Repository S
.WebApplicationContainerServer	Running	Enabled		Adaptive Process
.WebIntelligenceProcessingServer	Running	Enabled		Web Intelligence

## Install BI 4.2 SP5 Patch 05

To install patch 05 for SAP Business Objects 4.2 SP5:

1. Follow the steps from the [Install BI 4.2 SP5 Patch 05](#) section.

**Note:** For further details, see official SAP documentation:

<https://help.sap.com/viewer/985b023e35754728a151792b367f4536/4.2.5/en-US>

## Install Client Tools

1. Follow the steps from the [Install Client Tools](#) section.

**Note:** For further details, see official SAP documentation:

<https://help.sap.com/viewer/df8899896b364f6c880112f52e4d06c8/4.2.5/en-US>

When you complete the steps in this section, proceed to the [Install Standard BPM Package section](#).

## Configure Date Formats with an Oracle Database

Business Objects needs to know the Oracle database's configuration of date formats when it constructs and issues SQL statements with where clauses that contain dates. You configure this by doing the following steps:

1. Locate the **oracle.prm** file in the following folder:  
 <BO Installation Directory>\SAP BusinessObjects Enterprise XI  
 4.0\dataAccess\connectionServer\oracle\

2. Create a new folder named “legacy” in the following directory:  
 <BO Installation Directory>\SAP BusinessObjects Enterprise XI  
 4.0\dataAccess\connectionServer\oracle\extensions\
3. Copy and paste the **oracle.prm** file in the legacy folder.
4. Open the **oracle.prm** file and add the following lines, if they are not yet in the file:
 

```
<Parameter Name="USER_INPUT_DATE_FORMAT">'dd-MMM-yy'</Parameter>
<Parameter Name="USER_INPUT_NUMERIC_SEPARATOR">.</Parameter>
<Parameter Name="DATABASE_DATE_FORMAT">DD-MON-YY</Parameter>
```
5. Save the file and restart SIA for the configuration to take effect.

You can use SQL-plus to determine what date format the database should use. For example, you can issue the statement “select systedate from dual”, it will follow the format that is assumed in the preceding description.

## Install Standard BPM Package

This section describes how to install a standard BPM package including:

- Install compliant BPM package
- Create and Import BIAR Files

**Note:** This step is relevant for creating backup files or transferring BPM reports from one system to another.

## Install Compliant BPM Package

To install a new BI 4.2 compliant BPM Package (for versions 2.2.5, 2.3.1, 2.4 LA or later) on CMS that contains standard and customized reports and universes, consider the following scenarios:

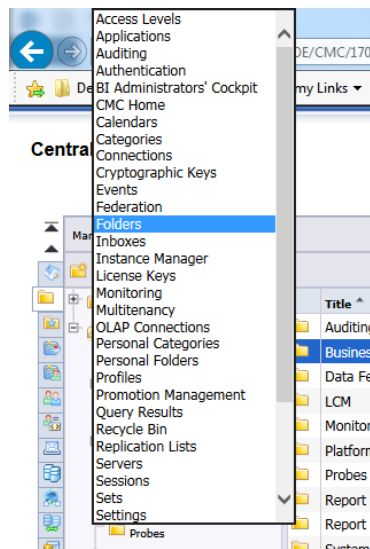
- Only Existing Standard Reports and Universes installed in the BPM Folder
- Existing Customized Reports and Universes within the BPM Folder
- Existing Customized Reports and Universes outside the BPM Folder

**Note:** Check if reports and universes from BI 4.1 installation are carried over to BI 4.2. In case you need to restore the backup from 4.1, see [Restore BPM Package Backup](#).

## Standard Reports and Universes in the BPM Folder

Use these steps if you have only existing standard reports and universes installed in the BPM Folder.

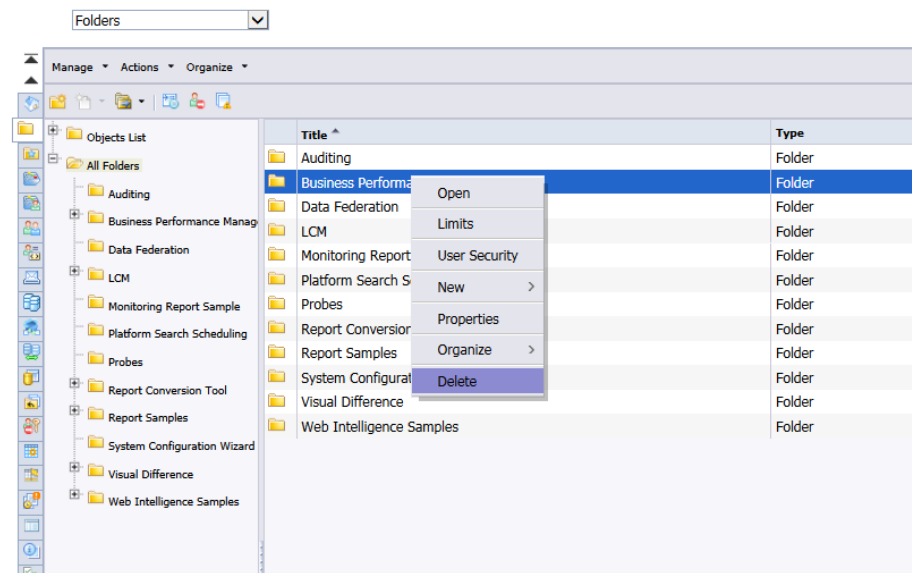
1. In the Start menu, open **SAP Business Intelligence » SAP Business Objects BI Platform » Central Management Console**.
2. From the drop-down list, select **Folders**.



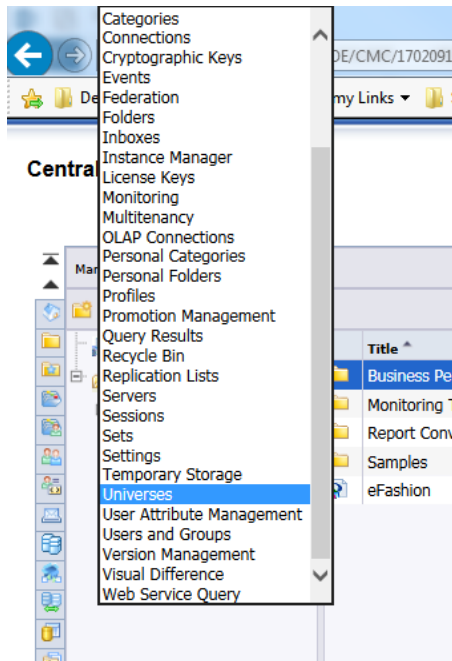
3. Click All Folders and delete the existing Business Performance Management folder.

## Install Standard BPM Package

### Central Management Console

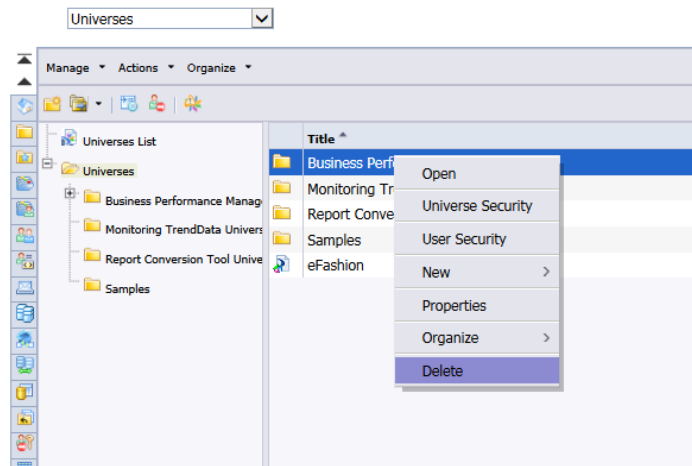


- From the drop-down, go to **Universes » Universes**.



- Delete the Business Performance Management folder.

### Central Management Console



6. Follow the steps in renaming the connection. ([See Renaming the Connection](#)).
7. Follow the steps in installing BPM packages in a clean CMS. ([See Promotion Management section](#)).

## Customized Reports and Universes WITHIN the BPM Folder

Use these steps if you have existing customized reports and universes within the BPM Folder.

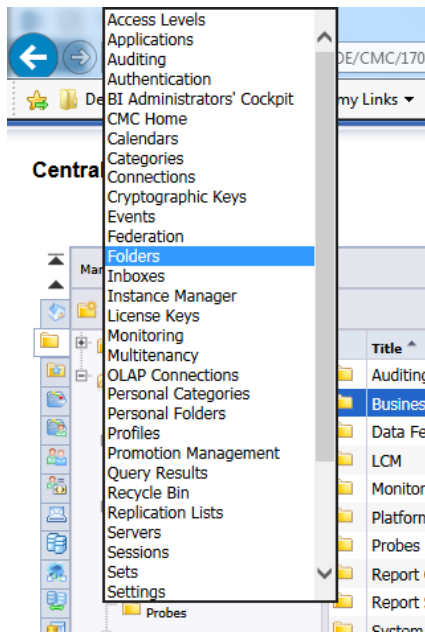
When installation of new packages is required and existing reports and universes are also necessary, you can:

- Create a backup of the existing reports, universes, connections, and so on, and delete the files afterwards ([See Backup Existing BPM Package](#)), or
- Retain the existing reports and universes.

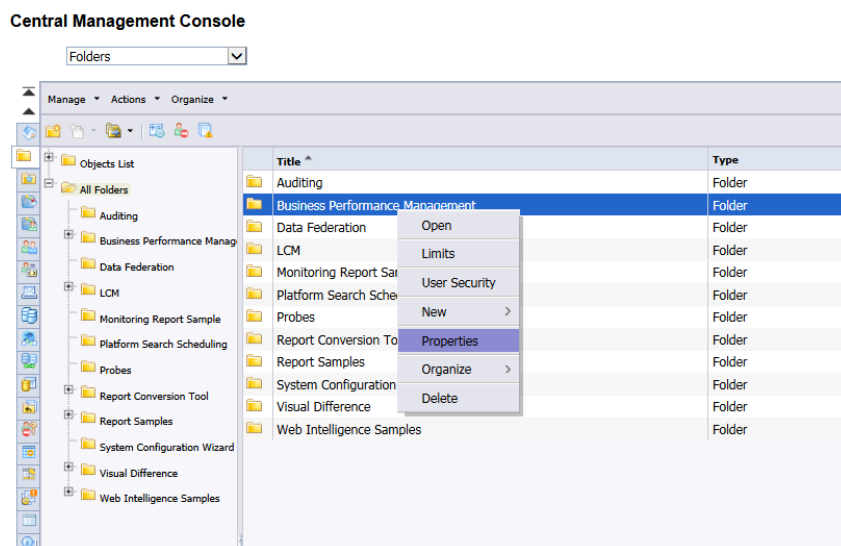
### To retain the existing reports and universes:

1. In the Start menu, open the **SAP Business Intelligence » SAP Business Objects BI Platform » Central Management Console**.
2. From the drop-down, go to **Folders » All Folders**.

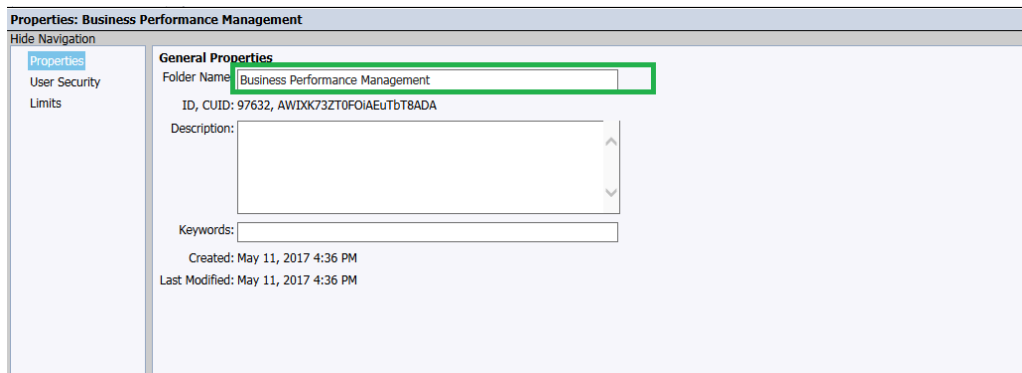
## Install Standard BPM Package



3. Right-click the Business Performance Management folder and select **Properties**.

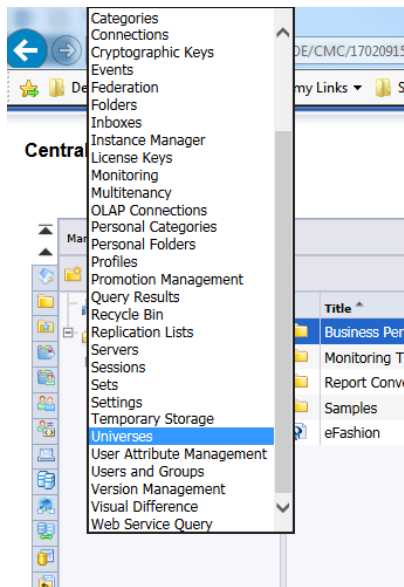


4. In the Properties window, rename the Folder Name.



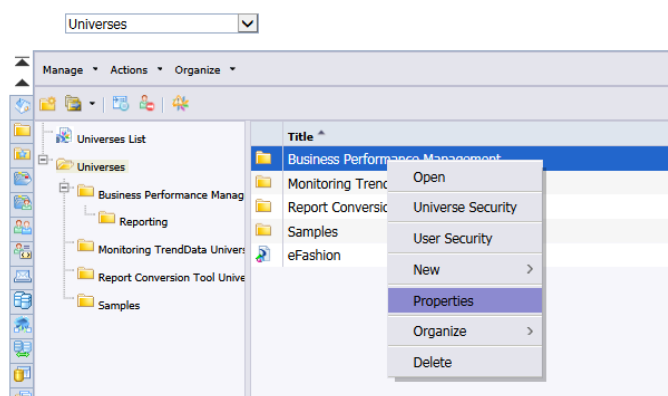


5. Click **Save & Close**.
6. From the drop-down, go to **Universes » Universes**.

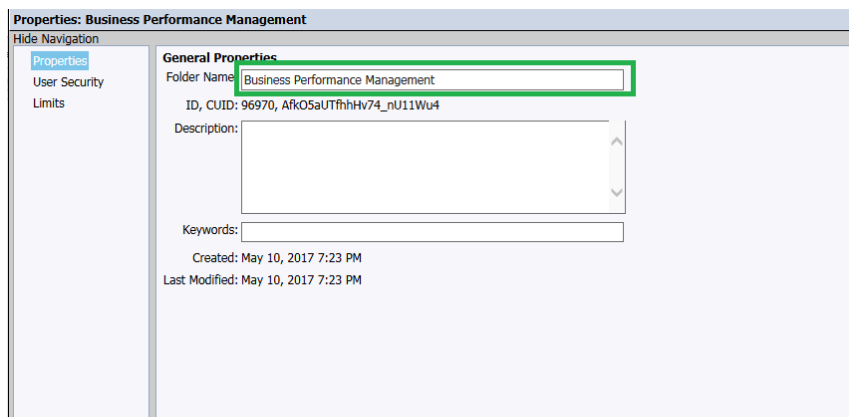


7. Right-click on the Business Performance Management folder and select **Properties**.

**Central Management Console**



8. In the Properties window, rename the Folder Name.

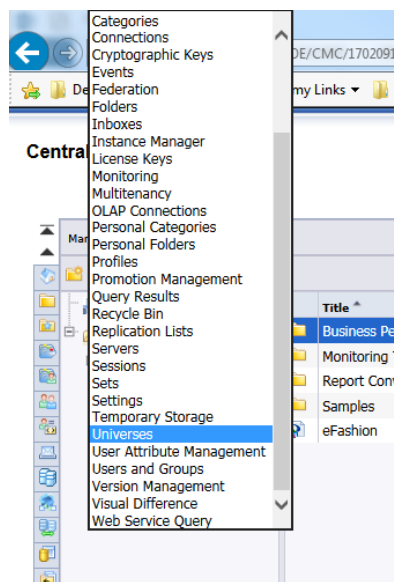


9. Click **Save & Close**.
10. Follow the steps in renaming the connection. ([See Renaming the Connection](#)).
11. Follow the steps in installing BPM packages in a clean CMS. ([See Promotion Management](#))

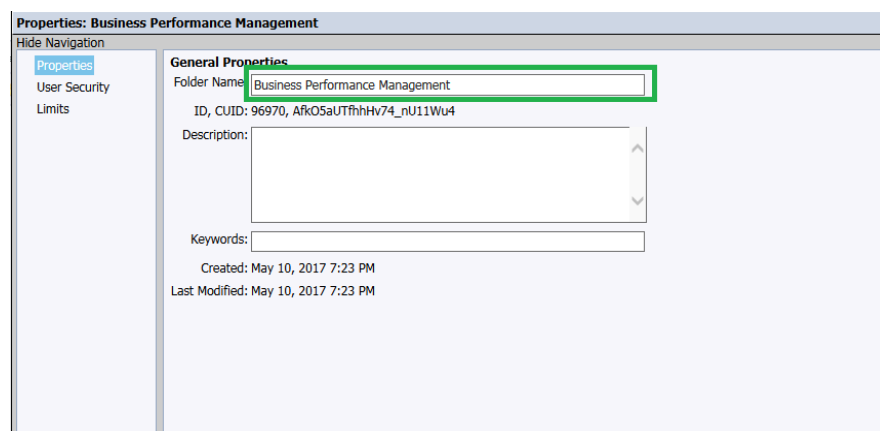
## Customized Reports and Universes OUTSIDE the BPM Folder

Use these steps if there are customizations located outside the BPM report folder but are connected to universes within the BPM universe folder.

1. On the Start menu, open **SAP Business Intelligence » SAP Business Objects BI Platform » Central Management Console**.
2. From the drop-down, go to **Universes » Universes**.



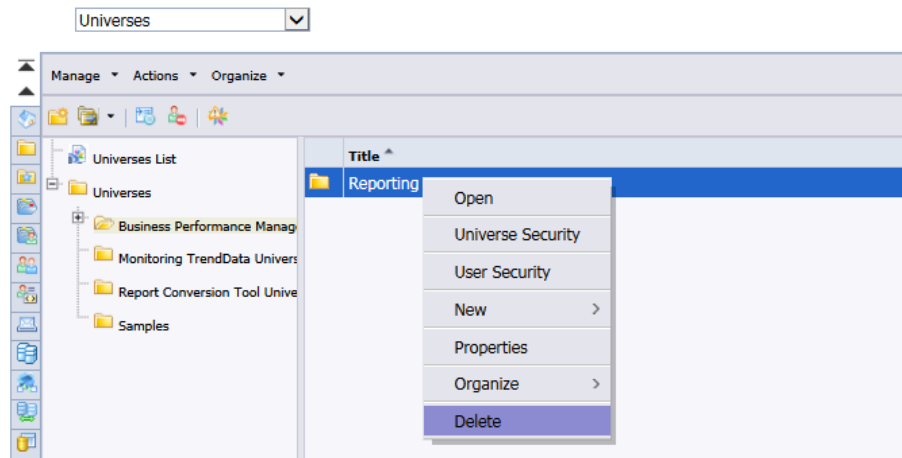
3. If the needed universes are placed under a separate subfolder other than Reporting, follow the steps below. Otherwise, skip to step 4.
  - a. Rename Business Performance Management folder.



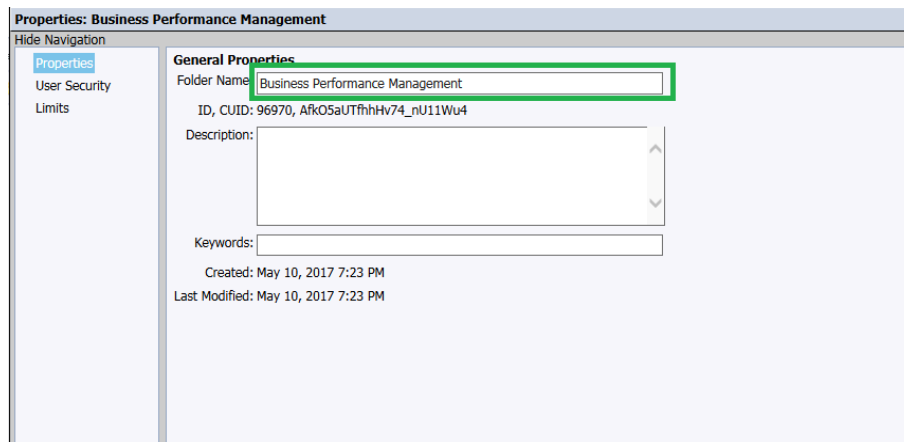
- b. Double-click Business Performance Management.

- c. Delete the Reporting folder.

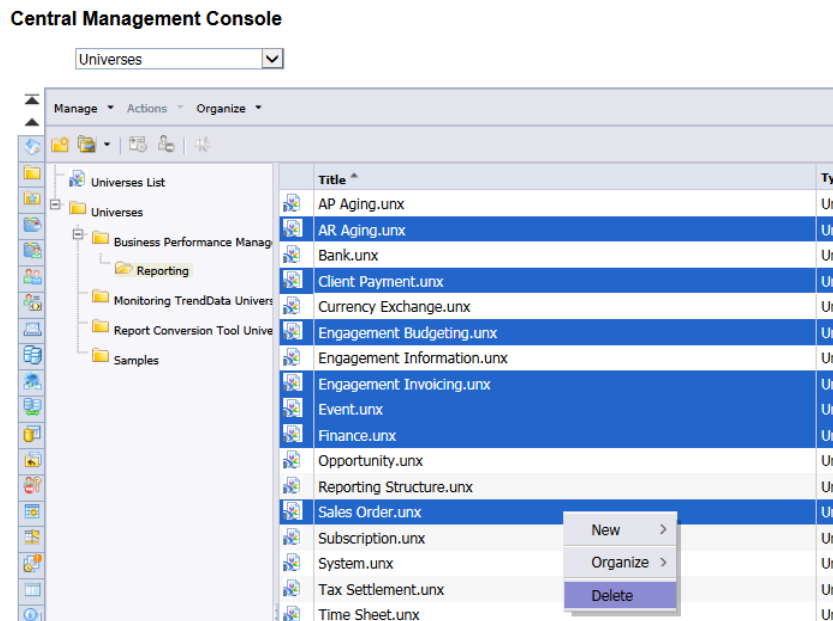
#### Central Management Console



4. If the needed universes are placed in the Reporting subfolder, follow the steps below:
  - a. Rename Business Performance Management folder.



- b. Go to **Business Performance Management » Reporting**.
  - c. Delete the unneeded universes from the list.



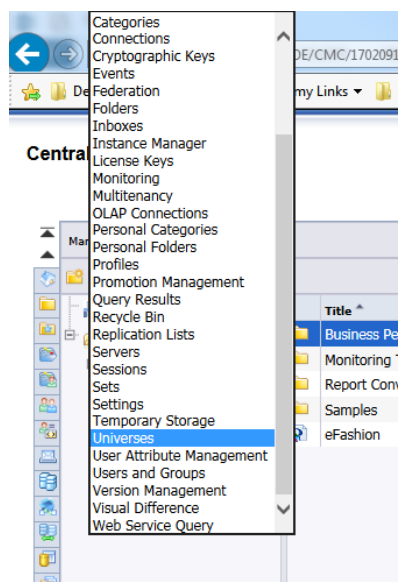
5. Follow the steps in renaming the connection. ([See Renaming the Connection](#)).
6. Follow the steps in installing BPM packages in a clean CMS. ([See Promotion Management](#))

## Identify and Update Connections

### Identify the Related Connection of the Universe

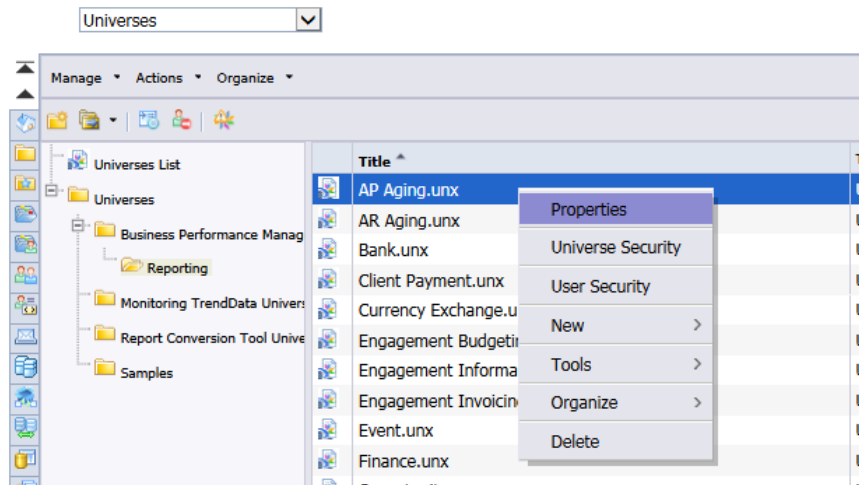
To identify the necessary connections related to the universe, follow these steps:

1. On the Start menu, open **SAP Business Intelligence » SAP Business Objects BI Platform » Central Management Console**.
2. From the drop-down, go to **Universes » Universes**.



3. Select **Business Performance Management » Reporting** (or the folder in which folder the universe is located).
4. Right-click on the universe and select **Properties**.

#### Central Management Console



5. In the Navigation pane of the dialog, select **Connections** and browse for the Connection Name.

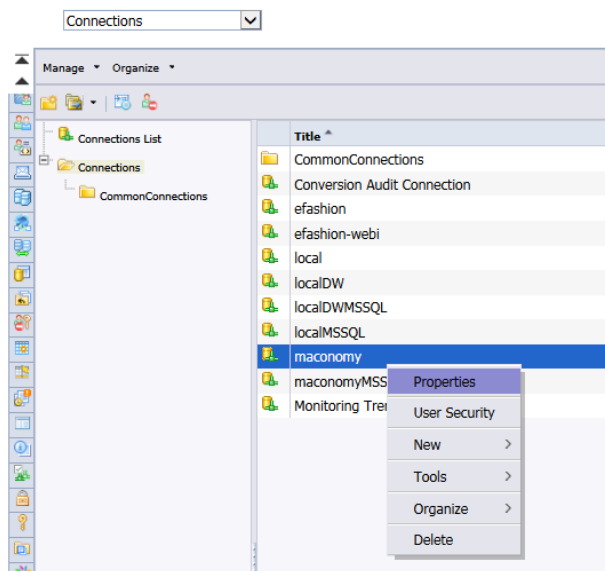


## Renaming the Connection

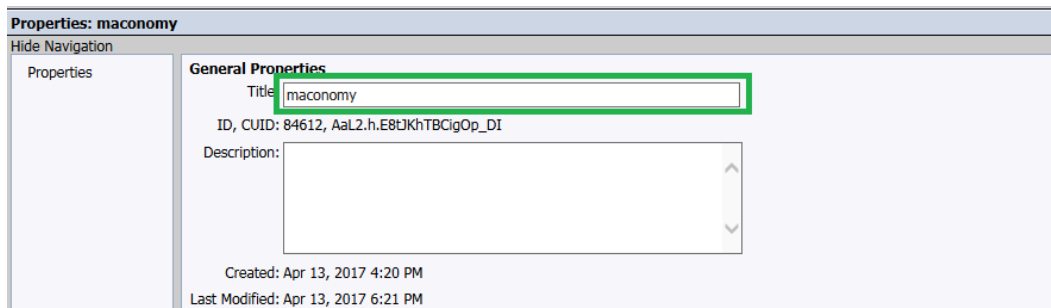
After you find the universe to which needed universe is connected, identify if the connection is a standard connection or not. If it is not standard, there is no need to rename the connection. If it is standard, follow these steps to update the connection:

1. From the Start menu, go to **SAP Business Intelligence » SAP Business Objects BI Platform » Central Management Console**.
2. From the drop-down, select **Connections » Connections**.
3. Select the connection to update and right-click.

### Central Management Console



4. From the Properties dialog, edit the Title.



5. Click **Save & Close**.

# Upgrade Customizations

To upgrade customizations, you must do the following:

- Migrate universes
- Remap documents

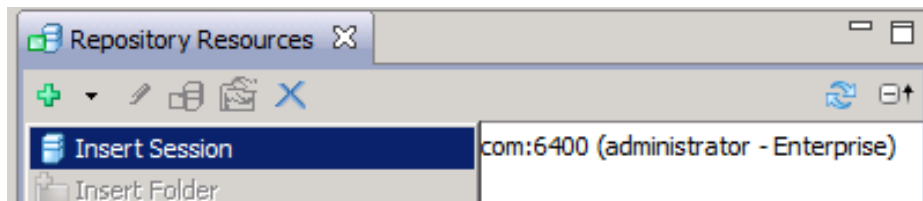
## Migrate Universes

In BO 3.1, universes are in UNV format. In BI 4.x, universes are in UNX format. Documents from the UNV universes can still run in BI 4.x, however, to fully utilize the features of BI 4.x, universes from BO 3.1 must be migrated to the UNX format.

**Note:** < Universes from BO 3.1 appear in BI 4.x as UNV universes. These can exist in the same folder as UNX universes with the same name. Hence, the universes of 2.2.3 will not overwrite custom UNV universes.

To migrate UNV universes to UNX, follow these steps:

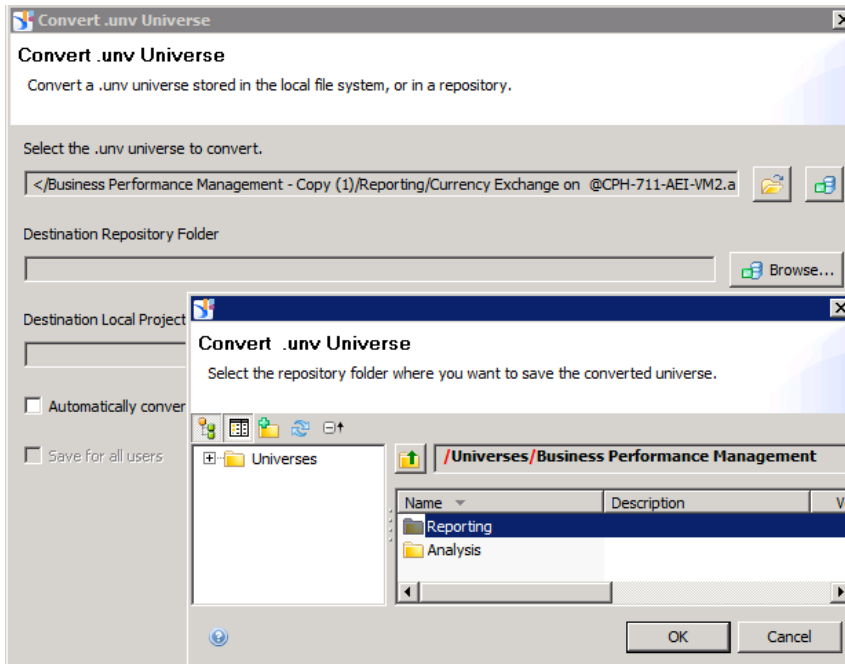
1. Open the Information Design Tool (IDT).
2. From the Repository Resource Panel, click **+** » Insert Session.



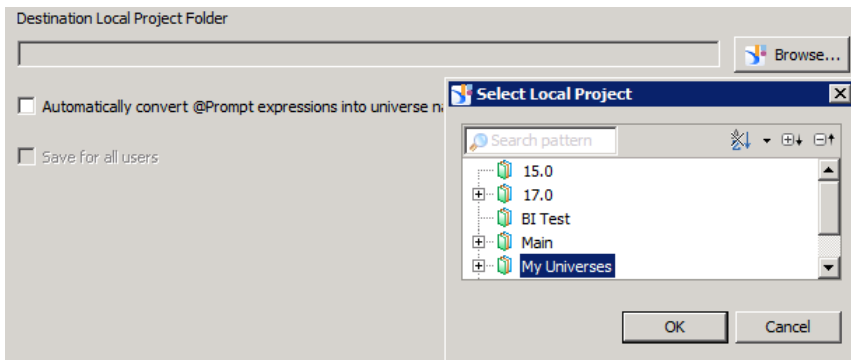
3. Right-click a UNV universe (universes without the **.unx** extension) and select *Convert .unv Universe*.



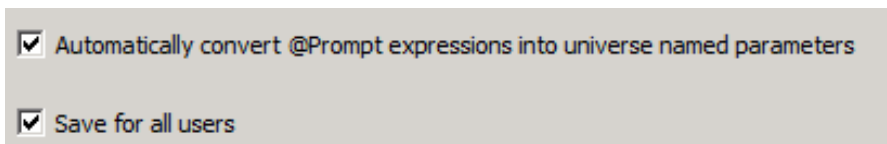
4. In the dialog, browse for and select the Destination Repository Folder.



5. Browse for and select the Destination Local Project Folder.



6. Select the following check boxes:

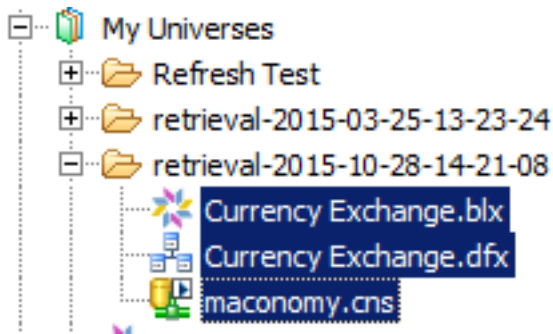


7. Click **OK**.

**Note:** The retrieved universe files (BLX, DFX, and CNX/CNS) are now saved to a timestamp-named subfolder. You must now move the retrieved universe files to the desired (project) folder.

8. Copy and paste the BLX, DFX, and CNX/CNS files to the desired folder.





**Note:** Use the copy and paste method for this step. **Do not** drag and drop files, as this method requires more follow-up steps that are not outlined here.

## Remap Documents

In order for a document running on UNV universes to utilize UNX universes instead, the data providers of the document need to be remapped.

**To map documents to UNX universes, follow these steps:**

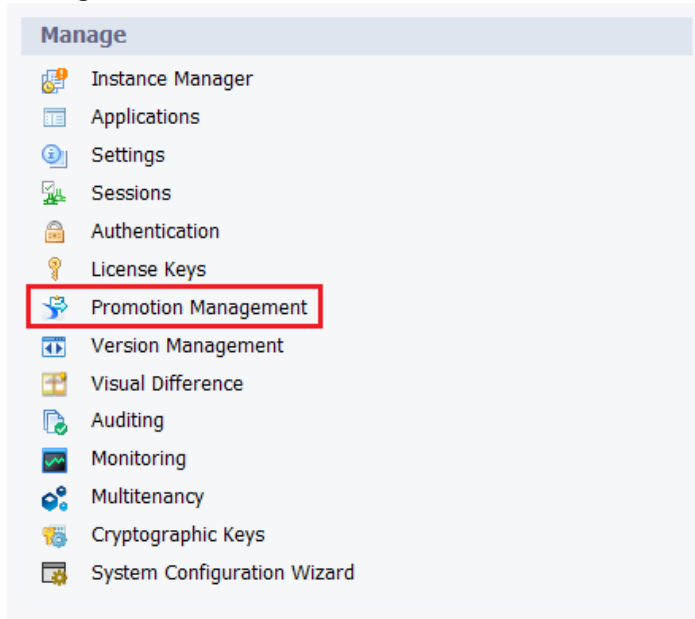
1. Log in to SAP BI Launch Pad.
2. Go to the Documents tab.
3. Click the **Folders** view and browse for the documents location.
4. Right-click the WebI document and select Modify.
5. Click the Data Access tab.
6. Click **Tools**.
7. Click **Change Source** and select the data provider to modify.
8. In the dialog that appears, select *Specify a new data source*.
9. From the drop-down menu, select **Universe...**
10. In the dialog that appears, select the desired UNX universe from the list.
11. Click **Next**.
12. In the dialog that appears, note and adjust the following if they are not properly mapped:
13. **Missing Objects** —To re-introduce missing objects into the universe, cancel the mapping, adjust and publish the universe, and start mapping again.
14. **Incorrect Objects** — These are handled by manually selecting the correct object.
15. Click **Finish**. The data provider is now refreshed.
16. Complete the mandatory prompts and click **OK**.
17. Click the **Close** button and select **Apply Changes and Close**. Otherwise, select **Revert Changes and Close**.

# Promotion Management

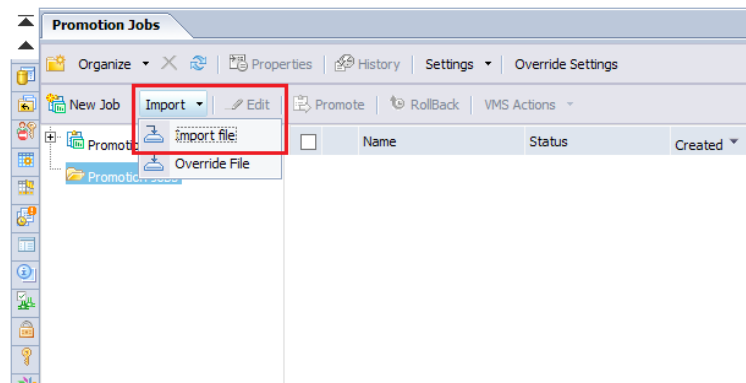
This section describes how to do a BIAR-to-server promotion using Promotion Management.

## To do a BIAR-to-server promotion:

1. Log in to the Central Management Console at <https://<server>:<port>/BOE/CMC>.
2. On the CMC homepage, find the Manage island at the right side and click **Promotion Management**.



3. Click the Import drop-down and select **Import file**.



4. The Import from file window appears. Select **File System**, then click **Browse**.
5. Select the BIAR or LCMBIAR (Lifecycle Management Business Intelligence Archive Resource), then click **Open**. The text beside the "Browse..." button updates with the location and file name of the BIAR.
6. Click **OK** to create the new job.

**Note:** A password can be set for LCMBIAR. Importing a password-protected LCMBIAR displays another window that allows a user to input the password.

7. A new job with the Source set as “From File” is automatically created. Update the Name and Destination of the new job and click **Create**.

Fields marked with an asterisk (\*) are mandatory fields

Name\*:

Description:

Keywords:

Save Job in\*:

Source :

Destination :

8. All objects from the BIAR are pre-selected, including the dependencies. Click **Promote** to display a new window that contains the Summary, Security Settings, and Test Promote.
  - **Select Security Settings** — Specify whether there are rights that must be included for the objects to be promoted.
  - **Select Test Promote** — Select this option to check whether there are any errors before you click **Promote** and commit to the changes.
9. Click **Promote** to start the transfer, or **Schedule** to have the promotion run at a later date (or on a recurring schedule, depending on the need).

# Backup and Restore

## Backup CMS and File Store

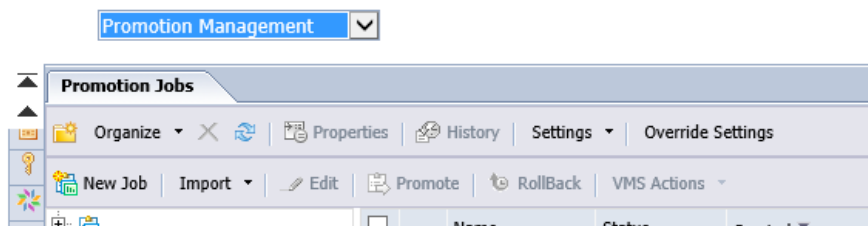
1. Backup the CMS Database
2. Backup **FileStore** located in <INSTALL\_DIRECTORY>\SAP BusinessObjects\SAP BusinessObjects Enterprise XI 4.0\FileStore

## Backup Existing BPM Package

To back up the existing package into the CMS:

1. On the Start menu, click **SAP Business Intelligence » SAP Business Objects BI Platform » Central Management Console**.
2. From the drop-down list, select **Promotion Management**.

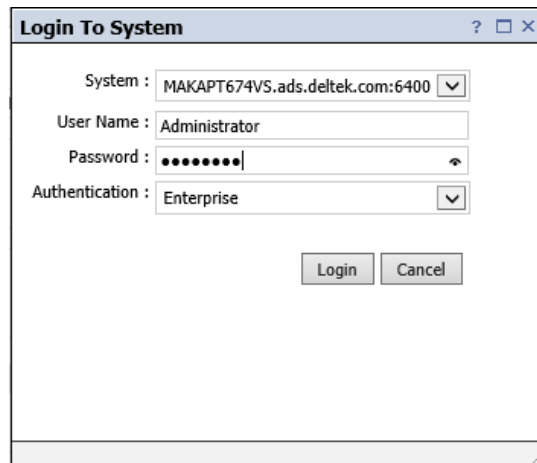
### Central Management Console



3. Click **New Job** and enter the required fields with an asterisk ( \* ).

The screenshot shows the 'New Job' form in the Central Management Console. The form has a title bar 'Promotion Jobs' and a subtitle 'New Job'. Below the title bar, there is a toolbar with icons for 'Add Objects', 'Manage Dependencies', 'Promote', and 'Rollback'. The form contains several fields: 'Name\*' (with the value 'Backup-Restore'), 'Description', 'Keywords', 'Save Job in\*' (with the value 'Promotion Jobs'), 'Source\*' (a dropdown menu), and 'Destination' (a dropdown menu). There are also buttons for 'Copy an Existing Job' and 'Browse'. At the bottom, there are 'Create' and 'Cancel' buttons. A note at the top of the form states: 'Fields marked with an asterisk (\*) are mandatory fields'.

3. From the Source drop-down, select **Login to a New CMS** and enter the credentials.
4. Click **Login**.



**Login To System**

System : MAKAPT674VS.ads.deltek.com:6400

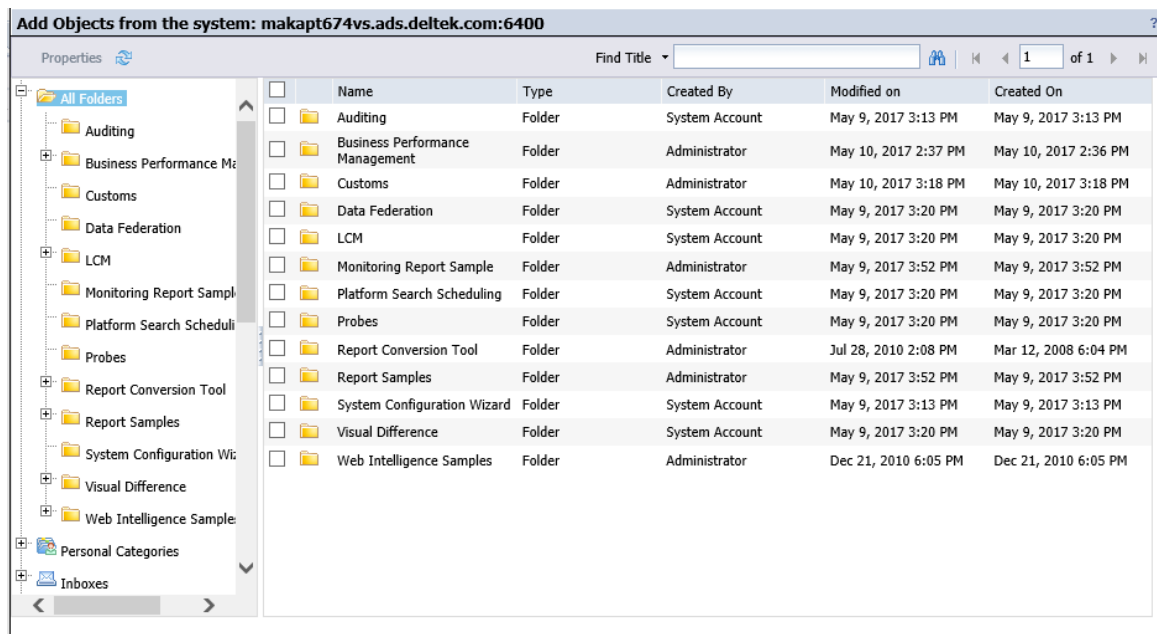
User Name : Administrator

Password : ••••••••

Authentication : Enterprise

Login Cancel

5. Click on the Destination drop-down list and choose the **Output to LCMBIAR** file.
6. Click **Create**.
7. Select everything you must back up. When done, click **Add** then **Close**. (This includes Folders, Reports, Universe, Connections, Users and Groups, Customs and so on).



**Add Objects from the system: makapt674vs.ads.deltek.com:6400**

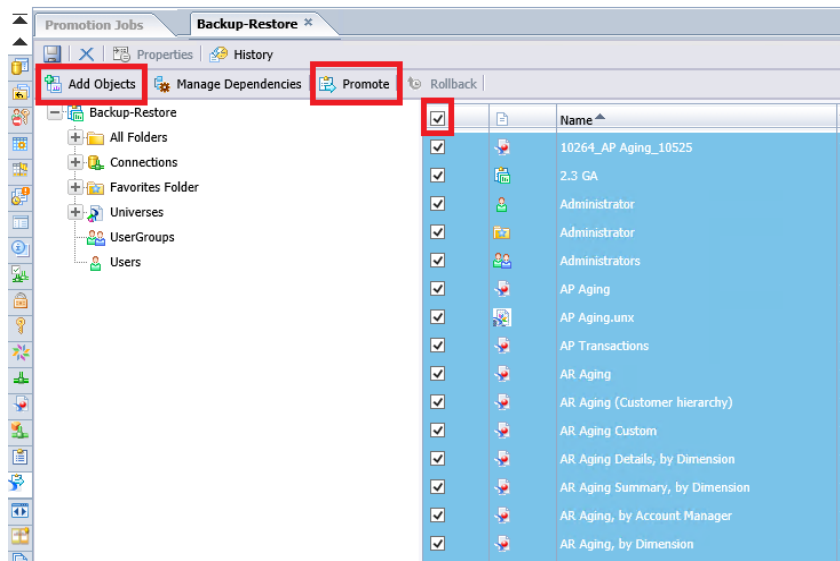
Properties Find Title 1 of 1

Name	Type	Created By	Modified on	Created On
Auditing	Folder	System Account	May 9, 2017 3:13 PM	May 9, 2017 3:13 PM
Business Performance Management	Folder	Administrator	May 10, 2017 2:37 PM	May 10, 2017 2:36 PM
Customs	Folder	Administrator	May 10, 2017 3:18 PM	May 10, 2017 3:18 PM
Data Federation	Folder	System Account	May 9, 2017 3:20 PM	May 9, 2017 3:20 PM
LCM	Folder	System Account	May 9, 2017 3:20 PM	May 9, 2017 3:20 PM
Monitoring Report Sample	Folder	Administrator	May 9, 2017 3:52 PM	May 9, 2017 3:52 PM
Platform Search Scheduling	Folder	System Account	May 9, 2017 3:20 PM	May 9, 2017 3:20 PM
Probes	Folder	System Account	May 9, 2017 3:20 PM	May 9, 2017 3:20 PM
Report Conversion Tool	Folder	Administrator	Jul 28, 2010 2:08 PM	Mar 12, 2008 6:04 PM
Report Samples	Folder	Administrator	May 9, 2017 3:52 PM	May 9, 2017 3:52 PM
System Configuration Wizard	Folder	System Account	May 9, 2017 3:13 PM	May 9, 2017 3:13 PM
Visual Difference	Folder	System Account	May 9, 2017 3:20 PM	May 9, 2017 3:20 PM
Web Intelligence Samples	Folder	Administrator	Dec 21, 2010 6:05 PM	Dec 21, 2010 6:05 PM

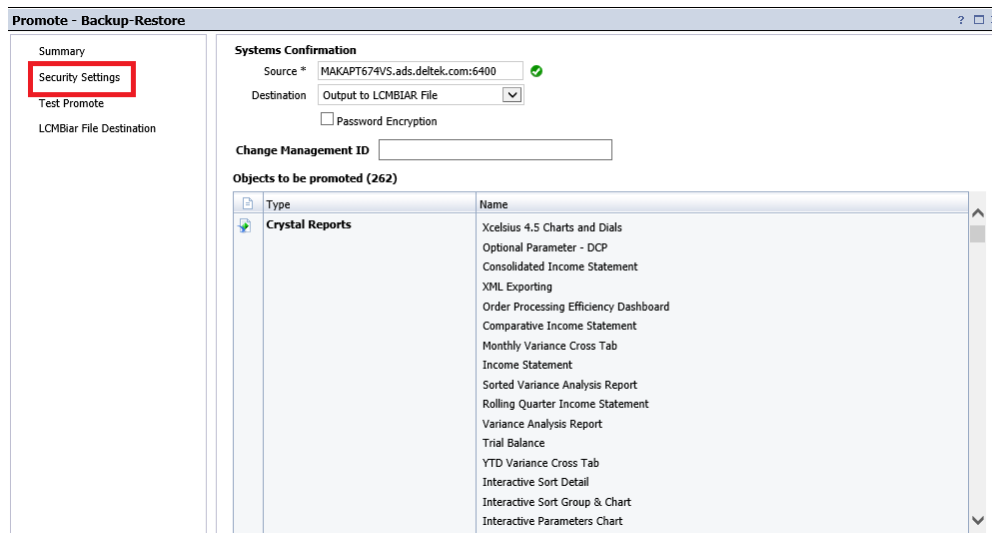
Left sidebar: All Folders, Auditing, Business Performance Management, Customs, Data Federation, LCM, Monitoring Report Sample, Platform Search Scheduling, Probes, Report Conversion Tool, Report Samples, System Configuration Wizard, Visual Difference, Web Intelligence Samples, Personal Categories, Inboxes

8. Review all the files. If you need to add additional files, click **Add Objects** to add additional files.
9. Once done, click the check box and select all needed files, and then click **Promote**.

## Backup and Restore



### 10. Select Security Settings.



### 11. Click **Promote Security** and select the following:

- Promote Object Security
- Promote User Security
- Include Application Rights



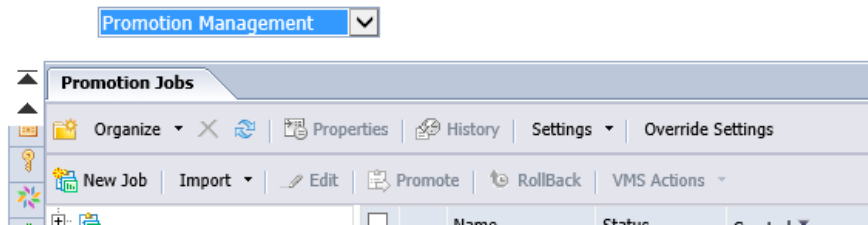
12. Click **Save** then **Export**. Depending on the path location, backup files will have the file extension name “.lcmbar”

## Restore BPM Package Backup

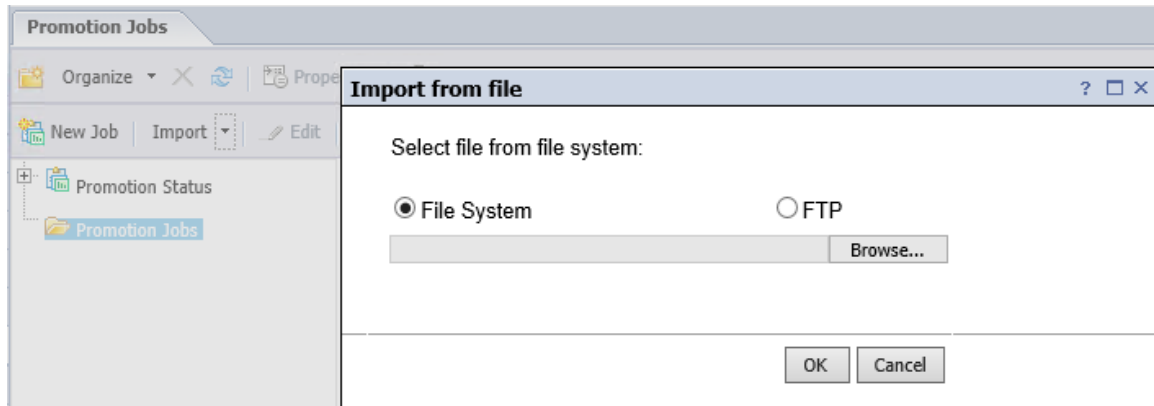
To restore the existing package into the CMS:

1. From CMC go to **Promotion Management**.

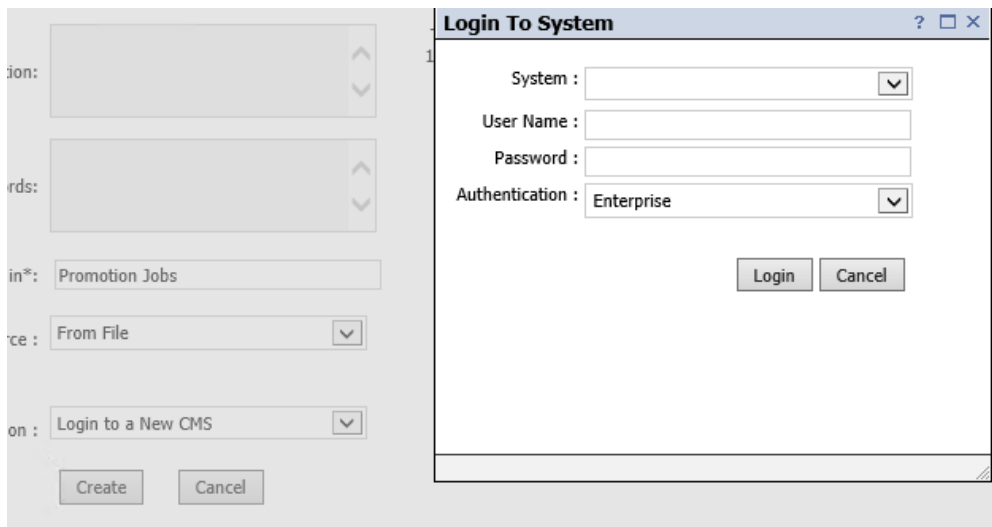
### Central Management Console



2. Click **Import » Import File**.
3. Browse where the backup \*.lcmbar file is located, then click **OK**.



4. In Destination, select **Login to a New CMS** and enter credentials.





- Once logged in, click **Create**.

Fields marked with an asterisk (\*) are mandatory fields

Name\*:

Description:

Keywords:

Save Job in\*:

Source :

Destination :

- Click **Promote**.

Name	Type
10264_AP Aging_10525	Web Intelligence
Administrator	Favorites Folder
Administrator	Users
Administrators	UserGroups
AP Aging	Web Intelligence
AP Aging.unx	DSL Universe (information design tool)
AP Transactions	Web Intelligence
AR Aging	Web Intelligence
AR Aging (Customer hierarchy)	Web Intelligence
AR Aging Details, by Dimension	Web Intelligence
AR Aging Summary, by Dimension	Web Intelligence
AR Aging, by Account Manager	Web Intelligence
AR Aging, by Dimension	Web Intelligence
AR Aging, by Dimension (Stacked Bar Chart)	Web Intelligence
AR Aging, by Dimension (Table)	Web Intelligence

- Confirm the Security Settings.

## Backup and Restore

8. Click **Save** then **Promote**.
9. Select the Job that was created and click **History**.

	Name	Status	Created
<input checked="" type="checkbox"/>	TEST	Success	May 10, 2017 2:36 PM
<input type="checkbox"/>	2.3 GA	Success	May 9, 2017 4:00 PM

Verify **Success** status in order to proceed.

Instance	Instance Time	Name	Source	Destination	Run By	Status
1	May 10, 2017 2:36 PM	TEST	From file	makapt674vs.ads.deltek.com:6400	Administrator	Success

**Note:** If the status is Partial Success, some of the files were not imported. It is possible that there are existing files that must be deleted or renamed.

If this is the case, delete or rename the existing files considering the scenarios from the [Install Compliant BPM Package](#) section. Afterwhich, import the LCMBIAR file again.

10. Restore the CMS database backup.
11. Restore the FileStore backup.

## BI 4.2 Known Issues

- Parentheses in objects or folders can make referencing objects fail. IDT inserts wrong § characters.
- Commas in objects or folders can make referencing objects fail.
- List of values in universes migrated from 3.1 or 4.1 may be wrong if objects in their queries are lacking. This is not necessarily caught by integrity check.
- Objects without table references yield errors in integrity checks and must be resolved.
- Refresh structure needs to run in order to migrate from 3.1 or 4.1 database field types to 4.2 types.
- Maconomy tables lack primary keys. This yields warnings in integrity check, which can be ignored.
- Legends and other elements in charts of migrated documents may be inaccurate.

**Note:**

- The *Information Design Tool* is used for managing UNX universes
- The *Universe Design Tool* is used for managing UNV universes (similar to BO 3.1)



## Upgrade to Pentaho 8.2-GA

This section describes how to easily upgrade Pentaho Data Integration version 6.1 or lower to Pentaho 8.2-GA, which is needed for the latest version of the ETL.

### Before you Begin

Before you begin, review requirements, including licenses, as well as other prerequisites.

### Prerequisites

- Export existing ETL jobs and transformations to an XML file to serve as backup and for the upgrade later on.
- Ensure that the current Pentaho version is completely uninstalled including all files inside the Pentaho installation directory and .kettle folders.

### Installation Files

Files of the installers mentioned above are located at:

File	Path
Installer Build	<a href="#">\\d\\applications\\Released\\BPM\\Pentaho\\Pentaho Data Integration\\pdi-8.2-GA\\Installer Build\\</a>
Archive Build (Plugins and Server components)	<a href="#">\\d\\applications\\Released\\BPM\\Pentaho\\Pentaho Data Integration\\pdi-8.2-GA\\Archive Build\\</a>

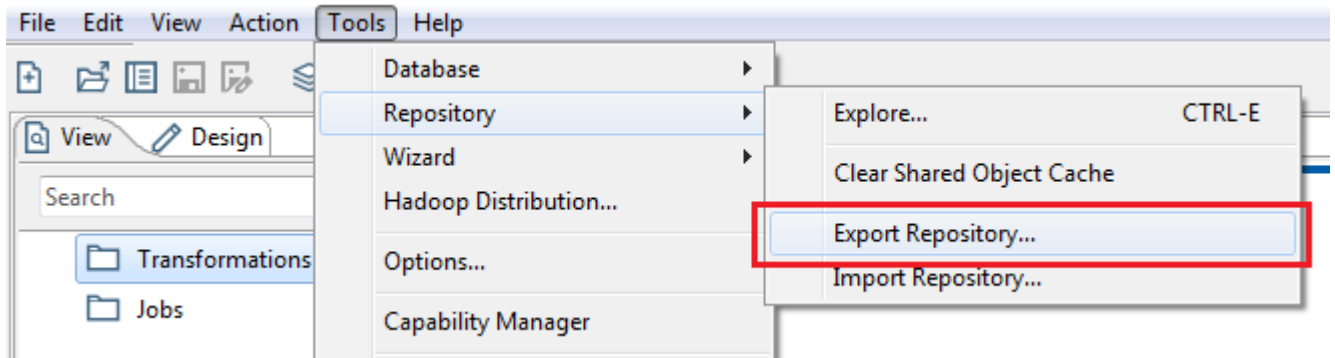
### Licenses

SAP Business Objects installation and Pentaho Installation require license keys and license files, respectively. All licenses can be requested by contacting Deltek Distribution at: [HQ-Distribution@deltek.com](mailto:HQ-Distribution@deltek.com).

## Backup ETL Jobs and Transformations

To export ETL jobs and transformation, follow these steps:

1. Open Pentaho Data Integration
2. Login to the repository that contains the jobs and transformation to export.
3. In the menu, select **Tools » Repository » Export Repository....**



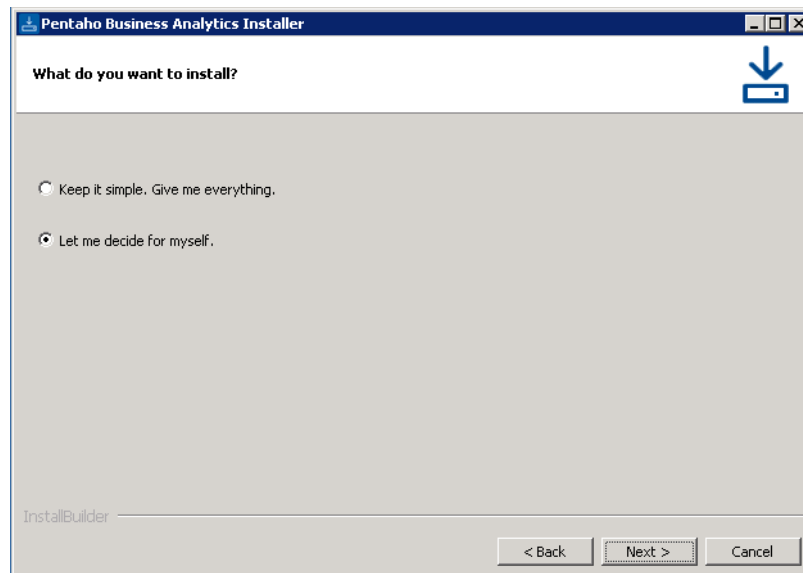
4. Input a file name and .xml as file extensions
5. Click **Save**.

## Install Pentaho 8.2-GA Server and Client Tools

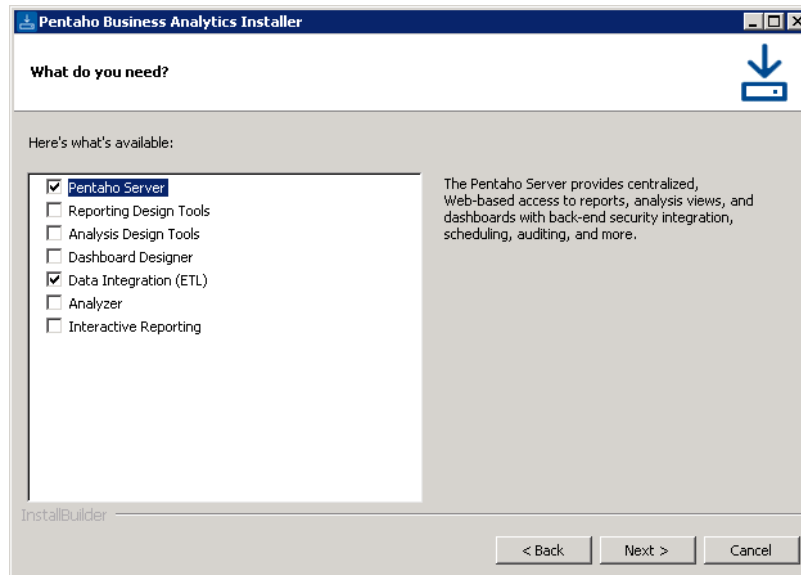
To install the server components and client tools, follow these steps:

**Note:** PostgreSQL is bundled as default repository database. Instructions on how to change repository database to Oracle or MS SQL on [DeltekMaconomyBPMInstallGuide.docx](#)

1. Run **pentaho-business-analytics-8.2.0.0-342-x64.exe** from the **Installer Build** folder– this will open an installation wizard to guide you through the installation.
2. Accept the license agreement then click **Next**.

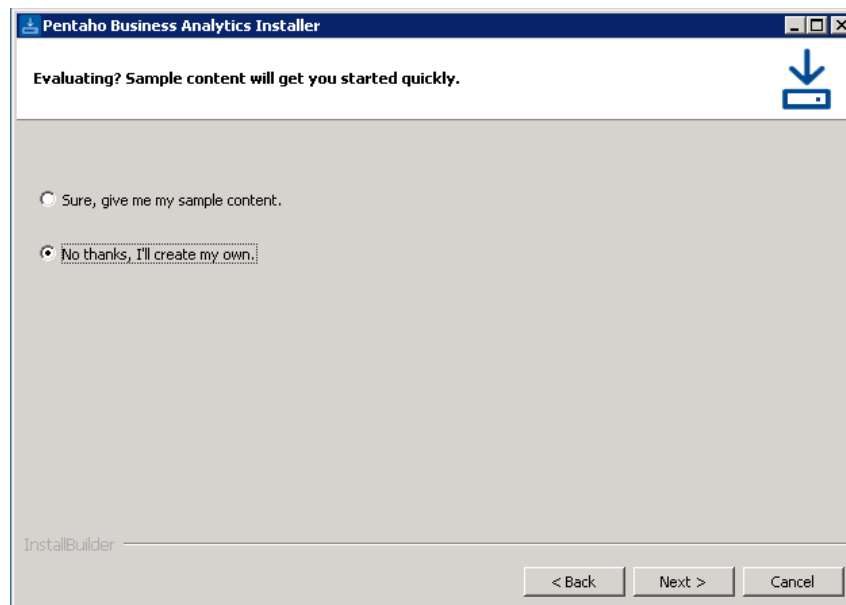


3. Select **Let me decide for myself** then click **Next**.
4. Select **Pentaho Server and Data Integration (ETL)** then click **Next**.



Pentaho Server will host the repository; Data Integration (ETL) is the client tools

5. Select **No thanks, I'll create my own** to skip generating sample contents



6. Enter a password for the postgres user.
7. Click **Next** until finished

**Note:** To install client tools only on workstations, follow the same steps as above but check Data Integration (ETL) only on step 4.

## Verify Installation

To verify that the server repository installation is successful, check the following:

1. Able to access Pentaho User Console:
  - a. Start > Pentaho Enterprise Edition > User Console Login OR
  - b. In a browser enter <http://<hostname>:<port>/pentaho>
2. Able to login to Pentaho User Console using the default credentials:
 

Username: **admin**

Password: **password**
3. Able to connect to installed Pentaho server repository using Pentaho Data Integration (a.k.a. Spoon)
  - a. Open **Data Integration** on Start > Pentaho Enterprise Edition > Data Integration
  - b. Click the Connect button on the top-right corner of the window.
  - c. Follow the wizard to setup the repository connection
  - d. Enter the default admin credentials:
 

Username: **admin**

Password: **password**
  - e. Click **Connect**.

## Install License

1. Login to Pentaho User Console
2. Click the drop down menu on the upper left side of the screen and select Administration
3. Select the Licenses tab
4. On the upper right corner click the + icon
5. Select the following files:
  - a. Pentaho BI Platform Enterprise Edition.lic
  - b. Pentaho PDI Enterprise Edition.lic

## Post Installation

### Change the Administrator's password:

1. Open Pentaho User Console (PUC)
  - a. Start > Pentaho Enterprise Edition > User Console Login
  - b. In a browser enter <http://<hostname>:<port>/pentaho>
2. Login using the default credentials:
 

Username: **admin**

Password: **password**
3. Click the drop down menu on the upper left side of the screen and select **Administration**



4. Under Users & Roles > Select admin (or add a new Administrator user)
  - a. If a new user is added, select all available roles and add it to the new user
5. Beside the user is the Password field click **Edit...**
6. Enter new password then click **OK**

## Configure kettle.properties

**Do the following for each windows user account that will be running the ETL:**

1. Using windows explorer navigate to **C:\Users\<username>\.kettle** folder
2. Open kettle.properties file using any text editor
3. Add the following lines:
  - DWH\_CONNECTION\_TYPE=ORACLE
  - MAC\_CONNECTION\_TYPE=ORACLE
  - FULL\_LOAD=YES
4. Set the following values to blank:
  - pentaho\_dilogs
  - channel\_logs
  - metrics\_logs
  - trans\_logs
  - job\_logs
  - live\_logging\_info
  - step\_logs
  - transperf\_logs

Example:

**From:** KETTLE\_JOB\_LOG\_SCHEMA=pentaho\_dilogs

**To:** KETTLE\_JOB\_LOG\_SCHEMA=

# Upgrade Data Warehouse

## Import ETL

To import ETL, follow these steps:

1. Download the latest DataIntegrationRepository.xml. This is included in the Reporting Packing Unit (RPU) available through DSM.
2. Open Pentaho Data Integration: Start > All Programs > Pentaho Enterprise Edition > Design Tools > Data Integration
3. Connect to the server repository by clicking the Connect button at the top right corner of the window.



4. New Repository Connection wizard will appear. Click **Get Started**.
5. Fill up the necessary fields. Enter the URL of the User Console (example: <https://myserver:8080/pentaho>) on the URL field.
6. Click **Finish**.
7. Login using the administrator account. Default credentials are:  
Username: **admin**  
Password: **password**
8. On the menu toolbar, click Tools > Repository > Import Repository
9. Select the DataIntegrationRepository.xml
10. Click **Open**.
11. Select No when prompted with "Apply import rules?"
12. Select the root folder (/).

**Warning:** Selecting a different folder will result in a duplicate "public" folder and broken references within Jobs.

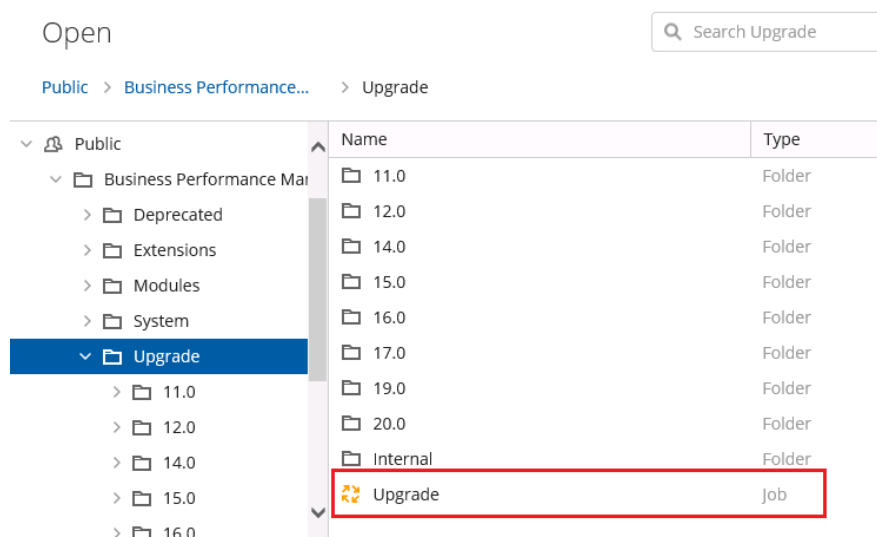
13. Once the import is finished, click **Close**.

## Run Upgrade Job

To upgrade the Data Warehouse, follow these steps:

1. Open Pentaho Data Integration: Start > All Programs > Pentaho Enterprise Edition > Design Tools > Data Integration
2. Connect to the server repository by clicking the Connect button at the top right corner of the window.

3. Select the repository containing the latest ETL
4. Open the repository explorer: Tools > Repository > Explore Repository
5. Go to the Connections tab
6. Edit the following connections:
  - DWH – set this to the Data Warehouse to upgrade
  - Maconomy – set this to the Maconomy database
7. On the menu toolbar, select File > Open
8. Navigate to Public/Business Performance Management folder/Upgrade and then select **Upgrade** job.



9. Click the Run button and wait until the upgrade process finish.



# Upgrade Custom Jobs and Transformations

To migrate custom jobs and transformations from previous Pentaho Data Integration version to 8.2-GA, follow these steps:

1. Export your custom jobs and transformations to an XML file (see section [Backup ETL Jobs and Transformations](#)).
2. Open the exported XML file in any text editor.
3. Change the value of <directory> element from the current value to /public/Business Performance Management/<original\_value>.

Example:

**From:** <directory>/Custom</directory>

**to:** <directory>/public/Business Performance Management/Custom</directory>

4. Repeat this for all jobs and transformations.

**Tip:** A quick way to do this is by using Replace All function of Notepad or Notepad++. Use the string "<directory>/" OR "<directory>&#47;" The slash "/" or it's encoded version "&#47;" after the <directory> tag indicates the start of a path for jobs and transformations, this ensures that certain directories like <directory>%java.io.tmpdir%</directory> are not accidentally replaced.

5. Import the XML (see section Import ETL) and make sure to select the root folder "/" to avoid broken dependencies between jobs.
6. Double check if there are any broken dependencies for jobs that are referenced by another job.

# Troubleshooting Pentaho Server installation

## Log Files

1. Server logs are in `<INSTALL_DIR>/server/pentaho-server/logs/pentaho.log`. This log file is truncated every time pentaho server is restarted.
2. Tomcat logs may contain other useful information. This can be found in `<INSTALL_DIR>/server/pentaho-server/tomcat/logs`
  - a. `Pentahoserver-stderr.<datestamp>`
  - b. `Pentahoserver-stdout.<datestamp>`
  - c. `Catalina.<datestamp>`

## Possible Issues:

### Issue:

Misc-

org.pentaho.platform.engine.services.connection.datasource.dbcp.PooledDataSourceSystemListener:  
DatasourceSystemListener.ERROR\_0002 - Unable to get datasource object

### Solution:

Rename or remove jackrabbit repository, follow these steps:

1. Stop Pentaho Server
  - a. Open a command prompt
  - b. Run `stop-pentaho.bat` in `<INSTALL_DIR>/server/pentaho-server/`
2. Navigate to `<INSTALL_DIR>/server/pentaho-server/pentaho-solutions/system/jackrabbit/`
3. Rename or delete the `repository` folder.

### Issue:

ORA-12505: TNS: listener does not currently know of SID given in connect descriptor

### Solution:

Verify that the connection string in the following files are correct:

- `/server/pentaho-server/pentaho-solutions/system/hibernate/oracle10g.hibernate.cfg.xml`
- `/server/pentaho-server/pentaho-solutions/system/jackrabbit/repository.xml`
- `/server/pentaho-server/tomcat/webapps/pentaho/META-INF/Context.xml`



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