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SAP BusinessObjects Business Intelligence platform

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Business Intelligence Platform Upgrade Guide

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1 Document History

The following table provides an overview of the most important document changes.

Version	Date	Description
SAP BusinessObjects Business Intelligence platform 4.3	June 2020	Initial release

2 About this Guide

This guide is intended for business intelligence administrators responsible for installing, upgrading, and maintaining the BI platform in corporate environments.

This guide describes upgrading your system data and business intelligence content to BI platform 4.3. It covers upgrade paths and important information about planning, preparing, and performing upgrades and post-upgrade tasks.

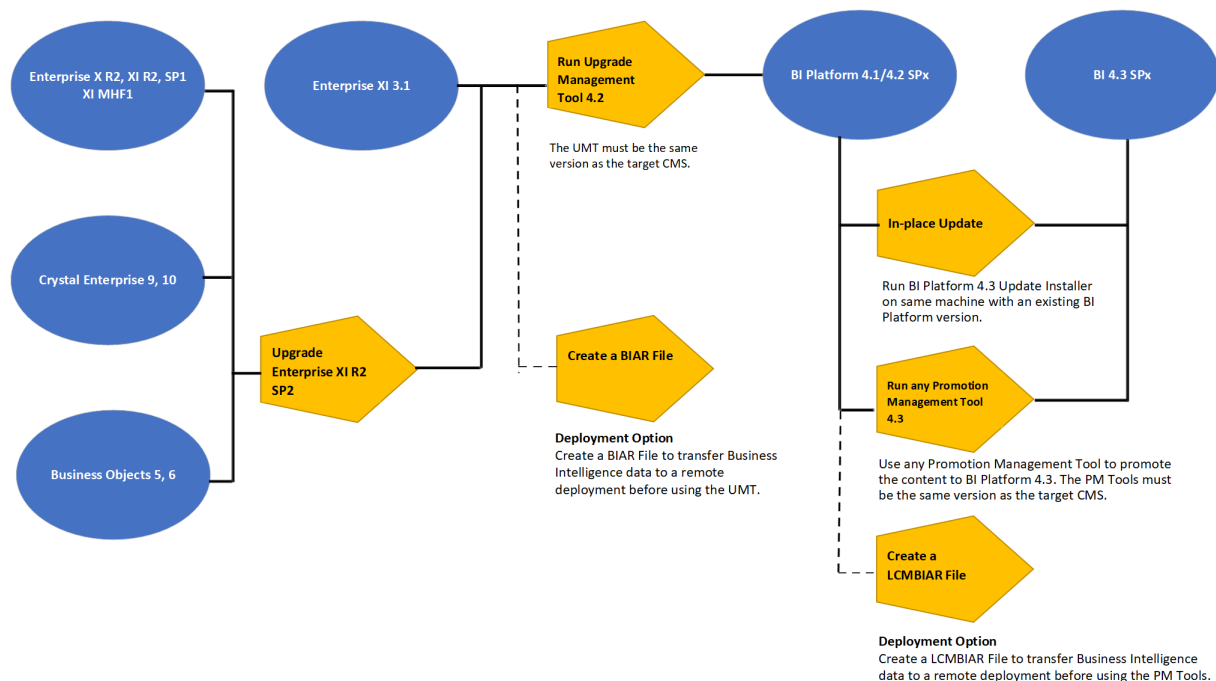
3 Planning Upgrades

3.1 Upgrade paths

You can migrate your system data and business intelligence content to BI platform 4.3 from the previous BI 4.x versions.

Note

Upgrade Management Tool is deprecated in 4.3, however, you can follow the below mentioned upgrade paths to move to 4.3.



If you have an older deployment, follow these guidelines to upgrade your existing deployment to BI platform 4.3:

1. If your existing deployment is of XI R2, XI MHF1, XI R2 SP1, BusinessObjects 5/6, or Crystal Enterprise 9/10, you must first upgrade to XI R2 SP2 (or higher) and proceed from step 3.
2. If your existing deployment is of XI 3.x, you can directly proceed with the upgrade from step 3.
3. Install BI 4.1/4.2 SPx on a separate machine, and run Upgrade Management Tool from the 4.1/4.2 SPx to migrate the content from the above-mentioned versions to BI 4.1/4.2 SPx level.
4. Once you brought your content to BI 4.1/4.2 SPx level, you can choose either of the following methods to move to 4.3.
 1. Run the update installation software of BI 4.3.x on the machine at 4.1/4.2 SPx level, Or

2. Install BI 4.3 on a separate machine and use the Promotion Management Tool from BI 4.3.x to promote the content from the BI 4.1/4.2 SPx level to BI 4.3.x level.

📘 Note

The PM tool must be the same version as the target CMS.

📘 Note

For more information on the BusinessObjects 5/6 to XI 3.1, refer the Migration Guide and the BI platform Installation Guide for your version available at https://help.sap.com/viewer/product/SAP_BUSINESSOBJECTS_ENTERPRISE_BUSINESS_INTELLIGENCE_PLATFORM/XI.3.1/en-US.

The Upgrade Management Tool (UMT) upgrades only the Server and Web Tier features in your deployment. For more information on UMT, see the Business Intelligence Platform Upgrade Guide for your version, available at https://help.sap.com/viewer/product/SAP_BUSINESSOBJECTS_BUSINESS_INTELLIGENCE_PLATFORM/4.2/en-US.

In-place update: If BI 4.3 SPx is installed on the same server machine, then you can run the in-place update to update the content to BI 4.3.x level.

3.1.1 Integration

You can install the BI platform independently, or side-by-side with an existing deployment. The two deployments can work at the same time, even if they are on the same machine.

→ Tip

You can uninstall your old deployment when you no longer need it.

Related Information

[Side-by-side deployments \[page 8\]](#)

3.2 Key Concepts

3.2.1 Central Management Server (CMS)

The dedicated Central Management Server (CMS) database (also known as a CMS repository or a CMS system database) contains configuration and operation information. A separate Auditing Data Store contains auditing information. You can run business intelligence reports on this auditing information.

The CMS system and Auditing Data Store databases are separate from your organization's reporting database. When your deployment is installed and configured, you can establish a read-only connection between the

deployment and your organization's reporting database for business reporting to analyze your data without changing your production database systems.

3.2.2 Business Intelligence Archive Resource (BIAR) files

A Business Intelligence Archive Resource (BIAR) file contains compressed business intelligence content. This content can be easily moved to a different location or SAP Crystal Server 2016 deployment.

During an incremental upgrade, you can select a BIAR file as the source or destination if you cannot connect to two Central Management Servers directly (for example, if your destination and source deployments are on different physical networks).

You can use the upgrade management tool to import a BIAR file generated using the Import Wizard from 2008 V1.

Note

You cannot export a BIAR file generated using the 4.x upgrade management tool into another 4.x deployment. Use the promotion management application in the Central Management Console (CMC) to promote content between two 4.x deployments. For more information, see the “Deployments with the same major version” section.

Caution

Using the upgrade management tool to import BIAR files generated with `biarengine.jar` is not recommended. For more information, see the “Promotion Management” chapter of the *BI platform Administrator Guide*.

Depending on your deployment and the complexity of its content, your content may be stored in multiple segmented BIAR files. To use multiple segmented BIAR files as an upgrade source, ensure that all files are located in the same directory. You can select any file in a group to export the contents of all files in the group.

Related Information

[Deployments with the same major version \[page 20\]](#)

3.2.3 Side-by-side deployments

A 3.x/4.x side-by-side deployment allows you to install the 4.x version of BI platform on a machine with an existing, older 3.x deployment.

Caution

- A 3.x/4.x side-by-side deployment is supported, but not a recommended deployment scenario.

- To avoid conflicts between the two deployments, install the second deployment into a unique directory, specify a unique Central Management Server (CMS) port, and ensure that all ports used by both deployments are unique.

Related Information

[Central Management Server \(CMS\) \[page 7\]](#)

3.3 Key Tasks

3.3.1 Complete upgrades

During a complete upgrade, the upgrade management tool copies all content from one deployment to another and then upgrades it.

Complete upgrades allow you to migrate all business intelligence content (including dependencies and permissions) from the source deployment to the destination deployment. Any objects that exist in the destination deployment are automatically overwritten by objects with the same unique identifiers in the source deployment. Objects in the source deployment with different unique identifiers but the same name and location as objects on the destination deployment are renamed when they are upgraded.

This is the simplest and fastest way to upgrade the content of your entire Central Management Server database.

To perform a complete upgrade on Windows, start the upgrade management tool from ► [SAP Business Intelligence](#) ► [SAP BusinessObjects BI platform 4](#) ► on the [Start](#) menu, and then click [Complete Upgrade](#) on the [Welcome to upgrade management tool](#) page.

❗ Note

You can also perform a complete upgrade from the command line on Windows or Unix.

Related Information

[Performing complete upgrades from the command line \[page 29\]](#)

3.3.2 Incremental upgrades

During an incremental upgrade, the upgrade management tool copies selected content from one deployment to another and then upgrades it.

Incremental upgrades allow you to migrate individual objects, content, dependencies, and rights to a destination deployment. You can select which objects in the source deployment can be copied and renamed if they have different unique identifiers but the same name and location as objects on the destination deployment.

You can also select a Business Intelligence Active Resource (BIAR) file as the source or destination for the upgrade.

Selecting and migrating specific objects from a Central Management Server with an incremental upgrade is the best way to export a limited subset of source objects into a destination deployment.

To perform an incremental upgrade on Windows, start the upgrade management tool from ► [SAP Business Intelligence](#) ► [SAP BusinessObjects BI platform 4](#) ► on the [Start](#) menu, and then click [Incremental Upgrade](#) on the [Welcome to upgrade management tool](#) page.

ⓘ Note

You cannot perform an incremental upgrade from the command line on Windows or Unix.

Related Information

[Business Intelligence Archive Resource \(BIAR\) files \[page 8\]](#)

[Deployments with the same major version \[page 20\]](#)

3.3.3 Upgrades from Information platform services 4.3

If you have an existing Information platform services (IPS) 4.3 deployment in a cluster with multiple machines, use the following guidelines to migrate your data to a BI platform 4.3 deployment, using the same Central Management Server (CMS) database, or a different database.

- Install BI platform 4.3 on the same number of machines that you have in your IPS cluster, using identical installation features and options (such as the installation path and node names).
- Install the CMS database into the existing IPS 4.3 database, and select [Use an existing database](#) during your installation of BI platform 4.3. For more information, see the “Full installation” section of the *Business Intelligence platform Installation Guide*.

ⓘ Note

If your deployments use different databases (for example, SQL Anywhere and Oracle), use the Central Configuration Manager (CCM) to copy your data from one database to another. For more information, see the “Copying data from one CMS system database to another” chapter of the *Business Intelligence platform Administrator Guide*.

Related Information

[Central Management Server \(CMS\) \[page 7\]](#)

3.4 Naming conventions

3.4.1 Variables

This guide uses the following variables.

Variable	Description
<INSTALLDIR>	The directory where BI platform is installed by default. On a Windows machine, it is C:\Program Files (x86)\SAP BusinessObjects
<AIXJVMDIR>	The directory where SAP Java Virtual Machine (JVM) is installed on an AIX machine. <INSTALLDIR>/sap_bobj/enterprise_xi40/aix_rs6000_64/sapjvm/bin
<BINDIR>	The directory where BI platform binary files are installed on a Unix machine. <INSTALLDIR>/sap_bobj/enterprise_xi40/<PLATFORM>
<PLATFORM>	The name of your Unix operating system. Acceptable values are: <ul style="list-style-type: none">• aix_rs6000_64• linux_x64• solaris_sparcv9
<LIBDIR>	The directory where libraries are installed on a Unix machine. Acceptable values are: <ul style="list-style-type: none">• LIBPATH (AIX)• LD_LIBRARY_PATH (Linux and Solaris)
<JARDIR>	The directory where upgrade management tool JAR files are installed. On a Windows machine, it is <INSTALLDIR>\SAP BusinessObjects Enterprise XI 4.0\java\apps\upgradeManagementTool\jars

Variable	Description
	On a Unix machine, it is <code><INSTALLDIR>/sap_bobj/enterprise_xi40/java/apps/upgradeManagementTool/jars</code>
<code><WIN64DIR></code>	The directory where 64-bit components are installed on a Windows machine. <code><INSTALLDIR>\SAP BusinessObjects Enterprise XI 4.0\win64_x64</code>

3.4.2 Terminology

The following terms are used throughout the BI platform documentation:

Term	Definition
Add-on products	Products that work with the BI platform but have their own installation program.
Auditing Data Store (ADS)	The database used to store auditing data
BI platform	An abbreviation for the SAP BusinessObjects Business Intelligence platform
Bundled database; bundled web application server	The database or web application server shipped with the BI platform
Cluster (noun)	Two or more Central Management Servers (CMSs) working together and using a single CMS database
Cluster (verb)	To create a cluster: <ol style="list-style-type: none"> 1. Install a CMS and CMS database on machine A. 2. Install a CMS on machine B. 3. Point the CMS on machine B to the CMS database on machine A.
Cluster key	Used to decrypt the keys in the CMS database. You can change the cluster key in the CCM, but you cannot reset the key like a password. It contains encrypted content and is important not to lose.
CMS	An abbreviation for the Central Management Server
CMS database	The database used by the CMS to store information about the BI platform

Term	Definition
Deployment	The BI platform software installed, configured, and running on one or more machines
Installation	An instance of BI platform files created by the installation program on a machine
Machine	The computer on which the BI platform software is installed
Major release	A full release of the software
Minor release	A release of some components of the software
Node	A group of BI platform servers that run on the same machine and are managed by the same Server Intelligence Agent (SIA)
Patch	A small update for a specific Support Package version
Promotion	The process of transferring BI content between deployments with the same major release (for example, 4.3 to 4.3), using the promotion management application
Server	A BI platform process. A server hosts one or more services
Server Intelligence Agent (SIA)	A process that manages a group of servers, including stopping, starting, and restarting servers
Support Package	A software update for a minor or major release
Web application server	A server that processes dynamic content
Upgrade	The planning, preparation, migration, and post-processes required to complete a migration process
ONE Installer	ONE Installer is a single installation package that supports multiple BI installation scenarios such as, fresh installation of a Service Package or Patch, any Patch to Patch update, or any Service Package to Patch update.

4 Preparing for Upgrades

Before upgrading the BI platform, perform the following tasks:

- Ensure your machines meet the deployment's system requirements.
- Back up existing repositories, including the system database and the File Store.
- Back up custom web applications, HTML pages, and scripts in your existing deployment.
- Close any locally-running programs before you run the upgrade management tool.
- Stop any web servers and web application servers on your existing deployment.
- Create a new database or use an existing database for the Central Management Server of your new deployment during installation.
- (Optional) If you select an existing database, obtain the details of the database server and the administrative credentials that you will need to connect to the database instance.
- (Optional) Configure the SSL settings of the upgrade management tool.

Note

The database account requires permission to add and drop tables, and insert, delete, and update data in tables.

- BI platform 4.3 replaces existing server tracing parameters with `sap_log_level` and `sap_trace_level`. If you have a 4.0.x deployment, update `BO_trace.ini` manually using `BO_trace.original.ini` file as a template. For more information, see the “Managing and Configuring Logs” chapter in the *BI platform Administrator Guide*.
- You must run the command `runbobjsldds.bat -clean` to clean the system landscape directory after upgrading to the latest version. For more information, refer to [2536219](#).
- Please refer to the following Knowledge Base Articles to ensure that you do not miss out on the best practices & pre-requisites before initiating the install/update activity:
 - KBA [1952120](#) - Best practices & pre-requisites on Windows while Install/Update/Patching BI
 - KBA [2490588](#) - Best practices & pre-requisites on Linux while Install/Update/Patching BI

When you run the upgrade management tool, follow these guidelines:

- If you have an XI R2 deployment, log on with the Administrator account when you upgrade your source deployment.
- If you have an XI 3.x (or later) deployment, log on as a member of the Administrators group.

For a detailed overview of changes in the deployment, see the *What's New* guide and the “Architecture” chapter in the *BI platform Planning Guide*.

Related Information

[To configure SSL settings \[page 21\]](#)

4.1 Object types and feature requirements


Ensure that the machine on which you run the upgrade management tool has the BI platform features that correspond to the object types that you want to upgrade. The following table lists the available object types and the features associated with them.

→ Remember

If a feature is not installed on the machine, the corresponding object type will not be upgraded.

Object type	Required feature
BI workspaces (Dashboards)	<i>BI workspace Services</i>
Crystal reports	none
Web Intelligence documents and publications	<i>Connectivity Processing Services</i>
Promotion management application (Lifecycle management console) data	<i>Platform Processing Services</i> or <i>Platform Scheduling Services</i>
Mobile	<i>CMS plugin for Mobile</i>
Universes, connections	<i>Connectivity Processing Services</i>
Analysis, edition for OLAP workspaces	none
Web service query tool (QaaWS)	<i>Connectivity Processing Services</i>

4.2 System requirements

For a list of operating systems, hardware requirements, web application servers, web servers, and database servers supported by this release, see the *Product Availability Matrix* (Supported Platforms/PAR), available in the SAP BusinessObjects section of the SAP Support Portal at: <https://support.sap.com/home.html> .

4.2.1 Legacy auditing databases

You cannot run BI platform 4.2 with a XI 3.x (or older) auditing database, because the upgrade management tool does not copy its contents. You can create a new BI platform 4.2 auditing database and direct the auditing output to it.

Related Information

[Configuring the auditing database \[page 34\]](#)

5 Performing Upgrades

Upgrading to BI platform 4.2 involves installing a new deployment and copying your content and system data from an existing deployment.

You can install the new deployment independently or side-by-side with an existing deployment. The two deployments can work at the same time. When you no longer need your old deployment, you can uninstall it.

⚠ Caution

If you create a side-by-side deployment, specify a unique Central Management Server (CMS) port number for your destination deployment (other than 6400) to avoid conflicts between deployments.

Perform the following manual steps after installing the new deployment:

- Enable your deployment servers.
- Use the upgrade management tool to export your business intelligence content from your existing deployment.
- Reconfigure and add the new deployment servers to the Central Management Server (CMS).
- Configure the auditing database.
- (Optional) Uninstall your previous deployment.

ℹ Note

The upgrade management tool does not copy server or server cluster settings to your new deployment. If your existing deployment is distributed across several servers or clusters, and you want to create the same structure for your new deployment, use the Central Management Console to add your servers and clusters manually. For more information, see the “Managing and Configuring Servers” chapter of the *BI platform Administrator Guide*.

For more information on installing a deployment on a Windows machine, see the *BI platform Installation Guide for Windows*.

For more information on installing a deployment on a Unix machine, see the *BI platform Installation Guide for Unix*.

Related Information

[Using the upgrade management tool \[page 20\]](#)

[Configuring the auditing database \[page 34\]](#)

[Uninstalling a previous deployment \[page 34\]](#)

5.1 Exporting content to your new deployment

5.1.1 Users and groups

The upgrade management tool exports users and groups from one deployment to another, keeping their hierarchical relationships. The upgrade management tool uses the following rules:

- If a group in a source deployment already exists in the destination deployment, the upgrade management tool merges the groups automatically, updates the membership of the group in the destination deployment, and adds the exported users to the deployment (if their accounts do not already exist).
- If a user in a source deployment has an alias identical to an alias of a user in the destination deployment, the upgrade management tool lets the user in the destination deployment keep all aliases, removing the conflicting alias from the user in the source deployment.

5.1.1.1 User licensing

When importing users with existing licenses, the upgrade management tool uses the following rules:

- Concurrent users in the source deployment are imported as concurrent users into the destination deployment.
- Named users in the source deployment are imported as named users into the destination deployment, until no more named user licenses are available. The remaining named users are imported as concurrent users.

For more information on user licensing, see the *BI platform Administrator Guide*.

5.1.1.2 Third-party authentication methods

The BI platform supports the following third-party authentication methods:

- Enterprise
- JD Edwards
- LDAP
- Oracle EBS
- PeopleSoft
- SAP
- Siebel
- Windows AD

For more information on third-party users and the authentication plug-in, see the “Authentication” chapter of the *BI platform Administrator Guide*.

Related Information

[Migrating Windows NT user and group aliases \[page 35\]](#)

5.1.1.3 To export users with existing third-party authentication

1. Configure and enable the authentication plug-ins on the destination deployment.
2. Run the upgrade management tool, and select the users to be migrated.

After the upgrade process is complete, all users are properly mapped to the appropriate groups. The users can log in without additional configuration.

For more information on third-party users and the authentication plug-in, see the “Authentication” chapter of the *BI platform Administrator Guide*.

Related Information

[Migrating Windows NT user and group aliases \[page 35\]](#)

5.1.2 Security settings

To export an object's security settings to a destination deployment, export the object along with any users and groups that have rights to the object. The upgrade management tool uses the following rules:

- If you perform an incremental upgrade and export an object to the destination deployment without exporting users and groups, the object loses its security settings, unless the same users and groups already exist in the destination deployment.
- If you perform an incremental upgrade and export an object to the destination deployment without exporting its custom access levels, the object loses the security settings that were used to set the custom access levels, unless the same custom access levels already exist in the destination deployment.
- If you do not export the owner of an object, and the owner does not exist in the destination deployment, the object is owned by the Administrator after you export it.

5.1.3 Note objects and legacy InfoView objects

Note objects

The upgrade management tool does not upgrade note objects during the initial upgrade process. After the upgrade process is complete, you must run the upgrade management tool again to successfully upgrade your note objects.

Legacy InfoView objects

When you upgrade to BI platform 4.3, legacy MyInfoView and InfoView objects are converted to BI workspaces and BI workspace modules.

⚠ Caution

If you want to convert your legacy MyInfoView and InfoView objects to their 4.3 equivalents, do not use the BIAR to Live upgrade scenario; instead, use the Live to Live upgrade scenario.

The upgrade management tool uses the following rules:

- During a complete upgrade, all objects in personal and public folders are upgraded automatically.
- During an incremental upgrade, you can select specific users. The users' personal and public folders (for example, inbox, documents, personal categories, or personal folders) are included as dependencies.
- Personal and corporate dashboards are converted to generic BI workspaces.
- The Performance Management application object is converted to a BI workspace application object.

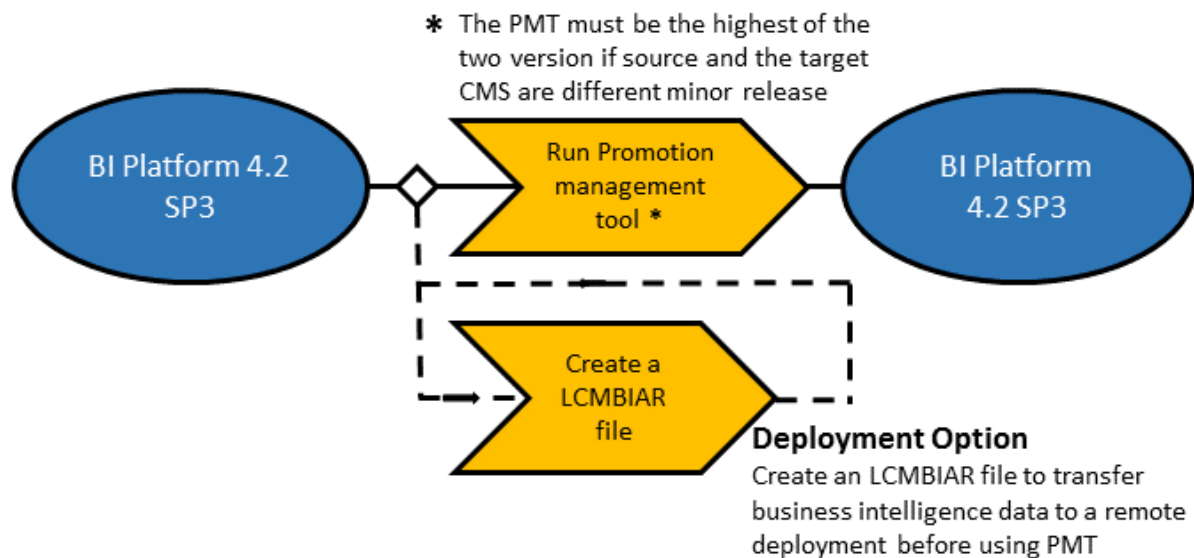
📌 Note

Previously, users with no access rights to the Performance Management application object could create and edit MyDashboard and MyInfoView objects, and save them into personal folders. After the upgrade, such users must be granted access rights to the BI workspace application object.

Related Information

[Log On page \[page 23\]](#)

5.1.4 Deployments with the same major version



You must use the promotion management application in the Central Management Console (CMC) to promote content between two BI platform 4.x deployments. For example, you can export content from a development or quality assurance deployment to a production deployment.

ⓘ Note

You cannot use the upgrade management tool to migrate content between deployments with the same major version.

ⓘ Note

XI 3.x Lifecycle Management (LCM) jobs cannot be migrated to BI platform 4.x because their contents are version-specific. By default, the migration of LCM objects is disabled. However, if you want to keep the history of your InfoObjects, you can force the migration by adding the following option to the upgrade management tool: `-Dumt.systemVar.omitLCMObjects=false`

For more information, see the “Promotion Management” chapter of the *BI platform Administrator Guide*.

5.1.5 Using the upgrade management tool

The upgrade management tool guides you through the process of exporting business intelligence content (user accounts, groups, folders, reports, universes, security, and other objects) and upgrading it to the most recent version.

The upgrade involves the following steps:

Complete Upgrades

1. Select an upgrade scenario.
2. Specify the source and destination deployments.
3. (Optional) Specify object parameters.
4. Perform the upgrade.

Incremental Upgrades

1. Select an upgrade scenario.
2. Specify the source and destination deployments.
3. Select objects to upgrade.
4. (Optional) Specify object parameters.
5. Review the summary and upgrade options.
6. Perform the upgrade.

5.1.5.1 Before you start

Before you upgrade your BI platform deployment, ensure that all unnecessary servers on the source and destination deployments are shut down, to avoid inconsistent states in your new BI platform 4.2 deployment:

- Stop all servers in the source deployment, except the Central Management Server (CMS), and the File Repository Server (FRS).

Note

If the CMS or the FRS is stopped on the destination deployment, the upgrade management tool will display a warning before you can begin the upgrade process.

- Stop all servers (including all Job Servers) in the destination deployment, except the CMS, FRS, the Report Application Server (if you plan to upgrade Crystal Reports 2011 or 2013 documents), and the Adaptive Processing Server (if you plan to upgrade Analysis workspaces).
- (Optional) Configure the SSL settings of the upgrade management tool.

To launch the upgrade management tool from the Start menu, click ► [SAP Business Intelligence](#) ► [SAP BusinessObjects BI platform 4](#) ► [Upgrade management tool](#) ►.

5.1.5.1.1 To configure SSL settings

If you use SSL, you must configure the SSL settings of the upgrade management tool in `<JARDIR> / upgradeManagementToolSystem.properties`

Note

SSL properties set on the Java Virtual Machine take precedence over the SSL properties set in this file.

Restriction

You must use the same SSL certificates on the source and destination deployments, and you must use BI platform 4.2 to generate the certificates.

1. Open `upgradeManagementToolSystem.properties` in a text editor.
2. Enter the values for each setting.

Setting	Value
<code>umt.systemVar.ssl.businessobjects.orb.oci.protocol</code>	The value <code>ssl</code> . Entering this value enables SSL communication.
<code>umt.systemVar.ssl.certDir</code>	The location of keys and certificates
<code>umt.systemVar.ssl.trustedCert</code>	The name of the trusted certificate file.
<div><div>Note</div><div>If you specify more than one file, separate your entries with a semicolon, for example, <code>fileA; fileB</code>).</div></div>	
<code>umt.systemVar.ssl.sslCert</code>	SDK certificate.
<code>umt.systemVar.ssl.sslKey</code>	The private key of the SDK certificate.
<code>umt.systemVar.ssl.passphrase</code>	The location of the file that contains the passphrase for the private key.
<code>umt.systemVar.ssl.source.bip4x</code>	Specifies if the source CMS version 4.0 or higher, and configured for SSL. Value is <code>true</code> or <code>false</code> . Default is <code>false</code> .
<div><div>Note</div><div>If your source CMS is 4.0 or higher and configured for SSL you must enter <code>true</code>, to ensure that the SSL certificates are kept in the upgrade.</div></div>	

Caution

Do not add or edit any other settings or values.

3. Save `upgradeManagementToolSystem.properties`

Example: SSL settings in `upgradeManagementToolSystem.properties`

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE properties SYSTEM "http://java.sun.com/dtd/properties.dtd">
<properties>
  <entry key="umt.systemVar.ssl.businessobjects.orb.oci.protocol">
    ssl</entry>
  <entry key="umt.systemVar.ssl.certDir">/usr/SSLCert</entry>
  <entry key="umt.systemVar.ssl.trustedCert">cacert.der</entry>
</properties>
```

```
<entry key="umt.systemVar.ssl.sslCert">servercert.der</entry>
<entry key="umt.systemVar.ssl.sslKey">server.key</entry>
<entry key="umt.systemVar.ssl.passphrase">passphrase.txt</entry>
<entry key="umt.systemVar.ssl.source.bip4x">true</entry>
</properties>
```

Related Information

[Variables \[page 11\]](#)

5.1.5.2 Upgrade management tool pages

5.1.5.2.1 Welcome page

The [Welcome](#) page lets you specify a [Complete Upgrade](#) or an [Incremental Upgrade](#). You can also select the language you want to use (if your deployment has additional languages installed), log level, and temporary folder location.

Click [Next](#) to continue.

5.1.5.2.2 Log On page

The [Log on](#) page lets you specify an upgrade scenario, and source and destination deployments.

Upgrade scenarios

- [Live to Live](#)
Exports content from a source deployment to a destination deployment, and upgrades it.
- [BIAR to Live](#)
Exports content from a BIAR file to a destination deployment, and upgrades it.
You can use the upgrade management tool to import a BIAR file generated using the Import Wizard from XI Release 2 or XI 3.x.

⚠ Caution

If you want to convert your legacy MyInfoView and InfoView objects to their 4.2 equivalents, do not use the BIAR to Live upgrade scenario; instead, use the Live to Live upgrade scenario.

- [Live to BIAR](#)
Exports content from a source deployment (BI platform 4.2 or newer) to a BIAR file.

ⓘ Note

You cannot export a BIAR file generated using the BI platform 4.x upgrade management tool into another 4.x deployment. Use the promotion management application in the Central Management Console (CMC) to promote content between two 4.x deployments.

⚠ Caution

Using the upgrade management tool to import BIAR files generated with `biarengine.jar` is not recommended. For more information, see the "Promotion Management" chapter of the *BI platform Administrator Guide*.

ⓘ Note

When you are performing Live to BIAR scenario, the following option is disabled.

- On [Select Filters](#) page, [Hide objects which are already migrated](#) option is disabled.

Source and destination deployments

- For the Central Management Server (CMS) that you have selected, enter the user name and password for the administrator account. If the CMS runs on any port except 6400, enter the hostname followed by a colon and a port number (for example, `hostname:portnumber`).
If you select the [Set credentials for future usage](#) checkbox, the system saves the CMS username. Henceforth, when you log on to UMT, by default the [Username](#) field is populated with the saved information.
- For the BIAR file you have selected, enter a path and a file name. You can also enter a password to protect your BIAR file and encrypt the local database created during the upgrade process.
If you select the [Set credentials for future usage](#) checkbox, the system saves the BIAR location. Henceforth, when you log on to UMT, by default the BIAR location is populated with the saved information.

ⓘ Note

Encrypting a BIAR file may increase the length of the upgrade process and result in decreased performance.

Click [Next](#) to continue.

After you log onto a CMS, you cannot return to this page. To use a different source or destination deployment, exit the upgrade management tool and restart it.

5.1.5.2.3 Select Filters Page

The main purpose of [Select Filter](#) page is to reduce the number of document being displayed. It allows you to filter the documents based on the following:

- The created/ modified time
- The object type
- The previously migrated content

On source

The source deployment provides you the following two filters:

- [Apply Time Filter](#): You can obtain the documents, which are created/modified between the specified start and end date.

Note

When you are performing BIAR to Live scenario, [Apply Time Filter](#) option is disabled.

- [Select All Object Type](#): By default all the document types are selected. You can choose to select the required document type.

On Destination

[Hide objects which are already migrated](#): If you don't want to migrate the documents, which you have previously migrated to the destination, then choose the [Hide objects which are already migrated](#) option.

Note

When you are performing Live to BIAR scenario, [Hide objects which are already migrated](#) option is disabled.

Click [Next](#) to proceed .

Note

The filter selected in the [Select Filter](#) page is applicable only for selecting the objects in the [Object Selection page](#). However, this filter selection is not applicable for dependency calculation in the [Summary](#) page.

For example, perform the following:

1. In [Select Filter](#) page, select the object type as Webl report.
2. In the [Object Selection](#) page, select the Webl report, and choose the [Export this object and its dependencies](#).
Irrespective of the filter that you choose in the [Select Filter](#) page, the [Summary](#) page displays the universe and connection along with the Webl report. This is due to the dependency rule.

5.1.5.2.4 Parameters page

The [Parameters](#) page lets you enter parameters for objects.

You can enter a URL for a web service query (for example, <http://localhost:8080/dswsbobje>).

Click [Next](#) to continue.

5.1.5.2.5 Object Selection Page

The [Object Selection](#) page lets you select object instance settings, the content that you want to export from the source deployment, the dependencies of specific objects, and the CMC tab access rights.

Object instance settings

Click [Options](#) and select one of the following options:

- [Export all instances of an object if the object is selected to have its dependencies exported.](#)
- [Do not export object instances.](#)
- [Export pending/recurring instances.](#)

Note

When you are performing BIAR to Live scenario, [Export pending/recurring instances](#) option is disabled.

Click [OK](#) to close the [Options](#) dialog box.

Objects and dependencies

You can export an object with its dependencies. You can also export an object that other objects depend on.

Click an object to select one of the following options:

- [Export this object and its dependencies](#)
Includes universes, universe connections, and object instances.
- [Export this object](#)
Does not export dependencies.
- [Export this object only if it is depended on](#)

To apply the same settings to multiple objects, select [Apply to selected objects](#).

Click [Next](#) to continue.

Users and User Groups Object

Note

You can select specific user folders when selecting users and user groups.

Click the [Users and User Groups](#) object to display a dialog box. In the [Users and User Groups](#) dialog box, you can right-click a group and select one of the following options:

- [Export this group, its subgroups, their users and their users' dependencies.](#)
- [Export this group, its subgroups and their users.](#)
- [Export this group, its subgroups and their users only if they are depended on.](#)

Note

To prevent the propagation of settings, hold `shift` while right-clicking a group.

Click [Close](#) to close the [Users and User Groups](#) dialog box.

5.1.5.2.6 Summary page

The [Summary](#) page displays a list of content that the upgrade management tool will export to the destination deployment.

Note

Ensure that the Central Management Server (CMS) and the File Repository Server (FRS) are running on the destination deployment. If the CMS or the FRS is stopped on the destination deployment, the upgrade management tool will display a warning before you can begin the upgrade process.

Complete upgrades

To revise export settings, click [Back](#).

Review the list, then click [Start](#) to continue.

Incremental upgrades

The list shows your objects' dependencies, and other objects that depend on them. To view an object's dependencies, double-click it or select it and click [<number> objects depend on this object](#). The [Dependencies](#) page displays the name, path, number of instances, and object type of the dependency.

You can remove an object by clearing the checkbox next to it. To add other objects to the list, click [Back](#) and select the objects on the [Object Selection](#) page.

To specify name conflict resolution or incremental export options, click [Upgrade Options](#).

To revise other export settings, click [Back](#).

Review the list, and then click [Start](#) to continue.

Note

System displays the minimum temporary space required by Upgrade Management Tool for document migration.

5.1.5.2.6.1 Upgrade Options

This dialog box allows you to specify name conflict resolution or incremental export options for the upgrade process.

Name conflict resolution

Select an action for two objects of the same object type that have the same name and location:

- [Default] [Rename object to avoid name conflict](#)
Adds a number to the end of an object's file name when it is exported.
- [Do not export object](#)
Excludes an object from the upgrade process.

Note

The upgrade options you select apply to all objects during the upgrade. To export multiple objects with different options, you must perform separate incremental upgrades.

Incremental export options

- [Overwrite object content](#)
Overwrites objects on the destination deployment with objects from the source deployment, if their CUIDs match.

Note

You can prevent a specific object type from being overwritten by checking its name in the [Except for the following object types](#) list.

- [Include Security](#)
Includes security rights from the source deployment to the destination deployment, if their CUIDs match.
- [Overwrite object security](#)

Overwrites existing security rights on the destination deployment with security rights from the source deployment, if their CUIDs match.

Click [OK](#) to return to the [Summary](#) page.

5.1.5.2.7 Export page

The [Export](#) page shows information about objects that were upgraded successfully and objects that could not be upgraded.

- The [General Info](#) tab displays the results of the upgrade process and the location of the log file.
- The [Object Log](#) tab displays detailed information about the processed objects.

The upgrade management tool writes this information to a log file.

5.1.5.3 Performing complete upgrades from the command line

You can run a complete upgrade from the command line on a Windows or Unix machine.

Before you run a complete upgrade from the command line on a Unix machine, include [<BINDIR>](#) in your binary search path:

```
export <LIBDIR>=$<LIBDIR>:<BINDIR>
```

To perform a complete upgrade, run `upgrademanagementtool.jar` from the [<JARDIR>](#) directory.

Note

If your deployment is on the AIX platform, run SAP Java Virtual Machine (JVM) from [<AIXJVMDIR>](#). For information about using Sun JVM with deployments running on other Unix platforms, see the "Variables" section.

Include the following Java parameters to allocate enough memory and specify the path to [<BINDIR>](#):

```
-Xmx2g -Djava.library.path="<BINDIR>"
```

Example: Live to Live export

```
<AIXJVMDIR>/java -Xmx2g -Djava.library.path="<BINDIR>"
-jar upgrademanagementtool.jar
-mode livetolive
-source mycms1:6400
-sourceusername "Administrator"
-sourcepassword "Password1"
-destination mycms2:6400
-destinationusername "Administrator"
```

```
-destinationpassword "Password2"  
-logfile "/usr/logs/myLogFile.csv"
```

Example: BIAR to Live export

```
<AIXJVMDIR>/java -Xmx2g -Djava.library.path="<BINDIR>"  
-jar upgrademanagementtool.jar  
-mode biartolive  
-biarfile "/usr/biarfiles/myBiarFile.biar"  
-destination mycms2:6400  
-destinationusername "Administrator"  
-destinationpassword "Password1"  
-logfile "/usr/logs/myLogFile.csv"
```

Note

Use BIAR to Live export when the source and destination deployments are on different physical networks, or when you cannot connect to both Central Management Servers at the same time.

Related Information

[Variables \[page 11\]](#)

[Command-line parameters \[page 31\]](#)

5.1.5.3.1 Creating a response file

A response file is a plain-text file that contains the parameters necessary to perform an upgrade. Using a response file is a convenient way to run the upgrade management tool from the command line with multiple custom parameters. For more information, see the “Command-line parameters” section.

⚠ Restriction

Responses cannot contain empty values or quotation marks (").

Example: myResponseFile.txt

```
mode=livetolive  
source=mycms1:6400  
sourceusername=Administrator  
sourcepassword=Password1  
destination=mycms2:6400  
destinationusername=Administrator  
destinationpassword=Password2
```

```
logfile=/usr/logs/myLogFile.csv
configparam:base_url=http://myHost:8080/dswsbobje
locale=fr_FR
```

To use a response file, run `upgrademanagementtool.jar` with the following parameter:

```
-responsefile "/usr/myResponseFile.txt"
```

Related Information

[Variables \[page 11\]](#)

[Command-line parameters \[page 31\]](#)

5.1.5.3.2 Command-line parameters

Required parameters

Parameter	Description	Example
-biarfile	The name and path of the BIAR file used as the source or destination of the export. <div>Note You can set this parameter only if you specified a BIAR file as the source or destination of the upgrade.</div>	-biarfile "/usr/biarfiles/myBiarFile.biar"
-destination	The host name of the CMS that you export content to. <div>Note If the CMS is running on a non-default port, you must also specify the port number.</div>	-destination mycms2:7500
-destinationpassword	The password of the administrative account in the destination deployment.	-destinationpassword "Password1"
-destinationusername	The user name of the administrative account in the destination deployment.	-destinationusername "Administrator"

Parameter	Description	Example
-mode	<p>→ Remember</p> <p>The -mode parameter is mandatory.</p> <p>The mode of exporting content. Accepted values:</p> <ul style="list-style-type: none"> • livetolive Exports content from one Central Management Server (CMS) to another. • biartolive Exports content from a BIAR file to a CMS. • livetobiar Exports content from a CMS to a Business Intelligence Archive Resource (BIAR) file. <p>For more information, see the "Business Intelligence Archive Resource (BIAR) files" section.</p>	-mode livetolive
-source	<p>The host name of the CMS that you export content from.</p> <p>📌 Note</p> <p>If the CMS is running on a non-default port, you must also specify the port number.</p>	-source mycms1:6500
-sourcepassword	The password of the administrative account in the source deployment.	-sourcepassword "Password1"
-sourceusername	The user name of the administrative account in the source deployment.	-sourceusername "Administrator"
Optional parameters		
Parameter	Description	Example
-configparam	<p>Allows you to enter parameters for objects.</p> <p>📌 Note</p> <p>After typing the parameter, type a colon (:), the name of the object parameter, an equals sign (=), and the object parameter value.</p>	-configparam:base_url="http://localhost:8080/dswsbobje"

Parameter	Description	Example
-locale	Specifies the language locale for the upgrade management tool. Note If a locale is not supported, the upgrade management tool defaults to English or the system locale.	<code>-locale fr_FR</code>
-logfile	Creates a log file that contains a record of the upgrade process.	<code>-logfile "/usr/logs/myLogFile.csv"</code>
-biarpassword	Protects your BIAR file with a password. Note When you use this parameter, -encrypttempstorage is also used.	<code>-biarpassword "p;4s5\$W0r,d"</code>
-encrypttempstorage	Encrypts the local database created during the upgrade process. Note Encrypting a BIAR file may increase the length of the upgrade process and result in decreased performance. Caution This parameter does not protect your BIAR file with a password. Use -biarpassword to add password protection.	<code>-encrypttempstorage</code>
-responsefile	Uses a response file which contains the parameters necessary to perform an upgrade.	<code>-responsefile "/usr/myResponseFile.txt"</code>

Related Information

[Variables \[page 11\]](#)

[Performing complete upgrades from the command line \[page 29\]](#)

[Creating a response file \[page 30\]](#)

[Business Intelligence Archive Resource \(BIAR\) files \[page 8\]](#)

5.2 Reconfiguring and adding servers

If your existing deployment was distributed across multiple servers or server clusters, you must add and configure servers manually using the Central Management Console (CMC) to recreate your deployment.

For more information on adding servers and server clusters with the CMC, see the *BI platform Administrator Guide*.

5.3 Configuring the auditing database

To keep the contents of your existing auditing database, create a new auditing database for your BI platform 4.2 deployment. You must recreate all the settings of your original auditing database, because the upgrade management tool does not copy its contents.

For more information on configuring the auditing database, see the "Managing Auditing" chapter of the *BI platform Administrator Guide*.

5.4 To enable BI platform 4.3 servers

After you copy the contents of your existing BI platform deployment, enable the BI platform 4.3 servers using the Central Configuration Manager (CCM) and the Central Management Console (CMC).

1. Open the CCM, and start the Server Intelligence Agent and web application server.
2. Open a browser, and log onto the CMC with Administrator account.
3. In the [Servers](#) area, select all servers, and click [Enable Server](#).

5.5 Uninstalling a previous deployment

If you installed the BI platform side-by-side with an older deployment, you can uninstall the older deployment, its service packs, and its hotfixes when you no longer need them, using [Add/Remove Programs](#) in [Control Panel](#).

Note

The contents of your existing deployment's File Repository Servers, CMS database tables, and auditing database tables are not uninstalled.

6 Post Upgrade

After you upgrade BI platform 4.2, you may need to perform the following tasks:

- BI platform 4.2 does not support Windows NT authentication. If you have existing Windows NT users and groups, you can migrate them to Active Directory (AD) authentication using the AD alias generator tool. For more information, see the “Migrating Windows NT user and group aliases” section.
- You can view Desktop Intelligence documents migrated using the upgrade management tool from XI R2 and XI 3.1 using the Desktop Intelligence 3.1 Desktop Client with the Desktop Intelligence Compatibility Pack (DCP). For more information on pre-requisites and on working with DCP, see the *Desktop Compatibility Pack User Guide*.

Related Information

[Third-party authentication methods \[page 17\]](#)

6.1 Migrating Windows NT user and group aliases

The AD alias generator tool allows you to migrate your Windows NT user and group aliases to Active Directory (AD) aliases. When you run the AD alias generator tool, it logs onto the destination deployment's Central Management Server (CMS) using administrative credentials and processes the user and group objects on the CMS in batches.

Related Information

[Third-party authentication methods \[page 17\]](#)

6.1.1 To migrate Windows NT user and group aliases

Note

Before you migrate your aliases, use the Central Management Console (CMC) to configure the Windows AD administrative credentials and the default domain.

1. Use `<WIN64DIR>/ADAliasGenerator.exe` to run the AD alias generator tool.



2. Note the command prompt output.

- If no errors occur, use the AD alias generator tool to remove the NT aliases from the destination deployment.
- If errors occur, review the log file, use the CMC to remove mapped AD member groups from the destination deployment, change your configuration, and run the AD alias generator tool again.

Related Information

[To remove mapped AD member groups \[page 37\]](#)

6.1.1.1 Command-line parameters for the AD alias generator tool

Parameter	Description	Example
-cms	The host name of the Content Management Server (CMS) on the destination deployment. <div> Note If the CMS is running on a non-default port, you must also specify the port number.</div>	<code>-cms mycms1:6500</code>
-username	The user name of the administrative account on the destination deployment.	<code>-username Administrator</code>
-password	The password of the administrative account on the destination deployment.	<code>-password Password1</code>
-remove	Removes the user and group NT aliases from the destination deployment. <div> Caution Before you use this parameter, ensure that the AD alias generator tool has successfully migrated the aliases.</div>	<code>-remove</code>
-help	Shows the available command-line parameters.	<code>-help</code>

Example: Migrating NT user and group aliases to AD

```
<WIN64DIR>/ADAliasGenerator.exe  
-cms mycms1:6500  
-username Administrator  
-password Password1
```

Example: Removing NT aliases

⚠ Caution

Before you run this command, ensure that the AD alias generator tool has successfully migrated the aliases.

```
<WIN64DIR>/ADAliasGenerator.exe  
-cms mycms1:6500  
-username Administrator  
-password Password1  
-remove
```

Related Information

[Variables \[page 11\]](#)

6.1.2 To remove mapped AD member groups

You can remove the mapped AD member groups to undo the actions of the AD alias generator tool.

1. Start the Central Management Console (CMC).
2. Go to the [Authentication](#) area and double-click [Windows AD](#).
The [Windows Active Directory](#) dialog box appears.
3. In the [Mapped AD Member Groups](#) area, click an AD group, and then click [Delete](#).
4. When you finish removing AD member groups, click [Update](#).
The dialog box closes.



Your changes are applied to the Central Management Server.

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