# Content

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Document History</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>About this Guide</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Planning Upgrades</td>
<td>6</td>
</tr>
<tr>
<td>3.1</td>
<td>Upgrade paths</td>
<td>6</td>
</tr>
<tr>
<td>3.2</td>
<td>Key Concepts</td>
<td>7</td>
</tr>
<tr>
<td>3.2.1</td>
<td>Central Management Server (CMS)</td>
<td>7</td>
</tr>
<tr>
<td>3.2.2</td>
<td>Business Intelligence Archive Resource (BIAR) files</td>
<td>7</td>
</tr>
<tr>
<td>3.2.3</td>
<td>Side-by-side deployments</td>
<td>8</td>
</tr>
<tr>
<td>3.3</td>
<td>Key Tasks</td>
<td>9</td>
</tr>
<tr>
<td>3.3.1</td>
<td>Complete upgrades</td>
<td>9</td>
</tr>
<tr>
<td>3.3.2</td>
<td>Incremental upgrades</td>
<td>9</td>
</tr>
<tr>
<td>3.3.3</td>
<td>Upgrades from Information platform services 4.1</td>
<td>10</td>
</tr>
<tr>
<td>3.4</td>
<td>Naming conventions</td>
<td>10</td>
</tr>
<tr>
<td>3.4.1</td>
<td>Variables</td>
<td>10</td>
</tr>
<tr>
<td>3.4.2</td>
<td>Terminology</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>Preparing for Upgrades</td>
<td>14</td>
</tr>
<tr>
<td>4.1</td>
<td>Object types and feature requirements</td>
<td>14</td>
</tr>
<tr>
<td>4.2</td>
<td>System requirements</td>
<td>15</td>
</tr>
<tr>
<td>4.2.1</td>
<td>Legacy auditing databases</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>Performing Upgrades</td>
<td>16</td>
</tr>
<tr>
<td>5.1</td>
<td>Exporting content to your new deployment</td>
<td>17</td>
</tr>
<tr>
<td>5.1.1</td>
<td>Users and groups</td>
<td>17</td>
</tr>
<tr>
<td>5.1.2</td>
<td>Security settings</td>
<td>18</td>
</tr>
<tr>
<td>5.1.3</td>
<td>Note objects and legacy InfoView objects</td>
<td>19</td>
</tr>
<tr>
<td>5.1.4</td>
<td>Deployments with the same major version</td>
<td>20</td>
</tr>
<tr>
<td>5.1.5</td>
<td>Using the upgrade management tool</td>
<td>20</td>
</tr>
<tr>
<td>5.2</td>
<td>Reconfiguring and adding servers</td>
<td>31</td>
</tr>
<tr>
<td>5.3</td>
<td>Configuring the auditing database</td>
<td>31</td>
</tr>
<tr>
<td>5.4</td>
<td>To enable BI platform 4.1 servers</td>
<td>32</td>
</tr>
<tr>
<td>5.5</td>
<td>Uninstalling a previous deployment</td>
<td>32</td>
</tr>
<tr>
<td>6</td>
<td>Post Upgrade</td>
<td>33</td>
</tr>
<tr>
<td>6.1</td>
<td>Migrating Windows NT user and group aliases</td>
<td>33</td>
</tr>
</tbody>
</table>
To migrate Windows NT user and group aliases. .................................................. 33
To remove mapped AD member groups. ......................................................... 35
# Document History

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

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP BusinessObjects Business Intelligence platform 4.1</td>
<td>May 2013</td>
<td>First release of this document.</td>
</tr>
</tbody>
</table>
| SAP BusinessObjects Business Intelligence platform 4.1 Support Package 1 | August 2013 | ● Incorrect `<parameter>`=`<value>` examples have been fixed.  
   ● Product names have been implemented consistently. |
| SAP BusinessObjects Business Intelligence platform 4.1 Support Package 2 | November 2013 | Command-line parameters have been updated.                                 |
| SAP BusinessObjects Business Intelligence platform 4.1 Support Package 7 | November 2015 | Included a note under Before you start section.                            |
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 4.1. 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 4.1 from XI Release 2 SP2 (or higher), or a Business Intelligence Archive Resource (BIAR) file generated from XI R2 SP2 (or higher, except BI platform 4.1).

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

- To upgrade to 4.1 from XI R2, XI MHF1, or XI R2 SP1, you must first upgrade to XI R2 SP2 (or higher).
- To upgrade from BusinessObjects 5/6, or Crystal Enterprise 9/10, you must first upgrade to XI R2 SP2. For more information, see the BusinessObjects 5/6 to XI 3.1 Migration Guide, and the BI platform Installation Guide for your version, available at https://support.sap.com/home.html.

Note

The upgrade management tool upgrades only the Server and Web Tier features in your deployment. To upgrade the client tools, run the Client Tools installation program.

Related Information

Central Management Server (CMS) [page 7]
Business Intelligence Archive Resource (BIAR) files [page 7]
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 2013 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 26]

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

Related Information

Business Intelligence Archive Resource (BIAR) files [page 7]
Deployments with the same major version [page 20]

3.3.3 Upgrades from Information platform services 4.1

If you have an existing Information platform services (IPS) 4.1 deployment in a cluster with multiple machines, use the following guidelines to migrate your data to a BI platform 4.1 deployment, using the same Central Management Server (CMS) database, or a different database.

- Install BI platform 4.1 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 4.1 database, and select Use an existing database during your installation of BI platform 4.1. 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.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;INSTALLDIR&gt;</code></td>
<td>The directory where BI platform is installed by default.</td>
</tr>
<tr>
<td></td>
<td>On a Windows machine, it is <code>C:\Program Files (x86)\SAP BusinessObjects</code></td>
</tr>
<tr>
<td><code>&lt;AIXJVMDIR&gt;</code></td>
<td>The directory where SAP Java Virtual Machine (JVM) is installed on an AIX machine.</td>
</tr>
<tr>
<td></td>
<td><code>&lt;INSTALLDIR&gt;/sap_bobj&gt;/enterprise_xi40/aix_rs6000_64/sapjvm/bin</code></td>
</tr>
<tr>
<td><code>&lt;BINDIR&gt;</code></td>
<td>The directory where BI platform binary files are installed on a Unix machine.</td>
</tr>
<tr>
<td></td>
<td><code>&lt;INSTALLDIR&gt;/sap_bobj/enterprise_xi40/</code></td>
</tr>
<tr>
<td><code>&lt;PLATFORM&gt;</code></td>
<td>The name of your Unix operating system. Acceptable values are:</td>
</tr>
<tr>
<td></td>
<td>● aix_rs6000_64</td>
</tr>
<tr>
<td></td>
<td>● linux_x64</td>
</tr>
<tr>
<td></td>
<td>● solaris_sparcv9</td>
</tr>
<tr>
<td><code>&lt;LIBDIR&gt;</code></td>
<td>The directory where libraries are installed on a Unix machine. Acceptable values are:</td>
</tr>
<tr>
<td></td>
<td>● LIBPATH (AIX)</td>
</tr>
<tr>
<td></td>
<td>● LD_LIBRARY_PATH (Linux and Solaris)</td>
</tr>
<tr>
<td><code>&lt;JARDIR&gt;</code></td>
<td>The directory where upgrade management tool JAR files are installed.</td>
</tr>
<tr>
<td></td>
<td>On a Windows machine, it is <code>&lt;INSTALLDIR&gt;\SAP BusinessObjects Enterprise XI 4.0\java\apps\upgradeManagementTool\jars</code></td>
</tr>
<tr>
<td></td>
<td>On a Unix machine, it is <code>&lt;INSTALLDIR&gt;/sap_bobj/enterprise_xi40/java/apps/upgradeManagementTool/jars</code></td>
</tr>
<tr>
<td><code>&lt;WIN64DIR&gt;</code></td>
<td>The directory where 64-bit components are installed on a Windows machine.</td>
</tr>
<tr>
<td></td>
<td><code>&lt;INSTALLDIR&gt;\SAP BusinessObjects Enterprise XI 4.0\win64_x64</code></td>
</tr>
</tbody>
</table>
### 3.4.2 Terminology

The following terms are used throughout the BI platform documentation:

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>add-on products</td>
<td>Products that work with the BI platform but have their own installation program, such as SAP BusinessObjects Explorer</td>
</tr>
<tr>
<td>Auditing Data Store (ADS)</td>
<td>The database used to store auditing data</td>
</tr>
<tr>
<td>BI platform</td>
<td>An abbreviation for the SAP BusinessObjects Business Intelligence platform</td>
</tr>
<tr>
<td>bundled database; bundled web application server</td>
<td>The database or web application server shipped with the BI platform</td>
</tr>
<tr>
<td>cluster (noun)</td>
<td>Two or more Central Management Servers (CMSs) working together and using a single CMS database</td>
</tr>
</tbody>
</table>
| cluster (verb)                                 | To create a cluster. For example, to create a cluster:  
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. |
<p>| 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                                                                      |
| 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, such as 4.0                                                                                                 |</p>
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>migration</td>
<td>The process of transferring BI content from a previous major release (for example, from XI 3.1), using the upgrade management tool. This term does not apply to deployments with the same major release. See promotion.</td>
</tr>
<tr>
<td>minor release</td>
<td>A release of some components of the software, such as 4.1</td>
</tr>
<tr>
<td>node</td>
<td>A group of BI platform servers that run on the same machine and are managed by the same Server Intelligence Agent (SIA)</td>
</tr>
<tr>
<td>Patch</td>
<td>A small update for a specific Support Package version</td>
</tr>
<tr>
<td>promotion</td>
<td>The process of transferring BI content between deployments with the same major release (for example, 4.0 to 4.0), using the promotion management application</td>
</tr>
<tr>
<td>server</td>
<td>A BI platform process. A server hosts one or more services.</td>
</tr>
<tr>
<td>Server Intelligence Agent (SIA)</td>
<td>A process that manages a group of servers, including stopping, starting, and restarting servers</td>
</tr>
<tr>
<td>Support Package</td>
<td>A software update for a minor or major release</td>
</tr>
<tr>
<td>web application server</td>
<td>A server that processes dynamic content. For example, the bundled web application server for 4.1 is Tomcat 7.</td>
</tr>
<tr>
<td>upgrade</td>
<td>The planning, preparation, migration, and post-processes required to complete a migration process</td>
</tr>
</tbody>
</table>
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 4.1 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.

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 22]

**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.

Table 3:

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

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://service.sap.com/bosap-support.

4.2.1 Legacy auditing databases

You cannot run BI platform 4.1 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 4.1 auditing database and direct the auditing output to it.

Related Information

Configuring the auditing database [page 31]
Performing Upgrades

Upgrading to BI platform 4.1 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.

**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 31]
- Uninstalling a previous deployment [page 32]
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 33]

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 33]

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 4.1, 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 4.1 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.

ℹ️ 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 4.1 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 documents), and the Adaptive Processing Server (if you plan to upgrade Analysis workspaces).

- (Optional) Configure the SSL settings of the upgrade management tool.

  **Note**
  
  If you upgrade from XI 3.1 SP6 FP6 and above or XI 3.1 SP7 FP3 and above to SAP BusinessObjects BI platform 4.1 deployment, then you need to perform the following:
  
  - In the command line parameter of Input File Repository Server and Output File Repository Server of XI 3.1 Source deployment, add the -disableAuth parameter. For more information, see SAP Note 2203527.

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 4.1 to generate the certificates.

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

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>umt.systemVar.ssl.businessobjects.orboci.protocol</code></td>
<td>The value <code>ssl</code></td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
</tr>
<tr>
<td></td>
<td>Entering this value enables SSL communication.</td>
</tr>
<tr>
<td><code>umt.systemVar.ssl.certDir</code></td>
<td>The location of keys and certificates</td>
</tr>
<tr>
<td><code>umt.systemVar.ssl.trustedCert</code></td>
<td>The name of the trusted certificate file</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
</tr>
<tr>
<td></td>
<td>If you specify more than one file, separate your entries with a semicolon (for example, <code>fileA;fileB</code>).</td>
</tr>
<tr>
<td><code>umt.systemVar.ssl.sslCert</code></td>
<td>The SDK certificate</td>
</tr>
<tr>
<td><code>umt.systemVar.ssl.sslKey</code></td>
<td>The private key of the SDK certificate</td>
</tr>
<tr>
<td><code>umt.systemVar.ssl.passphrase</code></td>
<td>The location of the file that contains the passphrase for the private key</td>
</tr>
</tbody>
</table>

**Caution**
Do not add or edit any other settings or values.

3. Save `upgradeManagementToolSystem.properties`

**Example**

SSL settings in `upgradeManagementToolSystem.properties`

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE properties SYSTEM "http://java.sun.com/dtd/properties.dtd">
<properties>
```
Related Information

Variables [page 10]

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).

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 4.1 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 4.1 or newer) to a BIAR file.
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.

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).
- 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.

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 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/dswsbojbe).

Click Next to continue.

5.1.5.2.4 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.

5.1.5.2.4.1 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.
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.

- **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.

5.1.5.2.5  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.
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"
```

**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 "Password2"
-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](#)

[Command-line parameters](#)
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=mycmsl:6400
sourceusername=Administrator
sourcepassword=Password1
destination=mycms2:6400
destinationusername=Administrator
destinationpassword=Password2
logfile=/usr/logs/myLogFile.csv
configparam:base_url=http://myHost:8080/dswsobje
locale=fr_FR

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

-rcponsefile "/usr/myResponseFile.txt"

Related Information

Variables [page 10]
Command-line parameters [page 29]
### Command-line parameters

#### Table 4: Required parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>-biarfile</td>
<td>The name and path of the BIAR file used as the source or destination of the export.</td>
<td>-biarfile &quot;/usr/biarfiles/myBiarFile.biar&quot;</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>You can set this parameter only if you specified a BIAR file as the source or destination of the upgrade.</td>
<td></td>
</tr>
<tr>
<td>-destination</td>
<td>The host name of the CMS that you export content to.</td>
<td>-destination mycms2:7500</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>If the CMS is running on a non-default port, you must also specify the port number.</td>
<td></td>
</tr>
<tr>
<td>-destinationpassword</td>
<td>The password of the administrative account in the destination deployment.</td>
<td>-destinationpassword &quot;Password1&quot;</td>
</tr>
<tr>
<td>-destinationusername</td>
<td>The user name of the administrative account in the destination deployment.</td>
<td>-destinationusername &quot;Administrator&quot;</td>
</tr>
<tr>
<td>-mode</td>
<td><strong>Remember</strong></td>
<td>-mode livetolive</td>
</tr>
<tr>
<td></td>
<td>The -mode parameter is mandatory.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The mode of exporting content. Accepted values:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- livetolive - Exports content from one Central Management Server (CMS) to another.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- biartolive - Exports content from a BIAR file to a CMS.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- livetobiar - Exports content from a CMS to a Business Intelligence Archive Resource (BIAR) file.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>For more information, see the &quot;Business Intelligence Archive Resource (BIAR) files&quot; section.</td>
<td></td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Example</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>-source</td>
<td>The host name of the CMS that you export content from.</td>
<td>-source mycms1:6500</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>If the CMS is running on a non-default port, you must also specify the port</td>
<td></td>
</tr>
<tr>
<td></td>
<td>number.</td>
<td></td>
</tr>
<tr>
<td>-sourcepassword</td>
<td>The password of the administrative account in the source deployment.</td>
<td>-sourcepassword &quot;Password1&quot;</td>
</tr>
<tr>
<td>-sourceusername</td>
<td>The user name of the administrative account in the source deployment.</td>
<td>-sourceusername Administrator</td>
</tr>
</tbody>
</table>

Table 5: Optional parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>-configparam</td>
<td>Allows you to enter parameters for objects.</td>
<td>-configparam:base_url=&quot;<a href="http://localhost:8080/dswsobje">http://localhost:8080/dswsobje</a>&quot;</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>After typing the parameter, type a colon (:), the name of the object parameter,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>an equals sign (=), and the object parameter value.</td>
<td></td>
</tr>
<tr>
<td>-locale</td>
<td>Specifies the language locale for the upgrade management tool.</td>
<td>-locale fr_FR</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>If a locale is not supported, the upgrade management tool defaults to English</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or the system locale.</td>
<td></td>
</tr>
<tr>
<td>-logfile</td>
<td>Creates a log file that contains a record of the upgrade process.</td>
<td>-logfile &quot;/usr/logs/myLogFile.csv&quot;</td>
</tr>
<tr>
<td>-biarpassword</td>
<td>Protects your BIAR file with a password.</td>
<td>-biarpassword &quot;p:4s5W0r,d&quot;</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>When you use this parameter, -encrypttempstorage is also used.</td>
<td></td>
</tr>
</tbody>
</table>
### Parameter Table

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>-encrypttempstorage</code></td>
<td>Encrypts the local database created during the upgrade process.</td>
<td><code>-encrypttempstorage</code></td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Encrypting a BIAR file may increase the length of the upgrade process and result in decreased performance.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Caution</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This parameter does not protect your BIAR file with a password. Use <code>-biarpassword</code> to add password protection.</td>
<td></td>
</tr>
<tr>
<td><code>-responsefile</code></td>
<td>Uses a response file which contains the parameters necessary to perform an upgrade.</td>
<td><code>-responsefile &quot;/usr/myResponseFile.txt&quot;</code></td>
</tr>
</tbody>
</table>

### Related Information

- Variables [page 10]
- Performing complete upgrades from the command line [page 26]
- Creating a response file [page 28]
- Business Intelligence Archive Resource (BIAR) files [page 7]

### 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 4.1 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 4.1 servers

After you copy the contents of your existing BI platform deployment, enable the BI platform 4.1 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 4.1, you may need to perform the following tasks:

- BI platform 4.1 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

i 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 35]

6.1.1.1 Command-line parameters for the AD alias generator tool

Table 6:

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

Example

Migrating NT user and group aliases to AD

\(<WIN64DIR>/ADAliasGenerator.exe\)
Example

Removing NT aliases

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

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

Related Information

Variables [page 10]

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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