

Oracle® Business Process Analysis Suite

Administration Guide

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Glossary

Preface

This Preface contains the following topics:

- [Audience](#)
- [Documentation Accessibility](#)
- [Related Documents](#)
- [Conventions](#)

Audience

Oracle Business Process Analysis Suite Administration Guide is intended for system administrators who perform the following tasks:

- Install and configure Oracle Application Server adapters
- Use adapters with BPEL Process Manager

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Related Documents

For more information, see the following document in the Oracle Other Product One Release 7.0 documentation set or in the Oracle Other Product Two Release 6.1 documentation set:

- *Oracle BPEL Process Manager User's Guide*
- *Oracle BPEL Process Manager Installation Guide*

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Manual Conventions

This chapter describes the manual conventions.

1.1 Writing Conventions and Formatting Features

In the Administration Guide, menu items, file names, etc. are identified by the following writing conventions and formatting features:

Table 1–1 Writing Conventions/Formatting Features

Writing Conventions/Formatting Features	Example
Menu items, shortcut keys, dialog boxes, file names, keyboard entries, etc. are written in bold.	Click on OK . Enter the path in the sample.txt file.
Sequences of menus and menu items are listed in order, separated by slashes.	Click on Help/Help Topics .
User-defined entries are highlighted in bold and enclosed in angle brackets.	Enter the path <directory>\server .

How to Set Up Oracle Business Process Architect for Use in a Browser

This section contains information on the setup, setting options and execution modes (Page 4) that are important for using Oracle BPA Suite products in a browser environment.

Procedure

1. Ensure that the system requirements are met.
2. Install the Web Client Components (see Installation Guide).
3. Install a JRE approved for Oracle BPA Suite. Ensure that the directory name of the path does not contain any spaces or special characters, or otherwise the JRE cannot be executed.

Navigate to the Web Client Components installation directory using your browser. If the Web Client Components are set up, you will find the link to the HTML test page at the end of the Multi Lingual Index Page.

When you navigate back to the Web Client Components installation directory using your browser, the database list of the linked Oracle BPA Suite Site is displayed.

4. Pass the link on to users who want to work with Oracle Business Process Architect, for example, the link to the `index_lan.html` file.

2.1 Oracle Business Process Architect Installed Files

By default, the files you need for downloading the Oracle Business Process Architect JAR files to your computer are installed in the `%bpa101home%server/html/lib` directory. You need the JAR files to run Oracle Business Process Architect. The `arisloader.cfg` file is saved in this Web directory. This file controls the download of Java-based products if you click on a database shortcut on the main page.

Here are some examples of entries in the `arisloader.cfg` file:

```
# Versioninfo
#   Version=10.1.3.3
#   File_Version=1

# Specifiy Client Installation Path Here
# Samples:
libdir=

# DO NOT EDIT THIS SECTION!
```

```
# Main Start Class
mainclass=com.idsscheer.aris.client.container.common.AARISClientContainer
jreoptions=-Xms25m -Xmx128m
# DLL Container for MS Windows Interaction
dll_container=cl_wcp.jar
```

You use the libdir= entry or the arisjarpath101= and bpa101home= environment variables to specify the directory on your computer to which the Java-based product files are copied after startup. Oracle BPA Suite Setup enters the path to the Oracle BPA Suite installation directory for the bpa101home= variable. arisjarpath101= and bpa101home= are environment variables of the client computer and not entries in the arisloader.cfg file.

Note: Please do not use any country-specific special characters in the path for arisjarpath101=, bpa101home= and libdir=.

The entry and environment variables are queried in the following sequence:

1. The system first searches for the arisjarpath101 environment variable. If the system finds it, the JAR files are copied to the directory specified there.
2. If the environment variable is not found, the libdir entry in the arisloader.cfg file is checked. If a directory is assigned to this entry, the JAR files are copied to that directory.
3. If no directory is assigned to this entry, the system searches for the bpa101home environment variable. If the system finds it, the JAR files are copied to the directory specified there.
4. If the environment variable is not found, the JAR files are copied to the <installation directory>\bpa10\webclient directory.

The arisjarpath101= and bpa101home= environment variables (see steps 1 and 3) enable you to copy the JAR files to any directory on any client computer.

2.2 Automatic Installation with aris_database.html and JRE

The aris_database.html file opens databases and models in Oracle Business Process Architect. Working with Oracle Business Process Architect requires an approved JRE (Page 65). The aris_database.html file checks whether an approved JRE is installed or not.

WARNING: Install the JRE in a path whose directory name does not include any spaces. Otherwise, the JRE cannot be executed.

```
If none of the required JREs is installed, the system redirects you to SUN's
Internet address for JRE installation:
if (NN) { document.writeln('<EMBED \
WIDTH = "100%" HEIGHT = "100%" \
pluginspage="http://java.sun.com/products/plugin/1.4/plugin-install.html" \
scriptable=false \'); }
else { document.writeln('<OBJECT
classid="clsid:8AD9C840-044E-11D1-B3E9-00805F499D93" \
WIDTH = "100%" HEIGHT = "100%" \
codebase="http://java.sun.com/products/plugin/1.4/jinstall-14-win32.cab#Version=1,
3,1,0">');
}
```

However, you can also delete the Internet address or replace it with the address of the Web Client Components.

The JRE setup program is located in the addons\java runtime environment directory.

Hint

You will find information on the JRE plug-in at: <http://www.java.sun.com/>.

2.3 SSL Encryption of Data Transmission Via Secure Socket Layer

Using SSL (1024 Bit RSA) you can exchange encrypted data between the Java-based products and Oracle Business Process Repository.

SSL capability is already integrated in Oracle BPA Suite.

If you want data exchange to be encrypted, please proceed as follows:

Procedure

1. Ensure that the system date matches the current date. This ensures that the validity of the SSL certificates supplied by Oracle Corporation is checked correctly. These certificates can only be used to exchange data between Java-based products and Oracle Business Process Repository.
2. Open the **ArisLauncher.cfg** file with a text editor. By default, this file is located in the **%bpa101home%server\config** directory after Oracle Business Process Repository installation.

3. Insert the text highlighted below in the line displayed:

```
<Profile name="Public" port="17050" ssl="443" threadpoolsize="100" options=""/>
```

If the port you specified is already in use, you can use any other port that is available.

4. Save and close the **ArisLauncher.cfg** file.
5. Open the **arissserver.cfg** file with a text editor. By default, this file is located in the **%bpa101home%server\config** directory after Oracle Business Process Repository installation.
6. In the **HTMLGenerator** section, remove the following comment lines:

```
<!--Remove this comment to turn on ssl encryption
<genfile target_dir="ssl" target_name="index.html" database_template="aris_
database_ssl.html"/>
-->
```

If Oracle Business Process Repository was active during the change, it must be restarted.

7. From now on, use **index_ssl.html** as the start file for the databases. This file is located in the **%bpa101home% server\html** directory.

2.4 Language Update and Character Sets

A language update for the Web Client Components and Oracle BPA Suite Server enters the language resource files in the **arisloader.cfg** file in the installation directory. As a result, a language update is performed automatically when a Java-based product opens a database.

To display different character sets (Japanese, Arabic, Cyrillic, etc.), the corresponding file in the installation directory must be called **font.properties**.

For example, if you wish to display Japanese characters, you must rename the **font.properties.ja** file to **font.properties**.

2.5 Execution as Applet or Application

We recommend that you run Oracle Business Process Architect as an application to prevent errors caused by your browser. You can install Oracle Business Process Architect as a client, or launch it as an application via a browser as described below.

During installation, the `\template\htmlgen` directory is created where the `aris_database_lan.html` (`index_lan.html`) and `aris_database_app.html` (`index_app.html`) files are stored.

If you use `aris_database_lan.html` (`index_lan.html`), Oracle Business Process Architect will start as an applet, if you use `aris_database_app.html` (`index_app.html`), it will start as an application.

The lines for starting Oracle Business Process Architect differ as follows:

`aris_database_lan.html` (`index_lan.html`) for starting Oracle Business Process Architect as an applet:

```
var appletmode = (args['appletmode'] ? args['appletmode'] : "applet");
```

`aris_database_app.html` (`index_app.html`) for starting Oracle Business Process Architect as an application:

```
var appletmode = (args['appletmode'] ? args['appletmode'] : "javaapp");
```

2.6 Providing Additional Memory

If you use Oracle Business Process Architect as an applet, you can provide additional memory for it. This is recommended if you use memory-intensive, user-defined symbols in your databases, for example.

Hint

This setting affects all Java-based programs.

Go to the Control Panel, open the Java control panel, and change the Java applet runtime settings by entering the required Java runtime parameters for the JRE version you are using. To provide 128 MB of memory please enter `-Xmx128m`.

2.7 Installation by Software Distribution

WARNING: As a consequence of changing the standard installation as described in this section, updates or other changes by the Oracle BPA Suite installation program are no longer possible. They would have to be made manually.

Generally, the following applies: The `cid.bin` file must not be distributed because all clients will otherwise be identified as one and the same client. Since the file is newly created when the client is started, there is no need to distribute it.

After starting Oracle Business Process Architect, you will find the **cid.bin** file in the **.BPA10.1.3** subdirectory of the user profile (`%userprofile%`).

You can copy the Oracle Business Process Architect JAR files from the **BPA/webclient** directory to a directory on the client computer via software distribution. You can then assign the **bpa101home** environment variable for this path to the **libdir=** entry in the **arisloader.cfg** file.

2.7.1 Possible Settings for user.cfg

You can specify the following settings in the **user.cfg** file:

- You can specify configuration settings, such as the default filter or grid width, for example.
- You set up sample Java-based products and copy the generated **user.cfg** file to the **bpa10/config** directory. You must delete the session ID in that case.

2.7.2 Pre-Configured user.cfg

When Oracle Business Process Architect is installed for the first time (Page 2), the internal **user.cfg** file is used when the application is first started.

2.7.3 How to Configure user.cfg

If Oracle Business Process Architect finds the **user.cfg** file in the config directory of your Web Client Components installation, this file will be used instead of the **user.cfg** preconfigured file.

Procedure

1. Switch to the **config** directory of your Web Client Components installation.
2. Open the **user.cfg** file with a text editor, enter your data and save the file.

The first time a user launches Java-based products, your settings will be used. If a user has already used Java-based products before the **user.cfg** file was changed, the **user.cfg** file must be deleted.

2.8 Oracle BPA Suite Reports - JavaScript

With Oracle Business Process Architect, you can create and run JavaScript reports, provided the necessary system requirements are met.

Configuration Options

This section describes how to customize Oracle BPA Suite by modifying various files.

3.1 How to Configure arisserver.cfg

Use the arisserver.cfg file (server\config directory) to:

- control the behavior of HTML Generator.
- configure the connections between clients, Oracle Business Process Repository and Oracle Business Process Repository Site Manager (see the following descriptions).

define that an e-mail is sent automatically to an address of your choice (Page 42) if the behavior of Oracle Business Process Repository triggers warnings or error messages.

Client/Oracle Business Process Repository Connection

While each client sends a ping to Oracle Business Process Repository every 25 seconds, Oracle Business Process Repository polls its clients every 90 seconds (value in milliseconds) according to the setting shown below. This entry determines the period within which a user can contact Oracle Business Process Repository via the client without having to log in again via the login dialog box.

```
<AppServerTimer
timeout_interval="90000" />
```

Oracle Business Process Repository/Oracle Business Process Repository Site Manager Connection

The following entries specify the intervals at which Oracle Business Process Repository Site Manager checks whether the license service is active:

```
<licenseservice_client
timeout_interval="300000"
heartbeat_interval="50000" />
```

The heartbeat_interval="50000" entry specifies that Oracle Business Process Repository sends a ping to Oracle Business Process Repository Site Manager every 50 seconds (= 50,000 milliseconds) and thus indicates that its licenses are still in use.

The timeout_interval="300000" entry specifies that Oracle Business Process Repository Site Manager checks every 5 minutes (= 300,000 milliseconds) whether Oracle Business Process Repository is still logged in with the corresponding licenses. If not, all licenses used via this Oracle Business Process Repository will be released.

Similarly, the following entries handle the locks in the database:

```
<lockservice_client
```

```
timeout_interval="300000"  
heartbeat_interval="50000" />
```

The `heartbeat_interval="50000"` entry specifies that Oracle Business Process Repository sends a ping to Oracle Business Process Repository Site Manager every 50 seconds (= 50,000 milliseconds) and thus indicates that its locks are still valid.

The `timeout_interval="300000"` entry specifies that Oracle Business Process Repository Site Manager checks every 5 minutes (= 300,000 milliseconds) whether Oracle Business Process Repository is still logged in with the corresponding licenses. If not, all locks generated via this Oracle Business Process Repository will be lifted.

3.1.1 HTML Generator - Current Database Lists

HTML Generator creates all index files and the **aris_database.html** for the Web Client Components. It updates the access files whenever databases are created, renamed or deleted. You can control its activity via the **arisserver.cfg** file (server\config directory).

During a default server installation, the HTML Generator is switched on and generates the index.html files in the **C:\<default directory>\bpa10\server\html** directory. If you accept all default values during installation, this directory will always contain a current, executable Web Client Components directory that you can copy directly to your Web server.

A dialog box prompts you to specify where the HTML Generator is to be installed.

The **htmlgen** section of the **arisserver.cfg** file contains the path in which the created files are saved. A language ID is entered in this section for each of the interface languages installed on the Oracle Business Process Repository. HTML Generator creates an **index.html** file for each of these IDs in the Web Client Components structure:

```
<htmlgen>  
<language list>  
  <language tag="de" />  
  <language tag="en" />  
  <language tag="ja" />  
</language list>  
<!-- Please edit only these paths for HTMLgenerator configuration -->  
<outputpath path="C:/wwwroot/bpa10" />  
</htmlgen>
```

You can run the HTML Generator manually at any time by executing the **htmlgen.bat** file in the Oracle Business Process Repository directory.

3.1.2 Restriction of the Number of index_backup Files

If HTML Generator creates a new **index.html** file, the existing **index.html** file is saved as **index_backup (<date time>).zip** under the specified backup path. The backup path is entered in the **<htmlgen>** section.

E.g.

```
<backuppath path="e:/wwwroot/bpa10/backup" />
```

You can determine the intervals at which the backup files - except for the most current one - will be deleted by making a corresponding entry in the **<htmlgen>** section. The interval is defined in days. In the following example, the entry specifies that all **index_** backup files except the most current one will be deleted after seven days:

```
<backupperiod period="7" />
```

3.2 When Do You Need To Configure Arislauncher.cfg?

You need to configure the **Arislauncher.cfg** file only if

- you wish to use the SSL software (Page 4).
- the computer on which you have installed Oracle Business Process Repository has two network cards.
- you have to change ports as a result of a port conflict with external software.

If you installed Oracle BPA Suite locally, the file is located in the **<Oracle BPA Suite installation directory>\LocalServer\config** directory.

If Oracle BPA Suite is installed on a server, the file is located in the **<Oracle BPA Suite installation directory>\server\config** directory.

Oracle Business Process Repository Computer with Two Network Cards

Corba (Orbacus) must be informed of the IP address of the card to be used. To do so, the following changes are necessary in the **ArisLauncher.cfg** and **AdminAgentLauncher.cfg** files:

The IP address must be appended to the entry for the public profile. In the following example, the IP address 127.0.0.1 is to be replaced with the correct IP address:

ArisLauncher.cfg

```
<Profile name="Public" port="17050" threadpoolsize="100" options="&#45;&#45;host
127.0.0.1"/>
```

AdminAgentLauncher.cfg

```
<Profile name="Agent" port="17050" threadpoolsize="100" options="&#45;&#45;host
127.0.0.1"/>
```

Customized Ports

To customize default ports, specify your changes for the server in the following files:

ArisLauncher.cfg

AdminAgentLauncher.cfg

ArisServer.cfg

- **services TCP/IP file.**

In addition, you need to modify the client ports in the following files:

services TCP/IP file,

arisclient.cfg

ConverterClient.cfg,

- **aris_database*.html** in the **<Oracle BPA Suite installation directory>\server\templates\htmlgen\<language code>** directory.

Note: This change has to be repeated after every update.

3.3 Providing Additional Memory

You can provide more memory for memory-intensive applications, such as an XML import or a Fast Merge.

To provide additional memory, you need to ensure that the hardware requirements are met.

Then you can increase memory usage by specifying the following entry in the **bpasrv101.ini** file (<Oracle BPA Suite installation directory>\server\jsl directory):

```
param01 = -Xmx512m
```

Just change the value shown in bold. The entry in the example above specifies that Oracle Business Process Repository may use a (maximum) memory of 512 megabytes.

3.4 Central User Login Using LDAP

To authenticate users centrally for an Oracle BPA Suite Site, you can set up an LDAP server (Page 83).

3.4.1 LDAP Authentication Requirements

To authenticate users via LDAP, you need to install an LDAP server. The LDAP server software can be downloaded free of charge from the Internet or purchased.

3.4.2 Advantages of LDAP Authentication

Authenticating users via the LDAP server instead of the Oracle BPA Suite database simplifies administration and avoids redundant password information.

With this "single point of login", users' passwords only need to be maintained in one system. Furthermore, if you delete LDAP users or change their passwords, you can prevent these users from accessing any of the Oracle BPA Suite databases that use the LDAP login process.

Hint

Please ensure that users select a password containing at least one letter. It is not possible to leave the password box blank, i.e. not to use a password.

3.4.3 Authentication Process

The login process runs differently depending on whether the LDAP login attribute was enabled to have the user log in via the LDAP server or disabled to have him log in to the database.

3.4.4 Security

This chapter contains information on your system's security settings.

3.4.4.1 Database Access

We recommend that you create at least one system user per database who is authenticated via the database rather than the LDAP server. This ensures that database access is still possible when all LDAP servers fail.

To ensure that the system user is authenticated via the database, all you have to do is make sure that the check box of the LDAP login attribute is disabled for this user.

3.4.4.2 Backup Server

You can enter up to three LDAP servers as database attribute. Operating three LDAP servers with identical configuration ensures a high level of reliability. During login,

the system first tries to access the first LDAP server, and if this server is not available, the second server is tried, etc.

3.4.5 How to Set Up Oracle BPA Suite for LDAP Server Operation

Once you have installed the LDAP servers, you need to specify the following settings in Oracle BPA Suite. It is necessary that you specify these settings for each database whose users are to log in via the LDAP server.

Procedure

1. Log in to the database with the Oracle BPA Suite product.
2. Right-click on the name of the database and click on **Attributes**. Attribute Editing opens.
3. Enter the respective **LDAP server URL** as the attribute value for each LDAP login server URL attribute. It has the following structure: ldap://<server name>:<port number>.
4. The server name is the name of the LDAP server and the number of the port on which the LDAP server receives queries. Example: ldap://<LDAP server>:389.
5. Click on **File/Save**.
6. Close Attribute Editing.
7. Click on the **User** database item.

If the database item is not visible, enable the check box next to the **User management** list entry in the Display box on the Explorer (**View/Options**) options page.

8. Select the names of the users who are to log in using the LDAP server.
9. Right-click on the selection and on **Attributes**. Attribute Editing opens.

10. In the **Distinguished name** box, for each user enter the name of the node corresponding to the user and containing the password information. To ensure successful login, please do not use any country-specific special characters.

Whether you use the unique ID (uid) or the common name (cn) depends on your LDAP server settings.

The structure of the entry is uid=<username> or cn=<username>,dc=<directory contact>.

Example: The entry for the user could be uid=pw,dc=bpas.

11. Enable the **LDAP login** attribute check box for each user. Otherwise, login via LDAP server is not possible.
12. Click on **File/Save**.
13. Close Attribute Editing.
14. From now on, the users you selected in step 7 will be authenticated via the LDAP server.

3.4.6 How to Set Up Oracle BPA Suite for LDAP Server Operation with SSL

Procedure

1. Install the LDAP server you want to use. Always refer to your LDAP system documentation because installation varies from system to system.
2. Obtain the SSL certificate for your LDAP system. To do so, consult your LDAP system documentation.
3. Import the certificate using the Keytool.exe program. The program is located in the **<Oracle BPA Suite Server installation directory>\server\jre\bin** directory.
4. Enter the path to the Oracle BPA Suite Server installation directory as the keystore parameter. Example: You have installed the Oracle BPA Suite Server in the C:\Program Files\Oracle BPA Suite<version>\server\ directory. The program could be called up as follows: Please note that you need to replace the terms within angle brackets (< >) by the actual terms without the angle brackets:

```
keytool.exe -keystore C:\Program Files\Oracle BPA Suite  
<version>\server\jre\lib\security\cacerts -storepass changeit -import -alias <dc>  
-file <path>\<certificate file>
```

Now you need to specify the following settings for each database whose users are to log in using the LDAP server.

5. Log into the database in Oracle BPA Suite.
6. Right-click on the name of the database and click on Attributes. Attribute Editing opens.
7. Enter the respective LDAP server URL as the attribute value for each LDAP login server URL attribute. It has the following structure:

ldaps://<server name>:<port number>.

The server name is the name of the LDAP server and the number of the port on which the LDAP server receives SSL queries. Example: ldaps://<LDAP server>:636.

8. Click on **File/Save**.
9. Close Attribute Editing.
10. Click on the User database item.

If the database item is not visible, enable the check box next to the User management list entry in the Display box on the Explorer (**View/Options**) options page.

11. Select the names of the users who are to log in using the LDAP server.
12. Right-click on the selection and on Attributes. Attribute Editing opens.
13. In the **Distinguished name** box, for each user enter the name of the node corresponding to the user and containing the password information. To ensure successful login, please do not use any country-specific special characters.

Whether you use the unique ID (uid) or the common name (cn) depends on your LDAP server settings.

The structure of the entry is uid=<username> or cn=<username>,dc=<directory contact>.

Example: The entry for the user could be uid=pw,dc=bpa.

14. Enable the **LDAP login** attribute check box for each user. Otherwise, login via LDAP server is not possible.
15. Click on **File/Save**.
16. Close Attribute Editing.
17. From now on, the users you selected in step 7 will be authenticated via the LDAP server.

3.5 New Database: Additional Languages

Using the **properties.xml** file, you can specify which database languages are automatically created when creating databases. Find the file

- for the local database system in the **<Oracle BPA Suite installation directory>\LocalServer\property** directory.
- for the Oracle BPA Suite Server in the **<Oracle BPA Suite installation directory>\server\property** directory.

Procedure

1. Open the **properties.xml** file of the corresponding directory in a text editor.
2. Select a language text block, e.g. the English block:
 1. `<property key="dbinitlanguages.en.commonfontbold" datatype="BOOL">false</property>`
 2. `<property key="dbinitlanguages.en.stdfontstyle" datatype="STRING">Standard</property>`
 3. `<property key="dbinitlanguages.en.maingroupname" datatype="STRING">Main group</property>`
 4. `<property key="dbinitlanguages.en.dialogfontsize" datatype="LONG">8</property>`
 5. `<property key="dbinitlanguages.en.commonfontsize" datatype="LONG">10</property>`
 6. `<property key="dbinitlanguages.en.codepage" datatype="LONG">1252</property>`
 7. `<property key="dbinitlanguages.en.charset" datatype="LONG">0</property>`
 8. `<property key="dbinitlanguages.en.commonfontname" datatype="STRING">Arial</property>`
 9. `<property key="dbinitlanguages.en.lcid" datatype="LONG">1033</property>`
3. Copy the text block to the clipboard and paste it at the end of the file.
4. If required, change the name of the default language font in row 2 (**Standard** is the default value in the English language text block).
5. Change the name of the main group in row 3, if necessary (**Main group** is the default value in the English language text block).
6. Modify the codepage entry in row 6, if necessary (codepage **1252** is the default value in the English language text block).
7. Change the general font name in row 8, if necessary (**Arial** is the default value in the English language text block).
8. Modify the locale ID in row 9, if necessary (locale ID **1033** is the default value in the English language text block).

Note: If you want to use country-specific special characters, they must be entered with UTF-8 encoding. Please use an UTF-8-enabled editor to encode country-specific special characters.

Database Server

This chapter describes the administration of the database.

4.1 Oracle Database Server

Read this section if you intend to use Oracle BPA Suite with an Oracle database.

Note: If you install an Oracle database yourself, always follow the instructions provided in the Oracle installation guide.

Scale your system in such a way that operation of the Oracle database does not use up more than 40% of your RAM. Otherwise, runtime problems may occur when Oracle Business Process Repository and other applications are running on the same computer at the same time.

Once you have installed the Oracle DBMS server you need to create an Oracle BPA Suite instance/database. The following sections describe the tablespace and table configurations required for Oracle BPA Suite, as well as recommended Oracle database system parameters.

The Oracle BPA Suite instance/database is created by the Oracle Database Configuration Wizard.

- Once you have created the instance/database, you need to create an ARIS70 database user. The Oracle BPA Suite Server uses only this connection user to access the database. The connection user has no database objects of any kind, such as tables, views, etc. This user requires only the following privileges:
- CREATE SESSION
- ALTER SESSION

The Oracle BPA Suite Server requires the ALTER SESSION privilege to be able to work on the schemas containing the database objects required for Oracle BPA Suite.

Run the SQL scripts located in the **dbms\oracle** directory of the Oracle BPA Suite installation CD.

Oracle Business Process Repository and database platforms supported by Oracle BPA Suite

4.1.1 Tablespaces and Tables Required

This section describes the tablespaces and tables required for using Oracle BPA Suite with an Oracle database.

The tablespaces described in the following table must exist before you install Oracle BPA Suite for use with an Oracle database.

Table 4–1 Tablespace

Tablespace	Default INITIAL	Default NEXT	Default PCT INCREASE	Default MAXEXTENT	Size of Data File	Next Extension
ARISDATA	128 KB	1 MB	0	UNLIMITED	2 GB	10 MB
ARISINDEX	128 KB	1 MB	0	UNLIMITED	1.5 GB	10 MB
Total					3.5 GB	

When all sizes of these tablespaces are summed up, it becomes evident that approximately 3.5 GB of hard disk space is required on the Oracle database server for all Oracle BPA Suite databases initially.

Tablespace Parameters

Since most tables derive their parameters from the tablespaces, it is important to ensure that the default storage parameters of the tablespaces (INITIAL, NEXT) are set up in line with the quantity of data to be stored in the database.

Note: Based on the size of the initial extent as suggested above, an Oracle BPA Suite database created subsequently will initially take up around 25 MB.

4.1.2 Recommended Tablespace Configuration

This section provides an overview of the recommended tablespace configuration for using Oracle BPA Suite with an Oracle database. This configuration is the storage property that serves as a basis for every newly created table (and every index).

Table 4–2 Name

Name	Contents
ArisData	Tables
ArisIndex	Table indexes

4.1.3 Oracle Database Settings

Note: When creating the Oracle database for Oracle BPA Suite, you need to specify **UTF-8** or **AL32UTF8** as the database character set. UTF-8 or AL32UTF8 are absolutely essential to the operation of Oracle BPA Suite. AL32UTF8 is the default Oracle database character set and replaces the previous UTF-8 database character set.

We recommend a block size of 8 KB (the block size should be a multiple of the operating system block size).

You cannot change either of these settings subsequently, i.e., if these settings are incorrect you will have to completely reinstall the database.

We recommend a size of at least 20 MB for each redolog file.

4.1.4 Oracle Database Instance Parameters

Table 4–3 Parameter

Parameter	Explanation
checkpoint_interval= 40000	The number entered here multiplied by the operating system block size should approximately result in the size of the redolog files. Example: If one assumes an operating system block size of 512 bytes and 20 MB for the redolog files, the value will be approximately 40000.
checkpoint_timeout=0	This parameter indicates the period in seconds in which Oracle performs an automatic check point. The default value is 1800. To turn off the time-controlled check point, enter 0.
session_cached_cursors=100	Optimizes access

4.1.5 Oracle Database Schemas for Oracle BPA Suite

Each Oracle BPA Suite database is located in exactly one Oracle database schema. These schemas all begin with the prefix **A70_** followed by a consecutive number as the database identifier **DBID**, for example **A70_1516**.

The names of these schemas are managed in catalog tables. The catalog tables are located in the **ARIS70ADM** schema. The schema includes the following tables:

dblist

Contains the assignment of Oracle BPA Suite database names to Oracle database schemas in which the Oracle BPA Suite databases are located. For example, if you delete a row from this table, the corresponding Oracle BPA Suite database is no longer visible for the application even though the associated Oracle database schema still exists.

db_stock

Includes a supply of empty Oracle BPA Suite schemas for new databases. If a new database is to be created, the Oracle BPA Suite Server checks whether an empty schema is available. If an empty schema exists, the entry is removed from the **db_stock** table and inserted into the **dblist** table.

db_trash

When the Oracle BPA Suite Server deletes an Oracle BPA Suite database, the corresponding entry is removed from the **dblist** table and inserted into the **db_trash** table. The Oracle BPA Suite schema is retained. Thus, the **db_trash** table acts as a sort of recycle bin for discarded Oracle BPA Suite schemas.

It is advisable that you periodically check which Oracle database schemas whose names begin with "A70_" are listed in the db_trash table and are therefore no longer required. You can manually delete the schemas you no longer need.

4.1.6 Updating Statistics for the Query Optimizer

The Oracle BPA Suite Server sets the value of the **statistics** column in the dblist table from 0 to 1 when it is useful to update the statistics for the corresponding Oracle BPA Suite schema. This is the case after restoring an Oracle BPA Suite database, for example.

The Oracle database administrator can now recalculate the statistics and reset the value of the **Statistics** column to 0.

4.1.7 Automating Schema Management

By default, the Oracle database administrator has to perform the following tasks manually, in addition to monitoring the dblist table and manually removing unneeded Oracle BPA Suite schemas:

Maintaining a sufficient supply of empty Oracle BPA Suite schemas in the db_stock table by calling the **schema_aris_70.new_schema** procedure for Oracle BPA Suite schemas.

Removing unneeded Oracle BPA Suite schemas from the db_stock table.

These tasks can be performed automatically by Oracle database jobs. Oracle BPA Suite CD 2 provides the automgr.sql script (**dbms\oracle** directory) as an example of automation. You can use this script to define suitable procedures and jobs.

The script uses the following default values:

Schema prefixes:A70_

Catalog schema:ARIS70ADM

Connection user:ARIS70

Oracle database user:system (Oracle database user who owns the procedures and under whose authorization the jobs run)

These default values can be changed by adapting the script.

4.1.8 Creating Oracle BPA Suite Schemas

To create and issue ARIS70 schemas, the **schema_aris_70.new_schema()** stored procedures are used for Oracle BPA Suite databases.

The description of the **schema_aris_70.new_schema()** stored procedure in the section below also applies to **schema_pca_70.new_schema()**.

The stored procedure is structured as follows:

```
schema_aris_70.new_schema (  
  p_aris70 IN VARCHAR2,  
  p_aris70adm IN VARCHAR2,  
  p_A70prefix IN VARCHAR2,  
  p_dattblspace IN VARCHAR2,  
  p_idxtblspace IN VARCHAR2)
```

Meaning of the parameters:

p_aris70: Name of the Oracle database user to which the Oracle BPA Suite Server connects. Default value: **ARIS70**

p_aris70adm: Name of the Oracle database schema containing the tables for managing the A70_ schemas: dblist, db_stock, db_trash. Default value: **ARIS70ADM**

p_A70prefix: Prefix for the names of the Oracle BPA Suite schemas. Default value: **A70_**

p_dattblspace: Name of the table area for the data. Default value: **ARISDATA**

p_idxtblspace: Name of the table area for the indices. Default value: **ARISINDEX**

Calling this procedure creates a new Oracle BPA Suite schema for an Oracle BPA Suite database. The name of the schema is formed using the prefix p_aris70prefix and the next DBID defined in the p_aris70adm schema. The procedure also inserts an entry in the db_stock table, thus adding a new schema to the supply of empty Oracle BPA Suite schemas.

4.1.9 Privileges

Neither the **ARIS70ADM** catalog schema nor the **A70_** Oracle BPA Suite schemas require any special privileges as they do not serve as Oracle database users. All database object privileges are transferred to the ARIS70 connection user (Page 24).

The Oracle database user with which the Oracle database administrator executes the stored procedure (Page 18) or the Oracle database jobs (Page 22) requires the following privileges.

Note: Oracle database users must have these privileges explicitly! Privileges allocated to them via an Oracle database role are insufficient.

```
ALTER SESSION;
CREATE USER
DROP USER
CREATE ANY TABLE
ALTER ANY TABLE
INSERT ANY TABLE
CREATE ANY TRIGGER
CREATE ANY INDEX
ANALYZE ANY
GRANT ANY OBJECT PRIVILEGE
GLOBAL QUERY REWRITE
UNLIMITED TABLESPACE
SELECT ANY SEQUENCE
SELECT ANY TABLE
INSERT ANY TABLE
DELETE ANY TABLE
UPDATE ANY TABLE
EXECUTE ANY PROCEDURE    WITH ADMIN OPTION
```

4.1.10 Importing SQL *Plus Scripts

The scripts supplied for the database server to create databases are sample scripts.

The scripts install the database objects required for operating Oracle BPA Suite in an existing Oracle database.

Alternatively, you can have the setup program create the database objects.

4.1.10.1 Available SQL *Plus Scripts

Once the Oracle database is created, the scripts for importing the database objects required for operating Oracle BPA Suite can be run.

Note: For this, the Oracle user requires explicit privileges.

The following scripts are available:

aris70.bat

Batch file for importing all SQL *Plus scripts.

adminc.sql

Database objects for the **ARIS70ADM** catalog schema.

userc.sql

Connection user **ARIS70**.

schema_aris.sql

Stored procedure for creating new Oracle BPA Suite schemas for Oracle BPA Suite databases.

automgr.sql

Sample procedures and jobs for automating Oracle BPA Suite schema management.

If you use the **aris70.bat** batch file, you need to replace ARIS with the correct TNS name in the following line after @:

```
SET ARIS_ORA_CONNECT_DATA=@ARIS
```

If you want to use automatic Oracle BPA Suite schema management with values other than the defaults, you need to modify the **automgr.sql** file accordingly. Then remove the comment out signs from the line calling the **automgr.sql** script in the **aris70.bat** file.

4.1.10.2 Running the aris70.bat/aris70.sh Batch Files

To import all SQL *PLUS scripts by running the **aris70.bat** or **aris70.sh** batch file, proceed as follows.

Procedure

1. Using the DOS box or Unix shell, switch to the directory containing the scripts.
2. Define two environment variables (as under Unix):

```
C:\> SET ORACLE_HOME=<path to Oracle home>
```

```
C:\> SET ORACLE_SID=<name of the Oracle instance, e.g. Oracle BPA Suite>
```

3. Run the batch file.

```
C:\> aris70.bat system manager <path to the scripts>
```

This example assumes that the stored procedures run under the authorization of the **system** Oracle database user with the password **manager**.

Example

aris70.bat system manager . (the example assumes that the scripts are located in the current directory, which is why the period is used).

4.1.10.3 Modification Options

You can change the names of the connection user, the catalog schema and the prefixes of the Oracle BPA Suite schemas. To do this, the scripts can be edited by changing all occurrences of ARIS70, ARIS70ADM and A70_.

If these entries are changed, the change must also be made in the LockService.cfg file of the Oracle BPA Suite Server. The default entries in this file are:

```
arisadm_user=ARIS70
arisadm_schema=ARIS70ADM
arisusrpfx=A70_
```

Further Explanatory Comment Regarding Database Objects

If you use the setup program instead of the SQL*PLUS scripts to create the database objects, then, in addition to the connection user **ARIS70** and the catalog schema user **ARIS70ADM**, a third Oracle database user **ARIS70JOB** is created. The Oracle database jobs for schema management are executed in its context.

The privileges of these three Oracle database users after creation of the database objects look like this:

Table 4–4 Oracle Database

Oracle Database	User	Admin Option Privilege
ARIS70	CREATE SESSION	NO
	ALTER SESSION	NO
ARIS70ADM	(none)	
ARIS70JOB	ALTER ANY TABLE	NO
	ANALYZE ANY	NO
	CREATE ANY INDEX	NO
	CREATE ANY TABLE	NO
	CREATE ANY TRIGGER	NO
	CREATE USER	NO
	DELETE ANY TABLE	NO
	DROP USER	NO
	GRANT ANY OBJECT PRIVILEGE	NO
	INSERT ANY TABLE	NO
	SELECT ANY TABLE	NO
	UNLIMITED TABLESPACE	YES

Table 4–4 (Cont.) Oracle Database

Oracle Database	User	Admin Option Privilege
	UPDATE ANY TABLE	NO

4.2 Microsoft SQL Server 2000 Enterprise Edition

To set up your Microsoft SQL Server (Page 65), we recommend that you make use of the Oracle Corporation installation support.

Read this section if you intend to use Oracle BPA Suite with Microsoft SQL Server.

Note: If you install Microsoft SQL Server yourself, always follow the instructions provided in the Microsoft SQL Server installation guide.

4.2.1 Required Programs, Drivers and Scripts

To use Oracle BPA Suite with an SQL Server, you need the following components:

- Microsoft SQL Server 2000 Enterprise Edition for installing the SQL Server on a Microsoft server.

If you want to use this server, you need to purchase it from Microsoft.

- Microsoft Service Pack 4 for Microsoft SQL Server 2000 Enterprise Edition
- Oracle BPA Suite SQL Server Scripts

The scripts are located on the Oracle BPA Suite installation CD in the **dbms\mssql** directory.

4.2.2 Notes on Installing SQL Server

- Please use the Mixed Mode installation option (Windows authentication and SQL Server authentication) because Oracle BPA Suite uses a single SQL Server user including his database schema for each Oracle BPA Suite database. Therefore, it is impossible to create a system user for an Oracle BPA Suite database.
- Select the relevant licensing mode.
- Please install Service Pack 4 for the SQL Server after you installed Microsoft SQL Server. Otherwise, the SQL Server will not be able to function properly.

4.2.3 Set up the SQL Server

The following description applies to Windows 2000. In other operating systems, names and options may differ.

Procedure

1. Open Computer Management.
2. In the tree view, navigate to the newly installed SQL Server via Services and Applications and Microsoft SQL Servers.
3. Right-click on the name of the newly installed system and select **Properties**.
4. On the **Server Settings** tab, enable the **Allow modifications to be made directly to the system catalogs** check box.

This allows the Oracle BPA Suite main user to create a new SQL Server user directly. Oracle BPA Suite requires the main user for creating its own databases. There is no need for this setting if the Oracle BPA Suite Server is to be operated in the SelfAdmin strategy.

5. Enable the **Allow triggers to be fired which fire other triggers (nested triggers)** check box.

This setting is necessary to improve the referential integrity of Oracle BPA Suite. SQL Servers prevent double referencing of base keys in a derived table, which is intended to prevent possible loops. To obtain the required functionality, Oracle BPA Suite uses nested triggers.

6. If the SQL Server is the main application on the computer, you can provide it with additional resources. On the **Processor** tab, enable the **Boost SQL Server priority on Windows** check box.
7. If you use a computer with multiple processors, disable **Use Windows NT fibers** (see Microsoft Knowledge Base article <http://support.microsoft.com/default.aspx?scid=kb%3Bde%3B303287>).
8. Click on **OK** to close the dialog box.
9. In the tree view, click on **Services**.
10. In the detail view, right-click on **SQLSERVERAGENT** and select **Properties**.
11. On the **General** tab, set **Automatic** as the start type for the SQL Server and server agent. The agent must be started every time the SQL Server is restarted.
12. Click on **Connections** and set the query time-out to **0**.
13. Click on **OK** and close Computer Management.

4.2.4 Oracle BPA Suite *.SQL Scripts

The scripts supplied for the database server to create databases are sample scripts. They are not eligible for Oracle Corporation support.

4.2.4.1 How to Adapt the init.sql Script

The following section of the init.sql script generates the ARIS7 instance on the SQL Server.

```
CREATE DATABASE ARIS7
ON PRIMARY
( NAME = ArisPrim,
  FILENAME = 'D:\sqlsrvdata\ARIS7\aris7Prim.mdf',
  SIZE = 100,
  FILEGROWTH = 10 ),
FILEGROUP FGDATA
( NAME = ArisData1,
  FILENAME = 'D:\sqlsrvdata\ARIS7\aris7Data1.ndf',
  SIZE = 600,
  FILEGROWTH = 100 ),
FILEGROUP FGIDX
( NAME = ArisIdx1,
  FILENAME = 'D:\sqlsrvdata\ARIS7\aris7Idx1.ndf',
  SIZE = 300,
  FILEGROWTH = 50 )
LOG ON
( NAME = aris.log,
  FILENAME = 'D:\sqlsrvdata\ARIS7\aris7.ldf',
```

```

SIZE = 100MB,
FILEGROWTH = 20MB )
COLLATE Latin1_General_CS_AS_KS_WS
GO

```

Please enter two existing paths for the paths to the **aris7Prim**, **aris7Data1**, **aris7Idx1** and **aris7.ldf** files. Select different drives if you use a RAID (SCSI) system with different logical drives to achieve better performance by distributing read and write operations.

4.2.4.2 Oracle BPA Suite Schema Strategy

You can create Oracle BPA Suite databases automatically or manually.

4.2.4.2.1 Automatic Configuration (Recommended) This strategy automatically creates new databases in the **ARIS70.db_stock** table.

Prerequisite

This is possible only if the Oracle BPA Suite main user has the privileges required for changing the SQL Server tables. This privilege is assigned to the ARIS70 user by the **enhancedProcedures.sql** script.

If you opt for this configuration, your intervention is not required to create or delete Oracle BPA Suite schemas.

Please proceed as follows.

Procedure

1. **You must copy the scripts to your hard drive!** You need write privileges in the target directory to store the installation log files.
2. Open the DOS box for the directory to which you have copied the **aris70AutoAdmin.bat** file and the SQL scripts.
3. Run the **aris70AutoAdmin.bat** script and enter the name of the database user (e.g. **sa**), the password (e.g. **manager**) and the directory containing the SQL scripts.

Example: **aris70AutoAdmin.bat sa manager.**

The period at the end of the sample line stands for the current directory. The following scripts are run in the order listed.

Table 4–5 Script

Script	Description
init.sql	Creates the Oracle BPA Suite instance.
installaris70.sql	Creates the ARIS70 Oracle BPA Suite main user and assigns access privileges to him.
aris.sql	Creates the procedures required for Oracle BPA Suite databases in the Oracle BPA Suite schema.
enhancedProcedures.sql	Assigns the ARIS70 Oracle BPA Suite main user the privilege to create users.
initialDatabases.sql	Creates initial databases in the DB_STOCK table.

Table 4–5 (Cont.) Script

Script	Description
recycler.sql	Job of the SQL Server agent. This job removes deleted databases at 12:30 a.m. each night.

4.2.4.2.2 Manual Configuration If you do not want to assign the Oracle BPA Suite main user the privilege to modify system tables on the SQL Server, manual configuration is recommended.

Procedure

1. Open the DOS box for the directory to which you have copied the **aris70SelfAdmin.bat** file and the SQL scripts.
2. Run the **aris70SelfAdmin.bat** script and enter the name of the database user (e.g. **sa**), the password (e.g. **manager**) and the directory containing the SQL scripts.

Example

```
aris70SelfAdmin.bat sa manager.
```

The period at the end of the sample line stands for the current directory.

The following scripts are run in the order listed:

Table 4–6 Script

Script	Description
init.sql	Creates the Oracle BPA Suite instance.
installaris70.sql	Creates the ARIS70 Oracle BPA Suite main user and assigns access privileges to him.
aris.sql	Creates the procedures required for Oracle BPA Suite databases in the Oracle BPA Suite schema.
initialDatabases.sql	Creates the initial database in the DB_STOCK table.
recycler.sql	Job of the SQL Server agent. This job removes deleted databases at 12:30 a.m. each night.

If the **ARIS70.dbstock** table is empty, you need to fill it manually. Otherwise, it is impossible to create an Oracle BPA Suite database.

During installation, several empty database schemas are added to the table. If these are used up by the creation of Oracle BPA Suite databases, the Oracle BPA Suite Client informs you that the dbstock table must be filled again.

You can insert ARIS70.dbstock table entries by means of a refilling procedure. To do this, use the refillDatabases.bat script. You can also switch from manual to automatic configuration (Page 29):

Recycling

As you can see from the previous table, a job removes deleted databases each night at 12:30 a.m. (**recycler.sql** file).

You can also initiate recycling manually.

Procedure

1. Open the DOS box for the directory to which you have copied the SQL scripts.
2. Run the **maintenance.bat** script and enter the name of the database user (e.g. **sa**), the password (e.g. **manager**) and the directory containing the SQL scripts.

Example

```
maintenance.bat sa manager.
```

The period at the end of the sample line stands for the current directory.

Refilling

Procedure

1. Open the DOS box for the directory to which you have copied the SQL scripts.
2. Run the **refillDatabases.bat** script and enter the name of the database user (e.g. **sa**), the password (e.g. **manager**) and the directory containing the SQL scripts.

Example:

```
##!(refillDatabases.bat sa manager)!##.
```

The period at the end of the sample line stands for the current directory.

3. In the **initialDatabases** script, enter the quantity of Oracle BPA Suite database templates to be created.

Example

```
EXECUTE ARIS70.CREATE_A70_SCHEMA 'aris', 24, 11
```

The last parameter specifies that 11 database templates are to be created.

Switching from Manual to Automatic Configuration

Procedure

1. Open the DOS box for the directory to which you have copied the SQL scripts.
2. Run the **aris70SwitchToAutoAdmin.bat** script and enter the name of the database user (e.g. **sa**), the password (e.g. **manager**) and the directory containing the SQL scripts.

Example:

```
##!(aris70SwitchToAutoAdmin.bat sa manager)!##.
```

The period at the end of the sample line stands for the current directory.

4.2.4.3 Oracle BPA Suite Installation with SQL Server

To access the installed Microsoft SQL Server with Oracle BPA Suite, please install the Oracle BPA Suite Server as described in the chapter on Oracle Business Process Repository installations (Windows operating system)/Oracle Business Process Repository Site Manager/Step-by-Step Instructions of the Installation Guide.

Oracle Business Process Architect

To be able to work with Oracle Business Process Architect, you need to import the SOA profiles into one of your database groups before modeling IT processes. This is required for each database that you want to work with.

The **SOA Profiles.xml** file is located on your hard disk under **<Oracle BPA Suite installation directory>\common**. If the file is not saved there, you can find it on the Oracle BPA Suite installation CD under **Addons\UML\SOA Profiles.xml**.

Further information is provided directly in the wizards and dialog boxes of Oracle Business Process Architect and under **Help/Help topics**.

Oracle Business Process Publisher

This chapter describes the configuration necessary for Oracle Business Process Publisher.

6.1 Oracle Business Process Publisher Server

Oracle Business Process Publisher is integrated into the **Oracle Business Process Architect Administration** module. Oracle Business Process Publisher administrators use these products to create Web exports of their Oracle BPA Suite databases after they have installed Oracle Business Process Publisher Server (see Installation Guide).

Oracle Business Process Publisher Servers manage Web exports created with Oracle Business Process Publisher. Web exports are Web applications based on J2EE. They use Java servlets and Java server pages (JSP) that need not only a Java environment (JDK), but also a Web container, i.e. servlet container (e.g. Apache Tomcat) as a process environment. The data is kept in a relational database system and exchanged with the program via a JDBC interface.

If you retain the settings of the Oracle Business Process Publisher installation program during installation, the context path and the free port to the Web server are entered automatically.

6.2 Context Path

The context path is the path to the directory where the **index.html** start page for Oracle Business Process Publisher is located. If you want to place the start page in another directory, you need to change the path accordingly.

6.3 Modify Configuration Files

- Free port to Web server (Page 36).
- Change IP address (Page 36).
- LDAP user management (Page 37).
- E-mail settings (Page 37).

6.3.1 Free Port to Web Server

The installation program automatically enters **8080** as the port. To use another free port on your Web server, you need to enter the required port in the Tomcat Server Port box.

Prerequisite

You have access privileges for the Oracle Business Process Publisher Server installation directory.

Procedure

1. Open the `server.xml` file in the Oracle Business Process Publisher Server installation directory `..\BPServer\tomcat\conf\` with a text editor.
2. Change the port number value in the following line:

`<Connector port="8090" />`.

1. Save your change and close the file.

The change only takes effect after you have restarted Oracle Business Process Publisher Server.

6.3.2 Change IP Address

If you have installed Oracle Business Process Publisher Server on an external computer rather than locally, you must enter the IP address of that computer in the configuration file.

Prerequisite

You have access privileges for the Oracle Business Process Publisher Server installation directory.

Procedure

1. Open the `webappserver.cfg` file in the Oracle Business Process Publisher Server installation directory `..\BPServer\tomcat\webapps\businesspublisher\config\` with a text editor.
2. In the `bpservicehost value` line, change the value for the IP address of the computer on which Oracle Business Process Publisher Server is installed, e.g. `<bpservicehost value="172.30.111"/>`
3. Save the change and close the file.

The change only takes effect after you have restarted Oracle Business Process Publisher Server.

6.3.3 LDAP User Management

If you manage users with an LDAP system, the system is also used for authentication. In order for the Oracle Business Process Publisher administrator to assign LDAP user groups to **Oracle BPA Suite** user groups, you must adjust the configuration file.

Prerequisite

You have access privileges for the Oracle Business Process Publisher Server installation directory.

Procedure

1. Open the `webappserver.cfg` file in the Oracle Business Process Publisher Server installation directory `..\BPServer\tomcat\webapps\businesspublisher\config\` with a text editor.
2. Find the `<ldap>` tag. In this section, configure the login using an LDAP system.

3. Enter the required settings. Information about settings is provided in the **<ldap>** section.
4. Save the changes and restart Oracle Business Process Publisher Server.

The Oracle Business Process Publisher administrator can now assign **Oracle BPA Suite** user groups to LDAP user groups.

WARNING: If your LDAP server is set up so that it allows anonymous authentication (unauthenticated bind mechanism), it is sometimes possible for users to log in without a password.

6.3.4 E-Mail Settings

If you are resetting passwords, for example, automatic e-mails containing the initial passwords are sent to the appropriate users.

Prerequisite

You have access privileges for the Oracle Business Process Publisher Server installation directory.

Procedure

1. Open the **webappserver.cfg** file in the Oracle Business Process Publisher Server installation directory **..\BPServer\tomcat\webapps\businesspublisher\config** with a text editor.
2. Find the **<badmin>** tag. In this section, configure the mail server settings.
3. Enter the required settings. Information about settings is provided in the **<badmin>** section.

Save the changes and restart Oracle Business Process Publisher Server.

6.4 Display News

The News section in the Home module is not used in the standard export. If you have knowledge of RSS Feed and XML programming, you can insert links in this area.

Procedure

1. Open the **news.rdf.xml** file in the Oracle Business Process Publisher Server installation directory **BPserver\tomcat\webapps\businesspublisher\layouts\default\data** with your editor. The following content is displayed:

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
<rss version="2.0">
<channel>
  <title>News</title>
  <link>http://www.<ids_scheer_en>/</link>
  <description>Oracle Corporation</description>
  <language>en-en</language>
  <lastBuildDate>Thu, 19 May 2006 11:28:45 +0000</lastBuildDate>
  <copyright>Copyright (C) Oracle Corporation</copyright>
</channel>
</rss>
```

2. Under the **</copyright>** tag insert the **<item>** tags for each entry. Use the following tags:

1. <title>: Title of the link.
 2. <link>: URL of the link that is to be displayed in the list.
 3. <description>: Description that is to be displayed below the link.
3. Save your changes.

Tip: The News section can be modified to suit your requirements. For example, you can maintain a list of links to the models or objects that have been changed or created since a particular date.

6.5 ORACLE Restart

After restarting the ORACLE server, links to the database may no longer function, which will lead to errors when used by **Oracle Business Process Publisher**. You can exclude this source of error by testing the connections of the connection pool via query in advance. The query is already commented out and included in the server.xml file. You need to insert the query as a value.

Procedure

1. Open the server.xml file with a text editor. The file is located in the **<Oracle Business Process Publisher installation directory>\Tomcat\conf** directory.
2. Locate the **<Resource name=** tag.
3. Add the following value after the last value:
validationQuery="select 'Y' from dual"
4. Save your changes.

The connections to the database will be tested as from now. If they are no longer correct, a new connection is established.

Additional Information

This section provides information on issues such as backing up databases or program timing, for example.

7.1 Automated Installation

An installation that you have already carried out before can be installed in the same way on other computers using the following procedure without having to enter user data. Thus, you avoid having to specify the same settings repeatedly.

Procedure

1. Run the installation program using the **setup.exe -r** command.
2. Specify your settings and complete the installation. Using the **-r** parameter creates the **setup.iss** file in your Windows directory.
3. Create a new directory on your hard disk and copy the files of the installation program and all its subdirectories to this new directory.
4. Copy the **setup.iss** file to the new directory, too, so that it is in the same location as the **setup.exe** file.
5. Copy the newly created directory to all computers on which you want to perform an identical installation.
6. Run the setup program using the **setup -s** command.

7.2 Oracle BPA Suite Converter

Oracle BPA Suite Converter is the program you use to convert data from **ARIS 7.0**, **Oracle BPA Suite 10.1.3.1** and **Oracle BPA Suite 10.1.3.3** formats for work with **Oracle BPA Suite 10.1.3.3**, regardless of the server platform or the database management system you are using. The conversion enables you to transfer databases of a different product version. If, for example, you created a user database under an Oracle database for **Oracle BPA Suite 10.1.3.1**, you can use **Oracle BPA Suite Converter** to specify that this database be transferred to your local **Oracle BPA Suite**.

You can convert databases directly from the relevant server.

If you have memory problems when converting large databases (see **serverout.log** file in the **<Oracle BPA Suite installation directory>\LocalServer\log** directory), you can specify in the **ArisLauncher.cfg** file (**<Oracle BPA Suite installation directory>\LocalServer\config** directory) that more memory (Page 6) be allocated for database conversion.

7.3 Back up User and Configuration Databases

To back up the entire content of a database server, you proceed as follows.

Procedure

1. Use Oracle BPA Suite Admintool to back up all user databases. Use the **BPAadm backup all <directory>** (Page 50) command if you use the Oracle BPA Suite Admintool in interactive mode.
2. Use Oracle BPA Suite Admintool to back up configuration data. Use the **BPAadm backupconfig <directory>** (Page 52) command if you use the Oracle BPA Suite Admintool (Page 50) in interactive mode.

7.4 Back up Current Configuration Files

Every time Oracle Business Process Repository is launched, the configuration files are backed up in the **backup_sysconfig.zip** file. This file is saved in the **sysconfig** directory. If required, you can open this file using an extraction program and restore the files of the **sysconfig** directory.

7.5 Server Log Directory

The activities of the Oracle Business Process Repository are recorded in the **log** directory of the server installation directory. If Oracle Business Process Repository fails to work properly, please send a description of the problem and the entire contents of the **log** and **config** directories to Oracle Corporation Customer Support.

Transferring Data From Earlier Versions

This chapter provides information on transferring data from databases of older Oracle BPA Suite versions or ARIS 7.0.

Table 8–1 Oracle BPA Suite version

Oracle BPA Suite version	Source	Data
ARIS 7.0	ARIS 7.0 Database directory on a network server or local Oracle BPA Suite database system.	Database directory on a network server or local Oracle BPA Suite database system. User database to be transferred from one database platform (e.g. Oracle) to another (e.g. standard database system), with or without configuration database.
Oracle BPA Suite 10.1.3.1	Database directory on a network server or local Oracle BPA Suite database system.	User database to be transferred from one database platform (e.g. Oracle) to another (e.g. standard database system), with or without configuration database.
Oracle BPA Suite 10.1.3.3	Oracle BPA Suite 10.1.3.3 Database directory on a network server or local Oracle BPA Suite database system.	Database directory on a network server or local Oracle BPA Suite database system. User database to be transferred from one database platform (e.g. Oracle) to another (e.g. standard database system), with or without configuration database.

What Data Will Be Transferred?

You can still use data from Oracle BPA Suite version 10.1.3.1 and higher in Oracle BPA Suite or ARIS 7.0. Using Oracle BPA Suite Converter you can transfer user data, configuration data and script data.

8.1 User Databases

User databases contain the organizational and procedural structure of your company, for example. The contents of user databases can be transferred in their entirety using Oracle BPA Suite Converter.

8.1.1 How to Transfer User Databases

Procedure

1. Create a backup copy of your databases.
2. Ensure that the Oracle Business Process Repository has been launched with access to the databases. The data to be transferred can exist locally within an Oracle BPA Suite installation or on the network.
3. Click on **Start/Programs/Oracle BPA Suite/Administration/Oracle BPA Suite Converter 10.1.3.3**, if you installed Oracle BPA Suite in the program group suggested by the installation program. The Oracle BPA Suite Converter Wizard starts.
4. Select the Oracle BPA Suite Server on which the converted database is to be saved. To add a server to the list, click on **Add**. Enter the name of the server and click on **OK**.
5. Click on **Next**.
6. Enable the option button for the Oracle BPA Suite version to be used as the source for conversion.
7. Click on **Next**.
8. Select the source containing the Oracle BPA Suite user database that you want to transfer to your new Oracle BPA Suite installation.

Based on your settings you now have one or several of the following options.

Oracle BPA Suite Network Server

Select an Oracle BPA Suite Server in the Network server box. To add a server to the list, click on **Add**. Enter the name of the server and click on **OK**.

Local System

Local database directory: Activate the **Local** option button.

Note: To convert databases locally (LOCAL server), you need to launch the LOCAL server of the appropriate Oracle BPA Suite version before starting Oracle BPA Suite Converter. To start **LOCAL**, click on **LOCAL** in the tree view in Explorer.

Procedure

1. Click on **Next**.
2. Select the user database you would like to transfer.
3. Click on **Next**.
 1. Check the check boxes for the configuration database items you wish to transfer. Enabling all check boxes has the following effects:

2. Items and method extensions that are contained in the configuration database of the source server but do not exist on the target server are transferred.
3. Items and user-defined symbols that already exist in the configuration database of the target server are overwritten with items and user-defined symbols having the same GUID.
4. Names of user-defined symbols, free attributes and units of free attributes that already exist in the configuration database of the target server in a certain language are overwritten.
5. Assignments of attributes to attribute type groups that already exist in the configuration database of the target server are overwritten.
6. Items and method extensions that are contained in the configuration database of the target server but do not exist on the source server remain unchanged.
User-defined symbols are always transferred. You cannot disable this check box.
4. Click on **Next**.
5. Enter the password for the Database Administrator and the configuration database of the source server.
6. Click on **Next**.
7. Enter the password for the Database Administrator and the configuration database of the target server.
8. Click on **Next**.
9. Check the settings you specified in the wizard. Click on **Finish** to begin data transfer. The converted database is saved. If the name of the converted database already exists on the target server, a number is added to the name of the converted database. Once the data transfer has been completed successfully a message appears.
10. Click on **OK**.

Oracle BPA Suite Converter closes.

8.2 Configuration Databases

Configuration databases contain method and evaluation filters, templates, font formats and chart definitions. The contents of the configuration database are available to all user databases on a given server. You can transfer individual configuration database items.

8.2.1 How to Transfer Item Groups from Configuration Databases

You can use Oracle BPA Suite Converter to transfer any or all item groups, such as filters or model templates, from the configuration database of older Oracle BPA Suite versions and ARIS 7.0.

Hint

- The procedure description and the Select configuration data wizard page of the online help for Oracle BPA Suite Converter include instructions for selecting individual item groups.

- When you transfer item groups with Oracle BPA Suite Converter, the reference to the respective database is not affected. In other words, the assignment of user-defined symbols to objects in the databases still exists, for example

8.2.2 How to Transfer Exported Filters, Font Formats, Languages and Templates

You can easily transfer filters, templates and chart definitions that you have exported in XML format (ACC, AMC and ATC files).

The following description refers to Oracle Business Process Architect.

Procedure

1. Start Oracle Business Process Architect.
2. Activate the **Administration** module.
3. In the navigation bar, click on the plus sign (+) next to the server into whose configuration database you wish to import the filter, font format, language or template.
4. Open the **Configuration/Conventions** database item.
5. Right-click on Filter, Font formats, Languages or Template and then on **Import**. The Import dialog box opens.
6. Select the import file and, if required, decide how conflicts are to be solved during import by enabling the relevant check boxes.
7. Click on **OK**.

8.3 Script Data

Script data can include the following categories:

- Shared files
- Macros
- Reports
- Semantic checks
- Transformations

The contents of the script data except for macros are available to all users of a server. You can transfer individual categories of script data. Macros are installed and maintained directly on the clients.

8.3.1 How to Transfer Script Data

You can transfer shared files, macros, reports, semantic checks and transformations without difficulty.

The following description refers to Oracle Business Process Architect.

Procedure

1. Start Oracle Business Process Architect.
2. Activate the **Administration** module.

3. In the navigation bar, click on the plus sign (+) next to the server into whose configuration database you wish to import shared files, macros, reports, semantic checks or transformations.
4. Open the **Evaluations** database item.
5. Select the category you want to import.
6. Click with the right mouse button and then select **Import**. The Import dialog box opens.
7. Select the import file and, if required, decide how conflicts are to be solved during import by enabling the relevant check boxes.
8. Click on **OK**.

Oracle BPA Suite Admintool

You can use Oracle BPA Suite Admintool to manage a server's Oracle BPA Suite databases. The program is a console application and runs in the MS DOS input window. The individual commands of the program are supplied as command line parameters. The program provides information on the success and effect of each command executed.

9.1 How to Launch Oracle BPA Suite Admintool

Under the following conditions you can run Oracle BPA Suite Admintool from any client computer and have access to the Oracle BPA Suite databases on the server:

Click on **Start/Programs/Oracle BPA Suite/Administration/Oracle BPA Suite Admintool** if you accepted the program group suggested by the installation program. The MS DOS input window opens and Oracle BPA Suite Admintool is launched in interactive mode.

9.2 Valuable Information

A command line in Oracle BPA Suite Admintool has the following syntax:

BPAadm [<option>] <command> [<command argument 1>] ...

The following options can be used in Oracle BPA Suite Admintool:

Table 9–1 Option

Option	Description
-s <server name>	Indicates the server on which the command is to be performed. In interactive mode, the server can be changed via the server command.
-p <password>	Indicates the Database Administrator password for the specified server. If the password is not correct, the program will prompt you to enter the correct password before the selected command can be performed. The default password is DBADMIN (uppercase).

Table 9–1 (Cont.) Option

Option	Description
-pc <password>	Indicates the Configuration Administrator password for the specified server. If the password is not correct, the program will prompt you to enter the correct password before the selected command can be performed. The default password is CFGADMIN (uppercase).
-pa <password>	Indicates the Site Administrator password.
-l <file name>	Activates logging of all program operations. The log file indicates which operation was performed at what time and with what result.
-cf <command file>	Specifies the command file with executable commands that is to be started.
-sc <schema context>	Indicates the context of the schema. Oracle BPA Suite is set as the default.
u <user> <password>	Specifies the alternative password for the system user.

Note: When working with Oracle BPA Suite Admintool, please observe the following:

If you are working with Oracle BPA Suite Admintool on the server computer, use the **-s localhost** parameter.

If you have not entered a password, you will be prompted to supply the Database Administrator password before each command is executed.

If you use values with special characters (e.g. "&" in the password), you need to enclose the value in quotes. For additional information, please refer to your Windows operating system help and support center.

On the server, system messages in Oracle BPA Suite Admintool are always output in the Oracle BPA Suite installation language.

9.3 Backup

Backs up a database as a compressed file with the **ADB** (Oracle BPA Suite database) file extension to a folder of your choice.

Oracle BPA Suite databases may contain your company's organizational structure and business processes, for example. The content of these databases is subject to constant development. Every time a user opens a database and creates a new model, for example, important information is added. To avoid the risk of losing this data, it is recommended that you back up your user databases every day.

To back up a database as an ADB file, enter the following command call and press Enter:

backup <database name> <backup directory>

The name of the **backup file** consists of the name of the database and the appended file extension, ADB.

WARNING: If a file of the same name already exists in the backup directory, it will be overwritten.

You can use the following switch:

All: Backs up all databases on the selected database server.

To back up all databases on a server as ADB files, enter the following command call and press Enter.

Interactive Mode

```
backup [<database name>] [all] <backup directory> [<new database name>]
```

Outside of Interactive Mode

```
BPAadm backup [<database name>] [all] <backup directory> [<new database name>]
```

With the Restore (Page 61) command, databases that have been backed up as ADB files can be imported into and registered on a server.

9.4 Oracle BPA Suite Admintool Commands

In this section, all program commands are listed with their syntax in the interactive mode (**Start/Programs/Oracle BPA Suite/Administration/Oracle BPA Suite Admintool**) and outside the interactive mode.

To work outside of interactive mode, you need to enter a command to navigate to the Oracle BPA Suite installation directory (for example, to the **C:\Program Files\Oracle BPA Suite** directory).

Parts of commands that are enclosed in pointed brackets must be replaced with the appropriate designations or names. Example: In the backup all **<directory>** command, you need to replace **<directory>** with the name of an existing directory. For example, this command could be: **backup all e:\backup**

Parts of commands that are enclosed in square brackets are optional, i.e., you can use these if you need to.

Example: delete [<database name>] [all]

After the command, you can either enter a database name or use **all** to specify that all databases be deleted.

If parameters include spaces you need to enclose the parameter in quotation marks. Example: You wish to recreate the Sales Data database under the name Sales Data 2005. Enter the following:

Interactive Mode

```
copy Sales Data "Sales Data 2005"
```

Outside of Interactive Mode

BPAadm copy Sales Data "Sales Data 2005"

9.4.1 Backup

Backs up a database as a compressed file with the **ADB** (Oracle BPA Suite database) file extension to a folder of your choice.

Oracle BPA Suite databases may contain your company's organizational structure and business processes, for example. The content of these databases is subject to constant development. Every time a user opens a database and creates a new model, for example, important information is added. To avoid the risk of losing this data, it is recommended that you back up your user databases every day.

To back up a database as an ADB file, enter the following command call and press Enter:

backup <database name> <backup directory>

The name of the **backup file** consists of the name of the database and the appended file extension, ADB.

WARNING: If a file of the same name already exists in the backup directory, it will be overwritten.

You can use the following switch:

All: Backs up all databases on the selected database server.

To back up all databases on a server as ADB files, enter the following command call and press Enter.

Interactive Mode

backup [<database name>] [all] <backup directory> [<new database name>]

Outside of Interactive Mode

BPAadm backup [<database name>] [all] <backup directory> [<new database name>]

With the Restore (Page 61) command, databases that have been backed up as ADB files can be imported into and registered on a server.

9.4.1.1 Example

The Project database to be backed up is located on the LOCAL server. The database administrator's password is **DBADMIN**. The backup file is to be saved to the **Backup** folder on a data carrier.

Procedure

1. Run Oracle BPA Suite Admintool (**Start/Programs/Oracle BPA Suite/Administration/Oracle BPA Suite Admintool**). Oracle BPA Suite Admintool is launched directly in interactive mode and you can enter the desired command.
2. Enter the following command line and press Enter:

backup project e:\backup

If you have identified yourself as the Database Administrator, the command is executed.

9.4.1.2 Data Backup Using a Batch Program (Batch File)

If you want to back up data automatically at a particular time every day, Oracle BPA Suite provides support with the **backup.cmd** batch program in the **addons\ServerBackup** directory on Oracle BPA Suite CD 2. This program can be run regularly using time control software.

To perform time-controlled data backups, copy the backup.cmd file to the installation directory where Oracle BPA Suite Admintool (file extension **.exe**) is located. Then use the time control software to specify the times at which the data backup is to be performed. All registered databases will be backed up at the specified time to the directory you previously entered in the **backup.cmd** file.

9.4.2 Backupconfig

Saves the ARIS Configuration data (filters, templates and charts) to the specified directory in the appropriate file format.

To save the ARIS Configuration data, enter the following command call and press Enter:

Interactive Mode

```
backupconfig <backup directory> <new file name>
```

Outside of Interactive Mode

```
BPAadm backupconfig <backup directory> <new file name>
```

To restore (Page 62) configuration files, use the Restoreconfig command.

9.4.3 Configadminpassword

Changes the configuration administrator's password.

To change the configuration administrator's password, enter the following command call and press Enter:

Interactive Mode (the new password must not be entered in interactive mode, you will be prompted for it by the system)

```
configadminpassword <current password>
```

Outside of Interactive Mode

```
BPAadm configadminpassword <new password> <current password>
```

9.4.4 Copy

Copies databases to a server. To copy a database, enter the following command call and press Enter:

Interactive Mode

```
copy <source database name> [all] <target database name>
```

Outside of Interactive Mode

```
BPAadm copy <source database name> [all] <target database name>
```

Optionally, you can specify the server to which you want to copy the database by typing a colon behind the target database name and adding the server name.

In batch mode, you can also enter the database administrator password and specify that all databases are to be copied:

```
copy <source database name> <target database name> [all] [:<server>] [/<server password>]
```

Note: Database names must be unique. If a database already exists with the name specified in the second parameter, the database cannot be copied.

Example

The SalesDB database is to be duplicated on the LOCAL server. The Database Administrator's password is DBADMIN. The copy of the database is to be named New SalesDB.

Procedure

1. Run Oracle BPA Suite Admintool (Start/Programs/Oracle BPA Suite/Administration/Oracle BPA Suite Admintool). Oracle BPA Suite Admintool is launched directly in interactive mode and you can enter the desired command.
2. Enter the following command line and press Enter:

```
copy SalesDB "New SalesDB"
```

If you have identified yourself as the Database Administrator, the command is executed.

9.4.5 Createdb

Creates a new database.

Interactive Mode

```
createdb SalesDB
```

Outside of Interactive Mode

```
BPAadm createdb SalesDB
```

9.4.6 Dbmspassword

Changes the password of the DBMS user. This change is helpful if the DBMS (Database Management System) in use is also used by applications other than Oracle BPA Suite. This may be the case with the Oracle DBMS. The Oracle DBMS user is called **ARIS70**. The default password is **arisadmin** (lower case).

To change the password of the DBMS user:

Interactive Mode (the new password must not be entered in interactive mode, you will be prompted for it by the system)

```
dbmspassword <current password>
```

Outside of Interactive Mode

```
BPAadm dbmspassword <new password> <current password>.
```

9.4.7 Download

Saves log files, configurations or user login information from the Oracle BPA Suite Site to a selected directory.

Interactive Mode

```
download [logs] [configs] [accounting] <target directory>
```

Logs stands for log files, **configs** for configurations and **accounting** for user information.

Outside of Interactive Mode

```
BPAadm download [logs] [configs] [accounting] <target directory>
```

9.4.8 Delete

Removes databases from the database server and deregisters them.

You can use the following switches:

All: Deletes all databases on the selected database server.

Force: Deletes the relevant databases even though users are still logged in.

To delete a database from the selected database server, enter the following command call and press Enter:

Interactive Mode

```
delete [<database name>] [all] [force]
```

Outside of Interactive Mode

```
BPAadm delete [<database name>] [all] [force]
```

9.4.9 Exit

Exits interactive mode and closes the Oracle BPA Suite Admintool window. The Exit command can only be executed in interactive mode.

To exit interactive mode as well as the program, enter the following command call and then press Enter: **exit**

9.4.10 Help

Displays a help text for every available command. The help text describes the actions that will be performed as a consequence of the command, as well as the parameters that must be entered with the command.

To call help for a specific command, enter the following command call and press Enter:

Interactive Mode

```
help <command>
```

Outside of Interactive Mode

```
BPAadm help <command>
```

To see an overview of help, enter the following command call and press Enter. By pressing the Enter key, you can navigate through the Help.

9.4.11 Interactive

Switches to interactive mode, in which you can enter several commands in a prompt sequence without having to exit the program. You need to log in to each server only once.

To enter a sequence of commands within the program, enter the following command call outside of interactive mode and press Enter:

```
BPAadm interactive
```

9.4.12 Kill

Terminates a user's connection to databases on the selected database server. This connection is identified by the connection ID that you can display using the Sessions command.

WARNING: All users whose connection to databases on the specified server was terminated with the Kill function cannot properly exit Oracle BPA Suite. Changes which have not yet been saved are lost and must be made again after Oracle BPA Suite has been restarted.

You can use the following switch:

all: Terminates all connections with databases on the selected database server.

To terminate a user's connection to databases on the specified server, enter the following command call and press Enter.

Interactive Mode

```
kill [<session ID>] [all]
```

Outside of Interactive Mode

```
BPAadm kill [<session ID>] [all]
```

9.4.13 List

Displays all databases that are registered on a database server and that can be opened by Oracle BPA Suite.

Interactive Mode

```
list
```

Outside of Interactive Mode

```
BPAadm list
```

9.4.14 Maintain

Starts maintenance for the specified database. Maintenance is database system-specific, which means that a set number of maintenance tasks is performed depending on the database. Refer to your database management system documentation for information regarding specific maintenance tasks.

You can use the following switch:

all: Starts maintenance for all databases on the database server.

To perform maintenance for a database, enter the following command call and press Enter.

Interactive Mode

```
maintain [<database name>] [all]
```

Outside of Interactive Mode

```
BPAadm maintain [<database name>] [all]
```

9.4.15 Monitor

Shows all current server activities, such as backup or XML export, for example.

To display the server activities, enter the following command call and press Enter.

Interactive Mode

```
Monitor
```

Outside of Interactive Mode

```
BPAadm monitor
```

9.4.16 Password

Changes the database administrator's password for the selected server. First, the current password must be entered.

To change the database administrator password, enter the following command call and press Enter.

Interactive Mode

```
password <new password> <current password>
```

Outside of Interactive Mode

```
BPAadm password <new password> <current password>
```

9.4.17 Rename

Renames a database.

You can use the following switch:

force: Renames the database even if users are connected to it.

To rename a database, enter the following command call and press Enter.

Interactive Mode

```
rename <old database name> <new database name> [force]
```

Outside of Interactive Mode

```
BPAadm rename <previous database name> <new database name> [force]
```

9.4.18 Reorg

Reorganizes a database.

Oracle BPA Suite searches the database for object and connection definitions that do no longer have occurrences in models. These are deleted.

If you are using an object library, you should not enable this option since it may be desired and intended for certain definitions to exist without having any occurrences.

A database can only be reorganized if no user is logged in to the database.

You can use the following switch:

all: Reorganizes all databases on the selected database server.

To reorganize a database, enter the following command call and press Enter.

Interactive Mode

```
reorg [<database name>] [all]
```

Outside of Interactive Mode

```
BPAadm reorg [<database name>] [all]
```

9.4.19 Restore

Imports individual databases that were backed up as ADB files, or imports all ADB files of a directory to the current database server.

The database directory must not contain a database that has the same name as the one to be imported. You are therefore given the opportunity to rename the database when importing.

You can use the following switch:

overwrite: Overwrites a database on the database server that has the same name as the one imported.

To import one or more ADB files in a directory to a server and register them there, enter the following command call and press Enter.

Interactive Mode

```
restore <backup file> [overwrite]
```

Directory with multiple ADB files:

```
restore <backup directory> [overwrite]
```

Outside of Interactive Mode

```
BPAadm restore <backup file> [overwrite]
```

Directory with multiple ADB files:

```
BPAadm restore <backup directory> [<new database name>] [overwrite]
```

To import an ADB file and rename the database at the same time, enter the following command call and press Enter.

Interactive Mode

```
restore <backup file> [<new database name>] [overwrite]
```

Outside of Interactive Mode

```
BPAadm restore <backup file> [<new database name>] [overwrite]
```

9.4.20 Restoreconfig

Saves the ARIS Configuration data (filters, templates and charts) to the specified directory in the appropriate file format.

To save the ARIS Configuration data, enter the following command call and press Enter:

Interactive Mode

```
restoreconfig <path\file name>
```

Outside of Interactive Mode

```
BPAadm restoreconfig <path\file name>
```

To back up ACB files, use the Backupconfig (Page 55) command.

9.4.21 Server

Can be run in interactive mode only. It terminates the current connection to the server and permits connecting to another server. All commands that are entered thereafter relate to the new server.

To terminate the current server connection and create a new one, enter the following command call and press Enter:

```
server <server> [<password>]
```

You can enter the Site administrator password now or wait for it to be requested later.

9.4.22 Sessions

Displays all users who are logged in to a database on the specified server.

The following information is displayed:

- TCP/IP host name of the computer that the user used when logging in to the database
- User name
- Connection ID
- Name of the application that established the connection

The user name displayed is based on the value specified in the **Username** environmental variable of the computer from which the user logged in to the database.

The information displayed can be sorted either by user name or database name.

The following options are available for displaying information about all current users of databases on the specified server.

Users Sorted by User Name:

Interactive Mode

```
sessions byuser
```

Outside of Interactive Mode

```
BPAadm sessions byuser
```

Users sorted by process identifier:

Interactive Mode

sessions bypid

Outside of Interactive Mode

BPAadm sessions bypid

Users sorted by database name:

Interactive Mode

sessions bydatabase

Outside of Interactive Mode

BPAadm sessions bydatabase

9.4.23 Siteadminpassword

Changes the site administrator's password.

To change the site administrator password:

Interactive Mode (the new password must not be entered in interactive mode, you will be prompted for it by the system)

siteadminpassword <current password>

Outside of Interactive Mode

BPAadm siteadminpassword <new password> <current password>

9.4.24 Statistic

- Displays the following information for the evaluated database:
- All models
- All users
- All font formats

You can use the following switch:

all: Outputs all information about the database.

To display this information for one or all databases, enter the following command calls and press Enter:

Interactive Mode

Information about a database:

statistic <database name>

Information about all databases:

statistic all

Outside of Interactive Mode

Information about a database:

BPAadm statistic <database name>

Information about all databases:

BPAadm statistic all

9.4.25 Status

Displays the status of a client-server connection.

To display the status of a client-server connection, enter the following command call and press Enter:

Interactive Mode

```
status <server>
```

Outside of Interactive Mode

```
BPAadm status <server>
```

9.4.26 Version

Outputs the Oracle BPA Suite version number.

To display version numbers, enter the following command call and press Enter.

Interactive Mode

```
Version
```

Outside of Interactive Mode

```
BPAadm version
```

Oracle BPA Suite Agent

The following section describes how the agent-based system in Oracle BPA Suite supports you in diagnosing and restoring Oracle BPA Suite services.

10.1 What Is the Purpose of Oracle BPA Suite Agents?

The Oracle BPA Suite Agent system autonomously monitors and, in particular, starts and stops Oracle Business Process Repository processes and all dependent services.

Within the system, an Oracle BPA Suite Agent monitors and manages all Oracle Business Process Repository processes (and the associated Oracle BPA Suite Services) that are installed on one computer.

10.2 What Tasks Does an Oracle BPA Suite Agent Handle?

- An Oracle BPA Suite Agent mainly performs the following tasks:
- Determining and providing Oracle BPA Suite Service information
- Monitoring Oracle BPA Suite Services by querying them at regular intervals (ping)
- Shutting down or rebooting Oracle BPA Suite Services (automatically or after prompting)

10.3 How to Exit Oracle BPA Suite Agents

Shutting down Oracle Business Process Repository correctly will also shut down the Oracle BPA Suite Agent and all Oracle BPA Suite Services. To do so, either open the DOS window for Oracle Business Process Repository and press **Ctrl + C**, or shut down the service.

10.4 Activation of the Oracle BPA Suite Notify Service

Administrators of Oracle BPA Suite Sites can have messages sent by the Oracle BPA Suite Notify Service when problems arise. It is also possible to notify several administrators at the same time.

In the **arisserver.cfg** file you can specify that an e-mail be sent to an e-mail address of your choice if the behavior of the Oracle BPA Suite Site triggers warnings or error messages. The e-mail contains the zipped files of the log and config directories. You can toggle the notification mode by setting the **state** value.

Note: The username account (see the following settings) must exist on your e-mail server.

The settings are included in the Adminservice tag:

```
<mailserver
state="on"
language="en"
country="en"
warnings="on"
host="172.20.130.233"
protocol="smtp"
username="adminservice"
address="adminservice@<ids_scheer_en>"
<recipient address="adminservice@<ids_scheer_en>" />
</mailserver>
```

Possible values:

Table 10–1 Entry

Entry	Value	Meaning
state	on off	The mail function is switched on. The mail function is switched off.
language country	en en	Contains the relevant language code. In this example, the language code is set to English.
warnings	on off	E-mails will be sent for warnings and errors. E-mails will be sent only for errors.
host	172.20.130.233	IP address or name of the mail server. In this example, an IP address has been entered.
protocol	smtp	Protocol used for sending the e-mails. In this example: simple mail transfer protocol.
username	adminservice	Name of the e-mail sender. In this example: adminservice
address	adminservice@<ids_scheer_en>	Address of the e-mail sender. In this example: adminservice@<ids_scheer_en>
recipient address	adminservice@<ids_scheer_en>	Address of the e-mail recipient. In this example: adminservice@<ids_scheer_en>

Oracle Business Process Repository and Database Platforms

Possible platforms for Oracle Business Process Repository and the databases with which they can be combined are listed in the following table. If other platforms or databases are released after this guide has gone to press, you will be informed about them in the Release Notes.

Tip: We support the integration of databases of the versions listed in the table below only as long as they are supported by the respective manufacturers.

Table 11–1 Platform Server/Databas

Platform Server/Database	Processor	Oracle Business Process Repository	Oracle 9.2.0.6 and Higher EE/SE (2)	Oracle 10.1 and 10.2 EE/SE and Standard	MS SQL Enterprise Edition 2005 (2)
Windows 64-bit					
Windows 2000	Intel x86_64 (Intel EM64T)	Yes	Yes	Yes	No
Windows 2003	Intel x86_64 (Intel EM64T)	Yes	Yes	Yes	No
Windows 2003	Intel x86_64(AMD Opteron)	Yes	Yes	Yes	No
Windows 32-bit					
Windows 2000	Intel x86 32-bit	Yes	Yes	Yes	Yes
Windows 2003	Intel x86 32-bit	Yes	Yes	Yes	Yes
Windows 2003 R2	Intel x86 32-bit	Yes	Yes	Yes	Yes
Windows XP	Intel x86 32-bit	Yes	Yes	Yes	Yes
Linux					
RHEL3.0	Intel x86_64 (Intel EM64T)	Yes	Yes	Yes	No
RHEL4.0	Intel x86_64 (Intel EM64T)	Yes	Yes	Yes	No
SLES9	Intel x86_64 (Intel EM64T)	Yes	Yes	Yes	No
RedHat 4 U2	Intel x86 (32-bit)	Yes	Yes	Yes	No
Solaris					
Solaris 5.8	Sun Sparc (64-bit)	Yes	Yes	Yes	No
Solaris 5.9	Sun Sparc (64-bit)	Yes	Yes	Yes	No
Solaris 5.10	Sun Sparc (64-bit)	Yes	Yes	Yes	No

Table 11–1 (Cont.) Platform Server/Databas

Platform Server/Database	Processor	Oracle Business Process Repository	Oracle 9.2.0.6 and Higher EE/SE (2)	Oracle 10.1 and 10.2 EE/SE and Standard	MS SQL Enterprise Edition 2005 (2)
HP-UX					
HP-UX 11.11	HP PA Risc (64-bit)	Yes (1)	Yes	Yes	No
HP-UX 11.23	HP PA Risc (64-bit)	Yes (1)	Yes	Yes	No
IBM AIX					
IBM AIX5L 5.3	IBM Power (64-bit)	Yes	Yes	Yes	No

(1)Installation only by Oracle Corporation Support.

(2)Database must be provided by the customer.

Hardware and Software Requirements

This section describes processor, memory, system configuration, and software requirements that the various server and client computers must meet for Oracle BPA Suite. For simultaneous use of other applications, a faster processor, additional memory or a system extension may be required.

Depending on the application scenario (e.g. Merge or Simulation), large databases can involve extended runtimes. Use of report, backup and restore functions may require more RAM. On the other hand, if more RAM is available than listed below, runtime behavior might improve.

Partly, minimum and maximum system requirements are specified. The minimum system requirements must be met in order for the Oracle BPA Suite products to work properly. Meeting the recommended system requirements will assure good performance even with large data volumes. In general, it is advisable to use up-to-date hardware taking into account the number of users who will be accessing the same Oracle Business Process Repository.

12.1 Known Restrictions

Knowing how the system is going to be used is essential to determining an optimal technical configuration.

Versions more recent than those listed below have not been tested or approved for use.

Note: Despite the approval of our software for operation with the listed operating system versions and other software and hardware requirements, we cannot eliminate any possibility of problems arising due to unpredictable incompatibility issues concerning certain hardware/software combinations.

For example, this applies to the use of certain printers/printer drivers or graphic cards/graphic card drivers under certain operating system versions. In individual cases, operational faults are possible when displaying graphics in Oracle BPA Suite, when creating reports, or may occur in other Office applications or in Oracle Business Process Publisher exports.

Printers/Plotters

Oracle BPA Suite printouts are not generated correctly with the HP Design Jet 800 plotter driver and compatible drivers in HPGL mode.

12.2 General Requirements and Releases

This chapter describes general requirements and releases.

12.2.1 JRE Versions

SUN Microsystems guarantees compatibility between the JRE patch levels. Therefore, the Oracle BPA Suite approvals for JREs are valid for all patch levels of a version.

If JRE 1.5.0_02 and update patches are approved for an Oracle BPA Suite product, the approval is valid for both JRE 1.5.0_02 and JRE 1.5.0_05 and any subsequent patch level.

Note: SUN renamed the JRE versions. JRE 1.5.0_05 is now called JRE 5.0, Update 5. Approvals are also valid for subsequent updates.

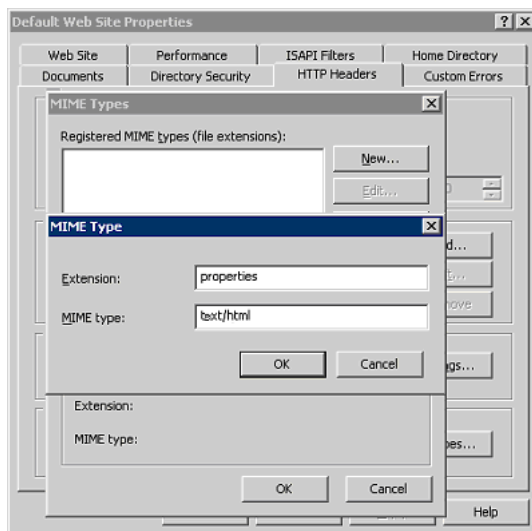
Oracle BPA Suite products are tested using the JRE that is most current at the time of release.

12.2.2 IIS 6.0 on Windows Server 2003

If you installed Internet Information Server 6.0 (IIS 6.0) with default settings, please proceed as follows to use Oracle Business Process Architect and Java Help. The example graphics are taken from an English-language system.

Procedure

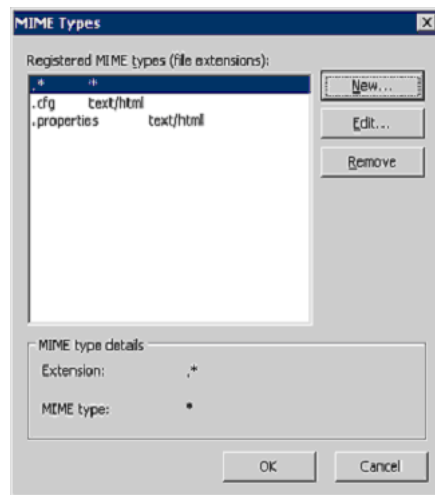
1. Oracle Business Process Publisher exports: For the Web site on which the Oracle Business Process Publisher exports will run, enter the text/html MIME type for the .properties file type. This allows the Oracle Business Process Publisher export files to be identified:



2. Oracle Business Process Architect: Register the *.cfg MIME type with the Web server. Only then can the **arisloader.cfg** file be used.
3. Java Help: Enter *.* as the MIME type. This enables the Java help files to be identified.

Note: By registering the *.* MIME type, all files are permitted for the Web site. This implies that security guidelines may not be complied with. To prevent security guidelines from being circumvented, the help must be installed on the client computers. This eliminates the possibility of downloading Oracle Business Process Architect from a Web server.

Once you carried out these three steps, the following MIME types are registered:



12.2.3 Multi-Monitor Operation

Oracle BPA Suite products are approved for multi-monitor operation.

12.3 Database Server

This section describes the hardware and software requirements that must be met so that the standard database system and other databases can be set up on the database server.

Please always observe the release information provided by the respective database manufacturer as it may be possible that only a specific patch level of a database is approved for operation with the server you are using.

Both a 32-bit and a 64-bit setup are available for Oracle Business Process Repository. By running the 64-bit setup on a computer under Windows 2003 64-Bit Edition, the 64-bit system options can be used to the fullest.

If you run the 32-bit setup under Windows 2003 64-Bit Edition, a message is displayed notifying you that a separate installation program exists for this system. However, you can still decide to run the 32-bit installation. In this case, the 64-bit options will not be used to capacity, which will result in reduced performance.

While the 32-bit set up can be run under Windows 2003 64-Bit Edition, it is not possible to run the 64-bit system on a 32-bit system.

You can request the 64-bit setup from our support staff.

12.3.1 Standard Database System

Operating System

- Windows Server 2000 Standard Edition + Service Pack 4
- Windows Server 2003 Standard Edition + Service Pack 1.

Network Communication

TCP/IP

12.3.2 Oracle Database

Operating System

- Windows Server 2000 Standard Edition + Service Pack 4
- Windows Server 2003 Standard Edition + Service Pack 1.

Note: If you install Oracle yourself, always follow the instructions provided in the Oracle installation guide.

12.4 Oracle Business Process Repository

This section describes the hardware and software requirements for Oracle Business Process Repository.

The default server includes:

- Oracle Business Process Repository
- Oracle Business Process Repository Site Manager

12.4.1 Hardware Requirements - Windows

Minimum System Requirements

Processor

Intel Pentium IV 2.4 GHz

Main Memory

512 MB RAM

Graphics Card

SVGA, screen resolution: 800 x 600; 256 colors

Recommended System Requirements

Processor

Intel Pentium IV 3.0 GHz

Main Memory

2 GB RAM

The processor requirements depend on the number of users and the size of the database (1 GB RAM for 50 users).

If you use Oracle BPA Suite Converter, you need an additional 256 MB RAM and 512 MB hard disk space for converting a database, for example.

Graphics Card

Screen resolution: 1024 x 768, at least 256 colors

Network

High-speed network (100 Mbit) between database server and Oracle Business Process Repository.

Note: Oracle Business Process Repository does not support NAT (Network Address Translation) by default. However, Oracle Corporation offers customized solutions. For further information, please contact Oracle Corporation.

12.4.2 Software Requirements - Windows

Operating System

- Windows Server 2000 Standard Edition + Service Pack 4
- Windows Server 2003 Standard Edition + Service Pack 1. **This release is not approved for 64-bit Itanium processors.** If you want to output reports with Microsoft Word or Microsoft Excel you need to have Microsoft Office version 2000, 2002 or 2003 installed.

JDK

If you have installed Oracle Business Process Repository, an internal JDK version is used automatically. You do not need to install this application separately. If you have already installed JDK, your Oracle BPA Suite installation is not used.

Network Communication

TCP/IP

12.4.3 Hardware Requirements - Unix

HPUX 11.11 and 11.23

System

HP Server 9000 RP 8440

Processor

- Ultra Sparc T1 (64-bit)
- Clock frequency 1 GHz
- Number of processors: 1

Main Memory

4 GB RAM

Other

- Two 36 GB hard disks
- Controller: Ultra 160 SCSI

Solaris 8, 9 and 10

System

Sun Fire T2000

Processor

- PA-RISC - PA 8900 (64-bit)
- Clock frequency 1 GHz
- Number of processors: 6

Main Memory

8 GB RAM

Other

- Two 72 GB hard disks
- Controller: Serial Attached SCSI

IBM AIX5L 5.3

System

IBM eServer pSeries 615

Processor

- PowerPc G4 - RISC (64-bit)
- Clock frequency 1.2 GHz
- Number of processors: 2

Main Memory

2 GB RAM

Other

- Two 36 GB hard disks
- Controller: Ultra 320 SCSI

12.4.4 Software Requirements - Unix

HPUX 11.11 and 11.23

Please use only the current patchlevel.

Solaris 8, 9 and 10

Please use only the current patchlevel.

IBM AIX5L 5.3

Please use only the current patchlevel.

Browser

- Mozilla Firefox, version 1.5

While Oracle Corporation has not approved the use of later versions, it is highly unlikely that they cannot be used.

Other

- JDK 1.4.2_04 or JDK 1.4.2_08
- Oracle Application Server 10.1.3
- Apache Tomcat 5.0.28 or 5.5, or
- IBM WebSphere Application Server 6.0
- Oracle also under HP and SUN
- Oracle Light in productive mode for up to 10 users

Network Communication

TCP/IP

12.5 Oracle Business Process Architect

This section describes the hardware and software requirements for Oracle Business Process Architect.

12.5.1 Hardware Requirements

Minimum System Requirements**Processor**

Intel Pentium III 450 MHz

Main Memory

- Client installation without local database system: 256 MB RAM
- Client installation with local database system: 512 MB RAM

Hard Disk Capacity

375 MB

For single-user installation: sufficient disk space for each user database

Graphics Card

SVGA, screen resolution: 800 x 600; 256 colors

Bandwidth

56 k. Lower bandwidths are possible. However, lower bandwidths can result in reduced performance.

Recommended System Requirements

Processor

Intel Pentium IV 2.4 GHz

Main Memory

Client installation with and without local database system: 1 GB RAM

Graphics Card

Screen resolution: 1024 x 768, at least 256 colors

Bandwidth

128 k transmission

12.5.2 Software Requirements - Windows

Operating System

- Windows XP Professional

Browser

- Microsoft Internet Explorer version 6.0 + Service Pack 2
- Mozilla Firefox, version 1.5

While Oracle Corporation has not approved the use of later versions, it is highly unlikely that they cannot be used.

- Java Runtime Environment (JRE) 1.4.2_07 , 1.4.2_08 and subsequent patches, as well as 1.5.0_02 and subsequent patches are approved for use with Internet Explorer.
- To display different character sets (Japanese, Arabic, Cyrillic, etc.), the corresponding file in the **<JRE installation directory>\<version>\lib** directory must be called **font.properties**. For example, if you wish to display Japanese characters, you must rename the **font.properties.ja** file to **font.properties**.

Browser Security Settings

Microsoft Internet Explorer

If Java Runtime Environment (JRE) is not yet installed and needs to be downloaded, you need to specify the following settings in the **Tools/Internet Options/Security/Custom Level** menu in Microsoft Internet Explorer:

Adjust your browser settings to ensure that

- ActiveX controls and plug-ins can be run.
- signed ActiveX controls are downloaded.
- permission to run JavaScript exists.

12.5.3 Software Requirements - Unix

Operating System

32-bit version of Red Hat Enterprise Linux 4.0

Browser

- Mozilla Firefox, version 1.5

While Oracle Corporation has not approved the use of later versions, it is highly unlikely that they cannot be used.

- Sun Java 5 SDK for Linux is approved.
- To display different character sets (Japanese, Arabic, Cyrillic, etc.), the corresponding file in the <JRE installation directory>\<version>\lib directory must be called **font.properties**. For example, if you wish to display Japanese characters, you must rename the **font.properties.ja** file to **font.properties**.

Other

- For report output, Openoffice 2.0 is recommended.
- A current SVG viewer should also be installed (for example, Inkscape).

Network Communication

TCP/IP

12.6 Web Client Components

This section describes the hardware and software requirements for Web Client Components.

The following Web server has been tested and approved for operation with Oracle Business Process Architect:

- Oracle Application Server 10.1.3
- Microsoft Internet Information Server 5.0 or 6.0
- Apache Web Server and Apache HTTP Server 2.0 under Windows

Note: Follow all information contained in the corresponding installation guide.

12.6.1 Hardware Requirements

Minimum System Requirements**Processor**

Intel Pentium III 450 MHz

Main Memory

256 MB RAM

Graphics Card

SVGA, screen resolution: 800 x 600; 256 colors

Bandwidth

56 k. Lower bandwidths are possible. However, lower bandwidths can result in reduced performance.

Recommended System Requirements

Processor

Intel Pentium IV 2.4 GHz

Main Memory

512 MB RAM

Graphics Card

Screen resolution: 1024 x 768, at least 256 colors

Bandwidth

128 k transmission

12.6.2 Software Requirements - Windows

Operating System

- Windows Server 2000 Standard Edition + Service Pack 4
- Windows Server 2003 Standard Edition + Service Pack 1.
- If you want to output reports in Microsoft Word or Microsoft Excel, you must have Microsoft Office version 2000, 2002 or 2003 installed, since previous versions are incompatible with Windows Server 2003.

Browser

- Microsoft Internet Explorer version 6.0 + Service Pack 2

While Oracle Corporation has not approved the use of later versions, it is highly unlikely that they cannot be used.

- Java Runtime Environment (JRE) 1.4.2_07 , 1.4.2_08 and subsequent patches, as well as 1.5.0_02 and subsequent patches are approved for use with Internet Explorer.

While Oracle Corporation has not approved the use of later versions, it is highly unlikely that they cannot be used.

12.6.3 Software Requirements - Unix

Operating System

32-bit version of Red Hat Enterprise Linux 4.0

Browser

- Mozilla Firefox, version 1.5

While Oracle Corporation has not approved the use of later versions, it is highly unlikely that they cannot be used.

- Sun Java 5 SDK for Linux is approved.
- To display different character sets (Japanese, Arabic, Cyrillic, etc.), the corresponding file in the **<JRE installation directory>\<version>\lib** directory must be called **font.properties**. For example, if you wish to display Japanese characters, you must rename the **font.properties.ja** file to **font.properties**.

Other

- For report output, Openoffice 2.0 is recommended.
- A current SVG viewer should also be installed (for example, Inkscape).

Network Communication

TCP/IP

12.7 Oracle Business Process Publisher

This section describes the hardware and software requirements for Oracle Business Process Publisher.

The following Web servers have been tested and approved for operation with Oracle Business Process Publisher:

- Oracle Application Server 10.1.3
- Apache Tomcat 5.0.28 and 5.5 under Windows
- IBM WebSphere Application Server 6.0
- Oracle Light in productive mode for up to 10 users

Note: Follow all information contained in the corresponding installation guide.

12.7.1 Hardware Requirements - Windows

Minimum System Requirements**Processor**

Intel Pentium IV 2.4 GHz

Main Memory

512 MB RAM

Graphics Card

SVGA, screen resolution: 800 x 600; 256 colors

Recommended System Requirements**Processor**

Intel Pentium IV 3.0 GHz

Main Memory

2 GB RAM

The processor requirements depend on the number of users and the size of the database (1 GB RAM for 50 users).

If you use Oracle BPA Suite Converter, you need an additional 256 MB RAM and 512 MB hard disk space for converting a database, for example.

Graphics Card

Screen resolution: 1024 x 768, at least 256 colors

Network

High-speed network (100 Mbit) between database server and Oracle Business Process Repository.

Note: Oracle Business Process Repository does not support NAT (Network Address Translation) by default. However, Oracle Corporation offers customized solutions. For further information, please contact Oracle Corporation.

12.7.2 Software Requirements - Windows

Operating System

- Windows Server 2000 Standard Edition + Service Pack 4
- Windows Server 2003 Standard Edition + Service Pack 1.

Browser

- Microsoft Internet Explorer version 6.0 + Service Pack 2
- Mozilla Firefox, version 1.0

While Oracle Corporation has not approved the use of later versions, it is highly unlikely that they cannot be used.

Other

- JDK 1.4.2_04 or JDK 1.4.2_08
- Oracle Application Server 10.1.3
- Apache Tomcat 5.0.28 or 5.5, or
- IBM WebSphere Application Server 6.0
- Oracle also under HP and SUN
- Oracle Light in productive mode for up to 10 users

Network Communication

TCP/IP

12.7.3 Hardware Requirements - Unix

HPUX 11.11 and 11.23

System

HP Server 9000 RP 8440

Processor

- Ultra Sparc T1 (64-bit)
- Clock frequency 1 GHz

- Number of processors: 1

Main Memory

4 GB RAM

Other

- Two 36 GB hard disks
- Controller: Ultra 160 SCSI

Solaris 8, 9 and 10**System**

Sun Fire T2000

Processor

- PA-RISC - PA 8900 (64-bit)
- Clock frequency 1 GHz
- Number of processors: 6

Main Memory

8 GB RAM

Other

- Two 72 GB hard disks
- Controller: Serial Attached SCSI

IBM AIX5L 5.3**System**

IBM eServer pSeries 615

Processor

- PowerPc G4 - RISC (64-bit)
- Clock frequency 1.2 GHz
- Number of processors: 2

Main Memory

2 GB RAM

Other

- Two 36 GB hard disks
- Controller: Ultra 320 SCSI

12.7.4 Software Requirements - Unix

HPUX 11.11 and 11.23

Please use only the current patchlevel.

Solaris 8, 9 and 10

Please use only the current patchlevel.

IBM AIX5L 5.3

Please use only the current patchlevel.

Browser

- Mozilla Firefox, version 1.5

While Oracle Corporation has not approved the use of later versions, it is highly unlikely that they cannot be used.

Other

- JDK 1.4.2_04 or JDK 1.4.2_08
- Oracle Application Server 10.1.3
- Apache Tomcat 5.0.28 or 5.5, or
- IBM WebSphere Application Server 6.0
- Oracle also under HP and SUN
- Oracle Light in productive mode for up to 10 users

Network Communication

TCP/IP

12.8 Other

12.8.1 LDAP

Oracle BPA Suite does support LDAP. These were tested:

- LDAP server Sun ONE 5.2
- Windows Server 2003 Active Directory

12.8.2 Citrix Presentation Server 4.0 (MetaFrame)

Citrix Presentation Server 4.0 (MetaFrame) on Windows Server 2000 Standard Edition + Service Pack 4

13.1 System Languages and Locale IDs

Table 13–1 System Language

System Language	Locale ID
Afrikaans - South Africa	1078
Albanian - Albania	1052
Arabic - Algeria	5121
Arabic - Bahrain	15361
Arabic - Egypt	3073
Arabic - Iraq	2049
Arabic - Jordan	11265
Arabic - Kuwait	13313
Arabic - Lebanon	12289
Arabic - Libya	4097
Arabic - Morocco	6145
Arabic - Oman	8193
Arabic - Qatar	16385
Arabic - Saudi Arabia	1025
Arabic - Syria	10241
Arabic - Tunisia	7169
Arabic - U.A.E.	14337
Arabic - Yemen	9217
Basque - Spain	1069
Belarussian - Belarus	1059
Bulgarian - Bulgaria	1026
Catalan - Spain	1027
Chinese - Hong Kong	3076
Chinese - PRC	2052

Table 13–1 (Cont.) System Language

System Language	Locale ID
Chinese - Singapore	4100
Chinese - Taiwan	1028
Croatian - Croatia	1050
Czech - Czech Republic	1029
Danish - Denmark	1030
Dutch - Belgium	2067
Dutch - Netherlands	1043
English - Australia	3081
English - Belize	10249
English - Canada	4105
English - Caribbean	9225
English - Ireland	6153
English - Jamaica	8201
English - New Zealand	5129
English - South Africa	7177
English - Trinidad	11273
English - United Kingdom	2057
English - United States	1033
Estonian - Estonia	1061
Faeroese - Faeroe Islands	1080
Farsi - Iran	1065
Finnish - Finland	1035
French - Belgium	2060
French - Canada	3084
French - France	1036
French - Luxembourg	5132
French - Switzerland	4108
German - Austria	3079
German - Germany	1031
German - Liechtenstein	5127
German - Luxembourg	4103
German - Switzerland	2055
Greek - Greece	1032
Hebrew - Israel	1037
Hungarian - Hungary	1038
Icelandic - Iceland	1039
Indonesian - Indonesia	1057

Table 13-1 (Cont.) System Language

System Language	Locale ID
Italian - Italy	1040
Italian - Switzerland	2064
Japanese - Japan	1041
Korean - Korea	1042
Latvian - Latvia	1062
Lithuanian - Lithuania	1063
Norwegian - Norway (Bokmal)	1044
Norwegian - Norway (Nynorsk)	2068
Polish - Poland	1045
Portuguese - Brazil	1046
Portuguese - Portugal	2070
Romanian - Romania	1048
Russian - Russia	1049
Serbian - Serbia (Cyrillic)	3098
Serbian - Serbia (Latin)	2074
Slovak - Slovakia	1051
Slovene - Slovenia	1060
Spanish - Argentina	11274
Spanish - Bolivia	16394
Spanish - Chile	13322
Spanish - Colombia	9226
Spanish - Costa Rica	5130
Spanish - Dominican Republic	7178
Spanish - Ecuador	12298
Spanish - El Salvador	17418
Spanish - Guatemala	4106
Spanish - Honduras	18442
Spanish - Mexico	2058
Spanish - Nicaragua	19466
Spanish - Panama	6154
Spanish - Paraguay	15370
Spanish - Peru	10250
Spanish - Puerto Rico	20490
Spanish - Spain (Modern Sort)	3082
Spanish - Spain (Traditional Sort)	1034
Spanish - Uruguay	14346
Spanish - Venezuela	8202

Table 13–1 (Cont.) System Language

System Language	Locale ID
Swedish - Finland	2077
Swedish - Sweden	1053
Thai - Thailand	1054
Turkish - Turkey	1055
Ukrainian - Ukraine	1058
Vietnamese - Vietnam	1066

13.2 Port Numbers

The following port numbers are entered in the Services file of your Windows installation. This file is located in the Windows directory system32/drivers/etc/.

Table 13–2 Port

Port	Name	For
17050	aris70_name_public	Public Name Service
17051	aris70_name_private	Private Name Service
17052	aris70_admin	Admin Service
17053	aris70_admin_agent	Agent Service
17054	aris_Sybase	Standard Database System
17055	aris70_local_public	Public Name Service local
17056	aris_local_Sybase	Standard database system local
17057	aris70_local_private	Private Name Service local
17058	aris70_local_admin	Admin Service local
17059	aris70_bp_service	Business Publisher Service
17060	aris70_local_bpsservice	Local Business Publisher Service

If errors are reported upon database access, check whether the port numbers have been assigned correctly to the services in the **Services** file. For example, the following must be entered for the Public Name Service:

```
aris70_name_public      17050/tcp
```

Glossary

Application Server

Computer on which applications are run. It is a component of a 3-tier architecture.

Database Server

Computer on which the Oracle BPA Suite Repository is installed. Oracle BPA Suite Clients access the database server on which the Oracle BPA Suite Repository containing the Oracle BPA Suite databases resides via the Oracle Business Process Repository.

Firewall

Technology (hardware and/or software) that controls the data flow between internal and external (unprotected) networks and provides protective mechanisms to combat unauthorized access.

JRE

Java Runtime Environment. System that is used to run Java programs. The main components are the Java Virtual Machine, the Java Interpreter, and the host operating system.

LAN

Local Area Network. Network within a company. This network has broad bandwidth.

Load balancing

Distribution of the network load per application server. The more transport transactions are required, the higher the utilization of a network.

LDAP

Lightweight Directory Access Protocol. Protocol that provides access to centrally managed libraries of information and directories. It saves having to search the whole network for data. The access data for user login to Oracle BPA Suite is stored centrally on the LDAP server so it does not have to be managed separately for each database.

Oracle

Relational database system that can be used for Oracle BPA Suite installations.

Oracle BPA Suite Agent

Program that autonomously monitors and manages Oracle Business Process Repository processes.

Oracle Business Process Architect

Modeling tool of the Oracle BPA Suite product family that runs within a browser or as an application and that can be used in a LAN and a WAN. Oracle Business Process Architect thus enables so to speak Internet modeling of business processes.

Oracle Business Process Repository

Oracle BPA Suite Application Server.

Oracle BPA Suite HTML Generator

Program module that automatically generates the HTML files needed by Java-based clients when they are launched via a browser.

Oracle BPA Suite Site

At least one Oracle Business Process Repository, one database server and one Oracle Business Process Repository Site Manager.

Oracle BPA Suite Site Administrator

Central management component with which administrative accesses can be provided to all Oracle BPA Suite sites simultaneously.

Oracle Business Process Repository Site Manager

Central component of Oracle BPA Suite Site that, for instance, coordinates access to programs and data by means of a license and lock service.

RAID

Redundant Array of Independent Disks. Method of linking several hard drives and accessing these as if accessing a single hard drive. This means that data storage and data access is "spread" across these hard drives, which improves access time and avoids complete loss of data should a drive fail.

SSL

Secure Socket Layer. Security software for encrypting data that is exchanged between programs.

WAN

Wide Area Network. Network that transports data both within the company network and via the Internet. This network has low bandwidth.

Web Client Components

WWW components that are accessed by Web Clients, e.g. Oracle Business Process Architect when they are started via a Web browser.

Web Server

A server containing the HTML pages, images, documents and other files and folders that users or programs within a network can access.