

# Oracle® BPEL Process Analytics

Installation Guide

10g Release 2 (10.1.2) for Solaris Operating Environment (SPARC), Linux x86, and Microsoft Windows

**B19186-01**

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This document provides the requirements and procedures for installing Oracle BPEL Process Analytics.

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## Oracle BPEL Process Analytics Components Overview

Oracle BPEL Process Analytics provides business analysts with real-time access to critical business performance indicators within and across Oracle Application Server e-business integration products within an enterprise.

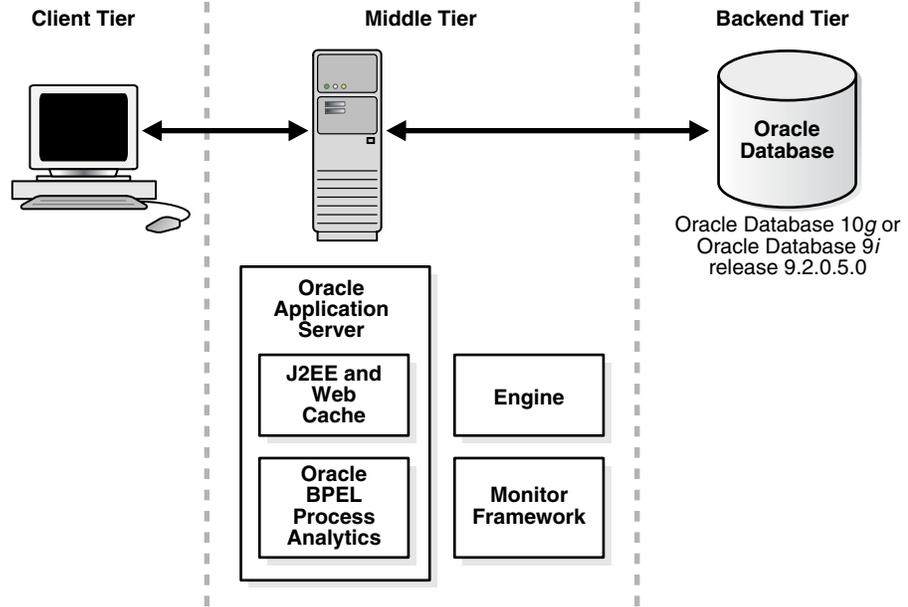
Oracle BPEL Process Analytics components reside in the following locations:

- Oracle Application Server middle tier  
Oracle BPEL Process Analytics must be installed in the same Oracle home directory as the J2EE and Web Cache installation type of Oracle Application Server 10g Release 2 (10.1.2). The J2EE and Web Cache installation type provides a Web server that enables you to develop and deploy Java 2 Enterprise Edition (J2EE) applications and accelerate Web site performance with Oracle Application Server Web Cache.
- Oracle Application Server Metadata Repository  
Oracle Application Server Metadata Repository database schema are stored in the Oracle Application Server Metadata Repository.

**See Also:** *Oracle BPEL Process Analytics User's Guide* for more details about Oracle BPEL Process Analytics components

Figure 1 shows Oracle BPEL Process Analytics components.

**Figure 1 Oracle BPEL Process Analytics Components**



## Installation Scenario for Oracle BPEL Process Analytics

Oracle BPEL Process Analytics can be configured with Oracle Application Server and Oracle Database 10g, or Oracle9i Database release 9.2.0.5.0 or later.

Oracle Database is configured to use the Oracle BPEL Process Analytics schemas (which are prefixed with the string **BAM**), by running the Integration Repository Creation Assistant (IRCA) described in "[Run the Integration Repository Creation Assistant \(IRCA\)](#)" on page 5.

## Installation Overview for Oracle BPEL Process Analytics

Table 1 provides an overview of installation tasks to perform, and provides references to procedures for performing these tasks.

**Table 1 Installation Overview**

When Installing...	Follow These Steps...	See Also...
Oracle Database 10g (10.1) or Oracle9i Database release 9.2.0.5.0	1. Install Oracle Database 10g or Oracle9i Database release 9.2.0.5.0 or later.	<i>Oracle Database Installation Guide 10g</i> , or <i>Oracle Database Installation Guide 9i</i> for your platform

**Table 1 (Cont.) Installation Overview**

When Installing...	Follow These Steps...	See Also...
	2. Create the database user and schema for Oracle BPEL Process Analytics in Oracle Database by using Integration Repository Creation Assistant (IRCA).	<a href="#">"Run the Integration Repository Creation Assistant (IRCA)"</a> on page 5
Oracle Application Server 10g release 10.1.2	1. Install Oracle Application Server 10g (10.1.2), choosing J2EE and Web Cache installation type.	<i>Oracle Application Server Installation Guide</i> for your operating system, and  <i>Oracle Application Server Upgrade and Compatibility Guide</i>
	2. Install the current release of Oracle BPEL Process Analytics on the Oracle Application Server middle tier in the same Oracle home as J2EE and Web Cache.	<a href="#">"Installation Tasks for Oracle BPEL Process Analytics"</a> on page 6

## System Requirements for Oracle BPEL Process Analytics

[Table 2](#) describes the system requirements for Oracle BPEL Process Analytics.

**Table 2 Oracle BPEL Process Analytics System Requirements**

Element	Requirements
Operating system	<ul style="list-style-type: none"> <li>■ Sun SPARC Solaris version 8 or 9 <b>See Also:</b> <i>Oracle Application Server Installation Guide 10g Release 2 (10.1.2) for Solaris Operating System (SPARC)</i> for information on any required operating system patches and packages, swap space requirements, and kernel parameter settings</li> <li>■ Red Hat Enterprise Linux AS/ES 2.1 and 3.0 <b>See Also:</b> <i>Oracle Application Server Installation Guide 10g Release 2 (10.1.2) for hp HP-UX PA_RISC (64-bit), and Linux x86</i> for information on any required operating system patches and packages, swap space requirements, and kernel parameter settings</li> <li>■ Microsoft Windows 2000 with Service Pack 3</li> <li>■ Microsoft Windows XP</li> <li>■ Microsoft Windows Server 2003 <b>See Also:</b> <i>Oracle Application Server Installation Guide 10g Release 2 (10.1.2) for Microsoft Windows</i> for information on processor, TEMP directory, virtual memory, and swap space requirements</li> </ul>
Disk space	<ul style="list-style-type: none"> <li>■ 1 GB for Microsoft Windows</li> <li>■ 1 GB for Unix</li> </ul>
Temp space	150 MB
Memory	512 MB RAM minimum (1 GB preferred)
Swap space	1535 MB minimum
Monitor	Configured to display at least 256 colors

**Table 2 (Cont.) Oracle BPEL Process Analytics System Requirements**

Element	Requirements
Large display settings	If you configure your Microsoft Windows environment to use display settings of large fonts and large-size DPI settings (120 DPI), then you must configure Oracle BPEL Process Analytics after installation. This ensures that all user interface elements correctly display in Oracle BPEL Process Analytics.

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**Note:** Throughout this chapter, Sun SPARC Solaris and Red Hat Enterprise Linux AS/ES are collectively referred to as Unix. Similarly, Microsoft Windows 2000, Microsoft Windows XP, and Microsoft Windows Server 2003 are collectively referred to as Microsoft Windows.

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## Required Software

To install Oracle BPEL Process Analytics, the following products must be installed:

- Oracle Database 10g, or Oracle9i Database release 9.2.0.5.0 or later
- Oracle Application Server 10g Release 2 (10.1.2)

**See Also:** "[Preinstallation Tasks for Oracle BPEL Process Analytics](#)" on page 5 for notes about these installations

## Supported Web Browsers

[Table 3](#) lists the supported Web browsers for using the Oracle BPEL Process Analytics Console.

**Table 3 Supported Web Browsers**

Operating System	Supported Browser
Unix	Netscape 7.0
Microsoft Windows	Internet Explorer 6.0

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**Note:**

- Install a Web browser using the Typical installation option. Custom-installed browsers can have problems with popup windows such as the calendar selection.
  - Ensure that cookies are enabled in your Web browser. The Oracle BPEL Process Analytics caching mechanism uses cookies to identify user sessions.
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## Globalization Support

For this release, Oracle BPEL Process Analytics does not support globalization.

## Preinstallation Tasks for Oracle BPEL Process Analytics

You must complete the preinstallation tasks described in the following sections before installing Oracle BPEL Process Analytics.

- [Install Oracle Database](#) on page 5
- [Run the Integration Repository Creation Assistant \(IRCA\)](#) on page 5
- [Install Oracle Application Server](#) on page 6

### Install Oracle Database

Install Oracle Database 10g or Oracle9i Database release 9.2.0.5.0 or later from the Oracle Database CD-ROM. The database can be on the same host, or a different host from where you intend to install Oracle BPEL Process Analytics.

**See Also:** The Oracle Database installation guide for your platform, as noted in [Table 2](#)

### Run the Integration Repository Creation Assistant (IRCA)

Run the Integration Repository Creation Assistant (IRCA) to create the database user and schemas as described in this section.

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**Note:**

- Whenever you run IRCA, it overwrites previous database configuration details.
  - You cannot run IRCA remotely.
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1. Copy `ircabpa.zip` to the host where Oracle Database is installed.
2. Extract `ircabpa.zip` to a temp directory on the host system, being sure to preserve the path information.
3. From a command window or xterm, run `ircabpa.bat` on Microsoft Windows or `ircabpa.sh` on Unix.

IRCA starts and prompts you for information.

4. Provide the database details, as shown in the following table, when prompted:

Prompt	Description	Example
Enter Database Oracle Home:	Your <code>ORACLE_HOME</code>	<code>C:\OraHome_1\</code>
Enter JDK 1.4 location <default path>:	Accept the default path for the Oracle Database. Otherwise, if you downloaded JDK 1.4 separately, then give its location.	<code>C:\oracle\product\10.1.0\Db_1\jdk</code>

Prompt	Description	Example
Enter database host [localhost]:	The full name or IP address of your database host.	hr1-pc.us.acme.com or 137.1.18.228
Enter database port [1521]	The database listener port.	1521
Enter database service name [orcl]	The service name that you specified when you installed the database.  Note that this is not the SID.  If you are not sure, then run the SQL*Plus command <code>show parameter service_names</code> .	orcl or orcl.us.acme.com
Enter sys password:	The database sys user password.	8x9cv55

## Install Oracle Application Server

Install Oracle Application Server 10g Release 2 (10.1.2).

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**Important:** Use Oracle Application Server 10g Release 2 (10.1.2) software only.

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You must install the Oracle Application Server 10g Release 2 (10.1.2) on the same host where you intend to install the Oracle BPEL Process Analytics.

- Select **Oracle Application Server** from the **Select a Product to Install** screen of the installation.
- Be sure to note the port number at which you can access the Oracle Application Server main page. This information is presented at the end of the Oracle Application Server installation.
- Be sure to note the `ias_admin` password that you enter.

**See Also:** *Oracle Application Server Installation Guide* for more information on this installation procedure

## Installation Tasks for Oracle BPEL Process Analytics

The following steps describe how to install Oracle BPEL Process Analytics:

1. Ensure that all preinstallation tasks and requirements described in "[Preinstallation Tasks for Oracle BPEL Process Analytics](#)" on page 5 have been completed.
2. Log on to the host on which you installed the J2EE and Web Cache installation type of Oracle Application Server.
3. Insert the Oracle BPEL Process Analytics CD-ROM.
4. Start the Oracle Universal Installer from the root of the CD-ROM or from the `Disk1` directory:

On...	Do This...
Unix	Enter the following command at the operating system prompt: ./runInstaller
Microsoft Windows	Click setup.exe.

The Welcome screen appears.

**5. Click Next.**

Note: If your host is detected to be part of a cluster, the Specify Hardware Cluster Installation Mode screen appears. Select **Noncluster Installation**. This installs Oracle BPEL Process Analytics on this node only, and not as part of a cluster node. Do not select **Cluster Installation**.

The Specify File Locations screen appears.

**6. In the Destination fields, select the Oracle home name and directory path where Oracle Application Server 10.1.2 J2EE and Web Cache is located.**

Do not accept the default Name and Path. The installer looks for the Oracle Application Server 10.1.2 J2EE and Web Cache instance. (The Dependencies alert will appear, if you specify an incorrect path.) An example is:

```
Name: oracleas1
Path: $/OraHome_1
```

Do not change the directory path in the **Source** field. This is the location of Oracle BPEL Process Analytics installation files.

**7. Click Next.**

The Specify Instance Repository Information screen appears.

**8. In the Specify Instance Repository Information screen, provide the information as described in the following table:**

Information	Example
Password for Oracle BPA Schema (BAM):	bam
Hostname:Port	my-pc.acme.com:1521 or 137.1.18.228:1521
Service Name:	orcl
ias_admin Password:	*****

The ias\_admin password is the password for the Oracle Application Server middle tier in which you are installing Oracle BPEL Process Analytics. You specified this password when you installed Oracle Application Server with J2EE and Web Cache.

**9. Click Next.** (Note that it takes a few minutes for the database schema to load.)

The Summary screen appears.

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**Note:** If you receive the following error when you click **Next**, it may be because the system account is locked. You can unlock the system account by connecting to the instance repository as SYSDBA and issuing the SQL ALTER USER SYSTEM ACCOUNT UNLOCK command.

```
Error:*** Alert: Unable to verify your connection to
this Hostname, Port and Service Name. Please verify
that you have entered the correct Hostname, Port and
Service Name.
```

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#### 10. Click **Install**.

The Installation Progress screen appears for a few seconds, and then the Configuration Assistants screen appears and lists the following configuration assistants:

- Oracle BPA Configuration Assistant
- OPMN Configuration Assistant
- Register DCM Plug Ins with EM
- Enterprise Manager Agent Configuration Assistant
- Enterprise Manager Web Site Configuration Assistant

When the configuration assistants have succeeded, the End of Installation screen appears.

#### 11. Click **Exit** and **Yes**.

For the full log of installation details, see the file named `installActionsdate_time.log` file, where `date_time` is the date and time at which the log file was created, and is specified as `yyyy-mm-dd_hr-mm-ss`.

This file is located in one of the following directories, where `C:` is the Microsoft Windows system drive and `UserHomeDirectory` is the Unix user home directory:

- On Microsoft Windows:  
`C:\Program Files\Oracle\Inventory`
- On Unix:  
`$UserHomeDirectory/Oracle/oraInventory/logs`

This completes the installation procedures. You should now verify the installation, as described in "[Postinstallation Verification Tasks for Oracle BPEL Process Analytics](#)" on page 8.

## Postinstallation Verification Tasks for Oracle BPEL Process Analytics

This section describes how to verify the Oracle BPEL Process Analytics installation. The steps vary slightly, depending on the operating system used. See one of the following sections for details:

- [Postinstallation Verification Tasks for Installations on Microsoft Windows](#) on page 9
- [Postinstallation Verification Tasks for Installations on Unix](#) on page 10

## Postinstallation Verification Tasks for Installations on Microsoft Windows

Verify that you can access Oracle BPEL Process Analytics components by following the steps in this section. Oracle BPEL Process Analytics components can also be started from Oracle Enterprise Manager 10g Grid Control Console.

1. Check the Oracle home directory, as follows:
  - If you installed Oracle BPEL Process Analytics into an Oracle Application Server middle tier directory, then check that there is a bam subdirectory. For example:
 

```
C:\OraHome_1\integration\bam
```
  - If you installed Oracle BPEL Process Analytics into a Database Client or Database home, then check that there is a bam subdirectory. For example:
 

```
C:\Oracle\product\10.2.0\Client_1\integration\bam
```

or

```
C:\Oracle\product\10.2.0\Db_1\integration\bam
```
2. Open the desktop **Start** menu, click **All Programs**, choose Oracle - OracleAS *home name*, and then ensure that there is an entry for **Oracle BPEL Process Analytics** and that this entry has these options:
  - BPA Console
  - BPA Quick Start Guide
  - BPA User's Guide
  - Setup BPA Samples
  - Start BPA Server
  - Stop BPA Server
3. Ensure that you can start the Oracle BPEL Process Analytics Server as follows:
  - On the desktop **Start** menu, choose **All Programs**, then Oracle - OracleAS *home name*, then **Oracle BPEL Process Analytics**, and then click **Start BPA Server**.

When the Start BPA Server command window closes, startup is complete.
4. Ensure that you can open the Oracle BPEL Process Analytics Console and log in as follows:
  - a. On the desktop **Start** menu, choose **All Programs**, then Oracle - OracleAS *home name*, then **Oracle BPEL Process Analytics**, and then click **BPA Console**.

Your default Web browser opens and displays the login page.

- b. Enter `Administrator` for the **Username** and **Password** and click **Login**.
    - c. Click **Logout**.
  5. Ensure that you can stop the Oracle BPEL Process Analytics Server, as follows:

On the desktop **Start** menu, choose **All Programs**, then **Oracle - OracleAS home name**, then **Oracle BPEL Process Analytics**, and then click **Stop BPA Server**.

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**Note:** Use the Oracle Application Server Java Authentication and Authorization Service (JAAS) Provider (JAZN) Administration tool to modify the `Administrator` password. Do not leave `Administrator` as the default password.

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## Postinstallation Verification Tasks for Installations on Unix

Verify that you can access Oracle BPEL Process Analytics components by following the steps in this section. Oracle BPEL Process Analytics components can also be started from Oracle Enterprise Manager 10g Grid Control Console.

1. Check the Oracle home directory, as follows:
  - If you installed Oracle BPEL Process Analytics into an Oracle Application Server middle tier directory, then check that there is a `bam` subdirectory. For example:

```
OraHome_1/integration/bam
```
  - If you installed Oracle BPEL Process Analytics into a Database Client or Database home, then check that there is a `bam` subdirectory. For example:

```
Oracle/product/10.2.0/Client_1/integration/bam
```

or

```
Oracle/product/10.2.0/Db_1/integration/bam
```
2. Ensure that you can start the Oracle BPEL Process Analytics Server as follows:

From the Oracle Process Manager and Notification Server (OPMN) `bin` directory in the Oracle home where you installed Oracle BPEL Process Analytics, issue the `opmnctl startall` command.
3. Ensure that you can open the Oracle BPEL Process Analytics Console and log in as follows:
  - a. Open a Web browser and enter the following URL, where *system* is the system on which you installed Oracle BPEL Process Analytics and *port* is the Oracle HTTP Server port for Oracle BPEL Process Analytics:

```
http://system:port/bam/pages/login.uix
```

The login page opens.
  - b. Enter `Administrator` for the **Username** and **Password** and click **Login**.

- c. Click **Logout**.
4. Ensure that you can stop the Oracle BPEL Process Analytics Server, as follows:
  - a. Set the current directory to the Oracle Process Manager and Notification Server (OPMN) bin directory in the Oracle home where you installed Oracle BPEL Process Analytics.
  - b. Issue the `opmnctl stopall` command.

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**Note:** Use the Oracle Application Server Java Authentication and Authorization Service (JAAS) Provider (JAZN) Administration tool to modify the Administrator password. Do not leave Administrator as the default password.

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## Directory Structure for Oracle BPEL Process Analytics

Oracle BPEL Process Analytics is installed into the `bam` subdirectory under the integration directory of your Oracle home (`C:\OAS_Home1\integration\bam` on Microsoft Windows, for example). [Table 4](#) lists the directories within the `bam` subdirectory.

**Table 4** Directories Within the `bam` Subdirectory

Subdirectory	Description
admin	Administration scripts
bamConfig.bkp	Backup of the configuration
bin	Oracle BPEL Process Analytics utilities
config	Configuration files
data	Configuration files
doc	Oracle BPEL Process Analytics documentation in PDF (portable document format)
install	Installation scripts for setting up the Oracle BPEL Process Analytics environment
lib	Class libraries directory
log	Default log directory
test	Files to use with the tutorials described in the <i>Oracle BPEL Process Analytics Quick Start Guide</i>

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**Note:** The product documentation in hypertext markup language (HTML) format is located in the `doc` directory of the product CD-ROM. It does not get installed into the `bam` subdirectory.

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## Deinstallation Tasks for Oracle BPEL Process Analytics

Follow these instructions to deinstall Oracle BPEL Process Analytics.

1. Stop Oracle BPEL Process Analytics.
2. Start Oracle Universal Installer.

3. Click **Deinstall Products** and in the Installed Products screen, scroll to the Oracle home where Oracle BPEL Process Analytics is installed, and expand the structure.
4. Select the check box for **Oracle BPEL Process Analytics**.
5. Click **Remove**.
6. Click **Yes** when prompted.
7. Delete the bam directory in the following location, where *ORACLE\_HOME* is the directory specification for the Oracle home where you installed Oracle Application Server:
  - On Microsoft Windows:  
`ORACLE_HOME\integration\bam`
  - On Unix  
`ORACLE_HOME/integration/bam`
8. If any of the following Oracle BPEL Process Analytics processes is running, stop it.
  - businessProcessMap
  - contentAgent
  - eris
  - KPIOffline
  - KPIOnline
  - logService
  - managedFastStore
  - metadataService
  - notify
  - squirrel
  - tiancontentservice
  - tns
  - usermanager
  - wsd

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**Note:** If you want to deinstall and reinstall Oracle BPEL Process Analytics in the *same* Oracle home, ensure that you first remove the directories and subdirectories below the `integration/bam` directory before performing the Oracle BPEL Process Analytics reinstallation. The only directory that does not need to be removed is the `log` directory. Other than this directory, the `integration/bam` directory must be empty for reinstallations into the same Oracle home.

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This completes the deinstallation procedures for Oracle BPEL Process Analytics.

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