BEAAquaLogic®
Enterprise
Repository

Installation Guide

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Introduction and Roadmap

The following sections describe the contents and organization of this guide—*Installation Guide*:

- Document Scope and Audience

- Guide to This Document

- Related Information

- New and Changed Features for This Release

- New and Changed Features for This Release

Document Scope and Audience

This document is intended for system administrators or application developers who are installing BEA AquaLogic Enterprise Repository (ALER) 3.0 software. It is assumed that readers are familiar with Web technologies and have a general understanding of Windows and UNIX platforms.

Guide to This Document

This document explains how to use the BEA Products installation program on both Windows and UNIX platforms. It is organized as follows:

- Introduction and Roadmap—Introduces the scope and organization of this guide.

- Preparing for Your Installation—provides the basic information you need to know before installing your BEA software.

- Starting the Installation Program—describes how to start the installation program in graphical, console, and silent modes on Windows and UNIX platforms.

- Running the Installation Program in Graphical Mode—describes how to install your BEA software on Windows and UNIX platforms using a Java-based graphical user interface (GUI).

- Running the Installation in the Console Mode—discusses how to install your BEA software on Windows and UNIX platforms using a text-based interface.

- Running the Installation in the Silent Mode—describes how to install your BEA software without user intervention by using an XML properties file to specify the installation options.

- Post-Installation Instructions—explains what you should do after you install the software.

- Uninstalling the Software—provides procedures for uninstalling your BEA software in graphical, console, and silent modes.

Related Information

Other ALER documents that you may find helpful when installing the software are:

- *ALER 3.0 Release Notes*
- *ALER 3.0 Supported Configurations*

New and Changed Features for This Release

For a comprehensive listing of the new ALER features introduced in this release, see "What's New in ALER 3.0" in the *Release Notes*.

Preparing for Your Installation

The following sections provide information that you need to know before installing your BEA software:

- Installation Overview

- Installable Product Components

- Product Distribution Methods

- Installation Prerequisites

- Database Installation Procedures

- Selecting Directories for Your Installation

- Choosing a BEA Home Directory

- Generating a Verbose Installation Log

- Where to Find Upgrade Information

Installation Overview

The installation program provides a complete framework for the installation and uninstallation of your entire BEA software product, or individual components, as desired. You can install AquaLogic Enterprise Repository using one of the following options:

- **Default**—Select this option to install core ALER features and examples.

- **Custom**—Select this option to install the AquaLogic BPM Process Engine to process the repository's Advanced Registration Flows.

Installation Modes

You can use the BEA Products installation program in one of the following modes.

Graphical Mode

Graphical-mode installation is an interactive, GUI-based method for installing your software. It can be run on both Windows and UNIX systems. For installation procedures, see Running the Installation Program in Graphical Mode

If you want to run graphical-mode installation, the console attached to the machine on which you are installing the software must support a Java-based GUI. All consoles for Windows systems support Java-based GUIs, but not all consoles for UNIX systems do.

Note: If you attempt to start the installation program in graphical mode on a system that cannot support a graphical display, the installation program automatically starts console-mode installation.

Console Mode

Console-mode installation is an interactive, text-based method for installing your software from the command line, on either a UNIX system or a Windows system. For instructions for using this method, see Running the Installation in the Console Mode

Silent Mode

Silent-mode installation is a noninteractive method of installing your software that requires the use of an XML properties file for selecting installation options. You can run silent-mode installation in either of two ways: as part of a script or from the command line. Silent-mode installation is a way of setting installation configurations only once and then using those configurations to duplicate the installation on many machines. For information on running the installation program in the silent mode, see Running the Installation in the Silent Mode

Installable Product Components

Using the BEA Products installation program, you can install the following components on your system.

For additional information about:

- The features and capabilities of ALER, see BEA AquaLogic Enterprise Repository 3.0.

- The features and capabilities of AquaLogic BPM, see AquaLogic BPM 5.7.

- Operating systems and hardware supported by your software, see BEA Products Supported Configurations.

AquaLogic Enterprise Repository

ALER manages the metadata for any type of software asset, from business processes and Web services to patterns, frameworks, applications, and components. It maps the relationships and interdependencies that connect those assets to improve impact analysis, promote and optimize their reuse, and measure their impact on the bottom line.

ALER consists of the following subcomponents that can be installed on your system:

- Core Repository with Examples—Installs everything necessary for the core Enterprise Repository. Evaluation customers should choose just this option.

- ALER Plug-in for Eclipse—This plug-in allows access to the repository from Eclipse. The Repository Access View supports browsing, searching, and retrieval of assets from ALER.

  Note: You can specify whether or not you want to install the new Eclipse plug-ins for ALER into a new WorkSpace Studio location or to use an existing Eclipse installation. For more information, see *Using BEA WorkSpace Studio for Repository Access*.

AquaLogic BPM

The Advanced Edition of ALER 3.0 includes the ALBPM Process Engine to process the repository's Advanced Registration Flows. This feature automates the manual asset registration process by providing a set of predefined flows designed to automate a set of common ALER asset registration tasks, such as asset submission, acceptance, registration, and other governance processes.

To accomplish this, ALER 3.0 includes an embedded, JMS-based event manager that manages the flow of ALER asset registration events, which are emitted in the form of Web Service events. ALER also includes the ALBPM Process Engine to process the Web Service events. When ALER is installed, it provides an option to install and configure the ALBPM Process Engine.

For more information on obtaining the Advanced Edition of ALER 3.0, contact your BEA sales representative.

Product Distribution Methods

Your BEA software is distributed on both the BEA Web site and DVD.

Web Distribution

You can download your software from the BEA Web site at `http://commerce.bea.com`.

In the left panel click on BEA AquaLogic to go to the download page of BEA AquaLogic Product Family. Click on BEA AquaLogic Enterprise Repository from the list of AquaLogic products. From the drop down list choose the appropriate operating system and click `Select`.

Note: You must register before you can download the installer.

DVD Distribution

If you purchased your software from your local sales representative, you will find the following items in the product box:

- DVDs containing the product software
- The following printed documents:
  - *Customer Support Quick Reference and Other Important Information*
  - A list of URLs for the online documentation for each product

Installation Prerequisites

The following sections specify the installation prerequisites:

- System Requirements
- Temporary Disk Space Requirements
- Administrator Privileges
- Database Installation Procedures

System Requirements

The system requirements for your installation are given in the following table.

Table 2-1 System Requirements

Component	Requirement
Platform configuration	A supported configuration of hardware, operating system, application server, JDK, and database is required. See BEA Products Supported Configurations.
	The Supported Configurations documentation specifies other prerequisites and recommendations, such as recommended versions of the JDK.
Processor	1-GHz CPU recommended
Hard Disk Drive	A complete installation requires approximately 1.2GB of disk space.
Memory	A minimum of 2 GB RAM
Character Encoding	UTF-8/Unicode character encoding must be configured for your supported database and application server.
Color bit depth display and size	For graphical user interface (GUI) mode installation, 8-bit color depth (256 colors) is required. For console-mode and silent-mode installation, there is no color bit depth requirement.
JDK	The BEA Products installation program requires a Java run-time environment (JRE) to run. A Java Development Kit (JDK), which includes a JRE, is bundled in the Windows installation program and in some UNIX installation programs (those with filenames ending in .bin). For other UNIX platforms, the installation program does not install a JDK. Filenames for these installation programs end in .jar.
	To run the .jar installation programs, you must have the appropriate version of the JDK installed on your system, and include the bin directory of the JDK at the beginning of the PATH variable definition. It is important that you use a JDK because the installation process assigns values to JAVA_HOME and related variables to point to the JDK directory.

Temporary Disk Space Requirements

The BEA installation program uses a temporary directory into which it extracts the files necessary to install the software on the target system. During the installation process, your temporary directory must contain sufficient space to accommodate the compressed Java run-time environment (JRE) bundled with the installation program and an uncompressed copy of the JRE

that is expanded into the temporary directory. The extracted files are deleted from the temporary directory at the end of the installation process. As a general rule, installation programs require approximately 2.5 times the amount of temporary space that is ultimately required by the installed files.

By default, the installation program uses the following temporary directories:

- Windows platforms—directory referenced by the TMP system variable

- UNIX platforms—system-dependent temporary directory

Note: If you do not have enough temporary space to run the installation program, you are prompted to specify an alternate directory or exit the installation program.

To make sure that you have adequate temporary space, you may want to allocate an alternate directory for this purpose. To do so, follow the instructions provided in the following table.

Platform	To allocate more space in the temp folder

Windows	Do one of the following:
	• Set the TMP system variable to a directory of your choice.
	• If starting the installation program from the command line, include the `-Djava.io.tmpdir=`*tmpdirpath* option, replacing *tmpdirpath* with the full path of the directory that you want to designate as a temporary storage area for the BEA Products installation program. For example:
	`aler30_win32.exe -mode=console`
	`-Djava.io.tmpdir=D:\Temp`

Unix	Enter the following option on the command line when you start the installation program: `-Djava.io.tmpdir=tmpdirpath` Here, *tmpdirpath* is the full path of the directory that you want to designate as a temporary storage area for the BEA Products installation program.

Administrator Privileges

On Windows systems, Administrator privileges are required to create Start menu shortcuts in the All Users folder.

When you are installing the software as a user with Administrator privileges, you are presented with the option to create the Start menu shortcuts in the All Users folder, or in the Local user's Start menu folder. The following table describes the options available.

If you select.....	The following occurs....
All Users	All users registered on the machine are provided with access to the installed software. Subsequently, if users without Administrator privileges use the Configuration Wizard from this installation to create domains, Start menu shortcuts to the domains are not created. In this case, users can manually create shortcuts in their local Start menu folders, if required.
Local Users	Other users registered on this machine will not have access to the Start menu entries for this installation.

If a user without Administrator privileges installs the software, the Start menu entries are created in the user's local Start menu folder.

Database Installation Procedures

The database administrator must create an empty database for ALER to install its files into. A user for this database must also be created (e.g., ALER_USER) and that user must have database owner privileges on the ALER database.

If you are installing the Advanced Edition of ALER 3.0 with the Advanced Registration Flows feature, then during the installation process, additional database administrator credentials will need to be supplied during the ALBPM portion of the procedure so that the installer can create two new databases and two new users. These two databases are used by the ALBPM process engine for transaction tracking and management.

Oracle Database Installation

Appropriate administrative privileges are necessary to complete this process.

Tip: A known bug on Oracle XE may cause an ORA-12519 error after the database is running for some period of time. To permanently fix this problem, run the following statement:

```
ALTER SYSTEM SET PROCESSES=150 SCOPE=SPFILE;
COMMIT;
```

Prerequisites

You will need to verify the following database prerequisites before beginning the ALER installation process.

- A login with database administrator privileges

- The name of the supported JDBC driver for Oracle: `ojdbc14.jar` (driver version 10.2.0.2)

  Note: Do not supply the BEA installer with the `classes12.jar` file used in previous releases of ALER.

- JDK 1.4.2 or higher on the current workstation

- SQL *Plus Client tools

- If you are installing the Advanced Edition of ALER to use the Advanced Registration Flows feature, you must verify that a TMP tablespace exists on the database server because the ALBPM installation requires its existence. This tablespace usually already exists on Oracle out-of-the-box, but it is sometimes removed by the database administrator.

Create the ALER Tablespaces

Follow these steps to create the necessary tablespaces before installing ALER 3.0:

1. Log into Oracle (system or DBA privileges are required).

2. Create a data tablespace named `ALER_DATA` with at least 300M of available space.

3. Create an index tablespace named `ALER_INDEX` with at least 300M of available space.

Example ALER Tablespace Creation Script

The following example scripts show how to create the `ALER_DATA` and `ALER_INDEX` tablespaces.

Note: These scripts are for a Unix/Linux based DataFile. For Windows, a file path value of `c:\oracle\...\file.dbf` is appropriate syntax.

```
CREATE TABLESPACE ALER_DATA
    DATAFILE '/opt/oracle/oradata/aler/aler_data.dbf' SIZE 100M AUTOEXTEND
ON NEXT 10240K MAXSIZE UNLIMITED
    EXTENT MANAGEMENT LOCAL AUTOALLOCATE
    LOGGING
    ONLINE
    SEGMENT SPACE MANAGEMENT AUTO;
```

```
CREATE TABLESPACE ALER_INDEX
    DATAFILE '/opt/oracle/oradata/aler/aler_index.dbf' SIZE 100M AUTOEXTEND
ON NEXT 5120K MAXSIZE UNLIMITED
    EXTENT MANAGEMENT LOCAL AUTOALLOCATE
    LOGGING
    ONLINE
    SEGMENT SPACE MANAGEMENT AUTO;
```

Build an ALER Database User

Follow these steps to create the necessary database user before installing ALER 3.0:

1. Log into Oracle (administrative privileges required).

2. Create a user and password.

3. Ensure that the user has the following privileges:

- Privilege to create sessions

- Ability to create tables

- Default tablespace is aler_data

- Assigned quota of 300M for aler_data

- Assigned quota of 300M for aler_index.

Example ALER User Creation Script

The following example script show how to create a user for newly created ALER Tablespaces.

```
CREATE USER ALER IDENTIFIED BY ALER_PWD
DEFAULT TABLESPACE ALER_DATA
    TEMPORARY TABLESPACE TEMP
    PROFILE DEFAULT
    ACCOUNT UNLOCK;

GRANT "CONNECT" TO ALER;
ALTER USER ALER DEFAULT ROLE "CONNECT";
GRANT CREATE MATERIALIZED VIEW TO ALER;
GRANT CREATE SEQUENCE TO ALER;
GRANT CREATE SESSION TO ALER;
```

```
GRANT CREATE SYNONYM TO ALER;
GRANT CREATE SNAPSHOT TO ALER;
GRANT CREATE TABLE TO ALER;
GRANT CREATE TRIGGER TO ALER;
GRANT CREATE VIEW TO ALER;
GRANT UNLIMITED TABLESPACE TO ALER;
```

SQL Server 2005 Database Installation

Appropriate administrative privileges are necessary to complete this process. These instructions assume the use of Enterprise Manager.

Prerequisites

You will need to verify the following database prerequisites before beginning the ALER installation process.

- A login with database administrator privileges (Usually the SA account).

- The name of the supported JDBC driver for SQL Server 2005: **sqljdbc.jar** (driver version 1.1.1501.101)

   Note: Do not supply the BEA installer with the `msbase.jar`, `msutil.jar`, `mssqlserver.jar` files as was required previous releases of ALER.

Create an ALER Database

Follow these steps to create the necessary database before installing ALER 3.0:

1. Open the SQL Server 2005 Management Studio.

2. Right-click the **Databases** folder and select **New Database**.

3. In the New Database window, enter ALER as the database name.

4. In the Database files section, change the Logical Name of ALER to ALER_DATA.

5. Enter ALER_USER as the database owner (or choose a Windows login account as appropriate for your security policy).

6. Click **Add** to create a new Filegroup, as follows:

   a. In Logical Name, enter ALER_INDEX.

b. Click the Filegroup cell and select `<new filegroup>`.

c. On the New Filegroup for ALER page, enter `INDEX` for the name.

d. Click **OK**.

7. Click **OK** again to create the database.

Create an ALER Database User

Follow these steps to create the necessary user before installing ALER 3.0:

Note: This step is only necessary if you are using SQL Server Authentication for the ALER application installation.

1. Open the SQL Server 2005 Management Studio.

2. Expand the Server tree to open the **Security** folder.

3. Right-click **Logins** and select **New Login**.

4. Enter `ALER_USER` as the Login name (or choose a Windows login account as appropriate for your security policy).

5. Select **SQL Server Authentication**.

6. Enter a password that meets your password policy into the Password and Confirm password fields.

7. Change the default database to **ALER**.

8. Select a page list, select **User Mappings**, and then in the Map column select the ALER database check box'.

9. Grant database roles for `public` and `db_owner`.

10. Click **OK** to create the user account.

Database Configuration for UTF-8/Unicode Character Encoding

These sections explain how to configure supported databases for UTF-8/Unicode character encoding.

SQL Server 2005 Database

SQL Server is automatically configured to support UTF-8/Unicode character encoding. No additional configuration is necessary.

UDB Database

1. Connect to the database as a DBA.

2. From a DB2 shell command prompt, run > `get db cfg`

   The output should include the line `Database code set = UTF-8`. If this line does not appear it is necessary to create a new UTF-8 database.

Example Database Creation SQL Script

```
--#SET TERMINATOR
-- UDB Client Invocation Command:
-- db2 -tv   (allows semicolons as the command terminator)
--
-- Dependencies:
--    UDB Client
--    In DB2 ADDNODE of server - 8 character alias (@NODE-NAME)

-- Create the ALER database
DROP DATABASE ALER;
CREATE DATABASE ALER USING CODESET UTF-8 TERRITORY US;

-- Connect to the ALER database
CONNECT TO ALER USER ALER_USER USING ALER_USER_PWD;

-- Create the ALER 32K Buffer Pools
CREATE BUFFERPOOL ALER32KDATAbp SIZE 1000 PAGESIZE 32K;
CREATE BUFFERPOOL ALER32KINDXbp SIZE 1000 PAGESIZE 32K;
CREATE BUFFERPOOL ALER32KBLOBbp SIZE 1000 PAGESIZE 32K;
CREATE BUFFERPOOL ALER32KTEMPbp SIZE 1000 PAGESIZE 32K;
CONNECT RESET;

CONNECT TO ALER USER ALER_USER USING ALER_USER_PWD;
CREATE REGULAR TABLESPACE alerdatats PAGESIZE 32 K MANAGED BY DATABASE
USING(file '/opt/IBM/DB2/data/alerdatats.dat' 300M) extentsize 512k
BUFFERPOOL ALER32KDATAbp;
CREATE REGULAR TABLESPACE alerindxts PAGESIZE 32 K MANAGED BY DATABASE
```

```
USING(file '/opt/IBM/DB2/data/alerindxts.dat' 300M) extentsize 512k
BUFFERPOOL ALER32KINDXbp;
CREATE REGULAR TABLESPACE alerlobts  PAGESIZE 32 K MANAGED BY DATABASE
USING(file '/opt/IBM/DB2/data/alerlobts.dat' 300M) extentsize 512k
BUFFERPOOL ALER32kBLOBbp;

-- Create the ALER Temp Tablespace
CREATE TEMPORARY TABLESPACE alertempts PAGESIZE 32 K MANAGED BY DATABASE
USING(file '/opt/IBM/DB2/data/alertempts.dat' 128M) BUFFERPOOL
ALER32KTEMPbp;

-- TUNING PARAMETERS
-- Default Values
-- UPDATE DATABASE CONFIGURATION FOR ALER USING APP_CCTL_HEAP_SZ  128;
-- UPDATE DATABASE CONFIGURATION FOR ALER USING CHNGPGS_THRESH   60;
-- UPDATE DATABASE CONFIGURATION FOR ALER USING DBHEAP           600;
-- UPDATE DATABASE CONFIGURATION FOR ALER USING LOCKLIST         50;
-- UPDATE DATABASE CONFIGURATION FOR ALER USING LOGPRIMARY       3;
-- UPDATE DATABASE CONFIGURATION FOR ALER USING MAXAPPLS         40;
-- UPDATE DATABASE CONFIGURATION FOR ALER USING MINCOMMIT        1;
-- UPDATE DATABASE CONFIGURATION FOR ALER USING NUM_IOCLEANERS   1;
-- UPDATE DATABASE CONFIGURATION FOR ALER USING STMHEAP          2048;
-- UPDATE DATABASE CONFIGURATION FOR ALER USING DFT_DEGREE       1;

-- New Values Growth
UPDATE DATABASE CONFIGURATION FOR ALER USING LOGBUFSZ           131;
UPDATE DATABASE CONFIGURATION FOR ALER USING MAXLOCKS           60;
UPDATE DATABASE CONFIGURATION FOR ALER USING DFT_PREFETCH_SZ    32;
UPDATE DATABASE CONFIGURATION FOR ALER USING LOGFILESIZ         1024;
UPDATE DATABASE CONFIGURATION FOR ALER USING SOFTMAX            120;
UPDATE DATABASE CONFIGURATION FOR ALER USING SORTHEAP           737;
UPDATE DATABASE CONFIGURATION FOR ALER USING CATALOGCACHE_SZ    526;
UPDATE DATABASE CONFIGURATION FOR ALER USING NUM_IOSERVERS      6;
UPDATE DATABASE CONFIGURATION FOR ALER USING PCKCACHESZ         859;
UPDATE DATABASE CONFIGURATION FOR ALER USING UTIL_HEAP_SZ       39963;
UPDATE DATABASE CONFIGURATION FOR ALER USING LOGSECOND          50;

CONNECT TO ALER USER ALER USING ALER_USER_PWD;
ALTER BUFFERPOOL ALER32KDATAbp SIZE 14532;
ALTER BUFFERPOOL IBMDEFAULTBP SIZE 3633;
```

```
COMMIT;
CONNECT RESET;
```

Oracle Database

Before you begin this procedure, verify that UTF-8 compatibility was defined when the Oracle SID (System Identifier) was created. Otherwise, a new SID must be created that does support UTF-8.

1. Connect to the database as a DBA.

2. From a SQL Plus command prompt, run:
   ```
   select * from nls_database_parameters where Parameter =
   'NLS_CHARACTERSET';
   ```

   The output will have two columns, *Parameter* and *Value*. The most common Values are:

   – UTF-8 Encoding: `AL32UTF8` (International support)

   – ISO-8859-1 Encoding: `WE8ISO8859P1` (U.S. English Encoding)

Example User Creation Script

```
Drop user ALER cascade;

CREATE USER ALER IDENTIFIED BY ALER_PWD
DEFAULT TABLESPACE USER_DATA
  TEMPORARY TABLESPACE TEMP
  PROFILE DEFAULT
  ACCOUNT UNLOCK;

GRANT "CONNECT" TO ALER;
ALTER USER ALER DEFAULT ROLE "CONNECT";
GRANT CREATE MATERIALIZED VIEW TO ALER;
GRANT CREATE SEQUENCE TO ALER;
GRANT CREATE SESSION TO ALER;
GRANT CREATE SYNONYM TO ALER;
GRANT CREATE SNAPSHOT TO ALER;
GRANT CREATE TABLE TO ALER;
GRANT CREATE TRIGGER TO ALER;
GRANT CREATE VIEW TO ALER;
GRANT UNLIMITED TABLESPACE TO ALER;
```

Migrating Database Character Encoding

The following is an overview of the process required to migrate database character encoding from ISO-8859 to Unicode/UTF-8. The specific operations for your database server should be performed by a database administrator.

1. Suspend replication.

2. Shut down the database.

3. Backup the data files, control files, init file, and password file.

4. Start up the database in restricted mode and perform a full export using the export or backup command.

5. Create a new database instance and set the character set(s) to UTF8.

6. Import the exported data into the new database.

7. Update the ALER application's database.properties file to communicate with the new UTF8 database.

8. Start the application server and test the new database configuration with the existing application.

9. Once the application test is completed successfully, perform ALER upgrade operations against the new UTF8 database as normal.

Selecting Directories for Your Installation

During the installation process, you need to specify locations for the following directories.

Choosing a BEA Home Directory

During the installation of the BEA software, you are prompted to specify a BEA Home directory. This directory serves as a repository for common files that are used by various BEA products installed on the same machine. For this reason, the BEA Home directory can be considered a central support directory for all the BEA products installed on your system.

The files in the BEA Home directory are essential to ensuring that BEA software operates correctly on your system. These files:

- Ensure that licensing works correctly for the installed BEA products

- Facilitate checking of cross-product dependencies during installation

- Facilitate Service Pack installation

The following illustration shows the structure of a sample BEA Home directory, on a Windows platform, which includes both the Sun and BEA JRockit JDKs.

BEA Home (directory)
jdk*xxx* (directory)
jrockit90_*xxx* (directory)
logs (directory)
utils (directory)
registry.xml
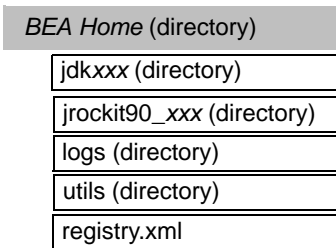
This illustration depicts only the files and directories required in the BEA Home directory. If you choose the default product installation directory, however, you will see additional directories in the BEA Home directory, such as `repository30` and `albpm57`. Although the default location for the product installation directory is within the BEA Home, you can select a different location outside the BEA Home directory.

Notes:

- On some UNIX platforms, the installation program does not install the JDK. During installation of your BEA software, you are prompted to choose an existing BEA Home directory or specify a path to create a new BEA Home directory. If you choose to create a new directory, the installation program automatically creates it for you.

- BEA recommends that you do not exceed a maximum of 12 characters when naming your BEA Home directory. If the name of this directory has more than 12 characters, or if there are spaces in the directory name, the `CLASSPATH` may not be resolved properly. You can install only one instance of each version of a BEA product in a single BEA Home directory. For example, you can install only one instance of ALER 3.0 in a BEA Home directory, but that BEA Home directory may also contain an instance of ALER 2.6.

- If the BEA Home directory is populated and it does not contain `registry.xml`, or if any of the other installation directories are not empty, the following messages will be displayed. You will then be prompted to continue installation, or return to the directory selection task with the one of the error message as shown in Listing 2-1:

Listing 2-1

```
For BEA Home directory selection task: BEA_HOME directory is not empty.
Proceed with installation?

For product installation directories selection task:One or more installation
directories are not empty. Proceed with installation?
```

- The product maintenance level of the current installer must be compatible with the maintenance level of the product already installed. If not, an error message is displayed and you must obtain the compatible installer or perform maintenance in order to achieve compatibility.

Understanding the Functions of the BEA Home Directory

The files and directories in the BEA Home directory are described in the following table.

Table 2-2 Understanding BEA Home Directory

Folder	Description
albpm57 directory	Contains the software for the AquaLogic BPM process engine.
jdkxxx directory	Contains the software for the Sun JDK if it is installed with your software. The JDK provides the Java run-time environment (JRE) and tools for compiling and debugging Java applications. In this directory name, *xxx* indicates the version of the Sun JDK installed on your system, for example jdk150_06.
jrockit90_xxx directory (Windows and Linux only)	Contains the software for the BEA JRockit JDK installed with your software. The JDK provides the Java run-time environment (JRE) and tools for compiling and debugging Java applications. In this directory name, *xxx* indicates the version of the JRockit JDK installed on your system, such as jrockit_150_06.
logs directory	Contains a history file of installation and uninstallation for the BEA Home directory.
repository30	Contains the software for ALER.
tools directory	Contains the software for Eclipse v 3.2.2.

Table 2-2 Understanding BEA Home Directory

Folder	Description
utils directory	Contains utilities that are used to support the installation of all BEA products installed in this BEA Home directory.
registry.xml file	A registry file that contains a persistent record of all BEA products installed on the target system. This registry contains product-related information, such as version number, service pack number, and location of the installation directory.
	Note: Do not edit this file manually. Doing so may cause operating problems for the currently installed BEA products, or result in installation problems when future BEA products or maintenance upgrades are installed.

Creating Multiple BEA Home Directories

Although it is possible to create more than one BEA Home directory, BEA recommends that you avoid doing so. In almost all situations, a single BEA Home directory is sufficient. There may be circumstances, however, in which you prefer to maintain separate development and production environments, with a separate product stack for each. With two directories, you can update your development environment (in a BEA Home directory) without modifying the production environment until you are ready to do so.

Choosing Product Installation Directory

The product installation directory contains all the software components that you choose to install on your system, including program files and examples. You are prompted during your initial installation to choose a product installation directory. If you accept the default on a Windows system, for example, your software is installed in the following directory:

```
C:\bea\repository30
```

where, `C:\bea` is the BEA Home directory and `repository30` is the product installation directory for the ALER software. However, you can specify any name and location on your system for your product installation directory; you need not name the directory `repository30` or create it under the BEA Home directory. You must also create a product installation directory for the Process Engine. The default location is `C:\bea\albpm57`.

Generating a Verbose Installation Log

If you launch the installation from the command line or from a script, you can specify the `-log` option to generate a verbose installation log. The installation log stores messages about events that occur during the installation process, including informational, warning, error, and fatal messages. This type of file can be especially useful for silent installations.

Note: You may see some warning messages in the installation log. However, unless a fatal error occurs, the installation program completes the installation successfully. The installation user interface indicates the success or failure of each installation attempt, and the installation log file includes an entry indicating that the installation was successful.

Syntax

To create a verbose log file during installation, include the `-log=full_path_to_log_file` option in the command line. For example:

```
aler30_win32.exe -log=C:\logs\ALER_install.log
```

The path must specify a file. You cannot create a folder simply by including a name for it in a pathname; your path should specify only existing folders. If your path includes a nonexistent folder when you execute the command, the installation program does not create the log file.

Where to Find Upgrade Information

For information about upgrading your software in the *Upgrade Guide*.

Starting the Installation Program

The following sections describe how to start the installation program on Windows and UNIX platforms:

- Before You Start

- Starting the Installation Program on Windows Platforms

- Starting the Installation Program on UNIX Platforms

Before You Start

Before you start installing the software, please review the following information:

- Make sure your system meets the hardware and the software requirements before you install the ALER software. A complete list of documents that describe AquaLogic Product family configurations supported by BEA can be found at
  http://e-docs.bea.com/platform/suppconfigs/index.html

- You cannot reinstall any BEA product on top of a previously installed version of the same product—in the same BEA Home directory or in the same file location. You can, however, add products and product components to an existing installation. For example, you can install ALER during one installation, and ALBPM during a later installation. However, to reinstall the same version of one of the products, you must first uninstall the previous installation, as described in Uninstalling the Software.

- If you are adding components to an existing installation of ALER, you should shut down any running instances before starting the installation.

Note: If you are installing the software on a Windows system that supports more than one monitor, you must disable all but one monitor before starting the installation program.

- Make sure you have a supported application server available. The ALER installer optionally provides a default application server.

- Make sure you have a supported database that is configured, running, and supports UTF-8/Unicode character encoding. See Database Installation Procedures.

- Make sure your supported application server is configured to use UTF-8/Unicode character encoding. Database Configuration for UTF-8/Unicode Character Encoding.

For information on supported application servers and databases, see *ALER 3.0 Supported Configurations*.

Starting the Installation Program on Windows Platforms

This section describes how to start the installation program on Windows Platforms:

- Starting the Installation in Graphical Mode

- Starting the Installation in Console Mode

- Starting the Installation in Silent Mode

Starting the Installation in Graphical Mode

To start the graphical-mode installation process on a Windows platform, perform the following steps:

1. Log into the Windows system.

2. Double click the installation file. Complete the appropriate procedure as in the following table.

If you are installing from...	Do This...
Web download	Go to the directory to which you have downloaded the installation program.
DVD	1. Insert the software DVD into the DVD-ROM drive.
	2. If the installation program does not start automatically, open Windows Explorer and double-click the DVD-ROM icon.
	3. Navigate to the folder for the Windows installation. Navigate to the directory that contains the installation program for your platform.

3. Enter the following command to start the installation:

    ```
    filename.exe [-log=full_path_to_log_file]
    ```

    For example:

    ```
    aler30_win32.exe [-log=full_path_to_log_file]
    ```

    Note:

    - `-log=full_path_to_log_file` is optional.

    - By default, the installer starts in the graphical mode.

    - You can also start the installer by double clicking the file.

    The installation begins.

4. To continue the installation in the Graphical mode on Windows, see Running the Installation Program in Graphical Mode.

Starting the Installation in Console Mode

To start the console-mode installation process on a Windows platform, perform the following steps:

1. Log into the target Windows system.

2. Complete the appropriate procedure as in the following table:

If you are installing from...	Do This...
Web download	1. Open an MS-DOS command prompt window.
	2. Go to the directory to which you have downloaded the installation program.
DVD	1. Insert the software DVD into the DVD-ROM drive.
	Note: If auto-run is enabled, the installation program may start automatically in graphical mode. You must exit the installation program to use console-mode installation.
	2. Open an MS-DOS command prompt window.
	3. Go to the DVD-ROM directory and navigate to the folder for the Windows installation program.

3. Launch the installation by entering one of the following commands:

   ```
   filename.exe -mode=console
   ```

   For example

   ```
   aler30_win32.exe -mode=console
   ```

   Note: You can also include the `-log=full_path_to_log_file` option in the command line to create a verbose installation log. For example:

   ```
   aler30_win32 -mode=console -log=C:\logs\ALER30_install.log
   ```

   For more information on generating a verbose log, see Generating a Verbose Installation Log.

   After a few moments, a BEA Installer window opens and the installation program begins to install the software.

4. To continue the installation in the Console mode on Windows, see Install ALER Using Console Mode.

Starting the Installation in Silent Mode

For details about silent-mode installation, see What Is Silent-Mode Installation?

To start the installation in silent-mode follow these steps:

1. Log into the Windows system.

2. Create a `silent.xml` file that defines the configuration settings normally entered by a user during an interactive installation process, such as graphical-mode or console-mode installation. For information about creating a `silent.xml` file, see Creating a silent.xml File for Silent-Mode Installation.

   Note: Incorrect entries in the `silent.xml` file can cause installation failures. To help you determine the cause of a failure, BEA recommends that you create a log file when you start the installation.

3. Complete the appropriate procedure as in the following table.

If you are installing from...	Do This...
Web download	1. Open an MS-DOS command prompt window.
	2. Go to the directory to which you have downloaded the installation program.
DVD	1. Insert the software DVD into the DVD-ROM drive.
	2. Open an MS-DOS command prompt window.
	3. Go to the DVD-ROM directory and navigate to the folder for the Windows installation program.

4. Launch the installation by entering the following command:

   ```
   filename.exe -mode=silent -silent_xml=path_to_silent.xml
   ```

   Here, `filename.exe` is the name of the BEA software installation file, and path_to_silent.xml is the full pathname of the `silent.xml` file.

   Note: You can also include the `-log=full_path_to_log_file` option in the command line to create a verbose installation log. For example:

   ```
   aler30_win32.exe -mode=silent -silent_xml=C:\silent.xml
   -log=C:\logs\ALER30_install.log
   ```

   For more information, see Generating a Verbose Installation Log.

   A BEA Installer window is displayed, indicating that the files are being extracted. No other prompt or text is displayed.

   For more information, see Running the Installation in the Silent Mode

Starting the Installation Program on UNIX Platforms

The ALER installation program requires a Java run-time environment (JRE) to run. A JRE is bundled in the Windows installation program, and in some UNIX installation programs (those with filenames ending in `.bin`). For other UNIX platforms, the installation program does not include a JRE. Filenames for these installation programs end in `.jar`. To run the `.jar` installation programs, you must have an appropriate version of a JDK installed on your system, and include the bin directory of the JDK at the beginning of your PATH system variable.

Note: It is important that you use a JDK because the installation process assigns values to JAVA_HOME and related variables to point to this directory. All scripts installed by your installation program use this JDK by default, including scripts to start sample applications, the Configuration Wizard, and other development tools.

To run graphical-mode installation, your console must support a Java-based GUI. If the installation program determines that your system cannot support a Java-based GUI, it automatically starts running in console mode. For details, see Running the Installation in the Silent Mode. The section describes how to start the installation using the following types of installers:

- Using Installers with Filenames Ending in .bin

- Using Installers with Filenames Ending in .jar

Using Installers with Filenames Ending in .bin

The following sections describe how to start the installation program on UNIX platforms using filenames that end in `.bin`:

- Starting the Installation in Graphical Mode

- Starting the Installation in Console Mode

- Starting the Installation in Silent Mode

Starting the Installation in Graphical Mode

To start the graphical-mode installation process using the installation files with names ending in `.bin`, do the following:

1. Log into the target UNIX system.

2. Complete the appropriate procedure as in the following table.

If you are installing from...	Do This...
Web download	Go to the directory to which you have downloaded the installation program.
DVD	1. Insert the software DVD into the DVD drive and go to the DVD directory. 2. Navigate to the directory that contains the installation program for your platform.

3. To change the permissions of the file enter the following command:

   ```
   chmod a+x filename.bin
   ```

   For example,

   ```
   chmod a+x aler30_linux32.bin.
   ```

   Note: You can also include the `-log=full_path_to_log_file` option in the command line to create a verbose installation log. For example:

   ```
   aler30_linux32.bin -log=/home/logs/BEA_install.log
   ```

   For more information, see Generating a Verbose Installation Log.

To continue the installation in the graphic mode, see Running the Installation Program in Graphical Mode.

Starting the Installation in Console Mode

To start the console-mode installation process for installation files with names ending in `.bin`, follow these steps:

1. Log into the target UNIX system.

2. Complete the appropriate procedure as in the following table:

If you are installing from...	Do this...
Web download	Go to the directory to which you have downloaded the installation program.
DVD	1. Insert the software DVD into the DVD-ROM drive and go to the DVD-ROM directory. 2. Navigate to the directory that contains the installation program for your platform.

3. Launch the installation by entering the following commands:

   ```
   chmod a+x filename.bin
   ```

   ```
   ./filename.bin -mode=console
   ```

   Here `filename.bin` is the name of the installation program specific to your platform, for example,

   ```
   chmod a+x aler30_linux32.bin.
   ```

   Note: You can also include the `-log=full_path_to_log_file` option in the command line to create a verbose installation log. For example:

   ```
   aler30_linux32.bin -mode=console -log=/home/logs/BEA_install.log
   ```

   For more information on generating a verbose log, see Generating a Verbose Installation Log.

4. To continue the installation in the console mode, see Running the Installation in the Console Mode.

Starting the Installation in Silent Mode

For details about silent-mode installation, see What Is Silent-Mode Installation?

To start the silent-mode installation process for installation files with names ending in `.bin`, follow these steps:

1. Log into the target UNIX system.

2. Create a `silent.xml` file that defines the configuration settings normally entered by a user during an interactive installation process, such as graphical-mode or console-mode installation.

For information about creating a `silent.xml` file, see Creating a silent.xml File for Silent-Mode Installation.

Note: Incorrect entries in the `silent.xml` file can cause installation failures. To help you determine the cause of a failure, BEA recommends that you create a log file when you start the installation.

3. Complete the appropriate procedure as in the following table.

If you are installing from...	Do this...
Web download	Go to the directory to which you have downloaded the installation program.
DVD	1. Insert the software DVD into the DVD-ROM drive and go to the DVD-ROM directory. 2. Navigate to the directory that contains the installation program for your platform.

4. Launch the installation program by entering the following command:

```
chmod a+x filename
```

```
./filename.bin -mode=silent -silent_xml=/path_to_silent.xml
```

Here `filename.bin` is the name of the installation file, for example,

```
chmod a+x aler30_linux32.bin
```

and path_to_silent.xml is the full pathname of the `silent.xml` template file.

Note: You can also include the `-log=full_path_to_log_file` option in the command line to create a verbose installation log. For example:

```
aler30_linux32.bin -mode=silent -silent_xml=/home/silent.xml
-log=/home/logs/BEA_install.log
```

For more information on generating a verbose log, see Generating a Verbose Installation Log.

A BEA Installer window is displayed, indicating that the files are being extracted. No other prompt or text is displayed.

For more information on Silent-Mode installation, see Running the Installation in the Silent Mode.

Using Installers with Filenames Ending in .jar

The following sections describe how to start the installation program on UNIX platforms using filenames that end in `.jar`:

- Starting the Installation in Graphical Mode

- Starting the Installation in Console Mode

- Starting the Installation in Silent Mode

Starting the Installation in Graphical Mode

To start the graphical-mode installation process for installation files with names ending in `.jar`, follow these steps:

1. Log into the target UNIX system.

2. Add the bin directory of the appropriate JDK to the beginning of the PATH variable definition

    on the target system. For example:

    ```
    PATH=<JAVA_HOME>/bin:$PATH
    export PATH
    ```

    Here `<JAVA_HOME>` represents the full path to the JDK directory.

3. Complete the appropriate procedure as in the following table.

If you are installing from...	Do this...
Web download	Go to the directory to which you have downloaded the installation program.
DVD	1. Insert the software DVD into the DVD-ROM drive and go to the DVD-ROM directory. 2. Navigate to the directory that contains the installation program for your platform.

4. Launch the installation program by entering the following command:

    ```
    java -jar filename.jar [-log=full_path_to_log_file]
    ```

Note: You can also include the `-log=full_path_to_log_file` option in the command line to create a verbose installation log. For example:

```
al30_generic.jar -log=/home/logs/BEA_install.log
```

For more information on generating a verbose log, see Generating a Verbose Installation Log.

The installation program begins the graphical mode.

5. To continue the installation in the graphical mode, see Running the Installation Program.

Starting the Installation in Console Mode

To start the installation in the console mode using the installation files with names ending in `.jar`, follow these steps:

1. Log into the target UNIX system.

2. Add the bin directory of the appropriate JDK to the beginning of the PATH variable definition on the target system. For example:

```
PATH=<JAVA_HOME>/bin:$PATH

export PATH
```

where, `<JAVA_HOME>` represents the full path to the JDK directory.

3. Complete the appropriate procedure as in the following table.

If you are installing from...	Do this...
Web download	Go to the directory to which you have downloaded the installation program.
DVD	1. Insert the software DVD into the DVD-ROM drive and go to the DVD-ROM directory.
	2. Navigate to the directory that contains the installation program for your platform.

4. Launch the installation by entering the following command:

```
java -jar filename.jar -mode=console [-log=full_path_to_log_file]
```

where, `filename.jar` is the name of the BEA Products installation file, for example,

aler30_generic.jar.

Note: You can also include the `-log=full_path_to_log_file` option in the command
line to create a verbose installation log. For example:

```
java -jar aler30_generic.jar -mode=console
-log=/home/logs/BEA_install.log
```

For more information on generating a verbose log, see Generating a Verbose
Installation Log.

5. To continue the installation in the console mode, see Installers With Filenames Ending in .jar.

Starting the Installation in Silent Mode

For details about silent-mode installation, see "What Is Silent-Mode Installation?" on page 6-1.
To start the silent-mode installation process for installation files with names ending in `.jar`,
follow these steps:

1. Log into the target UNIX system.

2. Create a `silent.xml` file that defines the configuration settings normally you specify in an
   interactive installation process, such as graphical-mode or console-mode installation. For
   information about creating a `silent.xml` file, see Creating a silent.xml File for Silent-Mode
   Installation.

   Note: Incorrect entries in the `silent.xml` file can cause installation failures. To help you
   determine the cause of a failure, BEA recommends that you create a log file when you
   start the installation.

3. Add the bin directory of the appropriate JDK to the beginning of the PATH variable definition
   on the target system. For example:

   ```
   PATH=<JAVA_HOME>/bin:$PATH
   ```

   ```
   export PATH
   ```

   where, `<JAVA_HOME>` is the full path of the JDK directory.

If you are installing from...	Do this...
Web download	Go to the directory to which you have downloaded the installation program.
DVD	1. Insert the software DVD into the DVD-ROM drive and go to the DVD-ROM directory. 2. Navigate to the directory that contains the installation program for your platform.

4. Launch the installation by entering the following command:

```
java -jar filename.jar -mode=silent -silent_xml=/path_to_silent.xml
[-log=full_path_to_log_file]
```

where, filename.jar is the name of the BEA Products installation file for example,

```
alerXX_generic.jar
```

> where, XX represents the version number of the software you are installing and path_to_silent.xml is the full path to the silent.xml file.

Note: You can also include the -log=full_path_to_log_file option in the command line to create a verbose installation log. For example:

```
aler30_generic.jar -mode=silent -silent_xml=/home/silent.xml
-log=/home/logs/BEA_install.log
```

> For more information on generating a verbose log, see Generating a Verbose Installation Log.

> A BEA Installer window is displayed, indicating that the files are being extracted. No other prompt or text is displayed.

For more information on silent-mode installation, see Running the Installation in the Silent Mode.

What's Next?

For details about running the installation program, see one of the following, depending on your selected installation mode:

- To run the installation program in graphical mode, see Running the Installation Program in Graphical Mode.

- To run the installation program in console mode, see Running the Installation in the Console Mode.

- To run the installation program in silent mode, see Running the Installation in the Silent Mode.

Running the Installation Program in Graphical Mode

This section describes how to continue the installation program in the graphical mode on following platforms:

- Running the Installation Program

- What's Next

Running the Installation Program

Caution: Before running the BEA Product installer, follow the preparation guidelines in Preparing for Your Installation, especially the Database Installation Procedures for your DBMS.

Start the installation program as described in Starting the Installation Program.

The installation program prompts you to enter specific information about your system and configuration. For instructions on responding to the prompts during installation, see the following table.

In this window . . .	Perform the following action . . .
Welcome	Click **Next** to proceed with the installation. You may cancel the installation at any time by clicking **Exit**.
Choose BEA Home Directory	Specify the BEA Home directory that will serve as the central support directory for all BEA products installed on the target system. If you already have a BEA Home directory on your system, you can select that directory (recommended) or create a new BEA Home directory. If you choose to create a new directory by typing a new directory name in the BEA Home Directory field, the installation program automatically creates one for you. You can also click **Browse** and select a directory from the **BEA Home Directory Selection** window. For details about the BEA Home directory, see Choosing a BEA Home Directory.
Choose Install Type This window is displayed only during an initial installation.	Select the option button for the type of installation you want to perform: • **Default**—Installs the core ALER features and examples. • **Custom**—Installs the AquaLogic BPM Process Engine for processing the repository's advanced registration flows. For more information, see Installable Product Components.
Choose Products and Components This window is displayed only under the following conditions: • You selected **Custom** installation in the **Choose Install Type** window. • You are adding components to an existing installation.	Specify the components to be installed by selecting or clearing the appropriate check boxes. This window displays a tree-view of all the components available for installation. When you select or clear a component at the folder level, all subcomponents are selected or cleared accordingly. If any components are already installed on your system, the check boxes for them are grayed out. **Note:** When you select or deselect components to install, the installation program checks for dependencies between components and automatically modifies the list of selected components accordingly. For details about the components available for installation on your system, see Installable Product Components.

In this window . . .	Perform the following action . . .
Install Eclipse Location Options This window is displayed only under the following conditions: • You selected **Custom** installation in the **Choose Install Type** window. • You are adding components to an existing installation.	Specify whether or not you want to install the Eclipse-based WorkSpace Studio (with ALER plug-ins) into your BEA Home directory or to use an existing Eclipse installation. If you want to use an existing Eclipse installation for the ALER plug-ins, provide a fully qualified path to the installation.
Choose Application Server	Select the application server used to run ALER. If you do not have an application server installed, select the Built-in Tomcat option to include installation of the necessary default resources. Valid values are: • Built in Tomcat (default) • Tomcat 5.5.17/18 (user supplied) • WebLogic Server 9.2.1/9.2.2 **Note:** This option is only available when installing ALER into an existing BEA Home where WLS 9.2.1/9.2.2 is installed. • WebSphere 6.1 • Generic Application Server
Initialize Repository Properties	Specify the information required to initialize ALER for your application server. For the **Fully-qualified server name**, change the example value to the fully-qualified server *and* domain name where ALER is being installed (for example, *myserver.mydomain.com*).

In this window . . .	Perform the following action . . .
Choose Product Installation Directory This window is not displayed if you are adding components to an existing installation. Instead, you are prompted to confirm the product installation directory. If you do so, the selected components are installed in the product installation directory you specified during the initial installation.	Specify the directories in which you want to install the software and click Next. You can accept the default product directory or create a new product directory. For additional information, see Choosing Product Installation Directory. If you choose to create a new directory, the installation program automatically creates one for you. If you go back to the **Choose Product Installation Directory** window to change the BEA Home Selection, the following changes occur based on the type of changes you make to the home directory: • If you accept the default product installation directory in the Choose Product Installation Directory window, in the Choose Product Installation Directory window, the old installation directory will be retained. • If you enter a new product installation directory in the Choose Product Installation Directory window, the directory name is modified to this new name in the Choose Product Installation Directory window. • If you specify the installation directory in the Choose Product Installation Directory window, and if it is outside of old BEA Home, if installation directory value was provided and installation directory resided outside of old BEA Home, installation directory will retain the old value.
Choose Shortcut Location This window is displayed only under the following conditions: • You have Administrator privileges. • You are performing an initial installation. • You are installing on a Windows platform.	Specify the Start menu folder in which you want the Start menu shortcuts created. You can select from the following options: • **All Users Start menu folder** Selecting this option provides all users registered on the machine with access to the installed software. However, only users with Administrator privileges can create shortcuts in the All Users folder. Therefore, if a user without Administrator privileges uses the Configuration Wizard to create domains, Start menu shortcuts to the domains are not created. In this case, users can manually create shortcuts in their local Start menu folders, if desired. Press ALT+Y on the keyboard to select the All Users Start Menu. • **Local user's Start menu folder** Selecting this option ensures that other users registered on this machine will not have access to the Start menu entries for this installation. Press ALT+N on the keyboard to select the Local User's start menu.
Status	Read the information displayed about BEA AquaLogic Enterprise Repository. When the installation program has finished copying the specified files to your system, click **Next**.

In this window . . .	Perform the following action . . .
Configure Database	Specify whether you want to enter information for the ALER Tablespaces that were configured as a prerequisite to this installation procedure or to configure a database at a later time.
	Before selecting **Yes**, verify that your DBA completed the Database Installation Procedures for your DBMS.
	If you select **No**, see the Installation Complete window.
Provide Database Tablespace Names This window is displayed only when configuring a database.	Specify the ALER tablespace names that were created prior to the installation procedure, as follows:
	• **SQL Server** – provide the file group and index group names to be used by ALER. Typically, the value for Data Tablespace would be PRIMARY and Index Tablespace would be INDEX.
	• **Oracle** – provide the data and index tablespace names to be used by ALER. Typically, the value for Data Tablespace would be ALER_DATA and Index Tablespace would be ALER_INDEX.
	• **DB2** – provide the data and index tablespace names to be used by ALER. Typically, the value for Data Tablespace would be alerdatats and Index Tablespace would be alerindxts.
	Note: For the BLOB Tablespace field, enter the same value that you entered in the Data Tablespace field.

In this window . . .	Perform the following action . . .
Initialize Repository Database Properties This window is displayed only when configuring an ALER database.	Specify the properties required to initialize your database. For the **Driver File Locations**, use: • Oracle – `ojdbc14.jar` • SQL 2005 – `sqljdbc.jar` For the **DBMS Name**, enter: • Oracle – enter the SID that the ALER schema was installed on. For Oracle, the default SID is **orcl**; for Oracle XE, the default SID is **xe**. **Note:** You can determine the SID needs to be entered by running this SQL statement: `select instance_name from v$instance;` • SQL – enter the database name (e.g., `ALER`) For the **DBMS Host**, enter the fully-qualified server *and* domain name where ALER is being installed (for example, *myserver.mydomain*.com). For the **User Name** and **User Password** fields, make sure that you enter the appropriate user information from the Preparing for Your Installation instructions. If you used the recommended sample Build an ALER Database User scripts for Oracle, or if you followed the Create an ALER Database User steps for SQL Server 2005, they are `ALER` and `ALER_PWD`.
Test Passed This pop-up message is displayed only when configuring an ALER database.	Click **OK**. If the test fails, confirm your user credential settings and retry.
Installation Complete	If you chose the Default installation for the Professional Edition of ALER, click **Done** to exit the installation program. However, if you chose Custom installation to enable the ALBPM Process Engine for the Repository Workflows, then click **Next**. *Warning!* If the test passed, do not click **Back** or you may overwrite the database configuration.
DBA User Credentials This window is displayed only when configuring an ALBPM database for Repository Workflows.	Specify the DBA User Name and Password used to manage your database. Refer to the Database Installation Procedures for your DBMS.

In this window . . .	Perform the following action . . .
FDI User Credentials This window is displayed only when configuring an ALBPM database for Repository Workflows.	Create the User Name and Password that will be used for the ALBPM administrative console. After the installation has completed, this information will be used to log into the ALBPM Process Engine as the administrator. You can use the same name for the user name and password, as show here: • User Name: bpm_admin • Password: bpm_admin • Confirm Password: bpm_admin **Note:** The @ character is not a valid password value. See What's Next for more information about how to use this User Name and Password to log into the ALBPM Process Engine Administrator using the FDI administrative user name.
Database Configuration for ALBPM Process Engine This window is displayed only when configuring an ALBPM database for Repository Workflows.	Create the User Name and Password credentials that will be used for ALBPM's FDI User schema and Server User schema. These two databases are used by the ALBPM process engine for transaction tracking and management. **Note:** These names should be unique in the database instance being used. **FDI User Info** (schema for ALBPM Manager) • User Name: bpm_fdi • Password: bpm_fdi • Confirm Password: bpm_fdi **Server User Info** (schema for ALBPM Process Engine) • User Name: bpm_engine • Password: bpm_engine • Confirm Password: bpm_engine

In this window . . .	Perform the following action . . .
Installation Complete This window is displayed only when configuring an ALBPM database for Repository Workflows.	Specify whether you want to configure Repository Workflows with the default ALBPM Process Engine. Click **Done** to exit the installation program and enable the default ALBPM Process Engine, if selected.

Configure Process Engine for Repository Workflows
 	
This window is displayed only when configuring an ALBPM Process Engine for Repository Workflows.
	```Creating directory and server.........```
	```Successfully created directory and server.......```
	```Publishing and deploying workflow.....```
	```Successfully published and deployed workflow.....```
	```Done.....```
	After the configuration processes listed above are completed, click **OK**.

What's Next

After completing the installation process, complete the following post installation tasks, as described in Post-Installation Instructions.

- Configure Your Application Server

- Install Java Web Start

- Start Your Application Server and Log Into the ALER Web-based Console

- Use the ALER Diagnostics Testing Tool

- Import ALER Solution Packs and Datapacks

- Test the ALER Installation

- Start the AquaLogic BPM Process Engine

- Tune SQL Server 2005 Database Performance

Running the Installation in the Console Mode

The section describes how to run the installation program in the console mode:

- Starting the Console Installer Using Windows

- Starting the Console Installer Using UNIX

- Install ALER Using Console Mode

- What's Next

Starting the Console Installer Using Windows

Use the following steps to install ALER using console mode:

1. Perform the pre-installation tasks as described in Starting the Installation Program on Windows Platforms

2. Install ALER Using Console Mode.

Starting the Console Installer Using UNIX

This section describes the installation using the console mode on the UNIX platforms. Following sections describe the installation using:

- Installers With Filenames Ending in .bin

- Installers With Filenames Ending in .jar

Installers With Filenames Ending in .bin

Using the following steps to install ALER using an installer with filename ending in .bin:

1. Complete the pre-installation tasks for installers with filename ending in .bin, see "Using Installers with Filenames Ending in .bin" on page 3-6.

2. "Install ALER Using Console Mode" on page 5-2.

Note: Skip step 11 and step 12, choosing the shortcut location applies only to Windows systems.

Installers With Filenames Ending in .jar

Using the following steps to install ALER using an installer with filename ending in .jar:

1. Complete the pre-installation tasks for installers with filename ending in .jar, see Using Installers with Filenames Ending in .jar.

2. Install ALER Using Console Mode.

Note: Skip step 11 and step 12, choosing the shortcut location applies only to Windows systems.

Install ALER Using Console Mode

Caution: Before running the BEA Product installer, follow the preparation guidelines in Preparing for Your Installation, especially the Database Installation Procedures for your DBMS.

To complete the console-mode installation process, respond to the prompts in each section by entering the number associated with your choice or by pressing Enter to accept the default. To exit the installation process, enter exit (or x, for short) in response to any prompt. To review or change your selection, enter previous (or p, for short) at the prompt. To proceed to the following prompt, enter Next (or n, for short).

For Information on how to start the installation in the console mode, see Starting the Installation in Console Mode. When you start the installation in the console mode you will see a welcome screen as in Listing 5-1.

Listing 5-1 Welcome Screen in the Console Mode

```
<------------------BEA Product AquaLogic Enterprise Repository 3.0
------------------>

Welcome:

--------

This installer will guide you through the installation of AquaLogic

Enterprise Repository 3.0.

Prerequisites:

This installation works with the included Tomcat distribution, or with your

existing installation of BEA WebLogic Server 9.2.1, Tomcat 5.5.17/18, or IBM

WebSphere 6.1.  A running and configured database is required. See

http://edocs.bea.com/aler/docs30/ for detailed database instructions.

Type "Next" or enter to proceed to the next prompt.  If you want to change

data entered previously, type "Previous".  You may quit the installer at any

time by typing "Exit".


Enter [Exit][Next]>
```

1. At the Welcome prompt, type `Next` (or `n` for short) or press `Enter` to continue with the installation process.

   The BEA Home directory prompt is displayed.

2. Specify the BEA Home directory that will serve as the central support directory for all BEA products installed on the target system. For details about the BEA Home directory, see Choosing a BEA Home Directory. If BEA Home directories exist on your system, a list of the directories is displayed, as shown in the Listing 5-2:

   – To use an existing BEA Home directory, type the number associated with the desired BEA Home directory. If your application server is WebLogic 9.2.1, select the associated existing BEA Home.

   – To create a new BEA Home directory, type `1` or press `Enter`.

If there are no BEA Home directories on your system, or you have selected to create a new BEA Home, the installation program displays the prompt as in Listing 5-3:

Listing 5-2 Choose a BEA Home Directory

```
<------------- BEA Product - AquaLogic Enterprise Repository 3.0
------------->

Choose BEA Home Directory:

-------------------------

 ->1* Create a new BEA Home

   2E:\aler30


Enter index number to select OR [Exit][Previous][Next]>
```

Listing 5-3 Choose a BEA Home

```
<------------- BEA Product - AquaLogic Enterprise Repository 3.0
------------->

Choose BEA Home Directory:

-------------------------

    "BEA Home" = [Enter new value or use default "C:\bea"]


Enter new BEA Home OR [Exit][Previous][Next]>
```

Do one of the following:

– To use the default BEA Home directory, type Next (or n for short), or press Enter.

– Enter the directory path and press Enter.

The installation program displays the BEA Home directory you have specified, as shown in Listing 5-4:

Listing 5-4 Accept BEA Home Directory

```
<------------------- BEA Installer - BEA Products ------------------->

Choose BEA Home Directory:
--------------------------

"BEA Home" = [C:\bea1]

Use above value or select another option:

    1 - Enter new BEA Home

    2 - Change to default [C:\bea]

Enter option number to select OR [Exit][Previous][Next]>
```

3. Press Enter to accept your selection. Otherwise, type 1 or 2 to return to the Choose BEA Home Directory panel, where you can modify your entry.

   After you have selected your BEA Home directory and confirmed your selection, type Next or press Enter. One of the following occurs:

   – If you are adding components to an existing installation, the Choose Components to install panel is displayed. Go to step 5.

   – If you are performing an initial installation, the Choose Install Type (see Listing 5-5) prompt is displayed.

Listing 5-5 Choose the Install Type

```
<------------- BEA Product - AquaLogic Enterprise Repository 3.0
------------->

Choose Install Type:
-------------------

Select the type of installation you wish to perform.

 ->1Default

     This option will install the Professional Edition, also suitable for

    evaluation purposes. Install the following software: - AquaLogic

    Enterprise Repository
```

```
  Examples

 2Custom

    Choose additional software products and components to install.



Enter index number to select OR [Exit][Previous][Next]>
```

4. Specify the type of installation you want to perform by entering the number associated with the install type, as shown in the Listing 5-5:

   – Type 1 or press Enter to choose a Default installation type. Proceed to step 8.

   – Type 2 to choose a Custom installation type. The Choose Components to install prompt is displayed.

   For more information about complete and custom installations, see Installation Overview.

5. If you the choose the Custom type installation, select the components you want to install. The available components are displayed as shown in Listing 5-6.

Listing 5-6   Choose Components to Install

```
<------------- BEA Product - AquaLogic Enterprise Repository 3.0
------------->

Choose Components to install:

----------------------------

Release 3.0.0.0

    +----AquaLogic Enterprise Repository [1] v

        +----Core Repository with Examples [1.1] v

        +----AquaLogic Enterprise Repository Plug-In for Eclipse [1.2] v

    +----AquaLogic BPM [2] v

        +----Process Engine [2.1] v



Enter number exactly as it appears in brackets to toggle selection OR
[Exit][Previous][Next]>
```

The word Installed is shown in brackets for any components you have already installed on your system.

When you select or deselect components to install, the installation program checks for dependencies between components and automatically modifies the list of selected components. For example, if you deselect the AquaLogic BPM component, the Process Engine is also deselected.

When you have selected the components, press Enter or type Next (or n for short). The Install Eclipse Options prompt is displayed (see Listing 5-7)

Listing 5-7   Install Eclipse Options

```
<------------- BEA Product - AquaLogic Enterprise Repository 3.0
------------->

Install Eclipse Options:

-----------------------


Install BEA installer bundled Eclipse or use the existing Eclispe.


 ->1¦Install Workspace Studio

    ¦

    ¦   Installer will use the BEA installer bundled

    ¦Eclipse kit and installs it to the default location.


   2¦Use Existing Eclipse

    ¦

    ¦   Do not install the installer bundled Eclipse.

    ¦I will specify Eclipse Home to use.


Enter index number to select OR [Exit][Previous][Next]>
```

6. Specify whether you want to install Eclipse, as shown in Listing 5-7. Do one of the following:

–   Type 1 if you want to install Eclipse. Proceed to step 8.

–   Type 2 if you want to use an existing Eclipse installation. The Choose a Eclipse Home
    Directory prompt is displayed (see Listing 5-8)

Listing 5-8   Choose a Eclipse Home Directory

```
<------------- BEA Product - AquaLogic Enterprise Repository 3.0
------------->

Choose a Eclipse Home directory:

-------------------------------

    "Eclipse Home" = []


Enter new Eclipse Home OR [Exit][Next]>
```

7.   Enter the directory and type n. Verify the directory as shown in Listing 5-9.

Listing 5-9   Choose a Eclipse Home Directory

```
<------------- BEA Product - AquaLogic Enterprise Repository 3.0
------------->

Choose a Eclipse Home directory:

-------------------------------

->1Yes, use this Eclipse Home [e:\myEclipse]

  2No, select another Eclipse Home


Enter index number to select OR [Exit][Next]>
```

Do one of the following:

–   Type 1 or n to select the Eclipse Home directory and press Enter.

–   Type 2 to select a different directory, press Enter and return to Listing 5-8.

8. Select an application server (see Listing 5-10). Enter the number representing your application server and press Enter.

   The Initialize Repository Properties prompt for the selected application server is displayed (for example, see Listing 5-11).

Listing 5-10   Choose Application Server

```
<------------- BEA Product - AquaLogic Enterprise Repository 3.0
------------->

Choose Application Server:

-------------------------

Enterprise Repository supports deployment in the following application

servers. If you have none installed, choose Built-in Tomcat to include

installation of the necessary default resources.

*Select Application Server


 ->1¦Built-in Tomcat(default)

   2¦Tomcat 5.5.17/18 (user-supplied)

   3¦WebLogic Server 9.2.1/9.2.2

   4¦WebSphere 6.1

   5¦Generic Application Server


Enter index number to select OR [Exit][Previous][Next]>
```

Listing 5-11   Initialize Repository Properties

```
<------------- BEA Product - AquaLogic Enterprise Repository 3.0
------------->

Initialize Repository Properties:

---------------------------------
```

```
Provide the required data to initialize Enterprise Repository.


   1*Fully qualified server name:[app.example.com]

   2*Port number:[7101]

   3*Repository application name:[aler]


Enter index number to select OR [Exit][Previous][Next]>
```

9. Use the installer menus to provide the initialization properties for the selected application server. When finished, type n.

   The Choose Product Installation Directories prompt is displayed (see Listing 5-12).

10. Verify your entry and press Enter to proceed with the installation. Otherwise, do one of the following:

   – Type 1 and press Enter to change the product installation directory for ALER.

   – Type 2 and press Enter to change the Process Engine directory.

   Modify your entry, confirm it. Type Next. Press Enter.

Listing 5-12 Choose Product Installation Directories

```
<------------- BEA Product - AquaLogic Enterprise Repository 3.0
------------->

Choose Product Installation Directories:

--------------------------------------

BEA Home Directory: [E:\aler20_2]

Product Installation Directories:


   1Default Product Home: [E:\aler20_2\repository30]

   2Process Engine: [E:\aler20_2\albpm57]
```

Enter index number to select OR [Exit][Previous][Next]>Enter option number
to select OR [Exit][Previous][Next]> Next

The locations for Shortcut prompt is displayed (see Listing 5-13).

Listing 5-13 Location for the Shortcut

```
<------------- BEA Product - AquaLogic Enterprise Repository 3.0
------------->

Choose Shortcut Location:

------------------------

*The installer creates shortcuts to BEA components, samples, and tools. As

    *a user with administrative privileges, you can specify where these

    *shortcuts are created.

->1"All Users" Start Menu folder (recommended)

   For some installations, this setting may limit the automatic creation of

   server shortcuts for users without administrative privileges. Refer to

   the documentation for more information.

   2Local user's Start Menu folder

   Select this option if you need to ensure that other profiles registered on

   this machine will not have access to these shortcuts.


Enter index number to select OR [Exit][Previous][Next]>
```

11. Do one of the following:

   – Type 1 or n to select All Users Start Menu folder and press Enter.

   – Type 2 to select Local users Start Menu folder and press Enter.

12. Type n and press Enter to confirm your choice for the location of the shortcut (see
    Listing 5-14).

Listing 5-14   Confirm the Location for the Shortcut

```
<------------- BEA Product - AquaLogic Enterprise Repository 3.0

------------->

Choose Shortcut Location:

------------------------

*Are you sure you wish to create the shortcuts in the selected location?

    *

    *"All Users" Start Menu folder (recommended)

   *For some installations, this setting may limit the automatic creation of

    *server shortcuts for users without administrative privileges. Refer to
the *documentation for more information.


 ->1Yes.

   2No, Go back to the previous screen and make another choice.


Enter index number to select OR [Exit][Previous][Next]>
```

Installation starts and you can see the progress of the installation at the prompt.

Note: It is normal for the installation program to pause for a fairly long time.

When the installation is complete, the Configure Repository Database panel is displayed (see Listing 5-15).

Listing 5-15   Configure Repository Database

```
<------------- BEA Product - AquaLogic Enterprise Repository 3.0

------------->

Configure Repository Database


  ->1 - Yes, configure the database now.

    2 - No, do not configure the database now.
```

```
Enter a number or [Previous][Next]>
```

13. Do one of the following:

   – Type 1 and press Enter to configure a database.

   – Type 2 and press Enter to configure a database later. Proceed to step 17.

   The Database Tablespace Names panel is displayed (see Listing 5-16).

Listing 5-16 Database Tablespace Names

```
<------------- BEA Product - AquaLogic Enterprise Repository 3.0
------------->


Provide Database Tablespace Names:

----------------------------------

Provide the requested information about the tablespaces configured for use

by Enterprise Repository.

1¦BLOB tablespace: []

   2¦Data tablespace: []

   3¦Index tablespace: []


Enter index number to select OR [Exit][Previous][Next]>
```

14. Use the installer menus to provide the table space names. When finished, type n.

   The Select Database Driver prompt is displayed (see Listing 5-17).

Listing 5-17 Select Database Driver

```
<------------- BEA Product - AquaLogic Enterprise Repository 3.0
------------->

Select Database Driver:
```

```
----------------------

Select a JDBC driver for your database from the supported drivers list.

->1¦Oracle

    ¦  [oracle.jdbc.driver.OracleDriver]

2¦IBM DB2 General Type 4 Driver

    ¦  [com.ibm.db2.jcc.DB2Driver]

3¦Microsoft SQL Server Driver 2005

    ¦  [com.microsoft.sqlserver.jdbc.SQLServerDriver]


Enter index number to select OR [Exit][Previous][Next]>
```

15. Use the installer menus to select a driver. When finished, type n.

The Configure Database Properties prompt is displayed (see Listing 5-18).

Listing 5-18 Configure Database Properties

```
<------------- BEA Product - AquaLogic Enterprise Repository 3.0
------------->


Configure the database properties below:
---------------------------------------
1¦Driver File Locations: []

    2¦DBMS Name: []

    3¦DBMS Host: [localhost]

    4¦DBMS Port: [50000]

    5¦User Name: []

    6¦User Password: []

    7¦Confirm Password: []
```

```
Enter index number to select OR [Exit][Previous][Next]>
```

16. Use the installer menus to provide the database properties. When finished, type n.

    The connection is tested:

    – If a connection is made, go to step 17.

    – If the connection fails, you will be returned to step 16. Correct any properties, verify that your database is running and you have selected the correct driver.

17. Press Enter or type Exit to exit the installation program.

What's Next

After completing the installation process, complete the following post installation tasks, as described in Post-Installation Instructions.

- Configure Your Application Server

- Install Java Web Start

- Start Your Application Server and Log Into the ALER Web-based Console

- Use the ALER Diagnostics Testing Tool

- Import ALER Solution Packs and Datapacks

- Test the ALER Installation

- Start the AquaLogic BPM Process Engine

- Tune SQL Server 2005 Database Performance

Running the Installation in the Console Mode

Running the Installation in the Silent Mode

The following sections describe how to run the installation program in silent mode:

- What Is Silent-Mode Installation?

- Using Silent-Mode Installation

- Creating a silent.xml File for Silent-Mode Installation

- Sample silent.xml Files for Silent-Mode Installation

- Returning Exit Codes to the Console

- What's Next

What Is Silent-Mode Installation?

Silent-mode installation is a way of setting installation configurations once and then using these configurations to duplicate the installation on many machines. During installation in silent mode, the installation program reads the settings for your configuration from an XML file that you create prior to beginning the installation. The installation program does not display any configuration options during the installation process. Silent-mode installation works on both Windows and UNIX systems.

It is assumed that you have already acquired the installation program, either on DVD or from the BEA Web site. For more information on different modes of product distribution, see Product Distribution Methods.

Using Silent-Mode Installation

The silent-mode installation process for ALER has three primary steps:

1. Follow the preparation guidelines in Preparing for Your Installation, especially the Database Installation Procedures for your DBMS.

2. Creating a `silent.xml` file that defines the configuration settings normally entered by a user during an interactive installation process, such as graphical-mode or console-mode installation. For example, values for the BEA Home directory, the product directory, and the components to be installed are supplied in a `silent.xml` file.

   For a detailed procedure, see Creating a silent.xml File for Silent-Mode Installation. For a sample `silent.xml` file, see Sample silent.xml Files for Silent-Mode Installation.

3. Starting the silent-mode installation process using the values specified in the `silent.xml` file.

   For more information on launching the installation in silent mode, see Starting the Installation Program.

Important Considerations for Silent-Mode Installation

When you are performing an installation in silent mode, keep in mind the following considerations:

- Before running the BEA Product installer, follow the preparation guidelines in Preparing for Your Installation, especially the Database Installation Procedures for your DBMS.

- Silent-mode installation requires the same amount of temporary disk space and uses the same temporary storage directories as a standard installation. For more information, see Temporary Disk Space Requirements. The installation program does not alert you if there is insufficient space in the temporary directory.

- A silent-mode installation takes the same amount of time as a standard installation. At the beginning of a silent-mode installation, an initial installation program window or message is displayed briefly, indicating that the installation has started. No messages are displayed to indicate that the installation is in progress or has been completed successfully.

- Incorrect entries in the `silent.xml` file can cause installation failures. To help you determine the cause of a failure, BEA recommends that you create a log file when you start the installation. For more information on generating a verbose log, see Generating a Verbose Installation Log.

- The XML definition (`<?xml version='1.0' encoding='UTF-8'?>`) must be at the very beginning of the `silent.xml` file. There cannot be any spaces or line breaks before the XML definition.

- You cannot reinstall any BEA product on top of a previously installed version of the same product—in the same BEA Home directory or in the same file location. You can, however, add products and product components to an existing installation. For example, you can install ALER during one installation, and ALBPM during a later installation. However, to reinstall the same version of one of the products, you must first uninstall the previously installed instance of it, as described in or install the new instance in another location.

Creating a silent.xml File for Silent-Mode Installation

When you install your ALER software in silent mode, the installation program uses an XML file (`silent.xml`) to determine which installation options should be implemented. Therefore, before you can run the installation program in silent mode, you must first create a `silent.xml` file in which you specify the installation options that you want to invoke.

Incorrect entries in the `silent.xml` file can cause installation to fail. To help you determine the cause of a failure, BEA recommends that you create a log file when you start the installation.

Caution: Before running the BEA Product installer in silent mode, follow the preparation guidelines in Preparing for Your Installation, especially the Database Installation Procedures for your DBMS.

To create a `silent.xml` file for use in the silent-mode installation process, follow these steps:

1. In a supported browser, view the sample `silent.xml` file for silent-mode installation. The sample file is available at
   http://e-docs.bea.com/common/docs92/install/scripts/silent.xml

   This sample `silent.xml` file is also presented in this section. See Sample silent.xml Files for Silent-Mode Installation.

2. Save the sample XML file, with the name `silent.xml`, in the same directory that contains the installation program.

   Note: The XML definition (`<?xml version="1.0" encoding="ISO-8859-1"?>`) must be at the very beginning of the `silent.xml` file. There should not be any spaces or line breaks before the XML definition.

3. In the `silent.xml` file that you saved on your system, edit the values for the keywords shown in Table 6-1 to reflect your configuration.

Note: You must follow XML guidelines for characters when modifying values. That is, do not use characters reserved for use in XML, such as <, >, [, and].

Table 6-1 Parameters for Silent.xml

For this data-value name...	Enter the following value...
BEAHOME	The full path for the BEA Home directory of your choice. For details about the BEA Home directory, see Choosing a BEA Home Directory.

COMPONENT_PATHS	The components and subcomponents you want to install on your system:
	
	• To install ALER, use the following values:
	   `AquaLogic Enterprise Repository`
	   `Core Repository with Examples`
	   `AquaLogic Enterprise Repository Plug-In for Eclipse`
	• To install ALBPM, use the following values:
	   `AquaLogic BPM/Process Engine`
	
	For more information about entering these values, see Guidelines for Component Selection.

APP_SERVER_TYPE	The application server type used to run ALER. If you do not have an application server installed, specify the Built-in Tomcat option to include installation of the necessary default resources. Valid values are: • `ce_tomcat` • `value for user-supplied Tomcat` (GUI = Tomcat 5.5.17/18 (user supplied)) • `value for WLS` (GUI = WebLogic Server 9.2.1/9.2.2) • `value for WAS` (GUI = WebSphere 6.1) • `value for Generic App Server` (GUI =Generic Application Server)

Table 6-1 Parameters for Silent.xml

APP_SERVER_NAME	The application server name used to run ALER. If you do not have an application server installed, specify the Built-in Tomcat option to include installation of the necessary default resources.
	Valid values are:
	• Built-in Tomcat (default)
	• Tomcat 5.5.17/18 (user supplied)
	• WebLogic Server 9.2.1/9.2.2
	• WebSphere 6.1
	• Generic Application Server
APP_PATH	The ALER application path. For example, if the ALER_URL is ultimately http://www.myhost.com:8001/ALER301, then the APP_PATH is ALER301.
WEB_PATH	The web application path.
ALER_URL	The fully-qualified server *and* domain name where ALER is being installed (for example, myserver.mydomain.com)
DOMAIN_LISTEN_PORT	The domain listening port.
USER_INSTALL_DIR	The directory where ALER will be installed within the specified BEAHOME.
RUN_DBCONFIG_WIZARD	The flag to run the DB Configuration Wizard:
	• true or yes, to run the Database Configuration wizard. The default is true.
	• false or no, to skip the database wizard.
CONFIG_RESPOSIT_DB	The flag to run the Repository Database Configuration wizard, which initializes the repository database properties.
	• true or yes, to configure a Repository Database Configuration wizard. The default is true.
	• false or no, to skip the configuration of a database.
	Note: This flag is skipped if RUN_DBCONFIG_WIZARD is set to false or no.
DB_TABLE_BLOB	Tablespace name for BLOBs.
	Note: For the BLOB Tablespace field, enter the same value that you specify for DB_TABLE_DATA.

Table 6-1 Parameters for Silent.xml

DB_TABLE_DATA	The data tablespace name to be used by ALER. For example: • **SQL Server** – PRIMARY • **Oracle** – ALER_DATA • **DB2** – alerdatats
DB_TABLE_INDEX	The index tablespace name to be used by ALER. For example: • **SQL Server** – INDEX • **Oracle** – ALER_INDEX • **DB2** – alerindxts
DB_DRIVER	Name of the driver. For example: oracle.jdbc.driver.OracleDriver
DB_JARFILES	Path to the driver JAR file. For example: • Oracle – d:\jdbc14.jar • SQL 2005 – d:\qljdbc.jar
DB_DBMS	The database management system. • Oracle – enter the SID that the ALER schema was installed on. For Oracle, the default SID is **orcl**; for Oracle XE, the default SID is **xe**. **Note:** You can determine the SID needs to be entered by running this SQL statement: select instance_name from v$instance; • SQL – enter the database name (e.g., ALER)
DB_PORT	The database port number.
DB_HOST	The fully-qualified server *and* domain name where ALER is being installed (for example, *myserver.mydomain*.com).
DB_USERNAME	The database user name. Enter the appropriate user information from the Database Installation Procedures instructions for your DBMS.
DB_PASSWORD	The password for a database user. Enter the appropriate user information from the Database Installation Procedures instructions for your DBMS.
DBA_ALBPM_USER	The DBA User Name used to manage your database for ALBPM users.
DBA_ALBPM_PASSWORD	The DBA Password used to manage your database for ALBPM users.

Table 6-1 Parameters for Silent.xml

`ALBPM_ADMIN_USER`	The FDI user name that will be used to log into the ALBPM Process Engine as the administrator.
`ALBPM_ADMIN_PASSWORD`	The FDI user password that will be used to log into the ALBPM Process Engine as the administrator.
`FDI_USER_NAME`	The User Name that will be used for ALBPM's FDI User schema (ALBPM Manager).
`FDI_USER_PASSWORD`	The Password that will be used for ALBPM's FDI User schema (ALBPM Manager).
`SERVER_USER_NAME`	The User Name that will be used for ALBPM's Server User schema (ALBPM Process Engine).
`SERVER_USER_PASSWORD`	The Password that will be used for ALBPM's Server User schema (ALBPM Process Engine).
`CONFIGURE_WORKFLOW`	Configure the ALER Advanced Registration workflows with the default ALBPM Process Engine. • true, or yes, configure workflows. • false, or no, to skip configuring workflows.
`APP_SERVER_HOME`	The application server home directory For example: *BEAHOME*\weblogic922
`USER_DOMAIN_DIR`	The ALER User Domain Directory directory. For example: *BEAHOME*\user_projects\domains\alerDomain
`SUPPORTED_WL_HOME`	The supported WebLogic Server home. For example: *BEAHOME*\weblogic922
`WL_HOME`	The WebLogic Server home. For example: *BEAHOME*\weblogic922
`ECLIPSE32_HOME`	For installations pointing at existing Eclipse plug-ins for ALER, specifies the optional Eclipse installation. If this key/value is not specified, the installer continues as in the normal GUI installation. `<data-value name="ECLIPSE32_HOME" value="c:\my_eclipse_home" />`

Guidelines for Component Selection

Use the following guidelines when you specify values for the `COMPONENT_PATHS` data-value name:

- When you specify a product component to be installed, all subcomponents that are installed by default in a complete installation are also installed. For example, the following entry in `silent.xml` installs both ALER and the examples:

  ```
  <data-value name="COMPONENT_PATHS" value="AquaLogic Enterprise
  Repository'/>" />
  ```

- To install multiple components, separate the components with a bar (|). Do not leave a space before or after the bar. For example, to install ALER and ALBPM, and the subcomponents that are installed by default, enter the following line in the `silent.xml` file:

  ```
  <data-value name="COMPONENT_PATHS" value="AquaLogic Enterprise
  Repository|AquaLogic BPM'/>" />
  ```

- To specify subcomponents, you must specify a `component/subcomponent` combination for each entry. For example:

  ```
  <data-value name="COMPONENT_PATHS" value="AquaLogic Enterprise
  Repository/AquaLogic Enterprise Repository Plug-In for Eclipse" />
  ```

  Note: You can include the `component/subcomponent` of the products you want to install.

- If you do not include the `COMPONENT_PATHS` data-value name in the `silent.xml` file, the "complete" ALER product is installed.

  Note: The installation program performs dependency checking to ensure that all components that provide functionality on which other components depend for proper operation are installed. These dependencies are visible during graphical and console mode installations. The same dependencies are enforced during silent installation: components on which other components depend are installed even if they are not explicitly referenced in a silent script.

Sample silent.xml Files for Silent-Mode Installation

The following sample silent.xml demonstrate how to install ALER and configure a database.

Listing 6-1   Sample XML File -- Install ALER with Database Configuration and ALBPM Process Engine

```
<?xml version='1.0' encoding='UTF-8'?>
<bea-installer>
  <input-fields>
  <data-value name='BEAHOME' value='D:\dev\silentInstall\aler_albpm'/>
  <data-value name='COMPONENT_PATHS' value='AquaLogic Enterprise
Repository/Core Repository with Examples|AquaLogic Enterprise
Repository/AquaLogic Enterprise Repository Plug-In for Eclipse|AquaLogic
BPM/Process Engine'/>
  <data-value name='APP_SERVER_TYPE' value='ce_tomcat' />
  <data-value name='APP_SERVER_NAME' value='Default (built-in Tomcat)'/>
  <data-value name='APP_PATH' value='aler3'/>
  <data-value name='WEB_PATH' value='aler3-web'/>
  <data-value name='ALER_URL' value='MyURL' />
  <data-value name='DOMAIN_LISTEN_PORT' value='8080' />
  <data-value name='APP_SERVER_HOME'
value='D:\dev\silentInstall\aler_albpm\my\tomcat'/>
  <data-value name='USER_INSTALL_DIR'
value='D:\dev\silentInstall\aler_albpm\repository30'/>
  <data-value name='RUN_DBCONFIG_WIZARD' value='yes'/>
  <data-value name='CONFIG_RESPOSIT_DB' value='yes'/>
  <data-value name='DB_TABLE_BLOB' value='USER_BLOB'/>
  <data-value name='DB_TABLE_DATA' value='USER_DATA'/>
  <data-value name='DB_TABLE_INDEX' value='USER_INDEX'/>
  <data-value name='DB_DRIVER' value='oracle.jdbc.driver.OracleDriver'/>
  <data-value name='DB_JARFILES' value='d:\ojdbc14.jar'/>
  <data-value name='DB_DBMS' value='sid2'/>
  <data-value name='DB_PORT' value='1521'/>
  <data-value name='DB_HOST' value='MyHostName'/>
  <data-value name='DB_USERNAME' value='silent'/>
  <data-value name='DB_PASSWORD' value='silent'/>
  <data-value name='DBA_ALBPM_USER' value='system'/>
```

```
  <data-value name='DBA_ALBPM_PASSWORD' value='aler30'/>
  <data-value name='ALBPM_ADMIN_USER' value='system'/>
  <data-value name='ALBPM_ADMIN_PASSWORD' value='manager'/>
  <data-value name='FDI_USER_NAME' value='fd1'/>
  <data-value name='FDI_USER_PASSWORD' value='fd1'/>
  <data-value name='SERVER_USER_NAME' value='fd2'/>
  <data-value name='SERVER_USER_PASSWORD' value='fd2'/>
  <data-value name='CONFIGURE_WORKFLOW' value='yes'/>
  </input-fields>
\</bea-installer>
```

Listing 6-2   Sample XML File -- Install ALER Only with Database Configuration

```
<?xml version='1.0' encoding='UTF-8'?>
<bea-installer>
  <input-fields>
  <data-value name='BEAHOME' value='D:\dev\silentInstall\aler3'/>
  <data-value name='COMPONENT_PATHS' value='AquaLogic Enterprise
Repository/Core Repository with Examples|AquaLogic Enterprise
Repository/AquaLogic Enterprise Repository Plug-In for Eclipse'/>
  <data-value name='APP_SERVER_TYPE' value='ce_tomcat' />
  <data-value name='APP_SERVER_NAME' value='Default (built-in Tomcat)'/>
  <data-value name='APP_PATH' value='aler3'/>
  <data-value name='WEB_PATH' value='aler3-web'/>
  <data-value name='ALER_URL' value='MyURL' />
  <data-value name='DOMAIN_LISTEN_PORT' value='8080' />
  <data-value name='APP_SERVER_HOME'
value='D:\dev\silentInstall\aler_albpm\my\tomcat'/>
  <data-value name='USER_INSTALL_DIR'
value='D:\dev\silentInstall\aler_albpm\repository30'/>
  <data-value name='RUN_DBCONFIG_WIZARD' value='yes'/>
  <data-value name='CONFIG_RESPOSIT_DB' value='yes'/>
  <data-value name='DB_TABLE_BLOB' value='USER_BLOB'/>
  <data-value name='DB_TABLE_DATA' value='USER_DATA'/>
  <data-value name='DB_TABLE_INDEX' value='USER_INDEX'/>
  <data-value name='DB_DRIVER' value='oracle.jdbc.driver.OracleDriver'/>
```

```
    <data-value name='DB_JARFILES' value='d:\ojdbc14.jar'/>
    <data-value name='DB_DBMS' value='sid2'/>
    <data-value name='DB_PORT' value='1521'/>
    <data-value name='DB_HOST' value='MyHostName'/>
    <data-value name='DB_USERNAME' value='silent'/>
    <data-value name='DB_PASSWORD' value='silent'/>
    </input-fields>
\</bea-installer>
```

For more information on launching the installation in silent mode, see Starting the Installation Program.

Returning Exit Codes to the Console

When run in silent mode, the installation program generates exit codes that indicate the success or failure of the installation. These exit codes are shown in the following table.

Code	Description
0	Installation Completed Successfully.
1	Installation failed due to a fatal error.
2	Installation failed due to an internal XML parsing error.

If you are launching the silent-mode installation process from a script, you can choose to have these exit codes displayed on the console. Listing 6-3 provides a sample command file that invokes the installation program in silent mode and echoes the exit codes to the console from which the script is executed.

Listing 6-3   Sample Command File Displaying Silent-Mode Exit Codes

```
rem Execute the installer in silent mode

@echo off
```

```
aler30_win32.exe -mode=silent -silent_xml=mySilentXMLFile.xml
-log=aler_30.log
@rem Return an exit code to indicate success or failure of installation
set exit_code=%ERRORLEVEL%
@echo.
@echo Exitcode=%exit_code%
@echo.
@echo Exit Code Key
@echo ---------------
@echo  0=Installation completed successfully
@echo -1=Installation failed due to a fatal error
@echo -2=Installation failed due to an internal XML parsing error
@echo.
```

What's Next

After completing the installation process, complete the following post installation tasks, as described in Post-Installation Instructions.

- Configure Your Application Server

- Install Java Web Start

- Start Your Application Server and Log Into the ALER Web-based Console

- Use the ALER Diagnostics Testing Tool

- Import ALER Solution Packs and Datapacks

- Test the ALER Installation

- Start the AquaLogic BPM Process Engine

- Tune SQL Server 2005 Database Performance

Running the Installation in the Silent Mode

Post-Installation Instructions

This section covers the following post-installation topics:

- Configure Your Application Server

- Install Java Web Start

- Start Your Application Server and Log Into the ALER Web-based Console

- Use the ALER Diagnostics Testing Tool

- Import ALER Solution Packs and Datapacks

- Test the ALER Installation

- Start the AquaLogic BPM Process Engine

- Tune SQL Server 2005 Database Performance

Configure Your Application Server

Your application server may require additional configuration before you can start using the product.

- WebLogic Server Installations
- WebSphere Installations

WebLogic Server Installations

The following sections provide post-installation information when using WebLogic Server as your application server.

User ID and Password

If WebLogic Server is selected as the application server, the installer creates a WLS Domain for ALER in PRODUCTION mode with the following default User and Password:

```
User: weblogic
Password: weblogic
```

For information on how to change the WLS UserID and Password, see Manage users and groups in the WebLogic Server 9.2 *Administration Console Online Help*.

Set WebLogic Server Environment Parameters

The SERVER_NAME environment variable is not correctly set by installer on WebLogic Server 9.2.1 installations. Remove or properly set the SERVER_NAME environment variable when starting the ALER domain. For example:

For Windows:

```
set SERVER_NAME=alerServer
```

For Linux/Unix:

```
SERVER_NAME=alerServer

export SERVER_NAME
```

WebSphere Installations

The following sections provide information for post-installation procedures required to complete your installation of ALER.

- Deploying the ALER Application

- Change the Server Classloader Order for XLST

Deploying the ALER Application

Once the BEA installer has completed, you will have a WebSphere directory, such as `BEA_HOME`/repository30/websphere. This directory contains all of the properties files that configure the ALER instance appropriately once it is deployed, as well as the `aler.ear` file and a copy of the JDBC Drivers that had been used to generate the database during the install process.

Use the following steps to deploy ALER 3.0 on WebSphere:

1. Create a `BEA_HOME`, such as /opt/bea, on the target application server.

2. As a recommended best practice, copy the JDBC Driver JAR file(s) and all properties files from the `BEA_HOME`/repository30/websphere directory into the `BEA_HOME` on the deployment server.

3. Deploy the `aler.ear` file in the manner most appropriate for your deployment server.

    Note: Do not start the application as there are additional configuration steps that must be performed before the application is considered fully deployed.

4. Modify the generic JVM parameters.

    a. Open the Servers > Application Servers > *myserver* > Java and Process Management > Process Definition > Java Virtual Machine page.

    b. Add the following parameters to the Generic JVM Parameters property:

    - Unicode compatibility – be sure to set the default client encoding appropriately. Depending on your locale, this may be reasonable:
      `-Dclient.encoding.override=UTF-8`

    - Turn off strict code verification: `-Xverify:none`

    - To prevent XLST transformations in the diagnostic page and the metadata viewer from failing in your Web browser, add a default implementation for DTMConfiguration:
      `-Dorg.apache.xml.dtm.DTMManager=org.apache.xml.dtm.ref.DTMManagerDefault`

    - On the Custom Properties page, click **Add** to add the following properties:

      Name: Enter `BEA_HOME` as the name of the variable *BEA_HOME*

Value: Enter the absolute path of the *BEA_HOME* directory. For example /opt//bea.

5. Modify the ALER application module class load order:

a. Enter the WebSphere Integrated Solutions Console.

b. Click Applications > Enterprise Applications.

c. Click the deployed ALER application.

d. Click the Manage Modules link.

e. Click the `aler-app.war` module.

f. Change the Class load order to **Classes loaded from application class loader first** (labeled as "Parent last" in version 6.0 and earlier).

g. Click **Apply**.

h. Click the `aler-web.war` module.

i. Change the Class load order to **Classes loaded from application class loader first** (labeled as "Parent last" in version 6.0 and earlier).

j. Click **Apply**.

k. Click the **Save directly to the master configuration** link to commit your changes to the master configuration.

6. Create a shared library from within the ALER application and associate it with the application:

    a. On the Applications > Enterprise Applications > ALER > Shared Library References page, select the `aler-app.war` module and then click Reference Shared Library.

    b. Click **New**.

    c. Select a Server Scope for the shared library that includes the Node, Cell, and Server levels.

    d. Assign a meaningful Name to the shared library. Description is optional.

    e. In the classpath field, enter the ALER 3.0 directory, such as `BEA_HOME`/`repository30/Websphere`. This directory contains all of the properties files for the ALER instance.

    f. On a separate line within the classpath field, enter the absolute path of each JDBC driver JAR files within the `BEA_HOME` directory. If you have more than one file, add only one file per line.

    g. Select the new library in the Available list box and use the right-facing arrow **>>** button to select that library for use with the `aler-app.war` application.

    h. Click **Ok** to continue.

    i. Click the **Save directly to the master configuration** link to commit your changes to the master configuration.

7. Restart WebSphere.

8. Restart the ALER application.

9. After starting up ALER, enable and set the following Systems Setting property to `true` for SSL support and also to avoid an SSLContext error on the Run Active Diagnostic page.

```
cmee.ssl.force-sun-provider = true
```

Change the Server Classloader Order for XLST

To prevent issues with XSLT Transformation, use the following steps to change the classloader order in your WebSphere installation:

1. Log into the WebSphere Administrative Console.

2. Click the Server > Application Server > server link

3. Select the **Configuration** tab.

4. Select the option for Parallel start.

5. Change the Access to internal server classes to: `Allow`.

6. Change Server Specific Application Settings > Classloader Policy to `Single`.

7. Change the Server Specific Application Settings > Class loading mode to `Parent First`.

8. Click the **Save directly to the master configuration** link to commit your changes to the master configuration.

Install Java Web Start

Java Web Start is a browser plug-in that runs files with JNLP extensions. Java Web Start must be available on the client in order to use ALER's Asset Editor, Type Manager, and the Import/Export utility.

Download and Install Java Web Start

1. Download Java Web Start from java.sun.com.

2. When the download is complete, install Java Web Start.

3. When installation is complete, open the Windows Control Panel.

4. Open the Java plug-in.

5. Click the browser tab and check the appropriate browser(s) with which to use the Java Web start application. (Required for proper Asset Editor functionality.)

6. Click the **Advanced** tab.

7. Select the appropriate SUN Java JRE version for use with the installed version of AquaLogic Enterprise Repository.

8. Close and re-open all instances of the Internet Explorer or FireFox browsers.

9. Navigate to the ALER instance.

10. Click **Edit/Manage Assets** on the ALER Assets screen.

    A security warning opens. (This occurs only during the first launch of the Asset Editor.)

11. Click **Start**.

Java Web Start installs and the Asset Editor opens.

Troubleshooting Java Web Start

ALER employs a browser MIME-type support checking process that is executed when the Edit/Manage Assets (Assets screen) and Edit (asset detail display) links are generated. This process will inspect the client browser to determine if there is a registered handler for a JNLP file (which should launch Java Web Start). If this process fails or returns no results, the link HREF target will point to the aler-web/web start/launch.htm page.

The browser-supported mime type determines which client installed application will be presented as the target of the Edit/Manage Assets and Edit links. Java Web Start must be properly installed in order to work correctly with the operating system as the handler for JNLP files passed to the client browser.

The process of registering this mime type with the browser is normally handled during installation of the Java Web Start plug-in application. Certain corporate security measures or anti-Spyware applications may block this kind of change to the Windows Registry, as will the improper installation and/or removal of the Java Web Start application, Java Run Time Environment or Java SDK if improperly registered within the Java plug-in applet within the Windows Control Panel.

The following instructions may help to rectify the incorrect MIME type support, assuming that Java Web Start and an appropriate version of the SUN Java JRE are properly installed within the client computer system.

To manually set the file/MIME association within the Windows operating system using the Windows Explorer:

1. Open the Tools Menu.

2. Select **Folder Options**.

3. Select the **File Types** tab.

4. Scroll down to JNLP or create a new JNLP file type.

5. Associate the Java Web Start Application (located in the correct path if more than one JWS is installed) with the JNLP file extension.

6. In the Windows Control Panel, add support (check the option) for Internet Explorer within the Java Plug-in console applet. This process should assign the JNLP file type to Java Web Start within the Windows operating system.

Start Your Application Server and Log Into the ALER Web-based Console

After configuring your application server, follow these steps to start your application server and log into the ALER Web-based console.

1. Start your application server:

   – Built-in Tomcat—navigate to the `BEA_HOME\repository30\bin` directory and, depending on your platform, double-click either the `startTomcat.cmd` (Windows) or `startTomcat.sh` (UNIX) file.

   – WebLogic Server—navigate to the `BEA_HOME\user_projects\domains\DOMAIN_NAME` directory and, depending on your platform, double-click either the `startWeblogic.cmd` (Windows) or `startWeblogc.sh` (UNIX) file.

   Note: For instructions on starting standalone Tomcat and WebSphere application servers, see the documentation for those products.

2. Point your browser to the ALER application.

   For example: `http://myserver.domainname.com:7101/aler/`

3. On the login screen, enter **admin** for the Username and Password. This is the default administrative account installed with ALER. You can change the default password through the Administration tab in ALER at a later time.

   Note: If your organization requires a user name and password each time you log into ALER, clear the Enable Automatic Login check box.

4. Click **Login**.

   The Login Stats dialog box displays a welcome message that includes the date and time of your login.

5. Click **Close**.

For more information on using the ALER console, see the "Getting Started" section of the *ALER User Guide*.

Use the ALER Diagnostics Testing Tool

The Diagnostics tool allows testing and troubleshooting of certain aspects of ALER, including testing for:

- Checking Product Version Information

- Servlet Functionality

- Required Libraries

- Database Connectivity

- List System Paths

- Run Pre-Compile Servlet

To launch the Diagnostics tool, navigate to the
`http://host_name/application_name/diag/index.jsp` page of the ALER console. For
more information, see "Utilizing the Diagnostics Testing Tool" in the *ALER Upgrade Guide*.

Import ALER Solution Packs and Datapacks

ALER bundles base sample data for users to help you get started using the enterprise repository.
Additionally, depending upon the edition of ALER that you purchased, you can also import
supplemental datapacks and solution packs, as follows.

Importing the Solution Pack for Working With AquaLogic Assembly Models in Eclipse

The Professional and Advanced Editions of ALER can use the Eclipse plug-in for ALER to
compose and visualize composite applications. However, in order to submit AquaLogic projects
as assembly models to the repository, you must first import the contents of the
`ALER30-AquaLogic-Solution-Pack.zip` file into ALER. This file is bundled with your
installation under the `BEA_HOME\repository30\core\tools\solutions` folder. For detailed
instructions on importing the AquaLogic Solution Pack into ALER, see *Using WorkSpace Studio
for Repository Access*.

Importing the Advanced Edition Data/Solution Packs

If you purchased the ALER 3.0 Advanced Edition, you also have access to supplemental
data/solution packs for Policies, Compliance Templates, EA, and Open Source, as well as the
documentation for the Advanced Edition features. The Advanced Edition features require a data
load to be used, and the Policies also require some ALER system settings to be switched on, as
described in the Advanced Edition documentation for those features.

The supplemental data and documentation is delivered in the
`ALER3.0SupInteg,Doc&Data.zip` file, which is available using a separate download link or on
the Advanced Edition CD. The supplemental data/solution packs need to be imported into ALER
using the Import/Export tool, as described in the *ALER Import/Export Guide*.

For more information on obtaining the Advanced Edition of ALER 3.0, contact your BEA sales
representative.

Test the ALER Installation

Testing the ALER installation involves a number of tasks that ensure the proper operation of
initial ALER features and functions. These instructions apply to all application servers currently
supported by ALER.

Note: To verify the Automated Registration Flow feature in the ALER 3.0 Advanced Edition
triggers automatic asset submission and acceptance, refer to the "Getting Started" section
of *Configuring and Managing Advanced Registration Flows* guide in the
`ALER3.0SupInteg,Doc&Data.zip` file.

Submit an Asset

Asset submission is performed on the ALER Assets page.

1. In the **Assets** panel, click **Submit an Asset**.

2. In the Asset Submission dialog box, complete the following fields:

   – Asset Name

   – Version

   – Type

   – Description

   – URL—enter the file location (for example, `http:/www.example.com/repository/`)

3. Click **Submit** to submit the asset the registrar.

   Note: Attempts to save as asset without first completing all required data fields will result
   in a warning message. A confirmation message indicates the asset was successfully
   submitted to the ALER registrar.

4. Click **Close**.

For more information, see the *ALER User Guide*.

Accept the Asset

The asset acceptance process is performed by the ALER registrar using the Asset Editor. The registrar makes decisions about an asset based on company requirements. To accept and assign an asset means that the registrar accepts the asset and assigns it to another person to shepherd it through the remainder of the registration process.

1. On the Assets page, click the **Edit/Manage Assets** option to launch the Asset Editor.

2. Expand the **Submitted** folder in the Assets tree.

3. Expand the **Pending** folder and open the asset submitted in Submit an Asset.

4. For the purposes of this exercise, click **Accept**.

   The asset moves to the Under Review folder in the tree, and also appears in each of the workflow folders under the asset. The workflow folders correspond to tabs in the Asset Editor.

For more information, see the *ALER Registrar Guide*.

Register the Asset

The asset acceptance process is performed by the ALER registrar using the Asset Editor.

1. On the Overview, Support, Technical, and Tests tabs, complete the remaining information, including the notification email, licensing information, and support contacts as appropriate.

   Note: The notification email automatically sends notification to the email address when the asset is downloaded/selected for use. The asset can be moved from its original location to the storage repository on this tab.

2. Click **Approve** on a tab.

   The tab label changes color and the *Approve* button changes to *Unapprove*.

3. Click the **Taxonomy** tab.

4. Assign the asset to the appropriate categories and/or domains.

   Note: Categories and domains are configurable. (See the ALER Administration Guide.)

5. Enter any keywords and classify the asset into one of five categories:

   – Raw—No assurance of quality or completeness.

– Educational—To be used for educational purposes only. The asset may not be complete in terms of documentation, test results, or other information.

– Approved—Approved for use by the registrar

– Recommended—Successfully used on at least one project.

– Mandated—Must be used whenever the functionality it provides is needed (This is especially relevant for Web services that access customer data, process payments, and so on).

6. Click **Approve**.

   The tab label changes color, and the *Approve* button changes to *Unapprove*.

7. Click the **Documentation** tab.

8. When all of the documentation requirements are met, click **Approve**.

9. Continue the approval process for each of the remaining tabs.

10. On the Administration tab, click **Register** to complete the registration process, or click **Assign** to assign the asset to someone else.

11. Save changes by clicking **Save** on the File menu.

    The asset is moved to the Registered folder and each action (approval of tabs, field value updates, etc.) are also recorded in the Audit log found on the asset's Administration Tab.

For more information, see the *ALER Registrar Guide*.

Find the Registered Asset and View Details

Complete the process by searching for the newly registered asset you created.

1. On the Assets page, use the **Search** option to locate the asset.

   The asset should appear in the list in the upper frame of the main Assets page, indicating that the XML data stored as a BLOB is correctly loaded in the database.

2. Click the asset to open the asset detail in the lower frame of main page.

Start the AquaLogic BPM Process Engine

If you purchased the ALER 3.0 Advanced Edition with the ALBPM component for repository workflows, follow these steps to launch the ALBPM Admin Center and start the Process Engine.

1. Navigate to the `<BEA_HOME>\albpm57\enterprise\bin` directory and double-click one of the following files:

   – **albpmadmcenter.exe** (Windows or UNIX GUI-based)

   – **./startwebconsole.sh** (UNIX console-based). Then point your browser to `http://<host>:8585/webconsole` (e.g., `http://localhost:8585/webconsole`).

2. On the Admin Center page, click the **Start BPM Web Applications** option.

3. When it becomes available, click the **Launch Process Administrator** option to launch the Process Administrator.

4. When prompted to enter the required credentials, enter the BPM admin user name and password that was used on the FDI User Credentials panel during the installation process. The recommended example for these credentials is `bpm_admin` for the user name and password.

5. Open the `aler_engine` Process Engine by clicking the **Engine** link on the left side of the page.

6. Start the `aler_engine` by clicking the **Start** icon under Engine Actions on the right side of the page. Starting the engine may take several minutes to complete. Make sure that the status of the engine is `Ready`.

For more information on configuring ALER to use the ALBPM Process Engine, see the *Configuring and Managing Advanced Registration Flows* guide in the `ALER3.0SupInteg,Doc&Data.zip` file.

Tune SQL Server 2005 Database Performance

ALER 3.0 takes advantage of parallel import performance within SQL Server 2005. To take advantage of this performance enhancement, enable and set the following property within the Admin System Settings page:

```
cmee.impexp.lightweight.import.serialize = false
```

Post-Installation Instructions

Installing ALBPM for Advanced Registration Flows

This section describes how to install the ALBPM Process Engine and deploy the Advanced Registration Flows both manually and by using the BEA Products installer.

Manually Configuring the ALBPM Database and Deploying the Advanced Registration Flows

The following steps describe how to manually install AquaLogic BPM Process Engine and deploy the Advanced Registration Flows without using the BEA Products installer. Follow the steps in this section if you:

- Successfully installed ALER, but chose not to select the ALBPM option and now need to configure ALBPM and deploy the Advanced Registration Flows.

- Attempted to install ALBPM, but the ALBPM deployment did not successfully complete. In which case, you may only need to verify existing information, and possibly make some minor changes, before manually running the ALBPM installation scripts.

WARNING: Before manually installing AquaLogic BPM, follow the preparation guidelines in Preparing for Your Installation, especially in regards to completing the Database Installation Procedures for your DBMS.

Step 1: Copy the Build Properties File

Make a copy of the `build.properties.bak` file in the
BEA_HOME`\albpm57\FuegoSetupScript` directory and rename it to `build.properties` in the
same directory.

Step 2: Modify the Default Values In the Build Properties File

Modify the renamed `build.properties` file with actual values, as follows:

- **Common properties:**

  – @BEAHOME — the path to the *BEA_HOME* directory where ALBPM is installed.

  – @ALBPM_INSTALL_DIR — the path to the ALBPM installation

- **Fuego Directory (FDI) properties:**

  – @ALBPM_ADMIN_USER@ — the administrative user for logging into the directory
  service. (This user should *not* exist in the database.)

  – @ALBPM_ADMIN_PASSWORD@ — the password for the administrative user ID.

- **FDI database properties:**

  – @DB_HOST@ — the hostname of the machine hosting the database.

  – @DB_PORT@ — the port number of the database service.

  – @DB_ADMIN_USER@ — the DBA (must already exist in the database).

  – @DB_ADMIN_PASSWORD@ — the password for the DBA.

    If using SQL Server 2005 database:

    - Uncomment this line by removing the # character —
      `#fuego.fdi.db.type=mssqlserver`

    - Remove this line — `fuego.fdi.db.type=@DB_TYPE@`

    - @MSSQL_FDI_USER_ID@ — the FDI user (should not exist in the database).

    - @MSSQL_FDI_PASSWORD@ — the password for the FDI user.

    If using Oracle database:

    - @DB_TYPE@ — replace with "`oracle`".

- @ORACLE_SID@ — the SID that the ALER schema was installed on. For Oracle, the default SID is `orcl`; for Oracle XE, the default SID is `xe`.

- @ORACLE_FDI_USER_ID@ — the FDI user (should not exist in the database).

- @ORACLE_FDI_PASSWORD@ — the password for FDI user.

● **Fuego Engine properties:**

  – @DB_HOST@ — the hostname of the machine hosting the database.

  – @DB_PORT@ — the port number of the database service.

  – @DB_ADMIN_USER@ — the DBA (must already exist in the database).

  – @DB_ADMIN_PASSWORD@ — the password for the DBA.

    If using SQL Server 2005 database:

    - Uncomment this line by removing the # pound character — `#fuego.fdi.db.type=mssqlserver`

    - Remove this line — `fuego. server.db.type=@DB_TYPE@`

    - @MSSQL_SERVER_USER_ID@ — the user for the ALBPM process engine (should not exist in the database).

    - @MSSQL_SERVER_PASSWORD@ — the password for ALBPM process engine user.

    If using Oracle database:

    - DB_TYPE@ — replace with "`oracle`".

    - @ORACLE_SID@ — the SID that the ALER schema was installed on. For Oracle, the default SID is `orcl`; for Oracle XE, the default SID is `xe`.

    - @ORACLE_SERVER_USER_ID@ — the user for the ALBPM process engine (should not exist in database).

    - @ORACLE_SERVER_PASSWORD@ — the password for the ALBPM process engine user.

● **Fuego project property:**

  – @ALBPM_INSTALL_DIR — the ALBPM installation directory.

Step 3: Backup the Build Properties File

Make a backup copy of the `build.properties` file since the commands described in Step 7: Run the ALBPM Ant Scripts will delete this file, and you may need it to rerun the Ant scripts in case they fail.

Step 4: Copy the JDBC Drivers

Copy the JDBC driver for Oracle or for SQL Server 2005 into the `BEA_HOME\albpm57FuegoSetupScript\ext` directory.

- Oracle – `ojdbc14.jar`

- SQL Server 2005 – `sqljdbc.jar`

Step 5: Modify the Engine Properties File

Modify the `aler_engine_props.exp` file in the `BEA_HOME\albpm57\FuegoSetupScript` directory, as follows:

- Search for the `<node name="homeDir">` node and make sure that it points to the `BEA_HOME/albpm57/enterprise/server/aler_engine` directory.

- Search for `<node name="logDir">` node and make sure that it points to the `BEA_HOME/albpm57/enterprise/server/aler_engine/log` directory.

- Search for `<entry key="javaArguments" value="">` and make sure that it points to the `BEA_HOME` directory.

Step 6: Set the ALBPM Install Environment

Modify the `setenv.bat` (Windows) or `setenv.sh` (UNIX) file by replacing the `@<parameters>` with the actual values, as follows:

- `@BEAHOME` – the path to the ALBPM `BEA_HOME` directory.

- `@ALBPM_INSTALL_DIR` – the path to the ALBPM installation.

From a command prompt, change to the `BEA_HOME\albpm57\FuegoSetupScript` directory and run either:

- `> setenv.bat` (Windows)

- `> setenv.sh` (UNIX)

Step 7: Run the ALBPM Ant Scripts

From a Windows or UNIX command prompt, run the following Ant scripts from within the `BEA_HOME`\albpm57FuegoSetupScript directory. (The Ant targets are in the `build.xml` file.)

- `> ant create-fdi` (Windows)

- `> ant --noconfig create-fdi` (UNIX)

  After the script completes, then run either:

- `> ant install-workflow` (Windows)

- `> ant --noconfig install-workflow` (UNIX)

This will create a directory service, create an ALBPM process engine, and deploy workflows on that engine.

Step 8: Verify the Installation

Verify the installation by going in the ALBPM Process Administrator console and checking whether the process engine was created and that the workflow project was deployed. For more information, see Start the AquaLogic BPM Process Engine.

Step 9: What's Next?

For additional post-installation steps, see the instructions in Post-Installation Instructions.

For more information on configuring ALER to use the ALBPM Process Engine, see the *Configuring and Managing Advanced Registration Flows* guide.

Using the BEA Installer to Configure the ALBPM Database and Deploy the Advanced Registration Flows

[BASED ON CR360487 - THIS SECTION NEEDS TO BE REVIEWED BY DEV/QA]

The following steps describe how to use the BEA Products installer to install the ALBPM Process Engine and deploy the Advanced Registration Flows without dropping the existing ALER database. Follow the steps in this section if you:

- Successfully installed ALER but chose not to select the ALBPM option and now need to configure ALBPM and deploy the Advanced Registration Flows.

- Attempted to install ALBPM, but the ALBPM deployment did not successfully complete. In which case, you may only need to verify existing information, and possibly make some minor changes.

WARNING: Before installing ALBPM, follow the preparation guidelines in Preparing for Your Installation, especially in regards to completing the Database Installation Procedures for your DBMS.

Step 1: Verify the Installed ALER Web Application

Verify aler webapp is valid

Step 2: Re-run the BEA Products Installer for ALBPM

Re-run the BEA Products installer to install ALBPM and configure .

3.1 choose not to re-configure the aler database

3.2 execute BEAHOME/repository30/common/bin/dbconfig.cmd (for windows)

   execute BEAHOME/repository30/common/bin/dbconfig.sh (for unix)

3.3 setup database for bpm

Step ?: Verify the Installation

Verify the installation by going in the ALBPM Process Administrator console and checking whether the process engine was created and that the workflow project was deployed. For more information, see Start the AquaLogic BPM Process Engine.

Step ?: What's Next?

For additional post-installation steps, see the instructions in Post-Installation Instructions.

For more information on configuring ALER to use the ALBPM Process Engine, see the *Configuring and Managing Advanced Registration Flows* guide.

Uninstalling the Software

The following sections provide procedures for uninstalling and reinstalling the software:

- About the Uninstallation Program

- Uninstalling Your Software in Graphical Mode

- Uninstalling Your Software in Console Mode

- Uninstalling Your Software in Silent Mode

- Reinstalling Your Software

About the Uninstallation Program

The following sections describe how to uninstall your ALER software on Windows and UNIX systems:

- You can uninstall the software using graphical, console, or silent mode. To run the graphical-mode uninstallation program, your console must support a Java-based GUI. If the uninstallation program determines that your system does not support a Java-based GUI, it automatically starts running in console mode.

- You can uninstall individual components of your product distribution, or the entire installation. Dependency checking in the uninstaller ensures that the appropriate components are uninstalled.

- The uninstallation program does not remove the ALER Home directory associated with the installation, the JDK, or any user-created domains. Only the components that were installed by the installation program can be removed. If you choose to uninstall the entire installation, the uninstallation program also removes the product directory associated with the installation unless one of the following is true:

  – The product directory contains user-created configuration or application files—*the uninstallation program does not delete user-created configuration files, application files, or domains.*

  – The complete installation was not uninstalled. If an individual component is uninstalled, only the installation directory for that component is removed; the installation directories for other components are unaffected.

  – The uninstallation program was invoked from within the product directory structure—specifically, from within the `utils\uninstall` directory.

- When uninstalling the ALER plug-ins for Eclipse, WorkSpace Studio will also be removed if WorkSpace Studio was installed by the ALER installer. This may not be desirable if other plug-ins were added to WorkSpace Studio. To avoid uninstalling additional WorkSpace Studio plug-ins, deselect the ALER Plug-ins for Eclipse from the list of components to uninstall.

Uninstalling Your Software in Graphical Mode

Use the following procedure to uninstall the all the product components, or individual components, in graphical mode:

1. Shut down any instances that are running.

2. Start the uninstallation program as described in Table 9-1.

Table 9-1 Starting the uninstallation program in the Graphical mode

To start the uninstallation program on...	Do this...
Windows	1. From the Windows Start menu, choose Start→ All Programs→ AquaLogic Enterprise Repository 3.0→ Uninstall AquaLogic Enterprise Repository. 2. The BEA Products Uninstaller Welcome window is displayed. Proceed to step 3.
UNIX	1. Go to the following directory: ALER_HOME/utils/uninstall where, ALER_HOME represents the directory in which you installed your ALER software. 2. Type uninstall.sh at the prompt and press ENTER. The BEA Products Uninstaller Welcome window is displayed. proceed to step 3. **Note:** If your system supports a graphical user interface, the uninstallation program starts in graphical mode. If your system does not support a graphical user interface, the uninstallation program starts in console mode. If console mode is started, see Uninstalling Your Software in Console Mode for instructions.

3. Click Next to start the uninstall program.

   The Choose Components window is displayed.

4. Select the components to uninstall by selecting or clearing the appropriate check boxes, and click Next. By default, all installed components are selected, indicating that they will be uninstalled.

5. Click Done in the Uninstalling AquaLogic Enterprise Repostory window to exit the uninstallation program.

Uninstalling Your Software in Console Mode

Use the following procedure to uninstall the complete product installation, or individual components, using the command-line interface:

1. Shut down any instances that are running.

2. Start the uninstallation program as described in Table 9-2.

Table 9-2 Starting the Installation Program in the Console Mode

To start the uninstallation program on...	Do this...
Windows	1. Go to the following directory: ALER_HOME\utils\uninstall where, ALER_HOME represents the directory in which you installed your ALER software. 1. Type uninstall.cmd and press Enter. 2. The BEA Products Uninstaller Welcome window is displayed. Proceed to step 3.
UNIX	1. Go to the following directory: ALER_HOME\utils\uninstall where, ALER_HOME represents the directory in which you installed your ALER software. 2. Type uninstall.sh at the prompt and press enter.Proceed to step 3 The BEA Products Uninstaller Welcome window is displayed. **Note:** If your system supports a graphical user interface, the uninstallation program starts in graphical mode. If your system does not support a graphical user interface, the uninstallation program starts in console mode.

3. Press Enter or type next to proceed to the next panel of the uninstallation program.

   Note: Instead of typing complete words when you want to enter [Exit], [Previous], and [Next], you can use the following one-letter shortcuts: x, p, and n, respectively.

   The Choose Components to uninstall pane is displayed.

4. Select the components you want to uninstall. The available components are displayed.

5. Enter number exactly as it appears in brackets to toggle selection OR [Exit][Previous][Next]>

6. By default, all installed components are selected, indicating that they will be removed. To leave a component installed on your system, type the numeric code for that component on the command line, exactly as it appears within the brackets. A check mark (Windows systems) or x (UNIX systems) beside the entry is cleared, indicating that it will not be uninstalled. Choose the components you want to uninstall. Dependency checking is performed to ensure that you do not uninstall a component that is required by another component.

7. Press Enter or type next to proceed with the uninstallation process.

8. When the uninstallation process is complete, press Enter or type exit to complete the uninstallation and exit the uninstallation program.

Uninstalling Your Software in Silent Mode

When you uninstall your ALER software in silent mode, the complete installation of your software is uninstalled. You cannot use silent-mode uninstallation to uninstall individual ALER components.

When you run the uninstallation program in silent mode, it leaves behind the same files and directories as when you run the uninstallation program in graphical and console modes. You can manually delete these files.

Although you can use silent-mode uninstallation to manually uninstall your software, silent-mode uninstall is intended for use in scripts. You can adapt the steps in Table 8-3 for use in scripts.

Use the following procedure to uninstall your ALER software in silent mode:

1. Shut down any instances that are running.

2. Start the uninstallation program as described in Table 9-3.

Table 9-3 Starting the Uninstalling Program in the Silent Mode

To start the uninstallation program on this platform...	Perform the following steps...
Window	1. Open a Command Prompt window and go to the following directory: `ALER_HOME\utils\uninstall` Here `ALER_HOME` represents the directory in which you installed your ALER software. 2. Execute the following command at the prompt: `uninstall -mode=silent`
UNIX	1. Go to the following directory: `ALER_HOME\utils\uninstall` Here `ALER_HOME` represents the directory in which you installed ALER. 2. At the prompt, enter the following command: `sh uninstall.sh -mode=silent`

Note: When you run the uninstallation program in silent mode, no messages are displayed indicating the uninstallation is in progress or has completed successfully, even if errors are encountered.

You can also include the `-log=full_path_to_log_file` option in the command line to create a verbose installation log. For example:

```
uninstall -mode=silent -log=C:\logs\ALER30_uninstall.log
```

For more information, see Generating a Verbose Installation Log.

Reinstalling Your Software

You cannot reinstall the same version of any BEA product on top of a previously installed version of the same product—in the same BEA Home directory or in the same file location. You can, however, add products and product components to an existing installation. For example, you can install ALER during one installation, and ALBPM during a separate installation.

To reinstall the same version of one of the product components or the entire ALER distribution in the same location, you must first uninstall the previous installation.

If you try to install a complete copy of the ALER software in a BEA Home directory that already contains a complete installation, an error message is displayed. Click or type OK to return to the Choose BEA Home directory prompt.

At the prompt, choose one of the following options:

● To continue installing the software using a different ALER Home directory, select an existing ALER Home directory that does not contain a previous installation, or create a new BEA Home directory.

● Exit the installation program. If you want to reinstall your BEA Products software in the same BEA Home, you must uninstall the previous installation. You can invoke the uninstall program appropriate for your platform, as described in one of the following sections:

– Uninstalling Your Software in Graphical Mode

– Uninstalling Your Software in Console Mode

– Uninstalling Your Software in Silent Mode

Then reinstall the software as described in Starting the Installation Program.

Uninstalling the Software