



BEA AquaLogic® Analytics

Installation Guide

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Welcome to AquaLogic Analytics

This book describes how to install and deploy AquaLogic Analytics 2.1 (“Analytics”).

How to Use This Book

This guide has been designed to be a quick reference for users with installation experience, while also providing detailed instructions for users installing for the first time.

Audience

This guide is written for the user responsible for installing Analytics. This user must have strong knowledge of the platform operating system, database, web and application servers, and any other third-party software required for installation.

Organization

This guide includes the following chapters:

- This chapter provides information on how to use this guide and describes other resources available to help install, deploy, and administer Analytics.
- [Chapter 2, “Installation Prerequisites,”](#) provides hardware and software requirements, as well as environmental and third-party software prerequisites. You must read this chapter and meet the prerequisites prior to proceeding to the installation.
- [Chapter 3, “Quickstart Overview,”](#) provides a high level overview of the Analytics installation procedures. Sufficient detail is provided to allow an experienced portal

administrator to quickly install Analytics. Cross-references link the high level tasks to detailed procedures in other chapters.

- [Chapter 4, “Installation,”](#) provides detailed instructions for installing and configuring Analytics.
- [Appendix A, “Troubleshooting,”](#) provides details about Analytics’ installation-related logs and troubleshooting tips.
- [Appendix B, “Uninstalling Analytics,”](#) provides instructions for uninstalling Analytics.

Typographical Conventions

This book uses the following typographical conventions.

Table 1-1 Typographical Conventions

Convention	Typeface	Examples/Notes
<ul style="list-style-type: none"> • Items you need to take action on (such as files or screen elements) 	bold	<ul style="list-style-type: none"> • Upload Procedures.doc to the portal. • To save your changes, click Apply Changes.
<ul style="list-style-type: none"> • User-defined variables • New terms • Emphasis • Object example names 	<i>italic</i>	<ul style="list-style-type: none"> • The migration package file is located in <i>install_dir</i>\serverpackages. • <i>Portlets</i> are Web tools embedded in your portal. • The URI <i>must</i> be a unique number. • The example Knowledge Directory displayed in Figure 5 shows the <i>Human Resources</i> folder.
<ul style="list-style-type: none"> • Text you enter • Computer generated text (such as error messages) • Code samples 	computer	<ul style="list-style-type: none"> • Type Marketing as the name of your community. • This script may generate the following error: ORA-00942 table or view does not exist • Example: <pre><setting name="SSOCookieIsSecure"> <value xsi:type="xsd:integer">0</value> </setting></pre>
<ul style="list-style-type: none"> • Environment variables 	ALL_CAPS	<ul style="list-style-type: none"> • The default location of BEA_HOME is C:\bea.

BEA Documentation and Resources

This section describes other documentation and resources provided by BEA.

Table 1-2 BEA Documentation and Resources

Resource	Description
Installation Worksheet	This worksheet allows you to record prerequisite information necessary for installing AquaLogic Analytics. It is available on edocs.bea.com/alui/analytics/docs21/ .
Release Notes	The release notes provide information about new features, issues addressed, and known issues in the release. They are available on edocs.bea.com/alui/analytics/docs21/ and on any physical media provided for delivering the application.
Online Help	The online help is written for all levels of Analytics users. It describes the user interface for Analytics and gives detailed instructions for completing tasks in Analytics. To access online help, click the help icon.
Developer Guides, Articles, API Documentation, Blogs, Newsgroups, and Sample Code	These resources are provided for developers on the BEA dev2dev site (dev2dev.bea.com). They describe how to build custom applications using AquaLogic User Interaction and how to customize AquaLogic User Interaction products and features.

Table 1-2 BEA Documentation and Resources

Resource	Description
AquaLogic User Interaction (ALUI) and AquaLogic Business Process Management (ALBPM) Support Center	<p>The ALUI and ALBPM Support Center is a comprehensive repository for technical information on ALUI and ALBPM products. From the Support Center, you can access products and documentation, search knowledge base articles, read the latest news and information, participate in a support community, get training, and find tools to meet most of your ALUI and ALBPM-related needs. The Support Center encompasses the following communities:</p> <p>Technical Support</p> <p>Submit online service requests, check the status of your requests, search the knowledge base, access documentation, and download service packs and hotfixes.</p> <p>User Group</p> <p>Participate in user groups; view webinars, presentations, the CustomerConnection newsletter, and the Upcoming Events calendar.</p> <p>Product Center</p> <p>Download product updates, service packs, and patches; view the Product Interoperability matrix (supported third-party products and interoperability between products).</p> <p>Developer Center</p> <p>Download developer tools, view code samples, access technical articles, and participate in discussions.</p> <p>Education Services</p> <p>Review the available education options, then choose courses by role and delivery method (Live Studio, Public Classroom Training, Remote Classroom, Private Training, or Self-Paced eLearning).</p> <p>Profile Center</p> <p>Manage your implementation details, local user accounts, subscriptions, and more.</p> <p>If you do not see the Support Center when you log in to http://support.plumtree.com, contact ALUISupport@bea.com or ALBPMSupport@bea.com for the appropriate access privileges.</p>

Table 1-2 BEA Documentation and Resources

Resource	Description
Technical Support	<p>If you cannot resolve an issue using the above resources, BEA Technical Support is happy to assist. Our staff is available 24 hours a day, 7 days a week to handle all your technical support needs.</p> <p>E-mail: ALUISupport@bea.com or ALBPMSupport@bea.com</p> <p>Phone Numbers:</p> <p>USA, Canada +1 866.262.7586 or +1 415.263.1696</p> <p>EMEA +44 1494 559127</p> <p>Asia Pacific +61 2.9931.7822</p> <p>Australia/NZ +61 2.9923.4030</p> <p>Singapore +1 800.1811.202</p>

Welcome to AquaLogic Analytics

Installation Prerequisites

Complete the following basic steps to prepare your network and host computers for deployment:

1. Read the product release notes for information on compatibility issues, known problems, and workarounds that might affect how you proceed with your deployment. Release notes are located at the top-level directory of the product package.
2. Print the configuration worksheets provided in the Analytics Installation and Configuration Worksheets document:
[Analytics_Installation_and_Configuration_Worksheets_WLP.pdf](#)
3. Determine the values you have assigned for this deployment, and record these values in the Analytics Installation and Configuration Worksheets document.
4. Provision host computers for your deployment and install prerequisite software. For details, see [“Hardware and Software Requirements” on page 2-1](#).

Hardware and Software Requirements

The following table summarizes the hardware, operating system, and software requirements for Analytics

Caution: IPv6 is not supported. You should verify that IPv6 is not enabled prior to installing Analytics.

Note: For an up-to-date list of supported versions, refer to the Interoperability page in the Support Center.

Table 2-1 Hardware and Software Requirements

Component	Requirement
Analytics Host Computer	<p>Hardware</p> <ul style="list-style-type: none"> • 1.6 GHz[^], with 2MB L2 cache • 1 GB memory • 2 GB disk space <p>Operating System</p> <ul style="list-style-type: none"> • Windows Server 2003 SP1 (or R2) • Red Hat Enterprise Linux 4 on x86 • SUSE Linux 9 on x86 • AIX 5.3 on POWER3, POWER4, POWER5 • Solaris 8, 9, and 10 on SPARC
Database Server Host Computer	<p>Hardware</p> <ul style="list-style-type: none"> • Dual 2.0 GHz[^], with 2 MB L2 cache • 2 GB memory[^] • Mirrored SCSI drives (either 15K or 10K RPM) • Disk space to accommodate growth of the Analytics database. Growth is directly correlated to the number of events occurring. Events include such things as page views, portlet views, and user logins. Estimate 100 MB of growth per 1 million events. For example, if your portal receives roughly 1 million events per day, you should anticipate growth of 36.5 GB per year. <p>Software</p> <ul style="list-style-type: none"> • Microsoft SQL Server 2000 SP3a[^], 2005 • Oracle 9.0.2.5[^] in default or Oracle RAC configuration • Oracle 10.1.0.3[^] in default or Oracle RAC configuration • Oracle 10.2.0.1[^] in either default or Oracle RAC configuration
Portal Compatibility	<ul style="list-style-type: none"> • WebLogic Portal 10.0
Browser	<ul style="list-style-type: none"> • Microsoft Internet Explorer 5.5[^] • Netscape Navigator 7.1[^] • Mozilla Firefox 1.0[^]

Default Ports Used by Analytics

The following table summarizes the default ports that are used by Analytics:

Table 2-2 Ports required by Analytics

Communication	Description
Portal to Analytics port 31314	Used for data collection.
Portal to Analytics port 11944	Used to display reports.
Portal URL (port number is environment-specific)	Used to synchronize portal objects.

Installation Prerequisites

Quickstart Overview

This chapter provides brief, high level instructions for the installation of Analytics, and is intended to quickly guide experienced administrators through the installation procedure.

Installation

Before you install Analytics, ensure that you have completed pre-installation steps. For details, see [“Installation Prerequisites” on page 2-1](#)

Installing Analytics

For more complete details on performing this task, see [“Installing Analytics” on page 4-1](#).

To install Analytics:

1. Back up the machine running Analytics using the tool of your choice.
2. Log in to the remote server host computer as the local administrator (on Windows) or a user with directory write privileges (on UNIX or Linux).
3. Copy the installer to the disk location from which you plan to launch it.
4. Launch the Analytics Installer.
 - On a Windows host, the installer is **ALAnalytics_WLP_v2-1.exe**.
 - On a UNIX or Linux host, the installer is **ALAnalytics_WLP_v2-1**.

5. Complete the installation wizard pages according to the settings you planned when you completed the Analytics Installation Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.
6. After the installer has copied all files to the installation directory, click **Done**. The Analytics Configurator will launch; however, do not complete the configuration at this time.

Integrating Analytics with WebLogic Portal

To integrate Analytics with your WebLogic Portal, you must add Analytics-specific facets to both your enterprise application and your web application. For more complete details on performing these tasks, see [“Integrating Analytics with WebLogic Portal” on page 4-3](#). This section discusses:

- Adding the Analytics Facet to your EAR Application
- Adding the Analytics Facet to your Web Application
- Configuring the Analytics Integration
- Deploying Analytics in your Production Domain

For more information about adding facets to your WebLogic Portal applications, see *WebLogic Portal Development Guide*.

Adding the Analytics Facet to your EAR Application

In the Package Explorer view, right-click the EAR project. Select the **WebLogic Portal (Optional)** facet. All the optional facets for WebLogic Portal are selected by default; you can de-select facets you do not need, but leave the Analytics facet selected.

Adding the Analytics Facet to your Web Application

In the Package Explorer view, right-click your web project. Select the **WebLogic Portal (Optional)** facet. All the optional facets for WebLogic Portal are selected by default; you can de-select facets you do not need, but leave the Analytics facet selected.

Configuring the Analytics Integration

To complete the Analytics integration within your development environment, edit the Analytics configuration file. To do this, you must know the following:

- The Analytics Administration URL

- The Analytics Reports URL
- The Open API Config host name and port number

To configure the Analytics integration, perform the following:

1. In the Merged Projects tab, copy the analytics-config.xml file to your Workspace.
2. Edit the analytics-config.xml file to match the configuration of the configuration of your Analytics environment.

Deploying Analytics In Your Production Domain

Use the WebLogic Server Console to add the Analytics library to your production domain and ensure it is deployed on every server within your cluster. You must deploy two libraries:

wlp-analytics-web-lib.war and wlp-analytics-app-lib.ear

Configuring the Analytics Database

Perform one of the following procedures that is appropriate to your database platform:

- [Creating and Setting Up the Analytics Database on Microsoft SQL Server 2000](#)
- [Creating and Setting Up the Analytics Database on Microsoft SQL Server 2005](#)
- [Creating and Setting Up the Analytics Database on Oracle](#)

Creating and Setting Up the Analytics Database on Microsoft SQL Server 2000

For more complete details on performing this task, see “[Creating and Setting Up the Analytics Database on Microsoft SQL Server 2000](#)” on page 4-7.

To create and set up the Analytics database on Microsoft SQL Server 2000:

1. Copy the scripts from *install_dir*\ptanalytics\2.1\sql\mssql to the database host computer.
2. Create the Analytics database user:
 - a. Create the Analytics database user with the user name you provisioned when you completed the Analytics Configurator Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.
 - b. Configure the Analytics database user to use SQL Server Authentication.
 - c. Set the Analytics database user password to the password you designated when you completed the Analytics Installation and Configuration Worksheets document.

3. Create the Analytics database with the following properties:
 - Create a database with the name you provisioned when you completed the Analytics Configurator Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.
 - Configure the size of the database.
4. Grant the Analytics database user the **public** and **db_owner** roles for the Analytics database.
5. On the Analytics database **Properties | Permissions** tab, grant the Analytics database user all permissions to the Analytics database.
6. Connect to the Analytics database as the Analytics database user.
7. Run the setup scripts for the database, located in the *install_dir*\ptanalytics\2.1\sql\mssql\ folder, in the following order (make sure that you are running the scripts on the Analytics database):
 - a. **db_creation.sql**
 - b. **install_seeddata.sql**

Creating and Setting Up the Analytics Database on Microsoft SQL Server 2005

For more complete details on performing this task, see [“Creating and Setting Up the Analytics Database on Microsoft SQL Server 2005”](#) on page 4-8.

To create and set up the Analytics database on Microsoft SQL Server 2005:

1. Copy the scripts from *install_dir*\ptanalytics\2.1\sql\mssql to the database host computer.
2. Create the Analytics database user:
 - a. Create the Analytics database user with the user name you provisioned when you completed the Analytics Configurator Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.
 - b. Configure the Analytics database user to use SQL Server Authentication.
 - c. Set the Analytics database user password to the password you designated when you completed the Analytics Installation and Configuration Worksheets document.
3. Create the Analytics database with the following properties:

- Create a database with the name you provisioned when you completed the Analytics Configurator Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.
 - Configure the size of the database.
 - Change the default database for the Analytics database user to the Analytics database.
4. Grant the Analytics database user the **db_owner** role for the Analytics database.
 5. Create the Analytics database schema. Specify the Analytics database user as the schema owner.
 6. Grant the Analytics database user the **sysadmin** server role.
 7. Connect to the Analytics database as the Analytics database user, using SQL Server Authentication.
 8. Run the setup scripts for the database, located in the *install_dir\ptanalytics\2.1\sql\mssql* folder, in the following order (make sure that you are running the scripts on the Analytics database):
 - a. **db_creation.sql**
 - b. **install_seeddata.sql**

Creating and Setting Up the Analytics Database on Oracle

For more complete details on performing this task, see [“Creating and Setting Up the Analytics Database on Oracle” on page 4-9](#).

To create and set up the Analytics database on Oracle:

1. Copy the **oracle** directory from *install_dir\ptanalytics\2.1\sql* to the Analytics database’s host computer.
2. Log on to the host computer for the Analytics database as owner of the Oracle system files.
3. Run the following scripts against your Oracle database as **sysdba**:
 - a. Determine the name of the SID that you will be using for this installation. If you changed the SID from the default when you installed the portal, you need to update **create_analytics_tablespaces.sql** to reflect the SID that you used, substituting all occurrences of the default SID name with your SID name. The default SID name is **BEAS**.
If you are creating a new SID, configure AL32UTF8 as the database character set and AL16UTF16 as the national character set.

- b. Run the script **create_analytics_tablespaces.sql**.
 - c. Run the script **create_analytics_user.sql**. For details on editing the script to use anything other than the default user and password, see [“Creating and Setting Up the Analytics Database on Oracle”](#) on page 4-9.
 - d. Add the Oracle database user and password values into the Analytics Configurator Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.
4. Execute the following steps as the **analytics** user, which you just created. The scripts that you run are located in the **oracle** directory that you copied in Step 1.
 - a. Run the script **create_analytics_schema.sql**.
 - b. Run the script **install_analytics_seeddata.sql**.
5. Run your database’s analysis tool on the portal database to increase the efficiency of the database.

Configuring Analytics

For more complete details on performing this task, see [“Configuring Analytics” on page 4-10](#)

To configure Analytics:

1. Launch the Analytics Configurator:
 - In Windows, choose **Start | Programs | BEA | Analytics Configurator**.
 - On UNIX or Linux, open **`http://localhost:11944/configurator/ui/start.jsf`** in a web browser.
2. Complete the configuration pages using the values you decided on when you completed the Analytics Configurator Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.
3. An installer screen appears that summarizes your configuration. Review this screen and make changes, if necessary. Otherwise, click **Update**.

Registering Portal Events with Analytics

To register portal events, run the following from the command line on the portal host machine:

- `PTANALYTICS_HOME\bin\AnalyticsLoadEvents.bat`
`..\settings\config\analytics-wlp-event-def.xml` (Windows)
- `PTANALYTICS_HOME/bin/AnalyticsLoadEvents.sh`
`..\settings/config/analytics-wlp-event-def.xml` (UNIX/Linux)

Starting Analytics and Portal Services

For more complete details on performing this task, see [“Starting Analytics and Portal Services” on page 4-13](#).

To start Analytics and portal services, perform one of the following:

- On Windows, ensure the BEA AL Analytics service has been started in the Windows Control Panel. Then ensure the BEA AL Analytics Collector service has been started.
- On UNIX and Linux, ensure the BEA AL Analytics service has been started by using the command: `install_dir/ptanalytics/2.1/bin/analyticsd.sh start`. Then ensure the BEA AL Analytics Collector service has been started by using the command: `install_dir/ptanalytics/2.1/bin/collectord.sh start`.

Quickstart Overview

Installation

This chapter describes the steps you take to install Analytics and its components:

1. Ensure you have completed pre-installation steps. For details, see [“Installation Prerequisites” on page 2-1](#)
2. Install Analytics on the remote server host computer. For details, see [“Installing Analytics” on page 4-1](#).
3. Integrate Analytics with WebLogic Portal. For details, see [“Integrating Analytics with WebLogic Portal” on page 4-3](#)
4. Configure the Analytics database. For details, see [“Configuring the Analytics Database” on page 4-7](#).
5. Configure Analytics. For details, see [“Configuring Analytics” on page 4-10](#).
6. Register portal events with Analytics. For details, see [“Registering Portal Events with Analytics” on page 4-12](#).
7. Start Analytics and portal services. For details, see [“Starting Analytics and Portal Services” on page 4-13](#).

Installing Analytics

This section describes how to install the core application. The instructions are the same for installing on a Windows or UNIX/Linux host, with slight exceptions as noted. To install Analytics:

1. Back up the machine running Analytics using the tool of your choice.
2. Log in to the remote server host computer as the local administrator (on Windows) or a user with directory write privileges (on UNIX or Linux).
3. Copy the installer to the disk location from which you plan to launch it. The installer file is one of the following:
 - Windows: **ALAnalytics_WLP_v2-1.exe**
 - UNIX/Linux: **ALAnalytics_WLP_v2-1**
4. Close all unnecessary applications.
5. Execute the installer file.
6. Complete the installation wizard pages as described in the following table and according to the settings you planned when you completed the Analytics Installation Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.

Table 4-1 Installation Wizard Pages

Wizard Page	Description
Introduction	Description of installer wizard.
License Agreement	Read and accept the license agreement.
Installation Directory	The default is: <ul style="list-style-type: none"> • C:\bea\alui (Windows) • /opt/bea/alui (UNIX and Linux)
License Directory	Specify the path to the location where you want to store the evaluation version of the license.bea file. This location must be in BEA_HOME. The default location of BEA_HOME is: <ul style="list-style-type: none"> • C:\bea (Windows) • /opt/bea (UNIX/Linux)
Existing License Update	(Only appears if you have an existing license) Choose to either merge the evaluation license with the existing license, replace the existing license with the evaluation license, or leave the existing license alone. If you already have an production license for Analytics, choose Leave Alone .
Application Port	Select http or https protocol. The default port is 11944 . This is the port that the portal uses to query Analytics for the Analytics reports UI.

7. On the final Wizard page, click **Install** to begin the installation.

Note: After the installer has copied all files to the installation directory, click **Done**. The Analytics Configurator will launch; however, do not complete the configuration at this time. First, configure the Analytics Database, described in “[Configuring the Analytics Database](#)” on page 4-7. Note that the Analytics Configurator does not launch on Linux systems if a default browser is not specified.

Note: The installer writes a log file to the directory where it is installed (for example: **C:\bea\alui**). If you encounter problems during installation, examine the error messages in the log file.

Caution: We recommend that you sync the clocks on the servers that run Analytics and the portal before proceeding with configuration. If the clocks are not aligned, some events and sync jobs behave incorrectly.

Integrating Analytics with WebLogic Portal

To integrate Analytics with your WebLogic Portal, you must add Analytics-specific facets to both your enterprise application and your web application. This section discusses:

- Adding the Analytics Facet to your EAR Application
- Adding the Analytics Facet to your Web Application
- Configuring the Analytics Integration
- Deploying Analytics in your Production Domain

For more information about adding facets to your WebLogic Portal applications, see *WebLogic Portal Development Guide*.

Adding the Analytics Facet to your EAR Application

To add the Analytics facet to your EAR application:

1. In the Package Explorer view, right-click the EAR Project and choose **Properties**.
2. Select **Project Facets** in the tree that is displayed in the left pane of the dialog.
3. Click **Add/Remove Project Facets**.

The **Add/Remove Project Facets - Select Project Facets** dialog appears.

4. Expand and select the **WebLogic Portal (Optional)** check box.

All the optional facets for WebLogic Portal are selected by default; you can de-select facets you do not need, but leave the Analytics facet selected.

5. Click **Finish**.
6. Click **OK**.

The Package Explorer view includes the new facet content.

Adding the Analytics Facet to your Web Application

To add the Analytics facet to your web application:

1. In the Package Explorer view, right-click your web project and choose **Properties**.
2. Select **Project Facets** in the tree that is displayed in the left pane of the dialog.
The project facets associated with your web project appear in the table.
3. Click **Add/Remove Project Facets**. The **Add/Remove Project Facets - Select Project Facets** dialog displays.
4. Expand and select the **WebLogic Portal (Optional)** check box.
All the optional facets for WebLogic Portal are selected by default, you can de-select facets you do not need, but leave the Analytics facet selected.
5. Click **OK** to add the selected facet.

Configuring the Analytics Integration

To complete the Analytics integration within your development environment, edit the Analytics configuration file. To do this, you must know the following:

- The Analytics Administration URL
- The Analytics Reports URL
- The Open API Config fully-qualified domain name and port number

To edit the configuration file:

1. In the Merged Projects tab, navigate to the analytics-config.xml file:
`//yourEAR/META-INF/templates/analytics-config.xml`
2. Right-click the analytics-config.xml file and select **Copy to Workspace...** to view the Copy to Workspace dialog.

3. Click **OK**.

The analytics-config.xml file is copied to your Workspace. You can now make any modifications.

4. In the Projects tab, navigate to the copied analytics-config.xml file.

5. Right-click the file and select **Open With > Text Editor**.

6. Edit the analytics-config.xml file to match the configuration of the configuration of your Analytics environment.

See below for a sample analytics-config.xml file that includes explanatory comments.

7. Save the edited configuration file.

Sample analytics-config.xml File

```
<?xml version="1.0"?>
<analytics-config xmlns="http://www.bea.com/ns/portal/90/analytics-config">
<! -- Ensure that the enabled attribute is defined as "true". --!>
    <enabled>true</enabled>
<! -- When configuring Analytics to work with WebLogic Portal, you must use
fully-qualified domain names (server.domain.com) when referencing Analytics
Administration, the WebLogic Portal Administration Console, and the Analytics
Configuration Tool when editing the XML configuration file. You cannot use IP
addresses. --!>
<! -- Use the open-api-config element to define the fully-qualified domain name
and port of the machine on which Analytics is installed. --!>
    <open-api-config>
        <host-name>work.bea.com</host-name>
        <port>31314</port>
    </open-api-config>
<! -- In the reports-url element, replace work.bea.com with the fully-qualified
domain name that you defined in the open-api-config element. --!>
<reports-url>http://work.bea.com:11944/analytics/ui/console.jsf?EnterpriseAppN
ame={url:enterpriseAppName}&WebAppName={url:webAppName}</reports-url>
<! -- In the admin-url element, replace work.bea.com with the fully-qualified
domain name that you defined in the open-api-config element. --!>
```

Installation

```
<admin-url>http://work.bea.com:11944/asmanager/ui/runtimemgr.jsf?EnterpriseAppName={url:enterpriseAppName}&amp;WebAppName={url:webAppName}</admin-url>
```

```
<! -- Optionally, add references to WebLogic Portal property sets for collection of Analytics user profile information. User profile values for the referenced Property Set attributes will be collected on behalf of users when they log into a portal application and sent along for storage in the Analytics database. These profile values can then be used for report filtering in the Analytics Administration Console.
```

```
For more information about property sets, see the WebLogic Portal User Management Guide. --!>
```

```
<profile-property>GroupSpace:im_id</profile-property>  
<profile-property>GroupSpace:phone_number</profile-property>  
<profile-property>GroupSpace:first_name</profile-property>  
<profile-property>GroupSpace:timezone</profile-property>  
<profile-property>GroupSpace:email</profile-property>  
<profile-property>GroupSpace:last_name</profile-property>  
<profile-property>GroupSpace:title</profile-property>  
</analytics-config>
```

Deploying Analytics In Your Production Domain

In this procedure, you will use the WebLogic Server Console to add the Analytics library to your production domain and ensure it is deployed on every server within your cluster. You will deploy two libraries: `wlp-analytics-web-lib.war` and `wlp-analytics-app-lib.ear`

To deploy Analytics to your WebLogic Portal production domain:

1. From the WebLogic Portal domain where you wish to deploy Analytics, run the WebLogic Server Console.
2. In the Domain Structure section, select **Deployments**. This displays a list of the deployed components.
3. In the Change Center section, click **Lock & Edit**.
4. In the Summary of Deployments section, click **Install**.
5. Navigate to the location of the `wlp-analytics-web-lib.war` file and select it (`WebLogic_Server_Home/portal/lib/modules/wlp-analytics-web-lib.war`).

6. Click **Next**.
7. Select **Install this deployment as a library** and click **Next**.
8. Make changes as required.
9. Click **Finish**.
10. Optionally, verify that the library is deployed to the server.
 - a. In the Deployments table, navigate to the library you just deployed.
 - b. Click the name of the library to view its configuration.
 - c. In the Targets tab, verify that the library is targeting the correct server(s).
 - d. Click **Save**.
11. In the Change Center section, click **Activate Changes**.
12. Repeat these steps for the `wlp-analytics-app-lib.ear` library.

Configuring the Analytics Database

This section describes how to set up the Analytics database. It contains the following sections:

- [Creating and Setting Up the Analytics Database on Microsoft SQL Server 2000](#)
- [Creating and Setting Up the Analytics Database on Microsoft SQL Server 2005](#)
- [Creating and Setting Up the Analytics Database on Oracle](#)

Creating and Setting Up the Analytics Database on Microsoft SQL Server 2000

To create and set up the Analytics database on Microsoft SQL Server 2000:

1. Copy the scripts from `install_dir\ptanalytics\2.1\sql\mssql` to the database host computer.
2. Create the Analytics database user:
 - a. Create the Analytics database user with the user name you provisioned when you completed the Analytics Configurator Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.
 - b. Configure the Analytics database user to use SQL Server Authentication.

- c. Set the Analytics database user password to the password you designated when you completed the Analytics Installation and Configuration Worksheets document.
3. Create the Analytics database with the following properties:
 - Create a database with the name you provisioned when you completed the Analytics Configurator Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.
 - Configure the size of the database. The growth of the database is directly correlated to the number of *events* present in the system. Events include such things as page views, portlet views, user logins, and discussion posts. Estimate 100 MB of growth per 1 million events. For example, if your portal receives roughly 1 million events per day, you should anticipate growth of 36.5 GB per year.
4. Grant the Analytics database user the **public** and **db_owner** roles for the Analytics database.
5. On the Analytics database **Properties | Permissions** tab, grant the Analytics database user all permissions to the Analytics database.
6. Connect to the Analytics database as the Analytics database user.
7. Run the setup scripts for the database, located in the *install_dir\ptanalytics\2.1\sql\mssql* folder, in the following order (make sure that you are running the scripts on the Analytics database):
 - a. **db_creation.sql**
 - b. **install_seeddata.sql**

Next, configure the Analytics application, as described in [“Configuring Analytics” on page 4-10](#).

Creating and Setting Up the Analytics Database on Microsoft SQL Server 2005

To create and set up the Analytics database on Microsoft SQL Server 2005:

1. Copy the scripts from *install_dir\ptanalytics\2.1\sql\mssql* to the database host computer.
2. Create the Analytics database user:
 - a. Create the Analytics database user with the user name you provisioned when you completed the Analytics Configurator Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.

- b. Configure the Analytics database user to use SQL Server Authentication.
 - c. Set the Analytics database user password to the password you designated when you completed the Analytics Installation and Configuration Worksheets document.
3. Create the Analytics database with the following properties:
 - Create a database with the name you provisioned when you completed the Analytics Configurator Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.
 - Configure the size of the database. The growth of the database is directly correlated to the number of *events* present in the system. Events include such things as page views, portlet views, user logins, and discussion posts. Estimate 100 MB of growth per 1 million events. For example, if your portal receives roughly 1 million events per day, you should anticipate growth of 36.5 GB per year.
 - Change the default database for the Analytics database user to the Analytics database.
 4. Grant the Analytics database user the **db_owner** role for the Analytics database.
 5. Create the Analytics database schema. Specify the Analytics database user as the schema owner.
 6. Grant the Analytics database user the **sysadmin** server role.
 7. Connect to the Analytics database as the Analytics database user, using SQL Server Authentication.
 8. Run the setup scripts for the database, located in the *install_dir\ptanalytics\2.1\sql\mssql* folder, in the following order (make sure that you are running the scripts on the Analytics database):
 - a. **db_creation.sql**
 - b. **install_seeddata.sql**

Next, configure the Analytics application, as described in “Configuring Analytics” on page 4-10

Creating and Setting Up the Analytics Database on Oracle

To create and set up the Analytics database on Oracle:

1. Copy the **oracle** directory from *install_dir\ptanalytics\2.1\sql* to the Analytics database’s host computer. This folder contains the scripts that you will use to set up and configure the Analytics Oracle Database.

2. Log on to the host computer for the Analytics database as owner of the Oracle system files.
3. Execute the following steps as the **system** user in your Oracle database.
 - a. Determine the name of the SID that you will be using for this installation. If you changed the SID from the default when you installed the portal, you need to update **create_analytics_tablespaces.sql** to reflect the SID that you used, substituting all occurrences of the default SID name with your SID name. The default SID name is **BEAS**.

If you are creating a new SID, configure AL32UTF8 as the database character set and AL16UTF16 as the national character set.
 - b. Run the script **create_analytics_tablespaces.sql** for your platform. This file is located in a platform specific subdirectory within the **oracle** directory that you copied in Step 1.
 - c. Run the script **create_analytics_user.sql**.
Note: If you do not want the script to use the defaults when creating the Oracle database user and password, edit the script. The default user is **analyticsdbuser**; the default password is **analyticsdbuser**. The **create_analytics_user.sql** script is located in the **oracle** directory that you copied in Step 1.
 - d. Add the Oracle database user and password values into the Analytics Configurator Worksheet, which is included in the Analytics Installation and Configuration Worksheets document (you will enter these values into the Analytics Configurator during the procedure described in “Configuring Analytics”).
4. Execute the following steps as the **analytics** user that you just created.
 - a. Run the script **create_analytics_schema.sql**. This script creates all of the tables and indexes that are necessary to run Analytics. The **create_analytics_schema.sql** script is located in the **oracle** directory that you copied in Step 1.
 - b. Run the script **install_analytics_seeddata.sql**. This script adds all of the initial seed data that are necessary to run the Analytics product. The **install_analytics_seeddata.sql** script is located in the **oracle** directory that you copied in Step 1.
5. Run your database’s analysis tool on the portal database to the efficiency of the database.

Next, configure the Analytics application, as described in [“Configuring Analytics” on page 4-10](#)

Configuring Analytics

This section describes how to configure Analytics.

Note: Different sets of component-specific configuration pages appear, depending on the components that you just installed.

To configure Analytics:

1. Return to the browser window that launched when you completed the installer. If you have closed the browser window, you can launch the Analytics Configurator on Windows by choosing **Start | Programs | BEA | Analytics Configurator**. On UNIX or Linux, open the following location in a web browser: <http://localhost:11944/configurator/ui/start.jsf>.

Caution: On Windows 2003, IE Security settings might prevent the configurator from completing. If this is the case, configure IE to completely trust the Analytics host computer.

2. Click **Continue** to begin the sequence of configuration pages. Complete the following configuration pages using the values you decided on when you completed the Analytics

Configurator Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.

Table 4-2 Analytics Configurator Pages

Configuration Page	Settings	Comments
Configure Analytics Database Information	Analytics DB	
	Analytics DB Server Name	Does not appear if you select Use JDBC URL
	Analytics DB Port	Does not appear if you select Use JDBC URL
	Analytics DB Name	Does not appear if you select Use JDBC URL
	Analytics DB JDBC URL	Appears if you select Use JDBC URL
	Analytics DB Username	
	Analytics DB Password	
	Use JDBC URL	We recommend that you only use a JDBC URL if the standard method of configuration does not work for your environment, for example if you use Oracle RAC or a SQL Server cluster.
Configure WLP Server Information	WLP Server URL	Example: <code>http://WebLogicPortal/Hostname:port/WLPAnalyticsSync</code> . <i>WLPAnalyticsSync</i> is defined in the <code>weblogic-application.xml</code> of the WLP application; the default is <code>EARnameAnalyticsSync</code> . Use the fully qualified domain hostname.

- An installer screen appears that summarizes your configuration. Review this screen and make changes, if necessary.
- On the final page, click **Update**.

Note: If you encounter Analytics Configurator-related errors, follow the instructions in the error message or see [“Troubleshooting” on page A-1](#)

Registering Portal Events with Analytics

To register portal events, run the following from the command line on the portal host machine:

- `PTANALYTICS_HOME\bin\AnalyticsLoadEvents.bat`
`..\settings\config\analytics-wlp-event-def.xml` (Windows)
- `PTANALYTICS_HOME/bin/AnalyticsLoadEvents.sh`
`../settings/config/analytics-wlp-event-def.xml` (UNIX/Linux)

Starting Analytics and Portal Services

This section provides information on starting Analytics and portal services. Perform the procedure that is appropriate to your operating system.

Starting Analytics Services on Windows

After you have installed Analytics services and all Analytics components:

- Ensure the BEA AL Analytics service has been started. From the Windows Control Panel, click **Administrative Tools | Services**; if the Analytics service has not started, right-click it and choose **Start**.
- Ensure the BEA AL Analytics Collector service has been started. From the Windows Control Panel, click **Administrative Tools | Services**; if the Analytics Collector service has not started, right-click it and choose **Start**.

Starting Analytics Services on UNIX and Linux

After you have installed Analytics services and all Analytics components:

- Ensure the BEA AL Analytics service has been started:
`install_dir/ptanalytics/2.1/bin/analyticsd.sh start`
- Ensure the BEA AL Analytics Collector service has been started:
`install_dir/ptanalytics/2.1/bin/collectord.sh start`

Installation

Troubleshooting

This appendix provides information on troubleshooting the installation and configuration process. It includes the following topics:

- [Overview of Installation and Configuration Logs](#)
- [Troubleshooting Common Installation and Configuration Problems](#)

Note: For details on troubleshooting Analytics during runtime, see *Administrator Guide for BEA AquaLogic Analytics*.

Overview of Installation and Configuration Logs

The following table provides the descriptions and locations of logs that you can use to troubleshoot the installation and configuration of Analytics. Individual log files are generated for each day's activity.

Table A-1 Logs Used to Troubleshoot the Installation and Configuration of Analytics

Log	Description	Location and Platform
AquaLogic_Analytics_version_InstallLog.log	Provides activity and error details for the installation of Analytics.	<ul style="list-style-type: none"> C:\bea\alui (Windows) /opt/bea/alui (UNIX/Linux)
ptanalytics_deploy.log	Provides additional activity and error details for the installation of Analytics.	<ul style="list-style-type: none"> C:\bea\alui (Windows) /opt/bea/alui (UNIX/Linux)
configurator.log	Provides activity and error details for the Analytics Configurator.	<ul style="list-style-type: none"> C:\bea\alui\ptanalytics\2.1\logs (Windows) /opt/bea/userinteraction/ptanalytics/2.1/logs (UNIX/Linux)

Troubleshooting Common Installation and Configuration Problems

The following table describes common installation and configuration problems and provides solutions to them.

Table A-2 Common Installation and Configuration Problems and Solutions

Problem Description and Details	Cause and Solution
<ul style="list-style-type: none"> Problem: Errors related to Analytics Configurator. Details: When you complete the Analytics Configurator, errors are generated. 	<ul style="list-style-type: none"> Cause: Incorrect information provided to the Configurator. Solution: Double check the information provided to the Configurator for accuracy, spelling and letter case. Re-run the Configurator.

Uninstalling Analytics

This appendix discusses how to uninstall Analytics.

Uninstalling Analytics on Windows

To uninstall Analytics on Windows, use the Windows Control Panel Add/Remove Program utility to launch the Analytics uninstall wizard and follow the instructions.

Uninstalling Analytics on UNIX/Linux

To uninstall Analytics on UNIX and Linux platforms:
`/opt/bea/userinteraction/uninstall/ptanalytics/version/`
`Uninstall_Aqualogic_Analytics_2.1`

Uninstalling Analytics

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