



BEA AquaLogic® Analytics

Installation and Upgrade Guide

Contents

1. Welcome to AquaLogic Analytics

How to Use This Book	1-1
Audience	1-1
Organization	1-1
Typographical Conventions	1-2
BEA Documentation and Resources	1-3

2. Installation Prerequisites

Hardware and Software Requirements	2-1
Default Ports Used by Analytics	2-3

3. Quickstart Overview

Installation	3-1
Installing Analytics Services	3-1
Configuring the Analytics Database	3-2
Creating and Setting Up the Analytics Database on Microsoft SQL Server 2000. 3-2	
Creating and Setting Up the Analytics Database on Microsoft SQL Server 2005. 3-4	
Creating and Setting Up an Oracle Database	3-5
Configuring Analytics	3-7
Registering Ensemble Events	3-7
Installing the Interaction Component	3-7
Installing the Image Service Component	3-8
Installing the Automation Service Component	3-8
Starting Analytics and Portal Services	3-9

Registering Analytics with the Portal	3-10
Importing the Ensemble Migration Package	3-10
Adding Analytics Jobs to the Automation Service	3-10
Upgrade	3-11
Upgrade Paths	3-11
Upgrading Analytics	3-11
Upgrading Analytics from Version 2.0 to 2.1	3-11
Upgrading Analytics from Version 1.2 to 2.1	3-13

4. Installation

Installing Analytics Services	4-2
Configuring the Analytics Database.	4-3
Creating and Setting Up the Analytics Database on Microsoft SQL Server 2000	4-4
Creating and Setting Up the Analytics Database on Microsoft SQL Server 2005	4-5
Creating and Setting Up the Analytics Database on Oracle	4-7
Configuring Analytics	4-8
Registering Ensemble Events.	4-12
Installing the Interaction Component.	4-13
Installing the Image Service Component	4-14
Installing the Automation Service Component	4-15
Starting Analytics and Portal Services	4-17
Starting Analytics and Portal Services on Windows.	4-17
Starting Analytics and Portal Services on UNIX and Linux.	4-17
Registering Analytics with the Portal.	4-17
Importing the Ensemble Migration Package	4-18
Adding Analytics Jobs to the Automation Service	4-19

5. Upgrade

Upgrade Paths. 5-1

Upgrading Analytics from Version 2.0 to Analytics 2.1 5-2

Upgrading Analytics from Version 1.2 to Analytics 2.1 5-3

. 5-7

A. Troubleshooting

Overview of Installation and Configuration Logs A-2

Troubleshooting Common Installation and Configuration Problems. A-4

B. Uninstalling Analytics

Uninstalling Analytics on Windows. B-1

Uninstalling Analytics on UNIX/Linux B-1

Index

Welcome to AquaLogic Analytics

This book describes how to install and deploy AquaLogic Analytics 2.1. It also provides instructions for upgrading to Analytics 2.1 from earlier versions.

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 or upgrading 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, upgrade, 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 or upgrade.

- [Chapter 3, “Quickstart Overview,”](#) provides a high level overview of the Analytics installation and upgrade procedures. Sufficient detail is provided to allow an experienced portal administrator to quickly install or upgrade 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.
- [Chapter 5, “Upgrade,”](#) provides detailed instructions for upgrading to Analytics 2.1.
- [Appendix B, “Uninstall,”](#) 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 	<code>computer</code>	<ul style="list-style-type: none"> • Type <code>Marketing</code> 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 	<code>ALL_CAPS</code>	<ul style="list-style-type: none"> • The default location of <code>BEA_HOME</code> is <code>C:\bea</code>.

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	<p>This worksheet allows you to record prerequisite information necessary for installing AquaLogic Analytics.</p> <p>It is available on edocs.bea.com/alui/analytics/docs21/.</p>
Release Notes	<p>The release notes provide information about new features, issues addressed, and known issues in the release.</p> <p>They are available on edocs.bea.com/alui/analytics/docs21/ and on any physical media provided for delivering the application.</p>
Administrator Guide	<p>This guide describes how to manage and maintain Analytics.</p> <p>It is available on edocs.bea.com/alui/analytics/docs21/.</p>
Online Help	<p>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.</p> <p>To access online help, click the help icon.</p>
Deployment Guide	<p>This guide is written for business analysts and system administrators. It describes how to plan your AquaLogic User Interaction deployment.</p> <p>It is available on edocs.bea.com/alui/deployment/index.html.</p>
Developer Guides, Articles, API Documentation, Blogs, Newsgroups, and Sample Code	<p>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.</p>

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_ALI.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, 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. <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"> • Plumtree Foundation 6.0 SP1, AquaLogic Interaction 6.1, AquaLogic Interaction 6.1 MP1

Table 2-1 Hardware and Software Requirements

Component	Requirement
Browser	<ul style="list-style-type: none"> • Microsoft Internet Explorer 5.5^ • Netscape Navigator 7.1^ • Mozilla Firefox 1.0^
Collaboration	<ul style="list-style-type: none"> • 4.1 SP1, 4.1 SP2, 4.2, 4.2 MP1
Publisher	<ul style="list-style-type: none"> • 6.2, 6.2 SP1, 6.3, 6.4
Studio	<ul style="list-style-type: none"> • Studio 2.1 SP1, 2.2 <p>Note: Analytics does not include Studio-specific reports. This requirement is for basic compatibility only.</p>

Default Ports Used by Analytics

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

Table 2-2 Default ports used by Analytics

Communication	Description
Portal to Analytics port 31314	Used for data collection.
Portal to Analytics port 11944	Used to display reports.
Analytics to Image Service port 80	Used to embed objects stored in the Image Service into Analytics reports.
Analytics to Portal DB and Collaboration DB. Port used depends on database implementation, for example 1433 (SQLServer) or 1521 (Oracle)	Used to synchronize data from portal or Collaboration.
Analytics to API Services machine port 11905	Used to synchronize data from the portal.

Installation Prerequisites

Quickstart Overview

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

This chapter is divided into two major sections:

- **Installation.** This section covers installing and configuring the Analytics components, scripting the database, and starting and verifying the installation. The organization of this section maps directly to detailed instructions in Chapter 4, “Installation”.
- **Upgrade.** This section covers upgrading version of Analytics to the latest version. The organization of this section maps directly to detailed instructions in Chapter 5, “Upgrade”.

Installation

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

Installing Analytics Services

For more complete details on performing this task, see [“Installing Analytics Services” on page 4-2](#).

To install Analytics Services:

1. 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).

2. Copy the installer to the disk location from where you plan to launch it.
3. Launch the Analytics Installer.
 - Windows: **ALAnalytics_ALI_v2-1.exe**
 - UNIX/Linux: **ALAnalytics_ALI_v2-1**
4. Choose to install the **Analytics Services** component.
5. 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.

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 an Oracle Database](#)

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 4-4](#).

To 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, using SQL Server Authentication.
 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**
 8. Connect to the portal database as the portal database user.
 9. As the portal database user, query the portal database to check if these tables exist:
 - PTROLES
 - PTAPPLICATIONS
 - PTCAPABILITIES
 - PTUSERROLELINKS
 - PTGROUPPROLELINKS
 - PTROLECAPABILITYLINKS
 - PTCREDENTIALPROPERTIES
 - PTCREDENTIALVALUES
- If these tables exist, continue to the next step.
- If these tables do not exist, run the **create_sds_tables_mssql.sql** script on the portal database to create these tables. The script is located in *install_dir\ptanalytics\2.1\sql\mssql*
10. As the portal database user, run the **install_sds_seeddata.sql** setup script on the portal database. The script is located in *install_dir\ptanalytics\2.1\sql\mssql*.

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 4-5.](#)

To 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**

9. Connect to the portal database as the portal database user.
10. As the portal database user, query the portal database to check if these tables exist:
 - PTROLES
 - PTAPPLICATIONS
 - PTCAPABILITIES
 - PTUSERROLELINKS
 - PTGROUPROLELINKS
 - PTROLECAPABILITYLINKS
 - PTCREDENTIALPROPERTIES
 - PTCREDENTIALVALUES

If these tables exist, continue to the next step.

If these tables do not exist, run the **create_sds_tables_mssql.sql** script on the portal database to create these tables. The script is located in *install_dir\ptanalytics\2.1\sql\mssql*.

11. As the portal database user, run the **install_sds_seeddata.sql** setup script on the portal database. The script is located in *install_dir\ptanalytics\2.1\sql\mssql*.

Creating and Setting Up an Oracle Database

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

To create and set up an Oracle database:

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_tablespace.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 4-7](#).
 - 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. As the portal database user, query the portal database to check if these tables exist:
 - PTROLES
 - PTAPPLICATIONS
 - PTCAPABILITIES
 - PTUSERROLELINKS
 - PTGROUPROLELINKS
 - PTROLECAPABILITYLINKS
 - PTCREDENTIALPROPERTIES
 - PTCREDENTIALVALUES

If these tables exist, continue to the next step.

If these tables do not exist, run the **create_sds_tables_oracle.sql** script on the portal database to create these tables. The script is located in *install_dir\ptanalytics\2.1\sql\oracle*

6. As the portal database user, run the **install_sds_seeddata.sql** setup script on the portal database. The script is located in *install_dir\ptanalytics\2.1\sql\oracle*.
 7. 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 4-8](#)

To configure Analytics:

1. Ensure that the following services are running:
 - BEA ALI API Service
 - BEA AL Analytics Service
2. 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.
3. 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.
4. An installer screen appears that summarizes your configuration. Review this screen and make changes, if necessary. Otherwise, click **Update**.

Registering Ensemble Events

(AquaLogic Ensemble integration only) To register Ensemble events, run the following from the command line on the Analytics host machine:

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

Installing the Interaction Component

For more complete details on performing this task, see [“Installing the Interaction Component” on page 4-13](#).

Install the Interaction component on all servers that host the portal. The installation instructions are the same for Windows, UNIX, and Linux hosts, with slight exceptions as noted.

Note: You must reinstall the Interaction component after each time you upgrade AquaLogic Interaction.

To install the Interaction component:

1. Log in to the portal host computer as the same user that installed AquaLogic Interaction.
2. If you are running on a Java application server, shut down the application server.
3. Launch the Analytics Installer.
 - Windows: **ALAnalytics_ALI_v2-1.exe**
 - UNIX/Linux: **ALAnalytics_ALI_v2-1**
4. Choose to install the **Interaction component**.
5. After the installation is complete, perform one of the following:
 - If you are running on Java, restart the application server. Then redeploy your portal.war or portal.ear file to your portal application server.
 - If you are running on IIS, restart IIS.

Installing the Image Service Component

For more complete details on performing this task, see [“Installing the Image Service Component” on page 4-14](#).

To install the Image Service component:

1. Log in to the Image Service host computer as the local administrator or the ALI user created during installation of AquaLogic Interaction.
2. Copy the installer to the disk location from where you plan to launch it.
3. Launch the Analytics Installer.
 - Windows: **ALAnalytics_ALI_v2-1.exe**
 - UNIX/Linux: **ALAnalytics_ALI_v2-1**
4. Choose to install the **Image Service component**.

Installing the Automation Service Component

For more complete details on performing this task, see [“Installing the Automation Service Component” on page 4-15](#)

To install the Automation Service component:

1. Log in to the Automation Service host computer as the local administrator or the ALI user created during the installation of AquaLogic Interaction.
2. Copy the installer to the disk location from where you plan to launch it.
3. Launch the Analytics Installer.

- Windows: **ALAnalytics_ALI_v2-1.exe**
- UNIX/Linux: **ALAnalytics_ALI_v2-1**

Note: Ensure that you copy the installer for the same platform that the Automation Service runs on. For example, if the Automation Service runs on Solaris, copy the Solaris installer.

4. Choose to install the **Automation Service component**.
5. 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.

Starting Analytics and Portal Services

For more complete details on performing this task, see [“Starting Analytics and Portal Services” on page 4-17](#).

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

- On Windows, ensure the BEA AL Analytics service has been started in Windows NT Services. 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 following command:

```
install_dir/ptanalytics/2.1/bin/analyticsd.sh start.
```

Then ensure the BEA AL Analytics Collector service has been started by using the following comment:

```
install_dir/ptanalytics/2.1/bin/collectord.sh start
```

Registering Analytics with the Portal

This section describes how to register the Analytics Console, remote server, web service, and portlet objects. For more complete details on performing this task, see [“Registering Analytics with the Portal” on page 4-17](#).

To register the Analytics application, remote server, web services, and portlets with the portal, use the migration utility to import the migration package **analytics.ptc**.

Importing the Ensemble Migration Package

This section describes how to register the Ensemble application with the portal for use with Analytics. You only need to perform this procedure if you are integrating Ensemble with Analytics. For more complete details on performing this task, see [“Importing the Ensemble Migration Package” on page 4-18](#).

To register the Ensemble application, use the migration utility to import the migration package **analytics_ensemble.ptc**.

Adding Analytics Jobs to the Automation Service

This section describes how to add all Analytics jobs to the Automation Service. Once Analytics Jobs are added to the Automation Service, the Automation Service runs them automatically. For more complete details on performing this task, see [“Adding Analytics Jobs to the Automation Service” on page 4-19](#)

To add Analytics jobs to the Automation Service:

1. Log into the Administrator Portal.
2. In Administration, choose **Automation Service**.
3. Ensure that the Automation Service is online.
4. Under **Edit Automation Services**, click the name of the computer on which Analytics Jobs are installed.

The Register Folders window appears.

5. Click **Add Folder**.

The Add Job Folder window appears.

6. Expand the **Analytics** folder.

7. Select the **Analytics Jobs** folder.
8. Click **OK** to close the Register Folders window.
9. Click **Finish**.

The Automation Service runs the Analytics jobs. If other Automation Service jobs were in queue or running when you added the Analytics jobs to the Automation Service, the Automation Service runs the Analytics jobs after these other jobs have completed.

10. At an appropriate time, ensure that the Analytics jobs have completed successfully. If any Analytics jobs failed, schedule these jobs to run again.

Upgrade

Upgrade Paths

The following table summarizes the supported database upgrade paths for Analytics.

Table 3-1 Upgrade Paths

Upgrade Path	Upgrade References
2.0 to 2.1	Follow the procedures in this chapter.
1.2 to 2.1	Follow the procedures in this chapter.

Note: We do not support upgrades from Analytics 1.1 to 2.1. To do so, you must first upgrade Analytics 1.1 to either 1.2 or 2.0, then perform the appropriate upgrade to Analytics 2.1.

Upgrading Analytics

This section discusses:

- [Upgrading Analytics from Version 2.0 to 2.1](#)
- [Upgrading Analytics from Version 1.2 to 2.1](#)

Upgrading Analytics from Version 2.0 to 2.1

This section describes how to upgrade from Analytics 2.0 to Analytics 2.1.

To upgrade from Analytics 2.0 to Analytics 2.1:

1. Delete the **Analytics** folder beneath the *install_dir\common\container\tomcat\5.0.28\work* directory.
2. Back up the installation directory of the previously-installed version of Analytics Services, using the tool of your choice.
3. Install Analytics Services. For details, see [“Installing Analytics Services” on page 4-2](#). If you are choosing the same location as the existing software, accept the default installation directory location when prompted.
4. Back up the Analytics database using the tool of your choice.
5. Upgrade the Analytics database by running the **upgrade_2.0_to_2.1.sql** script:
install_dir\ptanalytics\2.1\sql\database\upgrade_2.0_to_2.1.sql
6. Reconfigure Analytics by running the Analytics Configurator. For details, see [“Configuring Analytics” on page 4-8](#)
7. **(AquaLogic Ensemble integration only)** Register Ensemble events by running the following from the command line on the Analytics host machine:
 - PTANALYTICS_HOME\bin\AnalyticsLoadEvents.bat
 ../settings/config/analytics-ensemble-event-def.xml (Windows)
 - PTANALYTICS_HOME/bin/AnalyticsLoadEvents.sh
 ../settings/config/analytics-ensemble-event-def.xml (UNIX/Linux)
8. **(Oracle only)** Run your database’s analysis tool on both the portal and Analytics databases to increase the efficiency of the databases.
9. Back up the installation directory of the previously-installed version of the Interaction component, using the tool of your choice.
10. Install the Interaction component. For details, see [“Installing the Interaction Component” on page 4-13](#)
11. Install the Image Service component. For details, [“Installing the Image Service Component” on page 4-14](#)
12. Stop and restart the Analytics services. For details, see [“Starting Analytics and Portal Services” on page 4-17](#).
13. Register the Analytics application, remote server, Web services, and portlets with the portal by importing the migration package. For details, see [“Registering Analytics with the Portal” on page 4-17](#).

14. Register the Ensemble application with Analytics. For details, see [“Importing the Ensemble Migration Package” on page 4-18](#).
15. Install the Automation Service component. For details, see [“Installing the Automation Service Component” on page 4-15](#).
16. Add Analytics jobs to the Automation Service. For details, see [“Adding Analytics Jobs to the Automation Service” on page 4-19](#).

Upgrading Analytics from Version 1.2 to 2.1

This section describes how to upgrade from Analytics 1.2 to Analytics 2.1.

Note: You must upgrade your portal from Plumtree Foundation 5.x to BEA AquaLogic Interaction 6.x before upgrading Analytics from 1.2 to 2.1.

To upgrade from Analytics 1.2 to Analytics 2.1:

1. Delete the **Analytics** folder beneath the *install_dir\common\container\tomcat\5.0.28\work* directory.
2. Back up the installation directory of the previously-installed version of Analytics Services, using the tool of your choice.
3. Install Analytics Services. For details, see [“Installing Analytics Services” on page 4-2](#). If you are choosing the same location as the existing software, accept the default installation directory location when prompted.
4. From the Scheduled Tasks, delete the Sync job from the Analytics 1.2 installation.
5. Back up the Analytics database, using the tool of your choice.
6. Upgrade the Analytics database by running the **upgrade_1.x_to_2.0.sql** script:
install_dir\ptanalytics\2.1\sql\database\upgrade_1.x_to_2.0.sql
7. Upgrade the Analytics database by running the **upgrade_2.0_to_2.1.sql** script:
install_dir\ptanalytics\2.1\sql\database\upgrade_2.0_to_2.1.sql
8. As the portal database user, query the portal database to check if these tables exist:
 - PTROLES
 - PTAPPLICATIONS
 - PTCAPABILITIES
 - PTUSERROLELINKS

- PTGROUPPROLELINKS
- PTROLECAPABILITYLINKS
- PTCREDENTIALPROPERTIES
- PTCREDENTIALVALUES

If these tables exist, continue to the next step.

If these tables do not exist, run the `create_sds_tables_database.sql` script on the portal database to create these tables. The script is located in `install_dir\ptanalytics\2.1\sql\database\`

9. As the portal database user, run the **install_sds_seeddata.sql** setup script on the portal database. The script is located in `install_dir\ptanalytics\2.1\sql\database\`.
10. Reconfigure Analytics by running the Analytics Configurator. For details, see [“Configuring Analytics” on page 4-8](#)
11. **(AquaLogic Ensemble integration only)** Register Ensemble events by running the following from the command line on the Analytics host machine:
 - PTANALYTICS_HOME\bin\AnalyticsLoadEvents.bat
 `..\settings\config\analytics-ensemble-event-def.xml` (Windows)
 - PTANALYTICS_HOME\bin\AnalyticsLoadEvents.sh
 `..\settings/config/analytics-ensemble-event-def.xml` (UNIX/Linux):
12. Partition the Analytics database tables by running the following script:
 - AnalyticsPartition.bat (Windows): `install_dir\ptanalytics\2.1\bin\AnalyticsPartition.bat`
 - AnalyticsPartition.sh (UNIX/Linux):
 `install_dir\ptanalytics\2.1\bin\AnalyticsPartition.sh`
13. **(Oracle only)** Run your database’s analysis tool on both the portal and Analytics databases to increase the efficiency of the databases.
14. Back up the installation directory of the previously-installed version of the Interaction component, using the tool of your choice.
15. Install the Interaction component. For details, see [“Installing the Interaction Component” on page 4-13](#)
16. Install the Image Service component. For details, [“Installing the Image Service Component” on page 4-14](#)

17. Stop and restart the Analytics services. For details, see [“Starting Analytics and Portal Services” on page 4-17](#).
18. Register the Analytics application, remote server, Web services, and portlets with the portal by importing the migration package. For details, see [“Registering Analytics with the Portal” on page 4-17](#).
19. Register the Ensemble application with Analytics. For details, see [“Importing the Ensemble Migration Package” on page 4-18](#).
20. Install the Automation Service component. For details, see [“Installing the Automation Service Component” on page 4-15](#).
21. Add Analytics jobs to the Automation Service. For details, see [“Adding Analytics Jobs to the Automation Service” on page 4-19](#).

Quickstart Overview

Installation

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

1. Ensure you have completed pre-installation steps. For details, see [“Installation Prerequisites” on page 2-1](#)
2. Install Analytics Services on the remote server host computer. For details, see [“Installing Analytics Services” on page 4-2](#).
3. Configure the Analytics database. For details, see [“Configuring the Analytics Database” on page 4-3](#).
4. Configure Analytics. For details, see [“Configuring Analytics” on page 4-8](#).
5. Register Ensemble events. For details, see [“Registering Ensemble Events” on page 4-12](#).
6. Install the Interaction component of the installation package on all portal servers. For details, see [“Installing the Interaction Component” on page 4-13](#)
7. Install the Image Service component of the installation package on your Image Service host. For details, see [“Installing the Image Service Component” on page 4-14](#).
8. Install the Automation Service component of the installation package on your Automation Service host and complete the Analytics Configurator pages for the Automation Service component. For details, see [“Installing the Automation Service Component” on page 4-15](#).
9. Start Analytics and portal services. For details, see [“Starting Analytics and Portal Services” on page 4-17](#).

10. Register the Analytics application, remote server, web services, and portlets with the portal. For details, see [“Registering Analytics with the Portal” on page 4-17](#).
11. Add Analytics jobs to the Automation Service. For details, see [“Adding Analytics Jobs to the Automation Service” on page 4-19](#).

Installing Analytics Services

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

1. 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).
2. Copy the installer to the disk location from where you plan to launch it. The installer file is one of the following:
 - Windows: **ALAnalytics_ALI_v2-1.exe**
 - UNIX/Linux: **ALAnalytics_ALI_v2-1**
3. Close all unnecessary applications.
4. Execute the installer file.
5. Complete the installation wizard pages as described in the following table and according to the settings you planned when you completed the Analytics Services Installation Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.

Table 4-1 Installation Wizard Pages - Analytics Services

Wizard Page	Description
License Agreement	Read and accept the license agreement.
Choose Components	Choose Analytics Services .
Installation Directory	The default is: <ul style="list-style-type: none"> • C:\bea\alui (Windows) • /opt/bea/alui (UNIX and Linux)

Table 4-1 Installation Wizard Pages - Analytics Services

Wizard Page	Description
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) • /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.

6. 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 4-3. Note that the Analytics Configurator does not launch on UNIX and 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.

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, using SQL Server Authentication.
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**

8. Connect to the portal database as the portal database user.
9. As the portal database user, query the portal database to check if these tables exist:
 - PTROLES
 - PTAPPLICATIONS
 - PTCAPABILITIES
 - PTUSERROLELINKS
 - PTGROUPROLELINKS
 - PTROLECAPABILITYLINKS
 - PTCREDENTIALPROPERTIES
 - PTCREDENTIALVALUES

If these tables exist, continue to the next step.

If these tables do not exist, run the **create_sds_tables_mssql.sql** script on the portal database to create these tables. The script is located in *install_dir\ptanalytics\2.1\sql\mssql*

10. As the portal database user, run the **install_sds_seeddata.sql** setup script on the portal database. The script is located in *install_dir\ptanalytics\2.1\sql\mssql*.

Next, configure the Analytics application, as described in [“Configuring Analytics” on page 4-8](#).

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**
9. Connect to the portal database as the portal database user.
10. As the portal database user, query the portal database to check if these tables exist:
 - PTROLES
 - PTAPPLICATIONS
 - PTCAPABILITIES
 - PTUSERROLELINKS
 - PTGROUPPROLELINKS
 - PTROLECAPABILITYLINKS
 - PTCREDENTIALPROPERTIES

– PTCREDENTIALVALUES

If these tables exist, continue to the next step.

If these tables do not exist, run the **create_sds_tables_mssql.sql** script on the portal database to create these tables. The script is located in *install_dir\ptanalytics\2.1\sql\mssql*

11. As the portal database user, run the **install_sds_seeddata.sql** setup script on the portal database. The script is located in *install_dir\ptanalytics\2.1\sql\mssql*.

Next, configure the Analytics application, as described in [“Configuring Analytics” on page 4-8](#).

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_tablespace.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_tablespace.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. As the portal database user, query the portal database to check if these tables exist:
 - PTROLES
 - PTAPPLICATIONS
 - PTCAPABILITIES
 - PTUSERROLELINKS
 - PTGROUPROLELINKS
 - PTROLECAPABILITYLINKS
 - PTCREDENTIALPROPERTIES
 - PTCREDENTIALVALUES

If these tables exist, continue to the next step.

If these tables do not exist, run the **create_sds_tables_oracle.sql** script on the portal database to create these tables. The script is located in `install_dir\ptanalytics\2.1\sql\oracle\`

6. As the portal database user, run the **install_sds_seeddata.sql** setup script on the portal database. The script is located in `install_dir\ptanalytics\2.1\sql\oracle\`.
7. 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 4-8](#).

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. Ensure that the following services are running:
 - BEA ALI API Service
 - BEA AL Analytics Service
2. 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.
3. 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.

Table 4-2 Analytics Configurator Pages

Configuration Page	Settings	Comments
API Service Information	API Service URL	You can find the API Service URL in Portal Administration by selecting Portal Settings from the Select Utility drop-down list. Then click Portal URL Manager . The API Service URL is displayed in the SOAP Server URL field.
	Portal Username	This user must be for a portal account that has Select rights to all communities, portlets, users, documents, and Collaboration projects. It is recommended that you enter a user that belongs to the Administrators group.
	Portal Password	
Configure Portal Database Information	Portal DB	
	Portal DB Server Name	Does not appear if you select Use JDBC URL
	Portal DB Port	Does not appear if you select Use JDBC URL
	Portal DB Name	Does not appear if you select Use JDBC URL
	Portal DB JDBC URL	Appears if you select Use JDBC URL
	Portal DB Username	The Portal DB Username must be the same as the one you used to create the portal database.
	Portal 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.

Table 4-2 Analytics Configurator Pages

Configuration Page	Settings	Comments
Configure Collaboration Database Information (OPTIONAL)	BEA AquaLogic Interaction Collaboration is installed in my portal environment.	Select this option if Collaboration is installed in your portal environment.
	Collab DB	
	Collab DB Server Name	Does not appear if you select Use JDBC URL
	Collab DB Port	Does not appear if you select Use JDBC URL
	Collab DB Name	Does not appear if you select Use JDBC URL
	Collab DB JDBC URL	Appears if you select Use JDBC URL
	Collab DB Username	
	Collab 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.

Table 4-2 Analytics Configurator Pages

Configuration Page	Settings	Comments
Configure Publisher Database Information (OPTIONAL)	BEA AquaLogic Interaction Publisher is installed in my portal environment.	Select this option if Collaboration is installed in your portal environment.
	Publisher DB	
	Publisher DB Server Name	Does not appear if you select Use JDBC URL
	Publisher DB Port	Does not appear if you select Use JDBC URL
	Publisher DB Name	Does not appear if you select Use JDBC URL
	Publisher DB JDBC URL	Appears if you select Use JDBC URL
	Publisher DB Username	
	Publisher 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.

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

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

Registering Ensemble Events

(**AquaLogic Ensemble integration only**): To register Ensemble events, run the following from the command line on the Analytics host machine:

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

Installing the Interaction Component

This section describes how to install the Interaction and Automation Service components.

The installation instructions are the same for Windows, UNIX, and Linux hosts, with slight exceptions as noted.

Note: You must reinstall the Interaction component after each time you upgrade AquaLogic Interaction.

To install the Interaction component:

1. Log in to the portal host computer as the same user that installed AquaLogic Interaction.
2. If you are running on Java, shut down the application server.
3. Copy the installer to the disk location from where you plan to launch it. The installer file is one of the following:
 - Windows: **ALAnalytics_ALI_v2-1.exe**
 - UNIX/Linux: **ALAnalytics_ALI_v2-1**
4. Close all unnecessary applications and windows.
5. Perform one of the following:
 - If you are installing on Windows, double-click the installer file.
 - If you are installing on UNIX/Linux, run 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 Interaction Component Installation

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

Table 4-3 Installation Wizard Pages - Interaction Component

Wizard Page	Description
License Agreement	Read and accept the license agreement.
Choose Components	Choose Interaction component .
Portal Installation Directory	<p>Browse and select the location of the portal server installation, for example: C:\bea\alui\ptportal\6.1.</p> <p>Note: The Interaction and Automation Service components require installation into the same directory. For this reason, you use the same wizard page for both installations.</p>
Analytics Services - Fully Qualified Domain Name	Specify the fully qualified domain name for the machine hosting Analytics Services (not the host computer(s) on which you installed AquaLogic Interaction).

7. On the final Wizard page, click **Install** to begin the installation.
8. After the installation is complete, perform one of the following:
 - If you are running on Java, restart the application server. Then redeploy your portal.war or portal.ear file to your portal application server.
 - If you are running on IIS, restart the application server. For instructions, see your application server's documentation.

Note: The installer writes a log file in 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.

Installing the Image Service Component

This section describes how to install the Image Service component. The instructions are the same for installing on a Windows, UNIX, or Linux host, with minor differences as noted. To install the Image Service component:

1. Log in to the Image Service host computer as the local administrator or the ALI user created during installation of AquaLogic Interaction.

2. Copy the installer to the disk location from where you plan to launch it. The installer file is one of the following:
 - Windows: **ALAnalytics_ALI_v2-1.exe**
 - UNIX/Linux: **ALAnalytics_ALI_v2-1**
3. Close all unnecessary applications and windows.
4. Double-click the installer file.
5. Complete the installation wizard pages as described in the following table and according to the settings you planned when you completed the Image Service Component Installation Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.

Table 4-4 Installation Wizard Pages - Image Service Component

Wizard Page	Description
License Agreement	Read and accept the license agreement.
Choose Components	Choose Image Service component .
Installation Directory	Browse and select the location where the Image Service files are installed, for example: C:\bea\alui\ptimages\imageserver .

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

Note: The installer writes a log file in 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.

Installing the Automation Service Component

This section describes how to install the Automation Service component. The instructions are the same for installing on a Windows, UNIX, or Linux host, with minor differences as noted.

To install the Automation Service component:

1. Log in to the Automation Service host computer as the local administrator or the ALI user created during the installation of AquaLogic Interaction.
2. Copy the installer to the disk location from where you plan to launch it. The installer file is one of the following:

- Windows: **ALAnalytics_ALI_v2-1.exe**
- UNIX/Linux: **ALAnalytics_ALI_v2-1**

Note: Ensure that you copy the installer for the same platform that the Automation Service runs on. For example, if the Automation Service runs on Solaris, copy the Solaris installer.

3. Close all unnecessary applications and windows.
4. Double-click the installer file.
5. Complete the installation wizard pages as described in the following table and according to the settings you planned when you completed the Automation Service Component Installation Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.

Table 4-5 Installation Wizard Pages - Automation Service Component

Wizard Page	Description
License Agreement	Read and accept the license agreement.
Choose Components	Choose Automation Service component .
Portal Installation Directory	<p>Browse and select the location of the portal server installation, for example: C:\bea\alui\ptportal\6.1.</p> <p>Note: The Automation Service and Interaction components require installation into the same directory. For this reason, you use the same wizard page for both installations.</p>

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

Note: The installer writes a log file in 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.
7. When installation is complete, the **Analytics Configurator** launches for the machine on which you installed the Automation Service. Complete the configuration page that appears, as described in [“Configuring Analytics” on page 4-8](#).

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 and Portal Services on Windows

After you have installed Analytics services and all Analytics components:

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

Starting Analytics and Portal 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

Registering Analytics with the Portal

This section describes how to register the Analytics Console, remote server, web service, and portlet objects.

To register the Analytics objects with the portal:

1. Log into the Administrator Portal.
2. Click **Administration**.
3. From the **Select Utility** drop-down choose **Migration - Import**.
4. Browse to select the location of the migration package. If you accepted installation defaults, the location on the Analytics host is: *install_dir/ptanalytics/2.1/serverpackages/analytics.pte*
5. Click **Load Package**.

6. Perform one of the following:
 - If you are importing the migration package for the first time, keep the default selections under Import Settings. The default selections are **Import ACLs** and **Remember Dependency Settings**.
 - If you have previously imported the migration package and you are importing it again, keep the default selections and check the box next to **Overwrite Remote Servers**.
7. Click **Portal Resources** on the left hand side of the Migration editor.
8. Select the objects that you want to import.
9. Click **Finish**.

Importing the Ensemble Migration Package

This section describes how to register the Ensemble application with the portal for use with Analytics. You only need to perform this procedure if you are integrating Ensemble with Analytics.

To register Ensemble with Analytics:

1. Log into the Administrator Portal.
2. Click **Administration**.
3. From the **Select Utility** drop-down choose **Migration - Import**.
4. Browse to select the location of the migration package. If you accepted installation defaults, the location on the Analytics host is:
install_dir\ptanalytics\2.1\serverpackages\analytics_ensemble.pte
5. Click **Load Package**.
6. Perform one of the following:
 - If you are importing the migration package for the first time, keep the default selections under Import Settings. The default selections are **Import ACLs** and **Remember Dependency Settings**.
 - If you have previously imported the migration package and you are importing it again, keep the default selections and check the box next to **Overwrite Remote Servers**.
7. Click **Portal Resources** on the left hand side of the Migration editor.

8. Select the objects that you want to import.
9. Click **Finish**.

Adding Analytics Jobs to the Automation Service

This section describes how to add all Analytics jobs to the Automation Service. Once these jobs are added, the Automation Service runs them automatically. To add Analytics jobs to the Automation Service:

1. Log into the portal as an administrator.
2. Click **Administration**.
3. From the **Select Utility** drop-down, choose **Automation Service**.
The Automation Service Manager appears.
4. Ensure that the Automation Service is online.
5. Under **Edit Automation Services**, click the name of the computer on which Analytics Jobs are installed.
The Register Folders window appears.
6. Click **Add Folder**.
The Add Job Folder window appears.
7. Expand the **Analytics** folder.
8. Select the **Analytics Jobs** folder.
9. Click **OK** to close the Register Folders window.
10. Click **Finish**.
The Automation Service runs the Analytics jobs. If other Automation Service jobs were in queue or running when you added the Analytics jobs to the Automation Service, the Automation Service runs the Analytics jobs after these other jobs have completed.
11. At an appropriate time, ensure that the Analytics jobs have completed successfully. If any Analytics jobs failed, schedule these jobs to run again.

Installation

Upgrade

This chapter includes information on how to upgrade Analytics. It includes the following sections:

- [Upgrade Paths](#)
- [Upgrading Analytics from Version 2.0 to Analytics 2.1](#)

Upgrade Paths

The following table summarizes the supported database upgrade paths for Analytics.

Table 5-1 Upgrade Paths

Upgrade Path	Upgrade References
2.0 to 2.1	Follow the procedures in this chapter.
1.2 to 2.1	Follow the procedures in this chapter.

Note: We do not support upgrades from Analytics 1.0/1.1 to 2.1. To do so, you must first upgrade Analytics 1.0/1.1 to either 1.2 or 2.0, then perform the appropriate upgrade to Analytics 2.1.

This section discusses:

- [Upgrading Analytics from Version 2.0 to Analytics 2.1](#)
- [Upgrading Analytics from Version 1.2 to Analytics 2.1](#)

Upgrading Analytics from Version 2.0 to Analytics 2.1

This section describes how to upgrade from Analytics 2.0 to Analytics 2.1.

To upgrade from Analytics 2.0 to Analytics 2.1:

1. Delete the **Analytics** folder beneath the *install_dir*\common\container\tomcat\5.0.28\work directory.
2. Back up the installation directory of the previously-installed version of Analytics Services, using the tool of your choice.
3. Install Analytics Services. For details, see [“Installing Analytics Services” on page 4-2](#). If you are choosing the same location as the existing software, accept the default installation directory location when prompted.
4. Back up the Analytics database using the tool of your choice.
5. Upgrade the Analytics database from 2.0 to 2.1 by running the **upgrade_2.0_to_2.1.sql** script:

```
install_dir\ptanalytics\2.1\sql\database\upgrade_2.0_to_2.1.sql
```

6. Reconfigure Analytics by running the Analytics Configurator. For details, see [“Configuring Analytics” on page 4-8](#)
7. **(AquaLogic Ensemble integration only)** Run the following command from the command line on the Analytics host machine to create the Ensemble tables:
 - PTANALYTICS_HOME\bin\AnalyticsLoadEvents.bat
 ..\settings\config\analytics-ensemble-event-def.xml (Windows)
 - PTANALYTICS_HOME/bin/AnalyticsLoadEvents.sh
 ../settings/config/analytics-ensemble-event-def.xml (UNIX/Linux)
8. **(Oracle only)** Run your database’s analysis tool on both the Analytics and portal databases to increase the efficiency of the databases.
9. Back up the installation directory of the previously-installed version of the Interaction component, using the tool of your choice.
10. Install the Interaction component. For details, see [“Installing the Interaction Component” on page 4-13](#)
11. Install the Image Service component. For details, [“Installing the Image Service Component” on page 4-14](#)

12. Stop and restart the Analytics services. For details, see [“Starting Analytics and Portal Services” on page 4-17](#).
13. Register the Analytics application, remote server, Web services, and portlets with the portal by importing the migration package. For details, see [“Registering Analytics with the Portal” on page 4-17](#).
14. Register the Ensemble application with Analytics. For details, see [“Importing the Ensemble Migration Package” on page 4-18](#).
15. Install the Automation Service component. For details, see [“Installing the Automation Service Component” on page 4-15](#).
16. Add Analytics jobs to the Automation Service. For details, see [“Adding Analytics Jobs to the Automation Service” on page 4-19](#).

Upgrading Analytics from Version 1.2 to Analytics 2.1

This section describes how to upgrade from Analytics 1.2 to Analytics 2.1.

Note: You must upgrade your portal from Plumtree Foundation 5.x to AquaLogic Interaction 6.x before upgrading Analytics from 1.2 to 2.1.

To upgrade from Analytics 1.2 to Analytics 2.1:

1. Delete the **Analytics** folder beneath the *install_dir*\common\container\tomcat\5.0.28\work directory.
2. Back up the installation directory of the previously-installed version of Analytics Services, using the tool of your choice.
3. Install Analytics Services. For details, see [“Installing Analytics Services” on page 4-2](#). If you are choosing the same location as the existing software, accept the default installation directory location when prompted.
4. From the Scheduled Tasks, delete the Sync job from the Analytics 1.2 installation.
5. Back up the Analytics database using the tool of your choice.
6. Upgrade the Analytics database from 1.2 to 2.0 by running the **upgrade_1.x_to_2.0.sql** script:

`install_dir\ptanalytics\2.1\sql\database\upgrade_1.x_to_2.0.sql`
7. Upgrade the Analytics database from 2.0 to 2.1 by running the **upgrade_2.0_to_2.1.sql** script:

install_dir\ptanalytics\2.1\sql\database\upgrade_2.0_to_2.1.sql

8. As the portal database user, query the portal database to check if these tables exist:

- PTROLES
- PTAPPLICATIONS
- PTCAPABILITIES
- PTUSERROLELINKS
- PTGROUPROLELINKS
- PTROLECAPABILITYLINKS
- PTCREDENTIALPROPERTIES
- PTCREDENTIALVALUES

If these tables exist, continue to the next step.

If these tables do not exist, run the **create_sds_tables_database.sql** script on the portal database to create these tables. The script is located in

install_dir\ptanalytics\2.1\sql\database

9. As the portal database user, run the **install_sds_seeddata.sql** setup script on the portal database. The script is located in *install_dir\ptanalytics\2.1\sql\database*.
10. Reconfigure Analytics by running the Analytics Configurator. For details, see [“Configuring Analytics” on page 4-8](#)
11. **(AquaLogic Ensemble integration only):** Run the following command from the command line:
- PTANALYTICS_HOME\bin\AnalyticsLoadEvents.bat
 ..\settings\config\analytics-ensemble-event-def.xml (Windows)
 - PTANALYTICS_HOME/bin/AnalyticsLoadEvents.sh
 ..\settings\config\analytics-ensemble-event-def.xml (UNIX/Linux):
12. Partition the Analytics database tables by running the following script:
- AnalyticsPartition.bat (Windows)
 install_dir\ptanalytics\2.1\bin\AnalyticsPartition.bat
 - AnalyticsPartition.sh (UNIX/Linux)
 install_dir\ptanalytics\2.1\bin\AnalyticsPartition.sh

The partition.log file displays partitioning progress in real-time. This log is located in:

- C:\bea\alui\ptanalytics\2.1\logs (Windows)
- /opt/bea/alui/ptanalytics/2.1/logs (UNIX/Linux)

The following table describes the approximate lengths of time that it should take to partition the Analytics database:

Table 5-2 Analytics Database Partitioning Estimates - Analytics 1.2 to 2.1

Total Number of Facts	Time to Partition
10 million	12.5 minutes
20 million	25 minutes
50 million	62.5 minutes
100 million	2 hours 5 minutes
500 million	10 hours 50 minutes

13. **(Oracle only)** Run your database's analysis tool on both the Analytics and portal databases to increase the efficiency of the databases.
14. Back up the installation directory of the previously-installed version of the Interaction component, using the tool of your choice.
15. Install the Interaction component. For details, see [“Installing the Interaction Component” on page 4-13](#)
16. Install the Image Service component. For details, [“Installing the Image Service Component” on page 4-14](#)
17. Stop and restart the Analytics services. For details, see [“Starting Analytics and Portal Services” on page 4-17](#).
18. Register the Analytics application, remote server, Web services, and portlets with the portal by importing the migration package. For details, see [“Registering Analytics with the Portal” on page 4-17](#).
19. Register the Ensemble application with Analytics. For details, see [“Importing the Ensemble Migration Package” on page 4-18](#).
20. Install the Automation Service component. For details, see [“Installing the Automation Service Component” on page 4-15](#)

21. Add Analytics jobs to the Automation Service. For details, see [“Adding Analytics Jobs to the Automation Service” on page 4-19](#).

Upgrade

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_ <i>version</i> _ 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)

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

Log	Description	Location and Platform
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)
partition.log	<p>Provides activity and error details for initial partitioning of the Analytics database during upgrade. You create initial partitions by running the AnalyticsPartition.bat (Windows) or AnalyticsPartition.sh (UNIX/Linux) script.</p> <p>Note: The collector.log file provides activity and error details for routine partitioning activity that occurs during Analytics runtime. For details, see <i>Administrator Guide for BEA AquaLogic Analytics</i>.</p>	<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: Configurator errors when testing configuration connectivity. • Details: When you complete the Analytics Configurator, connectivity is tested and 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.

Uninstalling Analytics on UNIX/Linux

To uninstall Analytics on UNIX and Linux platforms, launch the uninstaller for Analytics 2.1 by running: `/opt/bea/userinteraction/uninstall/ptanalytics/version/Uninstall_Aqualogic_Analytics_2.1`

Uninstalling Analytics

Index

A

- Analytics
 - adding jobs to Automation Service 4-19
 - compatibility with portal 2-2
 - configuring 4-8
 - registering with the portal 4-17
 - synching clocks with portal 4-3
 - upgrade paths 5-1
- Analytics Configurator
 - running 4-8
- Analytics database
 - creating 4-3
 - host computer requirements 2-2
 - partitioning (1.2 upgrade) 5-4
- Analytics jobs
 - adding 4-19
 - adding to Automation Service 4-19
- Analytics services
 - installing 4-2
- analytics.ptc 4-17
- analytics_ensemble.ptc 4-18
- Automation Service
 - adding Analytics jobs 4-19
- Automation Service component
 - installing 4-15

B

- BEA AL Analytics service
 - starting on UNIX 4-17
 - starting on Windows 4-17
- BEA AquaLogic Analytics Collector service
 - starting on UNIX 4-17
 - starting on Windows 4-17
- BEA_Home default location 4-3

C

- Collaboration
 - compatibility requirements 2-3
- configurator.log A-3

D

- database
 - creating Oracle 4-7
 - creating SQL Server 2000 4-4
 - creating SQL Server 2005 4-5
- default installation directories
 - Analytics services 4-2
- default ports
 - application port 4-3

E

- Ensemble
 - importing migration package 4-18
 - registering events 4-12
- events
 - registering for Ensemble 4-12

H

- hardware requirements 2-1

I

- Image Service component
 - installing 4-14
- installation logs A-2
- installer file names 4-2
- Interaction component
 - installing 4-13
- IPv6 support 2-1

J

- jobs
 - adding to Automation Service 4-19

L
logs A-2

M
migration package 4-17

O
Oracle database
 creating 4-7

P
partition.log A-3
portal
 compatibility with Analytics 2-2
 registering Analytics 4-17
 synching clocks with Analytics 4-3
ptanalytics_deploy.log A-2
Publisher
 compatibility requirements 2-3

R
requirements for installation 2-1

S
software requirements 2-1
SQL Server 2000
 creating database 4-4
SQL Server 2005
 creating database 4-5
Studio
 compatibility requirements 2-3

U
UNIX
 starting Analytics services 4-17
upgrade

Analytics 1.2 to 2.1 instructions 5-3
Analytics 2.0 to 2.1 instructions 5-2

W
Windows
 starting Analytics services 4-17