



BEA AquaLogic® Analytics

Installation and Upgrade Guide

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Welcome to AquaLogic Analytics

This book describes how to install and deploy AquaLogic Analytics 2.5. It also provides instructions for upgrading to Analytics 2.5 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 2.5.
- [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 Analytics.</p> <p>It is available on edocs.bea.com/alui/analytics/docs25/.</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/docs25/ and on any physical media provided for delivering the application.</p>
Administrator Guide	<p>This guide describes how to manage, maintain, and troubleshoot Analytics.</p> <p>It is available on edocs.bea.com/alui/analytics/docs25/.</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 maintenance 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, maintenance 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 one.bea.com/support, 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:
Installation_Configuration_Worksheets_AL_Analytics_ALI_v2-5.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 SP2 (or R2) Red Hat Enterprise Linux 4 , update 3 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 2005 Oracle 9.0.2.4[^] 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"> AquaLogic Interaction 6.5
Browser	<ul style="list-style-type: none"> Microsoft Internet Explorer 6.0[^], 7.0 Netscape Navigator 7.2[^], 8.0 Mozilla Firefox 2.0[^]

Table 2-1 Hardware and Software Requirements

Component	Requirement
Collaboration	<ul style="list-style-type: none"> 4.5
Publisher	<ul style="list-style-type: none"> 6.4
Studio	<ul style="list-style-type: none"> 2.2 MP1 <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, creating and scripting the database, creating the ALUI Security 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 the Analytics Console Component

This section describes how to install the Analytics console and the BEA AL Analytics service. For more complete details on performing this task, see [“Installing the Analytics Console Component” on page 4-2](#).

To install the Analytics Console Component:

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_v2-5.exe**
 - UNIX/Linux: **ALAnalytics_ALI_v2-5**
4. Choose to install the **Analytics Console** component.
5. Complete all installation wizard pages according to the settings you planned when you completed the Analytics Console Component Installation Worksheet, which is included in the Analytics Installation and Configuration Worksheets document

Note: For important details about licensing, see documentation for the Existing License Update installation wizard page at [“Installing the Analytics Console Component” on page 4-2](#).

After the installer has copied all files to the installation directory, the Launch Configuration Manager installation wizard page appears.

6. Do not configure Analytics Console settings in Configuration Manager at this time. First, configure the Analytics and ALUI Security databases. For details see [Configuring the Analytics Database](#) and [Configuring the ALUI Security Database](#).
7. After configuring the Analytics and ALUI Security databases, configure all settings for all of the Analytics Console application components using the database and connectivity settings that you provisioned when you completed the Analytics Installation and Configuration Worksheets document.

Configuring the Analytics Database

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

- [Creating the Analytics Database on Microsoft SQL Server](#)
- [Creating the Analytics Database on Oracle](#)

Creating the Analytics Database on Microsoft SQL Server

For more complete details on performing this task, see [“Creating the Analytics Database on Microsoft SQL Server” on page 4-6](#).

To set up the Analytics database on Microsoft SQL Server:

1. On the machine to which you installed the Analytics Console component, copy the scripts from *install_dir\ptanalytics\2.5\sql\mssql* to the database host computer.
2. In SQL Server Management Studio, access the database engine's properties.
3. Configure the database engine to use **SQL Server and Windows Authentication mode**.
4. Restart the database engine.
5. Create the Analytics database user:
 - a. Create the Analytics database user with the user name you provisioned when you completed the Configuration 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.
6. Create the Analytics database with the following properties:
 - Create a database with the name you provisioned when you completed the Configuration 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.
7. Grant the Analytics database user the **db_owner** role for the Analytics database.
8. Create the Analytics database schema. Specify the Analytics database user as the schema owner.
9. Connect to the Analytics database as the Analytics database user, using SQL Server Authentication.
10. Run the setup scripts for the database, located in the *install_dir\ptanalytics\2.5\sql\mssql* folder, in the following order (make sure that you are running the scripts on the Analytics database):
 - a. **create_analytics_schema.sql**
 - b. **install_analytics_data.sql**

Creating the Analytics Database on Oracle

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

To create and set up an Oracle database:

1. On the machine to which you installed the Analytics Console component, copy the **oracle** directory from *install_dir\ptanalytics\2.5\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. 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.
 - 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**.
 - d. Add the Oracle database user and password values into the Configuration Worksheet, which is included in the Analytics Installation and Configuration Worksheets document (you will enter these values into Configuration Manager when configuring Analytics database settings).
4. Execute the following steps as the **analytics** user that you just created.
 - a. Run the script **create_analytics_schema.sql**.
 - b. Run the script **install_analytics_data.sql**.
5. Run your database’s analysis tool on the portal database to the efficiency of the database.

Configuring the ALUI Security Database

(Optional) This section describes how to set up the ALUI Security database.

Note: You do not need to perform this procedure if Pathways 1.5 is installed. Installing Pathways 1.5 requires creating the ALUI Security database.

This section contains the following sections:

- [Creating the ALUI Security Database on Microsoft SQL Server](#)
- [Creating the ALUI Security Database on Oracle](#)

Creating the ALUI Security Database on Microsoft SQL Server

(Optional) For more complete details on performing this task, see [“Creating the ALUI Security Database on Microsoft SQL Server” on page 4-9](#).

Note: You do not need to perform this procedure if Pathways 1.5 is installed. Installing Pathways 1.5 requires creating the ALUI Security database.

To create and set up the ALUI Security database on Microsoft SQL Server:

1. On the machine to which you installed the Analytics Console component, copy the scripts from *install_dir\ptanalytics\2.5\sql\mssql* to the ALUI Security database host computer.
2. In SQL Server Management Studio, access the database engine's properties.
3. Configure the database engine to use **SQL Server and Windows Authentication mode**.
4. Restart the database engine.
5. Create the ALUI Security database user:
 - a. Create the ALUI Security database user with the user name you provisioned when you completed the Configuration Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.
 - b. Configure the ALUI Security database user to use SQL Server Authentication.
 - c. Set the ALUI Security database user password to the password you designated when you completed the Analytics Installation and Configuration Worksheets document.
6. Create the ALUI Security database with the name you provisioned when you completed the Configuration Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.
7. Change the default database for the ALUI Security database user to the ALUI Security database.
8. Grant the ALUI Security database user the **db_owner** role for the ALUI Security database.

9. Create the ALUI Security database schema. Specify the ALUI Security database user as the schema owner.
10. Connect to the ALUI Security database as the ALUI Security database user, using SQL Server Authentication.
11. Run the **create_security_tables.sql** script, located in the folder that you copied in Step 1.

Creating the ALUI Security Database on Oracle

(Optional) For more complete details on performing this task, see [“Creating the ALUI Security Database on Oracle” on page 4-10](#).

Note: You do not need to perform this procedure if Pathways 1.5 is installed. Installing Pathways 1.5 requires creating the ALUI Security database.

To create and set up the ALUI Security database on Oracle:

1. On the machine to which you installed the Analytics Console component, copy the **oracle** directory from *install_dir\ptanalytics\2.5\sql* to the ALUI Security database’s host computer.
2. Log on to the host computer for the ALUI Security database as owner of the Oracle system files.
3. Create the ALUI Security database tablespace.
4. Create the ALUI Security database user.
5. Add the ALUI Security database user and password values into the Configuration Worksheet, which is included in the Analytics Installation and Configuration Worksheets document (you will enter these values into Configuration Manager when configuring Analytics database settings).
6. Connect to the ALUI Security database as the ALUI Security database user.
7. Run the **create_security_tables.sql** script, located in the folder that you copied in Step 1.
8. Run your database’s analysis tool on the ALUI Security database to the efficiency of the database.

Registering Portal Events

You must register portal events if you want Analytics to report on events that occur in the portal. To register portal events, run the following from the command line on the Analytics host machine:

- Windows:
 - .. PTANALYTICS_HOME\bin\AnalyticsLoadEvents.bat
 ..\settings\config\analytics-core-event-def.xml
 - .. PTANALYTICS_HOME\bin\AnalyticsLoadEvents.bat
 ..\settings\config\analytics-ali-event-def.xml
- UNIX/Linux:
 - .. PTANALYTICS_HOME/bin/AnalyticsLoadEvents.sh
 ../settings/config/analytics-core-event-def.xml
 - .. PTANALYTICS_HOME/bin/AnalyticsLoadEvents.sh
 ../settings/config/analytics-ali-event-def.xml

Registering Collaboration Events

To register Collaboration events, perform the following:

1. Navigate to the following file on the Collaboration host machine:
 install_dir\ptcollab\4.5\settings\config\analytics-collab-event-def.xml
2. Copy the **analytics-collab-event-def.xml** file on the Collaboration host machine to the following location on the Analytics host machine:
 install_dir\ptanalytics\2.5\settings\config
3. Run the following from the command line on the Analytics host machine:
 - .. PTANALYTICS_HOME\bin\AnalyticsLoadEvents.bat
 ..\settings\config\analytics-collab-event-def.xml (Windows)
 - .. PTANALYTICS_HOME/bin/AnalyticsLoadEvents.sh
 ../settings/config/analytics-collab-event-def.xml (UNIX/Linux)

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 Analytics Collector Component and Clustering the BEA AL Analytics Collector Service

This section includes the following topics:

- [Installing the Analytics Collector Component](#)
- [Clustering the BEA AL Analytics Collector Service](#)

Installing the Analytics Collector Component

This section describes how to install the Analytics Collector component, which includes the BEA AL Analytics Collector service. For more complete details on performing this task, see [“Installing the Analytics Collector Component” on page 4-12](#).

Note: If you want to cluster the BEA AL Analytics Collector service, we recommend that you install each node in the cluster on a separate machine (one installation of the Analytics Collector component is one instance of the BEA AL Analytics Collector service). One instance of the BEA AL Analytics Collector service operates as one node in the cluster).

To install the Analytics Collector component:

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_v2-5.exe**
 - UNIX/Linux: **ALAnalytics_ALI_v2-5**
4. Choose to install the Analytics Collector component.
5. Complete all installation wizard pages according to the settings you planned when you completed the Analytics Collector Component Installation Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.

Note: For important details about licensing, see documentation for the Existing License Update installation wizard page at [“Installing the Analytics Collector Component” on page 4-12](#).

6. After the installer has copied all files to the installation directory, the Launch Configuration Manager installation wizard page appears.
7. In Configuration Manager, configure all settings for all of the Analytics Collector application components using the database and connectivity settings that you provisioned when you completed the Analytics Installation and Configuration Worksheets document.

Clustering the BEA AL Analytics Collector Service

(Optional) A BEA AL Analytics Collector service cluster consists of multiple BEA AL Analytics Collector service nodes running simultaneously and working together to provide increased scalability and reliability. One instance of the BEA AL Analytics Collector service operates as one node in the cluster.

Note: You do not need to perform these steps if you do not want to cluster the BEA AL Analytics Collector service.

For more complete details on performing this task, see [“Clustering the BEA AL Analytics Collector Service” on page 4-15](#).

To cluster the BEA AL Analytics Collector service:

1. Configure AquaLogic Interaction to send events to the BEA AL Analytics Collector service cluster. For details, see [Configuring AquaLogic Interaction to Send Events to the Cluster](#).
2. Configure the nodes in the BEA AL Analytics Collector service cluster. For details, see [“Configuring Nodes in a Cluster” on page 3-10](#).

Configuring AquaLogic Interaction to Send Events to the Cluster

To configure AquaLogic Interaction to send events to the BEA AL Analytics Collector service cluster:

1. Access Configuration Manager on the machine on which AquaLogic Interaction is installed.
2. Configure the following settings in the **Analytics Communication** component:
 - Confirm that the **Enabled** check box is selected in the **Enable** area.
 - Click **Enabled** in the **Use Clustering** area.

- Configure the following settings in the **Cluster Communication** area: **Cluster name**, **Cluster node timeout period**, **Broadcast listening port**.

Online help for these settings is available in the Configuration Manager application.

Configuring Nodes in a Cluster

This section discusses how to configure nodes in a BEA AL Analytics Collector service cluster.

If you are configuring nodes of the BEA AL Analytics Collector service to use broadcast mode, IP broadcast packets are not automatically forwarded from one subnet to another. For this reason, you should configure each instance of the BEA AL Analytics Collector service to be in the same subnet as the application from which it receives events. This configuration ensures that the event-generating applications can successfully receive broadcast messages from the Collector service cluster. If you use virtualization software, we recommend that you configure nodes of the BEA AL Analytics Collector service to use broadcast mode.

Note: Perform this procedure for each node in the cluster.

To configure a node in a BEA AL Analytics Collector service cluster:

1. Ensure that you have installed the Analytics Collector component on each machine that will host a node in the cluster.

Note: We recommend that each instance of the BEA AL Analytics Collector service exist on a separate machine.

For installation instructions, see [“Installing the Analytics Collector Component” on page 3-8](#).

2. Access Configuration Manager on the BEA AL Analytics Collector service host.
3. Click the + symbol next to the **Analytics Collector** application name to view its components.
4. Configure the settings in the **Analytics Database** component.
5. Configure the settings in the **Clustering** component.

Note: The value for the **Cluster name** field should match the value set for the Cluster name field in the Portal Service application, Analytics Communication component of Configuration Manager on the portal host. You configured this setting when you performed the procedure [“Configuring AquaLogic Interaction to Send Events to the Cluster” on page 3-9](#).

6. Configure the settings in the **Logging** component.

Online help for these settings is available in the Configuration Manager application.

Installing the Interaction Analytics Component

The Interaction Analytics component facilitates communication between Analytics and the portal. For more complete details on performing this task, see [“Installing the Interaction Analytics Component” on page 4-17](#).

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

To install the Interaction Analytics 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_v2-5.exe**
 - UNIX/Linux: **ALAnalytics_ALI_v2-5**
4. Choose to install the **Interaction Analytics Component**.
5. Complete all installation wizard pages according to the settings you planned when you completed the Interaction Analytics Component 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, the Launch Configuration Manager installation wizard page appears.
7. In Configuration Manager, configure all settings for all of the Analytics Communication application components using the database and connectivity settings that you provisioned when you completed the Analytics Installation and Configuration Worksheets document.
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.

Installing the Image Service Component

For more complete details on performing this task, see [“Installing the Image Service Component” on page 4-20](#).

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_v2-5.exe**
 - UNIX/Linux: **ALAnalytics_ALI_v2-5**
4. Choose to install the **Image Service Component**.

Installing the Analytics Automation Jobs Component

For more complete details on performing this task, see [“Installing the Analytics Automation Jobs Component” on page 4-21](#)

To install the Analytics Automation Jobs 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_v2-5.exe**
 - UNIX/Linux: **ALAnalytics_ALI_v2-5**

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 **Analytics Automation Jobs** component.
5. Complete all installation wizard pages according to the settings you planned when you completed the Analytics Automation Jobs Component 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, the Launch Configuration Manager installation wizard page appears.
7. In Configuration Manager, configure all settings for all of the Analytics Jobs application components using the database and connectivity settings that you provisioned when you completed the Analytics Installation and Configuration Worksheets document.

Starting Analytics and Analytics Collector Services

For more complete details on performing this task, see [“Starting Analytics and Analytics Collector Services” on page 4-23](#).

To start the Analytics and Analytics Collector 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/2.5/bin/analyticsd.sh start.
```

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

```
install_dir/ptanalytics/2.5/bin/collectord.sh start
```

You can also start and stop these services using Configuration Manager. Log in to Configuration Manager using the user name Administrator and the password you specified during installation. Follow the instructions in Configuration Manager to start the Analytics Console and Analytics Collector applications.

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 4-24](#).

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**.

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 4-25](#).

To add Analytics jobs to the Automation Service:

1. Log into the portal as a user with administrative privileges.
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 the Analytics Jobs component is 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
2.1 to 2.5	Follow the procedures in this chapter.
2.0 to 2.5	Follow the procedures in this chapter.

Note: We do not support upgrades from Analytics 1.x to 2.5. To do so, you must first upgrade Analytics 1.0/1.1 to either 2.0 or 2.1, then perform the appropriate upgrade to Analytics 2.5.

Upgrading Analytics

This section discusses:

- [Upgrading Analytics from Version 2.1 to 2.5](#)
- [Upgrading Analytics from Version 2.0 to 2.5](#)

Upgrading Analytics from Version 2.1 to 2.5

This section describes how to upgrade from Analytics 2.1 to Analytics 2.5. For more complete details on performing this task, see [“Upgrading Analytics from Version 2.1 to Analytics 2.5” on page 5-2](#).

To upgrade from Analytics 2.1 to Analytics 2.5:

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 the Analytics Services component, using the tool of your choice.
3. Install the Analytics Console component. For details, see [“Installing the Analytics Console Component” on page 4-2](#).

Note: At this time, do not use Configuration Manager to configure Analytics Console settings.

Note: If you are upgrading to Analytics 2.5, you must choose **Overwrite License**. The installer replaces your Analytics 2.1 Production license with an Analytics 2.5 Evaluation license. Next, you must replace the Analytics 2.5 Evaluation license with an Analytics 2.5 Production license. You can obtain product licenses through elicense.bea.com or licensing@bea.com.

4. Configure the Analytics database. For details, see “[Configuring the Analytics Database](#)” on page 4-6.
 5. Register portal events. For details, see “[Registering Portal Events](#)” on page 4-10.
 6. Register Collaboration events. For details, see “[Registering Collaboration Events](#)” on page 4-11.
 7. **(AquaLogic Ensemble integration only)** Register Ensemble events. For details, see “[Registering Ensemble Events](#)” on page 4-11.
 8. Install the and configure Analytics Collector settings in Configuration Manager. For details, see “[Installing the Analytics Collector Component](#)” on page 4-12.
- Note:** If you are upgrading to Analytics 2.5, you must choose **Overwrite License**. The installer replaces your Analytics 2.1 Production license with an Analytics 2.5 Evaluation license. Next, you must replace the Analytics 2.5 Evaluation license with an Analytics 2.5 Production license. You can obtain product licenses through elicense.bea.com or licensing@bea.com.
9. **(Optional)** If desired, cluster the BEA AL Analytics Collector service. For details, see “[Clustering the BEA AL Analytics Collector Service](#)” on page 4-15.
 10. Back up the Analytics database using the tool of your choice.
 11. Upgrade the Analytics database by running the **upgrade_2.1_to_2.5.sql** script:

install_dir\ptanalytics\2.5\sql\database\upgrade_2.1_to_2.5.sql

12. Run the **Analytics25Update.bat** file:
 - Windows: *install_dir\ptanalytics\2.5\bin\Analytics25Update.bat*
 - UNIX/Linux: *install_dir\ptanalytics\2.5\bin\Analytics25Update.sh*
13. On the machine on which you installed the Analytics Console component, use Configuration Manager to configure all settings for all Analytics Console application components.

14. **(Oracle only)** Run your database's analysis tool on both the Analytics and portal databases to increase the efficiency of the databases.
15. Back up the installation directory of the previously-installed version of the Interaction Analytics component, using the tool of your choice.
16. Install the Interaction Analytics component and configure Analytics Communication settings in Configuration Manager. For details, see [“Installing the Interaction Analytics Component” on page 4-17](#).
17. Install the Image Service component. For details, [“Installing the Image Service Component” on page 4-20](#).
18. Stop and restart Analytics and portal services. For details, see [“Starting Analytics and Analytics Collector Services” on page 4-23](#).
19. Install the Analytics Automation Jobs component and configure Analytics Jobs settings in Configuration Manager. For details, see [“Installing the Analytics Automation Jobs Component” on page 4-21](#).
20. Add Analytics jobs to the Automation Service. For details, see [“Adding Analytics Jobs to the Automation Service” on page 4-25](#).
21. **(Optional)** Create and set up the ALUI Security database and migrate data from the portal database's security tables to the ALUI Security database.

Note: You do not need to perform these steps if either Pathways 1.5 or the Remote Portlets component of AquaLogic Interaction 6.5 is installed. Performing a clean (non-upgrade) install of Pathways 1.5 or installing the Remote Portlets component requires creating the ALUI Security database. Additionally, upgrading from Pathways 1.0 to Pathways 1.5 requires creating the ALUI Security database and migrating data from the portal database's security tables to the ALUI Security database.

 - a. Create and set up the ALUI Security database. For details, see [“Configuring the ALUI Security Database” on page 4-8](#).
 - b. On the machine on which the previous version of the BEA AL Analytics service is installed, run the **security-upgradetool.bat** or **security-upgradetool.sh** file, located in *install_dir\ptanalytics\2.5\bin*.

Upgrading Analytics from Version 2.0 to 2.5

To upgrade from Analytics 2.0 to Analytics 2.5:

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 the Analytics Console component. For details, see “[Installing the Analytics Console Component](#)” on page 4-2.

Note: At this time, do not use Configuration Manager to configure Analytics Console settings.

Note: If you are upgrading to Analytics 2.5, you must choose **Overwrite License**. The installer replaces your Analytics 2.0 Production license with an Analytics 2.5 Evaluation license. Next, you must replace the Analytics 2.5 Evaluation license with an Analytics 2.5 Production license. You can obtain product licenses through elicense.bea.com or licensing@bea.com.

4. Configure the Analytics database. For details, see “[Configuring the Analytics Database](#)” on page 4-6.
5. Register portal events. For details, see “[Registering Portal Events](#)” on page 4-10.
6. Register Collaboration events. For details, see “[Registering Collaboration Events](#)” on page 4-11.
7. **(AquaLogic Ensemble integration only)** Register Ensemble events. For details, see “[Registering Ensemble Events](#)” on page 4-11.
8. Install the and configure Analytics Collector settings in Configuration Manager. For details, see “[Installing the Analytics Collector Component](#)” on page 4-12.

Note: The installer adds an Analytics 2.5 Evaluation license. You must replace the Analytics 2.5 Evaluation license with an Analytics 2.5 Production license. You can obtain product licenses through elicense.bea.com or licensing@bea.com.

9. **(Optional)** If desired, cluster the . For details, see “[Clustering the BEA AL Analytics Collector Service](#)” on page 4-15.
10. Back up the Analytics database using the tool of your choice.
11. Upgrade the Analytics database by running the **upgrade_2.0_to_2.1.sql** script:
 - Windows: *install_dir\ptanalytics\2.5\sql\database\upgrade_2.0_to_2.1.sql*
 - UNIX/Linux: *install_dir/ptanalytics/2.5/sql/database/upgrade_2.0_to_2.1.sql*

12. Upgrade the Analytics database by running the **upgrade_2.1_to_2.5.sql** script:
 - Windows: *install_dir\ptanalytics\2.5\sql\database\upgrade_2.1_to_2.5.sql*
 - UNIX/Linux: *install_dir/ptanalytics/2.5/sql/database/upgrade_2.0_to_2.1.sql*
13. Run the **Analytics25Update.bat** file:
 - Windows: *install_dir\ptanalytics\2.5\bin\Analytics25Update.bat*
 - UNIX/Linux: *install_dir/ptanalytics/2.5/bin/Analytics25Update.sh*
14. On the machine on which you installed the Analytics Console component, configure all Analytics Console settings in Configuration Manager.
15. **(Oracle only)** Run your database's analysis tool on both the Analytics and portal databases to increase the efficiency of the databases.
16. Back up the installation directory of the previously-installed version of the Interaction Analytics component, using the tool of your choice.
17. Install the Interaction Analytics component and configure Analytics Communication settings in Configuration Manager. For details, see [“Installing the Interaction Analytics Component” on page 4-17](#)
18. Install the Image Service component. For details, [“Installing the Image Service Component” on page 4-20](#)
19. Stop and restart Analytics and portal services. For details, see [“Starting Analytics and Analytics Collector Services” on page 4-23](#).
20. 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 4-24](#).
21. Install the Analytics Automation Jobs component and configure Analytics Jobs settings in Configuration Manager. For details, see [“Installing the Analytics Automation Jobs Component” on page 4-21](#)
22. Add Analytics jobs to the Automation Service. For details, see [“Adding Analytics Jobs to the Automation Service” on page 4-25](#).
23. **(Optional)** Create and set up the ALUI Security database and migrate data from the portal database's security tables to the ALUI Security database.

Note: You do not need to perform these steps if either Pathways 1.5 or the Remote Portlets component of AquaLogic Interaction 6.5 is installed. Performing a clean

(non-upgrade) install of Pathways 1.5 or installing the Remote Portlets component requires creating the ALUI Security database. Additionally, upgrading from Pathways 1.0 to Pathways 1.5 requires creating the ALUI Security database and migrating data from the portal database's security tables to the ALUI Security database.

- a. Create and set up the ALUI Security database. For details, see [“Configuring the ALUI Security Database” on page 4-8](#).
- b. On the machine on which the previous version of the BEA AL Analytics service is installed, run the **security-upgrade.bat** or **security-upgrade.sh** file, located in *install_dir\ptanalytics\2.5\bin*.

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 the Analytics Console component on the remote server host computer. For details, see [“Installing the Analytics Console Component” on page 4-2](#).
3. Configure the Analytics database. For details, see [“Configuring the Analytics Database” on page 4-6](#).
4. Configure the ALUI Security database. For details, see [“Configuring the ALUI Security Database” on page 4-8](#).
5. Register portal events. For details, see [“Registering Portal Events” on page 4-10](#).
6. Register Collaboration events. For details, see [“Registering Collaboration Events” on page 4-11](#).
7. **(AquaLogic Ensemble integration only)** Register Ensemble events. For details, see [“Registering Ensemble Events” on page 4-11](#).
8. Install the Analytics Collector component and cluster the BEA AL Analytics Collector service. For details, see [“Installing the Analytics Collector Component and Clustering the BEA AL Analytics Collector Service” on page 4-12](#).

Note: Installing the Analytics Collector component is required. However, clustering the BEA AL Analytics Collector service is optional.

9. Install the Interaction Analytics component on all portal servers. For details, see [“Installing the Interaction Analytics Component” on page 4-17](#).
10. Install the Image Service component on your Image Service host. For details, see [“Installing the Image Service Component” on page 4-20](#).
11. Install the Analytics Automation Jobs component on your Automation Service host. For details, see [“Installing the Analytics Automation Jobs Component” on page 4-21](#).
12. Start Analytics and portal services. For details, see [“Starting Analytics and Analytics Collector Services” on page 4-23](#).
13. Register the Analytics application, remote server, web services, and portlets with the portal. For details, see [“Registering Analytics with the Portal” on page 4-24](#).
14. Add Analytics jobs to the Automation Service. For details, see [“Adding Analytics Jobs to the Automation Service” on page 4-25](#).

Installing the Analytics Console Component

This section describes how to install the Analytics Console component, which includes the Analytics user interface and the BEA AL Analytics service. The instructions are the same for installing on a Windows, UNIX, or Linux host, with slight exceptions as noted. To install the Analytics Console component:

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_v2-5.exe**
 - UNIX/Linux: **ALAnalytics_ALI_v2-5**
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 Service Installation Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.

Table 4-1 Installation Wizard Pages - Analytics Console Component

Wizard Page	Description
License Agreement	Read and accept the license agreement.
Choose Components	Choose Analytics Console .
Analytics Console - Installation Directory	<p>The default is:</p> <ul style="list-style-type: none"> • <i>install_dir</i>\ptanalytics (Windows) • <i>install_dir</i>/ptanalytics (UNIX and Linux) <p>Note: By default, <i>install_dir</i> is C:\bea\alui (Windows) and /opt/bea/alui (UNIX/Linux)</p>
Configuration Manager - Update	This page is displayed if an existing installation of Configuration Manager 2.0 is detected. Select if you want to update the password or port information for Configuration Manager or use the existing settings.
Configuration Manager - Port and Password	<p>This page is displayed if you chose to update Configuration Manager's password and port information or if you are installing Configuration Manager for the first time.</p> <p>Type the port number on which you want Configuration Manager to service requests.</p> <p>By default, the port number is 12345. After running the installer, you will be able to access Configuration Manager by using the following URL: <i>https://localhost:port_number</i>.</p> <p>Also type and confirm the Administrator password that you will use to log into Configuration Manager. The password is case-sensitive.</p> <p>In Windows, the Configuration Manager runs as the BEA AL Configuration Manager(<i>port_number</i>) service.</p>

Table 4-1 Installation Wizard Pages - Analytics Console Component

Wizard Page	Description
License Directory	<p>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:</p> <ul style="list-style-type: none"> • C:\bea (Windows) • /opt/bea (UNIX/Linux) <p>Note: When Analytics is installed with an evaluation version of the license.bea file, all user-level events are reported as performed by only the Administrator user. Analytics must be installed with a Production version of the license.bea file for user-level events to be reported on all individual users.</p>
Existing License Update	<p>This page is displayed if you have an existing license. Perform one of the following:</p> <ul style="list-style-type: none"> • Select Merge License to merge an Evaluation license with the existing license. • Select Overwrite License to overwrite the existing license with an Evaluation license. The installer will place a backup of the existing license in BEA_HOME. <p>Note: If you are upgrading to Analytics 2.5, you must choose Overwrite License. The installer replaces your Analytics 2.1 Production license with an Analytics 2.5 Evaluation license. Next, you must replace the Analytics 2.5 Evaluation license with an Analytics 2.5 Production license. You can obtain product licenses through license.bea.com or licensing@bea.com.</p> <ul style="list-style-type: none"> • Select Leave Alone to leave the existing license. If you already have a production license for Analytics, choose Leave Alone. <p>Note: When Analytics is installed with an evaluation version of the license.bea file, all user-level events are reported as performed by only the Administrator user. Analytics must be installed with a Production version of the license.bea file for user-level events to be reported on all individual users.</p> <p>For more complete details on license types and combining license keys, see Appendix C, “Licensing.”</p>

Table 4-1 Installation Wizard Pages - Analytics Console Component

Wizard Page	Description
Pre-Installation Summary	<p data-bbox="447 392 1185 482">Click Install to begin the installation. The installer copies the BEA AL Analytics service and core application files to the installation directory.</p> <p data-bbox="447 508 1185 590">Note: The installer writes a log file to the directory where it is installed (for example: C:\bea\alui\installlogs). If you encounter problems during installation, examine the error messages in the log file.</p>
Launch Configuration Manager	<p data-bbox="447 619 1185 710">This installation wizard page lets you access Configuration Manager to configure settings for the core Analytics application. It is important that you perform these steps in the following order:</p> <ol data-bbox="447 725 1185 1433" style="list-style-type: none"> 1. Before launching Configuration Manager, you must configure the Analytics and ALUI Security databases, described in: <ul data-bbox="485 795 1126 861" style="list-style-type: none"> – “Configuring the Analytics Database” on page 4-6. – “Configuring the ALUI Security Database” on page 4-8. 2. Click the link on this installation wizard page to access Configuration Manager. The default username for logging into Configuration Manager is administrator. Use the password that you typed into the Configuration Manager - Port and Password installation wizard page. 3. In Configuration Manager, click the + symbol next to the Analytics Console application name to view its components. 4. Configure all settings for all of the Analytics Console components using the database and connectivity settings that you provisioned when you completed the Analytics Installation and Configuration Worksheets document. Online Help for these settings is available in the Configuration Manager application. <p data-bbox="447 1312 1185 1394">Note: 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.</p> <ol data-bbox="447 1407 1022 1433" style="list-style-type: none"> 5. (Optional) Click LOGOUT in Configuration Manager.

Table 4-1 Installation Wizard Pages - Analytics Console Component

Wizard Page	Description
Application Settings Confirmation	Select Yes if you have completed configuration of the Analytics settings. Select No, configure later to complete the installer without configuring the Analytics settings. You must run the Configuration Manager and configure Analytics settings before starting Analytics.
Install Complete	Click Done to complete the Analytics Console component installation.

Configuring the Analytics Database

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

- [Creating the Analytics Database on Microsoft SQL Server](#)
- [Creating the Analytics Database on Oracle](#)

Creating the Analytics Database on Microsoft SQL Server

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

1. On the machine to which you installed the Analytics Console component, copy the scripts from `install_dir\ptanalytics\2.5\sql\mssql` to the database host computer.
2. In SQL Server Management Studio, access database engine's properties.
3. Configure the database engine to use **SQL Server and Windows Authentication mode**.
4. Restart the database engine.
5. Create the Analytics database user:
 - a. Create the Analytics database user with the user name you provisioned when you completed the Configuration 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.
6. Create the Analytics database with the following properties:

- Create a database with the name you provisioned when you completed the Configuration 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.
7. Grant the Analytics database user the **db_owner** role for the Analytics database.
 8. Create the Analytics database schema. Specify the Analytics database user as the schema owner.
 9. Connect to the Analytics database as the Analytics database user, using SQL Server Authentication.
 10. Run the setup scripts for the database, located in the *install_dir\ptanalytics\2.5\sql\mssql* folder, in the following order (make sure that you are running the scripts on the Analytics database):
 - a. **create_analytics_schema.sql**
 - b. **install_analytics_data.sql**

Creating the Analytics Database on Oracle

To create and set up the Analytics database on Oracle:

1. On the machine to which you installed the Analytics Console component, copy the **oracle** directory from *install_dir\ptanalytics\2.5\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_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 Configuration Worksheet, which is included in the Analytics Installation and Configuration Worksheets document (you will enter these values into Configuration Manager when configuring Analytics database settings).
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_data.sql**. This script adds all of the initial seed data that are necessary to run the Analytics product. The **install_analytics_data.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.

Configuring the ALUI Security Database

(Optional) This section describes how to set up the ALUI Security database.

Note: You do not need to perform this procedure if Pathways 1.5 is installed. Installing Pathways 1.5 requires creating the ALUI Security database.

This section contains the following sections:

- [Creating the ALUI Security Database on Microsoft SQL Server](#)
- [Creating the ALUI Security Database on Oracle](#)

Creating the ALUI Security Database on Microsoft SQL Server

(Optional) This section describes how to set up the ALUI Security database on Microsoft SQL Server.

Note: You do not need to perform this procedure if Pathways 1.5 is installed. Installing Pathways 1.5 requires creating the ALUI Security database.

To create and set up the ALUI Security database on Microsoft SQL Server:

1. On the machine to which you installed the Analytics Console component, copy the scripts from *install_dir\ptanalytics\2.5\sql\mssql* to the ALUI Security database host computer.
This folder contains the script that you will use to configure the ALUI Security database.
2. In SQL Server Management Studio, access the database engine's properties.
3. Configure the database engine to use **SQL Server and Windows Authentication mode**.
4. Restart the database engine.
5. Create the ALUI Security database user:
 - a. Create the ALUI Security database user with the user name you provisioned when you completed the Configuration Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.
 - b. Configure the ALUI Security database user to use SQL Server Authentication.
 - c. Set the ALUI Security database user password to the password you designated when you completed the Analytics Installation and Configuration Worksheets document.
6. Create the ALUI Security database with the name you provisioned when you completed the Configuration Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.
7. Change the default database for the ALUI Security database user to the ALUI Security database.
8. Grant the ALUI Security database user the **db_owner** role for the ALUI Security database.
9. Create the ALUI Security database schema. Specify the ALUI Security database user as the schema owner.

10. Connect to the ALUI Security database as the ALUI Security database user, using SQL Server Authentication.
11. Run the **create_security_tables.sql** script, located in the folder that you copied in Step 1.

Creating the ALUI Security Database on Oracle

(Optional) This section describes how to set up the ALUI Security database on Oracle.

Note: You do not need to perform this procedure if Pathways 1.5 is installed. Installing Pathways 1.5 requires creating the ALUI Security database.

To create and set up the ALUI Security database on Oracle:

1. On the machine to which you installed the Analytics Console component, copy the **oracle** directory from *install_dir\ptanalytics\2.5\sql* to the ALUI Security database's host computer.

This folder contains the script that you will use to configure the ALUI Security database.
2. Log on to the host computer for the ALUI Security database as owner of the Oracle system files.
3. Create the ALUI Security database tablespace.
4. Create the ALUI Security database user.
5. Add the ALUI Security database user and password values into the Configuration Worksheet, which is included in the Analytics Installation and Configuration Worksheets document (you will enter these values into Configuration Manager when configuring Analytics database settings).
6. Connect to the ALUI Security database as the ALUI Security database user.
7. Run the **create_security_tables.sql** script, located in the folder that you copied in Step 1.
8. Run your database's analysis tool on the ALUI Security database to the efficiency of the database.

Registering Portal Events

You must register portal events if you want Analytics to report on events that occur in the portal. To register portal events, run the following from the command line on the Analytics host machine:

- Windows:
 - .. PTANALYTICS_HOME\bin\AnalyticsLoadEvents.bat
 ..\settings\config\analytics-core-event-def.xml
 - .. PTANALYTICS_HOME\bin\AnalyticsLoadEvents.bat
 ..\settings\config\analytics-ali-event-def.xml
- UNIX/Linux:
 - .. PTANALYTICS_HOME/bin/AnalyticsLoadEvents.sh
 ../settings/config/analytics-core-event-def.xml
 - .. PTANALYTICS_HOME/bin/AnalyticsLoadEvents.sh
 ../settings/config/analytics-ali-event-def.xml

Registering Collaboration Events

To register Collaboration events, perform the following:

1. Navigate to the following file on the Collaboration host machine:
install_dir\ptcollab\4.5\settings\config\analytics-collab-event-def.xml
2. Copy the **analytics-collab-event-def.xml** file on the Collaboration host machine to the following location on the Analytics host machine:
install_dir\ptanalytics\2.5\settings\config
3. Run the following from the command line on the Analytics host machine:
 - .. PTANALYTICS_HOME\bin\AnalyticsLoadEvents.bat
 ..\settings\config\analytics-collab-event-def.xml (Windows)
 - .. PTANALYTICS_HOME/bin/AnalyticsLoadEvents.sh
 ../settings/config/analytics-collab-event-def.xml (UNIX/Linux)

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 Analytics Collector Component and Clustering the BEA AL Analytics Collector Service

This section includes the following topics:

- [Installing the Analytics Collector Component](#)
- [Clustering the BEA AL Analytics Collector Service](#)

Installing the Analytics Collector Component

This section describes how to install the Analytics Collector component, which includes the BEA AL Analytics Collector service. The instructions are the same for installing on a Windows, UNIX, or Linux host, with slight exceptions as noted.

Note: If you want to cluster the BEA AL Analytics Collector service, we recommend that you install each node in the cluster on a separate machine (one installation of the Analytics Collector component is one instance of the BEA AL Analytics Collector service. One instance of the BEA AL Analytics Collector service operates as one node in the cluster). For details on clustering the BEA AL Analytics Collector service, see [“Clustering the BEA AL Analytics Collector Service” on page 4-15](#).

To install the BEA AL Analytics Collector service:

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_v2-5.exe**
 - UNIX/Linux: **ALAnalytics_ALI_v2-5**
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 Collector Component Installation

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

Table 4-2 Installation Wizard Pages - Analytics Collector Component

Wizard Page	Description
License Agreement	Read and accept the license agreement.
Choose Components	Choose Analytics Collector .
Analytics Collector - Installation Directory	<p>The default is:</p> <ul style="list-style-type: none"> <i>install_dir</i>\ptcollector (Windows) <i>install_dir</i>\ptcollector (UNIX and Linux) <p>Note: By default, <i>install_dir</i> is C:\bea\alui (Windows) and /opt/bea/alui (UNIX/Linux)</p>
Configuration Manager - Update	<p>This page is displayed if an existing installation of Configuration Manager 2.0 is detected. Select if you want to update the password or port information for Configuration Manager or use the existing settings.</p>
Configuration Manager - Port and Password	<p>This page is displayed if you chose to update Configuration Manager's password and port information.</p> <p>Type the port number on which you want Configuration Manager to service requests.</p> <p>By default, the port number is 12345. After running the installer, you will be able to access Configuration Manager by using the following URL: <i>https://localhost:port_number</i>.</p> <p>Also type and confirm the Administrator password that you will use to log into Configuration Manager. The password is case-sensitive.</p>
License Directory	<p>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:</p> <ul style="list-style-type: none"> C:\bea (Windows) /opt/bea (UNIX/Linux) <p>Note: When Analytics is installed with an evaluation version of the license.bea file, all user-level events are reported as performed by only the Administrator user. Analytics must be installed with a Production version of the license.bea file for user-level events to be reported on all individual users.</p>

Table 4-2 Installation Wizard Pages - Analytics Collector Component

Wizard Page	Description
Existing License Update	<p>This page is displayed if you have an existing license. Perform one of the following:</p> <ul style="list-style-type: none"> • Select Merge License to merge an Evaluation license with the existing license. • Select Overwrite License to overwrite the existing license with an Evaluation license. The installer will place a backup of the existing license in BEA_HOME. <p>Note: If you are upgrading to Analytics 2.5, you must choose Overwrite License. The installer replaces your Analytics 2.1 Production license with an Analytics 2.5 Evaluation license. Next, you must replace the Analytics 2.5 Evaluation license with an Analytics 2.5 Production license. You can obtain product licenses through license.bea.com or licensing@bea.com.</p> <ul style="list-style-type: none"> • Select Leave Alone to leave the existing license. If you already have a production license for Analytics, choose Leave Alone. <p>Note: When Analytics is installed with an evaluation version of the license.bea file, all user-level events are reported as performed by only the Administrator user. Analytics must be installed with a Production version of the license.bea file for user-level events to be reported on all individual users.</p> <p>For more complete details on license types and combining license keys, see Appendix C, “Licensing.”</p>
Pre-Installation Summary	<p>Click Install to begin the installation. The installer copies BEA AL Analytics Collector service files to the installation directory.</p> <p>Note: The installer writes a log file to the directory where it is installed (for example: C:\bea\alui\installlogs). If you encounter problems during installation, examine the error messages in the log file.</p>

Table 4-2 Installation Wizard Pages - Analytics Collector Component

Wizard Page	Description
Launch Configuration Manager	<p>Click the link to access Configuration Manager. The default username for logging into Configuration Manager is administrator. Use the password that you typed into the Configuration Manager - Port and Password installation wizard page.</p> <p>In Configuration Manager:</p> <ol style="list-style-type: none"> 1. Click the + symbol next to the Analytics Collector application name to view its components. 2. Configure all settings for all of the s. <p>Online Help for these settings is available in the Configuration Manager application.</p> <p>Use the database and connectivity settings that you provisioned when you completed the Analytics Installation and Configuration Worksheets document.</p>
Application Settings Confirmation	<p>Select Yes if you have completed configuration of the Analytics Collector settings.</p> <p>Select No, configure later to complete the installer without configuring the Analytics Collector settings. You must run Configuration Manager and configure Analytics Collector settings before starting Analytics.</p>
Install Complete	Click Done to complete the installation.

Clustering the BEA AL Analytics Collector Service

(Optional) A Collector service cluster consists of multiple BEA AL Analytics Collector service nodes running simultaneously and working together to provide increased scalability and reliability. One instance of the BEA AL Analytics Collector service operates as one node in the cluster.

Note: You do not need to perform these steps if you do not want to cluster the BEA AL Analytics Collector service.

To cluster the BEA AL Analytics Collector service:

1. Configure AquaLogic Interaction to send events to the BEA AL Analytics Collector cluster. For details, see [Configuring AquaLogic Interaction to Send Events to the Cluster](#).

2. Configure the nodes in the BEA AL Analytics Collector service cluster. For details, see [“Configuring Nodes in a Cluster” on page 4-16.](#)

Configuring AquaLogic Interaction to Send Events to the Cluster

To configure AquaLogic Interaction to send events to the BEA AL Analytics Collector service cluster:

1. Access Configuration Manager on the machine on which AquaLogic Interaction is installed.
2. Click the + symbol next to the **Portal Service** application name to view its components.
3. Configure the following settings in the **Analytics Communication** component:
 - Confirm that the **Enabled** check box is selected in the **Enable** area.
 - Click **Enabled** in the **Use Clustering** area.
 - Configure the following settings in the **Cluster Communication** area: **Cluster name**, **Cluster node timeout period**, **Broadcast listening port**.

Online help for these settings is available in the Configuration Manager application.

Configuring Nodes in a Cluster

This section discusses how to configure nodes in a BEA AL Analytics Collector service cluster.

If you are configuring nodes of the BEA AL Analytics Collector service to use broadcast mode, IP broadcast packets are not automatically forwarded from one subnet to another. For this reason, you should configure each instance of the BEA AL Analytics Collector service to be in the same subnet as the application from which it receives events. This configuration ensures that the event-generating applications can successfully receive broadcast messages from the Collector service cluster. If you use virtualization software, we recommend that you configure nodes of the BEA AL Analytics Collector service to use broadcast mode.

Perform this procedure for each node in the cluster.

To configure a node in a BEA AL Analytics Collector service cluster:

1. Ensure that you have installed the BEA AL Analytics Collector service on each machine that will host a node in the cluster.

Note: We recommend that each instance of the BEA AL Analytics Collector service exist on a separate machine.

For installation instructions, see [“Installing the Analytics Collector Component” on page 4-12.](#)

2. Access Configuration Manager on the BEA AL Analytics Collector service host.
3. Click the + symbol next to the **Analytics Collector** application name to view its components.
4. Configure the settings in the **Analytics Database** component.
5. Configure the settings in the **Clustering** component.

Note: The value for the **Cluster name** field should match the value set for the Cluster name field in the Portal Service application, Analytics Communication component of Configuration Manager on the portal host. You configured this setting when you performed the procedure [“Configuring AquaLogic Interaction to Send Events to the Cluster”](#) on page 4-16.

6. Configure the settings in the **Logging** component.

Online help for these settings is available in the Configuration Manager application.

Installing the Interaction Analytics Component

This section describes how to install the Interaction Analytics component. The Interaction Analytics component facilitates communication between Analytics and 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 Analytics component after each time you upgrade AquaLogic Interaction.

To install the Interaction Analytics 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_v2-5.exe**
 - UNIX/Linux: **ALAnalytics_ALI_v2-5**
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 Analytics Component Installation Worksheet, which is included in the Analytics Installation and Configuration Worksheets document.

Table 4-3 Installation Wizard Pages - Interaction Analytics Component

Wizard Page	Description
License Agreement	Read and accept the license agreement.
Choose Components	Choose Interaction Analytics Component .
Configuration Manager - Update	This page is displayed if an existing installation of Configuration Manager 2.0 is detected. Select if you want to update the password or port information for Configuration Manager or use the existing settings.
Configuration Manager - Port and Password	<p>This page is displayed if you chose to update Configuration Manager's password and port information.</p> <p>Type the port number on which you want Configuration Manager to service requests.</p> <p>By default, the port number is 12345. After running the installer, you will be able to access Configuration Manager by using the following URL: <i>https://localhost:port_number</i>.</p> <p>Also type and confirm the Administrator password that you will use to log into Configuration Manager. The password is case-sensitive.</p>
Portal Installation Directory	<p>Browse and select the location of the portal server installation, for example: <i>install_dir\ptportal\6.5</i></p> <p>Note: The Interaction Analytics and Analytics Automation Jobs components require installation into the same directory. For this reason, you use the same wizard page for both installations.</p>
Pre-Installation Summary	<p>Click Install to begin the installation. The installer copies Interaction Analytics component files to the installation directory.</p> <p>The installer writes a log file to the directory where it is installed (for example: C:\bea\alui\installlogs). If you encounter problems during installation, examine the error messages in the log file.</p>

Table 4-3 Installation Wizard Pages - Interaction Analytics Component

Wizard Page	Description
Launch Configuration Manager	<p>Click the link to access Configuration Manager. The default username for logging into Configuration Manager is administrator. Use the password that you typed into the Configuration Manager - Port and Password installation wizard page.</p> <p>In Configuration Manager:</p> <ol style="list-style-type: none"> 1. Click the + symbol next to Portal Service application name to view its components. 2. Click the Analytics Communication component. 3. Click the Enabled check box, which appears in the Enable Analytics Communication area. Additional configuration options appear. 4. Configure the following settings: <ul style="list-style-type: none"> – Enable unicast – Collector hostname – Collector port <p>Online Help for these settings is available in the Configuration Manager application.</p> <p>Use the settings that you provisioned when you completed the Analytics Installation and Configuration Worksheets document.</p>
Application Settings Confirmation	<p>Select Yes if you have completed configuration of the Analytics settings.</p> <p>Select No, configure later to complete the installer without configuring the Analytics settings. You must run the Configuration Manager and configure Analytics Communication settings before starting Analytics.</p>
Install Complete	Click Done to complete the Interaction Analytics Component installation.

7. 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\installlogs**). 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_v2-5.exe**
 - UNIX/Linux: **ALAnalytics_ALI_v2-5**
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 .
Image Service Component - Image Service Installation Directory	Browse and select the location where the Image Service files are installed, for example: <i>install_dir\ptimages</i> .

Table 4-4 Installation Wizard Pages - Image Service Component

Wizard Page	Description
Pre-Installation Summary	<p>Click Install to begin the installation. The installer copies Image Service component files to the installation directory.</p> <p>The installer writes a log file to the directory where it is installed (for example: C:\bea\alui\installlogs). If you encounter problems during installation, examine the error messages in the log file.</p>
Install Complete	Click Done to complete the Image Service component installation.

Installing the Analytics Automation Jobs Component

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

To install the Analytics Automation Jobs 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_v2-5.exe**
 - UNIX/Linux: **ALAnalytics_ALI_v2-5**

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 Analytics Automation Jobs Component

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

Table 4-5 Installation Wizard Pages - Analytics Automation Jobs Component

Wizard Page	Description
License Agreement	Read and accept the license agreement.
Choose Components	Choose Analytics Automation Jobs .
Configuration Manager - Update	This page is displayed if an existing installation of Configuration Manager 2.0 is detected. Select if you want to update the password or port information for Configuration Manager or use the existing settings.
Configuration Manager - Port and Password	<p>This page is displayed if you chose to update Configuration Manager's password and port information.</p> <p>Type the port number on which you want Configuration Manager to service requests.</p> <p>By default, the port number is 12345. After running the installer, you will be able to access Configuration Manager by using the following URL: <i>https://localhost:port_number</i>.</p> <p>Also type and confirm the Administrator password that you will use to log into Configuration Manager. The password is case-sensitive.</p>
Portal Installation Directory	<p>Browse and select the location of the portal server installation, for example: <i>install_dir\ptportal\6.5</i>.</p> <p>Note: The Analytics Automation Jobs and Interaction Analytics components require installation into the same directory. For this reason, you use the same wizard page for both installations.</p>
Pre-Installation Summary	<p>Click Install to begin the installation. The installer copies Analytics jobs to the installation directory.</p> <p>The installer writes a log file to the directory where it is installed (for example: C:\bea\alui\installlogs). If you encounter problems during installation, examine the error messages in the log file.</p>

Table 4-5 Installation Wizard Pages - Analytics Automation Jobs Component

Wizard Page	Description
Launch Configuration Manager	<p>Click the link to access Configuration Manager. The default username for logging into Configuration Manager is administrator. Use the password that you typed into the Configuration Manager - Port and Password installation wizard page.</p> <p>In Configuration Manager:</p> <ol style="list-style-type: none"> 1. Click the + symbol next to the Analytics Jobs application name to view its components. 2. Configure all settings for all of the Analytics Jobs components. <p>Online Help for these settings is available in the Configuration Manager application.</p> <p>Use the database and connectivity settings that you provisioned when you completed the Analytics Installation and Configuration Worksheets document.</p>
Application Settings Confirmation	<p>Select Yes if you have completed configuration of the Analytics Jobs settings. Select No, configure later to complete the installer without configuring the Analytics Jobs settings. You must run the Configuration Manager and configure Analytics Jobs settings before starting Analytics.</p>
Install Complete	Click Done to complete the Analytics Automation Jobs component installation.

Starting Analytics and Analytics Collector Services

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

Starting Analytics and Analytics Collector Services on Windows

After you have installed all Analytics components:

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

You can also start and stop these services using Configuration Manager. Log in to Configuration Manager using the user name Administrator and the password you specified during installation. Follow the instructions in Configuration Manager to start the Analytics Console and Analytics Collector applications.

Starting the Analytics and Analytics Collector Services on UNIX and Linux

After you have installed all Analytics components:

- Ensure the BEA AL Analytics service has been started:
install_dir/ptanalytics/2.5/bin/analyticsd.sh start
- Ensure the BEA AL Analytics Collector service has been started:
install_dir/ptcollector/2.5/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 portal as a user with administrative privileges.
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\2.5\serverpackages\analytics.ptc
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 the Analytics Jobs component is 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.

Upgrade

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

- [Upgrade Paths](#)
- [Upgrading Analytics from Version 2.1 to Analytics 2.5](#)
- [Upgrading Analytics from Version 2.0 to Analytics 2.5](#)

Upgrade Paths

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

Table 5-1 Upgrade Paths

Upgrade Path	Upgrade References
2.1 to 2.5	Follow the procedures in this chapter.
2.0 to 2.5	Follow the procedures in this chapter.

Note: We do not support upgrades from Analytics 1.x to 2.5. To do so, you must first upgrade Analytics 1.0/1.1 to either 2.0 or 2.1, then perform the appropriate upgrade to Analytics 2.5.

Upgrading Analytics from Version 2.1 to Analytics 2.5

To upgrade from Analytics 2.1 to Analytics 2.5:

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 the Analytics Services component, using the tool of your choice.

Note: In Analytics 2.1, the *Analytics Services* component installation consisted of the BEA AL Analytics service, the core Analytics application files, and the BEA AL Analytics Collector service. The default installation directory for Analytics Services was *install_dir\ptanalytics* (Windows) and *install_dir/ptanalytics* (UNIX and Linux).

In Analytics 2.5, installing the Analytics Console component installs only the BEA AL Analytics service and the core Analytics application files. Installing the Analytics Collector component installs only the BEA AL Analytics Collector service.

3. Install the Analytics Console component. For details, see “[Installing the Analytics Console Component](#)” on page 4-2.

If you are choosing the same location as the existing software, accept the default installation directory location when prompted.

Note: At this time, do not use Configuration Manager to configure Analytics Console settings.

Note: If you are upgrading to Analytics 2.5, you must choose **Overwrite License**. The installer replaces your Analytics 2.1 Production license with an Analytics 2.5 Evaluation license. Next, you must replace the Analytics 2.5 Evaluation license with an Analytics 2.5 Production license. You can obtain product licenses through elicense.bea.com or licensing@bea.com.

4. Configure the Analytics database. For details, see “[Configuring the Analytics Database](#)” on page 4-6.
5. Register portal events. For details, see “[Registering Portal Events](#)” on page 4-10.
6. Register Collaboration events. For details, see “[Registering Collaboration Events](#)” on page 4-11.
7. (**AquaLogic Ensemble integration only**) Register Ensemble events. For details, see “[Registering Ensemble Events](#)” on page 4-11.

8. Install the Analytics Collector component and configure Analytics Collector settings in Configuration Manager. For details, see [“Installing the Analytics Collector Component” on page 4-12](#).
- Note:** If you are upgrading to Analytics 2.5, you must choose **Overwrite License**. The installer replaces your Analytics 2.1 Production license with an Analytics 2.5 Evaluation license. Next, you must replace the Analytics 2.5 Evaluation license with an Analytics 2.5 Production license. You can obtain product licenses through elicense.bea.com or licensing@bea.com.
9. **(Optional)** If desired, cluster the BEA AL Analytics Collector service. For details, see [“Clustering the BEA AL Analytics Collector Service” on page 4-15](#).
10. Back up the Analytics database using the tool of your choice.
11. Upgrade the Analytics database by running the **upgrade_2.1_to_2.5.sql** script:
 - Windows: `install_dir\ptanalytics\2.5\sql\database\upgrade_2.1_to_2.5.sql`
 - UNIX/Linux: `install_dir\ptanalytics\2.5\sql\database\upgrade_2.0_to_2.1.sql`
12. Run the **Analytics25Update.bat** file:
 - Windows: `install_dir\ptanalytics\2.5\bin\Analytics25Update.bat`
 - UNIX/Linux: `install_dir\ptanalytics\2.5\bin\Analytics25Update.sh`
13. On the machine on which you installed the Analytics Console component:
 - a. Access Configuration Manager.
 - b. Click the + symbol next to the **Analytics Console** application name to view its components.
 - c. Configure all Analytics Console settings.
14. **(Oracle only)** Run your database’s analysis tool on both the Analytics and portal databases to increase the efficiency of the databases.
15. Back up the installation directory of the previously-installed version of the Interaction Analytics component, using the tool of your choice.
16. Install the Interaction Analytics component and configure Analytics Communication settings in Configuration Manager. For details, see [“Installing the Interaction Analytics Component” on page 4-17](#)

17. Install the Image Service component. For details, [“Installing the Image Service Component” on page 4-20](#)
18. Stop and restart Analytics and Analytics Collector services. For details, see [“Starting Analytics and Analytics Collector Services” on page 4-23](#).
19. Install the Analytics Automation Jobs component and configure Analytics Jobs settings in Configuration Manager. For details, see [“Installing the Analytics Automation Jobs Component” on page 4-21](#)
20. Add Analytics jobs to the Automation Service. For details, see [“Adding Analytics Jobs to the Automation Service” on page 4-25](#).
21. **(Optional)** Create and set up the ALUI Security database and migrate data from the portal database’s security tables to the ALUI Security database.

Note: You do not need to perform these steps if Pathways 1.5 is installed. Performing a clean (non-upgrade) install of Pathways 1.5 requires creating the ALUI Security database. Upgrading from Pathways 1.0 to Pathways 1.5 requires creating the ALUI Security database and migrating data from the portal database’s security tables to the ALUI Security database.

- a. Create and set up the ALUI Security database. For details, see [“Configuring the ALUI Security Database” on page 4-8](#).
- b. On the machine on which the previous version of the BEA AL Analytics service is installed, run the **security-upgradetool.bat** or **security-upgradetool.sh** file, located in *install_dir\ptanalytics\2.5\bin*.

Performing this step migrates data from the portal database’s security tables to the ALUI Security database.

Upgrading Analytics from Version 2.0 to Analytics 2.5

To upgrade from Analytics 2.0 to Analytics 2.5.

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 the Analytics Services component, using the tool of your choice.

Note: In Analytics 2.0, the *Analytics Services* component installation consisted of the BEA AL Analytics service, the core Analytics application files, and the BEA AL Analytics

Collector service. The default installation directory for Analytics Services was *install_dir\ptanalytics* (Windows) and *install_dir/ptanalytics* (UNIX and Linux).

In Analytics 2.5, installing the Analytics Console component installs only the BEA AL Analytics service and the core Analytics application files. Installing the Analytics Collector component installs only the BEA AL Analytics Collector service.

3. Install the Analytics Console component. For details, see “[Installing the Analytics Console Component](#)” on page 4-2.

If you are choosing the same location as the existing software, accept the default installation directory location when prompted.

Note: At this time, do not use Configuration Manager to configure Analytics Console settings.

Note: The installer adds an Analytics 2.5 Evaluation license. You must replace the Analytics 2.5 Evaluation license with an Analytics 2.5 Production license. You can obtain product licenses through license.bea.com or licensing@bea.com.

4. Configure the Analytics database. For details, see “[Configuring the Analytics Database](#)” on page 4-6.
 5. Register portal events. For details, see “[Registering Portal Events](#)” on page 4-10.
 6. Register Collaboration events. For details, see “[Registering Collaboration Events](#)” on page 4-11.
 7. **(AquaLogic Ensemble integration only)** Register Ensemble events. For details, see “[Registering Ensemble Events](#)” on page 4-11.
 8. Install the Analytics Collector component and configure Analytics Collector settings in Configuration Manager. For details, see “[Installing the Analytics Collector Component](#)” on page 4-12.
- Note:** If you are upgrading to Analytics 2.5, you must choose **Overwrite License**. The installer replaces your Analytics 2.0 Production license with an Analytics 2.5 Evaluation license. Next, you must replace the Analytics 2.5 Evaluation license with an Analytics 2.5 Production license. You can obtain product licenses through license.bea.com or licensing@bea.com.
9. **(Optional)** If desired, cluster the BEA AL Analytics Collector service. For details, see “[Clustering the BEA AL Analytics Collector Service](#)” on page 4-15.
 10. Back up the Analytics database using the tool of your choice.

11. Upgrade the Analytics database by running the **upgrade_2.0_to_2.1.sql** script:
 - Windows: *install_dir\ptanalytics\2.5\sql\database\upgrade_2.0_to_2.1.sql*
 - UNIX/Linux: *install_dir\ptanalytics\2.5\sql\database\upgrade_2.0_to_2.1.sql*
12. Upgrade the Analytics database by running the **upgrade_2.1_to_2.5.sql** script:
 - Windows: *install_dir\ptanalytics\2.5\sql\database\upgrade_2.1_to_2.5.sql*
 - UNIX/Linux: *install_dir\ptanalytics\2.5\sql\database\upgrade_2.0_to_2.1.sql*
13. Run the **Analytics25Update.bat** file:
 - Windows: *install_dir\ptanalytics\2.5\bin\Analytics25Update.bat*
 - UNIX/Linux: *install_dir\ptanalytics\2.5\bin\Analytics25Update.sh*
14. On the machine on which you installed the Analytics Console component:
 - a. Access Configuration Manager.
 - b. Click the + symbol next to the **Analytics Console** application name to view its components.
 - c. Configure all Analytics Console settings in Configuration Manager.
15. **(Oracle only)** Run your database's analysis tool on both the Analytics and portal databases to increase the efficiency of the databases.
16. Back up the installation directory of the previously-installed version of the Interaction Analytics component, using the tool of your choice.
17. Install the Interaction Analytics component and configure Analytics Communication settings in Configuration Manager. For details, see [“Installing the Interaction Analytics Component” on page 4-17](#)
18. Install the Image Service component. For details, [“Installing the Image Service Component” on page 4-20](#)
19. Stop and restart Analytics and Analytics Collector services. For details, see [“Starting Analytics and Analytics Collector Services” on page 4-23](#).
20. 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 4-24](#).

21. Install the Analytics Automation Jobs component and configure Analytics Jobs settings in Configuration Manager. For details, see [“Installing the Analytics Automation Jobs Component” on page 4-21](#)
22. Add Analytics jobs to the Automation Service. For details, see [“Adding Analytics Jobs to the Automation Service” on page 4-25](#).
23. **(Optional)** Create and set up the ALUI Security database and migrate data from the portal database’s security tables to the ALUI Security database.

Note: You do not need to perform these steps if Pathways 1.5 is installed. Performing a clean (non-upgrade) install of Pathways 1.5 requires creating the ALUI Security database. Upgrading from Pathways 1.0 to Pathways 1.5 requires creating the ALUI Security database and migrating data from the portal database’s security tables to the ALUI Security database.
 - a. Create and set up the ALUI Security database. For details, see [“Configuring the ALUI Security Database” on page 4-8](#).
 - b. On the machine on which the previous version of the BEA AL Analytics service is installed, run the **security-upgrade.bat** or **security-upgrade.sh** file, located in *install_dir\ptanalytics\2.5\bin*.

Performing this step migrates data from the portal database’s security tables to the ALUI Security database.

Upgrade

Troubleshooting

This appendix provides information on Analytics' installation logs. 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"><code>install_dir\installlogs</code> (Windows)<code>install_dir/installlogs</code> (UNIX/Linux)
ptanalytics_deploy.log	Provides additional activity and error details for the installation of Analytics.	<ul style="list-style-type: none"><code>install_dir\installlogs</code> (Windows)<code>install_dir/installlogs</code> (UNIX/Linux)

Troubleshooting

Uninstalling Analytics

This appendix discusses how to uninstall Analytics.

Uninstalling Analytics on Windows

To uninstall Analytics on Windows:

1. Stop the following services:
 - BEA AL Analytics service
 - BEA AL Analytics Collector service
2. Use the Windows Control Panel Add/Remove Program utility to launch the Analytics uninstall wizard.

Note: The ALI Logging Utilities uninstall wizard also appears. We recommend that you do not uninstall ALI Logging Utilities if other components or products that use ALI Logging Utilities are installed on the same server as Analytics.
3. Follow the directions in the Analytics uninstall wizard to uninstall Analytics.

Uninstalling Analytics on UNIX/Linux

To uninstall Analytics on UNIX and Linux, launch the uninstaller for Analytics 2.5 by running:
`/opt/bea/userinteraction/uninstall/ptanalytics/version/
Uninstall_Aqualogic_Analytics_2.5`

Uninstalling Analytics

Licensing

This appendix describes how licensing is configured for Analytics. It contains the following sections:

- [Licensing Overview](#)
- [Installation Behavior](#)
- [Upgrading an Existing License](#)
- [Merging License Keys](#)

Licensing Overview

In order to function, Analytics requires a valid license key on the computer on which Analytics is installed. The license file containing this key must be located in the BEA_HOME directory.

By default, BEA_HOME is

- **Unix:** /opt/bea
- **Windows:** C:\bea

Depending on your use case, a different type of license is used. Each license type is defined by the license attributes that govern the behavior of the licensed installation. The following table lists

the license types, the most important attribute for each type, and how the license should be obtained.

Table C-1 Use Cases and Corresponding License Types

License Type	Key Attribute	Obtainment Method
Standard Evaluation	Session Limit: Standard Evaluation licenses will allow up to 5 concurrent user sessions.	Standard Evaluation licenses are automatically generated by the Analytics installer.
Extended Evaluation	Expiration: Extended Evaluation licenses expire on a specific date.	Extended Evaluation licenses are obtained by contacting a BEA sales representative.
Production	IP: Product licenses are only valid on a specific IP or within a specific IP range.	Existing customers can obtain Product licenses through license.bea.com or licensing@bea.com .

Installation Behavior

By default, the installer attempts to install a Standard Evaluation license file containing an Analytics key in the BEA_HOME directory.

If a license.bea file exists in the specified location, then the installer prompts you to merge a Standard Evaluation license with the existing license, overwrite the existing license with a Standard Evaluation license, or leave the existing license alone. If you elect to overwrite the existing license, then the installer places a backup of the existing license into the BEA_HOME directory.

If you are installing Analytics on a machine with another BEA products on it (for example, BEA WebLogic Server, AquaLogic Pathways, or AquaLogic Interaction Collaboration), choose to merge the license files when prompted by the installer.

Upgrading an Existing License

If you are upgrading an existing license to an Extended Evaluation license or a Production license, you can either combine the license keys or replace the existing license file with the new license file. You can obtain product licenses through license.bea.com or licensing@bea.com.

If you are upgrading a license on a machine with another BEA product on it (for example, BEA WebLogic Server, AquaLogic Pathways, or AquaLogic Interaction Collaboration), you must merge the license keys for both products into a single file. For more information on merging license keys, see “[Merging License Keys](#).”

Merging License Keys

To manually combine two or more license keys into the license.bea file, either use a text editor or the tool provided in BEA_HOME.

By default:

- **Unix:** BEA_HOME/UpdateLicense.sh
- **Windows:** BEA_HOME\UpdateLicense.cmd

The path to java.exe must be in the PATH variable. Use the following command to execute the tool:

- **Unix:** `./UpdateLicense.sh new_license_file`
- **Windows:** `UpdateLicense.cmd new_license_file`

Replace *new_license_file* with the name of the file containing the license key you wish to add to license.bea.

Licensing

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