BEAAquaLogic®
Analytics

Administrator Guide

Contents

5. Managing the Analytics Database

6. Synchronizing Analytics

A. Troubleshooting

Index

Welcome to AquaLogic Analytics

This book describes how to perform administration tasks for BEA AquaLogic Analytics 2.5.

How to Use This Book

This section describes the audience for this guide, lists typographical conventions used in this guide, and provides additional documentation and resources.

Audience

This guide is written for Analytics administrators who are responsible for configuring Analytics reports, working with the Analytics database, and maintaining the Analytics system.

Typographical Conventions

This book uses the following typographical conventions.

Table 1-1 Typographical Conventions

Convention	Typeface	Examples/Notes
• Items you need to take action on (such as files or screen elements)	**bold**	• Upload **Procedures.doc** to the portal. • To save your changes, click **Apply Changes**.
• User-defined variables • New terms • Emphasis • Object example names	*italic*	• The migration package file is located in *install_dir*\serverpackages. • *Portlets* are Web tools embedded in your portal. • The URI *must* be a unique number. • The example Knowledge Directory displayed in Figure 5 shows the *Human Resources* folder.

• Text you enter
• Computer generated text (such as error messages)
• Code samples
	`computer`	• Type `Marketing` as the name of your community.
		• This script may generate the following error:
		`ORA-00942 table or view does not exist`
		• Example:
		`<setting name="SSOCookieIsSecure">`
		`    <value xsi:type="xsd:integer">0</value>`
		`</setting>`

• Environment variables	ALL_CAPS	• The default location of BEA_HOME is C:\bea.

BEA Documentation and Resources

This section describes other documentation and resources provided by BEA.

Table 1-2 BEA Documentation and Resources

Resource	Description
Installation Guide	This guide describes the prerequisites (such as required software) and procedures for installing AquaLogic Analytics. It is available on <u>edocs.bea.com/alui/analytics/docs25/</u>.

Table 1-2 BEA Documentation and Resources

Resource	Description
Installation Worksheet	This worksheet allows you to record prerequisite information necessary for installing Analytics.
	It is available on edocs.bea.com/alui/analytics/docs25/.
Release Notes	The release notes provide information about new features, issues addressed, and known issues in the release.
	They are available on edocs.bea.com/alui/analytics/docs25 and on any physical media provided for delivering the application.
Online Help	The online help is written for all levels of Analytics users. It describes the user interface for Analytics and gives detailed instructions for completing tasks in Analytics.
	To access online help, click the help icon.
Deployment Guide	This guide is written for business analysts and system administrators. It describes how to plan your AquaLogic User Interaction deployment.
	It is available on edocs.bea.com/alui/deployment/index.html.
Developer Guides, Articles, API Documentation, Blogs, Newsgroups, and Sample Code	These resources are provided for developers on the BEA dev2dev site (dev2dev.bea.com). They describe how to build custom applications using AquaLogic User Interaction and how to customize AquaLogic User Interaction products and features.

Table 1-2 BEA Documentation and Resources

Resource	Description
AquaLogic User Interaction (ALUI) and AquaLogic Business Process Management (ALBPM) Support Center	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: **Technical Support** Submit online service requests, check the status of your requests, search the knowledge base, access documentation, and download maintenance packs and hotfixes. **User Group** Participate in user groups; view webinars, presentations, the CustomerConnection newsletter, and the Upcoming Events calendar. **Product Center** Download product updates, maintenance packs, and patches; view the Product Interoperability matrix (supported third-party products and interoperability between products). **Developer Center** Download developer tools, view code samples, access technical articles, and participate in discussions. **Education Services** 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). **Profile Center** Manage your implementation details, local user accounts, subscriptions, and more. 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.

Table 1-2 BEA Documentation and Resources

Resource	Description
Technical Support	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.
	E-mail: ALUISupport@bea.com or ALBPMSupport@bea.com
	Phone Numbers:
	USA, Canada +1 866.262.7586 or +1 415.263.1696
	EMEA +44 1494 559127
	Asia Pacific +61 2.9931.7822
	Australia/NZ +61 2.9923.4030
	Singapore +1 800.1811.202

Welcome to AquaLogic Analytics

Overview of Analytics

Analytics allows portal managers and business owners to track and analyze portal usage. Analytics provides the following basic functionality:

- **Usage Tracking Metrics:** Analytics collects and reports metrics of common portal functions, including community, portlet and document hits.

- **Behavior Tracking:** Users of Analytics reports can analyze portal metrics to determine usage patterns, such as portal visit duration and usage over time.

- **User Profile Correlation:** Users of Analytics reports can correlate metric information with user profile information. Usage tracking reports can be viewed and filtered by user profile data such as country, company or title.

- **Custom Event Tracking:** Portal Administrators and developers can register custom portal and non-portal events that are sent to Analytics using the OpenUsage API. Event data is saved to the Analytics database, which can then be queried for reporting to a portal or non-portal application.

Note: You must understand star schema database concepts in order to use Analytics' custom event tracking features.

Components of Analytics

Analytics is comprised of the following components:

Figure 2-1 Analytics Architecture
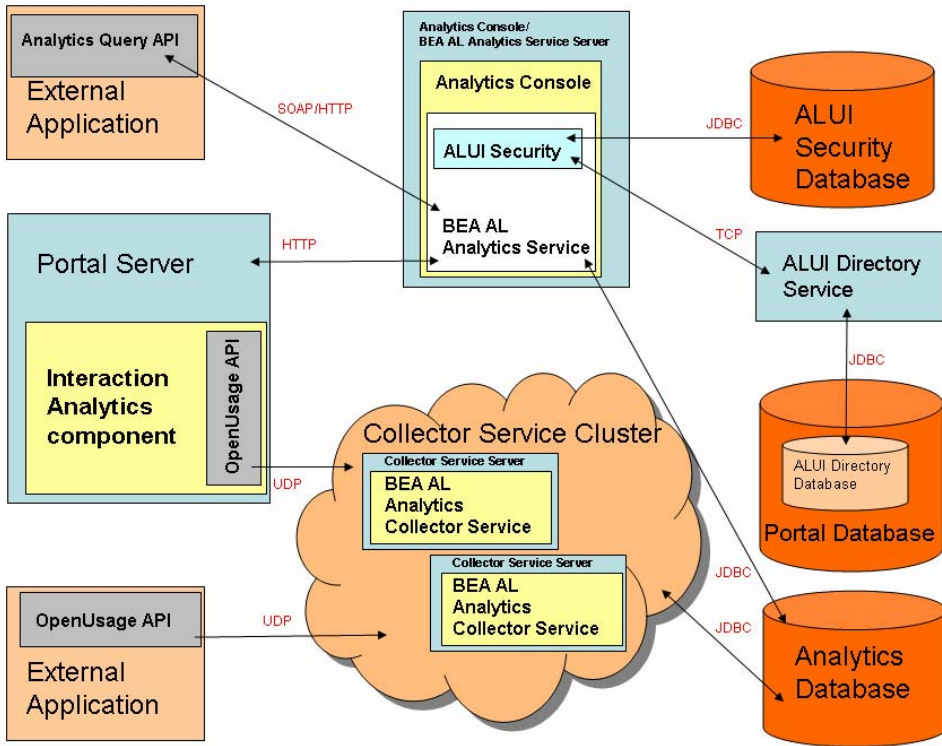
Overview of Analytics Components

The following table describes the components that are delivered with Analytics. For a list of ports used by Analytics, see *Installation and Upgrade Guide for BEA AquaLogic Analytics*.

Table 2-1 Analytics components

Component	Description
Interaction Analytics component	The Interaction Analytics component gathers portal usage tracking metrics. It is installed on the same server that hosts the portal. For details on installing the Interaction Analytics component, see *Installation and Upgrade Guide for BEA AquaLogic Analytics*.
OpenUsage API	The OpenUsage API sends the following metrics to the BEA AL Analytics Collector service via UDP: • Portal usage tracking metrics. • Custom portal and non-portal events. For details on using the OpenUsage API, see the document *Using the AquaLogic Analytics OpenUsage API* at dev2dev.bea.com/pub/a/2006/08/openusage-analytics.html
Analytics Query API	Facilitates communication between external applications and Analytics. For more information on using the Analytics Query API, see edocs.bea.com/en/alui/analytics/docs25/AquaLogicAnalytics_QueryAPI_2-5/
Analytics Console	The Analytics Console component includes the Analytics user interface and the BEA AL Analytics service, and is installed on a stand-alone server. The BEA AL Analytics service provides Analytics data to the end user through the Analytics Console or portlets that are created from Analytics portlet templates. For details on installing the Analytics Console component, see *Installation and Upgrade Guide for BEA AquaLogic Analytics*.

Table 2-1 Analytics components

Component	Description
Analytics Collector component	The Analytics Collector component includes the BEA AL Analytics Collector service. The BEA AL Analytics Collector service receives data from the Interaction Analytics component and gathers data from the portal database through the AquaLogic Interaction Development Kit ("IDK"). The BEA AL Analytics Collector service can be clustered to provide increased scalability and reliability.
	For details on installing the Analytics Collector component and clustering the BEA AL Analytics Collector service, see *Installation and Upgrade Guide for BEA AquaLogic Analytics*.
Image Service component (not shown in diagram)	Provides the Image Service with the necessary files to run Analytics. For details on installing the Image Service component, see *Installation and Upgrade Guide for BEA AquaLogic Analytics.*
Analytics Automation Jobs component (not shown in diagram)	Provides the Automation Service with the necessary jobs to synchronize Analytics with the portal. For details on installing the Analytics Automation Jobs component, see *Installation and Upgrade Guide for BEA AquaLogic Analytics.*
Analytics database	The Analytics database provides storage for metrics that are gathered from custom portal and non-portal events. For details on configuring the Analytics database, see *Installation and Upgrade Guide for BEA AquaLogic Analytics.*

Overview of AquaLogic Interaction Components

Analytics is designed to integrate with the AquaLogic Interaction portal. When Analytics is installed, a number of administrative objects, activity rights, and the Analytics Administration Utility are created in the portal.

The following table describes the AquaLogic Interaction components that are used by Analytics.

Table 2-2 Summary of AquaLogic Components

Component	Description
Portal Database	The portal database stores portal objects, such as user and group configurations, document records, and administrative objects. The portal database does not store the documents available through your portal. Source documents are left in their original locations. For information on setting up the portal database, see the *Installation and Upgrade Guide for BEA AquaLogic Interaction*.
Administrative Portal	The administrative portal handles portal setup, configuration, and content. It enables administrative functions, such as creating and managing portlets and other web services. For information on installing the Administrative Portal, see the *Installation and Upgrade Guide for BEA AquaLogic Interaction*.
Portal	The portal serves end user portal pages and content. It enables end users to access portal content via My Pages, community pages, the Knowledge Directory, and search. The portal also enables some administrative actions, such as setting preferences on portlets or managing communities.. For information on installing the portal, see the *Installation and Upgrade Guide for BEA AquaLogic Interaction*.
Image Service	The Image Service serves static content used or created by portal components. It serves images and other static content for use by the AquaLogic User Interaction system. Whenever you extend the base portal deployment to include additional components, such as portal servers or integration products, you may have to install additional Image Service files. For information on installing the Image Service files for those components, refer to the documentation included with the component software. For information on installing the Image Service, see the *Installation and Upgrade Guide for AquaLogic Interaction*.
ALUI Directory Service	The ALUI Directory Service enables AquaLogic Interaction to act as an LDAP server, exposing the user, group, and profile data in portal database through an LDAP interface.This enables other ALUI products (and other third-party applications) to authenticate users against the portal database.

Table 2-2 Summary of AquaLogic Components

Component	Description
Automation Service	The Automation Service runs jobs and other automated portal tasks. You run jobs to perform tasks such as crawling documents into the Knowledge Directory, synchronizing groups and users with external authentication sources, and maintaining the search collection.
	For information on installing the Automation Service, see the *Installation and Upgrade Guide for AquaLogic Interaction*.
API Service	The API Service provides access to the SOAP API.
	For information on installing the API Service, see the *Installation and Upgrade Guide for AquaLogic Interaction*.

Working with Analytics Reports

This chapter provides information on using and analyzing Analytics reports, creating portlets, and configuring the portal for most favorable tracking. It includes the following topics:

- Overview of Analytics Reports

- Accessing Analytics Reports

- Managing Security for Analytics Reports

- Creating Analytics Portlets

- Working with Analytics - Advanced Tips and Techniques

Overview of Analytics Reports

This section provides descriptions of the reports that are delivered with Analytics. For advanced tips and techniques on using Analytics reports, see "Tips and Techniques - Using Analytics Reports" on page 3-8.

The following table describes reports that are delivered with Analytics.

Table 3-1 Descriptions of Analytics Reports

Analytics **Report**	**Description**
Summary Metrics - Traffic	The Traffic console page displays metrics for many common events within the portal including community page views, My Pages views, search events, directory document views, Collaboration document views, content items views and directory views.
Summary Metrics - Pages	The Pages console page aggregates My Pages and community page views. The report displays the most visited pages (top pages), the least visited pages (bottom pages), the top entry pages and the top exit pages for the portal.
	The data can be summed by hits (total number of page views) or users (unique number of users who viewed pages). Additionally, the report can be filtered to show only pages from specific communities. Finally, if My Page views are included in the report they are summarized so that every user's My Pages are counted as one page.
Summary Metrics - Users	The Users console page displays counts of total, added, inactive and active users.
	Note: The Summary Metrics - Users report has been deprecated. You can continue to use the report in this release, but it will not be available in future releases. The Summary Metrics - Users report is disabled by default and can be enabled on the Runtime Settings page of the Analytics Administration Utility.
	An inactive user is someone who has not logged in to the portal for a period that exceeds the active user timeout setting that you specify on the Runtime Settings page. An active user is someone who has logged in to the portal for a period of time that is within the active user timeout setting. For details on the Active User Timeout setting, see "Configuring Runtime Settings" on page 4-2.
Summary Metrics - Logins	The Logins console page displays counts of logins into the portal, even if users have **Remember my password** selected on their home page, thereby logging them in automatically. The data can be summed by Logins (total logins into the portal) or Users (unique users who logged into the portal).

Table 3-1 Descriptions of Analytics Reports

Analytics **Report**	Description
Summary Metrics - Duration	The Duration console page shows the maximum and/or average duration of all portal visits.
	Note: The Summary Metrics - Duration report has been deprecated. You can continue to use the report in this release, but it will not be available in future releases. The Summary Metrics - Duration report is disabled by default and can be enabled on the Runtime Settings page of the Analytics Administration Utility.
	A portal visit starts when a user logs into the portal and ends when the user either logs out, logs in again or the Visit Timeout expires. The Visit Timeout is used instead of a session timeout because:
	• The session timeout may be set arbitrarily high for infrastructure reasons.
	• There may be a desire to end a portal visit after only a few minutes of inactivity.
	For instance, it is safe to assume that the user is no longer "using" the portal after 3 minutes of inactivity. For this reason, a new visit will be tracked the next time that the user clicks on a link in the portal or refreshes the page.
	The Visit Timeout can be set in the Analytics Administration utility. For details, see "Configuring Runtime Settings" on page 4-2.
Community Metrics - Traffic	The Community Traffic console page displays data for community page views. The report displays the most viewed communities (top communities), the least viewed communities (bottom communities), all communities (which is only available in tabular view) and selected communities.
	The report data can be viewed by Hits (page views), Visits (consecutive page views within a single community) and Users (unique users who viewed pages within the selected communities).

Table 3-1 Descriptions of Analytics Reports

Analytics **Report**	**Description**
Community Metrics - Response Time	The Response Time console page displays the length of time that has elapsed from when the portal server receives a request for a community page until the time the response is sent to the user. Because the tracking is done on the portal server, the length of time it takes for the response to reach the user's machine and be displayed on the browser is not included in this metric.
	This report displays the communities with the fastest response time (top communities), the communities with the slowest response time (bottom communities), all communities (which is only available in tabular view) and selected communities. The report shows maximum, average and minimum response times.
Portlet Metrics - Usage	The Portlet Usage console page displays data about clicks within portlets. Analytics tracks user clicks on a gatewayed button or link within portlets.
	The report displays the most used portlets (top portlets), the least used portlets (bottom portlets), all portlets (which is only available in tabular view), selected portlets and portlets within selected communities. The report data can be viewed by Activity (portlet clicks) and Users (unique users who used the selected portlets).
Portlet Metrics - Views	The Portlet Views console page tracks the number of times a portlet is displayed within the portal. That is, each time a page is viewed, all of the portlets on that page are counted as being viewed.
	The report displays the most viewed portlets (top portlets), the least viewed portlets (bottom portlets), all portlets (which is only available in tabular view), selected portlets and portlets within selected communities. The report data can be viewed by Views and Users (unique users who viewed the selected portlets).

Table 3-1 Descriptions of Analytics Reports

Analytics **Report**	**Description**
Portlet Metrics - Response Time	The Response Time console page displays the time from when the portal sends a request for a portlet until the time the remote server responds with the portlet content. This report is important because typically a community page response equals the response of the slowest portlet on that page. For this reason, when troubleshooting slow communities it is important to find the portlet with the slowest performance. The amount of time it takes for the response to reach the user's machine and be displayed on the browser is not included in this metric because the tracking occurs on the portal server.
	This report displays the portlets with the fastest response time (top portlets), the portlets with the slowest response time (bottom portlets), all portlets (Note: This option is only available in tabular view), selected portlets and portlets within selected communities. The report shows maximum, average or minimum response time.
Other Metrics - Search	The Search console page tracks portal searches.
	The report displays the top search terms. Additionally, for each search term the report displays the number of times the search was performed and abandoned. An abandoned search means that the user did not select any of the search results. Also, for each search term the report displays the documents that the user clicked on. Finally, the report can display searches that returned zero results.
	For each search phrase, click the **Details** link to view the names of the documents that were opened in the search results.
Other Metrics - Documents	The Documents console page tracks knowledge directory document views. Document views include documents opened from the directory and search results page. Additionally, document views include documents opened from snapshot and link portlets, and custom portlets that include gatewayed document links.
	The report displays the top documents viewed in the portal. Additionally, the report can be used to show the document views of all documents in a particular folder, or in a particular folder and its subfolders.

Table 3-1 Descriptions of Analytics Reports

Analytics **Report**	Description
Other Metrics - Projects	The Projects console page displays metrics for AquaLogic Interaction Collaboration. The metrics include document views, new documents and discussion posts.
	These three metrics can be used to report on the projects with the most traffic (top projects), projects with the least traffic (bottom projects), all projects (which is only available in tabular view) and selected projects.
Other Metrics - Content Items	The Content Items console page tracks AquaLogic Interaction Publisher content item views. A content item view refers to each time a user views a published content item from within a Publisher portlet.
	The report displays the most viewed content items (top content items) and the least viewed content items (bottom content items). Additionally, the report can display content item views within a folder or within a folder and its subfolders. Finally, the report can group content item views by Publisher Explorer folders.
Ensemble Metrics - Resources	The Ensemble Resources console page displays data regarding Ensemble resource views. The report displays the most viewed resources (top resources), the least viewed resources (bottom resources), all resources (which is only available in tabular view) and selected resources.
	The report data can be viewed by Hits (resource views), Visits (consecutive views within a single resource) and Users (unique users who performed views within the selected resources).

Accessing Analytics Reports
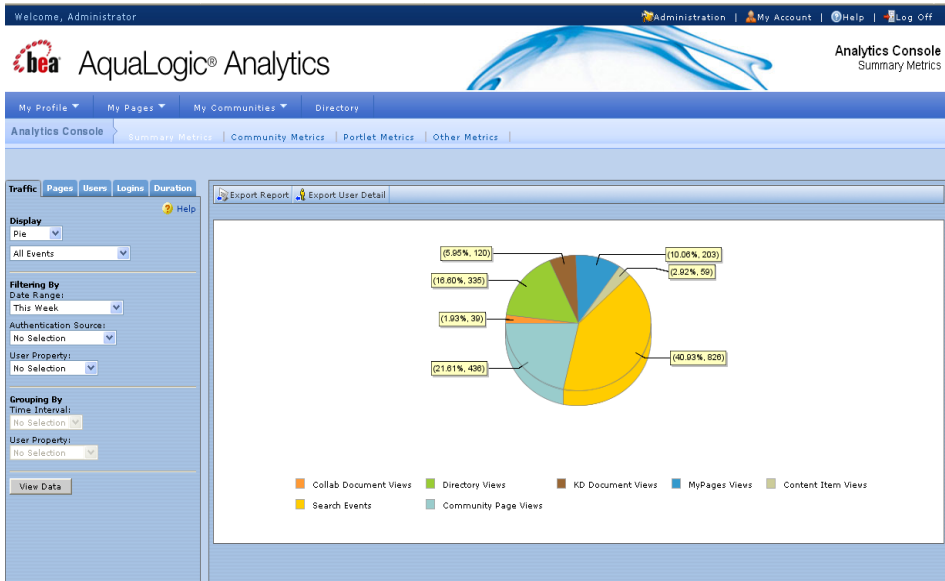
To access Analytics reports:

1. Log in to the portal as an administrator.

   Note: If you are not an administrator, you must join the Analytics Console community in order to add it to your My Communities list.

2. Choose **My Communities | Analytics Console**.

The Analytics Console appears, as shown in the following figure.

Figure 3-1 Analytics Console

Managing Security for Analytics Reports

Analytics reports are intended to make usage metrics visible to a limited set of administrative users who perform particular business functions, such as capacity planning, QoS analysis, ROI analysis, "best bet" customization for Search, and so on.

The Analytics Console and portlet reports contain usage data that is valuable for enterprise portal analysis but might be regarded as private or sensitive to portal users. For example, the Search, Document, Community, and Portlet reports can be configured to display activity metrics for a particular user, based on several user properties such as E-mail Address, First Name, or Last Name.

To protect security and privacy interests before you roll out Analytics reports:

● Manage administrative access to the Analytics Console and portlet templates.

To ensure that only a limited number of administrative users can add the Analytics Console community to their My Communities or create portlets based on Analytics portlet templates, create a new administrative group and manage group membership accordingly. Members of this administrative group require Read access to the Analytics Console

community and Select access to the Admin Objects directory that contains the portlet templates.

- Manage user access to Analytics portlets.

    When you create portlets, configure metrics that do not contain private or sensitive data unless such a view is particularly intended. If the metrics in the report do contain private or sensitive data, configure security so that only appropriate, specified users have Select access and can therefore add the portlet to their My Pages.

- Ensure that guest users are never allowed to add Analytics portlets to their My Pages.

For information on creating administrative groups and managing user and guest access to portal objects, see *Administrator Guide for BEA AquaLogic Interaction*.

Note: Users should not add many Analytics portlets to a single My Page; each additional Analytics portlet slows down performance. If users experience unacceptable performance or timeouts, you can recommend that they include fewer Analytics portlets on each My Page.

Creating Analytics Portlets

You can use the Analytics portlet templates to create portlets that provide custom usage reports. For information on creating portlets from portlet templates, see *Administrator Guide for BEA AquaLogic Interaction*.

When you create portlets, be sure to consider security and privacy issues, described in "Managing Security for Analytics Reports" on page 3-7.

Working with Analytics - Advanced Tips and Techniques

This section provides advanced tips and techniques for using Analytics reports and maximizing portal usage tracking.

Tips and Techniques - Using Analytics Reports

The following table provides tips and techniques for how you can more effectively use Analytics reports to track activity and improve the performance of your portal.

Table 3-2 Tips and Techniques - Using Analytics Reports

Tip	Tip
Tip #1: Combine filtering and grouping when viewing reports	Combining filtering and grouping lets you utilize Analytics reports in some powerful ways. For example, you can view a breakdown of sales force activity by city, determine the most active city, then view the departments that are making that city so active. The following example provides steps that you might perform to make these determinations in a similar report of your own: 1. Filter the report by the Department user property, which contains the *Sales* property value. 2. Group the report by the City user property. The report displays a breakdown of sales force activity by city. 3. Determine the most active city in the report. 4. Filter the report by the most active city. 5. Group the report by the Department user property. The report displays the departments that are making that city so active.
Tip #2: Use the Analytics Console as a portal "clean up" tool	Analyzing reports that track community, project and portlet usage can help you to improve the performance of your portal. You can use Analytics reports to: • Find the least-active communities and projects in your portal. Once you have done this, determine if these communities and projects are valuable. If they are not valuable, remove them from your portal. • Find the communities and portlets that have the slowest performance in your portal, and determine whether you should fix or remove these communities or portlets from your portal; then take appropriate action.

Tips and Techniques - Maximizing Portal Usage Tracking

The following table provides tips and techniques for what you can do within your portal to most effectively track usage.

Table 3-3 Tips and Techniques - Maximizing Usage Tracking

Tip	Description
Tip #1: Gateway links in portlets	Configuring your portlets to contain gatewayed links only improves the accuracy of the Portlet Metrics - Usage report.
Tip #2: Import user properties using a profile Web service	Importing user properties makes Analytics reports more powerful and compelling because you can cross-reference user profile data with tracked metrics. For example, if you import the Department and Region user properties, you can easily create reports such as Community Visits by Department and Logins by Region.

For details on importing user profile information with profile Web services, see *Administrator Guide for BEA AquaLogic Interaction*. |

Using Analytics Administration

This chapter provides information on accessing and working with the Analytics Administration console. It includes the following topics:

- Accessing Analytics Administration
- Using Analytics Administration
- Limiting Access to Analytics Administration

Accessing Analytics Administration

To access Analytics Administration:

1. Log in to the portal as an administrator.
2. Click **Administration**.
3. From the Select Utility drop-down list, choose **Analytics Administration**.

Using Analytics Administration

This section contains the following topics:

- Configuring Runtime Settings
- Configuring Security Settings
- Configuring Partition Settings

- Registering Events

Configuring Runtime Settings

The Runtime Settings page lets you configure timeout periods, enable portlet view and response time data capture, and choose the format of export reports. The timeout settings that you specify on the Runtime Settings page are only for Analytics reporting purposes; there is no relationship between these timeout settings and other portal timeout settings.

The following table describes the timeout settings that you can configure.

Table 4-1 Timeout Settings

Setting	Description
Visit Timeout (seconds)	Type the maximum number of seconds that a user must remain inactive during a portal visit in order for Analytics to report subsequent activity as a new portal visit. The default is 120 seconds.
	Note: If you upgraded to Analytics 2.5 from a previous version, the Visit Timeout default setting from the previous Analytics version remains. For example, if you upgraded from Analytics 2.1, the default Visit Timeout is 600 seconds, since that was the default in Analytics 2.1.
Active User Timeout (days)	Type the maximum number of days that a user must remain inactive in the portal in order for Analytics to report the user as an inactive user. The default is 7 days.
	Note: The Summary Metrics - Users report has been deprecated and is disabled by default. You do not need to configure this setting unless you have enabled the Summary Metrics - Users report. You can enable the Summary Metrics - Users report on the Runtime Settings page of the Analytics Administration Utility.
	If you install the portal while Analytics is running, Analytics restarts the calculation of portal user activity after you have completed the installation. This may impact Analytics user timeout reporting. For example, if you set the active user timeout to 7 days and the user goes on vacation and does not log in to the portal for eight days, Analytics reports the user as an inactive user on Day 8. However, if you install AquaLogic Interaction on Day 3 of the user's eight-day vacation, Analytics calculates Day 3 as the first day in which the user is inactive. For this reason, the seven-day active user timeout period does not occur and Analytics continues to report the user as an active user.

The following table describes the portlet view/response time settings that you can configure.

Table 4-2 Portlet Views/Response Time Settings

Setting	Description
Capture portlet views/response times	Select the check box to enable the collection of portlet view and response time data. Portlet view data is reported on the Portlet Views console page. Response time data is reported on the Portlet Metrics - Response Time console page. By default, the collection of portlet view and response time data is disabled.
	For guidelines on capturing portlet view and response time data, see "Restricting Portlet View Data" on page 5-3.

The following table describes the portal reports settings that you can configure.

Note: The Summary Metrics - Users and Summary Metrics - Duration reports have been deprecated and are disabled by default. You can continue to use these reports in this release, but they will not be available in future releases.

.

Table 4-3 Portal Reports Settings

Setting	Description
Enable Summary Metrics - Users report	Select the check box to enable the Summary Metrics - Users report.
Enable Summary Metrics - Duration report	Select the check box to enable the Summary Metrics - Duration report.

The following table describes the export report settings that you can configure.

Table 4-4 Export Report Settings

Setting	Description
Export Report	Select to export reports in one of the following formats: • **Excel (10,000 row limit)**: Exporting to Excel is limited to 10,000 rows. If you choose this option, reports that contain more than 10,000 rows in Analytics will contain only the first 10,000 rows when exported to Excel. • **TSV**: Tab Separated Values is a text-based file format in which exported columns are separated by tabs. TSV files are typically opened by Excel. **Note:** Although TSV reports have no limitation on numbers of rows, exported reports in excess of 10,000 rows will likely take an extended period of time to generate.

Configuring Security Settings

The Security Settings page lets you control the data that users can access in Analytics reports. On this page, you can add and remove roles, and launch the Edit Role window to make changes to the role (changes include adding and removing role members, capabilities and user properties to and from roles, and adding global filters to roles).

A user's roles and capabilities are retrieved by Analytics when the user's session is being established. If you make changes to a user's roles or capabilities when that user is logged in, that user's access to Analytics data does not change until they log off or their session expires.

Super Users Roles

The Super Users role grants portal Administrators Group and Administrator user access to all capabilities and user properties.

Note: For new Analytics installations, you must run the User Property Sync Job before assigning user properties to the Super Users role. The User Property Sync Job exists in the Analytics Jobs subfolder within the Analytics subfolder of the Admin Objects directory.

Removing the Super Users role permanently deletes it from the system. To add the Super Users role again, you must re-create it.

Capabilities

The following table describes the capabilities that you can assign to roles.

Table 4-5 Analytics Role Capabilities

Capability	Description
Export User Details Report	Lets the role export user-level data from reports. User-level data is exported into an .xls file that can be used with Microsoft Excel. By default, this capability is not granted. The option to export user-level data exists in these reports: • Summary Metrics - Traffic • Summary Metrics - Logins • Community Metrics - Traffic • Portlet Metrics - Usage • Other Metrics - Search • Other Metrics - Documents • Other Metrics - Projects • Other Metrics - Content Items • Ensemble Metrics - Resources
Select All/Top/Bottom Options	Lets the role use the All/Top/Bottom display options. The reports that include these display options are: • Summary Metrics - Pages • Community Metrics - Traffic • Community Metrics - Response Time • Portlet Metrics - Usage • Portlet Metrics - Views • Portlet Metrics - Response Time • Other Metrics - Documents • Other Metrics - Projects • Other Metrics - Content Items • Ensemble Metrics - Resources When a role is not granted the capability to select All/Top/Bottom options, the role must choose one community or project; the option that is available depends on the report. By default, this capability is not granted.

Table 4-5 Analytics Role Capabilities

Capability	Description
Application Write	Select the check box to grant the role the capability to add, modify, and remove roles.
View Portal Document Related Data	Lets the role view the Other Metrics - Documents report, as well as view document details in the Other Metrics - Search report. By default, this capability is not granted.

Creating Global Filters to Restrict Event Reporting

In the Edit Role window, you can use global filters to restrict which events are included in a report. For example, you can create a filter that excludes the user accounts of the company executives from reports so that other users cannot view the executives' portal activity. Filters can be grouped by filter sets, and you can require that any or all filters in a filter set be met for a filter set to be applied. When a user views a report in the Analytics Console or an Analytics portlet, the results are restricted by all filter sets that have been applied to all roles to which the user is assigned.

To create a new global filter set in the Edit Role window:

1. Click **Add** under **Global Filters**.

2. In the **Filter Set Editor**, select the event type to which the filter set applies.

   Select **All Events** if you want this filter set to be applied to all events.

3. Click **Next**.

4. **(Optional)** Type a name for the filter set in the **Filter Set Name** box.

   If you do not specify a name for the filter set, Analytics sets a name based on the filters in the filter set.

5. Perform one of the following:

   – Select **All** if you want to include or exclude an event from reports only if all filters in the filter set are true or if any filter in the filter set is false for the event.

   – Select **Any** if you want to include or exclude an event from reports if any filter in the filter set is true or if all filters in the filter set are false for the event.

6. To create a filter:

    a. Select a dimension on which to filter. The dimensions available depend on the type of event you selected on the previous page.

    b. Select a property of the dimension on which to filter.

    c. Select a comparison operator for the filter.

    d. Specify the value you want to filter by.

    e. Click **Add** to add the new filter to the filter set.

7. Repeat the previous step as many times as is necessary to add more filters to the filter set.

8. To remove a filter from the filter set, select the filter and click **Remove**.

9. After you have finished configuring the filter set, click **Save**.

    You are returned to the Role Editor.

Configuring Partition Settings

This section discusses the configuration of Analytics Administration's Partition Settings page. For guidelines on archiving and restoring partitions in your Analytics database, see "Archiving and Restoring Partitions" on page 5-4.

Analytics data is segregated into month-by-month partitions in the database. The Partition Settings page lets Portal Administrators specify the number of data partitions that are accessible to Analytics reports. The Analytics Engine regularly scans each data partition that is accessible. For this reason, you can have more control over system performance by limiting the number of accessible partitions to only those that are needed.

At the beginning of each month, the system creates a new partition and stores all new Analytics data in that partition until the month ends.

Note: You also use the Partition Settings page to refresh database views after archiving or restoring partitions. To do so, click **Finish**. If you do not refresh the database views, Analytics reports will fail.

Working with the Scrolling View Window

The Scrolling View Window, which you configure on the Partition Settings page, is a rolling database view that changes month-to-month. For example, suppose that on August 5, you enable the Scrolling View Window and set its size to 4 months. The following occurs:

The Scrolling View Window makes data from 4 months available: May, June, July, and August. (Note that even though the month of August has not completed, the Scrolling View Window makes data from the August partition available so that the most current data appears in Analytics reports).

On September 1, the Scrolling View Window scrolls one month forward and makes data from the June, July, August, and September partitions accessible. Though the Scrolling View Window removes the May partition from view, the partition and its data is still stored in the database. In this example, if in December of the same year the Portal Administrator wanted to make the data from the May partition available to reports, he or she would increase the Scrolling View Window size to 8 months so that it includes the May to December time frame.

To set the number of months, that are accessible to Analytics reports, first enable the Scrolling View Window, then specify the number of months: between 3 and 60. Data from monthly partitions that do not fall within the Scrolling View Window size is made unavailable to Analytics reports.

Note: If you do not enable the Scrolling View Window, all data from all partitions is accessible to Analytics reports.

Previewing Partitions

At any time, you can click **Preview** on the Partition Settings page to view a chart that displays a representation of all partitions and indicates whether they are available or unavailable to Analytics reports:

- Green squares indicate partitions whose data is available to Analytics reports.

- Red squares with an **X** indicate partitions whose data is unavailable to Analytics reports; these partitions do not exist in the database.

- Grey squares indicate partitions for months that do not currently fall within the Scrolling View Window's date range. These partitions may or may not exist in the database.

Registering Events

Overview of Event Registration

The Event Registration feature lets Portal Administrators and developers register custom portal and non-portal events that are sent to Analytics using the OpenUsage API. Event data is saved to the Analytics database, which can then be queried for reporting to a non-portal application. This feature's user interface includes the Event Registration and Create Event pages.

Use the Event Registration page to:

- Launch the Create Event page, which you use to create events and their parameters.

- Enable and disable the storage of data generated by individual events. Once event data is stored in the database, you can query the data for reporting in a portal or non-portal application.

- Create dimensions, which are discussed below.

Note: This topic only discusses the Event Registration user interface. To utilize the full capabilities of this feature, you must use the OpenUsage API. For details on using the OpenUsage API, see the document *Using the AquaLogic Interaction Analytics OpenUsage API* at dev2dev.bea.com/pub/a/2006/08/openusage-analytics.html

Overview of Events, Event Parameters, and Dimensions

An event typically defines one user action that you would like to capture. Each event is composed of several *event parameters*, which defines the various kinds of data that is generated by the event. By default, each event includes the USERID, TIMEID, VISITID, and OCCURRED event parameters (for more details on these parameters, see "Delivered Parameters" on page 4-11).

Event Registration also lets you create your own event parameters to capture data that is not defined by the delivered defaults. To capture data of type Date, Integer, or Float, simply create an event parameter for that data type. To capture data of type String, you must create a dimension to define this data (a dimension defines data of type String). After you create the dimension, you must create a new event parameter of type String, and associate it to the dimension that you created.

Note: We recommend that you do not create too many dimensions, since they slow down the speed of data collection and reporting.

Event Registration also lets you use dimensions from your own application's tables. To do so, create a parameter of type Integer. Then, using your database schema, map the parameter to the ID column in your dimension table.

Creating Custom Dimensions

The Managed Dimensions section of the Event Registration page lets you create custom dimensions to define data of type *String*.

To use a dimension, you must associate it to an event parameter on the Edit Event page. You can associate a dimension to multiple event parameters and use that dimension in multiple events.

Dimension names can be up to 20 characters in length and can only include letters, numbers, spaces, and underscores.

The names that you create only define how dimensions appear on the Event Registration page. In the database, custom dimension tables use the following naming convention: ascdim_*dimension_name* (spaces in dimension names are replaced by underscores).

Note: You cannot remove or change the name of a dimension after clicking **Finish** on the Event Registration page.

To store only unique values in this dimension's table, check **Unique**.

Note: In the database, dimension tables using the naming convention asdim_*dimension_name* store events that are generated by the portal; they do not store custom events. For descriptions of these tables, see the Analytics Database Schema document.

Creating Events

The Create Event page lets you define the event name and parameters that are included in the event. After you define the event and its parameters, click **Finish** to save an event and create its fact table in the database. Access the Create Event page by clicking **Add** on the Event Registration page.

Note: After you save an event, you cannot change the names of the event and its parameters; you also cannot delete parameters from an event. You can, however, add parameters after saving an event.

Event Names

Event names can be up to 14 characters in length and can only include letters, numbers, spaces, and underscores.

Note: You must set the OpenUsage API to send data to the fact table using the event name that you specified on this page, not its column name in the database.

Table Names

Table names are read-only, and define the name of the fact table that will store the event's data. Custom event tables use the following naming convention in the database: ascfact_*event_name* (spaces in event names are replaced with underscores). For complete details on the fact tables that are delivered with Analytics, see "Working with Delivered Fact Tables" on page 5-4.

Parameter Names

Parameter names can be up to 14 characters in length and can only include letters, numbers, spaces, and underscores. Use this parameter name when passing parameters with the OpenUsage API.

Note: You cannot remove or change the name of a parameter after clicking **Finish** on the New Event page.

Delivered Parameters

The following table describes the parameters that are delivered with Analytics which are, by default, included in every event:

Table 4-6 Parameters Delivered with Analytics

Parameter	Description
USERID	The ID of the user who triggers the event. You must use the OpenUsage API to set the User ID.
TIMEID	The unique ID number that is created for each occurrence of the event. This value is set by Analytics.
VISITID	The portal visit ID of the user who triggered the event. **Note:** This parameter is only compatible with events that occur in the portal. This value is set by Analytics.
OCCURRED	The date and time when the event was generated. The format of the date/time stamp is determined by your database type. This value is set by Analytics.

Saving Event Data

To begin saving an event's data, select the check box next to an event on the Event Registration page and click **Enable**. By default, the BEA AL Analytics Collector Service starts saving the event's data 30 minutes after you click **Enable**.

Stopping Event Data Storage

To stop saving an event's data, select the check box next to an event on the Event Registration page and click **Disable**. You can edit events even when they are disabled. By default, the BEA AL Analytics Collector Service stops saving the event's data 30 minutes after you click **Disable**.

Limiting Access to Analytics Administration

Users who have access rights to the Analytics Administration web service have the ability to access the Analytics Administration console by way of its URL, even if these users are not administrators (administrators have access to the Analytics Administration console by way of the portal user interface).

To prevent users from accessing Analytics Administration by way of its URL, remove the users' access rights to the Analytics Administration web service. For details, see *Administrator Guide for BEA AquaLogic Interaction*.

If you want users to access Analytics Administration by way of its URL, you must grant these users (at minimum) Read access to the Analytics Administration web service.

Managing the Analytics Database

This chapter includes the following topics:

- Sizing the Analytics Database

- Archiving and Restoring Partitions

Sizing the Analytics Database

This section provides information and recommendations that should help you manage the size and growth of your Analytics database to, which should increase performance. It includes the following topics:

- Overview of Analytics Database Growth

- Restricting Portlet View Data

- Tuning the Analytics Database - Oracle

Overview of Analytics Database Growth

The majority of growth in the Analytics database occurs in the fact tables that are delivered with Analytics. The rest of the delivered Analytics tables -- including dimension tables -- generate negligible growth in the Analytics database. This section provides details on the growth of fact and dimension tables.

Fact Table Growth

Fact tables capture event parameter data of types Date, Integer, and Float. Of the delivered Analytics fact tables, the ASFACT_PAGEVIEWS, ASFACT_PORTLETUSES, and ASFACT_PORTLETVIEWS tables grow at the fastest rate. For this reason, you should closely monitor these tables. For a complete list of delivered fact tables, see "Working with Delivered Fact Tables" on page 5-4.

Custom events that you create and register using the Event Registration section of Analytics Administration are also stored in fact tables. If you expect any of your custom events to generate large volumes of data (in the range of one million events per year), we recommend that you monitor their tables, and perhaps archive older partitions. For guidelines on archiving and restoring partitions, see "Archiving and Restoring Partitions" on page 5-4.

Both Oracle and SQL Server databases grow at approximately the same rate: every one million events that are stored in the database use approximately 150 megabytes of disk space. The following table lists numbers of events and their corresponding estimated database sizes.

Table 5-1 Numbers of Events and Corresponding Estimated Database Sizes

Number of Events	Estimated Database Size
1,000,000	150 megabytes
2,000,000	300 megabytes
5,000,000	750 megabytes
10,000,000	1.5 gigabytes

Use these size estimates to calculate your own database growth requirements. As the number of events in your system continues to grow, query performance ultimately starts to decline. For this reason, in high-volume environments you should monitor the growth of your database and take appropriate measures to prevent performance degradation.

Dimension Table Growth

Analytics uses dimensions to capture event parameter data of type String. Dimension tables do not grow as quickly as delivered fact tables because dimension data does not change at nearly the same rate as events occur.

Note that if an object is removed from the application on which Analytics is reporting, the record for that object's dimension data remains in the Analytics database. For this reason, Analytics

continues to report the events that occurred on this object before it was removed from the application.

Restricting Portlet View Data

Portlet views are the most heavily-generated events in the system. For this reason, we recommend that you do not collect portlet view data continuously, which results in tripling the growth rate of your database. Instead, you should only "sample" portlet views periodically. To do this, enable the **Capture portlet views/response times** option for a limited period of time, such as one or two weeks. You enable this option in Analytics Administration's Runtime Settings page. For details, see "Configuring Runtime Settings" on page 4-2.

If you decide to continuously collect portlet view data, you should aggressively archive older data partitions to prevent the database from reaching its capacity too quickly.

Portlet view data is reported on the Portlet Metrics - Views console page. Response time data is reported on the Portlet Metrics - Response Time console page.

Tuning the Analytics Database - Oracle

To obtain the best performance with Oracle, we recommend that you:

- Edit the create_analytics_tablespaces.sql script and include appropriate sizing information for your database. The create_analytics_tablespaces.sql script is located in a platform-specific subdirectory within the Analytics database's host computer.

    Note: The default values in the create_analytics_tablespaces.sql script are acceptable for a development or staging database. You should, however, change these values accordingly in a production environment.

- Move the ANALYTICSTABLE tablespace to a different drive than the one used for the ANALYTICSINDEX tablespace.

- Configure the Oracle settings described in this table:

Table 5-2 Oracle Settings and Configuration Recommendations

Oracle Setting	Configuration
Buffer Cache	Increase to 250 megabytes
PGA Aggregate Target	Increase to 150 megabytes
Data Block Size	Increase to 16K

Note: The recommendations in this table are for use with the Analytics database only. You might want to change these configurations slightly to more appropriately suit your environment.

Working with Delivered Fact Tables

The following table lists the fact tables that are delivered with Analytics. Every fact table name begins with the prefix *ASFACT_*, which helps you identify fact tables when working with the Analytics database.

Table 5-3 Fact Tables Delivered with Analytics

Fact Table	Description
ASFACT_DOCUMENTVIEWS	document views
ASFACT_KDFOLDERVIEWS	Knowledge Directory views
ASFACT_LOGINS	user logins
ASFACT_PAGEVIEWS	page views
ASFACT_PORTLETUSES	portlet uses
ASFACT_PORTLETVIEWS	portlet views
ASFACT_PUBITEMVIEWS	Publisher item views
ASFACT_SEARCHES	searches

For more detailed descriptions of these tables -- and all tables that are delivered with Analytics -- see the Analytics Database Schema document.

Archiving and Restoring Partitions

This section provides guidelines for archiving and restoring the partitions within your Analytics database. For details on using Analytics Administration's Partition Settings page, see "Configuring Partition Settings" on page 4-7.

To maintain a steady size of your Analytics database and keep your queries performing quickly, we recommend archiving partitioned data that is greater than six months old. You can identify partitioned tables by their date/year suffix. For example: *_08_2006*.

After archiving or restoring partitions, you must refresh the database views by clicking **Finish** on the Partition Settings page. If you do not refresh the database views, Analytics reports will fail.

Caution: Never remove the current fact table, which is not partitioned. Also, never remove database views. Instead, use the scrolling view window to set the number of partitions that are accessible to Analytics reports.

Managing the Analytics Database

Synchronizing Analytics

This chapter includes the following topics:

- Overview of Analytics Synchronization

- Performing Force Synchronizations

- Strategizing Synchronization Scheduling

Overview of Analytics Synchronization

Analytics synchronization is a process by which object dimension data is sent from the remote database to the dimension tables of the Analytics database, where the data is stored. The Automation Service runs the synchronization process using the Analytics sync jobs that are delivered with Analytics. Dimension data is transferred through a JDBC connection.

An Analytics sync job exists for each object. The Analytics Jobs subfolder exists within the Analytics subfolder of the Admin Objects directory. For a complete list of synchronized objects and their associated products and Automation Service jobs, see "Synchronized Dimension Data and Associated Jobs" on page 6-3.

The Automation Service automatically runs all Analytics sync jobs after you have installed or upgraded Analytics (including having added Analytics jobs to the Automation Service). The first synchronization is a *full synchronization*, in which the sync jobs transfer dimension data about all of the products' reported objects and populate the Analytics database's job records.

After this initial synchronization, the Automation Service automatically and regularly runs *partial synchronizations*, in which all Analytics sync jobs transfer only dimension data about

objects that are new or have been changed since the previous synchronization. Note that if an object is removed from the application on which Analytics is reporting, the record for that object's dimension data remains in the Analytics database. For this reason, Analytics continues to report the events that occurred on this object before it was removed from the application.

By default, the Automation Service performs a partial synchronization once per day. You can, however, edit each sync job's schedule to better suit your environment and its usage patterns. For synchronization scheduling guidelines, see "Strategizing Synchronization Scheduling" on page 6-5.

You can find details of sync jobs in the portal's job history log or in Analytics's sync.log file. For the location of the Analytics sync.log file, see "Overview of Logs" on page A-1.

Synchronized Dimension Data and Associated Jobs

The following table lists the products that are synchronized with Analytics, the objects whose dimension data is synchronized, and the Analytics job that triggers synchronization of that dimension data. The Analytics Jobs subfolder exists within the Analytics subfolder of the Admin Objects directory.

Table 6-1 Analytics Synchronization - List of Objects and Associated Sync Jobs

Product	Object	Analytics Job
BEA AquaLogic Interaction ("portal")	Communities	Community Sync Job
	Community Pages	Community Page Sync Job
	Portlets	Portlet Sync Job
	Auth Sources	Auth Source Sync Job
	Community to Portlet Relationships	Community Portlet Map Sync Job
	Directory Folders	Directory Folder Sync Job
	Document Data Sources	Document Data Source Sync Job
	KD Documents	Document Sync Job
	KD Document to Directory Folder Relationships	Document Folder Map Sync Job
	User Properties	Property Sync Job
	User Property Values	User Property Sync Job
		Note: User property values that are over 255 characters in length are truncated to 255 characters in the Analytics database. The user property values are not altered in the portal database.
	Users	User Sync Job
BEA AquaLogic Interaction Collaboration	Collaboration Message Post Data	Message Post Sync Job
	Collaboration Document Upload Data	Document Upload Sync Job

Table 6-1 Analytics Synchronization - List of Objects and Associated Sync Jobs

Product	Object	Analytics Job
BEA AquaLogic Interaction Publisher	Content Items	Content Item Sync Job
	Content Folders	Content Folder Sync Job

Note: Besides Analytics sync jobs, the Admin Objects directory includes these Analytics jobs, which are not related to synchronization:

- User Status Update Job: Uses the Active User Timeout setting to calculate user activity/inactivity. You configure the Active User Timeout setting in Analytics Administration's Runtime Settings page. For details, see "Configuring Runtime Settings" on page 4-2.

- Host Resolution Job: Resolves the IP addresses that are sent with events that are delivered with Analytics. This job does not resolve the IP addresses that are sent with custom events.

Performing Force Synchronizations

A force synchronization populates the Analytics database with the dimension data of objects that are synchronized by Analytics jobs. These jobs are listed in "Synchronized Dimension Data and Associated Jobs" on page 6-3.

Performing a Force Synchronization of All Dimension Data

To perform a force synchronization operation for all dimension data:

1. Execute the following SQL command on the Analytics database:

   ```
   TRUNCATE TABLE ASSYS_JOBLOGS
   ```

   The command deletes all records from the ASSYS_JOBLOG.

2. Schedule the Automation Service to run all Analytics jobs.

   The Analytics jobs populate the Analytics database with current dimension data.

Performing a Force Synchronization of a Single Object's Dimension Data

To perform a force synchronization of a single object's dimension data:

1. Delete the log records for the object's associated sync job.

   The log records are located in the ASSYS_JOBLOGS table.

2. Schedule the Automation Service to run the object's associated sync job.

   The Analytics job populates the Analytics database with the object's dimension data.

Strategizing Synchronization Scheduling

Because some dimension data in your environment might change more frequently than other dimension data, we recommend that you adopt a job scheduling strategy that reflects your environment's unique circumstances.

Following are some examples of scheduling strategies that you can adopt:

- If your portal contains objects that rarely change, run the appropriate Analytics sync job manually. For example, if your portal's authentication sources rarely change, run the Auth Source Sync Job manually.

- If your portal contains objects that change only once per week, schedule the appropriate Analytics sync job to run once per week. For example, if new portlets and communities are added to your production portal once per week, schedule the Portlet Sync Job and Community Sync Job to run once per week.

- If your portal contains data that changes on a constant basis, schedule the appropriate Analytics sync job to run frequently. For example, if your registration Web site creates portal user accounts throughout the day, schedule the User Sync Job to run once per hour.

Note: Collaboration object data is sent real time to Analytics when Collaboration sends event data. For this reason, you do not need to schedule the Message Post and Document Upload sync jobs to run periodically. Only use these jobs if you have noticed that the BEA AL Analytics Collector service was not running while users posted messages or uploaded documents to Collaboration.

For complete details on how to schedule Automation Service jobs, see *Administrator Guide for BEA AquaLogic Interaction*.

Troubleshooting

This appendix provides information on troubleshooting problems that occur in Analytics runtime. It includes the following topics:

- Overview of Logs

- Troubleshooting Common Runtime Problems

Note: For details on troubleshooting the installation and configuration of Analytics, see *Installation and Upgrade Guide for BEA AquaLogic Analytics*.

Overview of Logs

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

In the table below, *install_dir* is by default:

- C:\bea\alui (Windows)

- /opt/bea/alui (UNIX and Windows)

Table A-1 Logs Used to Troubleshoot Analytics in Runtime

Log	Description	Location and Platform
wrapper_analyticsui.log	Provides additional activity and error details for the BEA AL Analytics service, including details for these user interfaces: • Analytics Console • Analytics Administration	• *install_dir*\ptanalytics\2.5\logs (Windows) • *install_dir*/ptanalytics/2.5/logs (UNIX/Linux)
analyticsui.log	Provides activity and error details for the Analytics Console.	• *install_dir*\ptanalytics\2.5\logs (Windows) • *install_dir*/ptanalytics/2.5/logs (UNIX/Linux)
collector.log	Provides activity and error details for: • BEA AL Analytics Collector service. • Routine partitioning activity that occurs during Analytics runtime. The partition.log file provides activity and error details for initial partitioning of the Analytics database during upgrade.	• *install_dir*\ptcollector\2.5\logs (Windows) • *install_dir*/ptcollector/2.5/logs (UNIX/Linux)

Table A-1 Logs Used to Troubleshoot Analytics in Runtime

Log	Description	Location and Platform
wrapper_collector.log	Provides additional activity and error details for the BEA AL Analytics service, including details for the Analytics Console.	• *install_dir*\ptcollector\2.5\logs (Windows) • *install_dir*/ptcollector/2.5/logs (UNIX/Linux)
sync.log	Provides activity and error details for Analytics sync jobs.	The sync.log file is located on the Automation Service host machine in the following directories: • *install_dir*\ptanalytics\2.5\logs (Windows) • *install_dir*/ptanalytics/2.5/logs (UNIX/Linux)

Troubleshooting Common Runtime Problems

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

Table A-2 Common Runtime Problems and Solutions

Problem Description and Details	Cause and Solution
• **Problem:** No data is being generated in the report. • **Details:** Analytics reports are not being populated with data.	• **Cause 1:** The Interaction Analytics component is not correctly configured to communicate with Analytics. • **Solution 1:** Enable communication between the portal and Analytics. In Configuration Manager, navigate to the Portal Service application, Analytics Communication component. Select the **Enabled** checkbox in the **Enable Analytics Communication** area. Online help is available in the Configuration Manager application.
	• **Cause 2:** The Interaction Analytics component has the incorrect server name for the host of BEA AL Analytics Collector service. • **Solution 2:** Reconfigure the host name for the BEA AL Analytics Collector service. In Configuration Manager, navigate to the Portal Service application, Analytics Communication component. Type the correct name for the host of the BEA AL Analytics Collector service into the **Collector hostname** box, in the **Analytics Communication** area. Online help is available in the Configuration Manager application.

	• **Cause 3:** You did not redeploy the portal.war or portal.ear file to your portal application server after installing the Interaction Analytics component.
	
	• **Solution 3:** 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.

	• **Cause 4:** You did not refresh the database views after archiving or restoring partitions. • **Solution 4:** After archiving or restoring partitions, you must refresh the database views by clicking **Finish** on the Partition Settings page in Analytics Administration.

Table A-2 Common Runtime Problems and Solutions

Problem Description and Details	Cause and Solution
• **Problem:** Unacceptable portlet performance. • **Details:** Users are experiencing unacceptable performance or timeouts when using the Analytics portlets.	• **Cause 1:** Too many Analytics portlets have been added to a single My Page. • **Solution 1:** Encourage users to include fewer Analytics portlets on a single My Page. • **Cause 2:** Reports with very large amounts of data are timing out. • **Solution 2:** You may be able to resolve this problem by changing the Gateway Timeout setting in the report's web service to a higher value.
• **Problem:** When using filtering options, reports do not query on all data. • **Details:** Reports only query on data that is associated to properties included in the filter. • **Example:** A company employs 10,000 employees. Only the 200 newest employees are assigned to Departments in their user profiles. The administrator runs a report and queries on a date range, and filters on the Department property, containing the "Human Resources" property value. The report only filters through the 200 newest employees, since only those employees are assigned to a Department. The report does not filter through the other 800 employees, since those employees are not assigned to a Department.	• **Solution:** This behavior works as designed. If you want your filtered reports to query on all data, make sure that all data is associated to properties that are included in the filters. Using the example, if you want the report to filter through all 10,000 employees, then you must make sure that all 10,000 employees are assigned to a Department.

Table A-2 Common Runtime Problems and Solutions

Problem Description and Details	Cause and Solution

• **Problem:** The text in Japanese reports does not appear correctly.
• **Details:** The Y axis does not display Japanese characters.
	• **Cause:** The analytics.war file is not configured to display Japanese characters in the Y axis of Analytics reports.
	• **Solution:** Configure the AnalyticsUIParams.properties file to include font settings that are appropriate to your locale and platform:
	1. Unpack the analytics.war file.
	2. Open the AnalyticsUIParams.properties file for editing. You can find this file in the analyticsui.jar file.
	3. Add these locale entries:
	`LocaleCode_font_OSName=LocalFont`
	`LocaleCode_fontSize=14`
	`LocaleCode_fontSmallSize=10`
	
	4. Save and repackage .war file.
	
	The locale entries should include these values:
	• *LocaleCode* should include the appropriate two letter language code
	• *OSName* should include your operating system: Windows, Solaris, or Linux
	• *LocalFont* should include the name of the font that is appropriate to your locale and platform
	
	Windows example:
	`ja_font_Windows=MS PGothic`
	`ja_fontSize=14`
	`ja_fontSmallSize=10`

Table A-2 Common Runtime Problems and Solutions

Problem Description and Details	Cause and Solution
• **Problem:** Usage data for cached portlets does not appear in the Portlet Metrics - Usage report. • **Details:** Portlet usage events for gatewayed portlets are not recording cached portlet uses on the browser.	• **Cause:** The http headers have not been set to return "no-cache". • **Solution:** Set the http headers to return "no-cache". Visit this URL for the http header specification protocol: http://www.w3.org/Protocols/rfc2616/rfc2616-sec14.html
• **Problem:** Inaccurate data is being generated for reports. • **Details:** Report data does not seem to correspond with increased portal activity.	• **Cause:** You did not schedule Analytics jobs to run more often to reflect increased portal activity. • **Solution:** Schedule the Analytics jobs to run as often as necessary to ensure that the data in Analytics reports remain as current as possible.

Troubleshooting

Index

Collector service. See BEA AL Analytics
Collector service
collector.log A-2
Community Page Sync Job 6-3
Community Portlet Map Sync Job 6-3
Community Sync Job 6-3
Community Traffic report 3-3
components, summary of Collaboration 2-3
configuring data capture 4-3
Content Folder Sync Job 6-4
Content Item Sync Job 6-4
Content Items report 3-6
Create Event page 4-10
create_analytics_tablespaces.sql 5-3
custom dimensions 4-9
custom events
    creating 4-10
    recommendation for monitoring 5-2

D

Data Block Size (Oracle setting) 5-3
database. See Analytics database
defaults
    active user timeout 4-2
    event parameters 4-9
    Export User Details Report capability 4-5
    portlet view and response time data
        collection 4-3
    saving of event data 4-11
    Select All/Top/Bottom Options capability
        4-5
    stopping event data storage 4-11
    synchronization frequency 6-2
    values in create_analytics_tablespaces.sql
        5-3
    View Portal Document Related Data
        capability 4-6
    visit timeout period 4-2
dimension names 4-10
dimension tables

defined 5-2
growth 5-2
dimensions
    custom 4-9
    forcing synchronization 6-4
    name length 4-10
Directory Folder Sync Job 6-3
Document Data Source Sync Job 6-3
Document Folder Map Sync Job 6-3
Document Sync Job 6-3
Document Upload Sync Job 6-3
document views fact table 5-4
Documents report
    about 3-5
    enabling access 4-6
Duration report
    about 3-3
    enabling 4-3

E

Ensemble Resources report 3-6
event names 4-10
event parameters. See parameters
Event Registration page 4-9
events
    defined 4-9
    name length 4-10
    restricting by role 4-6
    saving data 4-11
    table naming convention 4-10
Export User Details Report capability 4-5

F

fact tables
    defined 5-2
    delivered 5-4
    growth 5-2
    naming convention 4-10
    warning about removing 5-5
filtering