Oracle® WebCenter Analytics

Administrator Guide

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Welcome to Oracle WebCenter Analytics

This book describes how to perform administration tasks for Oracle WebCenter Analytics 10.3.

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 Oracle WebCenter Analytics administrators who are responsible for configuring Oracle WebCenter Analytics reports, working with the Oracle WebCenter Analytics database, and maintaining the Oracle WebCenter 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	• ORACLE_HOME specifies the directory where Oracle products are installed.

Oracle Documentation and Resources

This section describes other documentation and resources provided by Oracle.

Table 1-2 Oracle Documentation and Resources

Resource	Description
Installation and Upgrade Guide	This guide describes the prerequisites (such as required software) and procedures for installing or upgrading Oracle WebCenter Analytics.
	It is available on the Oracle Technology Network at http://download.oracle.com/docs/cd/E13158_01/alui/analytics/docs103/index.html.
Configuration Worksheet	This worksheet allows you to record prerequisite information necessary for installing and configuring Oracle WebCenter Analytics.
	It is available on the Oracle Technology Network at http://download.oracle.com/docs/cd/E13158_01/alui/analytics/docs103/index.html.
Release Notes	The release notes provide information about new features, issues addressed, and known issues in the release.
	They are available on the Oracle Technology Network at http://download.oracle.com/docs/cd/E13158_01/alui/analytics/docs103/index.html.
Online Help	The online help is written for all levels of Oracle WebCenter Analytics users. It describes the user interface for Oracle WebCenter Analytics and gives detailed instructions for completing tasks in Oracle WebCenter Analytics.
	To access online help, click the help icon.
Oracle Technology Network (OTN)	The Oracle Technology Network is the world's largest community of developers, DBAs, and architects using Oracle products and industry-standard technologies. Every day, members collaborate via OTN to share real-world insight, expertise, and best practices on how to build, deploy, manage, and optimize applications.
	As a member of the Oracle Technology Network you will enjoy access to software downloads, discussion forums, documentation, wikis, podcasts, blogs, plus much more.
	Access the Oracle Technology Network at http://www.oracle.com/technology/index.html.
Oracle Support	The Oracle Support site provides access to all Oracle support resources including online support, software and patches, technical articles, and contact numbers.
	Access the Oracle Support site at http://www.oracle.com/support/index.html.

Overview of Oracle WebCenter Analytics

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

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

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

- **User Profile Correlation:** Users of Oracle WebCenter 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 Oracle WebCenter Analytics using the OpenUsage API. Event data is saved to the Oracle WebCenter 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 Oracle WebCenter Analytics' custom event tracking features.

Components of Oracle WebCenter Analytics

Oracle WebCenter Analytics is comprised of the following components:

Figure 2-1 Oracle WebCenter Analytics Architecture
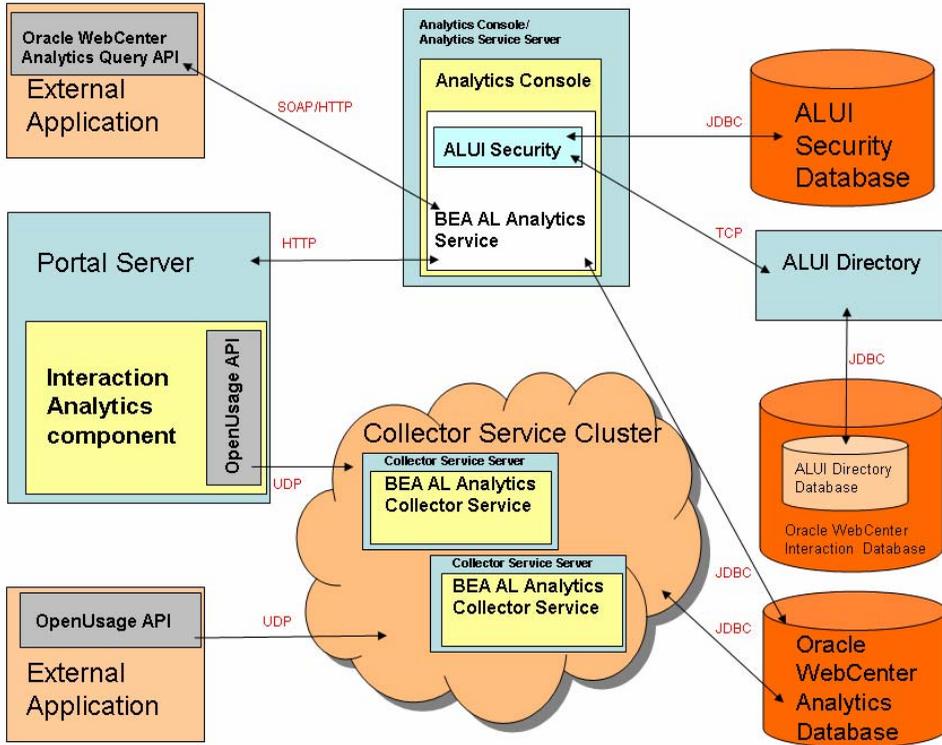
Overview of Oracle WebCenter Analytics Components

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

Table 2-1 Oracle WebCenter 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 Oracle WebCenter Analytics*.
OpenUsage API	The OpenUsage API sends the following metrics to the BEA AL Analytics Collector service: • Portal usage tracking metrics. • Custom portal and non-portal events. For additional details on using the OpenUsage API, see the Oracle WebCenter Analytics Development Guide on the Oracle Technology Network at http://download.oracle.com/docs/cd/E13158_01/alui/analytics/docs103/index.html .
Oracle WebCenter Analytics Query API	Facilitates communication between external applications and Oracle WebCenter Analytics. For more information on using the Oracle WebCenter Analytics Query API, see the Oracle WebCenter Analytics Development Guide on the Oracle Technology Network at http://download.oracle.com/docs/cd/E13158_01/alui/analytics/docs103/index.html .
Analytics Console	The Analytics Console component includes the Oracle WebCenter Analytics user interface and the BEA AL Analytics service, and is installed on a stand-alone server. The BEA AL Analytics service provides Oracle WebCenter Analytics data to the end user through the Analytics Console or portlets that are created from Oracle WebCenter Analytics portlet templates. For details on installing the Analytics Console component, see *Installation and Upgrade Guide for Oracle WebCenter Analytics*.

Table 2-1 Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter Analytics*.
Image Service component (not shown in diagram)	Provides the Image Service with the necessary files to run Oracle WebCenter Analytics. For details on installing the Image Service component, see *Installation and Upgrade Guide for Oracle WebCenter 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 Oracle WebCenter Analytics.*
Oracle WebCenter Analytics database	The Oracle WebCenter Analytics database provides storage for metrics that are gathered from custom portal and non-portal events. For details on configuring the Oracle WebCenter Analytics database, see *Installation and Upgrade Guide for Oracle WebCenter Analytics.*

Overview of Oracle WebCenter Interaction Components

Oracle WebCenter Analytics is designed to integrate with the Oracle WebCenter Interaction portal. When Oracle WebCenter 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 Oracle WebCenter Interaction components that are used by Oracle WebCenter Analytics.

Table 2-2 Summary of WebCenter Interaction 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 Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter 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 WebCenter 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 Oracle WebCenter Interaction*.
ALUI Directory	ALUI Directory enables Oracle WebCenter Interaction to act as an LDAP server, exposing the user, group, and profile data in portal database through an LDAP interface.This enables other Oracle WebCenter products (and other third-party applications) to authenticate users against the portal database.

Table 2-2 Summary of WebCenter Interaction 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 Oracle WebCenter 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 Oracle WebCenter Interaction*.

Working with Oracle WebCenter Analytics Reports

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

- Overview of Oracle WebCenter Analytics Reports

- Accessing Oracle WebCenter Analytics Reports

- Managing Security for Oracle WebCenter Analytics Reports

- Creating Oracle WebCenter Analytics Portlets

- Working with Oracle WebCenter Analytics - Advanced Tips and Techniques

Overview of Oracle WebCenter Analytics Reports

This section provides descriptions of the reports that are delivered with Oracle WebCenter Analytics. For advanced tips and techniques on using Oracle WebCenter Analytics reports, see "Tips and Techniques - Using Oracle WebCenter Analytics Reports" on page 3-9.

The following table describes reports that are delivered with Oracle WebCenter Analytics.

Table 3-1 Descriptions of Oracle WebCenter Analytics Reports

Oracle WebCenter 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, Oracle WebCenter 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 Oracle WebCenter Analytics Reports

Oracle WebCenter 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 Oracle WebCenter Analytics Reports

Oracle WebCenter 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. Oracle WebCenter 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 Oracle WebCenter Analytics Reports

Oracle WebCenter 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 Oracle WebCenter Analytics Reports

Oracle WebCenter Analytics Report	Description
Other Metrics - Projects	The Projects console page displays metrics for Oracle WebCenter 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 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 Oracle WebCenter 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 Oracle WebCenter Analytics Reports

To access Oracle WebCenter 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.

Managing Security for Oracle WebCenter Analytics Reports

Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter Interaction*.

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

Creating Oracle WebCenter Analytics Portlets

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

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

Working with Oracle WebCenter Analytics – Advanced Tips and Techniques

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

Tips and Techniques - Using Oracle WebCenter Analytics Reports

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

Table 3-2 Tips and Techniques - Using Oracle WebCenter Analytics Reports

Tip	Tip

Tip #1: Combine filtering and grouping when viewing reports	Combining filtering and grouping lets you utilize Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter Analytics to report subsequent activity as a new portal visit. The default is 120 seconds.
	Note: If you upgraded to Oracle WebCenter Analytics 10.3 from a previous version, the Visit Timeout default setting from the previous Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter Analytics is running, Oracle WebCenter Analytics restarts the calculation of portal user activity after you have completed the installation. This may impact Oracle WebCenter 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, Oracle WebCenter Analytics reports the user as an inactive user on Day 8. However, if you install Oracle WebCenter Interaction on Day 3 of the user's eight-day vacation, Oracle WebCenter 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 Oracle WebCenter 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.

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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 Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter Analytics data does not change until they log off or their session expires.

Super Users Role

The Super Users role grants members of the role to one or more capabilities and user properties. By default, in clean (non-upgraded) Oracle WebCenter Analytics 10.3 installations, the administrator user is assigned to the Super Users role with only the Application Write capability. If you upgraded to Oracle WebCenter Analytics 10.3, the Super Users role retains the members, capabilities, and user properties that it contained in the previous version of Oracle WebCenter Analytics.

Note: The Analytics User Property Sync Job must be executed to display any new User Properties. 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 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 Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter 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, Oracle WebCenter 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 Oracle WebCenter Analytics database, see "Archiving and Restoring Partitions" on page 5-5.

Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter 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, Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter Analytics reports.

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

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

- Red squares with an **X** indicate partitions whose data is unavailable to Oracle WebCenter 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 Oracle WebCenter Analytics using the OpenUsage API. Event data is saved to the Oracle WebCenter 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.

This topic only discusses the Event Registration user interface. To utilize the full capabilities of this feature, you must use the OpenUsage API. For additional details on using the OpenUsage API, see the Oracle WebCenter Analytics Development Guide on the Oracle Technology Network at http://download.oracle.com/docs/cd/E13158_01/alui/analytics/docs103/index.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 4-13).

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 Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter Analytics which are, by default, included in every event:

Table 4-6 Parameters Delivered with Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter Analytics Database

This chapter includes the following topics:

Sizing the Oracle WebCenter Analytics Database

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

Overview of Oracle WebCenter Analytics Database Growth

The majority of growth in the Oracle WebCenter Analytics database occurs in the fact tables that are delivered with Oracle WebCenter Analytics. The rest of the delivered Oracle WebCenter Analytics tables -- including dimension tables -- generate negligible growth in the Oracle WebCenter 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 Oracle WebCenter 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 5-5.

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

Oracle WebCenter 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 Oracle WebCenter Analytics is reporting, the record for that object's dimension data remains in the Oracle WebCenter Analytics

database. For this reason, Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter 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

Table 5-2 Oracle Settings and Configuration Recommendations

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

> **Note:** The recommendations in this table are for use with the Oracle WebCenter 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 Oracle WebCenter Analytics. Every fact table name begins with the prefix *ASFACT_*, which helps you identify fact tables when working with the Oracle WebCenter Analytics database.

Table 5-3 Fact Tables Delivered with Oracle WebCenter 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 Oracle WebCenter Analytics -- see the Oracle WebCenter Analytics Database Schema document.

Archiving and Restoring Partitions

This section provides guidelines for archiving and restoring the partitions within your Oracle WebCenter Analytics database. For details on using Analytics Administration's Partition Settings page, see "Configuring Partition Settings" on page 4-9.

To maintain a steady size of your Oracle WebCenter 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, Oracle WebCenter 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 Oracle WebCenter Analytics reports.

Synchronizing Oracle WebCenter Analytics

This chapter includes the following topics:

- Overview of Oracle WebCenter Analytics Synchronization
- Performing Force Synchronizations
- Strategizing Synchronization Scheduling

Overview of Oracle WebCenter Analytics Synchronization

Oracle WebCenter Analytics synchronization is a process by which object dimension data is sent from the remote database to the dimension tables of the Oracle WebCenter Analytics database, where the data is stored. The Automation Service runs the synchronization process using the Analytics sync jobs that are delivered with Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter Analytics is reporting, the record for that object's dimension data remains in the Oracle WebCenter Analytics database. For this reason, Oracle WebCenter 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 Oracle WebCenter Analytics' sync.log file. For the location of the Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter Analytics Synchronization - List of Objects and Associated Sync Jobs

Product	Object	Analytics Job
Oracle WebCenter 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 Oracle WebCenter Analytics database. The user property values are not altered in the portal database.
	Users	User Sync Job

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

Product	Object	Analytics Job
Oracle WebCenter Collaboration	Collaboration Message Post Data	Message Post Sync Job
	Collaboration Document Upload Data	Document Upload Sync Job
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 Oracle WebCenter Analytics. This job does not resolve the IP addresses that are sent with custom events.

Performing Force Synchronizations

A force synchronization populates the Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter 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 Oracle WebCenter 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: Oracle Webcenter Collaboration object data is sent real time to Oracle WebCenter Analytics when Oracle Webcenter 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 Oracle Webcenter Collaboration.

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

Troubleshooting

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

- Overview of Logs

- Troubleshooting Common Runtime Problems

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

Overview of Logs

The following table provides the descriptions and locations of logs that you can use to troubleshoot Oracle WebCenter 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 Oracle WebCenter 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\10.3.0\logs (Windows) • *install_dir*/ptanalytics/10.3.0/logs (UNIX/Linux)
analyticsui.log	Provides activity and error details for the Analytics Console.	• *install_dir*\ptanalytics\10.3.0\logs (Windows) • *install_dir*/ptanalytics/10.3.0/logs (UNIX/Linux)
collector.log	Provides activity and error details for: • BEA AL Analytics Collector service. • Routine partitioning activity that occurs during Oracle WebCenter Analytics runtime. The partition.log file provides activity and error details for initial partitioning of the Oracle WebCenter Analytics database during upgrade.	• *install_dir*\ptcollector\10.3.0\logs (Windows) • *install_dir*/ptcollector/10.3.0/logs (UNIX/Linux)

Table A-1 Logs Used to Troubleshoot Oracle WebCenter 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\10.3.0\logs (Windows) • *install_dir*/ptcollector/10.3.0/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\10.3.0\logs (Windows) • *install_dir*/ptanalytics/10.3.0/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:** Oracle WebCenter Analytics reports are not being populated with data.	• **Cause 1:** The Interaction Analytics component is not correctly configured to communicate with Oracle WebCenter Analytics. • **Solution 1:** Enable communication between the portal and Oracle WebCenter Analytics. In Oracle WebCenter 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 Oracle WebCenter Configuration Manager application.

Table A-2 Common Runtime Problems and Solutions

Problem Description and Details	Cause and Solution
	• **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 Oracle WebCenter 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 Oracle WebCenter 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.
• **Problem:** Unacceptable portlet performance. • **Details:** Users are experiencing unacceptable performance or timeouts when using the Oracle WebCenter Analytics portlets.	• **Cause 1:** Too many Oracle WebCenter Analytics portlets have been added to a single My Page. • **Solution 1:** Encourage users to include fewer Oracle WebCenter 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.

Table A-2 Common Runtime Problems and Solutions

Problem Description and Details	Cause and Solution
• **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 Oracle WebCenter 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 Oracle WebCenter Analytics reports remain as current as possible.

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