BEA AquaLogic™ Analytics

Database Schema

Version 2.1

Introduction

The Analytics database schema follows the star schema convention that is commonly used in applications that store large amounts of tracking data. In this convention, most fact tables are related to one or more dimension tables. When visually represented, this relationship creates the star-like image for which the convention is named.

Using this convention allows the Analytics database to store redundant data in dimension tables, and limit the data stored in fact table columns to mostly integer IDs that reference those dimensions. This type of storage minimizes the overall size of the database and helps with performance.

This document contains the following sections:

Dimension Tables

The following table lists and describes the dimension tables and fields used in Analytics reporting. Dimension tables store redundant descriptive data that is associated with events that are sent to the Analytics system and stored in fact tables.

Table Name	Fields
ASDIM_AUTHSOURCES Stores authentication source names synched out of the portal database via Analytics synch jobs.	**ID**: ID of the authentication source object **NAME**: Name of the authentication source object **LASTMODIFIED**: Timestamp of the last name update **CREATED**: Timestamp of when the record was created
ASDIM_BROWSERS Stores names, versions and operating systems of users' browsers. This information is sent with certain out-of-the-box events.	**ID**: ID of the browser record **NAME**: Name of the browser (if found) **VERSION**: Version of the browser (if found) **OS**: Operating system that the browser runs on (if found) **LASTMODIFIED**: Timestamp of the last name, version or OS update **CREATED**: Timestamp of when record was created
ASDIM_COMMPAGES Stores community page names and object IDs of associated communities.	**ID**: ID of the page object **NAME**: Name of the authentication source object **COMMUNITYID**: ID of the associated community **LASTMODIFIED**: Timestamp of the last name or community ID update **CREATED**: Timestamp of when the record was created
ASDIM_COMMUNITIES Stores community names.	**ID**: ID of the authentication source object **NAME**: Name of the authentication source object **LASTMODIFIED**: Timestamp of the last name update **CREATED**: Timestamp of when the record was created
ASDIM_COMMVISITS Stores community visit data. A community visit is created the first time a user hits a community's page, and is ended if the user either goes to a new community or that user's portal visit expires. For details, see the ASDIM_VISITS table.	**ID**: ID of the community visit **USERID**: ID of the user visiting the community **TIMEID**: ID of the time record that is associated with the start of the community visit **COMMUNITYID**: ID of the community that is being visited **VISITID**: ID of the portal visit in which this community visit occurred **STARTED**: The timestamp of when the community visit started **FINISHED**: The timestamp of when the community visit finished **DURATION**: The length of time that this community visit spans
ASDIM_CSDISCUSSIONS Stores Collaboration discussion names, descriptions, and object IDs of associated Collaboration projects.	**ID**: ID of Collaboration discussion object **CREATED**: Timestamp of when the object was created **LASTMODIFIED**: Timestamp of the last name update **CSPROJECTID**: ID of the Collaboration project that is associated to this discussion **NAME**: Name of the Collaboration discussion object **DESCRIPTION**: Description of the Collaboration discussion object

ASDIM_CSDOCUMENTS Stores collaboration document names, descriptions, and object IDs of associated Collaboration projects.	**ID**: ID of the Collaboration document object **CREATED**: Timestamp of when the object was created **LASTMODIFIED**: Timestamp of the last name update **CSPROJECTID**: ID of the Collaboration project that is associated to this document **NAME**: Name of the Collaboration document object **DESCRIPTION**: Description of the Collaboration document object
ASDIM_CSPROJECTS Stores Collaboration project names and descriptions.	**ID**: ID of the Collaboration project object **CREATED**: Timestamp of when the object was created **LASTMODIFIED**: Timestamp of the last name or description update **NAME**: Name of the Collaboration project object **DESCRIPTION**: Description of the Collaboration project object
ASDIM_GROUPS Stores group names, descriptions and object IDs of associated authentication sources.	**ID**: ID of the user group object **CREATED**: Timestamp of when the object was created **LASTMODIFIED**: Timestamp of the last name, authentication source ID or description update **NAME**: Name of the user group object **DESCRIPTION**: Description of the user group object **AUTHSOURCEID**: ID of the associated authentication source object
ASDIM_HOSTS Stores IP addresses and host names of the client browsers triggering the events, if applicable. When events are received with an IP address, the address is stored in this table. When the Host Resolution job runs, the host name of new IPs are resolved and stored.	**ID**: ID of the host record **CREATED**: Timestamp of when the record was created **LASTMODIFIED**: Timestamp of the last IP address or hostname update **IPADDRESS**: IP address of client triggering event **HOSTNAME**: Resolved name of the associated IP address (If an IP can not be resolved, HOSTNAME is marked as "Unknown".)
ASDIM_KDDOCDATASOURCES Stores data source names.	**ID**: ID of the data source object **CREATED**: Timestamp of when the object was created **LASTMODIFIED**: Timestamp of the last name update **NAME**: Name of the data source object
ASDIM_KDDOCUMENTS Stores document names, titles and object IDs of the associated document data sources.	**ID**: ID of the document object **CREATED**: Timestamp of when the object was created **LASTMODIFIED**: Timestamp of the last name, title or document data source ID update **NAME**: Name of the document object **KDDOCUMENTDATASOURCEID**: ID of the associated data source **TITLE**: Title of the document object

ASDIM_KDFOLDERS Stores document folder names and object IDs of the parent document folders. If a document folder is a root folder, the PARENTID column contains a NULL value.	**ID**: ID of the document folder object **CREATED**: Timestamp of when the object was created **LASTMODIFIED**: Timestamp of the last name or parent folder ID update **NAME**: Name of the document folder object **PARENTID**: ID of the parent document folder object
ASDIM_LINKSOURCES	This table is not used.
ASDIM_MYPAGES	This table is not used.
ASDIM_PORTLETS Stores portlet names and types.	**ID**: ID of the portlet object **CREATED**: Timestamp of when the object was created **LASTMODIFIED**: Timestamp of the last name or portlet type ID update **NAME**: Name of the portlet object **PORTLETTYPEID**: ID representing the portlet's type
ASDIM_PROPERTIES Stores property names, types and display statuses.	**ID**: ID of the property object **CREATED**: Timestamp of when the object was created **LASTMODIFIED**: Timestamp of the last name or property type ID update **NAME**: Name of the property object **PROPERTYTYPEID**: ID representing the property's type **ISDISPLAYED**: Flag representing the visibility of the property object in both the Analytics Console and Analytics Administration
ASDIM_PUBFOLDERS Stores Publisher folder names and object IDs of the parent Publisher folders.	**ID**: ID of the Publisher folder object **CREATED**: Timestamp of when the object was created **LASTMODIFIED**: Timestamp of the last name or parent folder ID update **NAME**: Name of the Publisher folder object **PARENTID**: ID of the parent Publisher folder object (If the folder is the root folder, the PARENTID column contains a NULL value.)
ASDIM_PUBITEMS Stores Publisher content item names, folder object IDs and published URLs, broken up into 5 columns for indexing purposes.	**ID**: ID of the Publisher content item object **CREATED**: Timestamp of when the object was created **LASTMODIFIED**: Timestamp of the last name, folder ID or URL update **NAME**: Name of the Publisher content item object **PUBFOLDERID**: ID of the associated Publisher folder object **PUBLISHEDURL1-5**: Chunked string representing the Publisher content item's published URL
ASDIM_SEARCHTERMS Stores search terms that are sent with search events.	**ID**: ID of the search term record **CREATED**: Timestamp of when the object was created **LASTMODIFIED**: Timestamp of the last record update **SEARCHTERM**: Search term that was used

ASDIM_TIME Stores time records that are used primarily for reporting. Events stored in Analytics can be grouped by hour, day, week, month or year. You can use these time-related columns to make reporting easier. For example, if you want to group data by hour you would use the "HOUROFDAY", "DAYOFYEAR", and "YEAR" columns.	**ID**: Calculated ID that corresponds to a specific hour in time **CREATED**: Timestamp when the record was created **LASTMODIFIED**: Timestamp of the last record update **PERIODSTART**: Timestamp of the time period start **PERIODEND**: Timestamp of the time period end **HOUROFDAY**: Hour of the day **DAYOFMONTH**: Day of the month **DAYOFYEAR**: Day of the year **WEEKOFYEARSUNDAY**: Week number based on Sunday as the first day of week **WEEKOFYEARMONDAY**: Week number based on Monday **WEEKOFYEARSATURDAY**: Week number based on Saturday **MONTHOFYEAR**: Month of the year **YEAR**: Year number
ASDIM_USERPROPERTYVALUES Stores user property values.	**ID**: ID of the user property value record **CREATED**: Timestamp of when the record was created **LASTMODIFIED**: Timestamp of the last record update **USERID**: ID of the associated user object **PROPERTYID**: ID of the associated property object **VALUE**: Value of the user property object
ASDIM_USERS Stores user data.	**ID**: ID of the user object **CREATED**: Timestamp of when the record was created **LASTMODIFIED**: Timestamp of the last record update **NAME**: Name of the user object **DESCRIPTION**: Description of the user object **LOGINNAME**: Login name of the user object **AUTHSOURCEID**: ID of the associated authentication source object **USERSTATUSID**: ID representing the activity status of the user **USERCREATED**: Timestamp of when the user object was created **USERDEACTIVATED**: Timestamp of when the record was last marked "inactive" **USERCREATEDTIMEID**: ID of the associated time record for the USERCREATED column **USERDEACTIVATEDTIMEID**: ID of the associated time record of the USERDEACTIVATED column
ASDIM_VISITS Stores portal visit data. A portal visit is created when a user first logs into the portal, and is ended if the user either re-authenticates or allows the Visit Timeout to pass without generating any new events.	**ID**: ID of the visit record **USERID**: ID of the associated user object **TIMEID**: ID of the associated time record of the STARTED column **STARTED**: Timestamp of when the visit was started **FINISHED**: Timestamp of when the visit was finished **DURATION**: The length of time that this visit spans

Fact Tables

Fact tables contain event data that is sent by other applications within the environment. Fact table columns contain mostly integer IDs that reference redundant descriptive data stored in dimension tables.

The following table lists the views used for querying the underlying event data in Analytics reporting. The actual tables are partitioned into monthly blocks. You should query the data through these views because they provide access to all of the underlying partitions. For details on partitioning, see *Administrator Guide for BEA AquaLogic Analytics*.

Table Name	Fields
ASFACT_CSDISCPOSTS Stores events that are sent when Collaboration messages are posted to Collaboration discussions by users.	**ID**: ID of the event record **TIMEID**: ID of the associated time record for the OCCURRED column **USERID**: ID of the associated user object **CSDISCUSSIONID**: ID of the associated Collaboration discussion object **CSPROJECTID**: ID of the associated Collaboration project object **OCCURRED**: Timestamp of when the event occurred
ASFACT_CSDOCUPLOADS Stores events that are sent when Collaboration document objects are uploaded to Collaboration projects by users.	**ID**: ID of the event record **TIMEID**: ID of the associated time record for the OCCURRED column **USERID**: ID of the associated user object **CSDOCUMENTID**: ID of the associated Collaboration document object **CSPROJECTID**: ID of the associated Collaboration project object **OCCURRED**: Timestamp of when the event occurred
ASFACT_DOCUMENTVIEWS Stores events that are sent when Collaboration or portal document objects are viewed by users.	**ID**: ID of the event record **TIMEID**: ID of the associated time record for the OCCURRED column **USERID**: ID of the associated user object **OCCURRED**: Timestamp of when the event occurred **DOCUMENTTYPEID**: ID representing the type of document: Collaboration or portal **DOCUMENTID**: ID of the associated document object **HOSTID**: ID of the associated host record **LINKSOURCEID**: ID of the associated linksource record **BROWSERID**: ID of the associated browser record **VISITID**: ID of the associated portal visit record **SEARCHFACTID**: ID of the associated search event record
ASFACT_KDFOLDERVIEWS Stores events that are sent when portal document folders are viewed by users.	**ID**: ID of the event record **TIMEID**: ID of the associated time record for the OCCURRED column **USERID**: ID of the associated user object **VISITID**: ID of the associated portal visit record **OCCURRED**: Timestamp of when the event occurred **KDFOLDERID**: ID of the associated document folder object

ASFACT_LOGINS Stores events that are sent when users log in.	**ID**: ID of the event record **TIMEID**: ID of the associated time record for the OCCURRED column **USERID**: ID of the associated user object **HOSTID**: ID of the associated host record **LINKSOURCEID**: ID of the associated linksource record **BROWSERID**: ID of the associated browser record **VISITID**: ID of the associated portal visit record **OCCURRED**: Timestamp of when the event occurred
ASFACT_PAGEVIEWS Stores events that are sent when pages are viewed by users.	**ID**: ID of the event record **TIMEID**: ID of the associated time record for the OCCURRED column **USERID**: ID of the associated user object **HOSTID**: ID of the associated host record **LINKSOURCEID**: ID of the associated linksource record **BROWSERID**: ID of the associated browser record **VISITID**: ID of the associated portal visit record **OCCURRED**: Timestamp of when the event occurred **COMMUNITYID**: ID of the associated community object **PAGEID**: ID of the associated page object **PAGETYPEID**: ID representing the page type, community or mypage **COMMVISITID**: ID of the associated community visit record **RESPONSETIME**: The time it took for the page to load **ISENTRYPAGE**: Flag representing the first page viewed in a portal visit **ISEXITPAGE**: Flag representing the last page viewed in a portal visit
ASFACT_PORTLETUSES Stores events that are sent when portlet are "used" by users. Only gatewayed requests are tracked.	**ID**: ID of the event record **TIMEID**: ID of the associated time record for the OCCURRED column **USERID**: ID of the associated user object **HOSTID**: ID of the associated host record **LINKSOURCEID**: ID of the associated linksource record **BROWSERID**: ID of the associated browser record **VISITID**: ID of the associated portal visit record **OCCURRED**: Timestamp of when the event occurred **PORTLETID**: ID of the associated portlet object **COMMUNITYID**: ID of the associated community object **PAGEID**: ID of the associated page object
ASFACT_PORTLETVIEWS Stores events that are sent when portlets are viewed by users. This event is generated for each active portlet on a viewed page.	**ID**: ID of the event record **TIMEID**: ID of the associated time record for the OCCURRED column **USERID**: ID of the associated user object **VISITID**: ID of the associated portal visit record **OCCURRED**: Timestamp of when the event occurred **PORTLETID**: ID of the associated portlet object **COMMUNITYID**: ID of the associated community object **PAGEID**: ID of the associated page object **RESPONSETIME**: The time it took for the portlet to load

ASFACT_PUBITEMVIEWS Stores events that are sent when Publisher content items are viewed by users.	**ID**: ID of the event record **TIMEID**: ID of the associated time record for the OCCURRED column **USERID**: ID of the associated user object **HOSTID**: ID of the associated host record **LINKSOURCEID**: ID of the associated linksource record **BROWSERID**: ID of the associated browser record **VISITID**: ID of the associated portal visit record **OCCURRED**: Timestamp of when event occurred **PORTLETID**: ID of the associated portlet object **COMMUNITYID**: ID of the associated community object **PAGEID**: ID of the associated page object **PUBITEMID**: ID of the associated Publisher content item object
ASFACT_SEARCHES Stores events that are sent when searches are performed by users.	**ID**: ID of the event record **TIMEID**: ID of the associated time record for the OCCURRED column **USERID**: ID of the associated user object **HOSTID**: ID of the associated host record **LINKSOURCEID**: ID of the associated linksource record **BROWSERID**: ID of the associated browser record **VISITID**: ID of the associated portal visit record **OCCURRED**: Timestamp of when the event occurred **RESPONSETIME**: The time it took for the portlet to load **SEARCHTERMID**: ID of the associated search term record **ISABANDONED**: Flag representing an abandoned search **MATCHES**: Count representing the total matches that were found using the search term

Value Tables

The following table lists and describes the value tables and fields used in Analytics reporting. Value tables contain static lookup data for items associated with events that are sent to the Analytics system and stored in <u>fact tables</u>.

Table Name	Fields
ASLOV_DOCUMENTTYPES Stores lists of values for document types.	**ID**: ID of the record **CREATED**: Timestamp of when the record was created **LASTMODIFIED**: Timestamp of the last record update **NAME**: Name of the document type
ASLOV_PAGETYPES Stores lists of values for page types.	**ID**: ID of the record **CREATED**: Timestamp of when the record was created **LASTMODIFIED**: Timestamp of the last record update **NAME**: Name of the page type
ASLOV_PORTLETTYPES Stores lists of values for portlet types.	**ID**: ID of the record **CREATED**: Timestamp of when the record was created **LASTMODIFIED**: Timestamp of the last record update **NAME**: Name of the portlet type
ASLOV_PROPERTYTYPES Stores lists of values for property types.	**ID**: ID of the record **CREATED**: Timestamp of when the record was created **LASTMODIFIED**: Timestamp of the last record update **NAME**: Name of the property type
ASLOV_USERSTATUSES Stores lists of values for user statuses.	**ID**: ID of the record **CREATED**: Timestamp of when the record was created **LASTMODIFIED**: Timestamp of the last record update **NAME**: Name of the user status

Mapping Tables

The following table lists and describes the mapping tables and fields used in Analytics reporting. Mapping tables contain many-to-many relational data for items in [dimension tables](#) that are related.

Table Name	Fields
ASMAP_COMMPORTLET Stores the associations between community and portlet objects.	**ID**: ID of the record **CREATED**: Timestamp of when the record was created **LASTMODIFIED**: Timestamp of the last record update **COMMUNITYID**: ID of the associated community object **PORTLETID**: ID of the associated portlet object
ASMAP_KDDOCUMENTFOLDER Stores the associations between document and folder objects.	**ID**: ID of the record **CREATED**: Timestamp of when the record was created **LASTMODIFIED**: Timestamp of the last record update **KDFODLERID**: ID of the associated folder object **KDDOCUMENTID**: ID of the associated document object

Private Tables

The following table lists additional tables that are delivered with BEA AquaLogic Analytics 2.1. These tables are necessary for the proper functioning of Analytics. We do not support making changes of any kind to these tables; they are listed here for your information only.

Table Name
ASLOV_COLUMNTYPES
ASLOV_CONFIGTYPES
ASLOV_JOBS
ASLOV_JOBSTATUSES
ASMAP_ROLEPROPERTY
ASSYS_CONFIG
ASSYS_EVENTDIMENSIONS
ASSYS_EVENTFACTS
ASSYS_EVENTS
ASSYS_JOBLOGS
ASSYS_PUBURLPATTERNS
ASSYS_REPORTSTATUSES