



BEA AquaLogic™ Analytics

Database Schema

Version 2.5

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.

Note: The Analytics Query API is available with this release and is the recommended method of accessing the Analytics database. Analytics 2.5 is the final release to support direct access to the Analytics database. For information on working with the Analytics Query API, see

http://edocs.bea.com/en/alui/analytics/docs25/AquaLogicAnalytics_QueryAPI_2-5/

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Dimension Tables

Dimension tables store redundant descriptive data that is associated with events that are sent to the Analytics system and stored in [fact tables](#).

The following table lists and describes the dimension tables and fields used in Analytics reporting.

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_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_USERPROPERTIES Stores user property names and display statuses.	ID: Internal 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 PROPERTYID: Property's ALI Object ID 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

<p>ASDIM_TIME</p> <p>Stores time records that are used primarily for reporting. Events stored in Analytics can be grouped by hour, day, week, month or year.</p> <p>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.</p>	<p>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</p>
<p>ASDIM_USERPROPERTYVALUES</p> <p>Stores user property values.</p>	<p>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 TYPE: Simple data type of the property value</p>
<p>ASDIM_USERS</p> <p>Stores user data.</p>	<p>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</p>
<p>ASDIM_VISITS</p> <p>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.</p>	<p>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</p>

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](#).

Note: In an upgrade installation of Analytics 2.5, the ASFACT_CSDOCUPLOADS and ASFACT_CSDISCPOSTS fact tables exist, but are not used.

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_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

<p>ASFACT_LOGINS</p> <p>Stores events that are sent when users log in.</p>	<p>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</p>
<p>ASFACT_PAGEVIEWS</p> <p>Stores events that are sent when pages are viewed by users.</p>	<p>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</p>
<p>ASFACT_PORTLETUSES</p> <p>Stores events that are sent when portlet are “used” by users. Only gatewayed requests are tracked.</p>	<p>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</p>
<p>ASFACT_PORTLETVIEWS</p> <p>Stores events that are sent when portlets are viewed by users. This event is generated for each active portlet on a viewed page.</p>	<p>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</p>

<p>ASFACT_PUBITEMVIEWS</p> <p>Stores events that are sent when Publisher content items are viewed by users.</p>	<p>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</p>
<p>ASFACT_SEARCHES</p> <p>Stores events that are sent when searches are performed by users.</p>	<p>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</p>

Value Tables

Value tables contain static lookup data for items associated with events that are sent to the Analytics system and stored in [fact tables](#).

The following table lists and describes the value tables and fields used in Analytics reporting.

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

Mapping tables contain many-to-many relational data for items in [dimension tables](#) that are related.

The following table lists and describes the mapping tables and fields used in Analytics reporting.

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

Private 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.

The following table lists additional tables that are delivered with BEA AquaLogic Analytics 2.5.

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
ASSYS_ACTIVECOMMVISITS
ASSYS_ACTIVEVISITS
ASSYS_DIMENSIONPROPS
ASSYS_NAMESPACES
ASSYS_VISITIDENTIFIERS
ASSYS_VISITTYPES