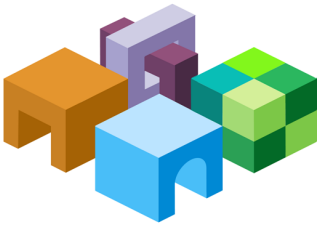

ORACLE® ESSBASE STUDIO

RELEASE 11.1.2.1

NEW FEATURES

ORACLE
ENTERPRISE PERFORMANCE MANAGEMENT SYSTEM

Oracle Essbase Studio continues to simplify cube construction by delivering a single environment for data modeling and cube design, providing a consistent platform for building analytic applications and loading data.

The sections that follow describe the new features in Essbase Studio Release 11.1.2.1 and 11.1.12. For more information about these features, see the *Oracle Essbase Studio User's Guide*, available when you access the online help in the Essbase Studio Console, or in PDF and HTML help format on the Oracle Technology Network.

Contents In Brief

Essbase Studio 11.1.2.1 New Features

Subtopics

Essbase Studio Server and Catalog Upgrade

This release allows you to upgrade your Essbase Studio installation from an earlier release, keeping all information in the Essbase Studio catalog intact and functional. After upgrade, all data source connections, metadata elements, Essbase models, and cube schemas are available, editable, and deployable.

If you are upgrading from Release 11.1.1.3, use the Oracle Hyperion Enterprise Performance Management System Installer, Fusion Edition and Oracle's Hyperion Enterprise Performance Management System Configurator to install products in a new environment, and follow the process described in "Upgrading EPM System Products" in the *Oracle Hyperion EPM System Installation and Configuration Guide*.

If you are moving from Release 11.1.2 to Release 11.1.2.1, use the "Apply Maintenance Release" option in Oracle Hyperion Enterprise Performance Management System Installer, Fusion Edition, and see the "Maintenance Release Installation Checklist" in *Oracle Hyperion EPM System Installation and Configuration Guide*.

Oracle BI EE Business Model Support

Essbase Studio now supports Oracle Business Intelligence Enterprise Edition Business Model as a data source. In previous releases, Oracle BI EE support was limited to Presentation Layer.

When you create an Oracle BI EE data source connection, you are now presented with the choice of creating the connection based on Presentation Layer or Business Model. The new Business Model option in Essbase Studio allows you to create hierarchies and dimension elements from Oracle BI EE dimensions. After the **Connection Wizard** process is complete, you can view the hierarchies and dimension elements that were created in the **Metadata Navigator**.

Note that measure hierarchies and other measures are not automatically created during this process. However, the Oracle BI EE measure elements are stored in the data source connection in the Source Navigator. You can use drag-and-drop to add source measure elements to the **Metadata Navigator**.

Work with these metadata elements as you would with elements created from other data source types. Use the elements to create a cube schema and Oracle Essbase model, and then deploy the model to create an Essbase cube.

Along with other relational data source creation workflow topics, see "Creating Oracle BI EE Dimensions" in the *Oracle Essbase Studio User's Guide*.

Binding Rules for Oracle BI EE Business Model Dimension Elements

Hierarchies created from Oracle BI EE Business Model sources are built based on elements which are primary keys. Many of these elements have numeric values (IDs). This causes a problem in the deployed Essbase cube, where members names in the outline are only numbers , instead of meaningful member names.

Essbase Studio follows a set of rules to generate binding expressions for the dimension elements in cases where the primary key column of the element is a numeric.

For specific information, see "Rules for Generating Key and Caption Bindings for Oracle BI EE Business Model Dimension Elements" in the *Oracle Essbase Studio User's Guide*.

SSL Support for Essbase Studio Server Connections

Essbase can be deployed to work in Secure Socket Layer (SSL). In SSL mode, all communication between Essbase Server and Essbase Studio Server is encrypted to ensure data security. Default deployments of Essbase components install self-signed certificates to enable SSL communication, mainly for testing purposes. Oracle recommends that you use certificates from well-known third-party certification authorities (CAs) to SSL-enable Essbase in production environments. See the *Oracle Hyperion EPM System Security Administration Guide* for more information.

You specify SSL mode when setting up connections to an SSL-enabledEssbase Server and when creating data source connections to an SSL-enabled Oracle Hyperion EPM Architect, Fusion Edition server. Additionally, if you are updating references to a rehosted Essbase Server, you must specify "SSL" along with the new host name and port number. See "Creating an Essbase Server Connection", "Defining Connection Parameters for Performance Management Architect Sources", and "Updating References to a Rehosted Essbase Server" in the *Oracle Essbase Studio User's Guide*.

Essbase Studio 11.1.2 New Features

Subtopics

Essbase Studio Server as a Windows Service

Essbase Studio Server can be installed as a Windows Service. Specify Essbase Studio Server to run as a Windows service during the Oracle Hyperion Enterprise Performance Management System configuration process.

Essbase Studio Catalog Export and Import

In this release, you can replicate the Essbase Studio catalog database between different machines for various administrative purposes, such as making catalog backups, restoring the catalog, and moving the catalog from one machine to another. Essbase Studio now provides an option to export the catalog into an XML file. This file can then be imported to a new location or a different machine in order to recreate the catalog. You also have the option of selectively copying some catalog objects, exporting to an XML file, and then recreating these objects in a new location or on a different machine.

See “Exporting and Importing the Essbase Studio Catalog Database” in the *Oracle Essbase Studio User's Guide*.

Improved Data Source Exploration

During data source creation, Essbase Studio is required to scrape, or explore, the data source. The metadata elements derived from the scraping process are subsequently written to the Essbase Studio catalog.

Essbase Studio can now perform scraping without locking the catalog during the data source exploration process. In previous releases, other Essbase Studio users could not read objects from or write objects to the catalog during the exploration process. This could cause problems in a multiuser environment if a data source took a long time to scrape.

If you want to prevent other users from reading or writing to the catalog during data source scraping, you have the option of locking the Essbase Studio catalog. In the **Select Tables** page of the **Connection Wizard**, select the **Lock catalog during exploration** option.

Oracle Diagnostic Logging (ODL)

Essbase Studio logging now uses the Oracle Diagnostic Logging (ODL) framework.

For information on configuring logging for Essbase Studio and other EPM System products, see the *Oracle Hyperion EPM System Installation and Configuration Troubleshooting Guide*, available on the Oracle Technology Network.

These Essbase Studio server properties related to logging have been removed:

- `logger.file`
- `logger.limit`
- `logger.count`
- `com.hyperion.cp.handlers=com.hyperion.cp.util.LoggerFileHandler`

The property, `com.hyperion.cp.level`, is now set in the `MIDDLEWARE_HOME/user_projects/epmsystem1/BPMS/bpms1/bin/logging.xml` file, which is part of ODL; it is no longer set in the Essbase Studio `server.properties` file.

Support for ODBC DSN and OCI Connections

During cube deployment, you can call specific ODBC DSNs or Oracle Call Interface (OCI) connect identifiers that you have set up in your environment. Calling an ODBC DSN or OCI connect identifier allows you to take advantage of the particular parameters that are set in the DSN or in OCI. For example, during cube deployment, you may use an Oracle Wire Protocol driver that is set up to take advantage of driver performance and failover options.

The option to specify the ODBC DSN or OCI connect identifier is on the Cube Deployment Wizard, “Essbase Server connection options” page, “Data Source settings” group.

Connection Pooling

With connection pooling, the query driver in Essbase Studio provides a pool of physical connections per data source, allowing the execution of concurrent queries, and speeding up query processing. You specify the number of connections in the pool.

In previous releases, the query driver opened one physical connection per data source. If several tasks tried to run concurrent queries to the same data source, the query driver was forced to run the queries sequentially; that is, each query waited until previous query execution was finished, causing delays in query processing.

Support for Connections to Essbase Server Clusters

Essbase supports clustering of Essbase Servers to provide active-passive failover with write-back capability. Active-passive Essbase failover clusters use the service failover functionality of the Oracle Process Manager and Notification (OPMN) Server.

Essbase Studio allows you to create connections to Essbase Server clusters. When you create an Essbase connection in the Connection Wizard, you can select the new "Cluster" check box to denote that the connection is to an Essbase Server cluster.

For more information on Essbase failover clusters, see the Essbase documentation.

Enhanced Data Source Synchronization

You can keep your Essbase Studio data source connections closely synchronized with the physical data source using the Delete and Refresh table commands available in the Data Sources tab of the Source Navigator.

Deleting Tables

Delete tables that are no longer in use or that you do not want used with a particular data source connection.

You can delete tables from data source connections as long as no Essbase Studio metadata elements are dependent on the tables. For example, if a table is used to build a hierarchy stored in your Essbase Studio catalog, you cannot delete the table without first deleting the dependent hierarchy and its elements.

Note: You can only delete tables from relational data sources, including Oracle BI EE data sources, and files from flat file data sources.

Refreshing Tables

Refresh tables to detect schema changes that occurred in your data source since you created the data source connection.

You can refresh tables at the connection level and the table level. Schema changes that are detected during refresh include:

- New columns
- Dropped columns
- Changes in column data type; for example, varchar to integer

When you refresh at the connection level, the refresh is performed for all tables in the connection. When you refresh at the table level, the refresh is performed only on the selected tables.

Note: You can refresh only relational data sources, including Oracle Business Intelligence Enterprise Edition data sources.

Enhanced Console Display, Messaging, and Navigation

Release 11.1.2 introduces the following usability improvements to the Essbase Studio Console interface:

- The title bar of the Essbase Studio Console now displays the Essbase Studio Server name, the logged-in user name, and the logged-in user role.
- In order to use the Launch Essbase Administration Console command from Essbase Studio Console, both consoles must reside on the same machine. If Administration Services Console is not installed on the same machine, then Essbase Studio Console now displays an informational message.
- When adding children or siblings to a hierarchy in the hierarchy editor, Essbase Studio remembers the last selection made. For example, if you chose the STATEID column from the MARKET table of the TBC sample data source, then, when adding the next child or sibling, the Select Entity dialog box is launched with the MARKET table already opened.

Increased Limit for Alias Tables

Essbase Studio now supports 32 alias tables for block storage and aggregate storage databases.

Text List Mapping Support

This release introduces a new metadata element for defining text lists. Text lists enable you to map a column containing text strings to a column containing IDs for those strings. The columns you use in the text list are columns from your data source, usually from a specific data source table that contains the IDs and text strings.

Note: You set up this ID-to-text string mapping structure in your data source before you create text lists in Essbase Studio.

Text lists are used in conjunction with text measures. Text measures extend the analytical capabilities of Essbase beyond numerical data to text-based content. Storage and analysis of textual content are useful when a cell needs to have one of a finite list of textual values.

For example, customer satisfaction may be expressed in terms of ratings such as High, Medium, and Low. These customer satisfaction ratings are a set of text strings which are mapped to corresponding numeric IDs, such as 1, 2, and 3 respectively. These mappings are contained in the text list element that you create.

Essbase Model Design Improvements

Essbase model design changes have resulted in improved Essbase model handling of specific changes to metadata elements and cube schemas. For example, in previous releases, changing a hierarchy name meant that you had to recreate or rebuild any Essbase models in which that hierarchy participated.

Starting with this release, recreating or rebuilding an Essbase model *is not* required when you perform the following operations on a metadata folder, dimension element, derived text measure, text list, hierarchy, measure hierarchy, or cube schema:

- Rename
- Move

Further, recreating or rebuilding an Essbase model *is not* required when you perform these operations:

- Change the binding, filter, sort order, or alias set bindings of a dimension element
- Change the binding, range, or alias set bindings of a derived text measure
- Change the value binding or ID binding of a text list
- Change an overridden data load binding in a cube schema

Note that recreating or rebuilding an Essbase model *is* required when you perform the following operations:

- Reorder, add, or remove members in a hierarchy or measure hierarchy
- Add or remove hierarchies from a cube schema
- Add or remove any loose measures in a cube schema
- Change the measure hierarchy in a cube schema
- Override the default data load bindings in a cube schema

Dimension Sort Order Support

Essbase Studio supports dimension sort order. Dimension sort order determines the order that dimensions appear in the Essbase model and subsequent Essbase outline and, in turn, impacts the order that dimensions are calculated.

You use toolbar buttons on the Essbase model dialog box for dimension sort ordering.

Note that dimension order can affect performance, especially for block storage databases. Calculation of aggregate storage and block storage databases is described in the *Oracle Essbase Database Administrator's Guide*

Support for Named Generations and Levels

You can now create your own names for generations and levels in an Essbase model. The name is a word or phrase that describes the generation or level. For example, you might create a generation name called Cities for all cities in the outline. You can define only one name for each generation or level.

Use generation and level names in calculation scripts and report scripts wherever you need to specify either a list of member names or a list of generation or level numbers. For example, you can limit a calculation in a calculation script to the members of a specific generation.

In a dimension that allows duplicate member names, you can specify that unique member names are required for a particular generation or level.

Automatic Placement of Actual Member Before Shared Members

For aggregate storage outlines, Essbase requires that actual members are always placed before shared members. After building your Essbase outline, you may have placed shared members before actual members in recursive dimensions. By selecting a new check box in the Outline Build tab of the Essbase Model Properties dialog box, the first instance of an outline member name becomes the actual member instance. Any other instances of that outline member name become the shared members. The check box is labeled:

“Reverse position of shared and actual members if shared member is located before actual member”

Below are examples showing the recursive hierarchy members before and after Essbase changes the shared member and actual member order. Note that the order of the parents remains the same; the position of the actual member changes.

Case 1, Before

```
Employees (dimension)
    Engineer
        John Smith (shared)
    Manager
        John Smith (shared)
    Director
        John Smith (actual)
```

Case 1, After

```
Employees (dimension)
    Engineer
        John Smith (actual)
    Manager
        John Smith (shared)
```

```
    Director
        John Smith (shared)
```

Case 2, Before

```
Employees (dimension)
    Engineer
        John Smith (shared)
        Paul Williams (shared)
    Manager
        John Smith (actual)
        Paul Williams (actual)
```

Case 2, After

```
Employees (dimension)
    Engineer
        John Smith (actual)
        Paul Williams (actual)
    Manager
        John Smith (shared)
        Paul Williams (shared)
```

MaxL Deployment Script Generation

When performing a cube deployment, you can save all the deployment parameters and options you have chosen as a MaxL script. Then, depending on the options you chose when creating the script, you can use this script in the MaxL Shell to perform member or data loads, or both.

The option to save deployment information as a MaxL script is on the "Setting Deployment Options" page of the Cube Deployment Wizard.

Note: You may edit the script file to substitute the user name and password parameters; for example:

```
deploy all from model 'cs1Model' in cube schema '\CubeSchemas\cs1'
login admin identified by password on host 'poplar-pc1' to
application 'cs2' database 'cs2' add values using connection
'Connection1' keep 200 errors on error ignore dataload write to
default;
```

Alternatively, enter the user name and password as parameters along with the script name at a command prompt; for example:

```
essmsh c:\generated_mxl_script.msh admin password
```

Cube Deployment Improvements

- A window now displays when you launch a cube deployment, and stays onscreen when deployment is completed. The window includes the following information about the cube deployment:
    - Member load and data load start time

- Status message listing member and data load details
- Elapsed time, in minutes and seconds, of member loads and data loads
- Number of records processed and records rejected
- Deployment success or failure
- Location of the error file

- Prior to cube deployment, users are now warned if errors exist in the Oracle Essbase model. If model errors exist, then, when you click Next in the "Essbase Server connection options" page of the Cube Deployment Wizard, a dialog is displayed asking if you want to launch the Essbase Model Properties dialog box. Click "Yes" to launch the properties dialog box and correct the errors.

  You may click "No" in this dialog, but you cannot proceed with the deployment until the model errors are corrected. If you click "No," then click the Model Properties button on the "Essbase Server connection options" page of the Cube Deployment Wizard to launch the properties dialog box and correct the errors.

Drill-through on Recursive Hierarchies

Essbase Studio now provides support for drill-through reports built on recursive hierarchies. Users can create a drill-through report that includes one or more recursive hierarchies, and then for each recursive hierarchy, specify a generation or level setting that will participate in the report. The report can be executed using Oracle Hyperion Smart View for Office, Fusion Edition.

Note: Recursive hierarchy drill-through on Essbase Studio-built cubes is not supported on Essbase Spreadsheet Add-in.

Lineage Viewer Display Improvement

In previous releases, the Lineage Viewer would show two physical elements for each dimension element, even when the caption binding and key binding expressions were the same. For example, for the dimension element, FAMILY, two nodes showing `tbc.family.FAMILY` were displayed: one node for the caption binding and one node for the key binding.

Now, when the caption binding and key binding are the same, only one node is displayed for the physical element in the Lineage Viewer.

Cancellation Option for Integration Services Catalog Migration

You may cancel an Oracle Essbase Integration Services catalog migration while it is in progress. There is now a Cancel button in the EIS Catalog Migration dialog box.

Accessibility

In this release, the Essbase Studio user interface adds keyboard-only support to all applicable dialog boxes and screen elements, as well as screen reader support.

Essbase Studio documentation is also accessible in this release in HTML format.

It is our goal to make Oracle products, services, and supporting documentation accessible to the disabled community. Oracle Essbase Studio supports the accessibility features described in Appendix A of the *Oracle Essbase Studio User's Guide*.

EPM System New Features

- Most EPM System products have adopted Oracle Diagnostic Logging (ODL) as the logging mechanism. The ODL framework provides uniform support for managing log files, including log file rotation, maximum log file size, and the maximum log directory size. For more information, see the "Using EPM System Logs" chapter of the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Troubleshooting Guide*.
- Oracle Configuration Manager (OCM) integrates with My Oracle Support and provides configuration information for Oracle software. It assists in the troubleshooting, maintenance, and diagnostics of your EPM System deployment. For more information about Oracle Configuration Manager see the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.
- With this release, many EPM System products support hostnames that resolve to IPv6 addresses. See the *Oracle Hyperion Enterprise Performance Management System Certification Matrix*. IPv4 support (both hostname and IP address) remains unchanged from earlier releases.
- Oracle Hyperion Enterprise Performance Management System supports the following types of SSL configurations:
  - Full SSL Deployment (including data access)
  - SSL Terminating at the Web Server
  - SSL Accelerators (Off-loading)
  - Two-way SSL

    For more information on the SSL configurations, see the *Oracle Hyperion Enterprise Performance Management System Security Administration Guide*.

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