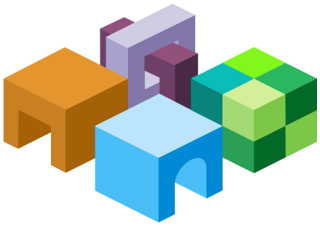


ORACLE® HYPERION PROFITABILITY AND COST MANAGEMENT

Release 11.1.2.2

New Features

ORACLE
ENTERPRISE PERFORMANCE MANAGEMENT SYSTEM

This document describes the new features and enhancements for Release 11.1.2.2 of Oracle Hyperion Profitability and Cost Management.

Note: For new features in Oracle Hyperion EPM Architect, refer to the *Oracle Hyperion Enterprise Performance Management Architect, Fusion Edition Readme*.

Contents In Brief

New Features in Release 11.1.2.2

See the following sections for the new features in this release:

Online Hosted Help

Online Help content for EPM System products is served from a central Oracle download location, which reduces the download and installation time for EPM System. You can also install and configure online Help to run locally. For more information, see the *Oracle Enterprise Performance Management System Installation and Configuration Guide*.

New Oracle Hyperion Profitability and Cost Management Accessibility Guide

To simplify access to accessibility information, a separate Accessibility Guide for each product is now available on the Accessibility tab of the Oracle Technology Network (OTN) http://www.oracle.com/technology/documentation/epm.html.

The material has been removed from the Appendix in the *Oracle Hyperion Profitability and Cost Management User's Guide* and is available as the *Oracle Hyperion Profitability and Cost Management Accessibility Guide*. The guide contains accessibility information specific to Profitability and Cost Management for both Standard and Detailed applications.

Detailed Profitability

With this release, in addition to Standard (existing) Profitability and Cost Management, there is now a Detailed Profitability option that offers another method to build your applications.

With Profitability and Cost Management, now you can choose to create your model using either the existing or Standard Profitability, or the new Detailed Profitability. The type of application that you select for a model depends on the type of modelling that you require to effectively manage your organization's models. Depending on the application, you may use one or the other. Within your organization you may use both types to model different requirements.

The existing Standard Profitability focuses on contribution analysis, following the flow of cost and revenue funds through all stages of the process to determine where funds are coming from, and where they are going. Using a hierarchical structure to build the model, a Standard Profitability and Cost Management model enables you to monitor and control direct contribution data for your entire model.

The new Detailed Profitability and Cost Management model employs your user-defined schema. Using Model Data Registration, you map the existing relational database tables to the Detailed Profitability application. Additional Lookup tables can also be associated with tables in the application to extend the available data. Detailed Profitability and Cost Management models are housed in relational databases only.

The models are constructed using a single Source and Destination table combination for selected Measures, with up to five Source dimensions, and up to 25 Destination dimensions. The allocations are completed based on calculations and formulas that you specify in the drivers and assignments. Points of View (POVs) represent a specific instance of the model, and can be used to view or calculate different versions of a model; for example, to view values for different months or quarters, to compare budget versus actual figures, or to play scenarios to measure the impact of various changes on the bottom line.

Because the Detailed Profitability application does not use a hierarchical structure, but processes all allocations in a flow between a single Source and Destination combination, the application can handle extremely large volumes. Millions to hundreds of millions of unique targets are defined by row count in the target or destination table. Practical limits are not bounded by dimension sizes because the target row is not required to be defined by a unique intersection of dimensions. Each Level-0 destination intersection may match many rows in the destination table.

Allocation is handled through a restricted MeasuresDetailed dimension, rather than using an AllocationType dimension as in Standard Profitability. The MeasuresDetailed dimension contains a limited set of members to process all allocations. After the application is deployed to Detailed Profitability and Cost Management, you build your model, creating the drivers and assignments that generate the flow of funds.

After you create the application in Performance Management Architect, you access the application in exactly the same way through Oracle Hyperion Enterprise Performance Management Workspace: **Navigate**, then **Applications**, then **Profitability**, and then select the application that you created.

See "Appendix C - Comparison between Standard and Detailed Profitability Applications " in the *Oracle Hyperion Profitability and Cost Management User's Guide* for an overview of the features and abilities of the two types of Profitability and Cost Management.

See these sections:

- "Validating and Calculating Detailed Profitability" on page 4
- "Working with the Model Summary" on page 4
- "Model Data Registration" on page 4
- "Managing Detailed Profitability Stages" on page 5
- "Managing Detailed Profitability Allocations" on page 5
- "Bulk Edits" on page 6
- "Performance Management Architect Detailed Profitability Validations" on page 6
- "Job Library" on page 6
- "Documentation Changes" on page 7

Validating and Calculating Detailed Profitability

In the same way that Standard Profitability is validated, there are validations that must be performed against the Detailed Profitability model:

- Model Data Registration is valid and complete
- Drivers are correctly formed
- All drivers are used
- No driver assignments are missing
- Assignment rules are correct

After you validate the structure and data of a model, you can deploy the reporting views and calculate the model.

For additional information, see “Validating Detailed Profitability Models“ and “Calculating Detailed Profitability Models“ in the *Oracle Hyperion Profitability and Cost Management User's Guide* for additional information.

Working with the Model Summary

The Model Summary displays the system information for the selected Detailed Profitability application, and enables you to modify model level preferences. The screens are slightly different from the same screens for Standard Profitability:

- The System Information tab provides detailed information for the selected model, including the relational database, authorized users and associated system components.
- The Model Level Preferences tab is used to select the Model Data Schema that is to be associated with your application. You can customize the application to use your display preferences. The settings on the Model Level Preference tab apply to the entire model. The tab also displays the type of Profitability and Cost Management application as Detailed.

For additional information, see “Working with the Model Summary“ in the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Model Data Registration

Detailed Profitability and Cost Management enables you to use your existing database tables as data sources in your application, rather than having to enter data to create a brand new application. To effectively use the existing tables, you must map the columns in your existing relational database to your Detailed Profitability application through the Model Data Registration process. You can register a database table or view for use within the application, edit an existing registration, or delete an existing registration.

In addition to the registered tables, you can attach additional Lookup tables to the source or destination stage tables to make a logical "stage business object". The expanded and logical "stage business object" may include measure columns and dimension columns that are not available

directly on the main stage table. The Profitability and Cost Management Administrator should set up these join definitions in Model Data Registration.

For additional information, see "Registering Model Data" in the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Managing Detailed Profitability Stages

In Detailed Profitability and Cost Management, there are only two stages in the model:

- The Source Stage (Stage 1) may contain up to five Performance Management Architect-managed dimensions, and may be sourced from a vertically or horizontally-oriented Stage Table from the Model Data Registration. One of the five source stage dimensions must be the Source Measures Dimension that you identified at the beginning of Table Registration.
- The Destination Stage (Stage 2) may contain up to 25 Profitability and Cost Management-managed and regular business dimensions, but must be a horizontally-oriented Stage Table from Model Data Registration.

In Detailed Profitability applications, the source and destination stages have different characteristics, requirements and validations. Unlike Standard Profitability applications, these stages cannot serve as both source and destinations.

For additional information, see "Managing Detailed Profitability Stages" in the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Managing Detailed Profitability Allocations

The MeasuresDetailed dimension is a reserved dimension that contains the Allocation members required to support stage balancing and other verification activities, such as contributions, reconciliation, and so on. The MeasuresDetailed dimension does not contain Driver measures. The MeasuresDetailed dimension is selected during the creation of the Detailed Profitability application in Performance Management Architect. It is a single selection, but contains the following measures:

- AssignedPostStage
- OverDriven
- IdleCost
- ReceivedPriorStage
- Input
- Unassigned

For information on managing allocations, see "Managing Detailed Profitability Allocations" in the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Detailed Profitability Drivers

In Detailed Profitability and Cost Management, allocations control how values are distributed throughout the model to specified accounts or elements. A driver is used to determine how the funds for each allocation are calculated. The calculated results are assigned from the source to the destination, as the funds flow through the model.

There are three main driver types available in Detailed Profitability:

- Ratio-Based Drivers
- Rate-Based Drivers
- Object Calculations

For information on selecting driver types, and defining drivers and formulas for Detailed Profitability, see "Managing Detailed Profitability Allocations" in the *Oracle Hyperion Profitability and Cost Management User's Guide*

Bulk Edits

The Bulk Editor on the Assignment screen enables you to create multiple assignments quickly and efficiently, without having to create each assignment individually. Using the Bulk Editor, you can perform bulk edits on both Drivers and Assignments to add or remove a single driver or assignment to multiple source stages.

See "Working with the Bulk Editor" in the *Oracle Hyperion Profitability and Cost Management User's Guide* for additional information.

Performance Management Architect Detailed Profitability Validations

There are a number of validations performed by Performance Management Architect in this release for each Detailed Profitability and Cost Management application.

For information, see Chapter 5, "Validating and Deploying the Application in Performance Management Architect" in the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Job Library

For Detailed Profitability only, there is a Job Library that lists all currently submitted or scheduled jobs for all models and all users for Detailed Profitability applications. You can click any column in the Job Library to sort the jobs by Start Date and Time, Application Name, Job Type, Comment, User, Task Flow ID, or Status Message. Click again to reverse the sort. Selecting a single job shows its job-type-specific information in the lower half of the screen.

For information, see Chapter 16, "Monitoring Detailed Profitability Job Status" in the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Documentation Changes

As required, the documentation suite has been updated to reflect the new requirements for both Detailed and Standard Profitability:

- "Oracle Hyperion Profitability and Cost Management User's Guide" on page 7
- "Oracle Hyperion Profitability and Cost Management Administrator's Guide" on page 7
- "Oracle Hyperion Enterprise Performance Management System Lifecycle Management Guide" on page 8

Oracle Hyperion Profitability and Cost Management User's Guide

To facilitate access for information, the *Oracle Hyperion Profitability and Cost Management User's Guide* has been divided into three main sections:

- *Part I: Introduction to Profitability and Cost Management* contains information that is common to both application types, such as accessing, launching, output log files, and information about viewing and filtering dimensions and members.
- *Part II: Working with Standard Profitability* is the existing section on existingProfitability and Cost Management models, and contains information about managing, and calculating your Standard Profitability models.
- *Part III: Working with Detailed Profitability* is new, and provides information about creating, managing, validating and calculating Detailed Profitability models.

You may find *Appendix C: Comparison between Standard and Detailed Profitability Applications* useful in determining which application type may best serve your organization's requirements.

Oracle Hyperion Profitability and Cost Management Administrator's Guide

The guide includes sections about the two Profitability types:

- Working with Standard Profitability
- Working with Detailed Profitability

In addition, these sections have been added specifically for Detailed Profitability:

- Detailed Profitability Import Staging Tables
- Exporting Model Definition Data for Detailed Profitability

In "Chapter 2 - Managing Security and Authorizing Users," security roles and requirements for each Profitability type are documented.

Oracle Hyperion Enterprise Performance Management Architect Administrator's Guide

Although the procedures for creating Detailed Profitability applications in Performance Management Architect are very similar to the way you create Standard Profitability applications, there are a couple of differences:

- When creating the application, you need to specify the **Application Type** for the new application:
  - **General** - Standard Profitability application
  - **Detail** - Detailed Profitability application
- When selecting dimensions and members, you must select the appropriate allocation dimensions for each application type:
  - For Standard Profitability, you select an **AllocationType** dimension to store direct allocations and allocation genealogy.

    Note: Properties that reference Oracle Essbase apply to Standard Profitability applications only.
  - For Detailed Profitability, you select **MeasuresDetailed** dimension. This reserved dimension is required for calculation and stage balancing. It contains AllocationMeasures, but does not include Driver Measures.

Oracle Hyperion Enterprise Performance Management System Lifecycle Management Guide

To avoid duplicating information, the procedures and artifact listings for Standard and Detailed Profitability have been removed from the *Oracle Hyperion Profitability and Cost Management Administrator's Guide*, and all the information is available in the *Oracle Enterprise Performance Management System Lifecycle Management Guide*. The procedures and artifacts for all products are listed in that single guide, including the new UI and migration process.

External Automation of Profitability and Cost Management Processes

To facilitate the running of lengthy or repetitive processes in Profitability and Cost Management, you can create custom scripts for your organization using Oracle Web Services Manager (OWSM) to automatically invoke processes in the production environment, such as deploying or transferring data, without requiring the process to be initiated by on-site personnel. You generate the custom scripts using a Java application programming interface (API) to invoke the web services operations.

See the following sections:

- "New Web Services Operations for Release 11.1.2.2" on page 9
- "Sample Client and Readme" on page 9

New Web Services Operations for Release 11.1.2.2

A number of new operations are now available for Profitability and Cost Management external automation:

- **applyBulkEdit** - Use this operation to perform Bulk Edit for the given source assignment rules with destination rules, or Drivers for a Profitability and Cost Management Detailed application.
- **deletePOV** - Use this operation to delete an existing POV in a Profitability and Cost Management application.
- **getApplicationType** - Use this operation to list the application type for all existing Profitability and Cost Management applications ad General (for Standard Profitability) or Detail (for Detailed Profitability).
- **getApplicationsByType** - Use this operation to list all Profitability and Cost Management applications of the selected type: Standard or Detailed.
- **getAssignmentRuleDefinitions** - Use this operation to list all assignment rule definitions for the selected application.
- **getDriverDefinitions** - Use this operation to list all driver definitions for the selected application.
- **getPOV** - Use this operation to retrieve all POV details for a selected application.
- **getStages** - Use this operation to retrieve all stage details for a selected application. You can find the name of a stage by using this command.
- **prepareDetailedViewsForReporting** - Use this operation to prepare Detailed Profitability and Cost Management views for reporting.
- **processDetailedCalculations** - Use this operation to process and run calculations for a selected Detailed Profitability application.

For information on using Web Services, see the *Oracle Hyperion Profitability and Cost Management External Automation Processes Guide*.

Sample Client and Readme

To assist you in creating your custom scripts, a Sample Client and Sample Client Readme are also included with the installation (`%EPM_ORACLE_HOME%\products\Profitability\samples\wsclient`).

The Sample Client File for Web Services displays the commands that can be used in your custom script for automating Profitability and Cost Management tasks, and identifies data within your Profitability and Cost Management model. The sample client file is intended as a guide only, to assist you in creating your custom scripts.

For information on each operation, and its input and output parameters, see the *Oracle Hyperion Profitability and Cost Management Web Service API Reference - Profitability Services*.

New Features in Release 11.1.2.1

See the following sections for the new features in this release:

Upgrading

Upgrading of Oracle Enterprise Performance Management System products is supported from Release 11.1.1.3 to Release 11.1.2.1, and has been enhanced to improve the upgrading process.

For details, see the *Oracle Enterprise Performance Management System Installation and Configuration Guide*.

Change to Essbase Connection Information Field

Previously, the Essbase Connection Information on the Model Summary and Calculate screens was labelled as "Server".

To more accurately reflect common configurations, this label has been changed to "Cluster." From Cluster, you select the logical name of the Essbase server which provides the connection to the Essbase databases. This name may point to a clustered or non-clustered Essbase server.

For additional information, see the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Standard Data Entry Views

Edit views provide a useful option if you frequently need to update specific sets of data in your application, however, they can take some time to create.

With this release, four standard data entry views are available, providing predefined selections of commonly associated measures on the Data Entry screen. If required, the standard data entry views can be modified, to customize the results for your organization.

The standard data entry views are created after deployment of the application from Performance Management Architect to Profitability and Cost Management. When a view is selected, the associated measures are displayed on the Data Entry screen.

The following Standard Data Entry Views are available:

- Cost Balancing
- Driver Statistics
- Cost Statistics
- Intrastage Costs

For more information, and to see the associated measures for each standard data entry view, see "Standard Data Entry Views" in the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Storage of Profitability and Cost Management Data Entry View Definitions

Previously, Profitability and Cost Management Data Entry view definitions were stored within EPM Workspace as preferences.

With this release, user-defined Data Entry view definitions are now stored in the Profitability and Cost Management schema. The views are defined per application and shared between all users of that application. This applies to named views only.

It is also possible to create ad-hoc views, for which the user selects measures and then clicks **Apply** instead of **Save**. The ad hoc views are stored in user preferences and not shared between users.

Performance Management Architect Validations

The following table describes the validations performed by Performance Management Architect in this release for each Profitability and Cost Management application.

Table 1 Profitability Validations

Validation Level	Validations
Application	● The name of the application must be 7 characters or fewer, and contain no special characters. ● At least one dimension must be set to POV type. Up to 4 dimensions may be marked as POV dimensions. Only one occurrence of each POV dimension class is allowed. ● At least one business dimension must be defined ● At least one Measures dimension must be defined ● At least one AllocationType dimension must be defined ● A maximum of one “Account” dimension exists ● Application names do not include Essbase special characters and reserved words
Dimension	● Root members of Business dimensions must have the ASO and BSO data storage set to LabelOnly. ● Dimension Sort Order is set for all dimensions in the model, excluding Alias and UDA dimensions, and satisfies the following conditions: ❍ A dimension sort order must be set for every dimension in the model, except Alias and UDA dimensions. **Note:** The Alias and UDA dimensions are ignored for Dimension Sort Order. ❍ The dimension sort order must be sequential. ❍ Measures dimension is set to 1, by default. ❍ AllocationType dimension is set to 2, by default. ❍ POV and business dimensions are set to 3 or higher. ❍ Attribute dimensions are sorted as the last dimensions. For example, if you have four attribute dimensions in a sequence of twelve dimensions, the attribute dimensions must be set as 9, 10, 11, and 12. ● Duplicate members do not exist in the same dimension. ● POV dimensions must have at least one member. ● Attribute dimensions can only be associated with sparse dimensions. ● Attribute dimensions must satisfy the following conditions: ❍ Only a Level-0 member from the attribute dimension may be assigned as an attribute. ❍ Attributes may be assigned only to members at the same level in the base dimension. ❍ Attribute dimensions can only be associated with sparse dimensions.

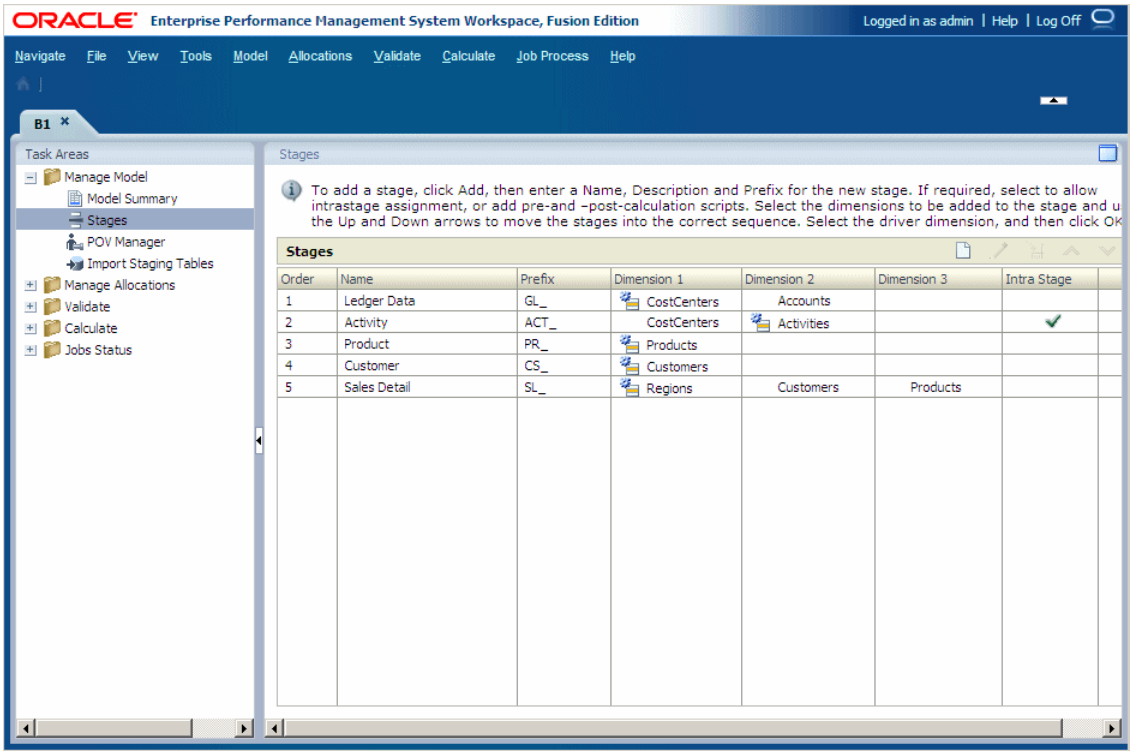
Validation Level	Validations
Member	• Allow only ASO and BSO data storage to be defined • No shared members are allowed in the first Gen 2 member • A Shared Member must always appear after its corresponding Base Member in the outline order. • `NoMember` must be set as the last generation 2 member for all business dimensions, and must be set to Ignore (~) in the Property Grid. **Note:** This requirement does not apply to POVs, Measures, AllocationType, Alias, UDA or Attribute dimensions. • Shared members must reside in a Dynamic hierarchy, where: ○ The Gen 1 member is `HierarchyType=HierarchiesEnabled.` ○ The first Gen 2 ancestor (primary hierarchy) is `HierarchyType = Stored.` ○ Other ancestors (alternate hierarchies containing shared members) is `HierarchyType = Dynamic.` • No duplicate member names or aliases exist for any members within the dimension. • Member names do not include Essbase special characters and reserved words

For additional information, see Chapter 5, "Validating and Deploying the Application in Performance Management Architect" in the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Additional Stage Details on Stages Screen

The Stages window now provides additional details about the selected stage:

- **Order** displays the number of the sequential position of the stage within the model.
- **Name** shows the name of the stage and usually identifies the business function or process of the stage, such as General Ledger or Operating Activities.
- Alphanumeric **Prefix** assigned to stage l Dimensions included in the stage. The driver dimension for the stage is indicated by the driver icon  .
- The **Intra Stage** field is checked to indicate that intrastage assignments are allowed for the stage.

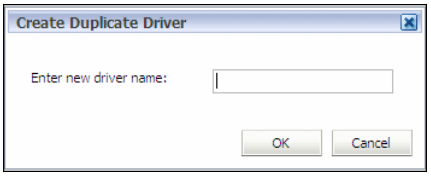


See "Setting Model Stages" in the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Creating Duplicate Drivers

You can now create duplicate drivers to rapidly create many similar drivers without having to reopen the Driver Definition dialog box.

To duplicate an existing driver, select the driver that most resembles the driver that you want to create, and then click the new Duplicate Driver icon  on the Driver Definitions screen. The Create Duplicate Driver dialog box is displayed. Enter a name for the new driver, and then click **OK**.



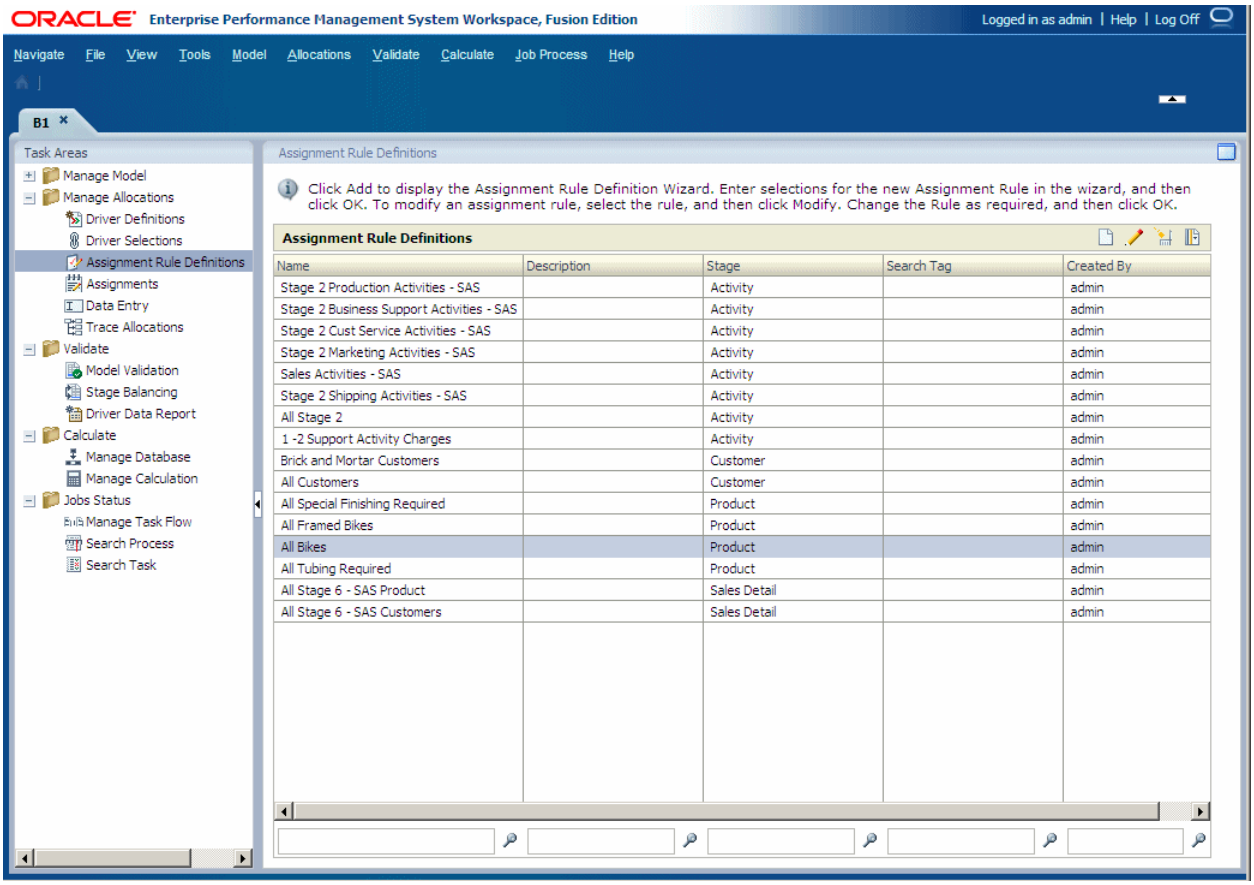
The new driver is added to the list of Driver Definitions, showing the same Type and Cost or Revenue details as the original driver.

For detailed instructions, see the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Assignment Rule Definition Screen

A new option for Assignment Rule Definitions has been added to the Task Areas pane.

The Assignment Rule Definition screen enables you to create and manage assignment rules in a single location. From this screen, you can view the complete list of all assignment rules for the application. All assignment rules are available, whether they were created in the Assignment Rule wizard or the Assignment Rule Definition screen.



The Assignment Rule Definition screen displays the Name and Description of any assignment rules, and the Destination stage. You cannot apply the rule to a source using this option. The ID of the user who created or modified the assignment rule is also displayed.

When creating a new assignment rule, you can add a Rule Name and Rule Description. An associated Search Tag can also be created to enable you to easily locate rules by searching for the custom tags.

For additional information, see "Working with Assignment Rules" in the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Sort Feature in Assignment Rule Wizard

When working with a list of many assignment rules, it may be difficult to locate the correct rule in the Assignment Rule wizard when applying rules to many sources. The Sort function make it much easier to locate the required assignment rule.

See “Sorting Columns” in the *Oracle Hyperion Profitability and Cost Management User's Guide* for detailed instructions.

Retain Last Selection for Rules in Assignment Rule Wizard

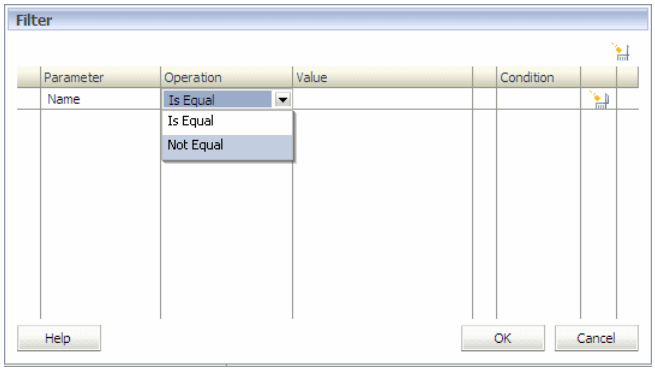
To assist in applying the same rule to many sources, the last selection is retained. Each time the wizard is opened, it will default to that selection so you do not have to continually enter the same details for similar rules.

See “Using the Assignment Rule Wizard” in the *Oracle Hyperion Profitability and Cost Management User's Guide*.

“Not Equal To” Supported in Assignment Rule Filters

An assignment rule is a collection of member sets and optional filter sets for a single destination stage. A filter is a collection of criteria that are applied to a dimension. When working with assignment rules, the destinations returned by an assignment rule are the cross-product of the Level-0 members from all the dimensions in the destination stage that pass the filter criteria applied to the rule.

In instances where you want to exclude one or several members, it is now possible to create a filter using “Not Equal” as one of the filter criteria.



See “Using Filters” in the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Alias, Sort, and Filter Members on Driver Definition and Driver Selection Screens

On the Driver Definition and Driver Selection screens (both Driver Rules and Exceptions tabs), several new options are available to help you locate drivers.

To filter or modify the display of members, click the Context Menu icon  , and select from the following options:

- **Show Tree** displays members for the selected dimension in an expandable hierarchy.

- **Show Grid** displays all members for the selected dimension in a flat, sequential list. This view mode must be selected if you want to filter or sort members.
- **Show Alias** displays the member aliases, or alternate names for members and shared members.
- **Show Name** displays the member names.
- **Filter** is used to filter members in Show Grid view mode. A Filter dialog box is displayed to enter the filter criteria.
- **Sort** is used in Show Grid view mode to display the members in ascending, descending or default order.

For additional information, see the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Find Feature

The Find feature is available on screens that require selections from multiple options, such as Driver Definitions, Driver Selections, Assignments, Data Entry, and so on. Each Find field is attached to the column in which it resides and can be used only in one column at a time.

The Find text box is shown at the bottom of those columns which can be searched. To find a member, enter the member name (or a partial name), and click the Search icon. The first match to the selected name is highlighted on the member list.

See "Using the Find Feature" in the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Calculation Genealogy Screen Retains the Last Stage Selections

When running a genealogy calculation, if you need to know which calculations were performed, you need to know the selected contribution path on which data was previously run.

With this release, when you generate a taskflow for running genealogy (either Run now or Run later), the last stage selections are stored in the application preferences.

The preference value is read from the relational database, and sent to the user interface when the Genealogy tab on the Manage Calculation screen is opened.

See "Calculating Multistage Contribution Paths in Genealogy" in the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Model Statistics Query

After a model has been built, it may be useful to determine the number and usage of certain components, such as stages or POVs and their dimensions, assignments and drivers. A new SQL-based query, `modelstats.sql`, has been developed to enable users to generate specific statistics for their models.

These read-only queries are useful when trying to view model characteristics and performance statistics, or to evaluate the impact of changes. The statistics can also be used to diagnose problems with models and performance.

To use the new query, you must have existing database views, as follows:

- Stages (HPM_EXP_STAGE)
- POVs (HPM_EXP_POV)
- Driver Selections (HPM_EXP_DRIVER_SELECTION)
- Assignments (HPM_EXP_ASSIGNMENT)
- Assignment Rule Selections (HPM_EXP_ASGN_RULE_SELECTION)

Note: The Drivers database view (HPM_EXP_DRIVER) is not used with model statistics.

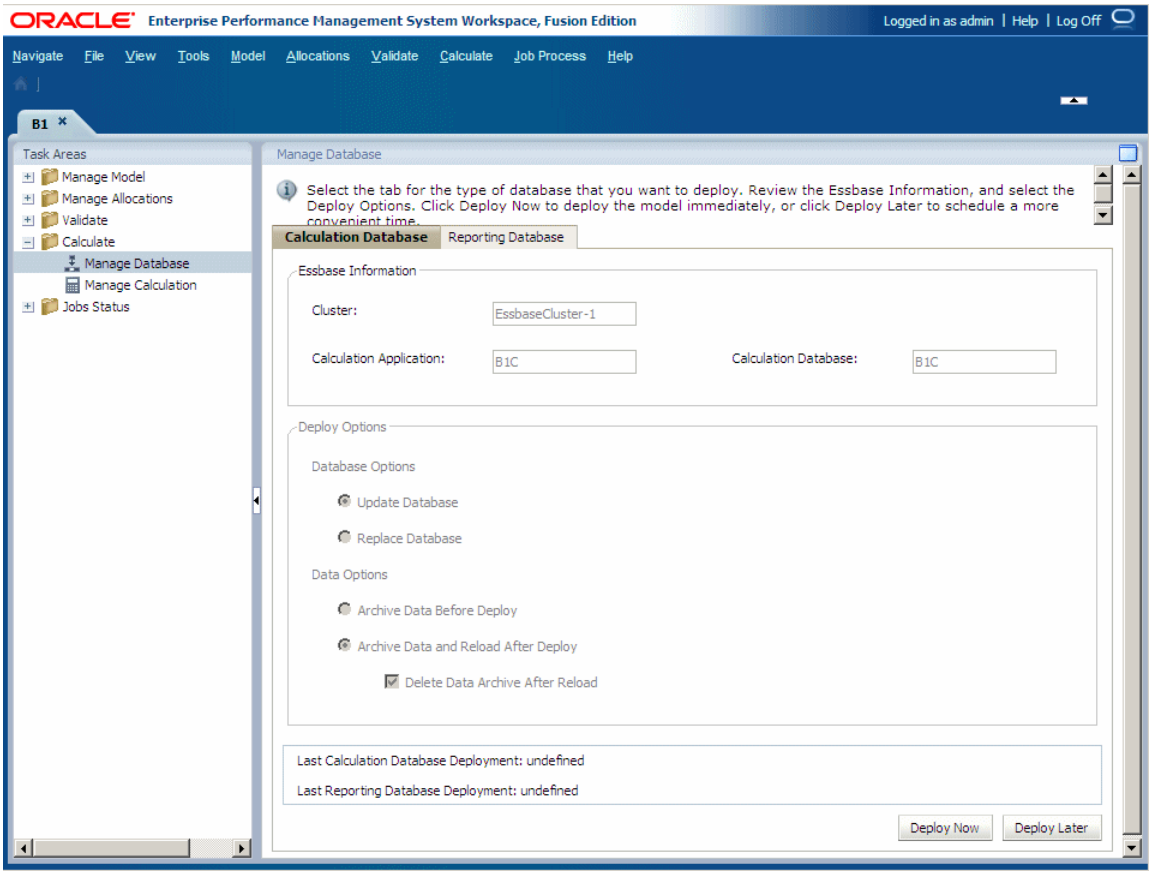
After installation, the `modelstats.sql` script is included in the application folder. The query is database neutral, and can be run against MS SQL or Oracle databases. If there are any errors in the model, they are not reported in the query results, and the existing statistics are still generated.

Oracle recommends that you run the query before you make significant changes to an application, and then save the queries and capture the output for comparison with later results. This snapshot provides you with baseline statistics against which you can compare subsequent changes or view information to evaluate the potential impact of proposed changes. For example, if an assignment rule is used thousands of times, any modification to that rule may have a much larger effect than originally expected.

For additional information and instructions on using the `modelstats.sql` query, see "Querying Model Statistics" in the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Preserving Essbase Data When Redeploying

When redeploying to Essbase, new Deploy options are available to preserve changes, or restore the existing artifacts to the new database for the Calculation and Reporting databases. You can also select Data Options to archive your data.



Under **Deploy Options**, you can select your Database Options:

- For the first deployment of a database, all selections are grayed out. This option creates the entire database for the first time.
- For subsequent deployments, when you need to replace the entire database, select **Replace Database** to remove the existing database, and replace the entire database.
- When you need to redeploy an existing database, select **Update Database** to retain existing artifacts and property settings in the new database, and change the outline to reflect current metadata.

Under **Data Options**, you can select options for the data:

- Select **Archive Data Before Deploy** to export existing data to the application database folder.
- Select **Archive Data and Reload After Deploy** to automatically import the data back into Essbase, using the previously exported data files. For this option only, you can select **Delete Data Archive After Reload** to automatically delete the archived data only after the successful data reload.

For complete instructions on using this feature, see "Managing Databases" in the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Migrating Individual Artifacts Using Lifecycle Management

In previous releases, when using Oracle Hyperion Enterprise Performance Management System Lifecycle Management, you had to migrate an entire Profitability and Cost Management application at once.

With this release, it is now possible to select individual Profitability and Cost Management artifacts for migration through Lifecycle Management.

One or more of the following artifacts can be selected for migration at one time:

- Application preferences
- Driver definitions
- Stage definitions
- POV definitions
- Driver selections (Driver Rules and Driver Exceptions)
- Regular Assignments
- Assignment Rules
- Assignment Rule Selections

For additional information, see the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Configuring Multiple EPM Oracle Instances

Previously, the location of the home directory was identified as `MIDDLEWARE_HOME/user_projects/epmsystem1`.

With this release, a new configuration panel in the Oracle Hyperion Enterprise Performance Management System Configurator enables users to configure additional instances of a product to support deployment on a shared drive. For detailed instructions, see the *Oracle Enterprise Performance Management System Installation and Configuration Guide*.

As a result of the new configuration options, the associated documentation refers to the location for the home directory as EPM Oracle Instance, or `EPM_ORACLE_INSTANCE` in a path.

External Automation of Profitability and Cost Management Processes

Introduction to Web Services

To facilitate the running of lengthy or repetitive processes in Profitability and Cost Management, you can create custom scripts for your organization using Oracle Web Services Manager (OWSM) to automatically invoke processes in the production environment, such as deploying or transferring data, without requiring the process to be initiated by on-site personnel.

You generate the custom scripts using a Java application programming interface (API) to invoke the following web services operations for Profitability and Cost Management:

- Import from the Profitability and Cost Management staging area.
- Get all stages in a given application.
- Get all Points of View (POVs) for a given application.
- Copy POV in a given application.
- Deploy or redeploy BSO cube given an application name and deployment options.
- Deploy or redeploy ASO cube given an application name and deployment options.
- Transfer data from BSO to ASO.
- Clear, generate and calculate a single POV, given the appName, povList, stageNameList, and clear, generate and calculate options for each stage and in each POV:
  - Generate calc script (app, stage, pov, layer).
  - Run calc script.
- Run genealogy given a contribution path (like 1-2-3, 1-5, 1-2-3-4) in a given application.
- Delete an application given its name.
- Check the status of asynchronous long running tasks using the job process name.

To assist you in creating your custom scripts, a Sample Client is also included with the installation. The sample client provides the Web Services commands that are available for Profitability and Cost Management, and helps to identify data within the model.

See the following sections:

- "Prerequisites" on page 21
- "The WSDL File" on page 22
- "Using the *Oracle Hyperion Profitability and Cost Management API Reference* " on page 22
- "Profitability Web Service Operations" on page 23
- "Creating a Custom Script" on page 26
- "Using the Profitability and Cost Management Sample Client File" on page 26

Prerequisites

Before you can use Web Services to create automated scripts, you must install and configure the following components as outlined in the *Oracle Enterprise Performance Management System Installation and Configuration Guide*:

- Enable security for Web Services. See "Postconfiguration Tasks" for Profitability and Cost Management.
- Run the Repository Creation Utility (RCU). See "Postconfiguration Tasks" for Profitability and Cost Management.

- Configure Oracle Web Services Manager (OWSM). See "Configuring Oracle Web Services Manager" for Profitability and Cost Management.

This document assumes you have a working knowledge of the following components:

- Oracle Web Services Manager
- WSDL
- XML
- XML Schema (XSD)
- SOAP

The WSDL File

The interface for the Web Service API is defined by its Web Services Description Language (WSDL) document. WSDL is an XML-based language that describes a Web service and specifies the location of the service and the operations that the service exposes.

To view the WSDL document for Profitability and Cost Management Web Services, see `http://<localhost>:19000/profitability/ProfitabilityService?WSDL`.

Using the *Oracle Hyperion Profitability and Cost Management API Reference*

The *Oracle Hyperion Profitability and Cost Management API Reference* provides the commands that are used in your custom script to invoke the web services available for Profitability and Cost Management.

All commands use the same Namespace and Location:

- **Namespace:** `http://profitability.webservices.epm.oracle`
- **Location:** `ProfitabilityService.wsdl`

The *Oracle Hyperion Profitability and Cost Management API Reference* provides the following information:

- **Services** - The Service must be set to **ProfitabilityService** to enable the defined web services operations for Profitability and Cost Management.
- **Interfaces (Port Types)** contain the specific operations that are available:
  - **PortType** class is set to **ProfitabilityService**. This enables the defined web services operations for Profitability and Cost Management.
  - **Operations** provides information about the list of available web services. For each operation, the following information is defined:
    - Operation
    - Input parameters
    - Output parameters, if required
    - Operation Definition

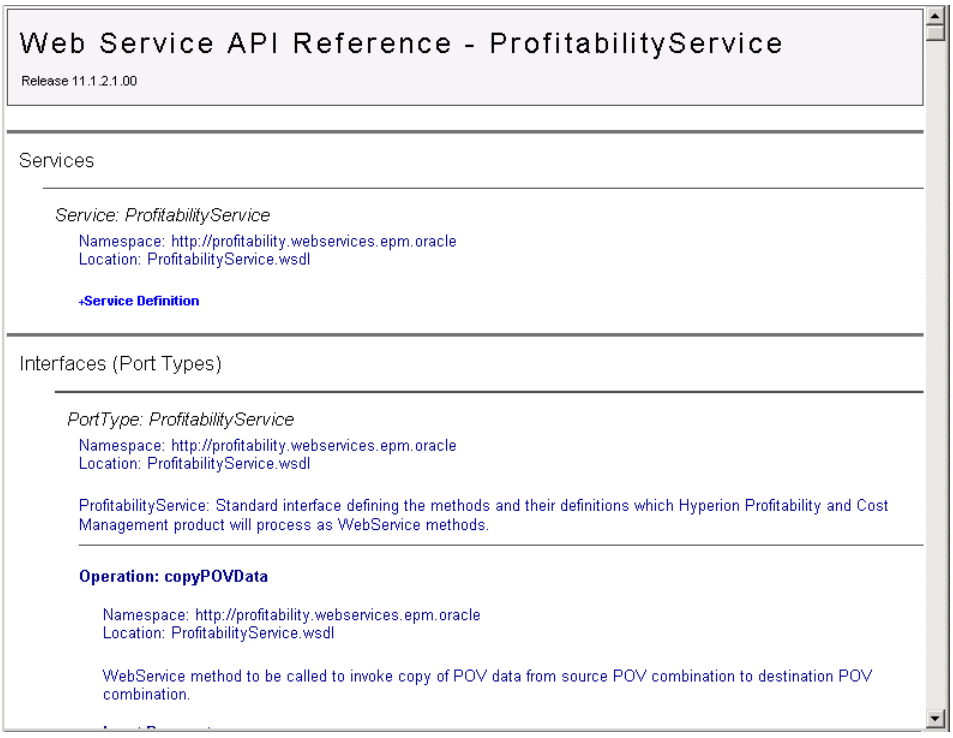
    - Binding Operation Definition

- **Messages** are fault messages that will be displayed if an exception is encountered. These messages are automatic, and no coding is required in the custom script.
- **Elements** are the defined fields in the `.wsdl` file. No coding is required in the custom script.
- **Type** represents the wrapper type for the specified parameters and return parameters. No coding is required in the custom script.

For specific coding details, refer to the *Oracle Hyperion Profitability and Cost Management API Reference* (`hpm_api_ref.html`) in the OTN Documentation Library, as described in the following procedure.

➤ To access the *Oracle Hyperion Profitability and Cost Management API Reference*:

1. **Open the OTN Documentation Library at** `http://www.oracle.com/technetwork/middleware/performance-management/documentation/index.html`.
2. **Locate the current release.**
3. **Select View Library, and then Financial PM Applications.**
4. **Under Oracle Hyperion Profitability and Cost Management, Fusion Edition, select hpm_api_ref.html to display the Web Services API Reference for Profitability and Cost Management.**



Profitability Web Service Operations

When you set the PortType in the custom script to ProfitabilityServices, a list of pre-defined Profitability and Cost Management operations becomes available.

By calling the required operation in the custom script, you can perform specific tasks, such as `getApplications` to view a list of all existing Profitability and Cost Management applications.

For detailed API commands for all operations, see the *Oracle Hyperion Profitability and Cost Management API Reference*. This document is available from the OTN Documentation Library.

See the following table for a list of all available operations.

Table 2 Oracle Web Services Operations for Profitability and Cost Management

Operation	Description	Input and Output Parameters
`getApplications`	List all existing Profitability and Cost Management applications.	**Input Parameters:** ● None. **Output Parameters:** ● *ApplicationDTO* return: Displays list of ApplicationDTOs containing application information.
`getPOVs`	List all existing POVs for a selected application.	**Input Parameters:** ● *string* applicationName: Enter the name of the application for which POVs should be retrieved. **Output Parameters:** ● *POVMemberGroupDTO* return: Displays list of POVMemberGroupDTOs containing POV information.
`getStages`	List all existing stages for a selected application.	**Input Parameters:** ● *string* applicationName: E nter the name of the application for which stages should be retrieved. **Output Parameters:** ● *stageDTO* return: Displays list of StageDTOs containing stage information.
`copyPovData`	Copy POV data from a source POV combination to a destination POV combination.	**Input Parameters:** ● *string* applicationName: Enter the name of the application to use. ● *CopyPOVDTO* copyPOVData: -- Selection details for Copy POV functionality. **Output Parameters:** ● None
`deleteApplication`	Delete an existing Profitability and Cost Management application.	**Input Parameters:** ● *string* applicationName: Enter the name of the application to be deleted. **Output Parameters:** ● None

Operation	Description	Input and Output Parameters
`deployCube`	Deploy the database (cube) for a selected application.	**Input Parameters:** ● *string* applicationName: Enter the name of the application to be deployed. ● *CubeDeployOptionsDTO* CubeDeployOptions: -- Enter selection details for deploying the cube. **Output Parameters:** ● *string* return: Process job ID generated for the deploy cube action.
`getTaskflowStatusByProcessName`	Obtain the current status of the job process name. The following valid status values are listed: ● New ● Active ● Stopped ● Done	**Input Parameters:** ● *string* processName: Enter the process name for which the status should be retrieved. **Output Parameters:** ● *string* return: Comma-separated values of all tasks and their statuses for the specified taskflow process name. For example, if the process has two tasks created for it with the IDs 12345 and 123455, displays task ID and status as follows: `12345=Done,123455=Active`
`processCalcScripts`	Initiate the selected actions for a selected Application Name, POV and Layer. The following options are available: ● Clear All ● Clear Calculated ● Generate ● Calculate ● Transfer data after calculation.	**Input Parameters:** ● *string* applicationName: Enter the name of the application to use. ● *CalcScriptOptionsDTO* options: -- Selection details for processing Calculation scripts. **Output Parameters:** ● *string* return: process task ID generated for the Calculation scripts processing action.
`processGenealogyExecutionPaths`	Generate the selected contribution paths for genealogy for a selected application.	**Input Parameters:** ● *string* applicationName: Enter the name of the application to use. ● *GenealogyOptionsDTO* genealogyInfo: -- Selection details for executing genealogy paths. **Output Parameters:** ● *string* return: process task ID generated for executing genealogy paths.

Operation	Description	Input and Output Parameters
`importFromStaging`	Import from Staging tables into a Profitability and Cost Management application.	**Input Parameters:** ● *string* applicationName: Enter the name of the application to use. ● *string* importConfigName: -- Import configuration to be imported. **Output Parameters:** ● None.

Creating a Custom Script

When generating a custom Web Services script, you must identify the service name, and select the operations that you want to invoke.

➤ To create a custom script for Profitability web services:

1 **Set up the server that is to be enabled for Web Services. See the *Oracle Enterprise Performance Management System Installation and Configuration Guide*.**

2 **When coding, select the ProfitabilityService service name. (See"Using the Profitability and Cost Management Sample Client File" on page 26 for more information.)**

3 **Create the Web Service Client and select the operations to be performed.**

- For a list of available operations, see "Profitability Web Service Operations" on page 23.
- For a detailed description of the parameters for each operation, refer to the *Oracle Hyperion Profitability and Cost Management API Reference* in the OTN Documentation Library.

4 **Optional: To run the program using a `.bat` or `.sh` script, edit the existing files to match the newly created Web Services client name.**

Using the Profitability and Cost Management Sample Client File

The Sample Client File for Web Services displays the commands that can be used in your custom script for automating Profitability and Cost Management tasks, and identifies data within your Profitability and Cost Management model. The sample client file is intended as a guide only, to assist you in creating your custom scripts.

See the following procedures:

- "Setting Up the Sample Client Environment" on page 27
- "Using the Sample Client File" on page 28
- "Compiling the Code" on page 29

Setting Up the Sample Client Environment

➤ To set up the sample client environment:

1 **Optional:** If you are not running on the same machine on which EPM Workspace is installed, copy the folder *EPM_ORACLE_HOME*/products/Profitability/samples/wsclient to the machine on which the sample is to be accessed.

2 Copy the following files from the source folders listed below to the wsclient folder:

Table 3 Required Files for Sample Client

Source Folder	File Name
EPM_ORACLE_HOME/../user_projects/domains/EPMSystem/config/fmwconfig	jps-config.xml
EPM_ORACLE_HOME/../user_projects/domains/EPMSystem/config/fmwconfig	<<Associated keystore file.XXXX.jks>>
If you are using file-based security, *EPM_ORACLE_HOME*/../user_projects/domains/EPMSystem/config/fmwconfig	cwallet.sso

3 Edit the hpm_ws_client.properties file to reflect your local settings:

```
# Full Path of the jps-config.xml file in use.
jps.config.file=C:/wsclient/jps-config.xml

#WSS Recipient key alias name used.
wss.recipient.key.alias=adminalias

# WSS Credential Store Framework key used.
wss.csf.key=epmpcm.credentials

# HPCM WSDL URL which is to be accessed. Eg: http://localhost:19000/profitability/
ProfitabilityService?WSDL (or) {DRIVE_LETTER}:/{FILE_PATH}/FILE_NAME.wsdl
hpcm.wsdl.url=http://localhost:19000/profitability/ProfitabilityService?WSDL

# Delimiter used to separate String literals in paramters
string.delimiter=_
```

4 **Optional:** If you are not running on the same machine on which the EPM Workspace is installed, download and install JDeveloper 11.1.1.3 locally to obtain the appropriate JAVA_HOME and MIDDLEWARE_HOME folders.

5 From a command or shell window, set the following environment variables:

Table 4 Sample Client Environment Variables

Environment Variable	Location
JAVA_HOME	Location in which Java Development Kit 1.6.0_18 or higher is available: ● For Windows, enter SET JAVA_HOME=C:/Oracle/Middleware/jdk160_18 ● For UNIX, enter export JAVA_HOME=/usr/c/Oracle/Middleware/jdk160_18

Environment Variable	Location
MIDDLEWARE_HOME	Location in which Oracle Middleware home is installed. ● For Windows, enter `SET MIDDLEWARE_HOME=C:/Oracle/Middleware` ● For UNIX, enter `export MIDDLEWARE_HOME=/usr/c/Oracle/Middleware`

6 **In the command window, go to `C:\wsclient`, and then enter the following command:**

```
hpm_ws_client.bat -help
```

A list of all available functions is displayed.

7 **Use the format and operations specified in the sample client file to build your custom script. See** **"Using the Sample Client File" on page 28**.

Using the Sample Client File

The sample client file is intended as a guide only for you to build your own custom scripts to access Profitability and Cost Management data through Web Services. The sample client files are available at `EPM_ORACLE_HOME/products/Profitability/samples/wsclient`. These files have been created using Batch Script (Windows OS) and Shell Script (UNIX/Linux OS).

➤ To use the sample client file:

1 **In the command window, go to `C:\wsclient`.**

2 **Enter the following command:**

```
hpm_ws_client.bat - help
```

The list of all available functions is displayed.

Table 5 Oracle Web Services Operations for Profitability and Cost Management

Operation	Description
`getApplications`	List all existing Profitability and Cost Management applications.
`getPOVs`	List all existing POVs for a selected application.
`getStages`	List all existing stages for a selected application.
`copyPovData`	Copy POV data from a source POV combination to a destination POV combination. See
`deleteApplication`	Delete an existing Profitability and Cost Management application. See
`deployCube`	Deploy the database (cube) for a selected application.

Operation	Description
`getTaskflowStatusByProcessName`	Obtain the current status of the job process name. The following valid status values are listed: • New • Active • Stopped • Done
`runImportConfiguration`	Import from selected staging tables into the Profitability and Cost Management application.
`processCalcScriptOptions`	Initiate the selected actions for a selected Application Name, POV and Layer. The following options are available: • Clear All • Clear Calculated • Generate • Calculate • Transfer data after calculation.
`processGenealogyExecutionPaths`	Generate the selected contribution paths for genealogy for a selected application.

3 **Select the operation to be performed, and enter the command in the following format:**

```
hpm_ws_client.bat - help operation_name
```

For example, to obtain the usage details of getPovs operation, enter the command in the following format:

```
hpm_ws_client.bat - help getPovs
```

4 **To use the sample client file to perform an operation, enter the command in the following format:**

```
hpm_ws_client.bat operation_name <<parameters>>
```

- **Example 1: List All Applications**

  For example, to obtain a list of all available applications, enter the command:

  ```
  hpm_ws_client.bat getApplications
  ```

- **Example 2: List All POVs**

  For example, to obtain a list of all POVs for a given application, enter the command:

  ```
  hpm_ws_client.bat getPovs <<application name>>
  ```

Compiling the Code

The client sample is provided in the following formats:

- As source code (in `wsclient/src/oracle/epm/webservices/profitability/client/ProfitabilityServicePortTypeClientSample.java`)
- As a compiled binary file (in `wsclient/lib/hpcmwsclient-sample.jar`)

To successfully compile the code, you must specify the location of the `common.components.home` folder.

If the source code needs to be recompiled for any reason, you can recompile using Ant. The `build.xml` file for Ant is available in the `wsclient` folder.

➤ To recompile the source code:

1 **Open a command or shell window to specify the location of the `common.components.home` folder.**

This folder is defined as `MIDDLEWARE_HOME/oracle_common`, where MIDDLEWARE_HOME is set as follows:

- For Windows: `SET MIDDLEWARE_HOME=C:/Oracle/Middleware`
- For UNIX: `export MIDDLEWARE_HOME=/usr/c/Oracle/Middleware`

2 **Pass the folder location to Ant, using one of the following methods:**

- As a command line parameter. For example:

```
ant -Dcommon.components.home=C:/Oracle/Middleware/oracle_common
```

- In the `build.properties` file, open the file for editing and uncomment the definition of the `common.components.home` variable. For example:

```
common.components.home=C:/Oracle/Middleware/oracle_common
```

3 **Recompile the source code.**

New Features in Release 11.1.2

See the following sections for the new features in this release:

EPM System

- 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 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 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 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 Enterprise Performance Management System Security Administration Guide*.

Middleware Home and EPM Oracle Home

A number of changes have been implemented during installation for the housing of files. HYPERION_HOME has been replaced, and the following files are now available:

Table 6 Middleware and EPM Oracle Home

Home Location	Description
MIDDLEWARE_HOME	Consists of the Oracle WebLogic Server home, and may include one or more Oracle homes, including EPM Oracle home. The Middleware home location is defined during the first product installation on the computer. The default installation directory is `Oracle/Middleware`.
MIDDLEWARE_HOME/user_projects	During configuration, the location for Web application deployment (including data and applications, deployed Web applications and log files) is set to the following location: `MIDDLEWARE_HOME/user_projects/domains/`*`domainName`* where `domainName` is the name of the WebLogic domain.
EPM_ORACLE_HOME	Contains the installed files necessary to host a specific product, and resides within the directory structure of the MIDDLEWARE_HOME. In addition, common internal components used by the products are installed in EPM Oracle home. The EPM Oracle home location is defined in the system environment variable called EPM_ORACLE_HOME. **Caution!** Because the location for EPM_ORACLE_HOME cannot be changed, select the location carefully before installation to ensure there is enough disk space for all products that you are installing on the machine.

Verify the location of files carefully after installation of this release. For additional information, and instructions, see the *Oracle Enterprise Performance Management System Installation and Configuration Guide*.

Oracle Diagnostic Logging (ODL) Files

With this release, the ODL logging location for Web applications has changed. All the configuration logging files for each EPM Workspace product have now been centralized. .

For Profitability and Cost Management, the configuration logging file is available at:

`MIDDLEWARE_HOME/user_projects/domains/EPMSystem/config/fmwconfig/servers//Profitability0`

where `serverName` is the name of the WebLogic managed server. The file name is `logging.xml`.

For additional information on the configuration logging file, see "Using EPM Logs" in the *Oracle Enterprise Performance Management System Installation and Configuration Troubleshooting Guide*.

Output Log Files

The default location of the following Profitability and Cost Management log files have been modified with this release:

- **`hpcm.log`**

  By default, the Profitability and Cost Management log files are available at `MIDDLEWARE_HOME\user_projects\domains\EPMSystem\servers\Profitability0\logs\hpcm.log`. Contact your system administrator for access to this log file.

- **`SharedServices_Security_Client.log`**

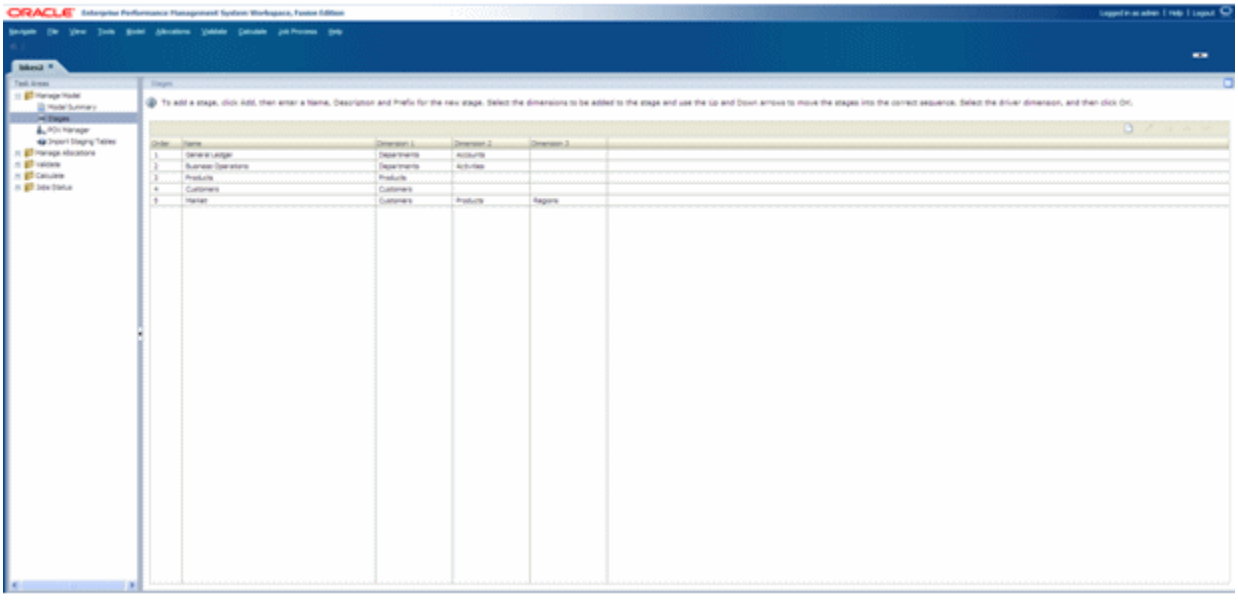
  The Oracle Hyperion Shared Services Client-side log file is now available at `%EPM_ORACLE_INSTANCE%/diagnostics/logs/sharedservices/`.

For additional log files for related products and applications, see the *Oracle Enterprise Performance Management System Installation and Configuration Guide*.

User Interface

A number of changes to the user interface have been implemented with this release:

- Windows and dialog boxes have a new color scheme.
- Tabs are now displayed at the top of a window, rather than along the bottom.
- Tasks in the Task Areas pane are now launched with a single click, rather than a double-click.
- The Search/Find Member Selector has been improved to enhance search capabilities.
- The Navigate icon has been replaced with the Navigate option.



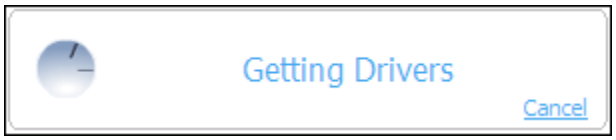
See the *Oracle Hyperion Profitability and Cost Management User's Guide* for instructions on using the application.

Dimension Member Selection Persistence

Previously, each time you changed from one task area to another, while the Point of View (POV) and layer selection persisted, you had to reselect the member selection. Now, the selected member and view options, such as Alias or Name, and Grid or Tree Views, are maintained when you move from task to task.

Busy Indicators

When an action is selected, busy indicators have been added to display which elements are currently being processed. A Cancel button is also available to enable you to end the action, if required.



Note: If the application is running in Accessibility mode, the progress indicators are not available.

New Profitability and Cost Management Properties

With this release of Profitability and Cost Management, two new properties are available:

- **Unicode** - Select this property to enable Unicode mode, which enables the application to support multiple character sets.
- **Secondary Level Weighting** - Restricts the levels for attributes which can be selected by the view selection engine during aggregation operation.

For additional information, see the *Oracle Hyperion Profitability and Cost Management Administrator's Guide*.

Storage of Profitability and Cost Management Data Entry View Definitions

Previously, Profitability and Cost Management Data Entry view definitions were stored within EPM Workspace as preferences.

With this release, user-defined Data Entry view definitions are now stored in the Profitability and Cost Management schema. The views are defined per-application and shared between all users of that application. This applies to named views only.

It is also possible to create ad-hoc views, for which the user selects measures and then clicks **Apply** instead of **Save**. The ad hoc views are stored in user preferences and not shared between users.

Changes to Profitability and Cost Management Metadata

With this release of Profitability and Cost Management, the following changes have been made to metadata:

- In the Measures dimension, the Data Storage (BSO) property for the following members needs to be changed TO 'StoreData' FROM 'DynamicCalc':
  - NetCostForAssignment
  - GrossReceivedCost
  - CostReceived
  - NetReciprocalCost
  - NetRevenueForAssignment
  - GrossReceivedRevenue
  - RevenueInput
  - RevenueReceived
  - Net Revenue
  - NetReciprocalRevenue
- The SysAllocVar2 member has been modified to add a formula for Data Storage (ASO), and the change has been added to the `update.ads` file. The formula is the same as that set for Data Storage (BSO), to calculate the sum of DirectAllocation, GenealogyAllocation and SysAllocVar1.
- The following new members have been added under AllocationType to accommodate the calculation of selected stages for genealogy:
  - **SysAllocVar3** stores calculated genealogy data that is used within the system. Do not use this member in reports.
  - **TotalAllocation** dynamically calculates the sum of the source links of DirectAllocation, GenealogyAllocation and SysAllocVar3.
  - **IndirectAllocation** dynamically calculates the sum of the source links of GenealogyAllocation, and SysAllocVar3.

> **Caution!** These are system variables, used internally for intrastage calculations. DO NOT modify these members. If you have existing applications, you must also perform the redeployment procedure shown below.

➤ To redeploy existing applications with updated metadata:

1 From Oracle Hyperion Enterprise Performance Management Workspace, select **Navigate**, then **Administer**, and then **Dimension Library**.

2 Select **File**, then **Import**, and then **Create Profile**.

The New Profile dialog box is displayed.

3 Complete the details of the import profile:

a. Enter a **Profile Name.**

b. Under **Import Type**, select **FlatFile**.

c. **Optional:** Enter a description.

d. Select the Profitability application to which the updated metadata is to be applied.

e. Under **FileName**, click **Browse** to display the File Input dialog box.

f. On the File Input dialog box, navigate to the location of the `update.ads` file (`$Middleware_Home\EPMSystem11R1\products\Profitability`) and then click **Upload**.

> **Caution!** If your application uses dimensions that have been named other than "Measures" and "AllocationType" exactly, you must edit the `update.ads` file to reflect the actual names, or apply the member changes manually.

g. On the **File Properties** page, select the properties for the import, such as Column Delimiter, Remove Double Quotes on Strings, and so on, and then click **Next**.

h. On the **Map Dimensions** page, select **Merge** for both the AllocationType and Measures locations, and then click **Next**.

i. On the **Dimension Mapping** page, highlight **AllocationType - AllocationType**, and click S**elect All**.

j. On the **Dimension Mapping** page, highlight **Measures - Measures**, and click **Select All**.

k. Click **Finish**.

After the import is successfully completed, perform the following tasks for all new and existing applications:

- Redeploy the application to Profitability and Cost Management.
- Redeploy the calculation cube and reporting cube to Essbase.
- Regenerate calc scripts to get the latest calculation script generation changes.
- Verify the changes in the application, as shown below:
  - For AllocationType - Verify the new members for genealogy changes (SysAllocVar3, TotalAllocation and IndirectAllocation) are displayed, and the properties for "TotalAllocation" are set correctly.
  - For Measures - Verify the properties for "NetCostForAssignment" member are set correctly. Although the Measures dimension has not changed structurally, the Data Storage (BSO) property for ten of its members has been changed from "DynamicCalc" to "StoreData."

Changes to Allocation Measures

As a result of the changes for Actual and Standard Basis drivers, there are several changes to Cost and Revenue Allocation Measures, as described in the following tables:

Cost Layer Allocation Measures

Table 7 Changed Cost Layer Allocation Measures

Measure	Description
StandardCostRate	For a Standard Basis driver, the user assigns a standard cost rate, and enters that value for use in calculations for the standard basis cost driver, as follows: `CostReceivedPriorStage =StandardCostRate * CalculatedDriverValue`
OverDrivenCost	For a standard basis driver, if the total cost assigned is greater than the `NetCostForAssignment`, the overage amount is posted to `OverDrivenCost`.
StandardCost	For Standard Basis driver, the calculated cost of `StandardCostRate * TotalDriverValue`. StandardCost is a reporting measure.
IdleCost	IdleCost is generated differently, depending on the driver type: ● For actual basis drivers, idle cost is generated using the allocation formula: `IdleDriverValue/ OverrideTotalDriverValue` ● For standard basis drivers, idle cost is generated if the total cost assigned is less than `NetCostForAssignment`.

Revenue Layer Allocation Measures

Table 8 Revenue Layer Allocation Measures

Measure	Description
StandardRevenueRate	For a Standard Basis driver, the user assigns a standard revenue rate, and enters that value for use in calculations for the standard basis revenue driver, as follows: `RevenueReceivedPriorStage =StandardRevenueRate * CalculatedDriverValue`
OverDrivenRevenue	For a standard basis driver, if the total revenue is greater than the `NetRevenueForAssignment`,the overage amount is posted to `OverDrivenRevenue`.
StandardRevenue	For Standard Basis driver, the calculated revenue of `StandardRevenueRate * TotalDriverValue`. StandardRevenue is a reporting measure.
IdleRevenue	`IdleRevenue` is generated differently, depending on the driver type: ● For actual basis drivers, idle revenue is generated using the allocation formula: `IdleDriverValue/ OverrideTotalDriverValue` ● For standard basis drivers, idle revenue is generated if the total revenue assigned is less than `NetRevenueForAssignment`.

Alias Dimensions

If you select Show Alias from the Context Menu, and no alias has been assigned, the member name is displayed within square brackets. For example, the member name Product is displayed as `[Product]`.

Cloned Dimensions

If a dimension occurs in one or more stages in a model, after the model is deployed to Essbase and opened in Performance Management Architect, an automatically-added cloned dimension is displayed. The cloned dimensions create a distinct version of the dimension for each stage in which it is used.

For example, if you create a dimension called "Department," and use this dimension in some stages within the model, after the model is deployed to Essbase, you see the cloned dimensions in the model:

- Department (original dimension)
  - GLDepartment (Cloned dimension for stage with prefix GL)
  - OPSDepartment (Cloned dimension for stage with prefix OPS)
  - OPSDepartment_intra (Cloned dimension for stage with prefix OPS that allows intrastage assignments).

Caution! Do not modify these cloned dimensions in Performance Management Architect, as they are maintained by Profitability and Cost Management.

If additional members are required, add the new members only to the original dimension. The new members are added to the cloned dimensions when the application is redeployed.

Note: Any updates to cloned dimensions are not passed to Profitability and Cost Management and Essbase.

Essbase Naming Conventions for Attribute Calculations Dimension

The members that Essbase creates in the attribute calculations dimension (Sum, Count, Min, Max, and Avg) are not considered reserved words because you can change these names in the attribute calculations dimension, and then use the standard name in an attribute or standard dimension.

See Appendix C - "Essbase Naming Conventions" in the *Oracle Hyperion Profitability and Cost Management Administrator's Guide*.

Exporting Model Definition Data

After the model has been created, you can query the database to display the model artifacts as output in a database view.

An Administrator can create new database views in the system database that mirror the columns used in the staging tables, showing the model data that is stored in the system:

- Stages (HPM_EXP_STAGE)
- POVs (HPM_EXP_POV)
- Drivers (HPM_EXP_DRIVER)
- Driver Selections (HPM_EXP_DRIVER_SELECTION)
- Assignments (HPM_EXP_ASSIGNMENT)
- Assignment Rule Selections (HPM_EXP_ASGN_RULE_SELECTION)

After installation, a SQL script (`create_sql`) is included in the application folder. The default location is `$Middleware_Home\EPMSystem11R1\products\Profitability/database/common/Oracle`. The script `create_sql`, which contains the SQL queries for artifacts within the model can be modified, if required.

See the *Oracle Hyperion Profitability and Cost Management Administrator's Guide*.

Priority Sequence Drivers

In some business models, a driver may use one or more calculated measures in a formula. Dependencies between sources in the same stage may require the allocations to be calculated in a controlled sequence. Priority sequence drivers enable you to set the order in which allocations within a stage are calculated.

For example, by setting the driver priority, you ensure that Source A using Driver A is calculated before Source B using Driver B. The cost or revenue values calculated by allocating Source A first can then be used by Driver B.

Any Level-0 descendant of the Measures dimension can be picked as a driver measure. When defining the driver, enter the Sequence Priority on the Drivers dialog box.

For additional information on setting priority sequence drivers, see the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Actual and Standard Driver Basis Types

With this release, you can now specify whether you want to use a calculated (Actual Basis) or assigned (Standard Basis) rate when defining drivers, using these driver basis types:

- **Actual Basis Driver Type** - This driver type enables you to calculate a rate, using the 'NetCostForAssignment' value on the source, to allocate costs downstream. The Actual Basis driver uses the formula:

```
CostReceivedPriorStage = NetCostForAssignment on the Source *
CalculatedDriverValue / TotalDriverValue on the Source
```

If Driver Data is missing, the results are posted on the Stage Balancing Report to 'Unassigned Cost' at the intersection and stage level.

- **Standard Basis Driver Type** - This driver type is used to set a standard rate that allows for consistency of measurements across time periods, for example, where there are seasonal variations or fluctuating account values due to the timing differences between accounting data capture and actual usage of resources.

  Using the Standard Basis Driver, you set a pre-calculated standard rate on a driver on the source intersection to allocate the costs downstream. The driver uses the formula:

  ```
  StandardCostRate (on the source) * Quantity on the assignment
  ```

  Sources using that driver allocate the product of the Standard Rate on the source, and the Quantity on the assignment to the destination intersections.

  Note: The Standard Basis driver cannot be used with Even or Percentage driver types.

  If Standard Basis is selected, "Allow Idle" is automatically activated. Standard basis drivers can be used on intrastage assignments; however, they cannot be used in reciprocal assignments.

  When the user selects a Standard Basis Driver, the Rate is entered on the source in the Measure dimension variable `StandardCostRate` for the Cost Layer and `StandardRevenueRate` for the Revenue Layer. The `StandardCostRate` on the source can be entered using cost input data entry screens. The 'Quantity' portion is calculated based on how the Driver is defined.

The basis types can be applied to drivers in both the Cost and Revenue layers. A single stage can contain both "Actual Basis" and "Standard Basis" drivers; however, if a driver is changed from one basis driver type to the other, the calculation script for the affected Stage must be regenerated.

For additional information on setting priority sequence drivers, see the *Oracle Hyperion Profitability and Cost Management User's Guide*.

New Fields on HPM_STG_DRIVER Staging Table

As a result of the new priority sequence and Driver Basis types, two new fields have been added to the HPM_STG_DRIVER staging table:

- **driver_basis_type** is used to set the required driver basis:
  - Actual Basis
  - Standard Basis

  Note: The Standard Basis driver cannot be used with Even or Percentage driver types.

- **priority** is used to enter the calculation priority of a driver so that allocations within a stage can be run in the specified order. The driver with the lowest priority is processed first. By default, the priority is set to 100, and the highest priority is 1.

  Numbers do not have to be sequential. Drivers with the same priority are executed in no particular order. Only whole, positive numbers are valid.

For additional information on staging tables, see the *Oracle Hyperion Profitability and Cost Management Administrator's Guide*.

Rules and Explicits Tab in Model Validation

A new Rules and Explicits tab has been added to the Model Validation screen. When the model is validated, this tab displays all sources within the selected application to which both explicit assignments and assignment rules have been attached to the same source. Because only one type of assignment is allowed on an intersection, one of the assignments must be removed from that source.

See "Validating Model Structure" in the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Performance Management Architect Validations

The following table describes the validations performed by Oracle Hyperion EPM Architect for each Profitability and Cost Management application.

Table 9 Profitability and Cost Management Validations

Validation Level	Validations
Dimension	● Business dimensions must have the ASO and BSO data storage set to LabelOnly. ● Dimension Sort Order has been set for all dimensions in the model, excluding Alias and UDA dimensions, and satisfies the following conditions: ❍ A dimension sort order must be set for every dimension in the model, except Alias and UDA dimensions. **Note:** The Alias and UDA dimensions are ignored for Dimension Sort Order. ❍ The dimension sort order must be sequential. ❍ Measures dimension is set to 1, by default. ❍ AllocationType dimension is set to 2, by default. ❍ POV and business dimensions are set to 3 or higher. ❍ Attribute dimensions are sorted as the last dimensions. For example, if you have four attribute dimensions in a sequence of 12 dimensions, the attribute dimensions must be set as 9, 10, 11, and 12. ● Duplicate members do not exist in the same dimension.

Validation Level	Validations
Application	• The name of the application must be seven characters or less, and contain no special characters. • At least one dimension must be set to POV type. Up to 4 dimensions may be marked as POV dimensions. • At least one business dimension must be defined. • At least one Measures dimension must be defined. • At least one AllocationType dimension must be defined. • There is only one dimension of type “Account.” • There is only one dimension of type “Entity.” • Application names do not contain Essbase special characters and reserved words.
Member	• Allow only ASO and BSO data storage to be defined • `NoMember` must be set as the last generation 2 member for all business dimensions, and must be set to Ignore (~) in the Property Grid. **Note:** This requirement does not apply to POV, Measures, AllocationType, Alias, UDA or Attribute dimensions. • Ensure that duplicate members are not present under the same parent. • Ensure there are no duplicate member names or aliases. • Validate that member names do not include Essbase special characters and reserved words

For additional information, see the *Oracle Hyperion Profitability and Cost Management Administrator's Guide*.

Generated Calculation Script Naming Conventions

When Profitability and Cost Management generates Oracle Essbase scripts, the scripts are automatically named using specific conventions. For this release, the driver calculation scripts and allocation calculation scripts are now combined into one script per stage.

The script name is created in the following format:

```
String scriptName = scriptSuffix + POV-identifier + Stage Order Number
+ "_" + index;
```

The script Suffix is based on the type of script. The following table displays the list of suffixes.

Table 10 Calculation Script Suffixes

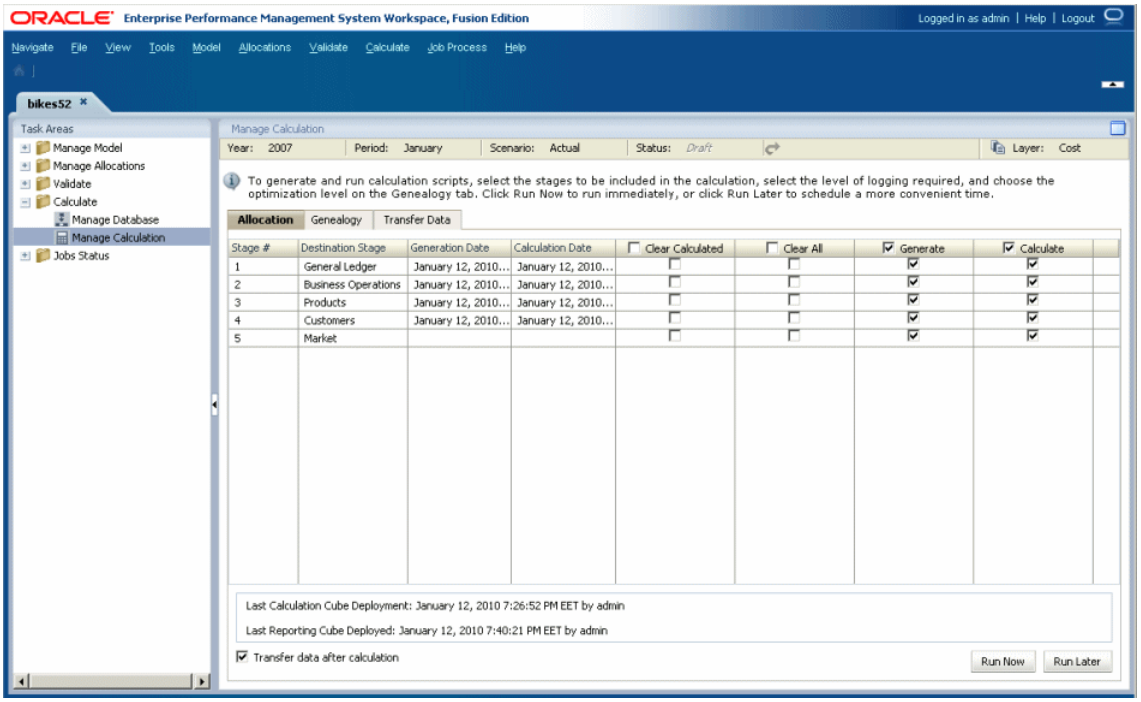
Script Type	Cost Layer	Revenue Layer
Inter-Stage Allocation	“a”	“r”
Intrastage Allocation	“i”	“t”

For additional information, see the *Oracle Hyperion Profitability and Cost Management Administrator's Guide*.

Stage Selection on Calculate Tab

When you select the Allocation tab on the Manage Calculation screen, by default, all stage selection check boxes are unchecked. You must select the stages for which you want to generate and run the calculation scripts. The following options are available for each stage:

- Select **Clear Calculated** to remove previously calculated data.
- Select **Clear All** to remove any existing data.
- Select **Generate** to generate the calculation scripts.
- Select **Calculate** to calculate the data.



For additional information about generating and calculating direct allocation data, see the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Option for Automatic Data Transfer

An option is now available on the bottom of the Manage Calculation screen to enable you to automatically transfer data from the Calculation database to the Reporting database when calculations are complete.

Before running the calculations, select the **Transfer data after calculation** option to enable you to view the Stage Balancing report or to generate validation reports.

For additional information on setting priority sequence drivers, see the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Obsolete Scripts

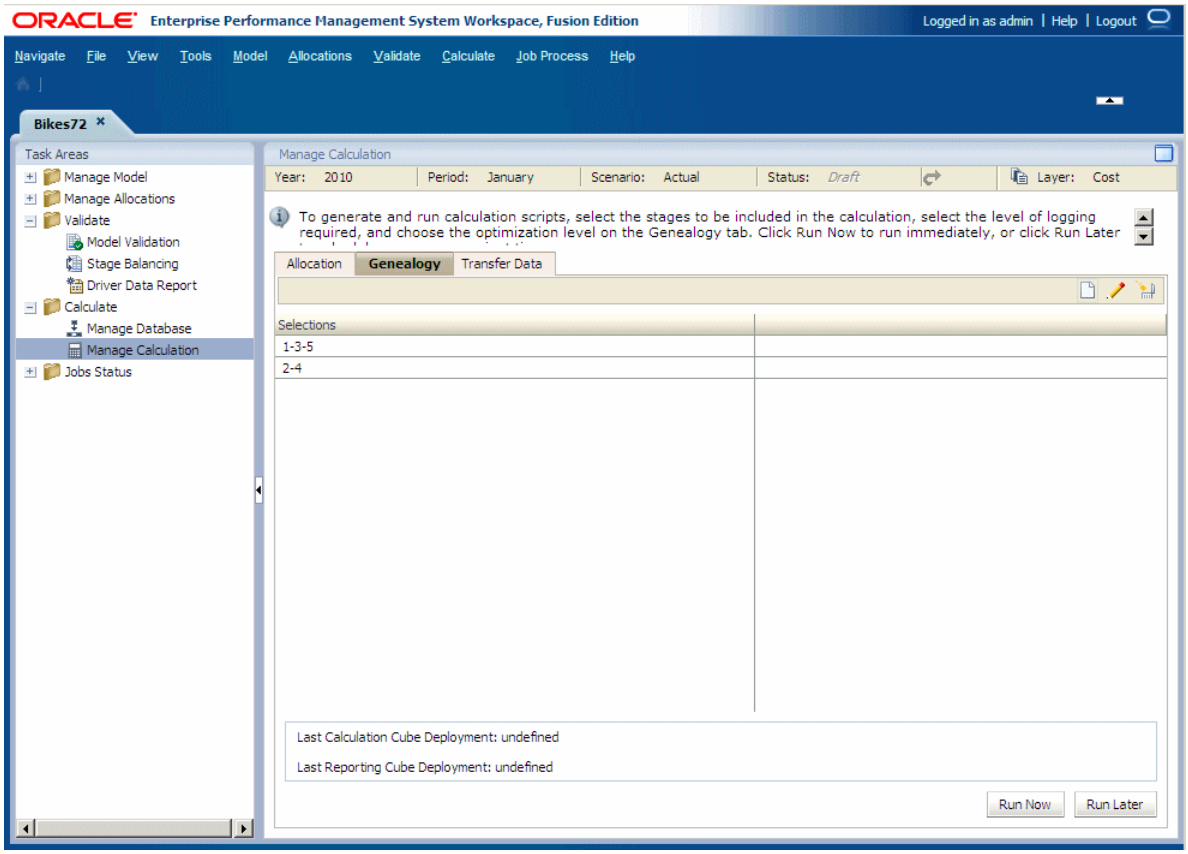
The modeling cycle is likely to include several recalculations after errors are discovered and model edits have been made to repair the errors. These changes can render some calculation scripts obsolete.

A warning message is now displayed to indicate that the selected calculation script is now obsolete, and should be regenerated.

Multi-Stage Contribution Paths in Genealogy

Instead of selecting an Optimization option when calculating genealogy, you now select the stages that you want to include in your calculations.

This feature enables you to analyze how values from one stage contribute to results in a later stage, and provides visibility on the intermediate stages through which those values passed.



From the Genealogy screen, you determine the allocation paths on which you want to report. You select the stage numbers for each path, in ascending order, and genealogy is calculated for each path. For example, you can run the calculations for Stage “1-3-5” or “2-4.” There must be at least one stage between the first and last stages.

Genealogy is calculated for multiple paths. Depending on the layer selection when you run the calculation, either cost or revenue will be calculated in a single run. You cannot run both layers in one genealogy calculation.

For information on calculating genealogy, see the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Changes to Trace Allocations

With this release, the default source for Trace Allocations reports is now the Reporting database. It is no longer necessary to run additional calculations before transferring data to the Reporting cube because the Reporting database aggregates the data automatically.

You can also export the currently displayed report to an image file.

For information on calculating genealogy, see the*Oracle Hyperion Profitability and Cost Management User's Guide* .

Changes to Jobs Status in Task Areas

There have been minor changes to the Jobs Status options, as follows:

- **Manage Taskflow** still displays the Taskflow Listing Summary screen.
- **Search Process** now displays the Taskflow Status Summary screen to view and update the status of existing taskflows.
- **Search Task** displays the My Tasks screen to view the details for an existing taskflow.

For instructions on using the Jobs Status option, see the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Migrating Data through Lifecycle Management

Previously, Profitability and Cost Management data had to be migrated through Lifecycle Management as a single artifact which contained the entire model. This process could be time-consuming, especially when only one or two artifacts were modified.

With this release, you can select one or more of the following artifacts for migration through Lifecycle Management:

- Application preferences
- Driver definitions
- Stage definitions
- POV definitions
- Driver selections
- Assignments
- Assignment Rules
- Application preferences

For an overview of Oracle Hyperion Enterprise Performance Management System Lifecycle Management, see the *Oracle Hyperion Profitability and Cost Management Administrator's Guide*.

Performance Tuning Appendix

Performance tuning is an iterative process, and every installation is unique in its components and applications. After installing a new release or patch, or after making substantial changes within your environment, including increases in data and users, or modeling style, some tuning of these components is probably required.

It is difficult to supply definitive tuning solutions that will work in every situation, but this appendix is designed for information purposes only, to suggest some areas for examination, and to direct you to information sources that may help you to fine-tune your Profitability and Cost Management installation.

To view the Performance Tuning appendix, see the *Oracle Hyperion Profitability and Cost Management Administrator's Guide*.

Accessibility in Profitability and Cost Management

It is our goal to make Oracle products, services, and supporting documentation accessible to the disabled community. This release of Oracle Hyperion Profitability and Cost Management supports accessibility features, which are described in the Accessibility Appendix in the *Oracle Hyperion Profitability and Cost Management Administrator's Guide*.

Enabling Screen Reader Support

You must enable screen reader support in order to use screen readers, magnifiers, and other accessibility tools to work in Profitability and Cost Management. Enabling screen reader support is a preference setting. If a user changes this setting during a session, the browser must be restarted to enable the changes.

If you are using JAWS® Screen Reading Software, Oracle recommends using the Internet Explorer browser.

For more information on accessibility, see the Accessibility Appendix in the *Oracle Hyperion Profitability and Cost Management User's Guide*.

Using Navigation Shortcuts

Oracle Hyperion Profitability and Cost Management provides navigation shortcuts to the main tasks in the application and to available action points (buttons, toolbars, icons, and so on).

To display navigation shortcuts for any related dialog box or tab on a Task Area page, click Alt +0 anytime. An Information pane lists available navigation shortcuts for the dialog box. If an

option is available for action, the shortcut is "enabled." If an option is unavailable for the current situation, the shortcut is "disabled."

For specific keyboard shortcuts, see the Accessibility Appendix in the *Oracle Hyperion Profitability and Cost Management User's Guide*.

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