New Features in this Release

Following is a list of the new Oracle Hyperion Calculation Manager features in this release. For new features relating to installation, architecture, and deployment changes in this release, see "New Features" in the Oracle Enterprise Performance Management System Installation and Configuration Readme.

Support for Parallel Processing in Member Range Components

You can enable parallel processing to process the member range commands of a member range component simultaneously, instead of sequentially. Selecting parallel processing may optimize the calculations in the member range. When you select parallel processing, you can enter the number of threads to be available for parallel processing. You can also select a numeric or integer type variable if you are creating the member range in a business rule or a numeric design-time prompt if you are creating the member range for a template.

Running Essbase Calculation Scripts with Runtime Prompts in Essbase

In previous releases of Calculation Manager, you could launch Oracle Essbase block storage business rules with runtime prompts only from within the System View or the Rule Designer of Calculation Manager. In this release, you can deploy Essbase business rules with runtime prompts to Essbase and then launch them from Oracle Essbase Administration Services, MaxL, or any other component that can run a calculation script. For information on launching Essbase business rules in Essbase or Essbase modules, see the documentation for Essbase.

Importing Essbase Calculation Scripts

In this release, you can import Essbase calc scripts with runtime prompt variables. When you import an Essbase calc script with a RUNTIMESUBVARS section, all the references to the variables are converted to Calculation Manager rule level variables (that is, runtime prompts)
with \{} notation. By default, a rule level variable of type string is created with the value of these variables from the RUNTIMESUBVARS section of the Essbase calc script.

The variable's value is displayed in the Value column of the Variables tab when you open the business rule in the Rules Designer. (You can see the variable's default value by opening it in the Variable Designer and looking at the Default Value column.) However, if the calc script does not have a value or default value for these variables, then Calculation Manager does not display any values.

If there is any text between the <RTSV_HINT> and </RTSV_HINT> tags in the script, that text is used as runtime prompt text for the variable; if there is no text between these tags, the prompt text is the name of the variable.

### New Design-Time Prompt Functions for Templates

In this release, there are new design-time prompt functions that you can use within DTP Assignment components for custom defined templates: These functions enable you to perform tasks such as comparing a member to another member, getting a list of members that are common or not common between two design time prompts, adding or removing quotes in a string, converting characters in a string to upper or lower case, and other tasks.

### New Custom Defined Functions

There are new custom defined functions that you can access from within the function selector of Calculation Manager script and formula components. These custom defined functions allow you to perform tasks such as launching encrypted MaxL scripts and files, copying and exporting data, removing and adding single or double quotes to a text string, comparing two strings, among others.

There are two different methods to include custom defined functions in a calc script to execute MaxL scripts. In one method, you can use a MaxL script file that can be accessed from the Essbase calculation engine, and in the second method, you embed the MaxL script into the calc script itself. In both cases, Oracle recommends that you use these custom defined functions via the RUNJAVA command, rather than calling the custom defined function within a FIX statement.

**Note:** The RUNJAVA command can be used only in a script component. The @CalcXX() command can be used in a script or a formula component.

### Finding and Replacing Text in the Variable Designer

You can search for, and replace, text within the Variable Designer. Find allows you to find text in variables of any scope (global, application, plan type or database, or rule level). By default, Calculation Manager searches using the variable's default value, any limits defined for it, and any prompt text. If you include the basic properties of the variable in the search, Calculation Manager searches using the variable name, the group, and the description.
When you search for text, Calculation Manager displays a list of the variables in which the text is found in a columnar format that shows the scope of each variable. From the list of variables returned, you can replace all or replace selected instances of the text.

**Aggregation System Template Enhancements**

The Aggregation system template has been enhanced to make it easier to use and understand. When you include the template in a business rule, the Aggregation template Wizard launches with an information tab that provides an overview of the template. In addition, the tabs that enable you to select dense and sparse dimensions to aggregate have been reorganized to make the process of aggregating data values simpler.

**Script Editor Enhancements**

Several enhancements have been made to the script editor that you use to edit script components and to edit business rules in script mode:

- The Wrap feature reformats any long lines of the script that scroll off the page so that they display on multiple lines on the same page.
- When you enter a line number in Go to Line and click the arrow, the line number you enter is highlighted in the script.
- You can expand or collapse a line in the script by clicking the plus or minus sign to the left of the line. For example, FIX statements display with all of the lines in the statement displayed by default, but you can hide the lines of the FIX statement by clicking the minus sign to the left of it.
- You can enter search text in Find and click Previous or Next to find the previous (by searching up in the script) or next (by searching down in the script) instance of the text.
- Auto suggestions are provided for functions in a dialog box. When you type the first few characters of the function, press CTRL+Space to display the suggestions.

**Filtering Objects in the System View**

Calculation Manager has a view called Filter View/List View in which you can define the filter criteria and display (in a list) only the objects matching the given filter criteria. The System View provides a hierarchical representation of all of the objects in Calculation Manager. The support of filters in the System View enables you to apply a filter to the System View to limit the display of objects for better usability.

**Analyzing Scripts**

In this release, you can analyze any business rule, not just graphical rules. When analyzing scripts, the rule is displayed in a view script mode, and each line that has analysis information has an
icon beside the row. The line of the script that takes the most time to execute is highlighted in red. You can click on each row that has analysis information to see the following:

- Execution time
- Block Count
- Number of potential blocks
- Number of counted blocks
- Scope of the Fix statement

**New Cell Text Range Component and Data Range Component Changes for Financial Management Applications**

In this release, you can create a new type of component for Oracle Hyperion Financial Management applications called a cell text range component. A cell text range component is a type of loop comprised of a range of cell text from Financial Management applications. You can use this component in Financial Management business rules and custom defined templates.

In the Financial Management data range component, there is a new POV entry in the component grid to support the new POV attribute, Data Unit, for Oracle Hyperion Financial Management Visual Basic scripts.

**Customizing Views**

In the System View, Deployment View, Custom View, and Filter View, you can customize the columns that display and the order in which they display. In the System View and Deployment View, you can also expand and collapse the contents of application types, applications, consolidation types, plan types or databases, and the objects within them.

**Comparing the Scripts of a Saved Rule to a Changed Rule**

Now you can compare the script of a saved rule to the changed version of the rule. You may want to view the scripts of the saved version and the changed version of the business rule to see how the two versions are different from each other, to see changes you made, or to see the scripts of the saved and changed graphical business rule side-by-side. You can display the scripts of a saved business rule and a changed business rule side-by-side in a window within the Designer view of Oracle Hyperion Calculation Manager.

**Creating and Working with Location Aliases**

You can create, edit, delete and display a list of location aliases for a block storage database and application. A location alias maps an alias name for a database to the physical location of that database. A location alias is set at the database or the application level and specifies an alias, a server, an application, a database, a user name, and a password.
Tracking Queries

You can use query data to select the most appropriate set of aggregate views to materialize for an aggregate storage database. You enable query tracking to capture data about the cost of each query that is performed against the database. The cost of a query is an estimate of the average retrieval time required to retrieve values from the view. For the first view (selected by default), the estimation is the average of all possible queries. For views for which query tracking is used, the estimation is the average of the tracked queries. Therefore, a view may, under different conditions, display different estimates.

Compacting a Database Outline

As you make changes to aggregate storage outline files (that is, .otl files), they may increase in size. By compacting these outline files, you can remove the records of deleted members, reduce the outline file size, and improve performance.

Compacting the outline file causes the database to restructure the outline, but not to clear the data.

Merging Incremental Data

You can merge all incremental data slices of an aggregate storage database into the main database slice, or merge all incremental data slices into a single data slice while leaving the main database slice unchanged. When you merge incremental data slices, you can keep cells with a zero value or remove cells with a zero value. To merge slices, you must have the same privileges as for loading data (Administrator or Database Manager permissions).

Aggregating System Generated Views

You can calculate aggregations for aggregate storage databases that contain data and for which you have Calculation permission. To perform an aggregation, you use system recommended views: the selection of the views and the aggregation processes are combined into one, nonconfigurable operation that is performed by the server. If you choose, you can specify the maximum disk space for the resulting files, base the view selection on user querying patterns, and include rollup hierarchies in the view selection.

Selecting a Compression Dimension

You can set any aggregate storage dimension as the compression dimension if it is a dynamic dimension, with a single dynamic hierarchy, and no attributes. By default, the compression dimension in an aggregate storage database is the Accounts dimension.

The choice of compression dimension can significantly affect performance, so a good candidate for a compression dimension is one that optimizes data compression while maintaining retrieval performance.
You can view compression estimates for aggregate storage databases. Compression estimates are related to the size of the database on disk and change depending on which dimension is set as the compression dimension.

**Displaying Level Information**

Dimension levels are defined in a bottom-up hierarchical structure. Levels measure the number of branches between a member and the lowest member below it. If you are working with an aggregate storage database, in addition to viewing other properties of the database, you can view the number of levels in each dimension of the application.

**Managing Sessions**

A request is a query sent to the Oracle Essbase server by a user or by another process. You can use the Sessions window to display and refresh a list of open user sessions and requests for aggregate storage applications.

You may want to end lengthy user requests that stop the application from responding to further requests. You can end all requests, end all requests for a user, or end a specific request.

You may also want to log off a user, all users, or instances of a user. You can log off users from selected servers, applications, or databases.