



ORACLE® ESSBASE

Release 11.1.2.4

New Features

ORACLE

This document describes the new features in Oracle Essbase Release 11.1.2.4. For detailed information on these features, see the *Oracle Essbase Database Administrator's Guide*, *Oracle Essbase Technical Reference*, and *Oracle Essbase API Reference*.

Essbase 11.1.2.4 New Features

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Thread Pool for Parallel Operations

Historically, Essbase dynamically created threads for parallel operations such as parallel calculation, parallel data load, and parallel restructure. However, beginning this release, the following parallel operations do not dynamically create threads, but instead use a set number of threads from a pre-created pool of threads:

- Parallel calculation, with CALCPARALLEL or FIXPARALLEL
- Parallel data load, for aggregate storage and block storage databases
- Parallel export, for block storage databases
- Parallel restructuring

You can customize the size of the thread pool. For more information, see the WORKERTHREADS configuration setting topic in the *Oracle Essbase Technical Reference*.

XML Outline Editing

XML outline editing enables you to use an XML file to make basic changes to the database outline. This method is a streamlined way to make outline edits without needing to use a rules file nor invoke the Outline API. To perform XML outline editing, you reference a provided .xsd file, create an .xml file, and call the C Main API function EssBuildDimXML (or the Java API method buildDimensionXml). For more information, see EssBuildDimXML in the *Oracle Essbase API Reference*.

To use the XML outline editing feature in Essbase 11.1.2.4, aggregate storage outlines that were created in an earlier release must first be migrated to 11.1.2.4.

Enhancements to Hybrid Aggregation

Hybrid aggregation mode was introduced in Release 11.1.2.3.500 as a way to bring improved calculation efficiency to block storage databases. In this release, Time-balance tagged members and Dynamic Time Series members can also be calculated in hybrid aggregation mode.

Additionally, many more calculation functions are included in the list for member formulas that can be calculated in hybrid aggregation mode. For the full list, see the topic “Functions Supported in Hybrid Aggregation Mode” in the *Oracle Essbase Technical Reference*.

For more information about hybrid aggregation mode, see the ASODYNAMICAGGINBSO configuration setting topic in the *Oracle Essbase Technical Reference*.

Optimizations for Oracle Exalytics In-Memory machine

Enhancements have been introduced for Essbase Server running on Oracle Exalytics In-Memory machine. An accompanying increase in virtual memory usage is normal and expected. Virtual memory usage is increased by the size of page files.

On SPARC T5/Solaris Exalytics In-Memory machine, for best performance, configure swap space on the system to be greater than the sum of the expected sizes of dynamic calculator caches, for all databases on the system.

Supporting POV and Pivot Enhancements for Smart View 11.1.2.5.400

Essbase and Oracle Hyperion Provider Services are enhanced to support the Oracle Smart View for Office Point of View (POV) toolbar and pivoting behavior as follows:

- Multiple members can be pivoted from the grid to the POV toolbar.
- Multiple members can be pivoted from the POV toolbar to the grid.

- A single dimension can remain on the POV toolbar.

In prior releases, only one member in a dimension could be pivoted from the grid to the POV, and from the POV to the grid. Also in prior releases, Essbase and Oracle Hyperion Provider Services only supported having at least two dimensions on the Oracle Smart View for Office POV toolbar.

Calculation Enhancements

New Calculation Functions

`@RELXRANGE`—Generates a cross dimensional list based on the relative position of the cell that is currently being calculated and the offsets.

Calculation Function Changes

Support for the `xrangeList` parameter is added to a number of functions. `xrangeList` is a range of members from one or more dimensions, and can help you incorporate time continuum navigation. The functions that support `xrangeList` are:

- `@COMPOUND`
- `@COMPOUNDGROWTH`
- `@CORRELATION`
- `@COUNT`
- `@DECLINE`
- `@DISCOUNT`
- `@GROWTH`
- `@INTEREST`
- `@IRR`
- `@IRREX`
- `@MEDIAN`
- `@MODE`
- `@NEXT`
- `@NEXTS`
- `@NPV`
- `@PRIOR`
- `@PRIORS`
- `@PTD`
- `@RANK`

- @RELXRANGE (new function)
- @SHIFT
- @SHIFTMINUS
- @SHIFTPLUS
- @SLN
- @SYD
- @VARIANCE
- @VARIANCEP

Configuration Setting (essbase.cfg) Changes

New Configuration Settings

- WORKERTHREADS—See “[Thread Pool for Parallel Operations](#)” on page 1.
- CRASHDUMPLOCATION—Sets the location where Essbase saves a core dump file when an abnormal termination occurs.
- CONNECTIONTIMEOUT—Specifies the maximum time that Essbase should wait for a SQL connection before timing out.
- QUERYTIMEOUT—Specifies the maximum time that Oracle Essbase should wait for a SQL query to execute before timing out.

MaxL Grammar Changes

The MaxL **export** data statement includes grammar you can use to make exported data anonymous, wherein real data is replaced with generated values. This removes the risk of sensitive data disclosure, and can be used in case a model needs to be provided to technical support for reproduction of certain issues.

Essbase API Changes

New C Main API Function

`EssBuildDimXML`—See “[XML Outline Editing](#)” on page 2.

New C Outline API Function

`EssOtlVerifyOutlineEx3`—A new API function for verifying outlines. This function differs from `EssOtlVerifyOutlineEx` in that it provides both member warnings and formula errors.

Changed API Functions and Structures

ESS_PERF_CUSTCALC_T and ESS_PERF_ALLOC_T have an additional field, *dataLoadOption*. Generated calculation or allocation values can be added to existing values, instead of overwriting them.

Features Introduced in Earlier Releases

Use the Cumulative Feature Overview tool to create reports of new features added in prior releases. This tool enables you to identify your current products, your current release version, and your target implementation release version. With a single click, the tool quickly produces a customized set of high-level descriptions of the product features developed between your current and target releases. This tool is available here:

<https://support.oracle.com/oip/faces/secure/km/DocumentDisplay.jspx?id=1092114.1>

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Essbase New Features, 11.1.2.4

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