

# What's New in Hyperion System 9 BI+ Essbase Analytics and Enterprise Analytics?

## Release summary

*Hyperion® System™ 9 BI+™ Essbase Analytics™ (Essbase Analytics)* and *Hyperion System 9 BI+ Enterprise Analytics™ (Enterprise Analytics)* are analytic database engines within *Hyperion System 9* that allow our customers to develop and deploy custom applications. With the 9.3 release of these modules, customers can take advantage of the market-leading usability and deeper functionality they need to manage their business.

Significant new capabilities have been incorporated. *Enterprise Analytics*, for example, now includes five built-in calendars, wizard-based time hierarchy creation, and time-aware date functions. And *Essbase Analytics* introduces “MyAnalytics,” an extension of the engine that enables off-line planning, as well as a new data export facility, giving users greater flexibility in exporting data from *Essbase Analytics*. A review of many of the key enhancements within the *Hyperion System 9 BI+* analytics platform follows.

## General Analytics Enhancements

The following general enhancements have been implemented with Release 9.3:

- **Support for 64-bit computing** has been expanded to the AIX, Solaris, Opteron, and Xeon platforms
- **MaxL Password Encryption:** User and password information stored in MaxL scripts can now be encrypted.
- **RunAs supports Batch Bursting** via the *Hyperion System 9 BI+ Financial Reporting™ (Financial Reporting)* module. An administrator can run reports “as” a specific user and the report output will reflect that user’s data/metadata security.
- **Microsoft Analysis Services (MSAS) conversion utility:** This utility helps customers create a meta-outline from an existing MSAS cube, and seamlessly migrate the MSAS implementation to the *Hyperion System 9 BI+ Analytic Services™ (Analytic Services)* environment.
- **Remove Locking Agent during Database Copy:** Users can now work with an *Analytic Services* database, even while an application copy is in process.
- **Using Reference Cubes to improve @XREF Performance:** With Release 9.3, two types of reference cubes are available: active reference cubes and passive reference cubes. These are “in memory” cubes for quick XREF calculations.
- **External Authentication Support has been removed.** If running *Analytic Services* databases in Legacy mode, native security must be used.

- **Cube Building from SAP R/3.** Release 9.3 provides customers with capabilities that will assist with modeling SAP R/3 data into *Analytic Services* and other *Hyperion System 9 Applications+*™ (*Applications+*) modules via staged SQL tables. These capabilities allow business users to easily provide their SAP experts with a mechanism to identify information that will be extracted from SAP R/3 and modeled into customized cubes.
- **MDX enhancements:** New MDX features include:
  - **String Manipulation:** New MDX functions allow string processing, which can be useful if member names have embedded information.
  - **Rank Tuples:** New MDX functions enable ranking the position of a tuple in a set.
  - **Time-Date Dimension:** New MDX functions permit analysis of date hierarchies.

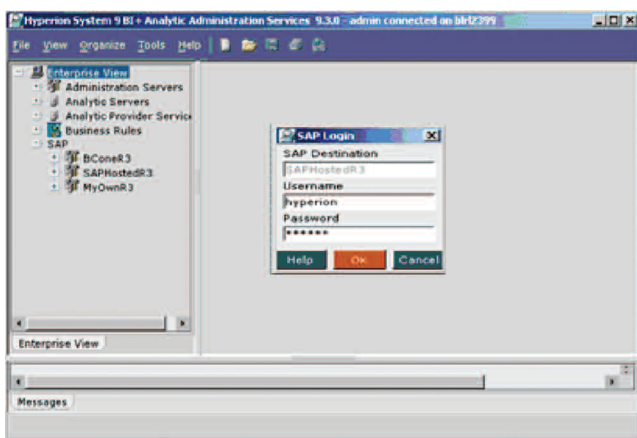


Figure 1: Release 9.3 assists you with modeling SAP R/3 data into *Analytic Services* and other *Hyperion System 9 Applications+*™ modules via staged SQL tables.

## Essbase Analytics Enhancements

The following specific enhancements to *Essbase Analytics* have been implemented with Release 9.3:

- **Database Export.** This new high performance database export gives users flexibility in specifying the subset of data to export including the option of specifying aggregates and dynamic calc members. Data can be exported “lights out” in a variety of formats including binary and ASCII, or directly into relational tables.
- **New calculation features:** Also now included in *Essbase Analytics* is a new calculation feature to remove blocks entirely filled with #MISSING cells in order to improve calculation performance. In addition, a non-consolidating members feature provides new tags that direct the calculator to ignore certain members upon calculation.
- **MyAnalytics.** This new feature is a personal version of *Essbase Analytics* that installs minimal components and uses the spreadsheet as the user interface (*Hyperion System 9 Smart View*™ (Smart View)). It has been exposed in order to support off-line planning with *Hyperion System 9 Planning*™.

## Enterprise Analytics Enhancements

The following specific enhancements to *Enterprise Analytics* have been implemented with Release 9.3:

First class time support. Typically, *Analytic Services* analyses involve time concepts, such as monthly, quarterly, or yearly sales, cost of goods sold, and profits. With Release 9.3, modeling of time-based metrics has been greatly improved by enabling *Enterprise Analytics* databases to capture the concept of time spans. *Enterprise Analytics* enables you to build a special Time-Date dimension based on the standard Gregorian calendar, an industry specific calendar, or a custom calendar.

Gregorian, Fiscal, Retail, Manufacturing and ISO8601 calendar templates are supported.

**Gregorian:** The Gregorian calendar, shown in Figure 2, is a standard calendar commonly used in departments such as Human Resources. It starts on Jan 01 and ends on Dec 31. All other calendar definitions are expressed in terms of Gregorian calendar dates.

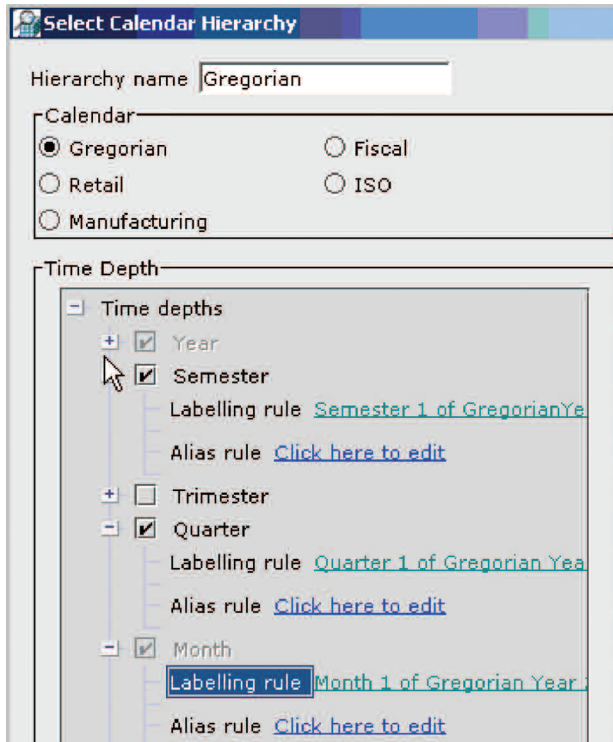


Figure 2.

**Fiscal:** The fiscal calendar provides definitions based on company reporting requirements and can start on any date, but the starting date must remain the same from year to year. Users can choose from a list of year definitions, such as a one starting on week that includes a specific date, or one starting on a specific day of a specific month. Similarly, different month definitions and week definitions are available for defining calendars.

**Retail:** This standard calendar comes from the National Retail Federation (NRF) and is modeled to analyze week-over-week data across years. It has a 4-5-4 quarter pattern with leap weeks every 5-6 years. The date differs from year to year, but it always falls in early February. When comparing year over year, it is a standard practice to omit the first week of a fifty-three week year to normalize for the extra week while keeping the same set of holidays in both years.

**Manufacturing:** The manufacturing calendar defines a thirteen period year, made up of seven-day weeks. The periods are divided into three quarters of three periods and one quarter of four periods ( $13 = 3*3+1*4$ ). Each period has four weeks with the exception of one period that has an extra week if the year has fifty-three weeks. When creating a time dimension using a Manufacturing calendar, you can choose from a list of calendar definitions, such as a definition that starts on a week that includes a specific date or one that ends on a specific week, such as the last week in July.

**ISO8601:** The ISO8601 calendar is made up of seven-day weeks. The year can start before or after the start of the Gregorian new year (Jan 1). The year is modeled to start on a day such that the first week of the ISO calendar contains the first Thursday of the Gregorian year.

In addition, time-based functionality has been enhanced so that *Enterprise Analytics* databases:

- Understand time as a continuum
- Support Cross-tab reporting of time
- Allow MDX Functions to work with time
- Facilitate loading based on time stamp

**Intelligent Aggregations.** Release 9.3 introduces the ability for the user to provide “hints” to the engine in order for aggregations to be pre-optimized. Users can influence the view selection by specifying areas that are not often queried and should not be considered for materialization. Query optimization works in concert with these “hints” for improved query performance.

## Analytic Integration Services Enhancements

With Release 9.3, *Hyperion System 9 BI+ Analytic Integration Services™* (Analytic Integration Services) provides the option of selecting from alternate source tables when building and loading analytic databases. Users will have the ability to switch the fact table, allowing customers to alter the table being used for the data load. This will also assist with the support of conformed dimensions.

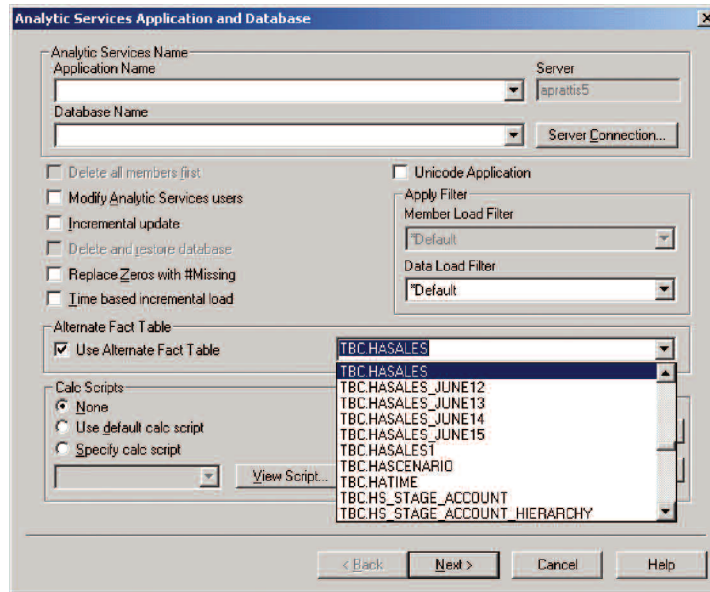


Figure 3. Analytic Integration Services now supports the selection of alternate fact tables

Analytic Integration Services now supports spaces in table names. These tables can be selected by using quotation marks ("" ) when identifying them.

Analytic Integration Services incorporates support of 64-bit functionality, giving it full compatibility with the 64-bit processing of *Analytic Services*. Analytic Integration Services supports 64-bit processing on all platforms supported by *Analytic Services*.

## Analytic Provider Services

### New middle tier provider

*Hyperion System 9 BI+ Analytic Provider Services™ (Analytic Provider Services)* is a new middle-tier services provider to *Analytic Services* for Java API, *Smart View*, and XMLA clients (see Figure 4). Analytic Provider Services supports highly concurrent analytical scenarios and provides scalability and reliability in a distributed Web-enabled enterprise environment. It replaces and subsumes the capabilities of the following:

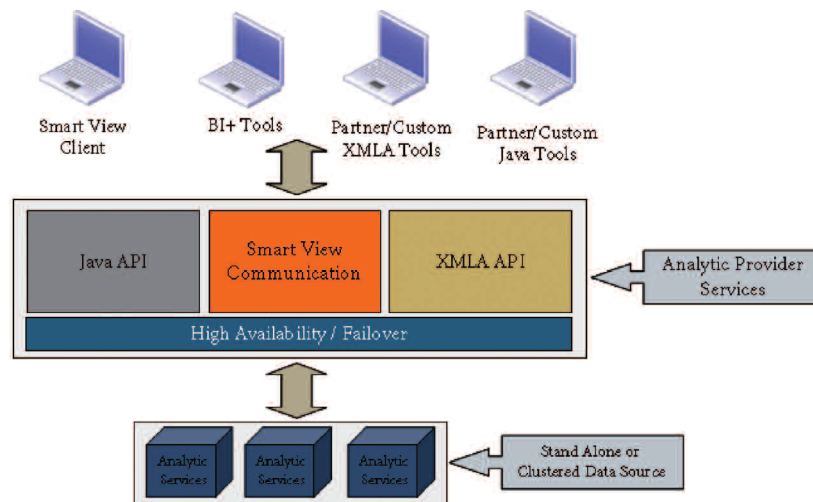


Figure 4.

- *Hyperion System 9 BI+ Analytic High Availability Services™ (Analytic High Availability Services): Analytic High Availability Services* works with *Essbase Analytics* and *Enterprise Analytics* to bring enterprise-level performance and reliability to *Analytic Services* applications.
- *Analytic Services Smart View* Provider
- Java API: Java consumers now have two means by which they can deploy and use JAPI-Embedded JAPI, and the 3-tier Analytic Provider Services mode. Embedded JAPI is a simple deployment of the JAPI solution through a collection of ".jar" files (and related property files) that a JAPI client can embed within their application. In the Embedded mode, JAPI clients will talk directly to *Essbase Analytics* through the Java API.
- XMLA Provider to *Analytic Services*: XMLA enhancements make the XMLA provider compliant with the specifications of the XMLA council. It is a first class API capable of providing robust data access from custom clients into the *Analytic Services* tier.
- Load balancing requests to a cluster of analytic servers
- High availability and failover capability for analytic servers
- Connection timeout to analytic servers
- Alias support for database clusters
- Thread monitoring to track bad cluster components
- Ease of administration through *Hyperion System 9 BI+ Administration Services™* Console
- Ease of installation, deployment, and configuration

### Learn more

Visit [www.hyperion.com/products](http://www.hyperion.com/products) for more information on what's new in Release 9.3 of *Hyperion System 9* software. Or for more immediate assistance, go [www.hyperion.com/contactus](http://www.hyperion.com/contactus) or call your Hyperion sales representative.

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Analytic Provider Services enables the following functionality for Java API, *Smart View*, and XMLA clients.

- Clustering of analytic servers
- Connectivity and session management to analytic servers

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