Oracle Essbase

Oracle Essbase is the market leading online analytical processing (OLAP) server for enterprise performance management (EPM) applications. Designed specifically for business users, Oracle Essbase supports forecasting, variance analysis, root cause identification, scenario planning and what-if modeling for both custom and packaged applications. It can be tightly integrated with multiple data sources and the information generated can be delivered through a wide variety of reporting options. Engineered for scalability, security, and rapid-response, Oracle Essbase brings advanced analytics to the business user to enable greater understanding of the business, alignment of resources and improved business results.

**KEY BUSINESS BENEFITS**

- Supports a large user community across massive data sets
- Uses innovative, visual, easy-to-understand interfaces
- Facilitates understanding of customer segments and behavior patterns
- Enables rapid discovery of trends and highlights these trends in large data sets
- Delivers rapid batch load and calculation times
- Supports highly dimensional models
- Leverages investments in legacy systems

**KEY FEATURES**

- Move beyond silos of business intelligence and disconnected spreadsheets
- Real-time analysis of key customer data, finances and spending, and product profitability
- Cost-saving links to existing systems
- Speed-of-thought analysis for thousands of concurrent users
- Fast and easy development, deployment, and maintenance
- Robust security system

**Richest User Experience**

Oracle Essbase brings powerful online analytics processing (OLAP) directly to the business user. Query results can be displayed through interfaces of the user’s choice, including Microsoft Office tools, and the variety of intuitive reporting options which Oracle offers. With the advantage of consistent, sub-second response times, users can interact with the data at the speed-of-thought without support from technical experts. This ability to “converse” with the data—understanding that an answer to one question leads to another—enables business users to better identify and analyze the metrics and relationships that influence performance, and to make better, more informed decisions. Users can share their saved reports, and modify their appearance, or create powerful additional queries as new questions arise.

**Multi-dimensional Representation and Extension**

Data is categorized in Oracle Essbase in the form of dimensions, a dimension could for instance represent a time period or a product or a customer. Thus a query may be to compare actual sales for a product in a specified state during the month of March 2010 with the corresponding budgeted value for that month. There are often relationships between members of a dimension and these relationships are represented by a hierarchy. A hierarchy enables mathematical calculations to be executed against the data, so for example all the sales for individual states can be aggregated to create a value for the entire USA. Oracle Essbase allows multiple hierarchies to be established so data can be speedily calculated or aggregated. Structures in Oracle Essbase such as dimensions and hierarchies are displayed in the “Outline”, which is a graphical representation that enables authorized users to easily review and maintain structures as business requirements change.
Users can extend data by using metrics or drivers to estimate what results will be in the future. These driver metrics can be based upon history, trends or entered by the user. These forecasted results can be compared with actual results and the reasons for variances investigated so that more accurate forecasts may then be produced. Users can also create further scenarios where they may model for exceptional changes in business and be prepared for turbulent trading conditions through this “what-if” analysis. This assists fast resolution of business issues and for risks to be managed.

Most Highly Advanced Calculation Engine

At its core Oracle Essbase contains a high performance calculation engine with over 350 pre-built, out-of-the-box functions. This comprehensive library enables Oracle Essbase to scale from simple aggregations to complex, cross-dimensional allocations. Financial formulas of all types are included to support business model development. In addition, business rules can be created to manage complex calculation requirements using a spreadsheet-like syntax.

Reporting Options

A wide variety of users, from many departments, will want to use Oracle Essbase. Delivering the information to them in a suitable form is of paramount importance. Data can be delivered to Oracle Business Intelligence Suite Enterprise Edition and in addition presented through a variety of formats including interactive dashboards, financial and production reports, Microsoft Office and advanced data visualization tools. Each of these reporting options suits a particular purpose, but all use the same data, and common data definitions ensuring consistency across the enterprise.

Figure 1: Best-in-class interfaces provide meaningful insights for business users
Oracle enterprise performance management applications are an integrated, modular suite that supports a broad range of strategic and financial performance management processes and helps unlock business potential.

**RELATED PRODUCTS**

Oracle enterprise performance management applications provide the following capabilities:

- Strategy Management
- Financial Close and Reporting
- Planning, Budgeting and Forecasting
- Profitability and Cost Management
- Enterprise Data Governance

## Open, Scalable and Secure

Oracle Essbase can be populated through a wide variety of tools that allow it to access any commonly recognized data source; the data can then be combined into a single analytic view, so the entire enterprise can be consistently reported upon.

Many organizations have multiple, large data sources from which the data needs to be extracted. Oracle Essbase performance is unmatched, offering inherent capabilities to optimize data load and recalculate data sets so results are speedily available to the users. Oracle Essbase enables detailed analysis of terabytes of data for thousands of simultaneous users providing up-to-the-minute, dependable information. This high-speed analysis provides business users speed-of-thought responsiveness to manage performance in real time.

User scalability features such as caching, multithreading, partitioning, and cross-platform support enable IT professionals to use fewer servers to support many analytic applications and large user communities. Supporting 64-bit architectures, Oracle Essbase enables larger analytical models with shorter calculation times, increasing the potential size of analytic applications, and the number of concurrent users. In addition, its n-tier architecture provides connection pooling, load balancing, and automatic failover so IT employees meet service-level requirements. With its High Availability Services feature, Oracle Essbase delivers distribution of processing across multiple physical servers to increase application availability.

With the potential to support thousands of users accessing significant volumes of data, security is a priority. Oracle Essbase leverages the Oracle EPM system foundation’s common authentication system offering both high level and detail cell level controls and the support of Group or Role based security models. In addition, Oracle Essbase supports Oracle Fusion Middleware security components like Oracle Internet Directory, Oracle Identity Management, and a single sign-on for Oracle Enterprise Performance Management Workspace.

## System Maintenance and Deployment

Manageability features within Oracle Essbase drive down IT costs. These features include packaged business product management applications; J2EE; .NET development tools; certified enterprise resource planning/customer relationship management application integration adapters; administrative wizards; automated maintenance scripts; Unicode support; and reusable dimensions, hierarchies, and business rules. The open architecture also lowers costs to develop, deploy, and maintain by leveraging existing IT skill sets. In addition, Oracle Essbase supports efficient, automated backup and restoration of the database as well as lifecycle management that provides a consistent way for administrators to migrate applications and artifacts across product environments.

Oracle Essbase leverages Oracle’s Hyperion Foundation Services and Oracle Fusion Middleware to provide a common platform of services upon which companies can create, deploy, and manage EPM applications in one place.