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An Oracle White Paper
April 2013

Oracle E-Business Suite

In-Memory Cost Management

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Contents

Executive Summary.....	1
Introduction to Engineered Systems	2
Oracle Exadata Database Machine	2
Oracle Exalytics.....	2
Oracle Exalogic	3
Oracle SPARC SuperCluster.....	4
Technical Benefits of Oracle’s Engineered Systems.....	5
Overview	5
Exadata Unique Features	6
Exalogic Unique Features.....	8
Benefits Summary	8
Product Profitability Planning and Analytics.....	12
Maximize Revenue and Increase Profits.....	12
Safeguard Current and Future Margins	13
Optimize Operational Costs and Working Capital	13
Discover Hidden Opportunities to Further Shrink Operations Costs.	13
Eliminate Variances and Improve Resource Allocations	14
Assure Timely Compliance & Financial Reporting, and Accurate Audits	15
Streamline Financial Overview of Supply Chain Transactions	15
Increase Financial Close Efficiency	15
Conclusion	17

Executive Summary

In order to grow profitability over the long term, businesses must adapt quickly to continuously changing market needs and efficiently manage their supply chains to optimally address those changing needs. A critical component of change strategies for improved profits and margins is tight control of costs. Effective cost management impacts the entire enterprise and requires that companies adapt to change quickly. Adopting such changes presents added challenges when trying to grow margins and maximize revenue/profits while simultaneously attempting to streamline budgeting, consolidate financials, and meet on-time statutory reporting. While most businesses want to successfully manage their costs so as to monitor the impact of cost changes on margins, maximize resource allocations, and optimize their product mix, that is much easier said than done for most companies today.

Today, large manufacturing organizations struggle to assess cost information at a sufficiently granular level because the available tools typically have poor response times when processing complex data such as a multi-level bills of material with their associated part costs, supplier data, and sales / revenue numbers. Because cost management remains highly manual and decentralized, organizations that want to perform detailed cost analysis often cannot access the information quickly enough to take actionable decisions that benefit the businesses in time to make a difference.

Oracle In-Memory Cost Management ("IMCM") solves this problem. IMCM is a new set of application tools that provides a bottoms-up approach to maximizing profit margins by enabling near real-time insight into all aspects of cost management. IMCM is built ground up to leverage Oracle's unique hardware and technology capabilities: Exadata's industry-leading data storage technologies, Exalogic's middle tier technology, and Exalytics' in-memory applications, all connected using InfiniBand technology to deliver extreme performance.

By eliminating the time delay of long data processing run times, Oracle In-Memory Cost Management makes possible the analysis of complex data in near real-time enabling businesses to make sound decisions in time to effectively minimize costs and maximize both margins and profits. IMCM presents cost accountants and business users with an intuitive graphical user interface to perform what-if simulations for variations in costs and sourcing alternatives, and shows the resulting impact on both COGS (Cost of Goods Sold) and gross profit margins instantly. The solution also enables cost accountants to visualize and quickly analyze cost variances across the supply chain and provide key location-based comparative cost insights. For example, when the same product is manufactured in multiple locations, cost accountants now can visualize quickly and easily this information across different locations to effectively track cost deviations at each manufacturing site. Additionally, they now can perform root-cause analysis on specific cost variances and take corrective actions to mitigate cost overruns. Oracle In-Memory Cost Management also enables businesses to monitor and resolve period-close bottlenecks ensuring a shorter run-time for period-end processing and financial period close.

This white paper outlines the benefits that businesses can achieve with Oracle In-Memory Cost Management.

Introduction to Engineered Systems

Oracle's engineered systems combine best-of-breed hardware and software components with game-changing technical innovations. Designed, engineered, and tested to work best together, Oracle's engineered systems can power the cloud or streamline data center operations to make traditional deployments even more efficient. The components of Oracle's engineered systems are preassembled for targeted functionality and then—as a complete system—optimized for extreme performance. By taking the guesswork out of these highly available, purpose-built solutions, Oracle delivers a solution that is integrated across every layer of the technology stack—a simplicity that translates into less risk and lower costs for your business. Only Oracle can innovate and optimize at every layer of the stack to simplify data center operations, drive down costs, and accelerate business innovation.

Oracle Exadata Database Machine

Oracle's Exadata Database Machine is Oracle's database platform delivering extreme performance for database applications including Online Transaction Processing, Data Warehousing, Reporting, Batch Processing, or Consolidation of mixed database workloads. Exadata is a pre-configured, pre-tuned, and pre-tested integrated system of servers, networking and storage all optimized around the Oracle database. Because Exadata is an integrated system, it offers superior price-performance, availability and supportability. Exadata frees users from the need to build, test and maintain systems and allows them to focus on higher value business problems.

Exadata uses a scale-out architecture for database servers and storage. This architecture maintains an optimal storage hierarchy from memory to flash to disk. Smart Scan query offload has been added to the storage cells to offload database processing. Exadata implements Smart Flash Cache as part of the storage hierarchy. Exadata software determines how and when to use the Flash storage for reads and write as well as how best to incorporate Flash into the database as part of a coordinated data caching strategy. A high-bandwidth low-latency InfiniBand network running specialized database networking protocols connects all the components inside an Exadata Database Machine. In addition to a high performance architecture and design, Exadata offers the industry's best data compression to provide a dramatic reduction in storage needs.

Oracle Exalytics

As analytic applications become more sophisticated and calculation-intensive, the use of mobile BI expands, user adoption increases, and data volumes explode making the need for speed and efficiency more important than ever. In-memory technology can dramatically accelerate analytic performance. Oracle Exalytics In-Memory Machine is the industry's

first engineered system for analytics that combines market leading BI foundation, in-memory analytics software, and best-in class hardware engineered and optimized to work together to deliver extreme performance for Business Intelligence and Enterprise Performance Management applications. As a result, users can visually navigate and drill into information at the speed of thought, without limits on the complexity of their questions or the volume of the underlying data. Exalytics drives a new class of smarter and more powerful analytic applications that simply weren't possible using conventional BI software and generic hardware configurations.

Oracle Business Intelligence Foundation running on Oracle Exalytics has been specially enhanced to take advantage of large memory, processors, concurrency, storage, networking, operating system, kernel, and system configuration afforded by the Oracle Exalytics hardware. Oracle TimesTen for Exalytics has been specially enhanced for analytical processing at in-memory speeds. With lightening fast scan speed of up to 100 million rows/second and up to 10x columnar compression, TimesTen for in-memory analytics delivers faster reports & dashboards for departmental as well as enterprise wide consumption.

Oracle Exalogic

Oracle Exalogic is an Engineered System on which enterprises deploy Oracle business applications, Oracle Fusion Middleware or third-party software products. Exalogic comes pre-built with compute nodes, memory, flash storage and centralized storage, all connected using InfiniBand in a high redundancy architecture delivering five-nines availability, with fault tolerance and zero-down-time maintenance.

Exalogic dramatically improves performance of Oracle Applications, Fusion Middleware and 3rd party applications without requiring code changes and reduces costs across the application lifecycle, from initial set-up to on-going maintenance, as compared to conventional hardware platforms. Oracle has made unique optimizations and enhancements in Exalogic firmware, Exalogic software, and in Oracle's middleware and Oracles applications. These include on-chip network virtualization based on near zero latency Infiniband fabric, high-performance Remote Direct Memory Access, workload management in Oracle Weblogic server and optimizations in Oracle Coherence and Oracle Traffic Director. Exalogic includes support for a highly optimized version of the Oracle VM, which significantly outperforms comparable virtualization solutions and is an ideal consolidation platform for Oracle Applications. Templates to simplify install, deployment and configuration of Applications on Exalogic are available.

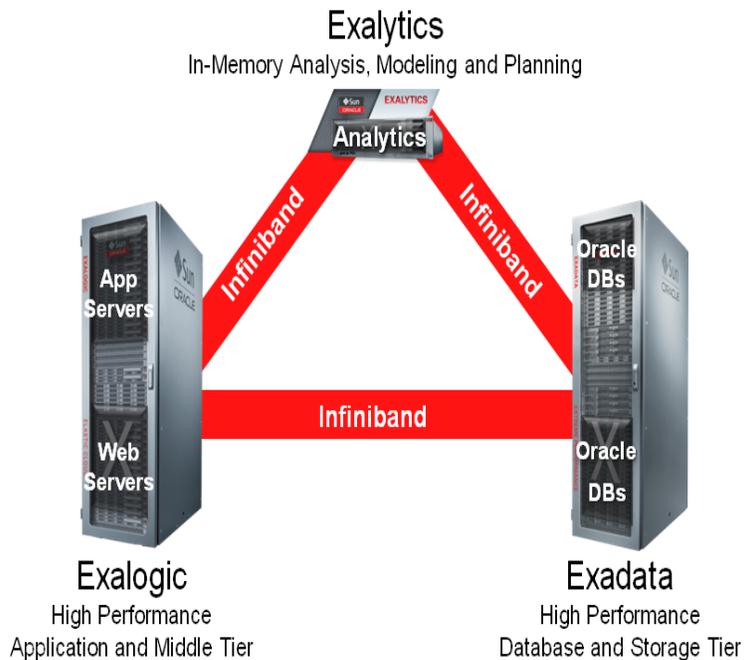


Figure 01: Engineered Systems: Exalogic, Exadata, Exalytics; Applications, Database and Analytics. The fastest, easiest path to unbeatable application performance

References

[Oracle Exadata Database Machine Brochures and Data Sheets](#)

[Oracle Tech Network Oracle Exadata Database Machine](#)

[Oracle Exalogic Elastic Cloud Overview](#)

Oracle SPARC SuperCluster

Similar to Engineered Systems such as Exadata, Exalogic, Oracle E-Business Suite can be deployed on Oracle's SPARC SuperCluster to achieve high availability, performance, scalability and environment consolidations. Here is a brief description of Oracle's SPARC SuperCluster's technical capabilities.

Oracle's SPARC SuperCluster is the world's most efficient multi-purpose engineered system, delivering extreme efficiency, cost savings, and performance for consolidating mission critical applications and rapidly deploying cloud services. Oracle's SPARC

SuperCluster represents a complete, pre-engineered, and pre-tested high-performance enterprise infrastructure solution that is faster and easier to deploy than a collection of individual database and application servers. The system combines innovative Oracle technology—the computing power of Oracle’s SPARC servers, the performance and scalability of Oracle Solaris, the Sun ZFS Storage Appliance, the optimized database performance of Oracle Database accelerated by Oracle Exadata Storage Servers, and a high-bandwidth, low-latency InfiniBand network fabric—into a scalable, engineered system that is optimized and tuned for consolidating mission-critical enterprise applications.

Oracle’s SPARC SuperCluster provides both the capacity for growth, as well as the fine-grained server virtualization needed to isolate individual application components. Deployment speed, application performance, and availability can all be optimized with the multiple layers of enterprise application infrastructure consolidated onto a high-performance, highly available SPARC SuperCluster system. Designed as a pre-configured, pre-tested, and ready-to-deploy SPARC SuperCluster engineered system, the solution provides a complete and optimized infrastructure solution for applications, built around robust compute, networking, storage, virtualization, and management resources. The result is a system that is orders of magnitude easier to manage, and up to five times faster to deploy than alternatives, all while occupying considerably less real estate requiring less power. Furthermore, the SPARC SuperCluster system provides full built-in redundancy resulting in a highly reliable infrastructure without single point of failure. An issue with one component will not impact other components of the system offering true isolation. Customers can consolidate multiple Oracle E-Business Suite environments with minimum disruption, without fear of performance degradation, and the ability to achieve required service levels.

Technical Benefits of Oracle’s Engineered Systems

Overview

Internal benchmarking indicates that Oracle E-Business Suite running on Oracle’s Engineered Systems performs 3 to 10 times faster for forms and self service applications depending upon the concurrency load profile. And linear scaling allows for very large deployments and multiple applications to run simultaneously while maintaining consistent response times. Oracle’s Engineered Systems are architected to deliver maximum availability, high performance, and scalability helping Oracle E-Business Suite customers to consolidate environments, and reduce server footprint resulting in an overall reduction in cost of application ownership.

Here are some of the technical benefits delivered by Engineered Systems:

- Oracle E-Business Suite applications consists of many batch processing programs that create large workloads. These workloads are highly CPU intensive. High

concurrency of these workloads requires systems with large memory capacity with large Systems global area (SGA) and Program global area (PGA) capable of processing high speed disk input/output (I/O). Oracle's Engineered Systems are architected to deliver these superior technical capabilities to manage such large workloads.

- Engineered systems can handle twice as many users per core compared to other servers delivering the scalability required to add more application users during growth and expansion.
- Linear Scaling easily supports very large deployments.
- Resource Manager can help consolidation of database and application environments by controlling CPU usage, managing CPU contention via instance caging, controlling disk I/O usage, and managing contention via IORM's inter-database resource plans. Customers can achieve higher throughputs as more transactions can be processed using single Exadata core compared to other servers.
- Exalogic has been engineered to leverage a technique known as Single-Root I/O Virtualization to eliminate virtualization overhead and deliver maximum performance and scalability. Mission-critical server virtualization offers a whole new level of consolidation where multiple virtual machines are sharing a single physical server in order to maximize the utilization of server hardware, while minimizing associated cost.
- Oracle VM template for Exalogic reduces installation and configuration time and allows rapid deployment of Oracle E-Business Suite applications.
- Oracle E-Business Suite customers can load balance web and forms servers, configure parallel concurrent processing and configure Oracle RAC and Oracle Data Guard for high availability.
- Oracle Enterprise Manager Cloud Control (EM) helps with Exadata manageability and provides a composite view of all health indicators of a cell or cell group to diagnose and troubleshoot performance problems efficiently.

Oracle In-Memory Cost Management customers benefit from using following unique features of Oracle's Engineered Systems:

Exadata Unique Features

Exadata Smart Flash Cache

Exadata Smart Flash Cache uses Flash memory to dramatically reduce the time to read and write database and log records. The intelligence in Smart Flash Cache transparently moves active database blocks from disk to flash in real time, thus ensuring that "hot" data is in

Flash memory when the next access occurs. Blocks that should not be in Flash are similarly recognized, maximizing the amount of space in Flash for active data.

Internal bench marks for Oracle E-Business Suite have shown following results as a result of Smart Flash Cache:

- Average I/O latency reduced by 58% and no special tuning is required to achieve I/O performance improvement.
- Log file sync events improved by 5% and no special tuning is required to achieve log file sync event improvements

Exadata Smart Scan

Exadata Smart Scan speeds up data-intensive queries by leveraging the processing power of Exadata Storage Servers to scan and filter out results. By moving queries to storage instead of moving the data to the database servers, long-running reports often complete 10 times faster than conventional systems.

InfiniBand

The use of InfiniBand as the networking fabric within Exadata ensures the lowest latency for messages and the highest bandwidth for data transfers. High-speed transactions as well as data-intensive queries and reports reap the benefits from InfiniBand. Oracle E-Business Suite benefits resulting from InfiniBand are:

- 30-40% lower CPU utilization and 100% or more throughput compared to Gigabit Ethernet
- 20% improvement in online transactions response times
- Easier scaling of E-Business Suite online transactional processing through low latency

Exadata Scale-Out Storage

Exadata Scale-Out Storage enables the full performance of Exadata to be realized against large and growing databases, without fear of bottlenecks. As the database size grows and storage capacity is added to Exadata, storage performance and networking bandwidth scale in equal proportion. As a result,

- Backups and Clones can be executed at a rate of 20TB/hour
- Faster incremental backups can be performed

I/O Resource Manager (IORM)

IORM allocates I/O bandwidth across different applications and databases, based on a prioritized allocation plan, to ensure that the most important applications get the

performance they need when they need it. As a result, customers can consolidate database and application environments without worrying about resource contention and performance degradation.

Exalogic Unique Features

Exalogic Exabus

Applications running on Exalogic utilize Exabus, the underlying InfiniBand fabric, which provides low latency and high throughput eliminating I/O bottlenecks in every application layer. Applications components are typically deployed in more than one server and Exabus provides low latency for I/O across nodes on same Exalogic rack. Access to ZFS storage device over Exabus greatly reduces latency for log file writes and other file access operations. For applications running on Exalogic and accessing the database tier on Exadata, Exabus delivers faster I/O, reduces CPU usage on both the mid-tier and DB-tier and providing higher connection pooling efficiency.

Oracle VM for Exalogic

Exalogic Oracle VM can sub-divide a physical compute node into multiple virtual machines to increase application deployment efficiency while maintaining application performance. Oracle VM has been engineered for tight integration with Exalogic Exabus I/O backplane using a technique called Single Root I/O Virtualization (SR-IOV) ensuring Oracle VM significantly outperforms comparable hypervisors from other leading vendors. The benefit of this approach is unmatched application performance. In an Exalogic configuration, the impact of virtualization on application throughput and latency is negligible.

Benefits Summary

The following table summarizes some of the technical benefits of deploying Oracle E-Business Suite on Oracle's Engineered Systems, and how they translate to business benefits.

Technical Benefits	Business Benefits
<p>High Availability</p> <p>Oracle's Engineered Systems are architected with built-in redundancy to minimize downtimes</p>	<ul style="list-style-type: none"> • Maximum productivity from uninterrupted mission critical business processes

Technical Benefits	Business Benefits
	<ul style="list-style-type: none">• Reduced business disruption• Reduced risk of failures <p>Increased regulatory compliance</p>
High Performance	<ul style="list-style-type: none">• Increased competitiveness through quick, informed decisions based on real-time access to business insights• Quick business problem solution and new opportunities development• New end user applications deployment that was not possible before, to improve business processes and employee productivity• Improved employee productivity by dramatically improving end user responsiveness• Ability to manufacture more products,

Technical Benefits	Business Benefits
	<p>fulfill more orders, react to changes quickly by reducing or eliminating the batch processing times for critical applications</p> <ul style="list-style-type: none"> • Increased revenue opportunities by timely completion of orders or services • Customer retention by increased customer satisfaction by delivering on-time services or goods and complying with service level agreements • Reduced total cost of ownership due to reduced need for developers or third party consultants required for tuning custom applications
<p>Scalability</p> <p>Oracle's Engineered Systems can scale to increase in users and transaction volumes</p>	<ul style="list-style-type: none"> • Instance consolidation • Global expansions • Efficient, rapid, low cost assimilation

Technical Benefits	Business Benefits
	<p>during Mergers and Acquisitions</p> <ul style="list-style-type: none"> • Increased business units, users or transactions without worrying about performance degradation
<p>Standardization</p>	<ul style="list-style-type: none"> • Reduced total cost of ownership • Simplified deployments • Rapid deployments across enterprise in multiples business units and multiple regions
<p>Storage improvements for Analytics</p> <p>Oracle's Engineered Systems provide several advanced methods of compression technologies</p>	<ul style="list-style-type: none"> • IT costs savings by reduced storage costs • Reduced IT costs by consolidations

Product Profitability Planning and Analytics

Maximize Revenue and Increase Profits

In order to accurately calculate margins and maximize profits, companies must maintain large amounts of both current and historic cost-related data. Making the critical decisions needed to realize the most profitable product mix requires complex multidimensional analyses and detailed what-if cost simulations on that vast body of cost data. Further, cost data for current transactions is changing constantly because of many factors across the supply chain and can vary significantly even with small changes to supplier costs for purchased components, landed costs for transportation, delivery-related expenses (customs, duty, etc.), as well as manufacturing costs on the shop floor. In order to identify optimal pricing for finished goods, businesses must analyze the impact to the profit and margins of their product line for such cost variations, inventory valuations, etc. Yet, even if they have some such capabilities, solutions available today take an enormous amount of time to obtain, consolidate and provide holistic views of the data for users to analyze and take action.

Accurately viewing the impact of cost changes typically is a very labor-intensive process. Despite the fact that most ERP systems, including Oracle's E-Business Suite, provide cost analysis tools, business users at most companies end up performing their costing activities manually because of the processing time required to achieve meaningful analyses. By the time businesses are able to translate the impact of cost changes into actionable decisions, profits and margins have been impacted, typically not for the better. Most analysis is often done retroactively because information is obtained too late. In contrast, Oracle In-Memory Cost Management automates many of the tasks that business users now perform manually in order to provide what-if simulations in near real-time and data visualizations to perform analyses that previously were impossible to achieve.

Oracle's Cost Impact Simulator and Gross Profit Analyzer provide the ability to perform comprehensive what-if analysis on complex multi-level bills of material, recipes, and routing data in near real time. Executives and cost accountants using Oracle's Cost Impact Simulator and Gross Profit Analyzer now are able to arrive quickly at actionable information that allows them to view and set cost element rates to accurately compute manufacturing costs and immediately view its impact on gross margins. Cost accountants now have the ability to investigate the impact of any granular level cost change by simply identifying the components that are changing, and then instantly visualize the impact of the change with the Cost Impact Simulator. Furthermore, users also can perform additional what-if analyses to investigate alternate simulations. Simulation scenarios can be used to instantly investigate impact to margins not only to the current period, but also for the downstream impact for unshipped orders and forecasted demand.

Cost Impact Simulator and Gross Profit Analyzer rely on a combination of technologies built into Exadata and Exalytics (networked with high-bandwidth, low-latency InfiniBand) to provide cost analysts and business users with the ability to efficiently perform analysis of

cost changes and their impact on gross profits and margins in near real time. With ERP data stored in Smart Flash Cache, these combined technologies speed up data retrieval with Smart Scan to deliver extreme performance coupled with the data visualization and analysis using Exalytics.

Safeguard Current and Future Margins

Business users currently leverage data from various historical records and past general ledger (GL) periods to set rates and costs for material, resources, and overheads that are used to value transactions in both currently active as well as in future periods. The tools available today, coupled with manual processes that business users must now perform for activities such as elemental cost rate set up, cost planning, and forecasting, are both slow and error prone.

Oracle's Cost Planning and Optimization and Oracle's Cost Forecasting provide users with the ability to set accurate component-level costs based on various inputs. Business users now are able to plan target costs and predict margins based on various user-selected scenarios. To determine costs, business users now are able to access data from multiple sources such as GL balances, expense data, budgets, maintenance related costs, manufacturing and other variances from the shop floor, scrap valuations, and *ad hoc* costs incurred over time. Cost Forecasting allows users to accurately simulate future costs with statistical formulae applied to historical cost trends, including the influence of outside parameters such as inflation, competitive pricing, discounts, and potential tax increases.

Costing applications are computationally intensive and need to process large amounts of data. Oracle's Cost Planning and Optimization and Oracle's Cost Forecasting crunch those huge data sets quickly by leveraging Essbase and Business Intelligence Foundation Suite running in-memory on Exalytics to provide immediate results, and benefits, to business users.

Optimize Operational Costs and Working Capital

Discover Hidden Opportunities to Further Shrink Operations Costs

Most product-centric businesses typically have manufacturing and operations spread across multiple locations. Developing a cost structure that is the most profitable for the entire business is complex, labor intensive, and time consuming. Creating an optimal pricing strategy with incomplete cost structures is often a "best guess". Ideally, manufacturing the same finished good product in more than one plant or location should have similar costs, but this usually is not the case.

Cost controllers are tasked with finding cost savings from operating costs and then are asked to disseminate those savings across all locations. Yet, investigating costs to uncover new savings opportunities is a complex task given the large volumes of data that need to be processed: Complex multi-level bills of material, intricate recipes and alternates used in consumer packaged goods (“CPG”) industries such as food processing, chemicals or pharmaceutical manufacturing, routings and resource allocations that vary with complexity at the shop floor, supplier sourcing rules, and global inter-organization networks for procurement of material. Though the requisite data often exists across the ERP system, business users often use disparate and unproven tools that are time consuming and which lead to inaccuracies.

Oracle’s Cost Comparison Tool allows processing and visualization of vast amounts of data quickly so that business users now can identify, view, and analyze details of cost structures across multiple locations and quickly take corrective actions. Fast data retrieval and processing is driven by Exadata’s hierarchical data storage with Smart Scan and Smart Flash Cache. Visualization and near real-time data analysis is driven by Exalytics’s in-memory software solution optimized specifically to leverage components networked via a high-bandwidth low-latency InfiniBand network across servers.

Eliminate Variances and Improve Resource Allocations

Business users spend considerable time and effort in deriving, setting up, and fine-tuning costs. Deviations from pre-determined standards that are caused by variations in cost of manufacturing and operations at the shop floor, transportation of goods, utility services and overheads consumed, and price fluctuations of raw material from supply base are captured and reported as variances. Cost accountants are required to investigate variances in order to prevent recurrences. Long-running queries and laborious data analysis with *ad hoc* tools have made business users look to alternates that can help them perform analyses quickly. Accuracy of costs are of foremost importance for manufacturing environments, so it is critical that the causes of variances be investigated immediately and appropriate corrective actions be made quickly.

Oracle’s Variance Analyzer and Cost Comparison Tool provide cost accountants with the ability to investigate the root cause of the observed variances easily so that they can take appropriate corrective actions quickly. For example, a recurring purchase price variance on a particular item, part, or raw material could mean regular purchases from a non-standard supplier. Re-negotiation of contracts with the lowest-cost but best quality option would benefit the businesses tremendously.

Integration between Variance Analyzer and other Oracle In-Memory Cost Management products enables users to continue the investigation from various different perspectives. For example, an investigation on Purchase Price variance (PPV) could lead business users to conclude that an alternate supplier may be a more cost-effective choice. In this

scenario, the Cost Impact Simulator can be used to simulate the business-wide impact of such a cost change and its impact across all product lines.

The Variance Analyzer leverages both Exadata's Smart Scan to speed up data-intensive queries by leveraging the processing power of Exadata servers to scan and filter out results as well as the in-memory Oracle Business Intelligence Foundation suite on Exalytics to enable cutting-edge visualization, speedy search, and the quick investigation to the root cause of such variances.

Assure Timely Compliance & Financial Reporting, and Accurate Audits

Streamline Financial Overview of Supply Chain Transactions

In order to close their books and perform statutory reporting accurately, businesses require a clear view of costs, including a drill down into the sources of any deviations. Business users need to provide detailed insight into margins and profits and to highlight any areas of concern to their management. As a part of their ongoing audit procedures, companies need to constantly track, investigate, and analyze differences between the values posted to their financial books, and to tally accurately any differences to the valuation sources from the sub-ledgers. For instance, differences could arise from physical inventory balances or from material receipts from un-invoiced purchases. These discrepancies require timely intervention and are highlighted by the audit which in turn benefits from accurate insight into accounting and account balances.

When cost accountants investigate documents that are created from multiple sub-ledgers, such as global purchasing agreements that could deliver raw material to multiple organizations or manufacturing sites, users typically have to sift through large amounts of transactional data in order to compare actual values to deviations to ensure correctness and accuracy. This is usually very manual, time consuming and inaccurate. Today, business users have to run multiple transactional and operational reports from the ERP system to get the numbers, and then must tally the balances manually, and --in many cases-- also perform manual adjustments to correct the data errors.

Oracle's Transaction Accounting Register and Accounting Reconciliation provide easy-to-use search and advanced data visualizations because of advanced storage and retrieval technologies in Exadata coupled with the in-memory search engine and analytics software on Exalytics, with the two servers connected over InfiniBand.

Increase Financial Close Efficiency

Shortening the financial period close run-time is a critical need for all enterprises. Large amounts of costing and transactional accounting data are required for federal and

statutory consolidation and reporting during every fiscal period. Information that is collected, aggregated, and analyzed, also is used as input for the business' next fiscal period. Cost accountants examine the details of material, overhead, and resource rates constantly and update them for accuracy at the end of fiscal period. Given the need to consolidate data from global business units, these activities are time-consuming and often lead to lengthy period close run-times. Today's ERP-based tools and technologies do not fully alleviate the key pain points needed to address critical business processes and shorten the time it takes to close fiscal periods.

Typically, period end activities at large enterprises take from days to sometimes even weeks. It is critical that tools help shorten these period-end activities by automating processes. Oracle Period Health Check and Accounting Reconciliation are new capabilities in Oracle In-Memory Cost Management solution built specifically to leverage technology from Exadata to facilitate fast financial data retrieval and to leverage Exalytics to provide holistic views of cost and accounting data quickly. This provides business users with the capability to analyze and correct errors in order to mitigate any risks to a timely period close.

Conclusion

Oracle In-Memory Cost Management is a new set of application tools that provides a bottoms-up approach to maximizing profit margins by enabling near real-time insight into all aspects of cost management. Oracle In-Memory Cost Management's extreme performance is possible because of the game-changing technical innovations within Oracle's engineered systems, including smart scans, flash cache, and high-bandwidth low-latency InfiniBand networking.

Cost accountants and finance / operations managers now can use Oracle In-Memory Cost Management to quickly perform what-if simulations on complex cost data and instantly visualize the impact of changes to their business. Specifically optimized for Oracle's engineered systems, Oracle In-Memory Cost Management provides a suite of solutions to perform complex cost analyses, identify optimal profit margins, and perform cost planning and forecasting so that companies can make decisions in time to capture the highest possible profits, safeguard current margins and identify optimal future margins, streamline financial overview across the supply chain, and increase financial close efficiency.



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April 2013

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