Cisco UCS with Intel Xeon Processors: Oracle Siebel Enterprise CRM RISC/UNIX Migration

Solution Brief
December 2012



Highlights

Excellent Solution for Oracle Siebel Enterprise CRM

- Cisco Unified Computing System™ (Cisco UCS®) servers with intelligent Intel® Xeon® processors can easily meet the requirements for the various configurations of application and database servers to meet scale-out and scale-up demands for Oracle's Siebel Enterprise Customer Relationship Management (CRM) deployments.

Cost-Effective Availability

- Supported by the advanced features of Intel Xeon processors, Cisco UCS delivers outstanding reliability, availability, and serviceability (RAS) while also lowering total cost of ownership (TCO).

Greater Agility and Flexibility

- Cisco UCS provides a better, faster, more cost-efficient and scalable server architecture for Oracle Siebel Enterprise CRM with complete visibility into the results of a RISC/UNIX migration.

Exceptional Performance

- In testing, Cisco UCS, with powerful Intel Xeon processors and excellent memory capacity, was five times more responsive on some requests than the SPARC-based system and outperformed the SPARC-based system in all areas of the Siebel Enterprise CRM solution.

By moving Oracle's Siebel Customer Relationship Management (CRM) applications to Cisco Unified Computing System™ (Cisco UCS®), companies can optimize their CRM application's potential to support business innovation.

The Cisco® strategic migration procedure provides a roadmap for secure and efficient migration from Oracle SPARC to Cisco UCS with Intel® Xeon® processors with little disruption to business. Most organizations began purchasing SPARC-based servers years ago when they were the low-cost enterprise-ready solution. With the advent of industry-standard, intelligent Intel Xeon processors and reliable, available, and serviceable server solutions from Cisco, companies have a better, more cost-effective choice.

Today, business demands are changing rapidly, requiring high responsiveness to keep pace with market dynamics. The performance capabilities of current SPARC processor-based systems, which use reduced instruction set computing (RISC) processors, have fallen far behind systems based on Intel Xeon processors and are expensive to purchase and support. Additionally, software licensing can be as much as double that for systems based on Intel Xeon processors. In this context, Cisco UCS, the industry's first unified data center platform, can add great value to businesses that need to respond quickly to customers.

The capability to easily, efficiently, quickly, and cost-effectively scale a CRM solution is crucial for businesses that depend on these mission-critical applications. Traditionally, scalability is achieved simply by adding units of computing power.

With RISC/UNIX systems, as each server is added, it must be individually configured, a cumbersome and time-consuming process with many touchpoints. For example, each network connection must be manually configured.

Many existing enterprise servers are not equipped to easily handle the ever-growing demands. As a result, companies are unable to move quickly with market and customer changes. In contrast, Cisco UCS, Intel Xeon processors, and EMC VNX storage deliver superior performance and flexibility.

Excellent Solution for Siebel Enterprise CRM

Cisco UCS servers can easily meet the requirements of the various configurations of application and database servers to address the scale-out and scale-up demands for Siebel Enterprise CRM deployments. Cisco has migrated Siebel Enterprise CRM from a RISC-based platform to Cisco UCS and industry-standard Intel Xeon processors with rigorous testing and validation. Following the Cisco Validated Design, customers can achieve a smooth migration. Cisco understands how to simplify the Siebel environment (Figure 1) and reduce the downtime for the entire Siebel Enterprise CRM migration.

Cost-Effective Availability

Cisco UCS delivers outstanding reliability, availability, and serviceability (RAS) while also lowering total cost of ownership (TCO). Today's intelligent Intel Xeon processors have advanced features to proactively detect and correct errors, alerting staff to act to avoid a failure rather than react after a failure occurs. Cisco UCS is so easy to deploy that a spare server can be up and running in a matter of minutes, avoiding application downtime. Together, Intel Xeon processors and Cisco UCS provide additional security features, such as hardware-based data encryption and consistent network security profiles that can protect applications from intrusions and attacks. With Cisco UCS, businesses get the benefits of an innovative architecture that simplifies and accelerates deployment of enterprise-class applications running in bare-metal, virtualized, and cloud-computing environments.

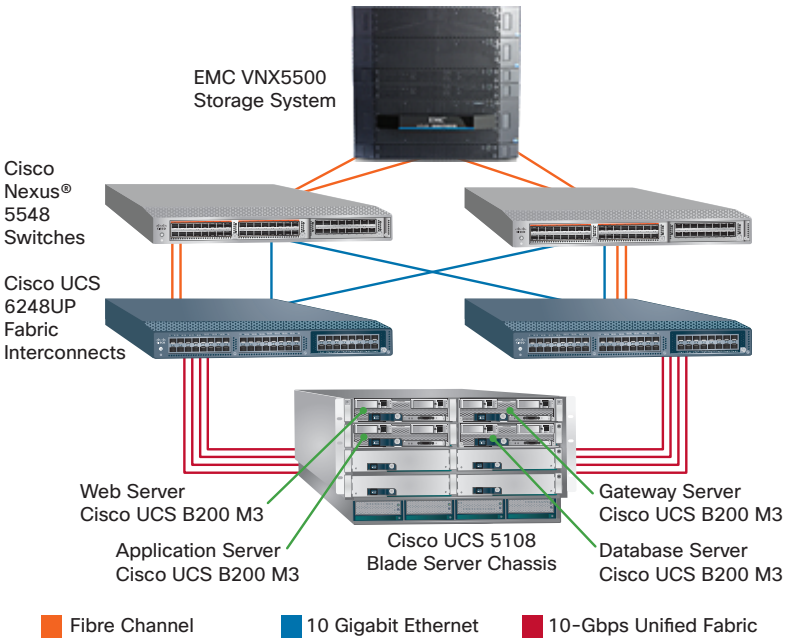

Figure 1. A Typical Siebel Enterprise CRM Environment Uses Cisco UCS B200 M3 Blade Servers and EMC VNX Storage

Cisco UCS is the first unified system that integrates computing, networking, and storage access resources. The system's unified fabric carries IP, storage, and interprocess communication with a single, high-bandwidth, low-latency Ethernet and Fibre Channel over Ethernet (FCoE) network, eliminating up to two-thirds of network infrastructure. The system

uses Cisco Fabric Extender Technology (FEX Technology) to eliminate blade server and hypervisor-resident switching, condensing three network layers into one. Cisco FEX Technology interconnects physical servers and virtual machines equivalently, with exceptional visibility, security, and control. In addition, Cisco provides among the highest memory density available in any half-width, 2-socket blade server, further reducing infrastructure and licensing costs for both bare-metal and virtualized environments.

Greater Agility and Flexibility

Cisco UCS provides a better, faster, more cost-efficient and scalable server architecture for Oracle Siebel Enterprise CRM. Cisco UCS is a self-aware, self-integrating, and self-documenting system that provides complete visibility into the results of a RISC/UNIX migration. The system is designed from the beginning so that its configuration can be programmed through software, automating server deployment so that it is fast and accurate. The system's unified, model-based management configures every aspect of the server personality, from firmware and BIOS settings to network and storage connectivity. Server deployment is reproducible and scalable, helping make the migration process efficient, smooth, and error free. Migrated applications can scale with ease, improving business agility while reducing the likelihood of configuration errors that can cause downtime. High-performance, high-capacity Cisco UCS servers with Intel Xeon processors and EMC VNX storage allow customers to scale with changing business needs, supporting growth well into the future. As business requirements change, servers can quickly be repurposed without costly onsite visits, and network infrastructure can remain unchanged.

Exceptional Performance

Cisco UCS offers some of the industry's highest-density 2-socket and 4-socket Intel Xeon processor–based rack and blade server platforms. This computing and memory density supports increased performance and capacity for demanding virtualization and large-data-set workloads. Alternatively, this technology can offer more cost-effective memory for less-demanding workloads, while still delivering outstanding performance. Intelligent Intel Xeon processors automatically and intelligently adjust server performance according to application needs, increasing performance as demand increases, while achieving substantial energy savings when performance requirements are low. Cisco UCS high-bandwidth, low-latency unified fabric brings up to 40 Gbps of network bandwidth to each half-width blade server, more than meeting the needs of Siebel Enterprise CRM and helping propel higher application performance.

Cisco UCS has been certified and has delivered industry-leading benchmarks on a wide variety of business applications from vendors

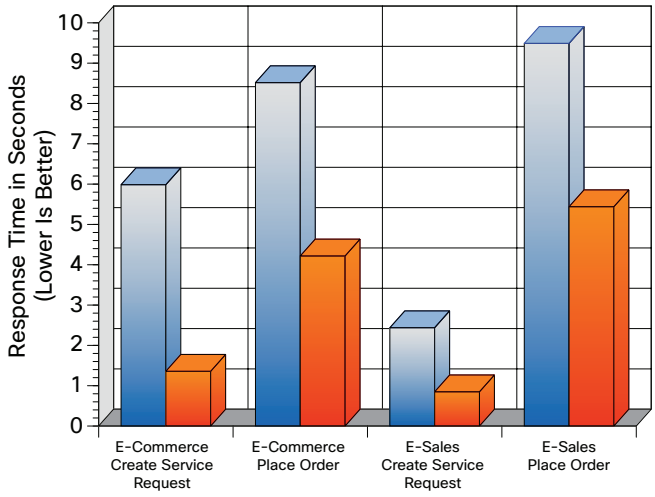

Figure 2. CPU Use Is Significantly Lower with Cisco UCS Than with Oracle SPARC Servers, Providing Greater Flexibility for Workload Spikes (Tested with Cisco UCS B200 M3 Blade Servers)

including Oracle, SAP, Microsoft, and VMware. When tested with Oracle Siebel Enterprise CRM, Cisco UCS outperformed the SPARC processor-based system in all parts of the Siebel Enterprise CRM solution (Figures 2 and 3).

Strong Partnerships

Cisco has strong partnerships with companies, including Intel and EMC. Industry-standard Intel Xeon processors deliver performance that is well suited for data-demanding workloads by delivering improved scalability and increased memory and I/O capacity. These processors help organizations adapt to rapidly changing short-term business demands while addressing requirements for longer-term business growth. Advanced reliability and security features help maintain data integrity, accelerate encrypted transactions, and increase the availability of mission-critical applications.

The EMC VNX family of unified storage platforms continues the EMC tradition of providing among the highest rates of data reliability and availability in the industry. In addition, the EMC VNX solutions can boost performance and bandwidth to address sustained data-access bandwidth rates. The new system design emphasizes storage efficiency and density as well as crucial green storage factors, such as a smaller data center footprint, lower power consumption, and improved power reporting. The EMC VNX5500 system was used in this RISC/UNIX migration scenario with Oracle Siebel Enterprise CRM. EMC worked together with Cisco to perform extensive testing and optimization to create migration guidelines, reducing risk and bringing industry-leading companies together to create a migration solution.

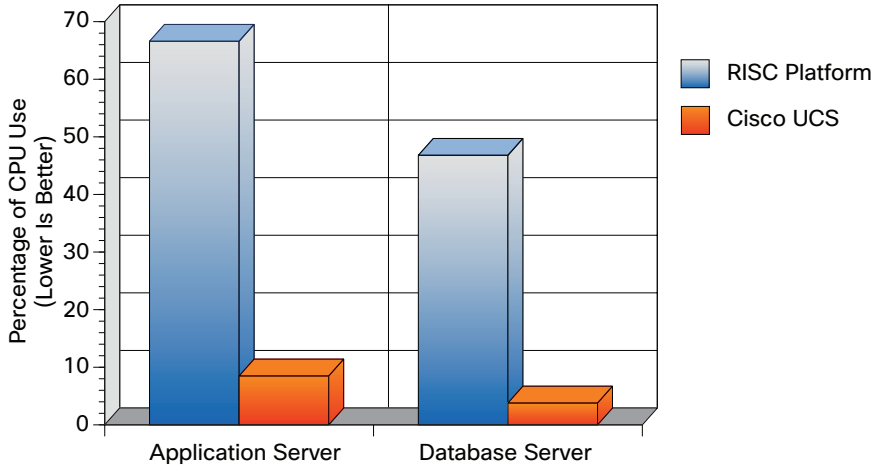

Figure 3. Cisco UCS Provides Significantly Faster Response to Queries Than the Oracle SPARC Server (Tested with Cisco UCS B200 M3 Blade Servers)

Cisco Advanced Services

Cisco RISC/UNIX Migration Services provides a proven migration process to help customers move from RISC-based UNIX environments to Cisco UCS. Using best-in-class migration methodologies, in-depth analysis tools, a robust planning process, and design and implementation guidelines, Cisco provides customers with a comprehensive and cost-effective approach to customer migration initiatives. Not all RISC/UNIX application migrations are the same, and proper planning and a sound migration methodology are required to help ensure a successful migration. Cisco RISC/UNIX Migration Services offers a flexible approach that adapts to the complexity and importance of the applications to be migrated. Cisco RISC/UNIX Migration Services uses strong relationships with many independent software vendors (ISVs), including Oracle, and has experience migrating many other commercial off-the-shelf and custom applications. The portfolio of available services includes an introductory Workshop and Proof-of-Concept Service through which Cisco works with customers to explore current applications and migration candidates, including off-the-shelf and custom applications. The

Cisco RISC/UNIX Migration Service helps develop a customer-specific migration strategy blueprint and high-level migration roadmap. The service performs migration planning, evaluates application service-level requirements, prepares a roadmap for transferring workloads from RISC/UNIX to Cisco UCS with Intel Xeon processors, and delivers a risk analysis reports. The detailed migration plan includes low-level design and functional and nonfunctional test plans. The process of migrating applications to Cisco UCS includes steps to create a golden image, perform the physical migration, and integrate the new solution into the customer's system management framework. After the migration is complete, Cisco provides operation support, including mentoring and knowledge transfer. Cisco is a highly partner-friendly server vendor and takes a flexible, collaborative approach that includes working with your choice of partners to help ensure your success.

Cisco Delivers a Smooth Migration

Oracle's Siebel Enterprise CRM applications, running on Cisco UCS with Intel Xeon processors and EMC VNX storage can provide cost-effective availability and reduce TCO at the platform, site, and organizational levels. The excellent performance of Cisco UCS provides increased responsiveness to users to make them more effective, promoting business innovation. Cisco UCS has a simplified architecture and point-and-click management that can increase IT staff productivity and business agility through just-in-time provisioning and mobility support for both virtualized and nonvirtualized environments. The process for migrating Siebel Enterprise CRM from SPARC/Solaris servers to Cisco UCS is straightforward and can be accomplished with little downtime. The procedure has been tested and optimized by Cisco in a lab environment to avoid surprises and inefficiencies in a real-life scenario.

For More Information

- For more information about migration of Oracle Siebel Enterprise CRM applications, please visit http://www.cisco.com/en/US/solutions/collateral/ns340/ns517/ns224/ns977/ns1141/guide_c07-701736.html.
- For more information about migration from RISC/UNIX platforms to Cisco UCS, please visit http://www.cisco.com/go/migratetoucs.
- For more information about Siebel performance on Cisco UCS, please visit http://www.cisco.com/go/ucsatwork.
- For more information about Cisco UCS, please visit http://www.cisco.com/go/ucs.
- For more information about EMC VNX storage, please visit http://www.emc.com/storage/vnx/vnx-family.htm.

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