

ELIMINATE THE NEED TO INTEGRATE, TEST, AND QUALIFY MULTIPLE COMPONENTS IN BUILDING PRIVATE CLOUD INFRASTRUCTURE

ENTERPRISE-READY FOR FAST ROI

- Deploy a virtualized blade infrastructure 98% faster than HP blade configuration deployed with RHEL and VMware.
- Reduce three-year TCO by up to 37% compared to a comparable HP configuration.
- Simplify deployments and reduce risk with pre-installed and preconfigured components that are engineered and tested to work together.

ACCELERATING ENTERPRISE CLOUD INFRASTRUCTURE DEPLOYMENTS

The Oracle Optimized Solution for Enterprise Cloud Infrastructure is a complete, integrated solution which can dramatically reduce the time required to architect, deploy, and manage Infrastructure-as-a-Service clouds, and ultimately lower TCO and improve productivity for enterprises and cloud service providers.

A Better Way to Deploy Private Clouds

Despite the widespread adoption of virtualization to increase IT performance and flexibility, it often remains a time-consuming and perplexing effort. The traditional method of building a virtualized infrastructure requires the integration of multiple components (servers, storage, network, virtualization tools, and operating systems). They must be diligently tested, hardened and qualified before applications can ever be layered on the infrastructure and it often takes weeks or months to plan, architect, configure, troubleshoot, and deploy a functional and effective virtualized infrastructure. The process is not only time-consuming, but also error-prone, making it hard to achieve a timely and profitable return on investment.

The Oracle Optimized Solution for Enterprise Cloud Infrastructure allows you to build a customized private cloud infrastructure that can reduce virtualized blade deployment time by as much as 98% over a comparable HP configuration while also reducing your three-year TCO of that same configuration by as much as 37%.

Designed and Engineered to Work Together

The Oracle Optimized Solution for Enterprise Cloud Infrastructure is an enterprise-ready, single-vendor solution that addresses every layer of the virtualization stack with Oracle hardware and software components. It enables quick and easy deployment of the virtualized infrastructure using components that have been tested together and are all supported together by one vendor — Oracle. Instead of assembling a mix of hardware and software technologies from multiple vendors, you can use the Oracle Optimized Solution for Enterprise Cloud Infrastructure to greatly reduce the complexity, time and risk of these do-it-yourself integrations.

The solution guides you through a selection of Oracle blades, networking, storage, virtualization, OS, and management software to create your own integrated and customized virtualized deployment for IaaS (Infrastructure as a Service).

Pre-installed and Pretested Upon Delivery

This Oracle Optimized Solution is designed, deployed, and operated as a single system, allowing you to deploy applications in hours instead of days. Tests show a 98% reduction in VM deployment times with 37% lower costs for acquisition, support and operation. You can simplify and accelerate your deployment using pre-defined, customizable VM Templates. To deploy the Oracle Optimized Solution for Enterprise Cloud Infrastructure, simply order the recommended hardware components and then download the Oracle VM Templates for this

FELXIBILITY AND VALUE REDEFINED

- The Sun Blade systems can deliver the elastic processing power needed by IaaS operations with savings in space, power consumption, and cabling complexity.
- Sun Blade systems are flexible to accommodate both SPARC and x86 architecture in the same chassis.
- The Sun ZFS Storage Appliance provides a cost effective Cloud Computing Infrastructure storage solution that reduces infrastructure costs, improves productivity, and simplifies storage management.
- Oracle Enterprise Manager Ops Center 11g simplifies datacenter operations using a single console to manage servers, operating systems, firmware, VMs, storage, and network fabrics to provide end-to-end lifecycle management, including built-in integration with My Oracle support.
- As your capacity needs grow, the system can be easily scaled in multiple dimensions with the ability to add compute, storage, and networking resources independently.

RELATED PRODUCTS

- Oracle Enterprise Manager Ops Center 11g
- Oracle Solaris Cluster
- Oracle Solaris
- Oracle Linux
- Oracle VM Server for SPARC and X86
- Oracle Sun Blade 6000 servers
- Oracle Sun ZFS Storage Appliance

RELATED SERVICES

- Premier Support
- Consulting Services

solution. Oracle VM Templates contain ready-to-run software configurations that can be up and running in hours as opposed to weeks. (See Figure 1.)

Time Required: Unboxing to Deploy First VM

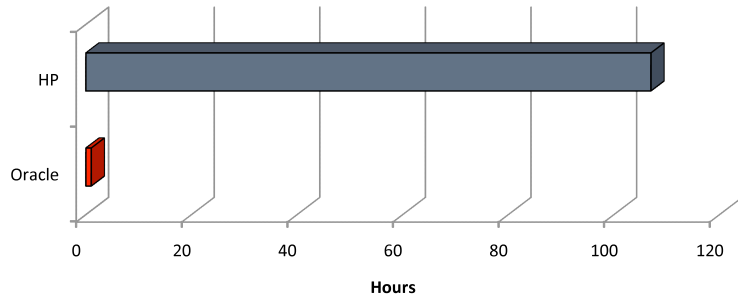


Figure 1. Time required to unbox and setup a 10-blade configuration until the first virtual machine is deployed.

Reduce TCO, Get More Value from Blade Infrastructure

Oracle’s highly scalable blade servers, with free enterprise-class virtualization, enable you to create a private cloud infrastructure to consolidate applications onto fewer, more powerful systems. The resulting agile cloud infrastructure can help you reduce costs, improve efficiencies, and accelerate the delivery of services to meet changing business needs. By providing leading x86 blade servers with integrated virtualization and your choice of Oracle Linux or Oracle Solaris as well as a unified service support contract, Oracle can dramatically reduce the risks associated with deploying and managing IT systems. The net result is a highly predictable, easily quantifiable TCO. For a ten-blade configuration with networking, Oracle’s three-year TCO is 37% lower than HP blade servers deployed with Red Hat Enterprise Linux and VMware vSphere. (See Figure 2.)

Ten-blade Configuration Three-year TCO

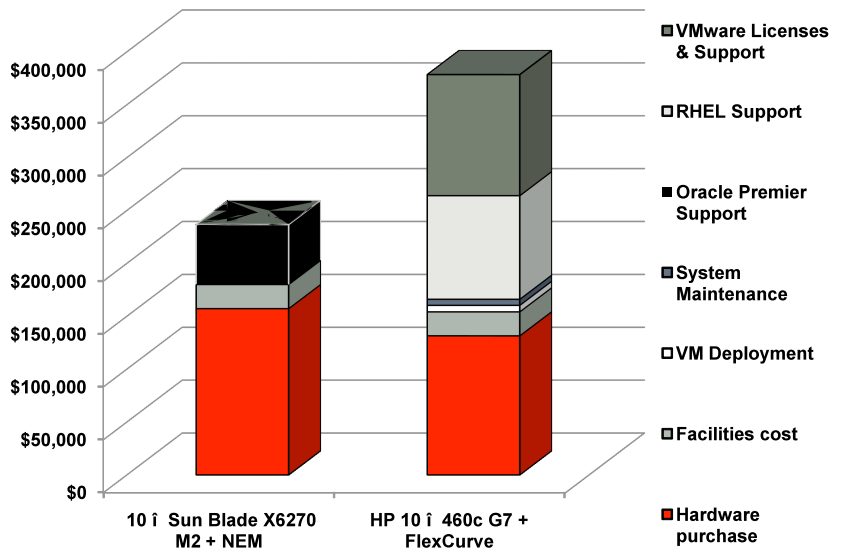


Figure 2. Three-year fully virtualized, supported TCO of a 10-blade system with networking and chassis.^{1,2}

DEPLOY CUSTOMIZED, HIGHLY VIRTUALIZED, PRIVATE CLOUD ENVIRONMENTS QUICKLY WITH ORACLE VM BLADE REFERENCE CONFIGURATION

CONTROL VIRTUALIZATION COSTS

- The largest cost drivers in a typical x86 blade virtualized infrastructure from HP are software licensing and support costs for Red Hat Enterprise Linux and VMware vSphere.
- On a ten-blade deployment, these two costs represent as much as 56% of the three-year total cost of ownership.
- The server and storage platforms used in the Oracle Optimized Solution for Enterprise Cloud Infrastructure require no additional costs for software licenses.

RELATED PRODUCTS

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Drive Better TCO with Oracle's Complete, Virtualized Stack

Oracle's Sun Fire and Sun Blade x86 systems can come pre-installed with Oracle Linux or Oracle Solaris and Oracle VM virtualization software. Oracle Linux 5 is up to 75% faster than RHEL 5 and comes with enterprise-quality support. Oracle Solaris provides enterprise availability, security, and flexible resource sharing that can transparently utilize idle resources that are often found in consolidated environments, enabling greater performance and ROI. Oracle VM Server for X86 is the only virtualization solution certified with Oracle software. This certification speeds problem resolution, reducing risk and helping to avoid expensive downtime. Furthermore, this entire x86 infrastructure is backed by Oracle's Premier Support, the award-winning service and support plan that includes proactive support tools and resources with embedded system diagnostics for faster troubleshooting and problem resolution.

The largest cost drivers in a typical virtualized x86 infrastructure from HP are often software licensing and support costs for RHEL and vSphere. On a ten-blade configuration with networking, these two costs can represent as much as 37% of the three-year total cost of ownership. Hardware acquisition costs are only 35%, while facilities, deployment, and system maintenance costs are just 9%. Oracle's system-based Premier Support plan dramatically reduces the cost with fully integrated, single-price support for system hardware, firmware, operating system, and virtualization software, with no additional costs for software licenses and support. Oracle Support includes on-site support with a two-hour response time and a unified, custom support platform with single point of accountability across the Oracle stack.

Most Flexible Blade Architecture for Cloud IaaS

Oracle Optimized Solution for Enterprise Cloud Infrastructure uses the Sun Blade Modular System to provide a compact form factor with integrated server, networking, storage, and management facilities. The Sun Blade systems deliver the elastic processing power needed by IaaS operations with savings in space, power consumption, and cabling complexity.

Sun Blade systems are flexible enough to accommodate both SPARC and x86 architectures within the same chassis. This optimized solution uses the Sun x86 Blades that support Oracle Linux and Oracle Solaris as well as other Linux distributions and the Microsoft Windows operating system. Using the Sun Blade modular chassis, thousands of virtual machines require only a few rack cabinets of equipment, including blade servers, storage, network infrastructure, and management systems.

Sun ZFS Storage Appliance Provides Application Availability, Storage Efficiency, and Data Protection

The Sun ZFS Storage Appliance seamlessly interoperates with Oracle VM to provide better operational efficiencies for Cloud Infrastructure storage while working to maintain business-critical application availability. Key data services that enhance your ability to manage and protect data in a Cloud Computing environment such as DTrace Storage Analytics, snapshots, clones, replication, compression, thin provisioning, live migration, and more, are included with no additional license fees. What this means is that when Cloud Computing and Virtualization are deployed in your datacenter, additional cost reductions and performance improvements can be realized with the Sun ZFS Storage Appliance.

Unleash the True Value of Your Private Cloud Infrastructure

The Oracle Optimized Solution for Enterprise Cloud Infrastructure and Oracle's unique offering of a fully integrated and virtualized x86 infrastructure combines leading performance for systems with superior operating system choices and virtualization technologies. Oracle can help you dramatically reduce deployment time of your private cloud infrastructure while also reducing administration using a single tool, Oracle Enterprise Manager (OEM) Ops Center

11g, to manage the entire stack. A single Oracle support organization with the award-winning Premier Support also helps you control complexity and cost. With as much as 37% lower three-year TCO versus a comparable HP blade system, Oracle provides the greatest value for your private cloud infrastructure.

Contact Us

For more information visit oracle.com/goto/serverconsolidation or call +1.800.ORACLE1 to speak to an Oracle representative.

¹ All TCO analysis based on pricing as of March 29, 2011. See "Reduce TCO and Get More Value from your X86 Infrastructure" at <http://www.oracle.com/us/products/servers-storage/servers/x86/tco-x86-exec-brief-352670.pdf> for TCO analysis details.

² Staffing hours cost for deployment labor costs from Boris Evelson's Blog at http://blogs.forrester.com/business_process/2010/01/bottom-up-and-top-down-approaches-to-estimating-cost-for-a-single-bi-report.html.



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Hardware and Software, Engineered to Work Together