Oracle® 10*g* Real Application Clusters on HP BladeSystem

A change-ready, cost-savvy infrastructure solution for staying ahead of the unpredictable world of IT

Think of it as a crystal ball with handlebars - it helps you see what's coming and gives you the control to adapt to the unpredictable and ever-changing world of IT.

Change is normal, especially in the IT world—but the pace and extent of that change is something no one can predict. Yet, somehow, IT managers are expected to handle datacenter changes, on a moment's notice, without impacting service levels—and without breaking the budget. Preparing for this feat will take either a crystal ball or a new approach to datacenter infrastructure.

Freedom and Confidence to Unlock Value

HP BladeSystem, Red Hat® Enterprise Linux, and Oracle Database 10*g* Real Application Clusters (RAC) deliver on the vision of a change-ready, cost-savvy datacenter—one in which IT managers have the freedom and the confidence to transform datacenter resources into competitive business advantages.

HP BladeSystem integrates the essential elements of the datacenter—compute, storage, network, power, and management—into a modular, self-optimizing unit. Its unified management environment allows the modules to be virtualized, pooled, and shared to simplify setup, operations, and change. In fact, HP BladeSystem automates tasks like system monitoring and delivers *pre*-failure alerts to ensure the system is ready to adapt in real-time to changing needs.

Red Hat Enterprise Linux extends the ability of BladeSystem to adapt to changing needs with the full value of open source—a stable, mature platform with exceptional performance and scalability for both 32 and 64-bit workloads—all backed by comprehensive around-the-clock technical support from Red Hat and HP.

Oracle RAC is particularly well suited to an infrastructure built on HP BladeSystem. Oracle RAC allows Oracle Database to run any packaged or custom application across a cluster of HP BladeSystem servers, providing unrivaled performance, scalability, and flexibility. When business requirements change, just add (or remove) a BladeSystem server and Oracle RAC dynamically distributes the workload across the infrastructure to maintain optimal performance.

And speaking of performance, a recent TPC-H 3TB benchmark result[1] placed the combination of dual-core AMD Opteron™-equipped HP BladeSystem servers with Oracle 10*g* RAC on Red Hat Enterprise Linux 4 ES at the top of the charts. This world-record performance was over 200 percent faster than the nearest cluster result (IBM) and 30 percent less expensive than the nearest non-cluster result (Sun).

Designed with Change In Mind

HP BladeSystem, Red Hat Enterprise Linux, and Oracle 10*g* RAC were designed with change in mind—and the trio delivers a forward-looking infrastructure that is change-ready, cost-savvy, and agile enough to accommodate the unpredictability that describes today's IT world. Plus, as one of HP's Adaptive Infrastructure offerings, the HP BladeSystem with Oracle 10*g* RAC and Red Hat Enterprise Linux is designed to lower IT costs and guarantee a higher quality of service.

All told, with HP BladeSystem, Red Hat Enterprise Linux, and Oracle 10*g* RAC in your datacenter, don't be surprised when someone comes looking for your crystal ball.

[1] TPC: Results valid as of June 6, 2006 in the 3000GB performance category. Complete results can be found at www.tpc.org

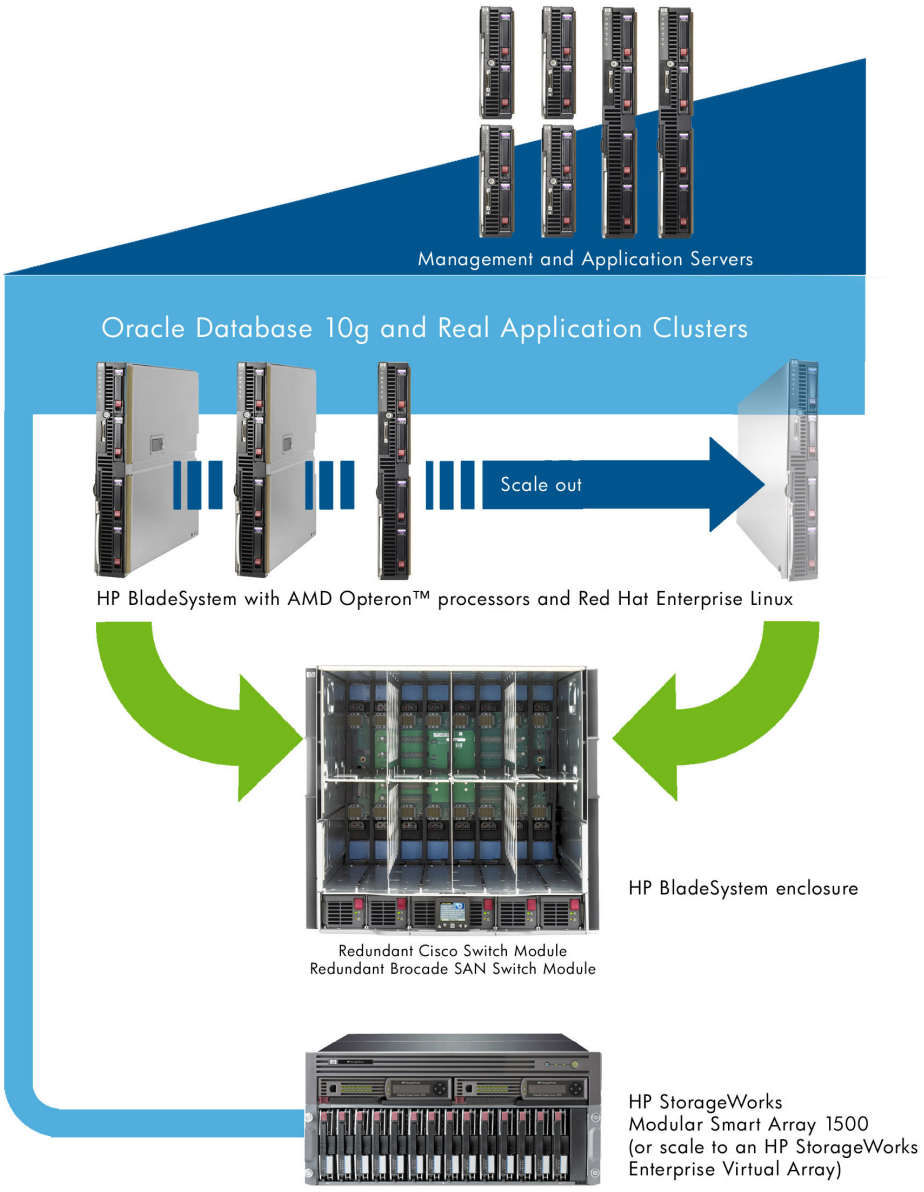
Architectural and functional view

Oracle RAC on HP BladeSystem and Red Hat Enterprise Linux offers a forward-looking high-availability infrastructure that delivers redundancy along with outstanding performance and scalability. Plus, the modular approach taken by HP and Oracle means resource utilization and flexibility are enhanced while management tasks are minimized. Together, Oracle, Red Hat, and HP deliver a change-ready, cost-savvy solution that prepares any IT environment for meeting ever-changing business requirements.

Typical Solution Components and Services

The following is a summary of the products and services typically purchased with this solution. For detailed information or to tailor your own solution, contact your HP/Oracle-authorized reseller or your HP account manager.

Infrastructure	
1	HP BladeSystem enclosure
1	HP BladeSystem Power Supply
2	Cisco Switch Module for HP BladeSystem
2	Brocade Fibre Channel SAN switch
Database Server Nodes	
n	Oracle Database 10*g* and RAC licenses
2	HP BladeSystem (2 x AMD Opteron™ processors, 4GB RAM, 4 x HP 72GB HDD, Emulex-based Fibre Channel Mezzanine Card)
Management and Application Server Nodes	
4	HP BladeSystem (2 x AMD Opteron™ processors, 4GB RAM, 2 x HP 72GB HDD)
Storage	
1	HP StorageWorks 1500cs Modular Smart Array
1	HP StorageWorks 4/8 Base SAN Switch
1	HP StorageWorks MSA30 SCSI enclosure (14 x 72.8 GB Pluggable U320 HDD (15,000 RPM)
Services	
1	HP BladeSystem Installation and Start-up Service



For the freedom and the confidence to transform your datacenter resources into competitive business advantages, Oracle and HP have the right solution. So, if you are ready to have this cost-savvy, change-ready infrastructure solution tailored for your business, or to just get more information on how this solution can drive IT costs out and bring new flexibility in, contact your local HP and Oracle-authorized reseller or your HP account representative.

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