HP Advances Flexibility, Efficiency of Blades Across the Data Center

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HP today announced virtualization and power management technologies that help customers streamline IT operations to realize dramatic cost savings, increased flexibility and improved energy efficiency.

Based on the market-leading HP BladeSystem c-Class infrastructure – a self-contained unit of servers, storage, network, management software and power and cooling technology – the new offerings mark the next major phase of HP's strategy to build modular, integrated, automated data centers that reduce administrative time and free resources to focus on the needs of the business.

Highlighting the announcement is the HP Virtual Connect Enterprise Manager, which improves IT processes by extending the capability of HP BladeSystem Virtual Connect technology to all blade enclosures in a data center.

Virtual Connect technology allows customers to pre-assign network and storage connections once and then add, move, replace or upgrade servers in minutes. The new Enterprise Manager enables IT administrators to manage and control these connections across 100 c-Class enclosures, or up to 1,600 blade servers, from a single console.

By dynamically moving server connections across a data center, or to remote sites, customers can more effectively and efficiently meet changing application workload and performance needs. In addition, the new software can be operated by a single administrator, which helps eliminate process steps and administration time, while providing an audit trail and limiting configuration conflicts.

“Enterprises need to dramatically simplify management on a large scale,” said Jonathan Eunice, principal IT advisor at Illuminata Inc., a research and advisory services company. ”HP Virtual Connect Enterprise Manager is important because it lays the foundation for coordinating IT infrastructure across the data center.”

HP’s advancements in virtualization, management, power and cooling have helped it secure the No. 1 position in blade server market revenue and units worldwide, according to IDC. The company shipped more than 150,000 virtual connect-enabled servers in the past year; these systems can now be enhanced by the capabilities of HP Virtual Connect Enterprise Manager.

“HP Virtual Connect gave us amazing flexibility to add and recover servers very quickly, speeding up our processes and eliminating wait time in response to our organization,” said Scott Hemmerlein, systems administrator, Information Systems and Technology Management, Indiana University School of Management. “We hope to expand those same time savings beyond one blade enclosure to the rest of our data center with HP Virtual Connect Enterprise Manager.”

Managing physical and virtual environments

HP also is delivering new and enhanced offerings based on HP Insight Control that help manage physical and virtual environments:

-- HP Server Migration Pack Universal Edition now combines virtual and physical migrations into a single tool to speed migration time of HP ProLiant and BladeSystem servers. A new “queued migration feature” helps to automate, plan and execute multiple migrations at once, with expected support to include Citrix XenServer, Microsoft virtual machines, Oracle VM and VMware.

-- HP Virtual Machine Management Pack 3.0, another key offering within the Insight Control management portfolio, provides central management of Citrix XenServer, Microsoft virtual machines, Oracle VM and VMware. It helps reduce downtime interruptions with a new predictive failure alert capacity that can relocate virtual machines before hardware failures occur.

-- HP PolyServe Software for Microsoft SQL Server consolidates large SQL environments onto a single cluster so customers can manage all instances at once, freely add and recover multiple instances, and roll out business applications more quickly while improving reliability.

“Infrastructure issues of cost, time, change and energy continue to challenge our customers, even as great technologies like virtualization help lower costs and speed the pace of making changes,” said Mark Linesch, vice president of marketing, Infrastructure Software, HP. “With these offerings, our recently acquired assets from Opsware and more products on the horizon, HP continues to drive toward an Adaptive Infrastructure inclusive of both physical and virtual resources.”

HP’s data center automation technology acquired from Opsware

automates the management of IT infrastructure and assesses the impact of changes, while providing a unified view that spans all infrastructure tiers of an application. HP plans to integrate the Opsware Automation Platform with its existing management solutions, bringing together hardware and software for future data center automation capabilities across the full stack.

Providing IT and facilities with energy-aware control across the data center

The cost to cool a data center can be more than the cost of powering the IT equipment. In fact, a recent study suggests that in a majority of the world's data centers, 60-70 percent of a data center's power is associated with cooling the IT equipment.

The new HP Power Distribution Rack controls three-phase power distribution across a row of server racks to more efficiently deliver power where and when it is needed most for significant cost and environmental benefits. The offering allows IT managers to:

-- Connect to power once across a row of server racks and adapt power distribution as needs change;

-- Prevent overloads and resolve problems fast with energy-aware, HP Thermal Logic technology; and,

-- Reduce cabling which lowers complexity and the chance for error with one set of input cables to the end of a row and short power drops to each rack.

The new HP Rackmountable Parallel 3 Phase UPS provides the highest level of power protection from HP and dissipates less than half as much

heat into a data center compared to the nearest competitor offering. It enables attached servers to save all work in progress and initiate a shutdown in the event of power loss, and restores it with Thermal Logic power policies to ensure business picks up where it left off.

When compared to competing, less efficient offerings, HP's new 3 Phase UPS can save more than $1,000 a year in power and cooling costs in the 12-kilowatt rack-mount model and more than $6,000 for the 60-kilowatt row-level configuration.

More information about HP's solutions for the Adaptive Infrastructure is available at www.hp.com/go/adaptiveinfrastructure .

Source: HP