News advisory

HP Virtual Connect Simplifies Server Management and Eliminates Barriers to Change in the Data Center

Process speed ultimately depends on the number of people involved and the lag time in between activities. A 30-minute task is not completed in 30 minutes, if multiple people and several days are needed to schedule and initiate it. For example, each time a server is added, changed or moved, it takes coordination of the storage, network and server administrators to complete the process. Constant, incremental coordination forces smart people to spend unnecessary time on routine tasks, when they could be focusing valuable time and energy on other areas of the business.

To that end, HP has introduced its latest innovation – HP Virtual Connect – a new approach to connecting and adapting server, local area network (LAN) and storage area network (SAN) domains across the data center. For the first time, server administrators can automatically manage resources independent of server connections to network and storage resources in an HP BladeSystem, saving days or even weeks of administrative "wait time."

Each HP BladeSystem c-Class includes the Virtual Connect architecture – a five terabit mid-plane with eight high-performance interconnect bays in the back to enable customers to manage and connect to the existing standards and familiar brands in their data center such as Cisco, Brocade or Nortel. All third-party and HP interconnect options are hot-pluggable and can be deployed in pairs for full redundancy.

To enable the virtualized, wired-once capability of this built-in architecture, HP Virtual Connect modules are expected to be available in the third quarter of 2006 for the HP BladeSystem c-Class infrastructure. Virtual Connect eliminates entire steps in the complex, routine processes associated with server upgrades and deployments and their impact on network and storage connections. HP's approach to virtualization provides the simplest view of an organization's environment to the Ethernet and Fibre Channel networks while relieving server, storage, and network administrators of their constant interdependence.

"As our customers move toward an automated and virtualized, 24x7, 'lights-out' computing environment, HP continues to evolve solutions to reduce complexity, costs, and management and enable IT to respond more efficiently to changing business needs," said Nick van der Zweep, director, Virtualization and Utility Computing, HP. "By virtualizing the network and storage

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connections in an HP BladeSystem environment, HP Virtual Connect vastly reduces time spent on cross-organization coordination and configuration time."

HP Virtual Connect for the HP BladeSystem c-Class
HP has addressed connectivity as part of an overall virtualization strategy. HP Virtual Connect technology works with other virtualization technologies – such as virtual machines, clients and storage to make a fully virtualized environment a reality.

HP Virtual Connect pools and abstracts the LAN and SAN connections to servers and virtual machines in the HP BladeSystem to provide ultimate server flexibility and eliminate time intensive management processes.

HP Virtual Connect – Breaking down barriers to change
HP Virtual Connect modules for HP BladeSystem make LAN and SAN connections available to a pool of up to 64 servers, allowing administrators to define a server's I/O connections to independently manage blade servers and their connectivity. Connections and configurations between server blades and the LAN and SAN can then be deployed at the click of a button, and migrated to another server bay instantly – all without disturbing the LAN or the SAN settings or administrators. Provisioning and maintenance time are slashed, productivity is improved, and customers gain the ability to more easily pool server resources.

Deployment time can be reduced from up to three days to approximately 30 seconds using just one server with the ability to quickly and independently assign LAN and SAN connections to replace any failed server.

HP BladeSystem c-Class Interconnect modules include:

- HP Virtual Connect Ethernet and FC modules – Reduces cables without adding managed switches, simplifies server connections and operations, cleanly separates management of server enclosures from LAN and SAN management. Flexibility to add, move and replace servers in minutes without affecting LANs or SANs;
- Brocade 4 gigabit (GB) SAN Switch for HP BladeSystem c-Class – Easy-to-manage embedded Fibre Channel (FC) switch solution integrates switches to reduce the need for additional FC cables and SFP requirements, reducing upfront costs of FC connectivity and simplifying management;
- Cisco Catalyst Blade Switch 3020 for HP BladeSystem c-Class – Capitalizes on current Cisco network infrastructure to reduce the total cost of implementation and ownership;
- HP GBE2c Ethernet Blade Switch for BladeSystem c-Class – Eliminates up to 94 percent of cabling compared to other connection options, reducing data center costs and complexity;
- Fibre Pass-Through Module for HP BladeSystem c-Class – Provides a direct, auto-negotiated FC link from each server blade to the SAN;
- HP 1GB Ethernet pass-Through Module for BladeSystem c-Class – Best suited to data center managers requiring a direct 1GB copper link from each

server blade to the network;

- HP NC326m PCI Express Dual-Port GB Server Adapter – Dual-port GB Ethernet server adapter for HP ProLiant c-Class server blades;
- HP NC373m PCI Express Dual-Port Multifunction GB Server Adapter – Provides additional multifunction GB Ethernet for HP ProLiant c-Class server blades that support scalability;
- Emulex LPe1105-HP 4GB FC HBA for HP BladeSystem c-Class – Provides reliable, high-performance connectivity to HP ProLiant c-Class server blades, and a high-availability connection to scalable storage ideal for data-intensive applications;
- QLogic QMH2462 4GB FC HBA for HP BladeSystem c-Class – Provides fast and reliable SAN connectivity and FC ports to HP ProLiant c-Class server blades.

Pricing and availability

The HP BladeSystem c-Class is expected to be available July 2006, with pricing available at that time.

More information about HP Virtual Connect is available at www.hp.com/go/bladesystem/evaluate. More information about HP BladeSystem technology is available at www.hp.com/go/bladesystem.

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