Software Defined Data Center and the Pursuit of Extreme Flexibility

WebTech Q&A Session, July 9, 2014

1. You have discussed several offerings and directions throughout the session. What is generally available now?
   
   a. Hitachi Content Platform (HCP), Hitachi Content Platform Anywhere (HCP-AW) and Hitachi Data Ingestor (HDI) support a mobile workforce and mobility among leading cloud storage services. And, they can run in virtual machines as software-only solutions.
   
   b. Unified Compute Platform Director with intelligent control and application and virtualization platform integration orchestrates and automates virtual and physical infrastructure.
   
   c. Hitachi Storage Virtualization Operating System (SVOS) abstracts across hardware platforms and makes Hitachi Data Systems native data services available to third party storage.

2. Does the Storage Virtual Operating System run on a standard Intel platform?
   Hitachi microprocessors complement Intel processors to maximize quality of service (QoS). Hitachi Storage Virtualization OS (SVOS) is the brain of its platforms, interfacing directly with both Hitachi and Intel processors to deliver QoS. Critical workloads with strict timing and those prone to contention will continue to need hardware assist to meet service levels. There are plans to gradually reduce the number of Hitachi microprocessors in our platforms as Intel processors become better able to handle enterprise workloads.

3. How mature is the Software Defined Data Center movement?
   Software Defined Data Center (SDDC) is still relatively new. Of the three domains – server, storage, network – networking or SDN is the most mature area. Storage and compute are still in the early stages of adoption. Owing to the ability to start from scratch, infrastructure for greenfield applications is tending to adopt SDDC architectures and techniques sooner than their legacy counterparts.

4. What are some of the customer concerns we have seen in adopting software defined data center?
   There are two main themes we’re hearing:
   
   a. Skills sets needed to run software-defined environments are in short supply. SDDC environments require both an operations background and developer skills. The programmability aspect of SDDC architectures is where the developer skills come in. Some businesses adopt a DevOps approach where IT pros and software developers collaborate on application delivery.
b. Transitioning from legacy architectures takes careful planning, especially assessing workload criticality and associated needs in an SDDC environment. Understandably, businesses want to fully utilize existing resources throughout their useful life.

5. Do we see any business sectors within our customers that are more inclined than others to adopt software defined data center offerings?
   Nearly all sectors are interested in SDDC, although the financial sector, where applications tend to have strict timing and availability needs, are more cautious.