Comprehensive and Simplified Management for VMware vSphere Environments – now, even better!

Allen Zargar, Hitachi Data Systems, Sr. Product Manager, UCP Pro for VMware vSphere
Michael Adams, VMware, Director, Product Marketing Infrastructure
COMPREHENSIVE AND SIMPLIFIED MANAGEMENT FOR VMWARE VSPHERE ENVIRONMENTS – NOW, EVEN BETTER!

Learn how to build out a robust private cloud infrastructure with the assurance that all the underlying server, storage, and network resources are in place and aligned to the appropriate service levels.

See how to achieve predictable reliability based on business needs in a robust, enterprise-class cloud platform – Hitachi Unified Compute Platform Pro for VMware vSphere.

We’ll take you through the latest updates to this industry-leading solution that is deeply integrated with vSphere, including HDS servers and storage, Brocade Fibre Channel, your choice of Cisco or Brocade Ethernet networking. We’ll also talk about software updates that include bare-metal support, improved monitoring and performance tuning, federated management, and non-disruptive firmware upgrades.

Attend this webcast and learn how to:
• Quickly capitalize on the benefits of your private cloud, and grow as needed.
• Enable both physical and virtual infrastructure consolidation while supporting thousands of VMs across the data center.
• Achieve cost reductions through automation and orchestration of your VMware vSphere environment across server, network, and storage tiers.
**IT Drivers**

- Time to market
- Operational efficiency
- Dynamic scaling
- Higher utilization
- Secure
- Service model

**A TRANSFORMATION PROCESS**

- Virtualize
- Converge
- Automate
- Software Defined Data Center
- Self-Service/Chargeback

**IT ORGS** can free up resources and speed up deployments while **END USERS** can accelerate insight and decision-making.
40% of larger enterprises are planning to deploy some manner of converged system in the short to medium term

“Converged Systems” revenue will grow at 54.7% CAGR … “General Purpose IT” revenue growth will be effectively flat for the same period (2011-2016).
HITACHI UNIFIED COMPUTE PLATFORM

ONE PLATFORM FOR ALL WORKLOADS

High Resilience, Scale, Performance and Automation for Higher ROI
Unified infrastructure management within VMware vSphere
UCP DIRECTOR SOFTWARE

- Deep integration into vCenter clients
- 100% parity across GUI, API and CLI
- Unified inventory, provisioning, operations, and monitoring
ENTERPRISE-GRADE COMPUTE BLADES

THE ONLY BLADE SERVER OFFERING LPAR TECHNOLOGY ON X86 ARCHITECTURE

Hitachi Compute Blade CB500 Chassis
Designed for Virtualization

Hitachi Compute Blade 520H B1 Blades
CPU: Intel Xeon E5-2630L/2640/2680
RAM: 128/192/256/384/512/768 GB

Highest customer satisfaction of any x86 vendor*

* IDC Japan “CY2012 Research for Japanese x86 server vendor’s support”  IDC #J12220104  2012.3
CHOICE OF ENTERPRISE-GRADE NETWORKING

Scales from 2 to 128 blades
VIRTUALIZE OVER 100 QUALIFIED 3RD PARTY STORAGE ARRAYS (HUS VM AND VSP)

...or, connect to your existing VSP, because enterprise storage outlasts compute
UCP PRO CUSTOMER EXPERIENCE

MADE TO YOUR SPECIFICATIONS, QUICK TO DEPLOY

- Plan
- Build
- Deploy
- Operate
COLLECT YOUR REQUIREMENTS

- **Networking**
  - Cisco, Brocade, production IP

- **Compute**
  - CPU and RAM configuration

- **Storage**
  - Configuration and total capacity

Total time: varies according to customer
DISTRIBUTION CENTER

- Rack and stack
- Configure network and storage
- Validate

Total time: 1 – 3 weeks, depending on configuration
DEPLOY

CUSTOMER SITE

- Connect power
- Re-validate systems
- Connect to customer network
- Configure software

Total time: 2 – 3 days
OPERATE VIA VCENTER

vSphere Windows Client

vSphere Web Client
Service provisioning

Automated firmware updates

Enhanced health and performance monitoring

Disaster recovery

Federated management
SERVICE PROVISIONING

Bare Metal Provisioning

vSphere provisioning
PROVISIONING TEMPLATES

Virtual

Bare metal

vmware®

Windows

Linux

CLUSTER
HEALTH AND PERFORMANCE MONITORING

BUILT-IN HEALTH AND PERFORMANCE MONITORING

AMQP
Advanced Message Queuing Protocol

vCOPs integration
PERFORMANCE GRAPHS

- Allow the end user to monitor element performance
- Compare current trends to historical data
- Ability to set threshold and alerts
TOPOLOGY MAPS

- Maps virtual to physical infrastructure
- Virtual machines to physical network switches
- Storage Volumes to physical servers
NON-DISRUPTIVE FIRMWARE UPDATES

- Chassis, Blade, Ethernet and Fibre Channel Switches
- Updated from within UCP Director
- Guided management block update
- ALL UPDATES ARE FULLY QUALIFIED BEFORE SHIPPING
FEDERATED MANAGEMENT

Hitachi Universal Replicator/True Copy

MANAGE AND MONITOR MULTIPLE UCP PROS

Data center 1

Data center 2

VM DISASTER RECOVERY ACROSS UCP PROS
ONE PLATFORM

VMWARE SOFTWARE DEFINED DATA CENTER

vCenter Orchestrator

vCloud Automation Center

vSphere Windows Client

vSphere Web Client

vCOM Monitoring

REST API and CLI

Compute-as-a-Service

Storage-as-a-Service

Network-as-a-Service
Hitachi + VMware - A Partnership of Leaders

HITACHI DATA SYSTEMS AND VMWARE

- Global VMware Elite Technology Alliance Partner
- Early Design Partner for development programs
- All hardware is VMware-ready
- Together we provide innovative, integrated, end-to-end virtualization solutions for the Software Defined Data Center
- Bundling VMware cloud infrastructure and provide organizations with complete, converged infrastructure solutions

“Hitachi Data Systems provides the reliability, scalability and innovation at the storage layer that allows us to do what we do at the virtualization layer. It is a very complementary relationship.”

Parag Patel
VP, Global Strategic Alliances, VMware
HDS STRATEGY SUPPORTS THE VMWARE VISION

- Broad portfolio of solutions including high-performance enterprise storage, file & content, compute and search

### COST EFFICIENCY

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### QUALITY OF SERVICE

- **SELECTIVE**
  - Zero-touch infrastructure
  - Increased control + service assurance
- **PROACTIVE**
  - Service Definition
  - Self-service
  - Chargeback

### BUSINESS AGILITY

- **IT**
  - Shared resource pools
  - Elastic capacity
- **IT / LOB**
  - 
- **CIO**
  - 

### INFORMATION CLOUD

- Analytics Integration
- Integrated information-as-a-service

### CONTENT CLOUD

- Search, discover, repurpose
- Link to vertical/SI markets
- Content-on-demand
- Archiving-as-a-service

### INFRASTRUCTURE CLOUD

- Virtualization, mobility
- Integrated management
- Infrastructure and platform-as-a-service
- Data center convergence
- Data, Storage, File, Server, Network Virtualization

vmware®
vSphere and vSphere with Operations Management

vSphere with Operations Management

- World’s leading virtualization platform
- Insight to workload capacity and health

- **Capacity planning** – know how many days before capacity runs out so IT can continue to be responsive
- **Optimize efficiency** – know on which virtual machines might be overprovisioned
- **Improve performance** - faster root cause identification of emerging issues
- **Proven virtualization platform** – for fully virtualized environments (including business critical applications)
UCP Director software helps IT Managers pinpoint issues and provide better services through **orchestration and automation**:

- Single point and **end-to-end visibility** of infrastructure
- **Disaster recovery** across Multiple UCP Pro instances
- Infrastructure-aware **monitoring** and tuning
- **Non-disruptive, automated** firmware upgrades
UPCOMING WEBTECHS

- Maximize IT WebTechs
  - Easily Deploy Microsoft® Private Cloud and Microsoft SQL Server® 2012 Data Warehouse on Hitachi Converged Solutions, Sept 25, 9 a.m. PT, 12 p.m. ET

- Fall/Winter Webcasts
  - Stay tuned for sessions on Private Cloud, Hitachi Dynamic Tiering and Microsoft Exchange

Check [www.hds.com/webtech](http://www.hds.com/webtech) for

- Links to the recording, the presentation, and Q&A (available next week)
- Schedule and registration for upcoming WebTech sessions
- Questions will be posted in the HDS Community:
  - [http://community.hds.com/groups/webtech](http://community.hds.com/groups/webtech)
QUESTIONS AND DISCUSSION
Maximize IT WebTechs

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THANK YOU