

# Simplify Your Microsoft-centric Data Center & Realize the Benefits

Cisco Data Center Solutions for Microsoft Windows Server 2012 Environments



You need to simplify your data center and do more with what you have. Virtualization, cloud computing and ever increasing business demands are forcing you to spend vital resources maintaining a growing, complicated, and inflexible IT infrastructure. There is a better way.

## A Better Way

Reduce your physical infrastructure, simplify operations, and run your applications faster in your Microsoft-centric IT environment with Cisco's full portfolio of data center products. Take full advantage of the enhanced virtualization and management features in Windows Server 2012 Hyper-V with Cisco's infrastructure and networking that's purpose-built for the cloud.

Reduce your number of management points and use System Center 2012 SP1 and PowerShell to automate the management for all of your physical and virtual resources end-to-end saving you time, increasing your team's efficiency and delivering ROI to your business.

Integrate your Microsoft data center with a highly manageable compute and networking platform that provides an optimum IT infrastructure for your Windows Server 2012 environment:



### Compute

- Cisco Unified Computing System™ (Cisco UCS®)



### Networking

- Cisco UCS Virtual Machine Fabric Extender (VM-FEX)
- Cisco Nexus® 1000V Series Switches



### Manageability

- Cisco UCS Manager
- Cisco UCS PowerTool
- System Center 2012 SP1 Management Packs



## Streamline Your Data Center

Cisco Unified Computing System (UCS) combines x86-architecture blade and rack servers with networking and storage access into a single converged system. Configure and manage the entire system using a unified management framework to ease administration and simplify deployment of applications and services running in physical, virtualized, and cloud-computing environments. Increase performance, security, and manageability by extending fabric directly to servers and virtual machines.

### Stateless Computing

Achieve maximum data center utilization and scalability by storing your server definitions in software templates and deploying your OS and applications on stateless hardware. Dynamically change workloads to meet demands with automated server provisioning.

### Unified Fabric

Simplify rack cabling using a "wire once" deployment model in which chassis are cabled just one time and I/O configuration changes are performed through your management system. Change network and storage configurations in the software service profile without changing the physical wiring. Transform your IT from a cost center to a service center and deliver architectural flexibility to your datacenter by providing consistent networking across physical, virtual and cloud environments.

## Attain Complete Software Control of Your Hardware

Cisco UCS Manager boosts administrative scalability with a flexible, standards-based GUI to configure, provision and manage your network, compute and storage components of UCS from one interface. Save time and ensure configuration consistency by automating UCS server provisioning with flexible service profiles.

Automate provisioning and configuration tasks with **Cisco UCS PowerTool**, an extensive PowerShell library of purpose-built cmdlets that utilize the standard verb-noun format. If you know PowerShell, it's simple to start using PowerTool to manage both Microsoft components and Cisco UCS.

### UCS Manager - Microsoft System Center 2012 SP1 Integration:

Combine the powerful UCS Manager open API with Microsoft's System Center 2012 SP1 managing and provisioning tools to provision, configure, orchestrate and monitor your physical and virtual infrastructure and Windows server and application software at every level.



Microsoft recognized this integration by awarding UCS Manager the Breakthrough Technology Award at TechEd in June 2012.

### UCS Management Pack for System Center Operations Manager

Monitor and manage your Cisco unified infrastructure with a single interface.

### UCS Integration Pack for System Center Orchestrator

Improve operational efficiency and deliver scalable and consistent UCS management through out-of-the-box runbooks.

### UCS UI Extension Add-in for System Center Virtual Machine Manager (SCVMM)

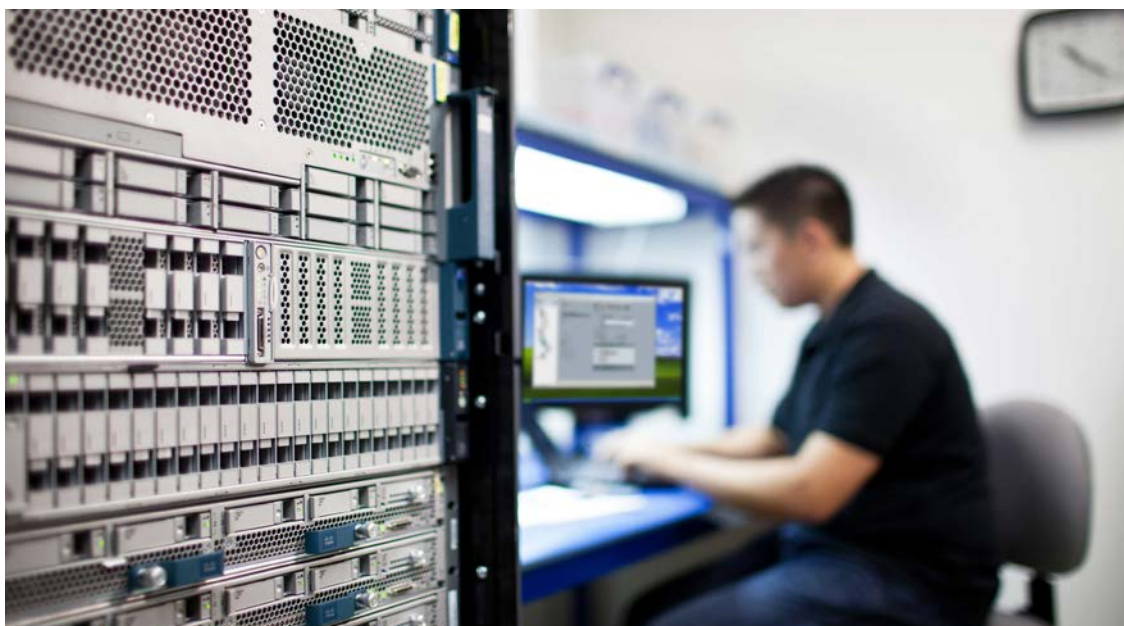
Provide centralized management of Cisco UCS by allowing access to UCS management controls from within SCVMM.

## Extend Comprehensive Networking Capabilities to Your Hyper-V Environment.

Attain consistency across your physical, virtual and cloud environments using Cisco Nexus 1000V, a distributed virtual switching platform with advanced networking features and integrated virtual services. Reduce your risk to deploy and to operate with a consistent operation model and protect your investment by future-proofing your network design with a flexible virtual networking platform.

### Nexus 1000V - Microsoft System Center 2012 SP1 Integration:

Automate the communication between the network and server administrators utilizing Nexus 1000V integration with System Center Virtual Machine Manager (SCVMM) 2012 SP1 and the Windows Server 2012 Hyper-V Extensible Switch. Network administrators can define network policies using Nexus 1000V - just like they would on a physical switch - with changes automatically propagated to SCVMM.



## Attain Near Bare-Metal Performance for Your Virtualized Workloads

Attain near bare-metal performance for your virtualized workloads with Cisco UCS VM-FEX by utilizing the SR-IOV functionality in Microsoft Hyper-V. Performance benchmarks prove that your Windows applications will run better on the UCS platform with VM-FEX. Achieve the benefits of simplified management by using a consistent feature set for both physical and virtual workloads and reducing the number of management points for the network administrator.

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## Get Started Today

This is your opportunity to take advantage of an ultimate unified computing and network infrastructure for your Microsoft applications, virtualization and cloud environments. Together, Cisco Unified Compute System, Nexus 1000V and Microsoft Windows Server 2012 Hyper-V create a comprehensive cloud platform solution that can be automated with PowerShell and managed through System Center 2012 SP1.

## Why Cisco for Microsoft?

We recognize that the intersection of computing, networking, virtualization, and software is at the center of a new era of innovation. The Microsoft and Cisco alliance extends the value of the Cisco Unified Data Center, including unified fabric, Cisco UCS and unified management, by integrating the operating system, native hypervisor, application, and management stacks into manageable and scalable solutions. Together, Microsoft and Cisco offer service and support to accelerate time-to-value and ROI. Our partner ecosystem, including value-added resellers and global systems integrators, benefits Microsoft partners and Cisco partners and customers alike.

## Learn More

For more information, contact your Cisco or Microsoft representative, or visit:

[www.cisco.com/go/microsoft](http://www.cisco.com/go/microsoft)

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