



Cisco Unified Data Center

The Optimal Infrastructure for Microsoft Environments and Applications



SIMPLIFY YOUR IT... TRANSFORM YOUR BUSINESS



Challenge

The past 10 years have seen an explosion of innovation and technical improvements in the data center. The promises of virtualization and cloud computing have driven IT departments worldwide to build customized solutions that connect hardware to software and applications to bare metal. More often than not, these advances have been painful, limited and expensive.

Today, many businesses fall short in realizing the full potential of their virtualization and private cloud strategies. Rigid infrastructure and architectural complexity are key blockers that must be overcome.

Businesses rely on their IT departments to enable their business strategies. More than ever, organizations need their IT infrastructure to be more agile, simple, and efficient.

Solution

Cisco Unified Data Center unifies compute, storage, networking, virtualization, and management into a single platform. The result is operational simplicity and business agility -- essential for cloud computing and deploying IT as a Service.

The Microsoft and Cisco alliance extends the value of the Cisco Unified Data Center by integrating the operating system, native hypervisor, application, and management stacks into manageable and scalable solutions.

A highly secure, scalable environment for companies that utilize Microsoft software and technologies, the Cisco Unified Data Center automates and simplifies deployment, orchestration, and management across server, network, and cloud.

A Cisco Unified Data Center...



Scales to meet business dynamics

Align delivery capabilities with the needs of the business using a high performance, highly available, secure and automated platform for Microsoft software and technologies.

Simplifies management

Eliminate complexity of managing physical and virtual systems and maximize your investment in Microsoft System Center 2012. Create the optimal environment for your business needs and manage it easily, whether virtual or physical, private or public cloud and across multiple data centers and infrastructures. Reduce operating costs, provide self-service provisioning, easily roll out new services, and resolve issues faster through automation of UCS hardware using Microsoft PowerShell.

Lowers operating costs

Achieve lower operating costs with a platform built for virtualization. Consolidate SQL, SharePoint and Exchange workloads, reduce power, cooling, and cabling needs, and protect investments in current infrastructure, management platforms, and applications. Reduce total-cost-of-ownership (TCO) at the platform, site and organization levels.

Delivers world class performance

In the three years since its introduction, Cisco Unified Computing System powered by Intel® Xeon® processors captured 70 world record-setting performance benchmarks, with results that were either first to market or exceed those set by vendors of existing systems.



"Cisco's server infrastructure helps us break down data centre silos and establish a single compute platform that's completely integrated with those of other vendors, making us immensely agile."

BEN ISSA
Head of IT Strategy
ING Direct Australia



Why Cisco for Microsoft?



Cassidy
Turley

"When we were running Exchange 2007 on our old hardware, the performance was slow . . . But with Exchange 2010 running on Cisco UCS, we've seen a total turnaround in performance, with very few mail-related issues."

RANDY TOLER
Systems Manager
Cassidy Turley

Cisco Validated Designs for Key Microsoft Workloads

To ensure Cisco customers running Microsoft software get the most from their data centers, Cisco designs, pretests, validates, and provides support for a growing list of Microsoft solutions such as Microsoft Exchange Server, SQL Server, and SharePoint Server.

Consolidate and Virtualize Microsoft Applications

Microsoft applications such as SQL Server, SharePoint Server, and Exchange Server are often prime candidates for consolidation and virtualization. Administrators can expedite and simplify virtualization deployment, management, and operations by using Cisco's high-bandwidth, low-latency, virtualization-aware unified network fabric, Cisco UCS and Microsoft Windows Server 2012 Hyper-V.

Cisco Services Support

Ensure a smooth production rollout of Microsoft applications on Cisco UCS that is on time and on budget. Cisco Services helps design and implement virtualized data centers and private or public cloud solutions. Cisco Advanced Services or one of the many Cisco channel partners can directly deliver these services. Increase uptime, quickly resolve problems and optimize solution performance with award-winning global technical support services from Cisco.

Cisco Validated Designs for Microsoft Private Cloud Solutions

Move to the cloud quickly and easily with the help of Cisco Validated Designs. Part of the Microsoft Private Cloud Fast Track program, these preconfigured solutions consist of industry-leading technologies from Cisco, EMC and NetApp. Reduce your risk and enjoy end-to-end architectural and deployment guidance with pretested design guides.

"As the adoption of virtualization, clusters and internal clouds grows, fabrics will become a foundational technology of IT organizations, hosters and cloud services to create networks with the flexibility (e.g., rapid provisioning and load balancing) required to support highly virtualized server infrastructures where the VMs are no longer tied to physical servers."

GEORGE J. WEISS / VALDIS FILKS Is the Concept of the 'Server' Obsolete, or in Need of Redefining? Gartner, 29 March 2012

Cisco and Microsoft: Better Together



Extend Advanced Networking for Microsoft Hyper-V Environments

For enterprise and service provider customers who want to extend Cisco networking experience to their Microsoft Windows Server 2012 Hyper-V deployments, Cisco offers a full portfolio of virtual networking technologies through the Cisco Nexus 1000V Series Switches and Cisco Unified Computing System Virtual Machine Fabric Extender (VM-FEX).

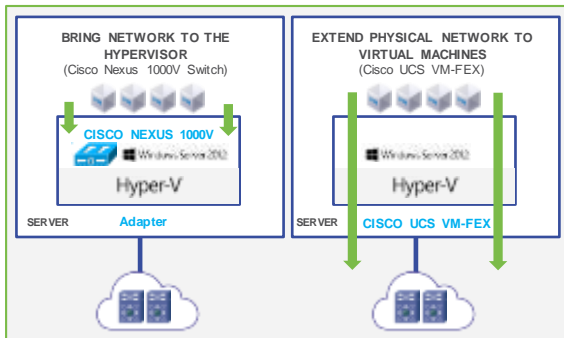
Extend the Capabilities of Microsoft System Center 2012 SP1

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.

- UCS Management Pack for System Center Operations Manager
- UCS Integration Pack for System Center Orchestrator
- UCS UI Extension Add-in for System Center Virtual Machine Manager (SCVMM)

Manage UCS Hardware with PowerShell

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.



“Cisco UCS delivers a more integrated, easier-to-manage platform that has reduced the number of server profiles we manage by as much as 80 percent.”

SCOTT BIESAART
Manager, MPS
Technology Group Xerox



Cisco UCS Manager was honored at Microsoft Tech Ed 2012 as the recipient of the Breakthrough Technology Award

Cisco Unified Data Center: The Platform for Delivering IT as a Service

Today's data center architecture must support a highly mobile workforce, proliferation of devices, data-driven business models, and seamlessly incorporate cloud applications and services. Cisco's Unified Data Center platform meets these diverse requirements with an architecture that combines compute, storage, network, and management. Designed to automate IT as a service across physical and virtual environments, the results are increased budget efficiency, more agile business responsiveness and simplified IT operations.



UNIFIED MANAGEMENT

Automated Resources Management
(Physical and Virtual)



UNIFIED FABRIC

Highly Scalable Secure Network Fabric



UNIFIED COMPUTING

Modular Stateless Computing Elements

Cisco Data Center Services

Support for Integrated Solutions

Automation, orchestration, and lifecycle management are key features of Cisco's Unified Management, simplifying deployment and operation of physical/bare metal, virtual, and cloud infrastructure. Cisco assists IT departments with developing a self-service portal and service catalog to quickly deliver on-demand IT services to support business initiatives.

Simplify deployment, help ensure quality of experience, and reduce operating costs with high-performance data and storage networking. Cisco's integrated network services provide high-speed connectivity and high availability, increase application performance, and reduce security risk in multi-tenant environments.

Cisco Unified Computing System (UCS) provides a highly-scalable, system-level computing solution that integrates computing, access networking, and storage networking. Embedded management capabilities simplify operations across physical, virtual, and cloud infrastructure.



AUTOMATION



INTELLIGENCE



FLEXIBILITY

CLOUD MANAGEMENT AND ORCHESTRATION

- End User Self-Service Portal
- Service Governance, Access and Policy Controls
- Workflow and Integration
- Lifecycle Management
- Pay-per-Use

On-Demand, Self-Service Provisioning of IT Resources

CLOUD MANAGEMENT AND ORCHESTRATION

Policy-based, Model-Driven Approach Reduces TCO

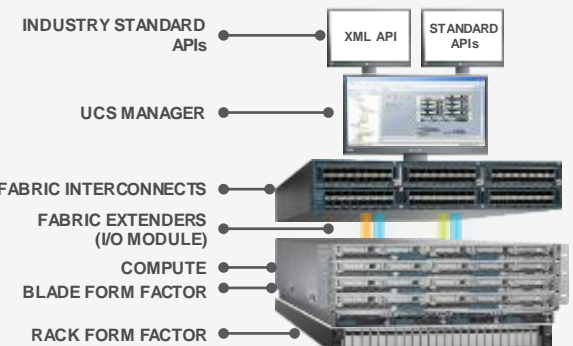
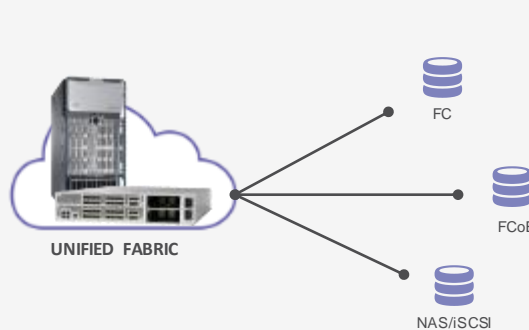
- POLICY-BASED COMPUTE Service Profiles
- POLICY-BASED STORAGE Storage Automation
- POLICY-BASED NETWORK Network Containers

Easiest to Use, Delivers Faster Time to Value



NETWORK COMPUTE STORAGE

Complements IT Systems and Management Tools



Thank you.



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