

VMware and Cisco: Virtualizing Cisco Unified Communications Solutions

AT A GLANCE

The latest Cisco Unified Communications (Cisco UC) software helps to improve employee productivity and collaboration across the business, but requires mission-critical infrastructure support that can be costly in non-virtualized environments. The Cisco Unified Computing System with VMware® vSphere™ provides an integrated, unified, and highly-manageable infrastructure solution that can dramatically simplify deployment, increase utilization, and reduce total costs. It is ideal for both new deployments and software upgrades, and is the only virtualization platform certified for Cisco UC.

BENEFITS

- **Simplify infrastructure and reduce TCO** with a unified and fully virtualized computing platform that reduces server counts, network ports, and cabling by 50 percent or more.
- **Safeguard employee productivity** with automated high availability, fault tolerance, and disaster recovery.
- **Improve business agility** through faster application deployment, on-demand scalability, and familiar and consistent management tools.
- **Deliver a great user experience** with quality of service (QoS) for virtualized environments, plus automated workload balancing.
- **Reduce business risk** with policy-based security optimized for virtual environments.
- **Grow your solution with ease** by enabling simple migration to faster hardware and storage as workloads and user volumes increase.

The Challenges of Un-Virtualized Infrastructure

Businesses depend on Cisco UC for voice, unified messaging, presence, and other capabilities that are essential for core business operations. To keep employees happy and productive, IT organizations need to deliver high performance at all times, along with uninterrupted availability and the flexibility to add capacity and new functionality on demand.

These are tough requirements to meet in a traditional IT environment. Without virtualization, utilization rates tend to be low, leading to data center sprawl and high capital, management, and operating costs. More agile and cost-effective solutions are needed, both for new customers and for those planning an upgrade to the latest Cisco UC software.

Better Value with a Unified and Virtualized Infrastructure

The Cisco Unified Computing System (Cisco UCS) with VMware vSphere provides mission-critical infrastructure support for Cisco UC on a highly flexible, cost-effective, and fully virtualized hardware platform. High-performance Cisco blade servers are pre-integrated with a unified fabric and a shared storage area network (SAN) to deliver exceptional performance, availability, manageability, and security.

Tight integration between VMware® vCenter™ and Cisco UCS Manager provides unprecedented control over physical and virtual assets. Cisco UC applications can be deployed, scaled and adapted far more quickly on this virtualized platform, and customers have the visibility and policy-based control they need to maintain the highest levels of availability, security, and business continuity.

OPEX

- Reduced Rack & Floor Space (36%)
- Reduced Power/Cooling (20+ %)
- Fewer Servers to Manage (50-75% less)
- Reduced Maintenance/Support Costs

CAPEX

- Reduced Server Count (50-75%)
- Storage Consolidation (50+ %)
- Reduced Network Ports (50+ %)
- Reduced Cabling (50+ %)

Simplify IT and Reduce TCO by virtualizing Cisco Unified Communications infrastructure.

IMPROVED BUSINESS CONTINUITY WITH VMWARE® VSPHERE™ 5:

- Simplified High Availability (HA).
- Setup HA in minutes to protect all applications.
- Enhanced Disaster Recovery.
- VMware vCenter Site Recovery Manager now includes automated failback to the primary site, plus VMware vSphere Replication for cost-effective, multi-site storage replication.

Enhanced Business And IT Agility

Cisco UC applications can be deployed in minutes, rather than days.

- **Just-in-Time Provisioning**

VMware vSphere templates and Cisco service profiles enable near-instant provisioning of virtual machines, while helping to ensure security and quality of service (QoS).

- **Simple Upgrades**

Physical capacity can be added almost instantly with Cisco UCS Manager and Cisco service profiles.

Higher Density, Lower TCO

Improved physical and operational efficiency deliver dramatic savings across all key IT parameters.

- **Better Utilization**

The Cisco UCS with VMware vSphere supports greater virtual machine density than any comparable platform.

- **A Radically Simplified Architecture**

The Cisco UCS has up to 50 percent fewer components to purchase, configure, manage, power, and cool.

- **More Memory at Lower Cost**

Cisco Extended Memory enables more memory per two-socket server, which reduces memory costs by up to 60 percent.

- **A Powerful, Converged Network**

The Cisco unified fabric supports all traffic types, while reducing adapter, cable, and switch requirements by more than 50 percent.

- **Efficient Management**

Cisco UCS Manager and VMware vCenter provide efficient, tightly integrated management of all physical and virtual assets.

A High Quality User Experience

Higher performance and simpler scaling helps IT deliver a better experience to more users.

- **Leading Virtual Machine Performance**

The Cisco UCS has posted one of the top scores on the VMware VMmark virtualization benchmark.

- **Faster Network and Storage Access**

Cisco virtual interface cards and VMware VMDirectPath technology increase network throughput by up to 30 percent.

- **On-Demand Scalability**

Automated workload balancing and dynamic resource scaling deliver continuous high performance.

Reduced Risk

The Cisco UCS with VMware vSphere is optimized to deliver high availability and strong security in mission-critical environments.

- **Zero-Downtime Failover**

VMware High Availability provides automated virtual machine monitoring and failover. VMware Fault Tolerance adds mirrored operation for full recovery with no downtime or data loss.

- **Automated Disaster Recovery**

VMware® Site Recovery Manager™ automates failover for the entire environment, and can be tested without disrupting applications.

- **QoS and Strong Security**

QoS and security configurations are encapsulated in Cisco service profiles that stay with virtual machines, even during live migrations.

- **Efficient, Collaborative Management**

Policy- and role-based management tools allow server, storage, and network administrators to combine their expertise.

- **Unique Visibility and Control**

Cisco VN-Link technology and VMware vCenter provide unique visibility and control of the virtual network.

Find Out More

Visit the following links to learn more:

- **The Cisco Unified Computing System**

<http://www.cisco.com/go/ucs>

- **Cisco Unified Communications**

www.cisco.com/go/uc

- **Cisco UC on Cisco UCS**

(Technical and Purchasing Information):

http://www.cisco.com/en/US/prod/collateral/voicesw/ps6790/ps5748/ps378/solution_overview_c22-597556.html

www.cisco.com/go/uconucs

- **The VMware and Cisco Alliance**

(Joint Solutions and Resources):

VMware Web site:

<http://www.vmware.com/go/cisco>

- Cisco Web site:

<http://www.cisco.com/go/vmware>

