

Cisco UCS Mini for Nimble Storage SmartStack with Microsoft Applications



Cisco UCS Mini with Nimble Storage SmartStack All-in-One Package

Cisco offers a unified computing solution for Microsoft-based small and medium-sized businesses or for the edge of your large IT environments.

Cisco UCS® Mini is a total computing solution that delivers enterprise capabilities in a small form factor. Together with Nimble Storage SmartStack, it provides a small and efficient platform for Microsoft Windows Server and Microsoft workloads such as SQL Server, SharePoint, Exchange, and private cloud.

Cisco and Microsoft Alliance

Cisco® Data Center solutions unify computing, networking, storage, and management resources in a single platform. These solutions help provide the architectural flexibility and operational simplicity that are essential for virtualization and cloud computing.

The Microsoft and Cisco alliance, building on the technical innovation at both companies, integrates the operating system, native hypervisor, applications, and management software into virtualization solutions. These solutions take full advantage of a unified infrastructure and enable IT as a service (ITaaS). Cisco Unified Computing System™ (Cisco UCS) solutions automate and simplify deployment, orchestration, and management across server, network, and cloud environments. This approach allows customers to:

- Respond rapidly to changing business needs
- Scale the data center while avoiding complexity
- Accelerate the transition to private cloud and hybrid cloud environments

Solution Overview

Cisco UCS Mini for Nimble Storage SmartStack with Microsoft applications offers these features:

- Computing and storage integration
 - Six-rack-unit (6RU) rack-mount chassis
 - Up to eight blade servers and up to seven rack servers
- Integrated networking
 - Enhanced Small Form-Factor Pluggable (SFP+) for 1- or 10-Gbps connectivity
 - Hassle-free connectivity with end-host mode
- High availability
 - Hot-pluggable redundant power supplies (N+N and N+1 plus support): 100 to 120 volts (V), 200 to 240V, and -48V support
 - Redundant network connectivity and redundant fans
- Storage
 - Nimble Storage Adaptive Flash, eliminating the flash memory performance and capacity trade-off
 - Capability to scale storage performance and capacity independently and nondisruptively
 - Cloud-based management and deep-data analytics, optimizing system availability and efficiency
 - Integration with Cisco UCS Director and Microsoft System Center for simplified provisioning and management
 - SmartStack reference architectures designed and tested with Cisco and Microsoft



Main Benefits

- Unites computing, networking, storage access, and management resources in a single platform
- Simplifies infrastructure management
- Enhances application performance and scalability
- Accelerates IT delivery to the business
- Offers an affordable solution for Microsoft Windows Server 2003 migration in remote and branch offices
- Provides a flexible and scalable entry point for migration to Microsoft Hyper-V or VMware private or hybrid clouds
- Has received Microsoft community recognition, with awards for the Cisco UCS and Cisco Nexus® platforms and Cisco UCS Manager

Microsoft Community Recognition

Cisco awards for UCS, Nexus and UCS Manager.





Nimble Storage SmartStack Components

- Cisco UCS B200 M3 Blade Server
- Cisco UCS 5108 Blade Server Chassis
- Cisco UCS 6324 Fabric Interconnect
- Nimble Storage CS-Series storage array



Reduce costs and deployment risks with prevalidated designs for infrastructure density, nondisruptive operations, systems scaled to fit, and workload independence.

Why Cisco UCS Mini with SmartStack for Microsoft?

- **Lower operational risks and administrative overhead, making IT more productive:** Benefit from Nimble Storage InfoSight, the data sciences-based customer support portal with cloud-based monitoring, capacity forecasting, performance recommendations, proactive alerting, and automated case creation.
- **Deliver great application performance and low storage latencies:** Reduce total-cost-of-ownership (TCO) at the platform, site, and organization levels with a network and server infrastructure designed for virtualization and cloud computing. Get high I/O operations per second (IOPS) rates with latencies of less than a millisecond for random read and write operations with dynamic caching of active data and a write-optimized data layout. Use validated designs including computing, networking, and application guidelines to accelerate deployment, reduce project risk, and improve IT staff efficiency.
- **Simplify management:** Use Microsoft System Center and PowerShell along with Cisco UCS Manager to holistically manage and orchestrate Cisco server and networking infrastructure the same way that you manage your Microsoft server and application software.
- **Deliver world-class performance:** In the five years since its introduction, Cisco UCS powered by Intel® Xeon® processors has captured 100 world-record performance benchmarks with results that were either first to market or exceeded those set by vendors of existing systems.

For More Information

www.cisco.com/go/ucsmini

www.nimblestorage.com/solutions/server

virtualization/microsoft.php

www.nimblestorage.com/solutions/smartstack.php

