

## Virtualizing Microsoft SharePoint for Small and Medium-Sized Businesses

### Highlights

#### Fast Deployment

- Cisco has engaged the EMC VSPEX program to design configurations that are presized and prevalidated to reduce risk and accelerate deployment.
- Cisco® Validated Designs for Microsoft SharePoint further accelerate deployment and reduce risk with pretested configurations.

#### Reduced Risk

- Reliable, highly available infrastructure helps ensure continuous access to Microsoft SharePoint.
- Sizing using the EMC VSPEX program helps ensure excellent performance.

#### Unified Management

- Cisco Unified Computing System™ (Cisco UCS®) provides intelligent infrastructure with unified management to accelerate deployment and simplify scaling. Standalone options that use individually managed servers are available.

#### Matched with EMC VNX Storage

- EMC VNX Series storage is high-performing unified storage that is simplified and efficient and optimized for virtual application deployment.

#### Choice of Hypervisor

- Customers can choose from Microsoft Windows 2008 R2 Hyper-V or VMware vSphere for their virtualized environment.

#### Lower Total Cost of Ownership

- With the simplified architecture of Cisco UCS, the solution has lower capital costs, and with its reduced complexity and simplified management, the solution has lower operating costs.

## Support a range of collaboration initiatives with easy deployment on Cisco Unified Computing System with presized and prevalidated EMC VSPEX configurations.

Cisco Unified Computing System™ (Cisco UCS®) with Microsoft SharePoint 2010 running on Microsoft Windows Server 2008 R2 Hyper-V or VMware vSphere enables and accelerates collaboration tool deployment with validated configurations that help ensure interoperability, decrease complexity, and increase efficiency for small and medium-sized businesses. These solutions use the EMC VSPEX M50, V50, M100, and V100 configurations and EMC VNX Family storage designed for high performance and consolidation with both IP and SAN storage options.

These Cisco® solutions are available to meet the collaboration needs of small and medium-sized businesses by running Microsoft SharePoint 2010 software in a virtualized environment. Microsoft SharePoint 2010 is an extensible and scalable web-based platform. It consists of tools and technologies that support collaboration and sharing of information within teams throughout the organization and on the web. The total package is a platform that can be used to build collaboration applications for better storage, sharing, and management of information within an organization. Microsoft SharePoint turns users into participants, allowing users to easily create, share, and connect with information, applications, and people.

### Solution Benefits

Cisco UCS with Microsoft SharePoint 2010, EMC storage, and a choice of hypervisors together help small and medium-sized businesses quickly lower total cost of ownership (TCO), reduce complexity, and improve operation efficiency. Joint validation has shown that the solution can support 500, 2500, and 5000 users with 10, 10, and 30 percent concurrency, respectively, using the configurations detailed in Table 1. All the designs support high availability through server redundancy.

The solutions offer customers a choice of hypervisors. Customers can also choose between managed (with Cisco UCS) and unmanaged (with individual servers) options. Small and medium-sized businesses can take advantage of the power and cost savings of server consolidation without being burdened with the complexity entailed in designing and implementing custom solutions.

The EMC VSPEX program gives you the flexibility to design and implement your choice of Cisco server and networking configurations. The Cisco solution is designed to provide the high availability required to meet today's needs as well as the headroom required for future growth and additional workload deployments on Cisco architectures.

## Easy Ordering

The Cisco Solution for EMC VSPEX: Microsoft SharePoint 2010 components are available through Cisco and its partners (see Table 1). Cisco solutions for EMC VSPEX make it easy to quickly deploy a powerful, secure collaboration environment in your enterprise without the expense or risk entailed in designing and building your own custom solution.

## For More Information

For more information about Cisco solutions for EMC VSPEX, please visit <http://www.cisco.com/go/vspex>.

See also the Cisco Validated Design [Microsoft SharePoint 2010 with Microsoft Hyper-V on Cisco UCS Rack-Mount Servers](#).

See also [Cisco Unified Computing System: Meet the Challenges of Microsoft SharePoint Server Workloads](#).

**Table 1.** Small, Medium, and Large Solution Components

Solution Component	Small	Medium	Large
Workload	500 users with 10% concurrency	2500 users with 10% concurrency	5000 users with 30% concurrency
Servers (The number of servers can be sized up or down depending on workload)	<b>Managed blade server solution:</b> 4 Cisco UCS B200 M3 Blade Servers with: <ul style="list-style-type: none"><li>• Cisco UCS Virtual Interface Card (VIC) 1240</li></ul> <b>Unmanaged rack server solution:</b> 4 Cisco UCS C220 M3 Rack Servers with: <ul style="list-style-type: none"><li>• Cisco UCS VIC 1225</li></ul>		
Processor and memory	<ul style="list-style-type: none"><li>• 2 Intel Xeon processors E5-2650 at 2.0 GHz (16 cores)</li><li>• 64 GB of memory</li></ul>		
Networking	<b>Managed blade server solution:</b> <ul style="list-style-type: none"><li>• 2 Cisco UCS 6248UP 48-Port Fabric Interconnects</li></ul> <b>Unmanaged rack server solution</b> <ul style="list-style-type: none"><li>• 2 Cisco Nexus 3048 Switches</li></ul>		
Storage	EMC VNXe3300 storage with: <ul style="list-style-type: none"><li>• 2 storage controllers</li><li>• Redundant Fibre Channel modules</li><li>• 15 600-GB SAS drives</li></ul> EMC VNXe3150 storage can be used for smaller workloads		

[Microsoft TechNet](#) has published best practices for Microsoft SharePoint 2010.

For more information about Cisco UCS Microsoft solutions, please visit <http://www.cisco.com/go/microsoft>.



**Americas Headquarters**  
Cisco Systems, Inc.  
San Jose, CA

**Asia Pacific Headquarters**  
Cisco Systems (USA) Pte. Ltd.  
Singapore

**Europe Headquarters**  
Cisco Systems International BV Amsterdam,  
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at [www.cisco.com/go/offices](http://www.cisco.com/go/offices).