Cisco Solution for EMC VSPEX with Cisco UCS Mini

With Microsoft Windows Server 2012 R2 Hyper-V

Solution Brief
March 2015

Reduce costs and radically simplify remote and branch office computing with Cisco Solution for EMC VSPEX with Cisco UCS Mini.

Imagine deploying remote or branch office computing simply and easily. Imagine not having to have local technical support contracts added to your expenses. Imagine powerful, flexible servers that don't need raised floors but that are managed remotely with the rest of your data center infrastructure.

Cisco UCS Mini integrates Cisco Unified Computing System™ (Cisco UCS®) Blade Servers with EMC VNXe 3200 storage running Windows Server 2012 R2 Hyper-V supporting up to 100 virtual machines. This validated, half-rack form factor solution is specifically designed to be easily deployed in remote or branch offices and managed remotely.

Quick and Reliable Deployments

This EMC VSPEX solution, based on a Cisco® Validated Design, increases the value of your remote and branch office deployments because:

- Cisco tested, validated, and documented the solution through a Cisco Validated Design. Cisco Validated Designs reduce risk and guesswork by giving your architects and administrators a guidebook for implementing the solution.
- Every Cisco UCS server can be managed from a single point with integrated Cisco UCS Manager and managed across geographic regions with Cisco UCS Central Software.
- This solution delivers the resiliency and low cost and eases deployment of remote and branch office computing environments that require availability, flexibility, and automation.
- Cisco simplified the architecture and greatly reduced server management costs to lower your capital expenditures (CapEx) and operating expenses (OpEx) for an overall reduction in total cost of ownership.

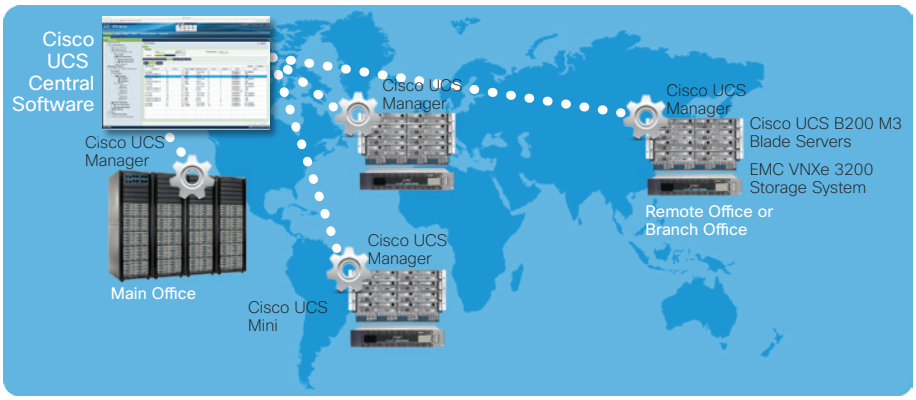

Figure1. Cisco Solution for EMC VSPEX with Cisco UCS Mini Can Be Deployed In Any Remote or Branch Office Environment

Reduced Risk

The Cisco Solution for EMC VSPEX with Cisco UCS Mini went through extensive testing to become a certified Cisco® Validated Design (CVD). The solution engages the EMC VSPEX program for configuration validation and to help ensure interoperability. All this is done to make deploying the solution fast and easy. Additionally, this solution is designed to be highly available and reliable, helping ensure continuous application access. This solution reduces risk through testing, validation, and with excellent availability.

Remote Management

Cisco UCS Manager uses a model-based approach to describe and implement a configuration by associating a logical model with a physical set of resources. A model, embodied as a Cisco UCS service profile, is a self-contained description of server identity, configuration, and connectivity. Cisco UCS Central Software extends the role- and policy-based management model of

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Cisco UCS Manager to deliver single, consistent, role- and policy-based management that spans multiple systems within a data center, across multiple facilities, and across locations worldwide. With Cisco UCS Central Software, you can manage all your remote and branch offices centrally, consistently, and efficiently.

Resiliency

Cisco UCS Mini consolidates application hosting, compute capabilities, centralized management and virtualization in a power-, size- and weight-optimized form factor designed for the remote and branch offices. The Cisco UCS Mini and EMC VNXe storage with its reduced hardware footprint, lower energy consumption and improved uptime availability and resiliency positions it as an excellent solution.

Lower TCO

Less Complexity

Less complexity means lower costs. Cisco UCS Mini is a smaller version of Cisco Unified Computing System. It is a unified system that eliminates the multiple layers of complex and separate Ethernet and Fibre Channel switching and associated management with Cisco SingleConnect technology. We increased performance and reduced complexity through a tight integration between Cisco UCS Mini and EMC storage.

Lower Management Costs

Your operating costs are reduced because management is integrated, simplifying deployment and reducing the risk of configuration errors that can cause downtime. Integrated management means that you can deploy servers in minutes, rather than the days or weeks required in traditional environments.

Lower Three-Year TCO

For a small configuration of two servers, the total cost of ownership of the Cisco UCS Mini, over three years, will give you savings compared a similar HP solution (HP DL360p Gen8) with:

- 38 percent savings on server and switch hardware costs and warranty costs
- 48 percent savings on power and cooling
- 43 percent savings for initial provisioning and ongoing server and network administration
- 100 percent savings on system management software licenses and warranty.

Reduce Support Costs

Additionally, because the Cisco UCS Mini can be managed remotely, by your data center staff, with efficiency and consistency, you won't have to pay for expensive support contracts with remote service organizations. This will greatly reduce the TCO of remote and branch office servers.

Excellent Solution

The Cisco Solution for EMC VSPEX with Cisco UCS Mini is an excellent solution for serving the compute needs of your remote and branch offices. It reduces your risk and accelerates deployments with validated designs. The solution lowers costs with a radically simplified architecture, fewer components, reduced power and cooling, and remote system management that extends your data center expertise to your remote and branch offices.

For More Information

- Read the Cisco Validated Design Cisco UCS Mini Branch Office Solution for EMC VSPEX with Microsoft Windows Server 2012 R2 Hyper-V
- For more information about Cisco Solutions for EMC VSPEX visit http://www.cisco.com/go/vspex

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