



Comprehensive EMC VSPEX Management with Cisco UCS Director

What You Will Learn

Today's strategic discussion with chief information officers (CIOs) and IT managers is about business agility and data center responsiveness. Organizations are shifting from siloed IT architecture models to converged infrastructure solutions that preintegrate computing, network, and storage components. This approach can reduce costs while enhancing an IT department's flexibility and agility.

EMC VSPEX is a simple, efficient, and proven infrastructure solution that delivers predictable performance to significantly reduce costs while delivering flexibility and agility. Built on the Cisco Unified Computing System™ (Cisco UCS®), Cisco Nexus® fabric, and EMC VNX storage platform, VSPEX delivers outstanding performance for virtualized business applications. In combination with EMC storage, these reference configurations allow flexible solutions that can easily scale, and they are optimized for a variety of application workloads.

However, EMC VSPEX alone cannot deliver the full measure of flexibility and agility sought by today's dynamic data centers. A centralized automation and management solution is also needed to further reduce operational and capital costs and improve team collaboration for enhanced IT operating efficiency.

Cisco UCS Director Features and Functionality for EMC VSPEX

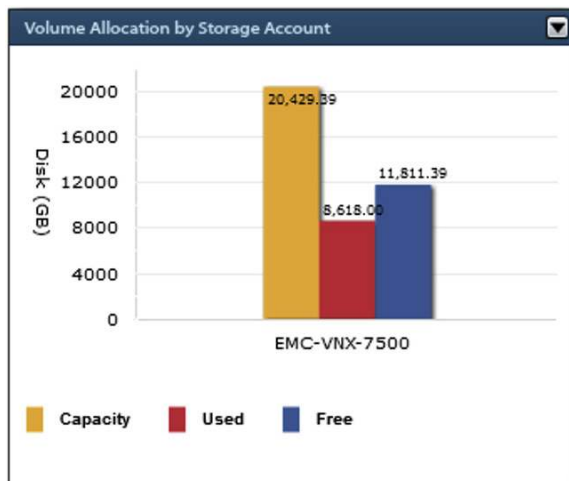
- Support for EMC VSPEX configurations V125 and V250
- Cisco UCS management
- Cisco Nexus management
- Storage management (file, block, unified EMC VNX 5300, 5700, and 7500 Series)
- Orchestration and provisioning
 - Prebuilt task libraries
 - Workflow creation for tenant, bare-metal, and storage components
- Dynamic capacity management
- Metering and chargeback
- Self-service and administrator portal

Solution

Cisco UCS Director is a vital, certified solution for EMC VSPEX that supports V125 and V250 models. It delivers unified orchestration, provisioning, and management across virtualization, computing, network, and storage from a single-view portal. When EMC VSPEX and Cisco UCS Director are combined, IT can shift focus from managing infrastructure to delivering new service innovation. Used together, EMC VSPEX and Cisco UCS Director deliver:

- Dramatically reduced capital and operating expenses through end-to-end automation and lifecycle management of the VSPEX solution
- Reduced data center complexity for organizations that build next-generation data centers based on VSPEX platforms
- Enhanced collaboration between computing, network, storage, and virtualization teams, allowing subject matter experts to define policies and processes that are utilized when infrastructure resources are consumed
- Support for multiple infrastructure stacks in a single data center, as well as across multiple data centers globally

Figure 1. Easy Resource Management



The extensive Cisco UCS Director task library lets you quickly assemble, configure, and manage workflows for EMC VSPEX tenant, bare-metal, and storage components. The workflows can be run immediately or published in an infrastructure catalog. The drag-and-drop workflow designer tool eliminates the need for service engagements or the need to bring together multiple product solutions or third-party adapters.

Figure 2. Tasks Specific to EMC VSPEX

EMC VNX Tasks

1. Create VNX Volume
2. Add VNX NFS Export
3. Create VNX File System
4. Delete VNX Volume
5. Delete VNX File System
6. Delete VNX NFS Export
7. Delete VNX Storage Pool
8. Create VNX Network Interface
9. Delete VNX Network Interface
10. Add VNX DNS Domain
11. Add VNX CIFS Server
12. Add VNX CIFS Share
13. Delete VNX DNS Domain
14. Delete VNX CIFS Share
15. Delete VNX CIFS Server
16. Create VNX RAID Group
17. Delete VNX RAID Group
18. Defragment VNX RAID Group
19. Create VNX Block Storage Pool
20. Delete VNX Block Storage Pool
21. Expand VNX Block Storage Pool
22. Create VNX LUN
23. Delete VNX LUN
24. Add VNX LUN to Storage Group
25. Remove LUN from VNX Storage Group
26. Create VNX Storage Group
27. Delete VNX Storage Group
28. Add VNX Host Initiator Entry
29. Add Hosts to VNX Storage Group
30. Remove Hosts from VNX Storage Group
31. Remove VNX Initiator
32. Resize VNX VM Datastore
33. Associate VNX LUN as Datastore
34. VNX Storage Disk Allocator

During installation of Cisco UCS Director, its model-based orchestration conducts an infrastructure discovery that maps the physical and logical relationships of each component layer within VSPEX. This information is stored in a Microsoft SQL Server or Oracle database and is used to deliver dynamic capacity management, metering, and showback capabilities.

Simplicity in the data center is rare, and IT is faced with complex applications and challenging expectations. Cisco UCS Director and EMC VSPEX allow IT departments to add more value to their organization, so they can quickly increase efficiency and better support their business goals.

For More Information

To learn more about Cisco UCS Director, visit: <http://www.cisco.com/go/ucsdirector>.

For more information about EMC VSPEX, visit: <http://www.emc.com/vspex>.



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