



EMC VCE Vblock Systems Administration and Management

Duration: 5 Days **Course Code: EMCVBAM** **Delivery Method: Virtual Learning**

Overview:

This course provides an introduction to the administration and management of a Vblock System.

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

Target Audience:

This course is intended for anyone charged with understanding and/or performing administrative and maintenance tasks using the Vblock system.

Objectives:

- Understand the main elements of Administration and Management
 - Develop a working understanding of the Vblock system as it pertains to:
 - o Validation
 - o Monitoring
 - o Administration
 - o Management
 - o Security
 - Perform resource isolation for simulated multi-tenant environments
 - Explain the steps for configuring monitoring and alert setup including thresholding
 - Build a Vblock System Run Book by walking through each of the component management interfaces.
 - Inventory current Vblock system configuration
 - Enact role based security
 - Understand and explore VCE Vision
-

Prerequisites:

Prerequisite Knowledge To understand the content and successfully complete of this course, a participant must have a suitable knowledgebase/skill set in datacenter disciplines of storage, network and server virtualization.

Completion of the VCE Converged Infrastructure Solutions Foundations eLearning course is strongly recommended

Content:

LAB 1. Capturing the Vblock System Configuration Baseline

- Establish a Vblock System Configuration Baseline
- UCS Manager GUI: Capture Compute Resource Configuration
- UCS Manager CLI: Capture Compute Resource Configuration
- EMC Unisphere for VNX: Capture VNX Storage Configuration Information
- Navisphere CLI: Capture VNX Storage Configuration using
- Solutions Enabler CLI: Capture VMAX Storage Configuration (Optional)
- NX-OS CLI for MDS Switch: Capture Storage Area Network (SAN) Configuration
- NX-OS CLI for Nexus 5548: Capture Network Configuration
- vSphere Web Client: Explore vCenter Configuration
- Collecting Support Information with VCE Vision and vSphere

LAB 2. VCE Vision: Administration

- VCE Vision Intelligent Operations Utilization
- Vision System Library Administration

LAB 3. VCE Vision Plug-in for vCenter

- Install VCE Vision Plug-in for vCenter

LAB 4. Additional UCS Configuration Options

- Modifying the time zone setting using UCS Manager
- Adding a network time protocol server using UCS Manager

LAB 5. Monitoring for Component Errors or Failures

- Vblock System Events
- Log Browser
- UCS Fault Detection
- Storage Alerts

LAB 6. Vblock System Assurance

- Running Compliance Scans
- Installing New Certification Matrixes
- Installing Optional components in a Compliance Scan
- Installing the latest VMware vSphere ESXi 5.1 patch

LAB 7. Proactive Monitoring

- Validating SNMP Setting within the UCS
- Validating SNMP on the MDS switches
- Validating SNMP on Nexus 5K Switches
- Validating SNMP on VNX
- Validating SNMP trap forwarding in EMC Unisphere
- Configure UCS Threshold Policies
- Syslog Management
- Using VCE Vision SNMP in Network Management Systems
- Testing System Library Configuration

LAB 8. Service Profile Templates and Service Profiles

- Modifying an Initial Service Profile Template
- Modifying the Service Profile by Bind to an Initial Service Profile Template
- Cloning a Service Profile to an Updating Service Profile Template
- Modifying an Updating Service Profile Template and the Bound Service Profile

LAB 9. UCS Manager: Expanding Address and ID Pools

- UUID Pool
- Expand MAC Address Pool
- Expand WWNN Address Pools
- Expand the WWPN Pool

LAB 10. Managing Boot Devices and Paths

- MDS NX-OS CLI: WWPN Verification
- UCS Manager: New Boot Policy (VNX)
- Unisphere for VNX: Connecting to VNX Storage - New Initiators
- Unisphere for VNX: Connecting to VNX Storage – Storage Groups
- Unisphere for VNX: Connecting to VNX Storage - Creating a boot LUN

LAB 11. UCS Manager: Create a Service Profile from Scratch

- Creating a New Service Profile
- Associate a new service profile
- Installing ESX-i
- Restore Original Service Profile

LAB 12. Deploying Virtual Machines

- Creating a New Datastore
- Provision an Additional LUN
- Create a New Data Store
- Creating a Virtual Machine
- Creating a New VM in vSphere Web Client
- Accessing the VM
- Capacity Management

LAB 13. Creating NFS Stores

- Configuring advanced settings for VMware vSphere ESXi 5.1
- Configure File System and NFS Exports
- ESXi NFS Configuration
- VM Access to the NFS File System
- Finding the NFS VLAN
- Adding a New Interface To VNX
- Create new network in vSphere
- Create new NIC the Application VM
- Create The NFS Mount on the VM

LAB 14. Managing CIFS

- Creating a CIFS Server
- Create a Volume
- Creating a File System Pool
- Creating a CIFS file system
- Mount a File System on the CIFS Server in VNX
- Test the CIFS File System on your Management Workstation
- Mount CIFS on VM

LAB 15. Protecting Vblock System Metadata

- VCE Vision Configuration Backup
- VCE Vision Configuration Restoration
- VCE Vision Interface to Vblock System Configuration
- Backup of UCS Manager
- Backup of the Nexus 5k Switch
- Backup of the MDS Switch

LAB 16. Protecting Vblock System Production Data

- Protection in Unisphere

LAB 17. Securing the Vblock System

- Security
- vCenter Password Retention
- VCE Vision Appliance and Central Authorization
- Adjusting Syslog maximum log file size
- Securing a New VLANs with Roles
- Creating a QoS Policy on the Nexus 1000v

LAB 18. Trusted Multi-tenant in a Vblock System

- Trusted Multi-Tenancy
- Create Admin Account
- Create Sub-Organization
- Segregated Storage
- Create a Segregated Storage Pool on EMC VNX
- Segregate UCS Compute Environment
- Segregate vSphere Access

- VMware Capacity Monitoring
- Monitoring Storage
- Monitor a Storage Pool
- Monitoring a RAID group
- Capacity Expansion
- Expand A Storage Pool
- Expand an Existing LUN
- Expand a Data Store
- Template Creation and Usage
- Creating a VM Template in vSphere Web Client
- Creating a VM from a Template
- Accessing the VM
- VLAN Creation
- Add a VLAN on UCS
- Adding a VLAN to the Cisco Nexus 5000
- Adding a VLAN to the Cisco Nexus 1000V
- Adding the VLAN to VMware Virtual Switch
- Changing the VLAN for the Application VMs

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

info@globalknowledge.co.uk

www.globalknowledge.com/en-gb/

Global Knowledge, Mulberry Business Park, Fishponds Road, Wokingham Berkshire RG41 2GY UK