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## VMAX All Flash and VMAX3 Configuration Management

**Duration: 3 Days    Course Code: VMAXCM**

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### Overview:

This Specialist level course provides participants with an in-depth understanding of configuration tasks on the VMAX All Flash and VMAX3 Family of arrays. Key features and functions of the VMAX All Flash and VMAX3 arrays are covered in detail. Topics include storage provisioning concepts, virtual provisioning, automated tiering (FAST), device and port management, service level based storage provisioning and eNAS. Participants will use Unisphere for VMAX and Solutions Enabler (SYMCLI) to manage configuration changes. The lab exercises will be performed on Open Systems hosts (traditional and virtualized) attached to VMAX3 arrays.

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### Target Audience:

This course is intended for EMC personnel, customers, and partners who will be managing VMAX All Flash and VMAX3 arrays.

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### Objectives:

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| <ul style="list-style-type: none"><li>■ <b>Upon successful completion of this course, participants should be able to:</b></li><li>■ Provide an overview of configuration and storage provisioning</li><li>■ Describe virtual provisioning concepts and automated tiering</li><li>■ Create thin devices</li><li>■ Manage ports and port characteristics</li><li>■ Perform service level objective based provisioning to hosts</li></ul> | <ul style="list-style-type: none"><li>■ Set/change Host I/O Limits, SLO, and Workload Type</li><li>■ Monitor Storage Resource Pools and SLO Compliance</li><li>■ Use Unisphere for VMAX for Workload Planning</li><li>■ Provide an overview of the eNAS solution</li><li>■ Manage eNAS</li><li>■ Provide an overview of storage management in a virtualized environment</li></ul> |
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### Prerequisites:

- VMAX3 Fundamentals
  - VMAX All Flash Fundamentals
  - VMware vSphere
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## Content:

The content of this course is designed to support the course objectives.

### Module – Configuration Management Overview

- Lesson – Overview
- Lesson – Storage Provisioning Overview
- Lab – Explore VMAX3 Environment with Unisphere for VMAX and SYMCLI

### Module – Virtual Provisioning and FAST Concepts

- Lesson – Virtual Provisioning and FAST Overview
- Lesson – FAST Algorithms and Parameters

### Module – Device and Port Management

- Lesson – Device Management
- Lesson – Port Management
- Lesson – iSCSI Management
- Lab – Port Management with Unisphere and SYMCLI

### Module – Storage Allocation using Auto-provisioning Groups

- Lesson – Auto-provisioning Groups Overview
- Lesson – Host Considerations – Storage Allocation
- Lesson – Service Level Objective Based Provisioning with Unisphere
- Lab - Service Level Objective Based Provisioning with Unisphere
- Lesson – Service Level Objective Based Provisioning with SYMCLI
- Lab – Service Level Objective Based Provisioning with SYMCLI
- Lab – Cascaded Storage Groups – Moving devices Non-disruptively and Changing SLO
- Lab – Managing Host I/O Limits

### Module – Monitoring and Workload Planning with Unisphere for VMAX

- Lesson – Monitor SRP
- Lesson – Monitor SLO Compliance
- Lesson – Workload Planning
- Lab – Monitoring SRP and SLO Compliance with Unisphere
- Lab – Workload Planning with Unisphere

### Module – eNAS Overview

### Module – eNAS Management

- Lesson – Unisphere for VMAX File Dashboard
- Lab – Allocate Storage to eNAS with Unisphere for VMAX File Dashboard
- Lesson – Managing File Systems/Shares
- Lab – Create FS/Share on VMAX3 Storage with Unisphere for VNX

### Module – Management in a Virtualized Environment

- Lesson – Virtual Server Management – Unisphere for VMAX
- Lesson – EMC VSI for VMware vSphere Web Client

This course includes labs designed to allow practical experience.

## 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](mailto:info@globalknowledge.co.uk)

[www.globalknowledge.com/en-gb/](http://www.globalknowledge.com/en-gb/)

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