Enterprise Computing Solutions - Education Services

OFERTA FORMATIVA

Detalles de contacto

Avda Europa 21, 28108 Alcobendas

Email: formacion.ecs.es@arrow.com
Phone: +34 91 761 21 51

Symmetrix VMAX Performance Workshop

CÓDIGO:	DURACIÓN:	Precio:
EMC_MR-1CP-SPERET	32 Hours (4 días)	€3,076.00

Description

This course introduces participants to the methodology for analyzing performance of Symmetrix VMAX 1/2 arrays. Participants will learn to analyze Symmetrix VMAX performance using ControlCenter Performance Manager and Symmetrix Performance Analyzer tools. Metrics that are relevant for analysis of each of the components in a Symmetrix VMAX 1/2 array are presented. Participants will learn to identify bottlenecks for performance and provide recommendations to remedy the problem. Hands-on lab exercises using performance archives reinforce the concepts and methodology presented in the lecture.

Objetivos

Upon successful completion of this course, participants should be able to:

- Relate knowledge of the Symmetrix architecture and I/O handling processes to their performance benefits
- Identify the performance impact different types of workloads have on Symmetrix VMAX 1/2 architectural components
- Use key metrics to identify performance bottlenecks and components over utilization
- Make performance-oriented recommendations when allocating new storage or migrating applications

Público

This course is intended for anyone responsible for operating, maintaining, and optimizing the performance of a Symmetrix storage environment.

Requisitos Previos

To understand the content and successfully complete this course, a student must have a suitable knowledgebase/skill set. The student must have an understanding of basic Symmetrix DMX and VMAX 1/2 architecture and the use of ControlCenter Performance Manager. Some experience with Symmetrix Performance Analyzer will be helpful.
A list of specific prerequisite courses can be found in EMC Education Services Learning Management System.

Programa

The content of this course are designed to support the course objectives. The following focus areas are included in this course:
Module 1: Performance Management Overview
Module 2: Tools for Analyzing Performance
Lesson 1: Unisphere for VMAX Performance Overview
Lesson 2: Loading Data in Performance Viewer
Lesson 3: Navigating Performance Viewer
Module 3: Performance Analysis
Lesson 1: Workload Profiles and Characterization
Lesson 2: Performance Analysis Roadmap
Lesson 3: Little’s Law and its Impact on Response Time
Module 4: Analyzing Performance of the Symmetrix Front-end Adapters
Module 5: Analyzing Symmetrix Cache Performance
Lesson 1: Symmetrix Cache Architecture
Lesson 2: Cache Hit and Miss I/O Operations
Lesson 3: System and Device Write Pending Limits
Lesson 4: Dynamic Cache Partitions
Lesson 5: Alignment of I/Os with Cache Slots
Lesson 6: XtremSW Cache

Lesson 7: Roadmap and Analysis
Module 6: Analyzing Performance of Symmetrix VMAX Backend Adapters
Lesson 1: Symmetrix Backend Architecture
Lesson 2: Analyzing Symmetrix Backend Utilization
Lesson 3: Analyzing I/O Imbalance
Lesson 4: Symmetrix Backend Optimization Algorithms
Lesson 5: Impact of RAID Protection on Backend Performance
Module 7: Performance Considerations for Business Continuity Operations
Lesson 1: TimeFinder Performance Considerations
Lesson 2: SRDF Performance Considerations
In addition to lecture and demonstrations, this course includes labs designed to allow practical experience for the participant.

Fechas Programadas

A petición. Gracias por contactarnos.

Información Adicional

Esta formación también está disponible en modalidad presencial. Por favor contáctenos para más información.