

Expert – VMAX All Flash and VMAX3 Solutions 2.0

Certification Description



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Certification Overview

Benefits any professional responsible for performance analysis of VMAX All Flash and VMAX3 arrays, design and implementation of VMAX security, multi-site SRDF, SRDF/Metro, FAST.X and Non-disruptive Migrations(NDM)

Certification Requirements

To complete the requirements for this certification you must:

1. Achieve one of the following Associate level certifications*
 - Associate - Information Storage and Management Version 1.0
 - Associate - Information Storage and Management Version 2.0
 - Associate - Information Storage and Management Version 3.0
2. Achieve one of the following Specialist level certifications
 - Specialist – Systems Administrator, VMAX3 Solutions Version 1.0
 - Specialist – Implementation Engineer, VMAX3 Solutions Version 1.0
 - Specialist – Technology Architect, VMAX3 Solutions Version 1.0
 - Specialist – Implementation Engineer, VMAX All Flash and VMAX3 Solutions Version 2.0
 - Specialist – Systems Administrator, VMAX All Flash and VMAX3 Solutions Version 2.0
 - Specialist - Implementation Engineer, PowerMax and VMAX Family Solutions Version 1.0
3. Pass the following Expert exam on or after May 06, 2016:
 - [E20-807 Expert - VMAX All Flash and VMAX3 Solutions Exam](#)

Note: These details reflect certification requirements as of **April 27, 2018**.

The Proven Professional Program periodically updates certification requirements. *Please check the [Proven Professional CertTracker](#) website regularly for the latest information and for other options to meet the Associate level requirement.

Dell Inc.
Hopkinton
Massachusetts
01748-9103
1-508-435-1000
In North America
1-866-464-7381

E20-807 Expert - VMAX All Flash and VMAX3 Solutions Exam

Exam Description



Duration

90 Minutes
(60 Questions)

Pass Score: 60

Practice Test

Exam - [E20-807](#)

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Overview

This exam is a qualifying exam for all VMAX All Flash and VMAX3 Solutions Expert tracks, including, Technology Architect, Implementation Engineer, and Storage Administrator.

This exam assesses the knowledge and skills required to analyze and understand the performance of VMAX All Flash & VMAX3 arrays, articulate VMAX All Flash & VMAX3 Security Concepts, incorporate external arrays using FAST.X, use SRDF for three-site remote replication and Metro solutions and Non-disruptive migrations to VMAX All Flash and VMAX3 arrays.

Dell Technologies provides free practice tests to assess your knowledge in preparation for the exam. Practice tests allow you to become familiar with the topics and question types you will find on the proctored exam. Your results on a practice test offer one indication of how prepared you are for the proctored exam and can highlight topics on which you need to study and train further. A passing score on the practice test does not guarantee a passing score on the certification exam.

Products

Products likely to be referred to on this exam include but are not limited to:

- VMAX All Flash and VMAX3 with HYPERMAX OS 5977 Q3 2016 Service Release
- Solutions Enabler 8.3
- Unisphere for VMAX 8.3
- SYMCLI
- TimeFinder SnapVX
- SRDF
- FAST.X
- Non-disruptive Migration

Exam Topics

Topics likely to be covered on this exam include:

VMAX All Flash and VMAX3 Performance (36%)

- Describe the architecture of the VMAX All Flash and VMAX3 arrays from a performance perspective. Identify and explain VMAX All Flash and VMAX3 array configuration best practices for optimal performance.
- Identify performance analysis methodology, relate performance measurements to I/O operations, identify workload characterization, and the implications of Little's Law
- Perform performance-related administration tasks. Monitor the performance of VMAX All Flash/VMAX3 arrays and manage performance reports.
- Performance analysis of frontend directors: Identify relevant metrics and solve performance issues
- Performance analysis of cache and backend directors: Identify relevant metrics, investigate, and resolve performance issues
- Identify and describe TimeFinder SnapVX and SRDF performance

VMAX All Flash and VMAX3 Security Concepts (14%)

- Describe how exposure to data security vulnerabilities and the prevention of unauthorized change control operations are addressed in VMAX All Flash and VMAX3. In addition, describe how data that resides on the VMAX All Flash and VMAX3 can be secured using Data at Rest Encryption (D@RE) and how this impacts system operations and management.
- Plan, implement, and manage user authentication and role-based permissions for Solutions Enabler and Unisphere for VMAX
- Plan, implement, and manage host-based access controls for VMAX All Flash and VMAX3 arrays

VMAX All Flash VMAX3 Multi-site SRDF Solutions (16%)

- Provide an overview of multi-site SRDF solutions
- Describe dual personality RDF devices and configure Concurrent and Cascaded SRDF
- Identify and describe the SRDF technologies that support SRDF/Star - SRDF/S consistency, SRDF/A multi-session consistency, and special SDDF and SRDF features
- Describe Concurrent and Cascaded SRDF/Star failure scenarios and manage operations under normal and fault conditions

VMAX All Flash and VMAX3 SRDF/Metro Solutions (12%)

- Describe SRDF/Metro and its benefits

VMAX All Flash and VMAX3 FAST.X Solutions (15%)

- Describe the architecture of FAST.X and list the benefits and use cases
- Describe the connectivity and provisioning requirements for external arrays. Verify connectivity and access to external array LUNs.
- Configure and manage eDisks and describe the relationship between eDisks, Disk Group, Data Device, and SRPs
- Explain the considerations for various use cases; for example, XtremIO, CloudArray, Data Migration, etc.

VMAX All Flash and VMAX3 Non-disruptive Data Migration (NDM) (7%)

- Describe Non-Disruptive Migration from VMAX to a VMAX All Flash Array or a VMAX3 Array
- Perform Non-Disruptive Migration when using Unisphere for VMAX and/or using the SYMCLI

The percentages after each topic above reflects the approximate distribution of the total question set across the exam.

Recommended prior hands-on experience

Candidates taking this exam are preferred to have experience in deploying and/or managing VMAX All Flash and VMAX3 hardware and software for at least one year. The candidate should have an understanding of fundamental storage technologies, storage management, security concepts and SRDF. It is also recommended they be able to perform administrative tasks within supported HYPERMAX operating systems.

Recommended Training

The following curriculum is recommended for candidates preparing to take this

exam.

Please complete all of the following courses

Course Title	Course Number	Mode	Available
VMAX All Flash and VMAX3 Security Concepts	MR-1WP-VMAXAFSEC	eLearning	3/22/18
VMAX All Flash and VMAX3 FAST.X Solutions	MR-1WP-VMAXAFFASTX	eLearning	3/22/18
VMAX All Flash and VMAX3 Multi-site SRDF Solutions	MR-1WP-VMAXAFSRDFMULTI	eLearning	3/22/18
VMAX All Flash and VMAX3 SRDF Metro Solutions	MR-1WP-VMAXAFSRDFMETRO	eLearning	11/15/17
VMAX All Flash and VMAX3 Non-disruptive Migrations	MR-1WP-VMAXAFNDM	eLearning	3/22/18

Please complete one of the following courses

Course Title	Course Number	Mode	Available
VMAX All Flash and VMAX3 Performance Workshop	MR-1CP-VMAXAF3PW	Instructor-Led	6/27/17
VMAX All Flash and VMAX3 Performance Workshop – Online ILT	MR-1LP-VMAXAF3PW	Online ILT	6/27/17
VMAX All Flash and VMAX3 Performance Workshop – Video ILT	MR-1TP-VMAXAF3PW-1706	Video ILT	6/27/17

Note: These exam description details reflect contents as of **April 27, 2018**.

The Proven Professional Program periodically updates exams to reflect technical currency and relevance. Please check the Proven Professional website regularly for the latest information.

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