Implementing Microsoft Exchange on NetApp Storage Systems (MSEXC)

**ID** NA-MSEXC  **Price** CAD 3,780  **Duration** 3 days

**Who should attend**

The target audience is customers, systems engineers, and professional services engineers.

**Prerequisites**

The following pre-requisites or equivalent knowledge are required for this course:

NA-D7ADM  
Microsoft Course 10135: Configuring, Managing and Troubleshooting Microsoft Exchange Server 2010

**Course Objectives**

By the end of this course, you will be able to:

- Describe the benefits of running Exchange 2010 on a NetApp storage system
- Plan, implement, and manage Exchange 2010 solutions on NetApp storage systems
- Describe how to back up and restore Exchange data that is stored on NetApp storage systems
- Summarize the benefits of deploying an Exchange 2010 solution on Data ONTAP operating in Cluster-Mode
- Prepare Exchange servers and NetApp storage systems for an Exchange 2010 deployment
- Use SnapManager for Microsoft Exchange (SME) to back up, verify, and restore Exchange data
- Configure Exchange 2010 disaster recovery by using NetApp SnapMirror software
- Perform a single mailbox recovery by using NetApp Single Mailbox Recovery (SMBR)
- Use NetApp SnapVault software to protect Exchange 2010 data
- Recognize and resolve common configuration issues for Exchange 2010 deployments on NetApp storage systems

**Course Content**

In this course you will learn how to optimize Microsoft® Exchange Server 2010 in a NetApp® storage environment. Through lecture and hands-on labs you will learn architecture planning, data migration, backup and restore, disaster recovery, clustering and troubleshooting. By the end of this course, you will be able to leverage the power of NetApp technology with Microsoft Exchange Server 2010.

**Detailed Course Outline**

**Module 1 Exchange 2010 Architectures and NetApp Storage Concepts**

- Describe the main architecture and components of an Exchange deployment
- List the key differences that are introduced with Exchange Server 2010
Delivered by Fast Lane Canada, Ltd.
900 Greenbank Road
Suite 536
Nepean, ON K2J 4P6
Toll Free: (855) 778-7246
www.fastlanetraining.ca
Email: info@fastlanetraining.ca

DELIVERY METHODS

ILT – Instructor-Led Classroom Training
ILT sessions are conducted in a physical classroom environment.

ILO – Instructor-Led Online Training
ILO sessions are conducted via WebEx in a VoIP environment.

FLEX Classroom™ – Combined ILT & ILO
FLEX Classroom sessions are delivered via ILT and ILO giving you the ultimate flexibility.

Module 2 Exchange 2010 Solution Design, NetApp Storage Planning and Sizing

- Explain the NetApp storage concepts and functionality that are most relevant to Exchange 2010 deployments
- Utilize your classroom lab equipment to complete student lab exercises

Module 3 Preparing for an Exchange 2010 Deployment on NetApp Storage

- Describe the installation process for Exchange Server 2010
- Prepare and configure the NetApp storage systems and Exchange servers
- Install and configure SnapDrive for Windows
- Install and configure SnapManager for Microsoft Exchange (SME)
- Plan for an Exchange Server upgrade or migration from an Exchange implementation

Module 4 Exchange 2010 and NetApp Data ONTAP Operating in Cluster-Mode

- Explain basic terminology for Data ONTAP operating in Cluster-Mode
- Identify the similarities and differences between Data ONTAP operating in 7-Mode and operating in Cluster-Mode
- List the main benefits of utilizing Data ONTAP operating in Cluster-Mode

Module 5 Backing Up and Restoring Exchange 2010 on NetApp Storage

- Describe the backup setting options that are available with SnapManager for Microsoft Exchange (SME)
- Use SME to perform an Exchange 2010 backup
- Describe the recovery setting options that are available with SME
- Use SME to perform an Exchange 2010 restore
- Describe some of the alternate backup solutions that are available for Exchange 2010 deployments on NetApp storage

Module 6 Exchange 2010 and SnapMirror Software

- Describe SnapMirror functionality within a Microsoft Exchange deployment
- Use SnapMirror software for disaster recovery of Exchange 2010
- Explain how the failover and failback processes work with SnapMirror software

Module 7 Exchange 2010 and SnapVault Software

- Describe SnapVault functionality within a Microsoft Exchange deployment
- Use SnapVault to archive and restore Exchange 2010 data

Module 8 NetApp Single Mailbox Recovery

- Explain the features, functionality, and benefits of Single Mailbox Recovery (SMBR) for an Exchange deployment
- Use SMBR to perform a single mailbox recovery

Module 9 Troubleshooting Exchange 2010 and Issues with SnapManager for Exchange

- Troubleshoot common issues for Exchange 2010 deployments on NetApp storage
- Explain viable solutions for common issues for Exchange 2010 deployments on NetApp storage
**Lab Exercises**

Lab 1-1 View the Exchange 2010 server implementation  
Lab 1-2 View the Exchange 2010 Mailboxes  
Lab 1-3 Send an email message  
Lab 1-4 Create a two-member DAG  
Lab 2-1 Use the IMT  
Lab 2-2 Use the Microsoft sizing tool  
Lab 2-3 Calculate aggregate, volume and LUN layout  
Lab 3-1 Prepare for iSCSI connectivity between SnapDrive and storage systems  
Lab 3-2 (Optional) Allow OnCommand System Manager firewall access  
Lab 3-3 Install and configure SnapDrive for Windows  
Lab 3-4 Install SnapManager for Exchange on MB1  
Lab 3-5 Verify settings for primary and secondary aggregates  
Lab 3-6 Create volumes on the primary storage system  
Lab 3-7 Create Qtrees to contain LUNs  
Lab 3-8 Use SnapDrive to create LUNs to contain Microsoft Exchange data  
Lab 3-9 Move MB1 Mailbox Server data to NetApp storage  
Lab 3-10 Move MB2 Mailbox Server data to NetApp storage (repeat task 6)  
Lab 4-1 Start Microsoft LoadGen  
Lab 4-2 Perform a VOL move using OnCommand System Manager  
Lab 4-3 Perform Rapid Reseed using PowerShell script  
Lab 5-1 Configure the Database Availability Group (DAG)  
Lab 5-2 Back up the database using SnapManager for Exchange  
Lab 5-3 Restore Microsoft Exchange data using SnapManager for Exchange  
Lab 6-1 Setting up SnapMirror relationships  
Lab 6-2 Update a SnapMirror destination using SnapDrive for Windows  
Lab 6-3 Set up SnapMirror automatic updates using SnapManager for Exchange  
Lab 7-1 Using SnapManager to create a Protection Manager Datasets  
Lab 7-2 Adding login credentials and granting SnapVault host access  
Lab 7-3 Adding a resource pool to Protection Manager  
Lab 7-4 Scheduling backup operations  
Lab 7-5 Using SnapManager to create a Protection Manager Dataset  
Lab 8-1 Install Single Mailbox Recovery  
Lab 8-2 Delete Exchange mailbox items  
Lab 8-3 Connect a drive to a SnapVault backup to access an .edb archive  
Lab 8-4 Restore Exchange mailbox items  
Lab 8-5 Using the Find tool  
Lab 9-1 Review a number of common root causes  
Lab 9-2 Locate the SnapManager for Exchange operation reports