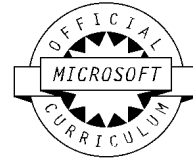


Course Outline

20345-2: Designing and Deploying Microsoft Exchange Server 2016



Duration: 5 days (30 hours)

Target Audience:

This course is intended for IT professionals who are experienced messaging administrators, messaging architects, or consultants. This course is designed for professionals in an enterprise environment who are responsible for designing and deploying Exchange Server 2016 solutions, including environments that contain previous versions of Exchange Server or Exchange Online. Students are expected to have experience with Exchange Server 2016 or previous versions of Exchange Server.

Prerequisites:

- Before attending this course, students must have:
- In addition to professional experience, students who attend this training should already have the following technical knowledge:
- Attended course 20345-1A: Administering Exchange Server 2016, or have equivalent knowledge.
- Minimum two years of experience working with any version of Exchange Server.
- Minimum of six months of experience working with Exchange Server 2013 or Exchange Server 2016.
- Minimum of two years of experience administering the Windows Server 2012 R2.
- Minimum two years of experience working with Active Directory Domain Services (AD DS).
- Minimum of two years of experience working with name resolution, including Domain Name System (DNS).
- Experience working with certificates, including public key infrastructure (PKI) certificates.
- Experience working with Windows PowerShell.

Topics Covered:

- Module 1: Planning Exchange Server 2016 deployments this module explains the requirements and considerations for planning an Exchange Server deployment. Lessons
 - New features in Exchange Server 2016
 - Gathering business requirements for an Exchange Server 2016 deployment
 - Planning for an Exchange Server deployment
 - Designing a Unified Messaging (UM) deployment
 - Lab : Planning Exchange Server 2016 deployments
 - Evaluating an existing messaging infrastructure

- Identifying requirements
- Discussion: Deployment design for Exchange Server 2016

After completing this module, students will be able to:

- Describe the new features in Exchange Server 2016.
- Describe how to gather business requirements for an Exchange Server 2016 deployment.
- Plan for an Exchange Server 2016 deployment.
- Design a UM deployment.

➤ Module 2: Planning and deploying Exchange Server 2016 Mailbox services This module explains how to plan and deploy Exchange Server hardware, virtualization, mailbox databases, and public folders. Lessons

- Planning Exchange Server hardware requirements
- Planning Exchange Server for virtualization and Microsoft Azure integration
- Planning and implementing public folders
 - Lab : Planning and implementing Exchange virtualization, mailbox databases, and public folders
 - Planning for virtualization
 - Planning for mailbox databases
 - Implementing mailbox databases
 - Planning and implementing public folders

After completing this module, students will be able to:

- Plan for the Exchange Server hardware requirements.
- Plan Exchange Server for virtualization and Azure integration.
- Plan and implement public folders.

➤ Module 3: Planning and deploying message transport This module explains how to plan and implement mail routing internally from and to the Internet, and transport-related tasks in the organization. Lessons

- Designing message routing
- Designing transport services
- Designing the message-routing perimeter
- Designing and implementing transport compliance
 - Lab : Planning and deploying message transport
 - Planning for a redundant and secure message transport
 - Planning for transport compliance
 - Implementing transport compliance

After completing this module, students will be able to:

- Design message routing.
- Design transport services.
- Design message routing in a perimeter network.
- Design and implement transport compliance.

➤ Module 4: Planning and deploying client access This module explains how to plan for client connectivity and client access in Exchange Server 2016. This module also describes how to implement Microsoft Office Online Server, and the coexistence of SharePoint 2016 with Exchange. Lessons

- Planning for Exchange Server 2016 clients
- Planning for client access

- Planning and implementing Office Online Server
- Planning and implementing coexistence of SharePoint 2016 with Exchange
- Designing external client access
 - Lab : Planning and deploying client access solutions
 - Planning and configuring namespaces
 - Planning and configuring client access services options
 - Planning and deploying Office Online Server
 - Planning and implementing reverse proxy

After completing this module, students will be able to:

- Plan for Exchange 2016 Server clients.
- Plan for client access.
- Plan and implement Office Online Server.
- Plan and implement SharePoint 2016 and with Exchange Server 2016 coexistence.
- Design external client access.

➤ Module 5: Designing and implementing high availability This module explains how to design and implement a highly available solution for Exchange Server 2016. Lessons

- Planning high availability for Exchange Server 2016
 - Planning for load balancing
 - Planning for site resilience
- Lab : Designing and implementing site resiliency
 - Creating a lag database copy
 - Recovering data from a lagged database copy
 - Implementing site resilience
 - Validating site resilience

After completing this module, students will be able to:

- Plan high availability for an Exchange Server 2016 deployment.
- Plan for load balancing in an Exchange Server 2016 deployment.
- Plan for site resilience in an Exchange Server 2016 deployment.

➤ Module 6: Maintaining Exchange Server 2016 This module explains how to maintain Exchange Server 2016 using Managed Availability and Desired State Configuration (DSC). Lessons

- Using Managed Availability to improve high availability
 - Implementing DSC
- Lab : Maintaining Exchange Server 2016
 - Using Windows PowerShell to investigate and configure Managed Availability
 - Implementing DSC

After completing this module, students will be able to:

- Describe and configure Managed Availability in Exchange Server 2016.
- Describe and implement DSC in Exchange Server 2016.



- Module 7: Designing messaging security This module explains how to plan for messaging security and design and implement Active Directory Rights Management Services (AD RMS) and Azure RMS in an Exchange Server organization. Lessons

- Planning messaging security
- Designing and implementing AD RMS and Azure RMS integration

- Lab : Designing messaging security
 - Implementing AD RMS
 - Integrating AD RMS with Exchange Server
 - Creating a message transport rule to protect email
 - Protecting an email with AD RMS

After completing this module, students will be able to:

- Plan messaging security.
- Design and implement AD RMS and Azure RMS integration.

- Module 8: Designing and implementing message retention This module explains how to plan for archiving and message retention. Lessons

- Overview of messaging records management and archiving
- Designing In-Place Archiving
- Designing and implementing message retention

- Lab : Designing and implementing message retention
 - Designing message retention and archiving
 - Implementing message retention and archiving

After completing this module, students will be able to:

- Describe messaging records management and archiving.
- Design In-Place Archiving.
- Design and implement message retention.

- Module 9: Designing messaging compliance This module explains how to plan for and implement several Exchange features to help minimize data loss and monitor email traffic and content. Lessons

- Designing and implementing data loss prevention
- Designing and implementing In-Place Hold
- Designing and implementing In-Place eDiscovery

- Lab : Designing and implementing messaging compliance
 - Designing messaging compliance
 - Implementing data loss prevention
 - Implementing In-Place eDiscovery
 - Comparing messaging policy and compliance options

After completing this module, students will be able to:

- Design and implement data loss prevention.
- Design and implement In-Place Hold.
- Design and implement In-Place eDiscovery.

- Module 10: Designing and implementing messaging coexistence This module explains how to plan and implement federation, design coexistence between Exchange organizations, and design and move mailboxes between different forests and Exchange organizations. Lessons

- Designing and implementing federation
- Designing coexistence between Exchange organizations
- Designing and implementing cross-forest mailbox moves

- Lab : Implementing messaging coexistence
 - Implementing message-routing coexistence
 - Migrating user mailboxes

After completing this module, students will be able to:

- Design and implement federation.
- Design the coexistence between Exchange Server organizations.
- Design and implement cross-forest mailbox moves.

- Module 11: Upgrading to Exchange Server 2016 This module explains how to plan and implement an upgrade from previous Exchange Server 2013 or Exchange Server versions to Exchange Server 2016. Lessons

- Planning an upgrade from previous Exchange Server versions
- Implementing the upgrade from previous Exchange Server versions

- Lab : Upgrading from Exchange Server 2013 to Exchange Server 2016
 - Documenting the Exchange Server 2013 organization
 - Deploying Exchange Server 2016
 - Upgrading from Exchange Server 2013 to Exchange Server 2016
 - Removing Exchange Server 2013

After completing this module, students will be able to:

- Plan an upgrade to Exchange Server 2016.
- Implement the upgrade to Exchange Server 2016.

- Module 12: Planning a hybrid Exchange Server deployment This module explains how to plan and implement a hybrid deployment for Exchange Server 2016. Lessons

- Basics of a hybrid deployment
- Planning and implementing a hybrid deployment
- Implementing advanced functionality for hybrid deployments

- Lab : Designing the integration with Exchange Online
 - Designing the integration with Exchange Online

After completing this module, students will be able to:

- Describe the basics of a hybrid deployment.
- Plan and implement a hybrid deployment.
- Implement advanced functionality for hybrid deployments.