

20345-2B: Designing and Deploying Microsoft Exchange Server 2016/2019

Course Outline

Module 1: Planning Exchange Server deployments

This module explains the key features of Exchange Server and explains how to gather business requirements. It also explains how to plan for an Exchange Server deployment and the migration of Unified Messaging to Cloud Voicemail.

Lessons

- New features in Exchange Server 2019
- Gathering business requirements for an Exchange Server deployment
- Planning for an Exchange Server deployment
- Planning the migration of Unified Messaging to Cloud Voicemail

Lab : Planning Exchange Server 2019 deployments

- Evaluating an existing messaging infrastructure
- Identifying requirements
- Discussion: Deployment design for Exchange Server 2019

After completing this module, students will be able to:

- Describe the new features in Exchange Server 2019.
- Describe how to gather business requirements for an Exchange Server deployment.
- Plan an Exchange Server deployment.
- Plan how to migrate Exchange Server 2016 Unified Messaging (UM) to Cloud Voicemail.

Module 2: Planning and deploying Exchange Server Mailbox services

This module explains how to plan and implement Exchange Server hardware, Exchange Server virtualization, Azure integration, 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 Server mailbox servers, databases, and public folders

- Planning mailbox server configuration and location
- Planning for mailbox databases
- Implementing mailbox databases
- Planning and implementing public folders

After completing this module, students will be able to:

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

Module 3: Planning message transport

This module explains how to plan and implement mail routing internally as well as from and to the internet. This module also describes transport-related tasks in the organization.

Lessons

- Designing message routing
- Designing transport services
- Designing the message-routing perimeter
- Designing transport compliance

Lab : Planning 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 external message routing.
- Design and implement transport compliance.

Module 4: Planning and deploying client access

This module explains how to plan and implement Exchange Server clients, client access, Microsoft Office Online Server, and coexistence of Microsoft SharePoint with Exchange Server. It also explains the design and implementation of external client access.

Lessons

- Planning for Exchange Server clients
- Planning for client access
- Planning and implementing Office Online Server
- Planning and implementing coexistence of SharePoint 2019 with Exchange Server 2019
- 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 Server clients.
- Plan for client access.
- Plan and implement Office Online Server.
- Plan and implement SharePoint and with Exchange Server coexistence.
- Design external client access.

Module 5: Designing and implementing high availability

This module explains how to plan and implement high availability for Exchange Server. It also explains how to plan for load balancing. Finally, it explains how to plan and implement site resilience.

Lessons

- Planning high availability for Exchange Server
- Planning for load balancing
- Planning for site resilience

Lab : Designing and implementing high availability

- Planning high availability and site resilience
- Creating a site-resilient DAG
- Validating site resilience
- Creating a lagged database copy
- Recovering data from a lagged database copy

After completing this module, students will be able to:

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

Module 6: Maintaining Exchange Server

This module explains how to maintain Exchange Server by using Managed Availability and DSC.

Lessons

- Using Managed Availability to improve high availability
- Implementing DSC

Lab : Maintaining Exchange Server

- Using Windows PowerShell to investigate and configure Managed Availability
- Implementing DSC

After completing this module, students will be able to:

- Use Managed Availability to improve high availability.
- Implement DSC.

Module 7: Designing messaging security

This module explains how to plan for messaging security, and how to design and implement AD RMS and Azure RMS in an Exchange Server organization.

Lessons

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

Lab : Designing messaging security

- Planning messaging security
- Implementing AD RMS
- Integrating AD RMS with Exchange Server
- Creating a message transport rule to protect email

After completing this module, students will be able to:

- Plan messaging security.

- Design and implement AD RMS and Azure RMS.

Module 8: Designing and implementing message retention and archiving

This module explains the purpose of archiving and messaging records management. It also explains how to design and implement In-Place archiving and message retention.

Lessons

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

Lab : Designing and implementing message retention and archiving

- Designing message retention and archiving
- Implementing message retention and archiving

After completing this module, students will be able to:

- Explain the purpose of archiving and messaging records management.
- Design and implement In-Place archiving.
- Design and implement message retention.

Module 9: Designing and implementing messaging compliance

This module explains how to design and implement data loss prevention policies, In-Place Hold, and In-Place eDiscovery.

Lessons

- Designing and implementing data loss prevention policies
- 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 design and implement federation. It also explains how to design coexistence between Exchange Server organizations. Finally, it explains how to design and implement cross-forest mailbox moves.

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 2019

This module provides an overview of the options you have when choosing to implement Exchange Server 2019, and provides details on how to upgrade an existing Exchange Server 2013 or Exchange Server 2016 organization to Exchange Server 2019.

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 2019

- Documenting the Exchange Server 2013 organization
- Deploying Exchange Server 2019
- Upgrading from Exchange Server 2013 to Exchange Server 2019
- Removing Exchange Server 2013

After completing this module, students will be able to:

- Plan an upgrade to Exchange Server 2019.
- Implement the upgrade to Exchange Server 2019.

Module 12: Planning a hybrid Exchange Server deployment

This module explains the basics of a hybrid deployment and how to plan for authentication in a hybrid deployment. It also explains how to implement Microsoft Azure Active Directory (Azure AD) Connect, a hybrid development, and advanced functionality for hybrid deployments.

Lessons

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

Lab : Planning a hybrid Exchange deployment

- Creating a plan for hybrid Exchange deployment

After completing this module, students will be able to:

- Explain the basics of a hybrid deployment.
- Plan for authentication in a hybrid environment.
- Implement Azure AD Connect.
- Implement a hybrid deployment.
- Implement advanced functionality for hybrid deployments.

