20345-1B: Administering Microsoft Exchange Server 2016/2019

Course Duration: 32 Hours (4 Days)

Overview

The 20345-1B: Administering Microsoft Exchange Server 2016/2019 course is a comprehensive training program designed for IT professionals who aspire to administer and support Exchange Server 2016/2019 environments. Covering both the deployment and management aspects of Exchange Server, the course provides learners with the necessary skills to maintain, optimize, and troubleshoot Exchange Server infrastructure for efficient and secure operations.Starting with an overview of Exchange Server, learners gain insight into the architecture and requirements for deploying Exchange Server, including the Exchange Server 2016 and Exchange Server 2019 cost considerations. Practical labs reinforce the deployment process, including the use of Exchange Server Management Tools.As the course progresses, students learn to manage storage, recipient objects, and Client connectivity, leveraging both the graphical interface and Exchange Management Shell cmdlets. High availability, disaster recovery, Message transport, security, and compliance are also key components, ensuring that students can secure and maintain a robust messaging environment. The course concludes with modules on monitoring, troubleshooting, and managing Exchange Online deployments, equipping learners with the versatility to handle both on-premises and cloud-based Exchange infrastructures.

Audience Profile

The course 20345-1B prepares IT professionals to manage and administer Microsoft Exchange Server 2016/2019, enhancing enterprise communication.

- IT professionals responsible for managing Exchange Servers
- Systems administrators
- Network administrators
- Messaging administrators
- Support technicians working with Exchange Server environments
- Technical consultants who design and implement messaging solutions for enterprises
- IT generalists who wish to learn about Exchange Server 2016/2019
- Help desk professionals looking to advance their skills in Exchange Server management
- IT professionals seeking certification in Microsoft Exchange Server as part of career growth

Course Syllabus

Module 1: Deploying Exchange Server

- This module explains the key features and architecture of Exchange Server. It also explains
- the prerequisites and requirements for deploying Exchange Server. Additionally, it explains
- how to use the Exchange admin center and the Exchange management shell to manage
- Exchange Server.

Lessons

- Overview of Exchange Server
- Exchange Server architecture

- Requirements for Exchange Server
- Deploying Exchange Server Exchange Server
- Exchange Server Management Tools

Lab: Deploying Exchange Server

- Evaluating requirements and prerequisites for an Exchange Server 2019 installation
- Deploying Exchange Server 2019
- Verifying Exchange Server functionality
- Installing Exchange Server 2019 on Windows Server Core 2019 (optional)
- After completing this module, students will be able to:
- Describe the key features and functionality of Exchange Server.
- Describe the Exchange Server architecture.
- Describe the requirements and options for deploying Exchange Server.
- Deploy Exchange Server.
- Describe how to use management tools to manage Exchange Server.

Module 2: Managing Exchange Server 2016 storage

- This module explains the features of Exchange Server mailbox databases and the storage
- options available for Exchange Server. It also explains how to configure Exchange Server
- mailbox databases and storage.

Lessons

- Exchange Server mailbox databases
- Exchange Server storage
- Configuring Exchange Server mailbox databases and storage

Lab: Configuring Exchange Server storage

- Creating and configuring mailbox databases
- After completing this module, students will be able to:
- Describe the features of Exchange Server mailbox databases.
- Explain the storage options available for Exchange Server.
- Configure Exchange Server mailbox databases and storage

Module 3: Managing recipient objects

- This module explains how to manage the user, shared, resource, public folder, arbitration
- mailboxes in Exchange Server. It also explains how to manage contacts, mail users, and
- distribution groups in Exchange Server. Finally, it explains how to configure address lists
- and email address and address book policies in Exchange Server.

Lessons

- Managing user mailboxes
- Managing other types of mailboxes
- Managing other recipients' objects
- Configuring policies and adress lists

Lab: Managing recipient objects

- Configuring recipient objects

- Managing public folder mailboxes

Lab: Configuring address lists and policies

- Managing email address policies
- Managing address lists and address book policies
- After completing this module, students will be able to:
- Manage user mailboxes in Exchange Server.
- Manage shared, resource, public folder, and arbitration mailboxes in Exchange
- Server.
- Manage contacts, mail users, and distribution groups in Exchange Server.
- Configure address lists, and email address and address book policies in Exchange
- Server

Module 4: Managing recipients and Exchange servers by using Exchange Server

- cmdlets
- This module describes how to manage recipients by using Exchange Server cmdlets. It also
- explains how to manage Exchange servers by using Exchange Server cmdlets and scripts

Lessons

- Overview of the Exchange Management Shell
- Managing Exchange Servers by using Exchange Management Shell cmdlets
- Managing Exchange servers by using scripts

Lab: Managing Exchange Server and recipient objects by using Exchange

- Management Shell
- Using Exchange Management Shell to manage recipients
- Using Exchange Management Shell to manage Exchange Server
- After completing this module, students will be able to:
- Manage recipients by using Exchange Server cmdlets.
- Manage Exchange servers by using Exchange Server cmdlets.
- Manage Exchange servers by using scripts.

Module 5: Implementing client connectivity

- This module explains how to configure and manage client access services in Exchange
- Server. It also explains the client connectivity options for Exchange Server and how to
- configure Outlook on the web. Additionally, it explains how to configure mobile messaging
- for Exchange Server.

Lessons

- Configuring client access services
- Managing client access services
- Client connectivity in Exchange Server
- Configuring Outlook on the web
- Configuring mobile messaging

Lab: Configuring client access services

- Configuring namespaces for client access
- Configuring certificates for client access
- Configuring custom MailTips

Lab: Deploying and configuring client access services on Exchange Server

- Configuring Exchange Server for Outlook
- Configuring Outlook on the web
- Configuring Microsoft Exchange ActiveSync
- After completing this module, students will be able to:
- Configure client access services in Exchange Server.
- Manage client access services.
- Describe client connectivity and publishing of Exchange Server services.
- Configure Outlook on the web.
- Configure mobile messaging on Exchange Server

Module 6: Managing high availability in Exchange Server

- This module describes the high availability options for Exchange Server. It also explains
- how to configure highly available mailbox databases and Client Access services by using
- load balancing methods

Lessons

- High availability on Exchange Server
- Configuring highly available mailbox databases
- Configuring high availability of Client Access services

Lab: Implementing DAGs

- Creating and configuring a DAG

Lab: Implementing and testing high availability

- Deploying a high availability solution for Client Access services
- Testing the high availability configuration
- After completing this module, students will be able to:
- Describe the high availability in Exchange Server.
- Configure highly available mailbox databases.
- Configure high available Client Access services

Module 7: Implementing disaster recovery for Exchange Server

- This module describes Exchange Server backup and restore features and the details that
- you need to consider when you create a backup plan.

Lessons

- Implementing Exchange Server backup
- Implementing Exchange Server recovery

Lab: Backing up Exchange Server data

- Backing up an Exchange Server mailbox database

Lab: Restoring Exchange Server data

- Restoring Exchange Server mailbox
- Restoring a database availability group (DAG) member (optional)
- After completing this module, students will be able to:
- Back up Exchange Server data.
- Restore Exchange Server data by using the configured backups.

Module 8: Configuring and managing message transport

- This module explains messaging transport in Exchange Server. It also explains how to
- configure message transport in Exchange Server and manage transport rules in Exchange
- Server.

Lessons

- Overview of message transport
- Configuring message transport
- Managing transport rules

Lab: Configuring and managing message transport

- Configuring message transport
- Monitoring and verifying message delivery
- Configuring a disclaimer transport rule
- Configuring a DLP policy for financial data
- After completing this module, students will be able to:
- Describe messaging transport in Exchange Server.
- Configure message transport in Exchange Server.
- Manage transport rules in Exchange Server.

Module 9: Configuring message security

- This module describes how to deploy and manage an Edge Transport server for message
- security. It also explains how to implement antivirus and antispam solutions for Exchange
- Server

Lessons

- Deploying and managing an Edge Transport server for message security
- Implementing an antivirus solution for Exchange Server
- Implementing an antispam solution for Exchange Server

Lab: Configuring message security in Exchange Server

- Configuring and testing EdgeSync
- Configuring antivirus, antispam and malware protection features
- After completing this module, students will be able to:
- Deploy and manage an Edge Transport server for message security.
- Implement an antivirus solution for Exchange Server.
- Implement an antispam solution for Exchange Server.

Module 10: Monitoring and troubleshooting Exchange Server

- This module explains how to configure performance monitoring and troubleshoot issues in
- Exchange Server.

Lessons

- Monitoring Exchange Server
- Troubleshooting Exchange Server
- Lab: Monitoring and troubleshooting Exchange Server
- Monitoring Exchange Server
- Troubleshooting database availability
- Troubleshooting Client Access servers
- After completing this module, students will be able to:
- Configure performance monitoring in Exchange Server.
- Troubleshoot issues in Exchange Server.

Module 11: Securing and maintaining Exchange Server

- This module explains how to secure Exchange Server by using role-based access control
- (RBAC). It also explains how to configure audit logging in Exchange Server and how to
- maintain and update Exchange Server.

Lessons

- Securing Exchange Server by using RBAC
- Configuring audit logging in Exchange Server
- Maintaining Exchange Server

Lab: Securing and maintaining Exchange Server

- Configuring Exchange Server permissions
- Configuring audit logging
- Maintaining Exchange Server
- After completing this module, students will be able to:
- Secure Exchange Server by using RBAC.
- Configure audit logging in Exchange Server.
- Maintain and update Exchange Server.

Module 12: Implementing and managing Exchange Online deployments

- This module explains Exchange Online and Office 365 and how to manage it. It also
- explains how to implement a migration to Exchange Online.

Lessons

- Overview of Exchange Online and Office 365
- Managing Exchange Online
- Implementing the migration to Exchange Online
- Managing a hybrid environment

Lab: Managing Exchange Online

- Managing Exchange Online
- After completing this module, students will be able to:
- Provide an overview of Exchange Online and Office 365.
- Manage Exchange Online.
- Implement a migration to Exchange Online.