MOC 20698 B: Installing and Configuring Windows 10

Course Summary

Description

This five-day instructor-led course provides IT professionals with the knowledge and skills required to install and configure Windows 10 desktops in a Windows Server small to medium-sized AD DS domain environment. These skills include learning how to install and customize Windows 10 operating systems and apps, configure local and remote network connectivity, and configure local and online storage.

Students also will learn how to configure security in addition to how to maintain, update, and recover Windows 10.

Objectives

After taking this course, students will be able to:

- Plan, install, and upgrade to Windows 10.
- Perform post-installation configuration.
- Implement networking.
- Implement network security.
- Manage Windows 10 with Group Policy.
- Implement remote management.
- Manage local storage.
- Manage files and resources.
- Install and manage apps.
- Secure Windows 10.
- Implement remote connectivity.
- Maintain and update Windows 10.
- Recover and troubleshoot Windows 10.

Topics

- Installing Windows 10
- Performing post-installation configuration
- Implementing networking
- Implementing network security
- Managing Windows 10 with Group Policy
- Implementing remote management
- Managing storage
- Managing files and resources
- Deploying and managing apps
- Securing Windows 10
- Implementing remote connectivity
- Maintaining Windows 10
- Recovering Windows 10

Audience

This course is intended for IT professionals who administer and support Windows 10 desktops and devices in small to medium-sized networks.

The networks with which these professionals typically work are configured as AD DS domain-based environments with managed access to the Internet and cloud services.

Students who seek certification in exam 70-698: Installing and Configuring Windows 10 also will benefit from this course. In addition, this course is intended to provide skills for Enterprise Desktop/Device Support Technicians (EDSTs) who work in small to medium-sized organizations, and who provide Tier 1 or Tier 2 support to users running Windows 10 desktops and devices within a Windows domain environment.
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Course Summary (cont.)

Prerequisites

Before attending this course, students must have:

- Experience deploying and configuring Windows 8, Windows 8.1, or Windows 10.
- Experience deploying and configuring network services, including DNS, in Windows Server 2012 or Windows Server 2016.
- Windows Client essentials, such as a working knowledge of Windows 8.1, Windows 8, or Windows 7.

Duration

Five days
Course Outline

I. Installing Windows 10
   This module describes the features of Windows 10 and the process for installing and deploying it. The module also describes how to upgrade to Windows 10, perform post-installation maintenance tasks, and manage volume activation.
   A. Overview of Windows 10
   B. Planning your Windows 10 deployment
   C. Installing and deploying Windows 10
   D. Upgrading to Windows 10
   E. Windows 10 installation maintenance
   F. Managing volume activation

Lab: Upgrading to Windows 10
   - Migrating user settings
   - Upgrading from Windows 8.1 to Windows 10 (optional)

Lab: Maintaining a Windows 10 installation with Windows Configuration Designer
   - Creating and configuring a Windows Configuration Designer provisioning package

II. Performing post-installation configuration
   This module provides an overview of the management tools in Windows 10. It describes how to customize the user interface, manage devices, drivers, and services, and configure several other features. The module also provides an overview of Client Hyper-V.
   A. Overview of management tools
   B. Customizing the user interface
   C. Managing devices, device drivers, and services
   D. Configuring features, mobility, and power options
   E. Overview of Client Hyper-V

Lab: Managing devices
   - Install a device driver
   - Resolving the device driver problem

Lab: Configuring features and power options
   - Turning on Windows features with Control Panel
   - Managing installed Windows features
   - Configuring power options

III. Implementing networking
   This module describes the homegroups, workgroups, and domains feature in Windows 10. It also describes how to configure IPv4 and IPv6 network connectivity, and how to implement name resolution. Additionally, the module describes how to troubleshoot network connectivity and implement wireless network connectivity.
   A. Homegroups, workgroups, and domains
   B. Configuring IPv4 network connectivity
   C. Configuring IPv6 network connectivity
   D. Implementing name resolution
   E. Troubleshooting network connectivity
   F. Implementing wireless network connectivity

Lab: Implementing network connections
   - Verifying and testing network connectivity
   - Configuring automatic IPv4 addressing
   - Configuring and testing name resolution

Lab: Troubleshooting network connections
   - Resolving a network problem (1)
   - Resolving a network problem (2)

IV. Implementing network security
   This module describes how to implement network security by using the Windows 10 features such as Windows Firewall, connection security rules, and Windows Defender.
   A. Implementing Windows Defender Firewall
   B. Connection security rules
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Course Outline

C. Implementing Windows Defender Antivirus

Lab: Implementing network security
- Creating and testing inbound rules
- Creating and testing outbound rules
- Creating and testing connection security rules
- Configuring Windows Defender Antivirus

V. Managing Windows 10 with Group Policy
This module describes how to use the Group Policy feature in AD DS to manage Windows 10 devices. The module also explains how you can configure Windows 10 devices by using Group Policy Objects (GPOs).
A. Overview of Group Policy
B. Configuring Windows 10 devices with GPOs

Lab: Configuring Group Policy Objects and settings
- Managing Windows 10 by using Group Policy

VI. Implementing remote management
This module describes how to implement remote management by using Windows 10 features such as Remote Desktop, Remote Assistance, and remoting with Windows PowerShell.
A. Using Remote Desktop
B. Using Remote Assistance
C. Using Windows PowerShell remoting

VII. Managing storage
This module describes how to manage storage in Windows 10 devices by using the available storage options. It also explains how to manage and maintain disks, partitions, and volumes. The modules then describes how you can use the Storage Spaces feature, Microsoft OneDrive, and virtual hard disks to manage storage.
A. Overview of storage options

B. Managing disks, partitions, and volumes
C. Maintaining disks and volumes
D. Managing Storage Spaces
E. Implementing and managing OneDrive
F. Working with virtual hard disks

Lab: Managing storage
- Adding a disk
- Creating a simple volume
- Creating a storage space

VIII. Managing files and resources
This module describes how to manage files and resources in Windows 10. The module starts by providing an overview of file systems and how file access works. The module then describes shared folders and Work Folders features. Finally, it describes how to manage printers.
A. Overview of file systems
B. Configuring and managing file access
C. Managing shared folders
D. Work Folders
E. Managing printers

Lab: Creating, securing, and sharing a folder
- Creating, securing, and sharing a folder

Lab: Implementing Work Folders
- Configuring Work Folders

Lab: Managing printers
- Managing and using a printer

IX. Deploying and managing apps
This module describes the various methods available to deploy and manage apps in Windows 10. The module provides an overview of the Microsoft Store and Microsoft Store for Business, and describes other options such as desktop apps and web browsers.
A. Overview of apps in Windows 10
B. The Microsoft Store and Microsoft Store for Business
C. Automating app deployment

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Course Outline(cont.)

D. Configuring web browsers
   **Lab: Deploying and managing Microsoft Store apps**
   - Sideload an app
   **Lab: Deploying apps with Windows Configuration Designer**
   - Creating a provisioning package
   - Deploying the package
   - Verifying deployment
   **Lab: Configuring Microsoft Edge**
   - Configuring and using Microsoft Edge

X. **Securing Windows 10**
   This module describes how to implement security in Windows 10 devices. It also describes how to manage user accounts and their permissions by using the User Account Control (UAC) feature. Additionally, the module explains how to implement and manage BitLocker Drive Encryption.
   A. Managing user accounts
   B. Configuring UAC
   C. Implementing and managing BitLocker
   **Lab: Configuring user accounts**
   - Managing user accounts
   - Configuring UAC
   **Lab: Managing data security**
   - Using BitLocker

XI. **Implementing remote connectivity**
   This module describes how to implement remote connectivity by using the available options, including virtual private networks (VPNs) and DirectAccess.
   A. Overview of remote connectivity options
   B. Implementing VPNs
   C. Implementing DirectAccess
   **Lab: Implementing a VPN**
   - Deploying a virtual private network (VPN) server
   - Creating a VPN connection

XII. **Maintaining Windows 10**
   This module describes how maintain a Windows 10 environment by updating and monitoring the Windows 10 operating system. The module describes the Windows Update settings and how to use the Windows Server Update Services (WSUS), Microsoft System Center Configuration Manager, and Microsoft Intune to regularly update Windows 10. The module then explains how to monitor Windows 10 by using tools such as the Notifications & actions settings, Event Viewer, and Windows Performance Monitor.
   A. Updating Windows 10
   B. Monitoring Windows 10
   **Lab: Maintaining Windows**
   - Configuring updates for a single device
   - Configuring updates with GPOs
   - Monitoring reliability and performance

XIII. **Recovering Windows 10**
   This module describes the recovery options for Windows 10. It also explains how to recover lost files, manage devices and device drives, and perform system recovery.
   A. Recovering files
   B. Performing system recovery
   **Lab: Troubleshooting and recovery**
   - Using File History to recover files
   - Using Previous Versions to recover files
   - Recovering a device with a restore point
   - Using the advanced startup options to recover a device