



Installing and Configuring Windows 10

OD20698; On-Demand, Video-based

Course Description

This 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.

Course Objectives

After completing 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

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.

Prerequisite

Before attending this course, students must have:

- Experience deploying and configuring Windows 8, Windows 8.1, or Windows 10
- Experience deploying and configuring Windows Server 2012 or Windows Server 2016 Active Directory Domain Services (AD DS)
- 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

Course Outline

Module 1: 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.

Lessons

- Overview of Windows 10
- Planning your Windows 10 deployment
- Installing and deploying Windows 10
- Upgrading to Windows 10
- Windows 10 installation maintenance
- 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 ICD

- Create and configure a Windows Imaging and Configuration Designer (Windows ICD) provisioning package

After completing this module, students will be able to:

- Describe the features and editions of Windows 10
- Plan to deploy Windows 10
- Install and deploy Windows 10
- Upgrade to Windows 10
- Maintain Windows 10 installations
- Manage Windows 10 activation

Module 2: 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.

Lessons

- Overview of management tools
- Customizing the user interface
- Managing devices, device drivers, and services
- Configuring features, mobility, and power options
- 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

After completing this module, students will be able to:

- Describe the different tools that you can use to configure Windows 10
- Explain how to navigate and customize the user interface
- Manage device drivers
- Configure Windows features, mobility options, and power settings
- Describe Client Hyper-V

Module 3: 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.

Lessons

- Homegroups, workgroups, and domains
- Configuring IPv4 network connectivity
- Configuring IPv6 network connectivity
- Implementing name resolution
- Troubleshooting network connectivity
- 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)

After completing this module, students will be able to:

- Describe homegroups, workgroups, and domains
- Describe how to configure IPv4 network connectivity
- Describe how to configure IPv6 network connectivity
- Implement name resolution
- Troubleshoot network connections
- Implement wireless network connectivity

Module 4: 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.

Lessons

- Implementing Windows Firewall
- Connection security rules
- Implementing Windows Defender

Lab: Implementing network security

- Creating and testing inbound rules
- Creating and testing outbound rules
- Creating and testing connection security rules
- Configuring Windows Defender

After completing this module, students will be able to:

- Describe Windows Firewall
- Understand rules regarding connection security
- Manage Windows Defender

Module 5: Managing Windows 10 with Group Policy

This module describes how to implement the Group Policy feature in Windows 10. The module also explains how you can configure Windows 10 devices by using Group Policy Objects (GPOs).

Lessons

- Overview of Group Policy
- Configuring Windows 10 devices with GPOs

Lab: Describe Windows Firewall

- Managing Windows 10 by using Group Policy

After completing this module, students will be able to:

- Describe Group Policy processing and management
- Configure common settings for users and desktops by using Group Policy

Module 6: 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.

Lessons

- Using Remote Desktop
- Using Remote Assistance
- Remoting with Windows PowerShell

Lab: Implementing remote management

- Using Remote Desktop
- Using Remote Assistance
- Remoting with Windows PowerShell

After completing this module, students will be able to:

- Use Remote Desktop to manage remote computers
- Use Windows Remote Assistance to manage remote computers

- Use Windows PowerShell remoting to manage remote computers

Module 7: 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 module then describes how you can use the Storage Spaces feature, Microsoft OneDrive, and virtual hard disks to manage storage.

Lessons

- Overview of storage options
- Managing disks, partitions, and volumes
- Maintaining disks and volumes
- Implementing Storage Spaces
- Implementing and managing OneDrive
- Working with virtual hard disks

Lab: Managing storage

- Adding a disk
- Creating a simple volume
- Creating a storage space

After completing this module, students will be able to:

- Explain the different storage options in Windows 10
- Manage disks, partitions, and volumes
- Maintain disks, partitions, and volumes
- Manage Storage Spaces
- Explain how to implement Microsoft OneDrive
- Explain how to implement virtual hard disks

Module 8: 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.

Lessons

- Overview of file systems
- Configuring and managing file access
- Managing shared folders
- Implementing Work Folders
- 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

- Installing and sharing a printer

After completing this module, students will be able to:

- Describe the file systems that Windows 10 supports
- Configure and manage file permissions
- Create and manage share folders
- Create and use Work Folders
- Configure and manage printers

Module 9: 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 Windows Store and Windows Store for Business, and describes other options such as desktop apps and web browsers.

Lessons

- Overview of apps in Windows 10
- The Windows Store and Windows Store for Business
- Automating app deployment
- Configure web browsers

Lab: Deploying and managing Windows Store apps

- Sideloading an app

Lab: Deploying apps with Windows ICD

- Creating a provisioning package
- Deploying the package
- Verifying deployment

Lab: Configuring Microsoft Edge

- Configuring and using Microsoft Edge

After completing this module, students will be able to:

- Describe the available app types in Windows 10
- Describe the Windows Store and Windows Store for Business
- Deploy and manage Windows Store apps
- Automate app deployment
- Configure Windows 10 web browsers

Module 10: 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.

Lessons

- Managing user accounts
- Configuring UAC
- Implementing and Managing BitLocker

Lab: Configuring user accounts

- Managing user accounts
- Configuring UAC

Lab: Managing data security

- Using BitLocker

After completing this module, students will be able to:

- Manage user accounts
- Configure User Account Control (UAC)
- Implement and manage BitLocker drive encryption

Module 11: Implementing remote connectivity

This module describes how to implement remote connectivity by using the available options, including virtual private networks (VPNs) and DirectAccess.

Lessons

- Overview of remote connectivity options
- Implementing VPNs
- Implementing DirectAccess

Lab: Implementing a VPN

- Deploying a virtual private network (VPN) server
- Creating a VPN connection

After completing this module, students will be able to:

- Describe remote connectivity options in Windows 10
- Implement virtual private networks (VPNs) in Windows 10
- Describe how to implement DirectAccess

Module 12: 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.

Lessons

- Updating Windows 10
- Monitoring Windows 10

Lab: Maintaining Windows

- Configuring updates for a single device
- Configuring updates with GPOs
- Monitoring reliability and performance

After completing this module, students will be able to:

- Explain how to keep Windows 10 up to date
- Monitor Windows 10

Module 13: 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.

Lessons

- Recovering files
- 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

After completing this module, students will be able to:

- Configure file recovery and revert to previous versions of files
- Describe and use system recovery features in Windows 10