

Supporting and Troubleshooting Windows 10



Length: 5 days

Format: Bootcamp

Time: Day



About This Course

This is a 5-day course that is designed to provide students with the knowledge and skills required to support and troubleshoot Windows 10 PCs and devices in a Windows Server domain environment. These skills include understanding of Windows 10 features, how they can be used in an Active Directory environment and how to troubleshoot them.

Required Exams

Audience Profile

The primary audience for this course is the Enterprise Desktop Support Technician (EDST), who provides Tier 2 support to users running Windows 10 personal computers (PCs) and devices in medium to large enterprise organizations, within a Windows domain environment. EDSTs focus on a broad range of technical issues for Windows operating systems (OSs), devices, cloud services, applications, networking, and hardware support. In the overarching scenario, if an enterprise offers the service, the EDST is asked to support it.

The key responsibilities include resolving technical issues pertaining to Windows 10 installation and migration, activation, performance, profiles, settings; and device synchronization. Some other key responsibilities include local and remote network access; access to applications, access to data and printers; authentication, Endpoint security and policy; OS and data recovery.

The secondary audience for this course are IT professionals who administer and support Windows 10 desktops, devices, users, and associated network and security resources.

Course Objectives

By completing this course, students will learn how to:

- * Describe the processes involved in planning and using a troubleshooting methodology for Windows 10.
- * Troubleshoot startup issues and operating system services on a Windows 10 PC.

- * Perform system recovery.
- * Resolve issues related to hardware devices and device drivers.
- * Administer Windows 10 devices.
- * Troubleshoot issues related to network connectivity.
- * Configure Windows 10 devices using group policies.
- * Configure user settings.
- * Implement remote connectivity.
- * Configure and troubleshoot resource access.

Outline

Module 1: Implementing a Troubleshooting Methodology

This module introduces the new Windows 10 operating system features and devices; it also describes the process of developing and applying a Windows 10 troubleshooting methodology.

Lessons

- * Overview of Windows 10
- * Introduction to the EDST Job Role
- * Overview of Troubleshooting Steps
- * Troubleshooting Tools

Module 2: Troubleshooting Startup Issues

This module describes how to identify and troubleshoot startup issues that affect - and problematic services that run on - a Windows 10 operating system. This module introduces potential problems that can cause startup issues in Windows 10. It also provides an overview of the Windows startup process, including the Windows Recovery Environment (Windows RE) and Boot Configuration Data (BCD).

Lessons

- * Overview of the Windows 10 Startup Recovery Environment
- * Troubleshooting Startup Settings
- * Recovering BitLocker-Protected Drives
- * Configuring the Registry

Module 3: Performing System Recovery

This module describes how to resolve issues related to operating system services and how to recover a

computer.

Lessons

- * Troubleshooting Operating System Service Issues
- * Recovering a Computer

Module 4: Troubleshooting Hardware and Device Drivers

This module explains how to resolve issues related to device drivers and hardware devices.

Lessons

- * Troubleshooting Device Drivers Failures
- * Overview of Hardware Troubleshooting

Module 5: Administering Windows 10

This module describes how to use the various administration tools in Windows 10 to resolve issues. It describes the features and functionalities of tools such as Windows Admin Center, Remote Desktop, Quick Assist, and Windows PowerShell.

Lessons

- * Overview of Administration Tools
- * Using Remote Desktop
- * Introduction to Windows PowerShell
- * Remoting with Windows PowerShell
- * Introduction to Provisioning

Module 6: Resolving Issues with Network Connectivity

This module explains how to identify network settings and troubleshoot issues related to network connectivity in wired and wireless networks, IPv4 and IPv6 connectivity, and name resolution.

Lessons

- * Determining Network Settings
- * Troubleshooting Network Connectivity
- * Troubleshooting Name Resolution

Module 7: Troubleshooting Group Policy

This module provides an overview of the Group Policy application and describes how to resolve issues in client configuration GPO application.

Lessons

- * Overview of Group Policy Application
- * Resolving Client-Configuration Failures and GPO Application Issues

Module 8: Configuring and Troubleshooting User Settings

This module describes the common sign-in issues, how to detect them, and how to troubleshoot these issues. The module also provides an overview of user account types that are supported by Windows 10 and how authentication works for those accounts.

Lessons

- * Troubleshooting Sign-In Issues
- * Troubleshooting the Application of User Settings

Module 9: Troubleshooting Remote Connectivity

This module provides an overview of Remote Access and describes how to troubleshoot issues with VPN connectivity.

Lessons

- * Overview of Remote Access
- * Troubleshooting Issues with VPN Connectivity

Module 10: Configuring and Troubleshooting Resource Access

This module describes how to troubleshoot issues with file permissions and printer access. It also describes how to configure and manage file synchronization and file recovery in Windows 10.

Lessons

- * Troubleshooting File Permissions Issues
- * Troubleshooting Issues with Printer Access
- * Configuring and Troubleshooting File Synchronization
- * Performing file recovery in Windows 10

Module 11: Troubleshooting Applications

This module explains how to troubleshoot application installation-issues and problems in desktop and Microsoft Store apps. This module also describes how to resolve issues with Internet Explorer and Microsoft Edge browsers.

Lessons

- * Troubleshooting Desktop App Installation Issues
- * Troubleshooting Desktop Apps
- * Managing Universal Windows Apps

Module 12: Maintaining Windows 10

This module describes how to troubleshoot activation and performance issues in Windows 10. It also explains how to apply and troubleshoot Windows updates.

Lessons

- * Monitoring and Troubleshooting Computer Performance
- * Applying Applications and Windows Updates