



Supporting and Troubleshooting Windows 10- 40 hours

Overview

This course 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.

Prerequisites

- Networking fundamentals, including Transmission Control Protocol /Internet Protocol (TCP/IP), User Datagram Protocol (UDP), and Domain Name System (DNS).
- Microsoft Active Directory Domain Services (AD DS) principles.
- Understanding of the Public Key Infrastructure (PKI) components.
- Windows Server 2016 fundamentals.

Course content

Module 1: Implementing a Troubleshooting Methodology

This module explains the processes of establishing and using a troubleshooting methodology in Windows 10. This module also covers various Windows 10 fundamentals, high-level architecture, and often-used troubleshooting tools. It also explains the role of an EDST (Enterprise Desktop Support Technician) in a Windows 10 environment.

Module 2: Troubleshooting Startup Issues

This module describes how to identify and troubleshoot issues that affect the Windows 10 operating system's ability to start, and how to identify problematic services that run on the operating system. It also describes how to use the Windows 10 advanced troubleshooting tools, collectively known as the Windows Recovery Environment (Windows RE).

Module 3: Troubleshooting Hardware and Device Drivers

This module explains how to support users that utilize a multitude of devices that run Windows 10. It describes how an operating system uses device drivers, and how you can troubleshoot hardware devices and device drivers. The module also covers how to monitor the reliability of a Windows 10 device and troubleshoot any issues that might occur.

Module 4: Troubleshooting Remote Computers

The focus of this module is on using tools that are designed specifically to facilitate remote management connections. This module explores three ways in which you can remotely connect to and manage remote computers: Remote Desktop, Windows Remote Assistance, and Windows PowerShell remoting.

Module 5: Resolving Issues with Network Connectivity

This module describes the tools that you can use to set up and troubleshoot both wired and wireless network connections more efficiently. This module also explains how to support your organization's network infrastructure, and configure and troubleshoot network connections.

Module 6: Troubleshooting Group Policy

This module provides an overview of Group Policy and describes how to apply GPOs to computers. It also explains how to resolve configuration problems and issues with applying GPOs.

Module 7: Troubleshooting User Settings

In this module, you will examine issues that can occur when users sign in. You will study the methods that you can use to identify the causes of sign-in issues, and learn how to troubleshoot them. You will also learn how to troubleshoot the application of user settings.

Module 8: Troubleshooting Remote Connectivity

This module explains the virtual private network (VPN) and DirectAccess technologies, and the common problems with their implementation and usage. The module also provides several possible mitigations for these problems.

Module 9: Troubleshooting Resource Access within a Domain

This module explains how to resolve problems related to resource access from computers that are domain members. It explains how to troubleshoot file permission issues, encrypting file system (EFS) issues, and printer access issues.

Module 10: Troubleshooting Resource Access for Clients That Are Not Domain Members

This module explains how to resolve problems related to resource access from computers that are not domain members. You will learn how to configure and troubleshoot the Work Folders feature, which enables users to access organizational data securely from their personal devices. You will also learn how to configure and troubleshoot access to Microsoft OneDrive.

Module 11: Troubleshooting Applications

Windows 10 supports the installation and use of two types of applications: desktop apps and Universal Windows apps. This module examines these two types of applications, and the issues—including application compatibility issues—that affect a user's ability to install and run them. This module also covers how users can resolve web browser–related issues, specifically issues associated with both Microsoft Internet Explorer and Microsoft Edge.

Module 12: Maintaining Windows 10

Once the Windows 10 operating system is activated on your computers, you must establish procedures to monitor their performance and ensure that they remain up-to-date with the latest operating system updates and security fixes. This module discusses how to provide for the ongoing maintenance of Windows 10 operating systems.

Module 13: Recovering Data and Operating Systems

This module explains how to use file recovery and troubleshoot deleted files. It also describes how to recover a Windows 10 computer.