# Supporting and Troubleshooting Windows 10 - MOC On Demand (MS-10982)

Modality: On Demand

**Duration: 2 Days** 

SATV Value: 2

# About this course:

This Microsoft Official On-Demand course is available for 90 days from the course request date if you have a yearly membership, or course buys exclusively. Course access will terminate the when course enrollment 90 days completed.

This course is intended to train intensive skills of troubleshooting for Windows 10. In this course, we talk about regular issues that emerge and devices to assist you with settling them. A portion of the aptitudes included in this course:

- Troubleshooting installation problems of Windows.
- Troubleshooting web browser problems of Windows.
- Troubleshooting issues of application installation.
- Troubleshooting Authentication problems of Windows.
- Use of reliability tools of Windows.

An understudy also gets abilities and learned in this course, about how to customize and install Windows 10 working frameworks and applications, and how to configure remote and local network storage and connectivity. Understudies will also figure out how to configure device security, data security, and network security, and update, maintain and recover Windows 10. This course further readies the understudies for the Microsoft 70-697: certification exam of Configuring Windows Devices.

The normal compensation for IT Support and Helpdesk is \$65,000 annually.

# **Course Objective:**

At the time of finishing this course, understudies will have the option to:

- Resolve issues that relate to device drivers and hardware devices.
- Issues for troubleshooting the startup and services of the operating system on a Windows 10 PC.
- Troubleshoot problems that relate to the connectivity of the network.
- Determine problems pertains to accessing resources from devices that are domain-joined.
- Define the procedures associated with using and planning a methodology of troubleshooting for Windows 10.

@.vap=0

- Troubleshoot the devices of Windows 10 remotely.
- Troubleshoot user settings issues.
- Troubleshoot client configuration issues and failures with Group Policy Objects application.
- Troubleshoot issues that relate to the operation and installation of the application.
- Troubleshoot issues for remote connectivity.
- Maintain a device running Windows 10.
- Resolve issues identified with getting to resources from gadgets that are not area joined.
- Recover a device running Windows 10.

# **Targeted Audience:**

This course is planned for:

Enterprise Desktop Support Technician (EDST), who gives users Tier 2 help running Windows 10 (PCs) and gadgets in medium to enormous enterprise associations, inside a Windows area condition.

This course secondary Targeted Audience is the professionals of IT who support and administer Windows 10 desktops, users, devices, and associated security and network resources.

# **Prerequisites:**

Prior to going to this course, understudies must have:

- Principles of MS Active Directory Domain Services (AD DS).
- Networking fundamentals, including User Datagram Protocol (UDP), Transmission Control Protocol /Internet Protocol (TCP/IP), and Domain Name System (DNS).
- Fundamentals of Windows Server 2012 R2.
- Understanding of the components of Public Key Infrastructure (PKI).

# **Course Outline:**

# Module 1: Implementing a Troubleshooting Methodology

This module explains the processes involved in establishing and using a troubleshooting methodology. 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

#### Lessons

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

# Lab : Implementing a Troubleshooting Methodology

@.vap=0

• Implementing a Troubleshooting Methodology

# Lab : Using Troubleshooting Tools

• Using Troubleshooting Tools

After completing this module, students will be able to:

- Describe Windows 10, supported devices, and the Windows 10 architecture.
- Understand the role of an EDST in a Windows 10 environment.
- Understand the troubleshooting methodology for Windows 10.
- Describe Windows 10 troubleshooting tools.
- Use Windows 10 troubleshooting tools.

# 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).

## Lessons

- Overview of the Windows 10 Startup Recovery Environment
- Troubleshooting Startup Settings
- Troubleshooting Operating System Services Issues
- Recovering BitLocker-Protected Drives

# Lab : Troubleshooting Startup Issues

- Resolving a Startup Issue (1)
- Resolving a Startup Issue (2)

# Lab : Recovering BitLocker-Encrypted Drives

- Recovering a BitLocker-Encrypted Drive
- Creating a New BitLocker Password

After completing this module, students will be able to:

- Describe the Windows 10 startup architecture.
- Optimize and troubleshoot startup settings.
- Troubleshoot Windows 10 operating system services.
- Recover drives encrypted with Windows BitLocker Drive Encryption.

# Module 3: Troubleshooting Hardware and Device Drivers

@.vap=0

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 issue that might occur.

# Lessons

- Troubleshooting Device Driver Failures
- Overview of Hardware Troubleshooting
- Troubleshooting Physical Failures
- Monitoring Reliability
- Configuring the Registry

## Lab : Troubleshooting Device Driver Issues

- Troubleshooting a Missing Device Driver
- Resolving Hardware Problems
- Resolvinga Device Driver Problem
- Configuring Group Policy Settings to Control Device Installation

#### Lab : Troubleshooting Hardware Issues

- Diagnosing Memory and Troubleshooting Failed Disk Redundancy
- Accessing a Volume from a Failed Computer

After completing this module, students will be able to:

- Troubleshoot hardware device drivers.
- Describe the process of troubleshooting hardware.
- Troubleshoot physical hardware failures.
- Monitor the reliability of Windows 10 devices.
- Configure the Windows 10 registry.

# Module 4: Troubleshooting Remote Computers

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.

#### Lessons

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

# Lab : Troubleshooting Remote Computer by using Remote Desktop and Remote Assistance

- Using Remote Desktop
- Using Remote Assistance

#### Lab : Troubleshooting Remote Computer by Using Windows PowerShell

Using Windows PowerShell Remoting

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 5: Resolving Issues with Network Connectivity Issues

This module explains 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 how to use these tools to configure and troubleshoot network connections.

#### Lessons

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

#### Lab : Resolving Network Connectivity Issues

- Resolving a Network Problem (1)
- Resolving a Network Problem (2)
- Troubleshooting a Wireless Network

After completing this module, students will be able to:

- Determine network settings in Windows 10.
- Troubleshoot issues with network connectivity.
- Troubleshoot issues with name resolution.

#### Module 6: 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

# Lab : Troubleshooting Issues with Group Policy Application

- Resolving Group Policy Application (1)
- Resolving Group Policy Application (2)
- Resolving Group Policy Application (3)

#### Lab : Resolving Issues with Group Policy

• Resolving Group Policy Application (1)

#### After completing this module, students will be able to:

- Describe ho you apply GPOs to computers.
- Resolve client-configuration failures and GPO application issues.

## Module 7: Troubleshooting User Settings

In this module, you will examine issues that can occur when users sign in, and you will also learn about how to troubleshoot the application of user settings.

#### Lessons

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

#### Lab : Troubleshooting Sign in Problems

- Resolving Sign-In Issue 1
- Resolving Sign-In Issue 2

#### Lab : Troubleshooting the Application of User Settings

• Resolving Folder Redirection Issue

#### After completing this module, students will be able to:

- Troubleshoot user sign-in issues.
- Troubleshoot the correct application of user settings.

#### Module 8: Troubleshooting Remote Connectivity

@.vap=0

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

# Lessons

- Troubleshooting VPN Connectivity Issues
- Troubleshooting DirectAccess

# Lab : Troubleshooting VPN Connectivity

- Troubleshoot VPN Connectivity Issue 1
- Troubleshoot VPN Connectivity Issue 2

# Lab : Configuring and Troubleshooting DirectAccess

- Prepare the DirectAccess Implementation
- Configuring and Verifying Client-Side Settings for DirectAccess
- Troubleshooting DirectAccess

## After completing this module, students will be able to:

- Troubleshoot issues with VPN connectivity.
- Configure and troubleshoot DirectAccess.

# 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.

#### Lessons

- Troubleshooting File Permissions Issues
- Recovering Files Encrypted by EFS
- Troubleshooting Printer Access Issues

# Lab : Troubleshooting File Access Issues

- Resolving a File Access Issue (1)
- Resolving a File Access Issue (2)
- Resolving a File-Access Issue (3)

# Lab : Troubleshooting Access to Encrypted Files

#### Lab : Troubleshooting Printer Issues

- Resolving a Printer Access Issue (1)
- Resolving a Printer Access Issue (2)

After completing this module, students will be able to:

- Troubleshoot issues with file permissions.
- Troubleshoot issues with file access.
- Recover files encrypted by EFS.
- Troubleshoot access to encrypted files.
- Troubleshoot issues with accessing printers.

## 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.

#### Lessons

- Configuring and Troubleshooting Work Folders
- Configuring and Troubleshooting OneDrive Access

#### Lab : Troubleshooting Resource Access for Clients That Are Not Domain Members

- Troubleshooting Work Folders 1
- Troubleshooting Work Folders 2
- Troubleshooting OneDrive for Business

After completing this module, students will be able to:

- Configure and troubleshoot the Work Folders feature.
- Configure and troubleshoot access to Microsoft OneDrive.

#### Module 11: Troubleshooting Applications

Windows 10 supports 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.

#### Lessons

- Troubleshooting Desktop App Installation Issues
- Troubleshooting Desktop Apps
- Managing Windows Store Apps
- Troubleshooting Access to Company Web Applications

# Lab : Troubleshooting Desktop Apps

- Troubleshooting AppLocker Policy Application
- Troubleshooting Application Compatibility Issues

## Lab : Troubleshooting Access to Company Web Applications

- Troubleshooting Microsoft Internet Explorer Issues
- Troubleshooting Microsoft Edge Issues

After completing this module, students will be able to:

- Troubleshoot desktop app installation issues.
- Troubleshoot desktop apps.
- Manage Universal Windows apps.
- Troubleshoot web browsers.

#### 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.

#### Lessons

- Managing and Troubleshooting Windows Activation
- Monitoring and Troubleshooting Computer Performance
- Applying Applications and Windows Updates

#### Lab : Monitoring and Troubleshooting Performance

- Resolve a Performance-Related Issue
- Resolve a CPU-Related Performance Issue
- Resolve a Disk-Related Performance Issue

After completing this module, students will be able to:

• Manage and troubleshoot volume activation in Windows operating systems.

- Monitor and troubleshoot Windows 10 performance.
- Update applications and Windows 10.

## Module 13: Recovering Data and Operating System

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

#### Lessons

- File Recovery in Windows 10
- Recovering an Operating System

#### Lab : Recovering Data

• Resolving Issues with Previous Versions

#### Lab : Provisioning Computer to Comply with Company Standards

• Provision Computer to Comply with Company Standards

After completing this module, students will be able to:

- Recover files in Windows 10 by configuring and using file-recovery features.
- Recover a computer that is running Windows 10.

@Morro