

## **10982: Supporting and Troubleshooting Windows 10 (5 Day)**

### **About this Course**

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. Students taking this course are expected that have a good understanding of Windows 10 configuration and features and how these features can be used in enterprise environment. This course focuses on how to troubleshoot issues with Windows 10 devices.

### **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.

### **Prerequisites**

Before attending this course, students must have:

- 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 2012 R2 fundamentals.
- Microsoft Windows Client essentials; for example, experience with Windows 10 or knowledge from the courses 20697-1 and 20697-2.

## **At Course Completion**

After completing this course, students will be able 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.
- Resolve issues related to hardware devices and device drivers.
- Troubleshoot Windows 10 PCs remotely.
- Troubleshoot issues related to network connectivity.
- Troubleshoot client configuration failures and GPO application issues.
- Troubleshoot issues related to user settings.
- Troubleshoot remote connectivity issues.
- Resolve issues related to accessing resources from computers that are domain-joined.
- Resolve issues related to accessing resources from computers that are not domain-joined.
- Troubleshoot issues related to application installation and operation.
- Recover a PC running Windows 10.

## **Course Outline**

### **Module 1: Implementing a Troubleshooting Methodology**

Overview of Windows 10

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

### **Module 2: Troubleshooting Startup Issues**

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

### **Module 3: Troubleshooting Hardware and Device Drivers**

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

**Module 4: Troubleshooting Remote Computers**

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

**Module 5: Resolving Network Connectivity Issues**

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

**Module 6: Troubleshooting Group Policy**

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

**Module 7: Troubleshooting User Settings**

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

**Module 8: Troubleshooting Remote Connectivity**

- Troubleshooting VPN Connectivity Issues
- Troubleshooting DirectAccess

**Module 9: Troubleshooting Resource Access Within a Domain**

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

**Module 10: Troubleshooting Resource Access for Non Domain Member Clients**

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

**Module 11: Troubleshooting Applications**

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

**Module 12: Maintaining Windows 10**

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

### **Module 13: Recovering Data and Operating System**

- File Recovery in Windows 10
- Recovering an OS