

Supporting and Troubleshooting Windows 10 10982-E



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| Course Name | Supporting and Troubleshooting Windows 10 |
| Course Code | 10982-E |
| Course Duration | 5 Days |
| Course Structure | Instructor-Led |
| Course Overview | This is a 5-day ILT 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. |
| Audience Profile | <p>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.</p> <p>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.</p> <p>The secondary audience for this course are IT professionals who administer and support Windows 10 desktops, devices, users, and associated network and security resources.</p> |
| Course Prerequisites | <p>In addition to their professional experience, students who attend this training should already have the following technical knowledge:</p> <ul style="list-style-type: none"> • 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. |

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| | <ul style="list-style-type: none"> • Microsoft Windows Client essentials; for example, experience with Windows 10 or knowledge from the courses 20697-1 and 20697-2. |
| <p>Course Outcome</p> | <p>In addition to their professional experience, students who attend this training should already have the following technical knowledge:</p> <ul style="list-style-type: none"> • 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. • Microsoft Windows Client essentials; for example, experience with Windows 10 or knowledge from the courses 20697-1 and 20697-2. |
| <p>Assessment/Evaluation</p> | <p>This course will prepare delegates to take the 10982-E: Supporting and Troubleshooting Windows 10 Exam.</p> <p>Successfully passing this exam will result in the attainment of Supporting and Troubleshooting Windows 10 Certification and Certificate of Attendance issued by IT-IQ Botswana</p> |

| Course Details | |
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| Topic | <p>Topic 1: Implementing a Troubleshooting Methodology This Topic describes the new Windows 10 operating system features and devices; it also describes the process of developing and applying a Windows 10 troubleshooting methodology.</p> <p>Lessons</p> <ul style="list-style-type: none">• Overview of Windows 10• Introduction to the EDST Job Role• Overview of the Troubleshooting Steps• Troubleshooting Tools <p>Lab: Using Troubleshooting Tools</p> <p>After completing this Topic, you will be able to:</p> <ul style="list-style-type: none">• Describe the Windows 10 operating system, devices it supports, and the Windows 10 architecture.• Explain the troubleshooting methodology for Windows 10.• Describe Windows 10 troubleshooting tools <p>Topic 2: Troubleshooting Startup Issues This Topic describes how to identify and troubleshoot startup issues that affect—and problematic services that run on—a Windows 10 operating system. This Topic 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).</p> <p>Lessons</p> <ul style="list-style-type: none">• Overview of the Windows 10 Startup Recovery Environment• Configuring the Registry• Troubleshooting Startup Settings• Recovering BitLocker-Protected Drives |

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| | <p>Lab: Troubleshooting Startup Issues</p> <ul style="list-style-type: none">• Exploring Windows RE• Resolving a Startup Issue <p>Lab: Recovering BitLocker-Encrypted Drives</p> <ul style="list-style-type: none">• Recovering a BitLocker-Encrypted Drive• Creating a New BitLocker Password <p>After completing this Topic, you will be able to:</p> <ul style="list-style-type: none">• Describe how to configure the registry.• Explain how to troubleshoot startup settings.• Recover drives encrypted with Windows BitLocker Drive Encryption <p>Topic 3: Performing System Recovery This Topic describes how to resolve issues related to operating system services and how to recover a computer.</p> <p>Lessons</p> <ul style="list-style-type: none">• Troubleshooting Operating System Service Issues• Recovering a Computer <p>Lab: Performing System Recovery</p> <ul style="list-style-type: none">• Preparing for System Recovery• Recovering a Computer <p>After completing this Topic, you will be able to:</p> <ul style="list-style-type: none">• Troubleshoot operating system services.• Recover a computer that is running Windows 10. <p>Topic 4: Troubleshooting Hardware and Device Drivers This Topic explores how to troubleshoot issues related to device drivers and hardware devices.</p> <p>Lessons</p> <ul style="list-style-type: none">• Troubleshooting Device Driver Failures• Overview of Hardware Troubleshooting |
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Lab: Troubleshooting Hardware and Device Driver Issues

- Troubleshooting a Missing Device Driver
- Resolving Hardware Problems

After completing this Topic, you will be able to:

- Troubleshoot device driver failures.
- Describe the process of troubleshooting hardware.

Topic 5: Administering Windows 10

This Topic 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

Lab: Troubleshooting Remote Computers through Remote Desktop

- Using Remote Desktop

Lab: Troubleshooting a Remote Computer by Using Windows PowerShell

- Using Windows PowerShell Remoting

After completing this Topic, you will be able to:

- Use Remote Desktop to manage remote computers.
- Use Windows PowerShell cmdlets and scripts.
- Use Windows PowerShell remoting to manage remote computers.
- Implement provisioning packages.

Topic 6: Resolving Issues with Network Connectivity

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| | <p>This Topic describes how to identify network settings and troubleshoot issues related to network connectivity in wired and wireless networks, IPv4 and IPv6 connectivity, and name resolution.</p> <p>Lessons</p> <ul style="list-style-type: none">• Determining Network Settings• Troubleshooting Network Connectivity• Troubleshooting Name Resolution <p>Lab: Resolving Network Connectivity Issues</p> <ul style="list-style-type: none">• Configuring Network Settings• Resolving a Network Problem (1)• Resolving a Network Problem (2) <p>After completing this Topic, you will be able to:</p> <ul style="list-style-type: none">• Determine network settings in Windows 10.• Troubleshoot issues with network connectivity.• Troubleshoot name resolution issues. <p>Topic 7: Troubleshooting Group Policy This Topic provides an overview of Group Policy application and describes how to resolve issues in client configuration GPO application.</p> <p>Lessons</p> <ul style="list-style-type: none">• Overview of Group Policy Application• Resolving Client-Configuration Failures and GPO Application Issues <p>Lab: Troubleshooting Issues with Group Policy Application</p> <ul style="list-style-type: none">• Working with GPOs• Resolving Group Policy Application (1)• Resolving Group Policy Application (2)• Resolving Group Policy Application (3) <p>Lab: Resolving Issues with Group Policy</p> <ul style="list-style-type: none">• Resolving Group Policy Application (4) |
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| | <p>After completing this Topic, you will be able to:</p> <ul style="list-style-type: none">• Describe how you apply GPOs to computers.• Resolve client-side configuration failures and GPO application issues. <p>Topic 8: Configuring and Troubleshooting User Settings This Topic describes the common sign-in issues, how to detect them, and how to troubleshoot these issues. The Topic also provides an overview of user account types that are supported by Windows 10 and how authentication works for those accounts.</p> <p>Lessons</p> <ul style="list-style-type: none">• Troubleshooting Sign-In Issues• Troubleshooting the Application of User Settings <p>Lab: Troubleshooting Sign-In Issues</p> <ul style="list-style-type: none">• Resolving a Sign-In Issue <p>Lab: Configuring and Troubleshooting the Application of User Settings</p> <ul style="list-style-type: none">• Configuring UE-V• Configuring Folder Redirection• Resolving a Folder Redirection Issue <p>After completing this Topic, you will be able to:</p> <ul style="list-style-type: none">• Troubleshoot user sign-in issues.• Troubleshoot the application of user settings. <p>Topic 9: Configuring and Troubleshooting Resource Access This Topic 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.</p> <p>Lessons</p> <ul style="list-style-type: none">• Troubleshooting File Permissions Issues• Troubleshooting Issues with Printer Access• Configuring and Troubleshooting File Synchronization |
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| | <ul style="list-style-type: none">• Performing File Recovery in Windows 10 <p>Lab: Troubleshooting File Access Issues</p> <ul style="list-style-type: none">• Resolving a File Access Issue (1)• Resolving a File Access Issue (2)• Resolving a File Access Issue (3) <p>Lab: Troubleshooting Printer Issues</p> <ul style="list-style-type: none">• Resolving a Printer Issue (1)• Resolving a Printer Issue (2) <p>Lab: Configuring and Troubleshooting File Synchronization</p> <ul style="list-style-type: none">• Troubleshooting Work Folders <p>Lab: Recovering Data</p> <ul style="list-style-type: none">• Preparing for File Recovery• Resolving Issues by Using Previous Versions (Optional) <p>After completing this Topic, you will be able to:</p> <ul style="list-style-type: none">• Troubleshoot issues with file permissions.• Troubleshoot issues with accessing printers.• Configure and troubleshoot file synchronization.• Configure and troubleshoot file recovery. <p>Topic 10: Troubleshooting Remote Connectivity This Topic provides an overview of Remote Access and describes how to troubleshoot issues with VPN connectivity.</p> <p>Lessons</p> <ul style="list-style-type: none">• Overview of Remote Access• Troubleshooting Issues with VPN Connectivity <p>Lab: Troubleshooting VPN Connectivity</p> <ul style="list-style-type: none">• Troubleshooting VPN Connectivity Issue 1• Troubleshooting VPN Connectivity Issue 2 |
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| | <p>After completing this Topic, you will be able to:</p> <ul style="list-style-type: none">• Describe common remote access technologies.• Troubleshoot issues with VPN connectivity. <p>Topic 11: Troubleshooting Applications This Topic explains how to troubleshoot common desktop app operations issues. It also describes the Universal Windows apps, Microsoft Store, and Microsoft Store for Business, and explains how to resolve issues related to Universal Windows apps.</p> <p>Lessons</p> <ul style="list-style-type: none">• Troubleshooting Desktop Apps• Managing Universal Windows Apps <p>Lab: Troubleshooting Desktop Apps</p> <ul style="list-style-type: none">• Troubleshooting AppLocker Policy Applications• Troubleshooting Application Compatibility Issues <p>Lab: Provisioning a Kiosk Device</p> <ul style="list-style-type: none">• Creating a provisioning package• Applying a provisioning package <p>After completing this Topic, you will be able to:</p> <ul style="list-style-type: none">• Troubleshoot desktop apps.• Manage Universal Windows apps. <p>Topic 12: Maintaining Windows 10 This Topic describes how to troubleshoot performance issues in Windows 10. It also explains how to apply and troubleshoot Windows updates.</p> <p>Lessons</p> <ul style="list-style-type: none">• Monitoring and Troubleshooting Computer Performance• Applying Windows Updates |
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| | <p>Lab: Maintaining Windows 10</p> <ul style="list-style-type: none">• Using Performance Monitor• Configuring Windows Update Settings <p>After completing this Topic, you will be able to:</p> <ul style="list-style-type: none">• Monitor and troubleshoot Windows 10 performance.• Update applications and Windows 10. |
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