SUPPORTING AND TROUBLESHOOTING WINDOWS 11 (55342)

Duration: 4 Days   **Course Code: M55342**   **Delivery Method: Company Event**

Overview:

This is a 4-day ILT course that is designed to provide students with the knowledge and skills required to support and troubleshoot Windows 11 PCs and devices in an on-premises Windows Server Active Directory domain environment.
These skills include understanding:
- Important Windows 11 features
- How these features are used in an Active Directory
- How to troubleshoot these features

Company Events

These events can be delivered exclusively for your company at our locations or yours, specifically for your delegates and your needs. The Company Events can be tailored or standard course deliveries.

Target Audience:

The primary audience for this course is Desktop Support Technicians (DSTs). These technicians provide Tier 2 support to users with domain-joined computers running the Windows 11 OS, typically in medium to large enterprise organizations.
The secondary audience for this course are IT professionals who administer and support Windows 11 desktops, devices, users, and associated network and security resources.

Objectives:

- By the end of this course students will be able to;

- Describe the processes involved in planning and using a troubleshooting methodology for Windows 11.

- Troubleshoot startup issues and operating system services on a Windows 11 PC.

- Perform system recovery.

- Resolve issues related to hardware devices and device drivers.

- Administer Windows 11 devices.

- Troubleshoot issues related to network connectivity.

- Configure Windows 11 devices by using Group Policy.

- Configure and troubleshoot user settings.

- Configure and troubleshoot resource access.

- Implement remote connectivity.

- Deploy and troubleshoot applications.

- Maintain Windows 11 devices.

Prerequisites:

Students should have the following knowledge and experience to derive the best outcome from this course:

- 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 fundamentals.
- Microsoft Windows Client essentials; for example, experience with Windows 10 or 11 or knowledge from the M70697A: Implementing

and Managing Windows 11 course.

Content:

Module 1: Introducing Windows 11

This module describes the new Windows 11 operating system features and devices, with a particular focus on what's changed since Windows 10. The modules also describes the process of developing and applying a Windows 11 troubleshooting methodology.

Lessons for Module 1:

- Overview of Windows 11
- New features in Windows 11
- Highlight significant changes from Windows 10
- Brief overview of UI changes
- Includes overview of system architecture, including both Linux and Androidsubsystems
- Troubleshooting installation and deployment
- Overview of required hardware, identifying differences from Windows 10
- Describe common reasons why devices cannot upgrade to Windows 11
- Recommendations for typical troubleshooting procedures
- Introduction to troubleshooting tools
- Task Manager
- Resource Monitor
- Performance Monitor
- Review of revised Settings app

Module 2: Administering Windows 11 Remotely

This module describes how to use the various remote administration tools in Windows 11 to resolve issues. It describes the features and functionalities of tools such as Windows Admin Center, Remote Desktop, Quick Assist, and Windows PowerShell.

Lessons for Mdoule 2:

- Overview of administration tools
- Using Remote Desktop
- Using Quick Assist
- Using Windows Admin Center
- Introduction to Windows PowerShell
- Remoting with Windows PowerShell
- Enabling PowerShell Remoting
- Trusted hosts
- Introduction to provisioning

Module 3: Troubleshooting startup and performing system recovery

This module describes potential problems that can cause startup issues in Windows 11. It also provides an overview of the Windows startup

Module 6: Troubleshooting Group Policy

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

Lessons for Mdoule 6:

- Overview of Group Policy
- Resolving client-configuration failures and GPO application issues

Module 7: Configuring and Troubleshooting Security Settings

This module describes various security settings in Windows 11, including Credential Guard, Exploit Guard, and Application Guard. Windows Hello authentication is also covered, in addition to common sign-in issues, how to detect them, and how to troubleshoot these issues. The module also explains ways to secure the startup environment, including Secure Boot and related technologies.

Lessons for Module 7:

- Overview of Secure Boot, Trusted Boot, Measured Boot
- UEFI settings
- TPM requirements
- Implementing network security with Windows Defender Firewall and Windows Defender Firewall with Advanced Security
- Implementing Credential Guard, Exploit Guard, and Application Guard
- Configuring Windows Hello
- Troubleshooting sign-in issues

Module 8: Configuring and Troubleshooting User State

This module provides guidance on configuring and troubleshooting user state synchronization in an on-premises network. This includes managing roaming profiles, UE-V, and folder redirection.

Lessons for Module 8:

- Troubleshooting the application of user settings
- Configuring and troubleshooting UE-V
- Configuring and troubleshooting Folder Redirection

Module 11: Maintaining Windows 11

This module describes how to identify performance issues in Windows 11. It also explains how to manage and troubleshoot Windows updates.

Lessons for Module 11:

- Monitoring and troubleshooting Computer Performance
- Overview of Windows Update
- Configuring Windows Update for Business
- Troubleshooting Windows updates

Classroom Live Labs

Lab: Using Windows 11 Troubleshooting Tools

- Use Windows 11 troubleshooting tools

Lab: Administering Windows 11 remotely

- Implement Remote Desktop
- Manage remote computers using Windows PowerShell

Lab: Troubleshooting startup and performing system recovery

- Explore Windows RE
- Resolve a startup issue
- Configure and recover BitLocker
- Recover a computer after failure

Lab: Troubleshooting devices and device drivers

- Troubleshoot missing drivers
- Resolve a hardware issue

Lab: Configuring and troubleshooting network connectivity

- Troubleshoot a network connectivity issue
- Troubleshoot name resolution
- Troubleshoot remote access

Lab: Troubleshooting Group Policy

- Troubleshoot the application of GPOs on client devices

Lab: Configuring and Troubleshooting Security Settings

- Resolve a sign-in issue

Lab: Configuring and Troubleshooting User

process, including the Windows Recovery Environment (Windows RE) and Boot Configuration Data (BCD). It also describes how to resolve issues related to operating system services and how to recover a computer.

Lessons for Module 3:

- Overview of the Windows 11 Recovery Environment
- Configuring the Registry
- Troubleshooting startup settings
- Recovering BitLocker-protected drives
- Troubleshooting OS service Issues
- Recovering a computer

Module 4: Troubleshooting devices and device drivers

This module explores how to troubleshoot issues related to hardware devices and device drivers.

Lessons for Module 4:

- Overview of hardware troubleshooting
- Group Policy settings than can control/inhibit hardware installation
- Troubleshooting device driver failures

Module 5: Configuring and troubleshooting network connectivity

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

Lessons for Module 5:

- Identifying incorrectly configured network and TCP/IP settings
- Overview of IPv4 subnet addressing to help identify incorrectly configured devices
- Determining Network Settings
- Troubleshooting network connectivity
- Troubleshooting name resolution
- Overview of remote access
- Troubleshooting issues with VPN connectivity

Module 9: 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 recovery in Windows 11.

Lessons for Mdoule 9:

- Troubleshooting file permissions issues
- Troubleshooting issues with printers
- Performing File Recovery in Windows 11

Module 10: Troubleshooting applications

This module explains how to troubleshoot common desktop application operations issues. It also describes the Universal Windows apps and the Microsoft Store. The module also explains how to resolve issues related to Application Control and AppLocker policies. Finally, the module covers how to enable and configure Kiosk mode.

Lessons for Module 10:

- Troubleshooting desktop apps
- Managing Universal Windows apps
- Overview of Application Control
- Troubleshooting AppLocker Policy application
- Troubleshooting application compatibility Issues
- Configuring Kiosk mode

State

- Configure UE/V
- Configure Folder Redirection
- Troubleshoot Folder Redirection

Lab: Configuring and Troubleshooting Resource Access

- Resolve a file access issue
- Troubleshoot printing
- Recover files

Lab: Troubleshooting applications

- Troubleshoot AppLocker
- Provision a kiosk device

Lab: Maintaining Windows 11

- Review computer performance
- Configure Windows Update

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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