

Maintaining and Troubleshooting Windows Vista Computers

Course 5118: Three days; Instructor-Led

Prerequisites

Before attending this course, students must have:

- Experience supporting previous versions of the Windows operating system.
- Familiarity with an IT helpdesk ticketing system.
- Experience researching online and local knowledge bases.
- Experience running commands from a command window, such as the DOS command prompt.
- Familiarity with computer hardware and devices, such as the ability to use Windows device manager and look for unsupported devices.
- Basic TCP/IP knowledge, such as knowing why you need to have a valid IP address.
- Basic Windows and Active Directory knowledge, such as knowledge about domain user accounts, domain vs. local user accounts, user profiles, and group membership.
- Fundamentals of applications, such as how a client communicates with the server in client/server applications.
- Experience reviewing logs, such as understanding chronology, sequential order, severity, etc.

In addition, it is recommended, but not required, that students have completed the following courses:

- 5115A: Installing and Configuring the Windows Vista Operating System
- 5116A: Configuring Windows Vista Mobile Computing and Applications

Important: This learning product will be most useful to people who intend to use their new skills and knowledge on the job immediately after training.

Course Outline

Module 1: A Troubleshooting Methodology

This module explains what a troubleshooting methodology is, its role in an enterprise, and how it can be used to improve the support function within an organization.

Lessons

- Overview of a Troubleshooting Methodology
- Overview of Troubleshooting Stages
- Troubleshooting Component Areas

Lab: Preparing for Remote Troubleshooting

- Obtaining Information Remotely from Windows Vista
- Using the System Information Tool Remotely

After completing this module, students will be able to:

- Identify the users of the troubleshooting methodology.
- Identify the most important troubleshooting component areas.
- Determine which issues directly affect the troubleshooting process.

Module 2: Troubleshooting Operating Systems

This module explains how to identify and troubleshoot issues that affect the operating system's ability to boot and the services that it is running.

Lessons

- Overview of the Windows Vista Startup Process
- Troubleshooting the Windows Vista Startup Process with Windows RE
- Troubleshooting Operating System Services

Lab: Troubleshooting the Operating System

- Gathering System Information and Developing a Plan of Action
- Implementing the Proposed Plan of Action
- Clean-Booting Windows Vista

After completing this module, students will be able to:

- Identify the available recovery options in Windows Vista.
- Determine the capabilities of each recovery option.
- Troubleshoot operating system services.

Module 3: Troubleshooting Hardware

This module explains how to troubleshoot hardware-related problems and how to use Windows Vista tools to troubleshoot device problems.

Lessons

- Overview of Troubleshooting Hardware
- Dealing with Physical Failures
- Dealing with Device Driver Failures
- Troubleshooting Printing in Windows Vista
- Troubleshooting Microsoft BitLocker Protected Computers

Lab : Troubleshooting Hardware

- Gathering Customer Information and Developing a Plan of Action
- Resolving Printing Problems
- Checking for Signed Device Drivers

After completing this module, students will be able to:

- Identify basic types of hardware-related troubleshooting problems.
- Determine which problems are related to hardware failures.
- Determine which problems are caused by device drivers.
- Identify recovery options for computers that are protected by BitLocker.

Module 4: Troubleshooting Networks

This module explains how to identify the most likely cause of network problems in a number of given network scenarios.

Lessons

- Determining Network Settings
- Troubleshooting Network Connections

Lab : Troubleshooting Networks

- Gathering Customer Information
- Gathering Relevant Computer Information
- Resolving the Problem

After completing this module, students will be able to:

- Obtain information to help in network troubleshooting.
- Explain how you can use the Network Diagnostics Framework to troubleshoot network problems.
- Identify solutions to common network problems.

Module 5: Troubleshooting Security Issues

After completing this module, students will be able to troubleshoot issues that are caused by security-related configurations, such as User Account Control (UAC) and Windows Firewall.

Lessons

- Overview of User Account Control
- Troubleshooting User Account Control
- Implementing Windows Firewall
- Implementing Windows Defender

Lab : Troubleshooting Security Related Issues

- Gathering Customer and System Information and Developing a Plan of Action
- Implementing a Plan of Action
- Additional Security Checks

After completing this module, students will be able to:

- Explain the User Account Control architecture.
- Apply best practices for working with User Account Control.
- Troubleshoot User Account Control-related problems.
- Troubleshoot issues related to Windows Firewall.
- Configure Windows Firewall by using Group Policy.
- Troubleshoot issues related to Windows Defender.
- Configure Windows Defender.

Module 6: Troubleshooting Applications

After completing this module, students will be able to troubleshoot problems that are caused by some applications which are not compatible with Windows Vista.

Lessons

- Windows Application Troubleshooting
- Web Application Troubleshooting

Lab : Troubleshooting Applications

- Analyzing Collected Information and Identifying Probable Causes of a Web Application Problem
- Implementing a Plan of Action

After completing this module, students will be able to:

- Troubleshoot Windows application problems.
- Troubleshooting Web application problems.

Module 7: Maintaining and Optimizing Windows Vista

After completing this module, students will be able to identify tools that can be used to maintain a healthy operating system and optimize its performance.

Lessons

- Maintaining Windows Vista

- Optimizing Windows Vista Performance
- Monitoring Windows Vista

Lab : Maintaining and Optimizing Windows Vista

- Analyzing Collected Information and Identifying Probable Causes of a Computer Performance Problem
- Implementing a Plan of Action
- View and Interpret Reports in Performance Monitor

After completing this module, students will be able to:

- Identify Windows Vista maintenance tasks.
- Identify Windows Vista optimization tools.
- Explain the Windows Vista monitoring process.