6292 Installing and Configuring Windows 7 Client

Course Summary

Description

This course is intended for IT professionals who are interested in expanding their knowledge base and technical skills about Windows 7 Client. In this course, students learn how to install, upgrade, and migrate to Windows 7 client. Students then configure Windows 7 client for network connectivity, security, maintenance, and mobile computing. This course helps students prepare for the Exam 70-680, TS: Windows 7, Configuring.

Objectives

At the end of this course, students will be able to:

- Perform a clean installation of Windows 7, upgrade to Windows 7, and migrate user-related data and settings from an earlier version of Windows.
- Configure disks, partitions, volumes, and device drivers to enable a Windows 7 client computer.
- Configure file access and printers on a Windows 7 client computer.
- Configure network connectivity on a Windows 7 client computer.
- Configure wireless network connectivity on a Windows 7 client computer.
- Secure Windows 7 client desktop computers.
- Optimize and maintain the performance and reliability of a Windows 7 client computer.
- Configure mobile computing and remote access settings for a Windows 7 client computer.

Topics

- Installing, Upgrading, and Migrating to Windows 7
- Configuring Disks and Device Drivers
- Configuring File Access and Printers on Windows 7 Client Computers
- Configuring Network Connectivity
- Configuring Wireless Network Connections
- Optimizing and Maintaining Windows 7 Client Computers

Audience

This course is intended for IT professionals who are interested in:

- Expanding their knowledge base and technical skills about Windows 7 Client.
- Acquiring deep technical knowledge of Windows 7.
- Learning the details of Windows 7 technologies.
- Focusing on the "how to" associated with Windows 7 technologies.

Most of these professionals use some version of Windows client at their work place and are looking at new and better ways to perform some of the current functions.

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Course Summary (cont'd)

Prerequisites

Before attending this course, students must have:

- Experience installing PC hardware and devices.
- Basic understanding of TCP/IP and networking concepts.
- Basic Windows and Active Directory knowledge.
- The skills to map network file shares.
- Experience working from a command prompt.
- Basic knowledge of the fundamentals of applications. For example, how client computer applications communicate with the server.
- Basic understanding of security concepts such as authentication and authorization.
- An understanding of the fundamental principles of using printers.

Duration

Three days

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Course Outline

I. Installing, Upgrading, and Migrating to Windows 7

This module explains how to install, upgrade and migrate to Windows 7. It also describes the key features, editions, and hardware requirements of Windows 7.

A. Preparing to Install Windows 7
B. Performing a Clean Installation of Windows 7
C. Upgrading and Migrating to Windows 7
D. Performing Image-based Installation of Windows 7
E. Configuring Application Compatibility

Lab: Installing and Configuring Windows 7

- Migrating Settings by using Windows Easy Transfer
- Configuring a Reference Image of Windows 7
- Configuring a Reference Image

After completing this module, students will be able to:

- Describe the key features, editions, and hardware requirements of Windows 7.
- Perform a clean installation of Windows 7
- Upgrade and Migrate to Windows 7 from an earlier version of Windows.
- Perform an image-based installation of Windows 7
- Resolve common application compatibility issues.

II. Configuring Disks and Device Drivers

This module examines how to configure disks, partitions, volumes, and device drivers to enable Windows 7 to function as desired.

A. Partitioning Disks in Windows 7
B. Managing Disk Volumes
C. Maintaining Disks in Windows 7
D. Installing and Configuring Device Drivers

Lab: Configuring Disks and Device Drivers

- Configuring Disks
- Configuring Disk Quotas (Optional)
- Updating a Device Driver

After completing this module, students will be able to:

- Configure disk partitions on a Windows 7 client computer
- Create and manage disk volumes
- Manage file system fragmentation and disk quotas
- Install and configure device drivers

III. Configuring File Access and Printers on Windows 7 Client Computers

This module explains how to manage access to shared folders and printers on a computer running Windows 7. Specifically, it describes how to share and secure folders, configure folder compression, and how to install, configure, and administer printing.

A. Overview of Authentication and Authorization
B. Managing File Access in Windows 7
C. Managing Shared Folders
D. Configuring File Compression
E. Managing Printing

Lab: Configuring File Access and Printers on Windows 7 Client Computers

- Create and Configure a Public Shared Folder for all Users
- Configuring Shared Access to Files for Specific Users
- Creating and Sharing a Printer

After completing this module, students will be able to:

- Describe authentication and authorization
- Manage file access on a Windows 7 client computer
- Create and manage shared folders
- Configure file compression
- Install, configure, and administer printers

IV. Configuring Network Connectivity

This module explains both IPv4 and IPv6 network connectivity. It also describes how to implement automatic IP Address Allocation and troubleshoot network connectivity.

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Course Outline (cont'd)

A. Configuring IPv4 Network Connectivity
B. Configuring IPv6 Network Connectivity
C. Implementing Automatic IP Address Allocation
D. Overview of Name Resolution
E. Troubleshooting Network Issues

Lab: Configuring Network Connectivity

- Configuring IPv4 Addressing
- Configuring IPv6 Addressing
- Troubleshooting Network Connectivity

After completing this module, students will be able to:

- Configure IPv4 network connectivity.
- Configure IPv6 network connectivity.
- Implement automatic IP address allocation.
- Troubleshoot common network related issues by using the tools available in Windows 7.

V. Configuring Wireless Network Connections

This module describes key wireless network technologies and how to configure wireless network components and the Windows 7 elements that are necessary to access wireless networks.

A. Overview of Wireless Networks
B. Configuring a Wireless Network

Lab: Configuring Wireless Network Connections

- Determining the appropriate configuration for a wireless network
- Troubleshooting Wireless Connectivity

After completing this module, students will be able to:

- Describe the standards and technologies related to wireless network connections.
- Configure a wireless network connection.

VI. Securing Windows 7 Desktops

This module describes how to make a Windows 7 computer more secure while ensuring usability is not sacrificed in the process. Specifically, it describes Windows Firewall, User Account Control, Windows Defender, and Security in Internet Explorer 8.

A. Overview of Security Management in Windows 7
B. Securing a Windows 7 Client Computer by Using Local Security Policy Settings
C. Securing Data by Using EFS and BitLocker
D. Configuring Application Restrictions
E. Configuring User Account Control
F. Configuring Windows Firewall
G. Configuring Security Settings in Internet Explorer 8
H. Configuring Windows Defender

Lab: Configuring UAC, Local Security Policies, EFS, and AppLocker

- Using Action Center
- Configuring Local Security Policies
- Encrypting Data
- Configuring AppLocker

Lab: Configuring Windows Firewall, Internet Explorer 8 Security Settings, and Windows Defender

- Configuring Windows Firewall
- Configuring Internet Explorer 8 Security
- Configuring Windows Defender

After completing this module, students will be able to:

- Explain the security management features of Windows 7.
- Configure local security policy settings on a Windows 7 client computer.
- Secure data by using EFS and BitLocker.
- Configure application restrictions by using AppLocker.
- Configure user account control settings.
- Configure Windows Firewall on a Windows 7 client computer.
- Configure security-related settings in Internet Explorer to help protect a Windows 7 client computer that is connected to the Internet.
- Configure Windows Defender to help protect a Windows 7 client computer against malicious software.

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Course Outline (cont'd)

VII. Optimizing and Maintaining Windows 7 Client Computers

This module describes how to use the monitoring and configuration tools to obtain information about Windows 7 performance and how to troubleshoot performance and reliability problems.

A. Maintaining Performance by Using the Windows 7 Performance Tools
B. Maintaining Reliability by Using the Windows 7 Diagnostic Tools
C. Backing Up and Restoring Data by Using Windows Backup
D. Restoring a Windows 7 System by Using System Restore Points
E. Configuring Windows Update

Lab: Optimizing and Maintaining Windows 7 Client Computers

- Monitoring System Performance
- Backing Up and Restoring Data
- Configuring System Restore Points
- Configuring Windows Update

After completing this module, students will be able to:

- Maintain the performance of a Windows 7 client computer by using performance management tools.
- Maintain reliability of a Windows 7 client computer by using the diagnostic tools.
- Back up and restore data on a Windows 7 client computer by using Windows Backup.
- Restore a Windows 7 system by using system restore points.
- Configure Windows Update on a Windows 7 client computer.

VIII. Configuring Mobile Computing and Remote Access in Windows 7

This module explains how to configure mobile devices and remote access. It also discusses DirectAccess and BranchCache which are new for Windows 7.

A. Configuring Mobile Computer and Device Settings
B. Configuring Remote Desktop and Remote Assistance for Remote Access
C. Configuring DirectAccess for Remote Access
D. Configuring BranchCache for Remote Access

Lab: Configuring Mobile Computing and Remote Access in Windows 7

- Creating a Sync Partnership
- Configuring Power Options
- Enabling Remote Desktop
- Enabling BranchCache

After completing this module, students will be able to:

- Configure mobile computer and device settings on a Windows 7 client computer.
- Configure Remote Desktop and Remote Assistance on a Windows 7 client computer.
- Configure DirectAccess on a Windows 7 client computer for remote access.
- Configure BranchCache on a branch office Windows 7 client computer.

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