

# 6292 – Installing and Configuring Windows 7 Client

**Vendor Course Code:** 6292

**Course Length:** 3 days

**Overview:** This three-day instructor-led 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.

**Skills Gained:** After completing 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.
- Optimise 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.

## **Key Topics:** **Course Outline**

### **Module 1: 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.

Lessons  
Preparing to Install Windows 7  
Performing a Clean Installation of Windows 7  
Upgrading and Migrating to Windows 7  
Performing Image-based Installation of Windows 7  
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.

### **Module 2: 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.

Lessons  
Partitioning Disks in Windows 7  
Managing Disk Volumes  
Maintaining Disks in Windows 7  
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

### **Module 3: 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.

Lessons

Overview of Authentication and Authorisation  
Managing File Access in Windows 7  
Managing Shared Folders  
Configuring File Compression  
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 authorisation
- Manage file access on a Windows 7 client computer
- Create and manage shared folders
- Configure file compression
- Install, configure, and administer printers

### **Module 4: 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.

Lessons

Configuring IPv4 Network Connectivity  
Configuring IPv6 Network Connectivity  
Implementing Automatic IP Address Allocation  
Overview of Name Resolution  
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.

### **Module 5: 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.

Lessons

Overview of Wireless Networks  
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.

### **Module 6: 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.

Lessons

Overview of Security Management in Windows 7  
Securing a Windows 7 Client Computer by Using Local Security Policy Settings  
Securing Data by Using EFS and BitLocker  
Configuring Application Restrictions  
Configuring User Account Control  
Configuring Windows Firewall  
Configuring Security Settings in Internet Explorer 8  
Configuring Windows Defender

Lab : Configuring UAC, Local Security Policies, EFS, and AppLocker  
Using Action Centre  
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.

### **Module 7: Optimising 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.

Lessons

Maintaining Performance by Using the Windows 7 Performance Tools  
Maintaining Reliability by Using the Windows 7 Diagnostic Tools  
Backing Up and Restoring Data by Using Windows Backup  
Restoring a Windows 7 System by Using System Restore Points  
Configuring Windows Update

Lab : Optimising 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.

### **Module 8: 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.

#### Lessons

Configuring Mobile Computer and Device Settings  
Configuring Remote Desktop and Remote Assistance for Remote Access  
Configuring DirectAccess for Remote Access  
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.

### **Target 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.

### **Prerequisites:**

Before attending this course, students must have:

- A solid understanding of TCP/IP and networking concepts.
- A solid Windows and Active Directory background. For example, domain user accounts, domain vs. local user accounts, user profiles, and group membership.
- A good understanding of scripts and batch files.
- A solid understanding of security concepts such as authentication and authorisation.
- Performed a clean installation of Windows 7, Upgrade to Windows 7, and migrate user-related data and settings from Windows XP.
- Configured disks, partitions, volumes, and device drivers to enable Windows 7 to function as desired.
- Experience configuring and troubleshooting permissions and other settings to allow access to resources and applications on Windows 7 Systems.
- Experience configuring settings to enable network connectivity.
- Experience configuring and troubleshooting a wireless network connection.
- Experience configuring and troubleshooting Windows 7 security.
- Configure mobile computers and devices.
- Familiarity with the client administration capabilities of Windows Server and familiar with management tools such as the System Centre suite of products.
- Familiarity with deployment, packaging, and imaging tools.
- The ability to work in a team/virtual team
- Trained and mentored others