
Configuring Windows 8

Duration: 5 Days **Course Code: 687**

Overview:

This course provides students hands-on experience with Windows 8. It provides guidance on installing, upgrading, and licensing for Windows 8. Students will learn how to manage storage by creating simple, spanned, and striped volumes, and how to optimize file-system performance. Additionally, they will learn how to manage available disk space by using quotas. Students will work with Windows tools and services to determine the source of performance and reliability issues, and to troubleshoot these issues.

This course describes how to configure networking to include IPv4, IPv6, connect to wireless networks, and use the networking features included in Windows 8 to troubleshoot networking issues. Students will also learn preventive measures and tools that work together to protect their computers from security threats.

The course then covers the features related to file and folder management, which include setting permissions, file/folder compression, and configuring shared folders. Students will also learn about installing and managing printers. Additionally, the course provides an overview of the SkyDrive functionality, and describes the procedures to install and configure applications, including Windows Store apps.

The course also examines the fundamentals of working with virtual machines in the Client Hyper-V environment in Windows 8.

Students will learn about features such as Virtual Private Networks (VPNs) and DirectAccess, which provide mobile users access to internal resources when the users are out of the office.

Throughout the course, students will use Windows PowerShell 3.0, and its graphical user interface (GUI) to configure and manage the system. Students will also use the scripting editor to create and examine PowerShell scripts used to manage the system.

Target Audience:

This course is intended for IT professionals who configure or support Windows 8 computers, devices, users and associated network and security resources. The networks with which these professionals typically work are configured as a single domain-based or peer-to-peer environment with access to the Internet and cloud services. The IT professional could be a consultant, full-time desktop support technician, or an IT generalist who administers Windows 8-based computers and devices as a portion of their broader technical responsibilities. The course is also intended for students who seek certification in the 70-687 Windows 8 Configuring exam.

Objectives:

- **After completing this course, students will be able to:**
 - Plan and perform the installation of Windows 8.
 - Install Windows 8 on computers that are running an existing operating system.
 - Configure disks, partitions, volumes, and device drivers in a Windows 8 system.
 - Configure network connectivity.
 - Install, configure, and maintain wireless network connections.
 - Implement Windows 8 technologies to secure network connections.
 - Share files and printers.
 - Implement tools and technologies that can help secure Windows 8 desktops.
 - Configure and control applications in Windows 8.
 - Optimize and maintain Windows 8 based computers.
 - Configure mobile computer settings and to enable remote access.
 - Create and configure virtual machines in Hyper-V for Windows 8 and describe how to use it to support legacy applications.
 - Determine how to recover Windows 8 from various failures.
 - Describe how to use Windows PowerShell to manage Windows 8.
-

Prerequisites:

In addition to their professional experience, students who attend this training should already have the following technical knowledge:

- 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 and fundamentals of AD DS management
 - Understanding of the Public Key Infrastructure (PKI) components and working knowledge of the fundamentals of Active Directory Certificate Services (AD CS)
 - Microsoft Windows Server 2008 or Windows Server 2008 R2 fundamentals
 - Microsoft Windows Client fundamentals; for example, working knowledge of Windows XP, Windows Vista, and/or Windows 7
 - Fundamentals of management and experience using the Microsoft Office 2010 system or the Microsoft Office 2007 system
 - Windows Automated Installation Kit (WAIK) components including Windows PE, Windows SIM, VAMT, ImageX, USMT, and DISM concepts and fundamentals
-

Content:

Module 1: Installing Windows 8

This module will introduce the student to some new features of Windows 8, provide guidance on installing Windows 8, and introduce them to the Windows 8 licensing environment.

Lessons

- Introducing Windows 8
- Preparing to Install Windows 8
- Installing Windows 8
- Automating the Installation of Windows 8
- Activating Windows 8
- Upgrading to Windows 8
- Migrating to Windows 8
- Migrating User Data and Settings
- Managing Disks, Partitions, and Volumes
- Maintaining Disks, Partitions, and Volumes
- Working with Virtual Hard Disks
- Installing and Configuring Device Drivers
- Overview of Wireless Networks
- Implementing a Wireless Network
- Managing File Access
- Managing Shared Folders
- Configuring File Compression
- Managing Printers
- Overview of SkyDrive
- Configuring Mobile Computers and Device Settings
- Configuring VPN Access
- Configuring Remote Desktop and Remote Assistance
- Overview of DirectAccess

Lab : Installing Windows 8

- Planning to Install Windows 8
- Performing a Clean Installation of Windows 8

Lab : Performing an Unattended Installation of Windows 8

- Configuring an Answer File
- Using an Answer File to Install Windows 8

Module 2: Upgrading and Migrating to Windows 8

This module examines the upgrade process, identifies different methods for upgrading and migrating, and introduces you to the tools and processes used to perform an upgrade or migration.

Lessons

- Introducing Windows 8
- Preparing to Install Windows 8

Lab : Configuring Network Connection

- Enabling Automatic IPv4 Configuration
- Configuring IPv4 Manually

Lab : Troubleshooting Network Connectivity

- Creating a Simulated Network Connectivity Problem
- Resolving a Network Connectivity Problem

Module 5: Implementing Wireless Network Connections

This module describe the wireless network technologies available, the procedures for configuring wireless network components, and the Windows 8 elements that are necessary to access wireless networks.

Lessons

- Introducing Windows 8
- Preparing to Install Windows 8
- Installing Windows 8
- Automating the Installation of Windows 8
- Activating Windows 8
- Upgrading to Windows 8
- Migrating to Windows 8
- Migrating User Data and Settings
- Managing Disks, Partitions, and Volumes
- Maintaining Disks, Partitions, and Volumes
- Working with Virtual Hard Disks
- Installing and Configuring Device Drivers
- Overview of Wireless Networks
- Implementing a Wireless Network
- Managing File Access
- Managing Shared Folders
- Configuring File Compression
- Managing Printers
- Overview of SkyDrive
- Configuring Mobile Computers and Device Settings
- Configuring VPN Access
- Configuring Remote Desktop and Remote Assistance
- Overview of DirectAccess

Lab : Planning the Implementation of Wireless Network Connections

- Planning a Wireless Network
- Determining the Cause of Wireless Network Problems
- Configuring a Wireless Network Policy

Module 6: Implementing Network Security This module explainshow to formulate a strategy to protect your computers by using User

Lab : Configuring and Testing UAC

- Modifying UAC Prompts

Module 9: Configuring ApplicationsThis module explains how to install and configure applications, which include both desktop apps and Windows Store apps.**Lessons**

- Install and Configure Applications
- Managing Apps from the Windows Store
- Configuring Internet Explorer Settings
- Configuring Application Restrictions in the Enterprise

Lab : Configuring Internet Explorer Security

- Configuring Internet Explorer

Lab : Configuring AppLocker

- Configuring AppLocker Rules
- Testing the AppLocker Rules

Module 10: Optimizing and Maintaining Windows 8 Client ComputersThis module explains the tools that you can use to determine the source of performance and reliability issues. It also describes the steps to take to improve system performance and reliability.**Lessons**

- Optimizing the Performance of Windows 8
- Managing the Reliability of Windows 8
- Managing Windows 8 Updates

Lab : Optimizing Windows 8 Performance

- Creating a Performance Baseline
- Introducing Additional Workload
- Measuring System Responsiveness Under Load

Lab : Maintaining Windows Updates

- Configuring Windows Update

Module 11: Configuring Mobile Computing

Lessons

- Introducing Windows 8
- Preparing to Install Windows 8
- Installing Windows 8
- Automating the Installation of Windows 8
- Activating Windows 8
- Upgrading to Windows 8
- Migrating to Windows 8
- Migrating User Data and Settings
- Managing Disks, Partitions, and Volumes
- Maintaining Disks, Partitions, and Volumes

- Installing Windows 8
- Automating the Installation of Windows 8
- Activating Windows 8
- Upgrading to Windows 8
- Migrating to Windows 8
- Migrating User Data and Settings
- Managing Disks, Partitions, and Volumes
- Maintaining Disks, Partitions, and Volumes
- Working with Virtual Hard Disks
- Installing and Configuring Device Drivers
- Overview of Wireless Networks
- Implementing a Wireless Network
- Managing File Access
- Managing Shared Folders
- Configuring File Compression
- Managing Printers
- Overview of SkyDrive
- Configuring Mobile Computers and Device Settings
- Configuring VPN Access
- Configuring Remote Desktop and Remote Assistance
- Overview of DirectAccess

Lab : Migrating to Windows 8

- Backing Up Important User Data and Settings
- Restoring User Data and Settings to a Target Computer
- Verifying Successful Migration of User Data and Settings

Module 3: Managing Disks and Device Drivers

This module explains how to manage disk, including simple, spanned, or striped volumes. It also explains how to optimize file-system performance, and how to use disk quotas to manage available disk space on installed volumes.

Lessons

- Introducing Windows 8
- Preparing to Install Windows 8
- Installing Windows 8
- Automating the Installation of Windows 8
- Activating Windows 8
- Upgrading to Windows 8
- Migrating to Windows 8
- Migrating User Data and Settings
- Managing Disks, Partitions, and Volumes
- Maintaining Disks, Partitions, and Volumes
- Working with Virtual Hard Disks
- Installing and Configuring Device Drivers
- Overview of Wireless Networks
- Implementing a Wireless Network
- Managing File Access
- Managing Shared Folders
- Configuring File Compression
- Managing Printers
- Overview of SkyDrive

policies, anti-virus software, encrypted network traffic, and other protective measures. It also explains how to optimize the appropriate Windows network security features, such as the Windows Firewall and Windows Defender. Lessons

- Overview of Threats to Network Security
- Configuring Windows Firewall
- Securing Network Traffic
- Configuring Windows Defender

Lab : Configuring Inbound and Outbound Firewall Rules

- Creating an Inbound Firewall Rule
- Creating An Outbound Firewall Rule

Lab : Configuring Connection Security Rules

- Creating and Configuring Connection Security Rules

Lab : Configuring Host-Based Virus and Malware Protection

- Configuring Windows Defender

Module 7: Configuring File Access and

Lessons

- Introducing Windows 8
- Preparing to Install Windows 8
- Installing Windows 8
- Automating the Installation of Windows 8
- Activating Windows 8
- Upgrading to Windows 8
- Migrating to Windows 8
- Migrating User Data and Settings
- Managing Disks, Partitions, and Volumes
- Maintaining Disks, Partitions, and Volumes
- Working with Virtual Hard Disks
- Installing and Configuring Device Drivers
- Overview of Wireless Networks
- Implementing a Wireless Network
- Managing File Access
- Managing Shared Folders
- Configuring File Compression
- Managing Printers
- Overview of SkyDrive
- Configuring Mobile Computers and Device Settings
- Configuring VPN Access
- Configuring Remote Desktop and Remote Assistance
- Overview of DirectAccess

Lab : Configuring File Access

- Creating a Shared Folder for All Users
- Creating a Shared folder for the Marketing Group

- Working with Virtual Hard Disks
- Installing and Configuring Device Drivers
- Overview of Wireless Networks
- Implementing a Wireless Network
- Managing File Access
- Managing Shared Folders
- Configuring File Compression
- Managing Printers
- Overview of SkyDrive
- Configuring Mobile Computers and Device Settings
- Configuring VPN Access
- Configuring Remote Desktop and Remote Assistance
- Overview of DirectAccess

Lab : Configuring a Power Plan

- Creating and Configuring a New Power Plan

Lab : Implementing a VPN Connection

- Creating and Testing a VPN Connection

Lab : Implementing Remote Desktop

- Configuring a Remote Desktop Connection

Module 12: Implementing Hyper-V This module introduces the student to Client Hyper-V in Windows 8, and explains the fundamentals of working with virtual machines in the Client Hyper-V environment. Lessons

- Overview of Hyper-V
- Creating Virtual Machines
- Managing Virtual Hard Disks
- Managing Snapshots

Module 13: Troubleshooting and Recovering Windows 8 This module explains how to use the included tools to maintain a backup of important data files and additional tools that can help you to recover a computer that will not start, or starts with errors. Lessons

- Backing Up and Restoring Files in Windows 8
- Recovery Options in Windows 8

Lab : Recovering Windows 8

- Exploring Windows 8 Recovery Options
- Introducing a Simulated Problem
- Resolving the Problem

Module 14: Using Windows PowerShell This module explains how to use Windows PowerShell, its (GUI), and scripting editor to write scripts that automate repetitive tasks, and thereby increase consistency and productivity. Lessons

- Configuring Mobile Computers and Device Settings
- Configuring VPN Access
- Configuring Remote Desktop and Remote Assistance
- Overview of DirectAccess

Lab : Managing Disks

- Creating Volumes
- Configuring Quotas
- Working with VHDs

Lab : Configuring Device Drivers

- Installing Device Drivers
- Managing Device Drivers

Module 4: Configuring and Troubleshooting Network Connections

This module explains how to configure and troubleshoot Windows 8 networking features including both TCP/IP version 4 and TCP/IP version 6.

Lessons

- Configuring IPv4 Network Connectivity
- Configuring IPv6 Network Connectivity
- Implementing Automatic IP Address Allocation
- Implementing Name Resolution
- Troubleshooting Network Connectivity

Lab : Configuring Printers

- Creating and Sharing a Local Printer

Module 8: Securing Windows 8 Desktops

This module explains the features of Windows 8 that help you maintain a secure computer desktop environment.

Lessons

- Authentication and Authorization in Windows 8
- Implementing Group Policy Objects
- Securing Data with EFS and BitLocker
- Configuring User Account Control

Lab : Implementing Local Group Policy Objects

- Creating Multiple Local Group Policy Objects
- Testing the Application of the Local Group Policy Objects

Lab : Securing Data

- Protecting Files with EFS

- Introduction to Windows PowerShell 3.0
- Windows PowerShell Remoting
- Using Windows PowerShell Cmdlets

Further Information:

For More information, or to book your course, please call us on+254 713 027 191

training@clclearningafrica.com

www.clclearningafrica.com

Computer Learning Centre 2nd Floor Museum Hill Centre, Muthithi Road, Westlands, Nairobi, Kenya