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# **Configuring Windows 8.1**

Get expert instruction and hands-on practice administering and configuring Windows 8.1 in this 4-day Microsoft Official Course.

This course is designed for experienced IT professionals who have knowledge and experience administering Windows PCs and devices in a domain environment with managed access to the Internet.

You will learn the skills you need to administer Windows 8.1 in a Windows Server domain environment and also provide secure, managed access to users from their non-domain joined Windows devices.

You will learn how to install and customize Windows 8.1 operating systems and apps, integrate and control access to domains and cloud services, and migrate and synchronize settings across multiple devices.

In addition, you will learn how to implement mobile security and customize configurations using Windows management tools including Group Policy and Windows PowerShell.

You will also learn how to configure user settings and profiles, local and remote network connectivity, Client Hyper-V, virtual apps, and Internet Explorer 11.

Finally, you will learn how to optimize security and provide controlled access from Windows 8.1 PCs and devices to specified resources through Workplace Join services and Work Folders.

This course is also designed to prepare certification candidates for Exam 70-687, Configuring Windows 8.1.

As part of the learning experience, you will perform hands-on exercises in a virtual lab environment.

NOTE: This course is based on Windows 8.1 Enterprise Edition with domain services provided by Windows Server 2012 R2.

#### Détails

• Code : CW8

• Durée : 4 jours ( 28 heures )

#### **Public**

- Administrators
- Enterprise Desktop/Device Support Technicians (EDSTs)

#### Pré-requis

 Basic awareness of Windows deployment tools (Windows ADK components: Windows PE, Windows SIM, VAMT, ImageX, USMT, and DISM concepts and fundamentals) but no actual prerequisite skills with the specific tools are assumed

#### **Objectifs**

- Determine requirements and perform the tasks for installing and deploying Windows 8.1.
- Manage profiles and user state between Windows devices.
- Determine the most appropriate management tools to configure Windows 8.1 settings.
- Configure disks, partitions, volumes, and device drivers in a Windows 8.1 system.
- Configure network connectivity.

## **Programme**

# Module 1: Windows 8.1 in an Enterprise Network Environment

- Description
  - This module describes solutions and features related to managing Windows 8.1 in an enterprise network environment
  - Students will identify how to use Windows 8.1 features and related solutions to support intranet, Internet, and non-domain joined Windows 8.1

#### clients

- They will also learn how to identify changes to the Windows 8.1 user interface and perform customizations of the desktop and Start screen
- Lessons
  - Managing Windows 8.1 in an Enterprise Environment
  - Overview of Windows 8.1
- After completing this module, students will be able to:



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- o Manage Windows 8.1 in an enterprise environment
- o Describe Windows 8.1

### Module 2: Installing and Deploying Windows 8.1

#### Description

- This module describes how to identify hardware, software, and infrastructure readiness for installing and deploying Windows 8.1, and also describes the different options for installing Windows 8.1 on a computer
- It also explains how students can customize a Windows 8.1 image file and deploy it using appropriate installation tools
- This module also describes the methods students can use to manage volume activation in Windows 8.1

#### Lessons

- o Preparing to Install and Deploy Windows 8.1
- Installing Windows 8.1
- Customizing and Preparing an Image for Deployment
- Volume Activation for Windows 8.1
- Lab: Installing Windows 8.1
  - o Planning to Install Windows 8.1
  - Performing a Clean Installation of Windows 8.1
- Lab: Customizing and Capturing a Windows 8.1 Image
  - o Creating and Configuring an Answer File
  - Using an Answer File to Install Windows 8.1 on a Reference Image
  - Preparing and Capturing a Windows 8.1 Reference Image
- Lab: Deploying a Windows 8.1 Image
  - Using DISM to Deploy a Windows Image
- After completing this module, students will be able to:
  - o Prepare to install and deploy Windows 8.1
  - o Install Windows 8.1
  - o Customize and prepare an image for deployment
  - o Describe volume activation for Windows 8.1

# Module 3: Managing Profiles and User State in Windows 8.1

- Description
  - This module describes how to manage profiles and user state between Windows devices
  - Students will learn about managing user accounts and profiles in Windows 8.1, configuring User State Virtualization using Microsoft UE-V and Windows 8.1, and migrating user state and settings when migrating to Windows 8.1.
- Lessons
  - Managing User Accounts and Profiles
  - o Configuring User State Virtualization
  - Migrating User State and Settings
- Lab: Configuring Profiles and User State Virtualization
  - Configuring Roaming User Profiles and Folder Redirection
  - o Implementing and Configuring UE-V
- Lab: Migrating User State by Using USMT
  - Creating and Customizing USMT XML Files

- Capturing and Restoring User State to a Target Computer
- After completing this module, students will be able to:
  - Manage user accounts and profiles
  - o Configure User State Virtualization
  - Migrate user state and settings

# Module 4: Tools Used for Configuring and Managing Windows 8.1

- Description
  - This module explains how to determine the most appropriate management tools to configure Windows 8.1 settings
  - It describes tools used for local and remote management of Windows 8.1, and the use of Group Policy and Windows PowerShell in managing Windows 8.1 settings
- Lessons
  - Tools Used to Perform Local and Remote Management of Windows 8.1
  - Using Windows PowerShell to Configure and Manage Windows 8.1
  - Using Group Policy for Management
- Lab: Using Management Tools to Configure Windows 8.1 Settings
  - Managing Windows 8.1 by Using Group Policy
  - o Implementing Windows PowerShell Remoting
- After completing this module, students will be able to:
  - Describe the tools to use for local and remote management of Windows 8.1
  - Use Windows PowerShell to configure and manage Windows 8.1
  - Use Group Policy for management

#### Module 5: Managing Disks and Device Drivers

- Description
  - This module explains how to configure, partitions, volumes, and device drivers in a Windows 8.1 system
  - It also explains how to manage virtual hard disks in the Windows 8.1 file system
- Lessons
  - Managing Disks, Partitions, and Volumes
  - o Maintaining Disks, Partitions, and Volumes
  - Working with Virtual Hard Disks
  - Installing and Configuring Device Drivers
- Lab: Managing Disks
  - Creating Volumes
  - o Configuring Disk Quotas
  - Managing Virtual Hard Disks
- · Lab: Configuring Device Drivers
  - o Installing Device Drivers
  - Managing Device Drivers
- After completing this module, students will be able to:
  - o Manage disks, partitions, and volumes
  - Maintain disks, partitions, and volumes
  - o Work with virtual hard disks
  - Install and configure device drivers



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### Module 6: Configuring Network Connectivity

- Description
  - This module explains how to configure network connectivity using IPv4 and IPv6
  - It also describes how to implement automatic IP address allocation and name resolution
- Lessons
  - Configuring IPv4 Network Connectivity
  - Configuring IPv6 Network Connectivity
  - o Implementing Automatic IP Address Allocation
  - o Implementing Name Resolution
  - o Implementing Wireless Network Connectivity
- Lab: Configuring a Network Connection
  - Enabling Automatic IPv4 Configuration
  - o Configuring IPv4 Manually
- Lab: Resolving Network Connectivity Issues
  - Creating a Simulated Network Connectivity Problem
  - Resolving a Network Connectivity Problem
- After completing this module, students will be able to:
  - o Configure IPv4 network connectivity
  - Configure IPv6 network connectivity
  - o Implement automatic IP address allocation
  - o Implement name resolution
  - o Implement wireless network connectivity

# Module 7: Configuring Resource Access for Domain-Joined and Non-Domain Joined Devices

- Description
  - This module explains how to configure resource connectivity for both domain-joined and non-domain joined devices
  - It also explains how to configure workplace join for non-domain joined computers, and configure work folders
- Lessons
  - Configuring Domain Access for Windows 8.1 Devices
  - o Managing Non-Domain Devices
  - Configuring Workplace Join
  - o Configuring Work Folders
- Lab: Configuring Resource Access for Non-Domain Joined Devices
  - o Implementing Workplace Join
  - Configuring Work Folders
- After completing this module, students will be able to:
  - o Configure domain access for Windows 8.1 devices
  - Manage non-domain devices
  - o Configure workplace join
  - o Configure work folders

# Module 8: Implementing Network Security

- Description
  - This module explains how to secure network connections by implementing Windows 8.1 technologies
  - It explains how to configure Windows firewall,
    Windows SmartScreen, and Windows Defender
  - It also explains how to implement connection security rules to secure network traffic

#### Lessons

- o Overview of Threats to Network Security
- Configuring Windows Firewall
- Securing Network Traffic
- Guarding Against Malware
- · Lab: Configuring Inbound and Outbound Firewall Rules
  - o Creating an Inbound Firewall Rule
  - Creating an Outbound Firewall Rule
- Lab: Configuring IPsec Rules
  - Creating and Configuring IPsec Rules
- Lab: Configuring Malware Protection
  - Configuring Windows SmartScreen
  - o Configuring Windows Defender
- After completing this module, students will be able to:
  - o Identify and mitigate threats to network security
  - o Configure Windows Firewall
  - Secure network traffic
  - o Guard against malware

### Module 9: Configuring File, Folder, and Printer Access

- Description
  - This module explains how to manage secure file and folder access, create and manage shared folders, and configure file and folder compression
  - It also explains how to enable and configure
    SkyDrive access, and create and configure shared printers

#### Lessons

- Managing File and Folder Access
- Managing Shared Folder Access
- o Configuring File and Folder Compression
- Overview of SkyDrive
- Managing Printers
- Lab: Configuring File Access
  - Creating a Shared Folder for the Marketing Group
  - Configuring File and Folder Compression
- Lab: Configuring Printers
  - o Creating and Sharing a Local Printer
- After completing this module, students will be able to:
  - Manage file and folder access
  - Manage shared folder access
  - o Configure file and folder compression
  - o Describe SkyDrive
  - Manage printers

#### Module 10: Securing Windows 8.1 Devices

- Description
  - This module explains how to implement tools and technologies that can help secure Windows 8.1 desktops
  - It describes methods used for authentication and authorization in Windows 8.1
  - It also describes how to use local Group Policy objects to configure security and other settings, and explains the use of file encryption methods and User Account Control

#### Lessons

- o Authentication and Authorization in Windows 8.1
- o Implementing Local Policies



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- o Securing Data with EFS and BitLocker
- o Configuring User Account Control
- · Lab: Implementing Local Group Policy Objects
  - Creating Multiple Local GPOs
  - o Testing the Application of the Local GPOs
- Lab: Securing Data Using BitLocker
  - o Protecting Files with BitLocker
- Lab: Configuring User Account Control
  - Modifying UAC Prompts
  - Testing UAC Prompts
- After completing this module, students will be able to:
  - Describe methods used for authentication and authorization in Windows 8.1
  - Describe how to use local Group Policy objects to configure security and other settings
  - Secure data with EFS and BitLocker
  - o Configure User Account Control

# Module 11: Configuring Applications for Windows 8.1

- Description
  - This module explains how to configure and control applications in Windows 8.1
  - It describes application deployment methods, and explains how to install and manage Windows Store apps
  - It also explains how to configure and secure Internet Explorer, and configure application restrictions with AppLocker
- Lessons
  - o Application Deployment Options in Windows 8.1
  - Managing Windows Store Apps
  - o Configuring Internet Explorer Settings
  - Configuring Application Restrictions in the Enterprise
- Lab: Configuring Internet Explorer Security
  - Configuring Internet Explorer
- Lab: Configuring AppLocker
  - o Configuring AppLocker Rules
  - o Testing the AppLocker Rules
- After completing this module, students will be able to:
  - Describe application deployment options in Windows 8.1
  - Manage Windows Store apps
  - o Configure Internet Explorer settings
  - o Configure application restrictions in the enterprise

# Module 12: Optimizing and Maintaining Windows 8.1 Computers

- Description
  - This module explains how to optimize and maintain Windows 8.1 based computers
  - It also explains how to manage reliability, and configure and manage software updates in Windows 8.1
- Lessons
  - Optimizing the Performance of Windows 8.1
  - o Managing the Reliability of Windows 8.1
  - Managing Software Updates in Windows 8.1
- Lab: Optimizing Windows 8.1 Performance

- o Creating a Performance Baseline
- Introducing Additional Workload
- o Measuring System Responsiveness Under Load
- Lab: Maintaining Windows Updates
  - Configuring Windows Update
- After completing this module, students will be able to:
  - o Optimize the performance of Windows 8.1
  - o Manage the reliability of Windows 8.1
  - Manage software updates in Windows 8.1

# Module 13: Configuring Mobile Computing and Remote Access

- Description
  - This module explains how to configure Windows 8.1 settings that are applicable to mobile computing devices
  - It also describes DirectAccess, and how it can be used to provide remote access.
  - This module also explains how to enable and configure VPN access, Remote Desktop, and Remote Assistance
- Lessons
  - Configuring Mobile Computers and Device Settings
  - Overview of DirectAccess
  - Configuring VPN Access
  - Configuring Remote Desktop and Remote Assistance
- Lab: Configuring a Power Plan
  - Creating and Configuring a New Power Plan
- Lab: Implementing DirectAccess
  - Running the Getting Started Wizard
  - Validating the DirectAccess Deployment
- Lab: Implementing Remote Desktop
  - o Configuring a Remote Desktop Connection
- After completing this module, students will be able to:
  - Configure mobile computers and device settings
  - Describe DirectAccess
  - o Configure VPN access
  - o Configure Remote Desktop and Remote Assistance

# Module 14: Recovering Windows 8.1

- Description
  - This module explains how to recover Windows 8.1 from failures
  - It describes how to provide for file and folder recovery, and identify when and how to recover Windows 8.1
- Lessons
  - o Backing Up and Restoring Files in Windows 8.1
  - o Recovery Options in Windows 8.1
- Lab: Recovering Windows 8.1
  - o Exploring Windows 8 Recovery Options
  - o Introducing a Simulated Problem
  - o Resolving a Problem
- After completing this module, students will be able to:
  - o Back up and restore files in Windows 8.1
  - o Explain recovery options in Windows 8.1



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## Module 15: Configuring Client Hyper-V

- Description
  - This module describes Hyper-V for Windows 8.1, and explains how to create and configure virtual machines in Hyper-V for Windows 8.1
  - It also explains the use of virtual hard disks, and the creation and implementation of virtual machine checkpoints
- Lessons
  - o Overview of Client Hyper-V

- o Creating Virtual Machines
- Managing Virtual Hard Disks
- Managing Checkpoints
- Lab: Configuring Client Hyper-V
  - Installing Client Hyper-V
  - o Creating a Virtual Network and Virtual Machine
- After completing this module, students will be able to:
  - Describe Client Hyper-V for Windows 8.1
  - o Create virtual machines
  - Manage virtual hard disks
  - Manage checkpoints

### Modalités

- Type d'action :Acquisition des connaissances
- Moyens de la formation :Formation présentielle 1 poste par stagiaire 1 vidéo projecteur Support de cours fourni à chaque stagiaire
- Modalités pédagogiques : Exposés Cas pratiques Synthèse
- Validation : Exercices de validation Attestation de stages