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## Windows 10

### Modern Desktop Administrator Associate

DURATION: 5 DAYS

COURSE CODE: MD-100

FORMAT: LECTURE/LAB

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#### WHY FIREFLY

Firefly is trusted by customers, technology vendors and channel partners around the world to deliver highly effective, immersive educational experiences. Our innovative, role-based Microsoft training covers all of the latest certifications, from Azure to Server 2016 to SQL to the modern desktop, and is designed engineers the skills they need to remain relevant in today's multcloud world.

#### WHO SHOULD ATTEND

Candidates for this exam are IT professionals who perform installation, configuration, general local management and maintenance of Windows 10 core services. Candidates may also be familiar with enterprise scenarios and cloud-integrated services.

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#### PREREQUISITES

Basic understanding of computer networks and hardware concepts

Basic understanding of OS and Application concepts

Experience with using the Windows OS

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#### LEARNING OBJECTIVES

Prepare to install Windows 10

Install Windows 10

Configure Updates for Windows

Perform post-installation configuration tasks

Configure devices and drivers for Windows

Configure storage for Windows

Configure network settings in Windows

Configure remote management of Windows

Configure and manage applications in Windows

Configure Internet Explorer

Describe the methods for securing Windows 10

Configure account access and authentication

Configure file and folder permissions

Create security policies

Describe common threats and methods for mitigating against them

Use Windows troubleshooting and monitoring tools

Troubleshoot Windows installations

Troubleshoot application installation issues

Troubleshoot web browser settings

Troubleshoot Windows authentication

Troubleshoot hardware issues related to Windows machines

Installing Windows 10	Configuring Windows 10	Protecting Windows 10	Maintaining Windows 10
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# MD-100T01-A: Installing Windows 10

## DESCRIPTION

In this course, students will learn how to support the installation tasks associated with Windows 10. Students will develop skills that include learning how to install and customize Windows 10 operating systems. Students will also learn about the new Windows servicing model and methods for keeping Windows up to date. The course will conclude with common post-installation tasks.

## COURSE OUTLINE

### 1. Installing Windows

This module covers installing the Windows 10 OS. Students will learn the different editions of Windows 10, requirements, and new features introduced. This module covers how to install the OS, as well as methods for migrations and upgrading. Students will also learn about common tools used in the deployment process

Introducing Windows 10

Installation Options

Requirements for Windows Features

Installation Process and Media

Upgrading to Windows 10

#### Lab : Installing Windows 10

Upgrading Windows 7 to Windows 10

Migrating User Settings

### 2. Updating Windows

In this module, Students will learn about keeping Windows 10 up-to-date. Students will be introduced to the new Windows servicing model and how it applies to various scenarios. Students will learn the various different methods for updating Windows and applications, as well as managing updates using tools like group policy and Windows Update for Business.

Windows Servicing Model

Updating Windows

Applying Applications and Windows Updates

#### Lab : Updating Windows 10

Configuring Updates for a Single Device

Configuring Updates with GPOs

### 3. Post-installation Configuration and Personalization

This module covers common post-installation tasks in Windows 10. Students will learn how to customize the user interface, as well as using the control panel and settings app to configure common OS settings. This course will also introduce students to Windows PowerShell.

Customize the Windows 10 UI.

Configure device specific settings such as power plans and mobile device options.

Use the Windows control panel and setting app to configure settings.

Describe using Windows PowerShell.

#### Lab : Configuring Windows 10

Using the Settings App

Using Control Panel Using Control Panel

Using Windows PowerShell

### 4. Course Conclusion

Final Exam

Lab : Graded Lab

# MD-100T02-A: Configuring Windows 10

## DESCRIPTION

In this course, students will learn how to support the configuration tasks associated with Windows 10. Students will develop skills that include managing storage, files, drivers, and printers as well as how to configure network connectivity for Windows 10. This course will also cover managing and deploying applications.

## COURSE OUTLINE

### 1. Configuring Peripherals and Drivers

This module will cover device configuration. Students will learn how device drivers work and how to install them. Students will also be introduced to managing and configuring hardware peripherals such as printers.

Managing Devices and Drivers

Managing Printers

### 2. Configuring Networking

In this module, Students will learn about networking concepts. This module will introduce to IPv4 and IPv6, and concepts like DNS. Students will learn how to configure network settings in Windows, as well as learn about wireless network technologies. The module will conclude with methods of managing Windows remotely.

Configure IP Network Connectivity

Implement Name Resolution

Implement Wireless Network Connectivity

Remote Access Overview

Remote Management

### 3. Configuring Storage

This module covers storage configuration and management in Windows 10. Students will be introduced to local, cloud and virtual storage options. This course will also cover configuring storage on client devices and introduce storage spaces.

Overview of storage options

Using OneDrive

Managing Disks, Partitions, and Volumes

Maintaining Disks and Volumes

Managing Storage Spaces

#### Lab : Practice Lab: Managing Storage

Adding a Disk

Creating a Simple Volume

Compressing a Folder

Enabling Disk Quotas

Creating a Storage Space

### 4. Managing Apps in Windows 10

In this module, Students will be introduced to App management in Windows 10. This module will cover the different types of apps and supported installation methods. Students will learn how to install apps using manual and automated methods, as well as manage app delivery using the Windows Store. Finally, this module will cover the differences between Internet Explorer and Microsoft Edge.

Providing Apps to Users

Managing Universal Windows Apps

The Windows Store

Web browsers in Windows 10

### 5. Course Conclusion

Final Exam

Lab : Graded Lab

# 100T03-A: Protecting Windows 10

## DESCRIPTION

In this course, students will learn how to secure the Windows 10 OS and protect the data on the device. Students will be introduced to common methods used for authentication and access control. This course will teach how to configure file and folder permissions and creating security policies. Students will also be introduced to the different types of external threats and how to leverage features like encryption and firewalls, as well as tools like Windows Defender.

## COURSE OUTLINE

### 1. Configuring Authorization & Authentication

This module introduces the tools and features of Windows 10 for authorizing access to Windows 10 clients. Students will learn about methods for how users sign-in to Windows 10. This module also covers restricting what users can or cannot do on a device through methods like UAC and account types.

Using Security Settings to Mitigate Threats

Configuring User Account Control

Implementing Device Registration

Authentication

### 2. Configuring Data Access and Usage

In this module, Students will learn about permissions. This module will cover considerations for different files systems. Students will learn how to configure file and folder permissions as well as shared folders. The module will conclude with configuring settings through methods such as local and group policy.

Overview of File Systems

Configuring and Managing File Access

Configuring and Managing Shared Folders

Managing Security with Policies

#### Lab : Configuring and Managing Permissions and Shares

Creating, Managing, and Sharing a Folder

Using Conditions to Control Access and Effective Permissions

### 3. Configuring Advanced Management Tools

This module introduces students to protecting devices from external threats. Students will learn about the different types of common threats. This module will teach students about using encryption, firewalls, and IPSec to help protect against threats. The module will conclude with how to configure and use Windows Defender and AppLocker.

Configuring Tenant Roles

Managing Tenant Health and Services

#### Lab : Practice Lab: Managing Network Security

Creating and Testing Inbound Rules

Creating and Testing Outbound Rules

Creating and Testing Connection Security Rules

Configuring Windows Defender

### 4. Hands-On Lab

Final Exam

Lab : Graded Lab

# MD-100T04-A: Maintaining Windows 10

## DESCRIPTION

In this course, students will learn how to manage and troubleshoot Windows 10. This course will deep-dive into the architecture and tools used for managing, monitoring, and troubleshooting the OS, Apps, and hardware. Students will learn about proactive and troubleshooting methodology, and how to identify and mitigate common issues.

## COURSE OUTLINE

### 1. Supporting the Windows 10 Environment

This module will cover the Windows 10 architecture and common environments. Students will be introduced to the various tools used in maintaining Windows. This module will also discuss methodologies for effectively troubleshooting issues and how to proactively manage and optimize Windows 10.

Troubleshooting Windows

Troubleshooting Tools

#### Lab : Practice Lab: Monitoring Windows 10

Monitoring Events

Monitoring Reliability and Performance

### 2. Troubleshooting the Windows OS

In this module, Students will learn how to troubleshoot startup and service issues related to the operating system. This module will teach the different startup and recovery options, and how to troubleshoot different Windows services.

Troubleshooting Windows Startup

Troubleshooting Operating System Service Issues

Troubleshooting Sign-In Issues

### 3. Troubleshooting Files & Applications

This module helps students plan for file backup and recovery. Students will learn how to plan and configure data protection strategies and how to perform various file and system recovery methods. This module also includes common methods for troubleshooting application installation issues, compatibility issues, and resolving browser issues.

File Recovery in Windows 10

Application Troubleshooting

#### Lab : Troubleshooting Desktop Apps

Troubleshooting AppLocker Policy Applications

Troubleshooting Application Compatibility Issues

Troubleshooting Microsoft Internet Explorer Issues

Troubleshooting Microsoft Edge Issues

### 4. Troubleshooting Hardware and Drivers

This module introduces hardware troubleshooting. Students will learn about driver management and how to troubleshoot devices. Students will also learn steps for troubleshooting system hardware and external peripherals such as USB drives and printers, including diagnostic methods and remediation.

Troubleshooting Device Driver Failures

Overview of Hardware Troubleshooting

Troubleshooting Physical Failures

#### Lab : Troubleshooting Device Driver Issues

Troubleshooting a Missing Device Driver

Resolving Hardware Problems

Resolving device driver problem

Configuring Group Policy Settings to Control Device Installation

### 5. Course Conclusion

Final Exam

Lab : Graded Lab