98-349: Windows Operating Fundamentals

Understanding operating system configurations (15–20%)

Configure Control Panel options

This objective may include but is not limited to: Configure administrative tools; configure accessibility options; configure power settings; configure File Explorer settings

Configure desktop settings

This objective may include but is not limited to: Configure profiles, display settings, and shortcuts; configure and customize Start Menu; configure Task Bar settings; configure toolbars; configure notifications

Configure native applications and tools

This objective may include but is not limited to: Configure Microsoft Edge; configure Cortana; configure Hyper-V; configure settings using MSCONFIG; configure processes and applications using Task Manager; configure computer management

Configure mobility settings

This objective may include but is not limited to: Configure Sync Center, Windows Mobility Center, and Remote Desktop

Configure and use management tools

This objective may include but is not limited to: Configure MMC; configure the Windows PowerShell console and Windows PowerShell ISE

Installing and upgrading client systems (15–20%)

Identify Windows operating system editions

This objective may include but is not limited to: Identify hardware and compatibility requirements; determine appropriate editions per device type

Identify upgrade paths

This objective may include but is not limited to: Identify upgrade paths from previous Windows versions; identify application compatibility

Understand installation types

This objective may include but is not limited to: Perform a clean install; upgrade via Windows Update; migrate from previous Windows versions; perform removable media installation; perform network installation

Understand operating system architecture

This objective may include but is not limited to: Understand kernel mode; understand user mode; understand memory, IRQs, drivers, CPUs, and UI; understand 32-bit vs. 64-bit architecture

Managing applications (15–20%)

Configure applications

This objective may include but is not limited to: Understand local vs. network applications; configure desktop applications; configure app startup options; configure Windows features; configure Windows SmartScreen; configure application removal; configure Windows Store apps

Configure User Account Control (UAC)

> This objective may include but is not limited to: Understand standard user vs. administrative user; understand types of UAC prompts and levels

Configure antivirus settings

> This objective may include but is not limited to: Configure Windows Defender and the Malicious Software Removal tool

Understand services

> This objective may include but is not limited to: Understand service start-up types, service accounts, and service dependencies

Managing files and folders (15–20%)

Understand file systems

> This objective may include but is not limited to: Understand FAT32, NTFS, and ReFS

Understand file and print sharing

> This objective may include but is not limited to: Configure File System permissions; configure Share Permissions; configure HomeGroup settings; configure print drivers; configure effective permissions; create shares; create mapped drives

Understand encryption

> This objective may include but is not limited to: Understand BitLocker and Encrypting File System (EFS)

Understand libraries

> This objective may include but is not limited to: Understand offline files; configure libraries; add multiple local locations to a library; add networked locations

Managing devices (15–20%)

Connect devices

> This objective may include but is not limited to: Connect, enable, and disable plug-and-play and Bluetooth devices; connect and disconnect printers; install third-party software for devices; install device drivers

Understand storage

> This objective may include but is not limited to: Understand disk types, security (encryption), storage device types (eSATA, USB, IEEE 1394, iSCSI, Infiniband), and storage drive types (basic, primary, extended, logical, dynamic disk, VHDs); configure simple and spanned volumes; configure disk management; configure OneDrive use; optimize drives

Understand printing devices

> This objective may include but is not limited to: Understand local printers, network printers, print queues, print-to-file, and Internet printing

Understand system devices

> This objective may include but is not limited to: Understand video, audio, and infrared input devices; understand Device Manager

Understanding operating system maintenance (15–20%)

Understand backup and recovery methods

This objective may include but is not limited to: Configure System Restore; configure a recovery drive; configure recovery boot options such as Last Known Good and various Safe Mode options; recover files from OneDrive

Understand maintenance tools

This objective may include but is not limited to: Understand Disk Defragmenter, Disk Cleanup, Task Scheduler, and System Information

Configure updates

This objective may include but is not limited to: Configure Windows Update options; implement Insider Preview, Current Branch, and Current Branch for Business scenarios; manage update history; roll back updates