

Chapter 12

Working with
Operating Systems

Episode 12.01

Episode **The Task Manager**
title:

Objective:

Lower 3rds

Services are applications or functions started by an operating system to perform specific and critical background tasks as needed.

Processes are applications, utilities, or other software that a user starts.

Users are anyone that issues commands or requests to a computer.

Lower 3rds

The Task Manager is used to manage the processes and services running on a PC.

Processes lists the processes and services currently running on the computer.

The Performance page provides a graphical view of the system resources.

Lower 3rds

The App History page provides information on applications installed on the system.

The Start-up apps page lists the services and applications that startup each time Windows is started.

Lower 3rds

The Details page lists the processes running on the computer with more detail.

The Services page lists the services currently running on the system.

Episode 12.02

Episode **The Control Panel**
title:

Objective: The Control Panel is a large collection of applets that are used for updating system settings, dealing with hardware, and troubleshooting. This episode explores the basics of the Control Panel in Windows.

Lower 3rds

Slight differences between Windows 10 & 11 Control Panels

Windows 10 control panel

Windows 11 control panel

Access center

appwiz.cpl

Microsoft scanning your OS constantly can tax performance

Public vs. Private Network? Choose wisely to protect your data

A strong password is your first defense against malware

Manually allow or block apps based on your network type

Enable Fast Startup for quicker boot times

USB Selective Suspend cuts power to idle devices to conserve energy

Manage who can log in, what they can access, and how secure their profile is

Lower 3rds

Control Panel - System Management Hub

.CPL Files Launch Applets

Administrative Tools" → "Windows Tools

Switch to Category View

Manage Connected Devices Here

Accessibility Settings for Vision & Screen

Shortcut: appwiz.cpl to Programs & Features

Lower 3rds

Sort Apps by Date, Name, Size

Indexing Affects File Search Speed

Configure Proxies & Advanced
Network Settings

Set Output Devices & Volume

Choose Public or Private Network

Manage Email Profiles (if applicable)

Set Login Permissions & Passwords

Lower 3rds

Local Admin Account Shown

Manually Allow or Block Apps

Access Fast Startup & Power Plans

Find Fast Startup Here

USB Suspend Saves Battery on Laptops

Check RAM, Edition, and System Info

Episode 12.03

Episode **Windows settings**
title:

Objective: Windows Settings has a number of options to change, update, and customize the OS. You can find settings for System, Devices, Network and Internet, Accounts, Gaming, and more.

Lower 3rds

Windows Settings = Central Control for Device & OS Preferences

Win + I = Universal Shortcut to Open Settings

Windows 10 vs. 11 = Slight Naming & Layout Differences

Display Settings = Adjust Brightness, Resolution, Text Size

Lower 3rds

Sound Settings = Manage Input/Output
Devices & Volume

Notifications & Focus Assist = Customize
Alert Behavior

Power Settings = Control Sleep, Hibernate &
Fast Startup

Fast Startup = Faster Boot by Saving
System State

Lower 3rds

Storage Settings = Cleanup, Backup & Storage Spaces

Nearby Sharing = Send Files Between Local Windows Devices

Multitasking = Control Snapping & Switching of Windows

Activation = View OS Product Key & License Info

Lower 3rds

Troubleshoot = Built-in Fixes for Internet, Audio, & More

Recovery Options = Reset or Reinstall Windows

Remote Desktop = Secure Remote Access to PCs

Clipboard = Sync & Manage Copied Content

Lower 3rds

Optional Features = Add Advanced Tools
(WSL, Hyper-V, etc.)

About Section = System Specs, Edition, and
Build Info

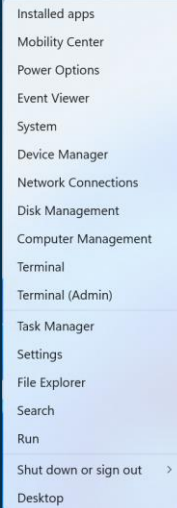
Windows Settings is a Microsoft Windows app

To open the Windows Settings in Windows 10, select the Start button and then the gear icon on the lower left of the display



Windows Settings is a Microsoft Windows app

On Windows 11, you can right-click the Start icon and choose Settings in the Power User menu.

A screenshot of the Windows 11 Start menu's Power User menu, which appears after right-clicking the Start icon. The menu is a light blue vertical list of system tools and settings. The items are: Installed apps, Mobility Center, Power Options, Event Viewer, System, Device Manager, Network Connections, Disk Management, Computer Management, Terminal, Terminal (Admin), Task Manager, Settings (highlighted in blue), File Explorer, Search, Run, Shut down or sign out (with a right arrow), and Desktop.

- Installed apps
- Mobility Center
- Power Options
- Event Viewer
- System
- Device Manager
- Network Connections
- Disk Management
- Computer Management
- Terminal
- Terminal (Admin)
- Task Manager
- Settings
- File Explorer
- Search
- Run
- Shut down or sign out >
- Desktop

Episode 12.04

Episode **MMC and Additional Tools**
title:

Objective: Windows is all about customization, and that flexibility extends to the administration of the machine as well. With the Microsoft Management Console (MMC), we are able to create specific templates that include only the needed administrative tools for the machine or task at hand. Let's get familiar with MMC and create our own custom framework for managing our PC.

Lower 3rds

MMC contains a variety of snap-ins that are used to manage and control the hardware, software, and network components of a Windows PC.

Event Viewer

Disk Management

Task Scheduler

Lower 3rds

Device Manager

Certificates

Local Users and Groups

Performance

Local Computer Policy

Lower 3rds

System Information (msinfo32.exe)

Resource Monitor (resmon.exe)

System Configuration (msconfig.exe)

Disk Cleanup (cleanmgr.exe) and Disk
Defragment (dfrgui.exe)

Registry Editor (regedit.exe)

Episode 12.05

Episode **What Is the Registry?**
title:

Objective: N/A

Episode 12.06

Episode **MacOS Core Tools**
title:

Objective: macOS has a number of tools you can use to configure, secure, and streamline your operating system. This episode covers the most important tools you'll need to know for any macOS device.

Lower 3rds

Displays, Networks, Printers, Scanners, Privacy, Accessibility, and Time Machine.

Location Services: can allow apps, system services and websites to collect data based on the physical location of a Mac to provide location-based services.

Full Disk Access: can grant antivirus and other apps full access to other apps, such as Mail (ETC)

Lower 3rds

Allow applications downloaded from:
protects the system by only allowing
apps from the App store or other
specified sources.

FileVault: can encrypt everything on the
startup disk

Appearance: used to change the look of
the macOS display and how scroll bars
are used.

Lower 3rds

Accessibility settings: although many of the specific settings areas, such as Display, Sound, Keyboards, and others

Time Machine: add or remove a backup disk and specify frequency and exclusions

Multiple desktops

Mission Control

Lower 3rds

Keychain

Spotlight

iCloud

Gestures

Finder

Dock

Lower 3rds

Continuity

Disk Utility

FileVault

Terminal

Force Quit