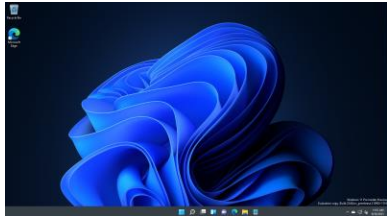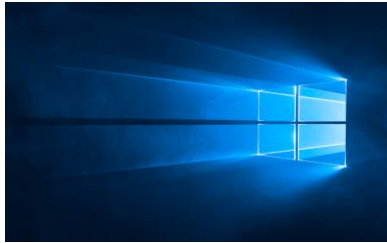# Sun City Summerlin
# Computer Club

# Saturday Windows
## *Upgrading From Windows 10 to Windows 11*

**Tom Burt**
**October 12, 2024**

# Agenda



- **Windows 10 Support Ending 11/14/2025**
  - **https://www.zdnet.com/article/5-ways-to-save-your-windows-10-pc-in-2025-and-most-are-free/**

- **Possible Options …**
  - **Keep Using Windows 10 Without Support (Risky)**
  - **Pay for Extended Windows 10 Support (Pricey)**
  - **Trash Your Windows 10 PC & Buy a New Windows 11 PC (Pricey)**
  - **Install Linux + WINE (Lots of Learning)**
  - **Install ChromeOS Flex (Lots of Learning, No Windows Apps)**
  - **Upgrade to Windows 11, Possibly Using Various Hacks (Some Learning, moderately complex)**

**A Tour of Windows 11**

# Windows 11 Hardware Requirements

- **A PC that runs Windows 10 may not be able to *officially* run Windows 11.**
  - **Key requirement is support for TPM 2.0 (Intel CPUs) or PSP 11.0 (AMD CPUs)**
  - **https://www.microsoft.com/en-us/windows/windows-11-specifications**

- **Windows 11 *requires* a 64-bit capable CPU (no 32-bit version) with Intel *VT-x or AMD-V*. *CPU must be on the Microsoft "supported" list.***

- **Tom's *Recommended* Configuration:**
  - **2.5 GHz or faster dual (or more) core 64-bit CPU, 8 GB of RAM or more.**
  - **TPM 2.0 (Intel) or PSP 11.0 (AMD) on CPU or add-on card or in UEFI BIOS.**
  - **DirectX 12 Graphics Card / Chip with WDDM 2.0 driver.**
  - **60 GB free hard disk space on a 256 GB (or more) drive.**
  - **Solid State Drive for the system drive.**

- **There are few application compatibility issues**
  - **Most Windows 10 – compatible applications should run fine on a Windows 11 PC.**

- **There may be some device compatibility issues**
  - **Most 64-bit Windows 10 – compatible devices (printers, scanners, web-cams, …) should run on Windows 11.**

**A Tour of Windows 11**

# How To Get Windows 11 (1)

- **Easiest – Buy a *new* PC.**
  - **Windows 11 Home comes pre-installed.**
  - **Product activation handled by the hardware vendor.**
  - **Windows 11 will be tested and verified by the vendor.**
  - ***Still need to install your other applications and data.***

- **If you're running Windows 10 on compatible hardware, Windows 11 will be offered automatically via Windows Update.**
  - **Best to run the Windows 11 PC Health Check app before trying to install the upgrade. Checks your hardware and apps for compatibility.**
  - **Updates for existing Windows 10 PCs with compatible hardware reportedly have been available since Q1 of 2022.**
  - **For custom-built PCs, it may work well to install Windows 10 (using old or cheap product keys) and then let Windows Update deliver Windows 11.**

- **Install using setup from a [bootable] ISO, DVD or USB flash drive.**
  - **https://www.microsoft.com/software-download/windows11**

- **Persuade (or pay) someone to do Windows 11 Upgrade on your PC**

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# Windows 11 Pricing

- **Retail PC Versions and Prices:**                    OEM Product Key
  - **Windows 11 Home**                                              **$139 at MS**
    *Built-in on most new retail PCs*

  - **Windows 11 Professional**                              **$199 at MS**
    *Upgrade from Win 11 Home*                          **$99 at MS**
  - **Windows 365 (subscription)**                        **$45/mo per seat**


- **Big Discounts via Groupon.com or Kinguin.com and others.**


- **Upgrade Price – *FREE***
  - *To owners of Windows 10*
  - *To participants in the "Windows 11 Insider" Program.*
  - *An "in-place" upgrade is available via Windows Update only to systems running Windows 10.*
  - *Others can do a "clean install" upgrade using a downloaded setup image (Media Creation Tool) (burned to a dual-layer DVD or bootable flash drive).*


- *You can still activate a clean Win 11 install using a Windows 7, 8, 8.1 or 10 activation key.*

# Windows 11 Compatibility Concerns

- **Hardware / Drivers**
  - **Windows 11 *requires* GUID Partition Tables, UEFI BIOS and Secure Boot.**
  - **UEFI BIOS might be out of date on old PCs – May need to update it.**
  - **Windows 11 is only available as a 64-bit operating system …**
    ***Hardware drivers must also be 64-bit and SIGNED!***
  - **For older devices, 64-bit Win 11 hardware drivers from MS or vendors may not exist.**
    - **Video and Sound cards**
    - **SCSI Disk Controllers and Wireless LAN cards**
    - **Printers, faxes and Scanners**
- **System Utilities / Tools software**
  - **Anti-virus and backup programs may need upgrades.**
  - **FAX, Scan and Print Tools may need upgrades.**
- **Application software – Especially OLD programs may not work**
  - **Games**
  - **Graphics applications**
  - **Video & music editors & players**

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# Windows 11 Compatibility Checks

- **Run the Windows 11 PC Health Check App (demo)**

- **Run the TPM Manager**
  - **Use command prompt: tpm.msc**
  - **If no TPM found, you may have to enable it in the BIOS.**

- **Display the System Information**
  - **Use command prompt: msinfo32.exe**

- **Check the Settings (Winkey+I) > System > About screen**

- **Check the Device Manager > Security Devices**
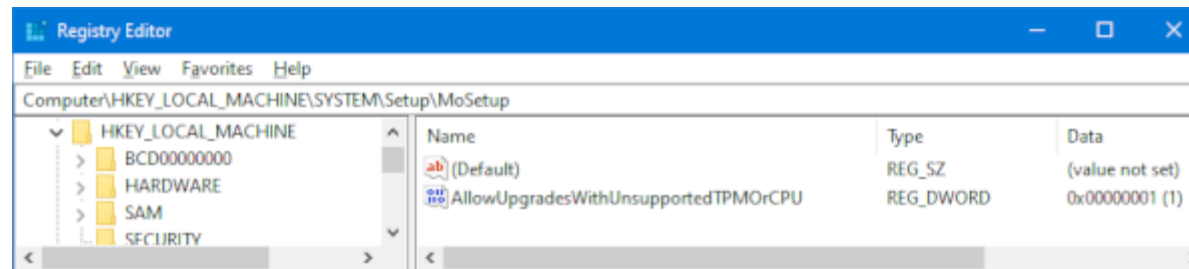  - **Look for Trusted Platform Module or AMD PSP**



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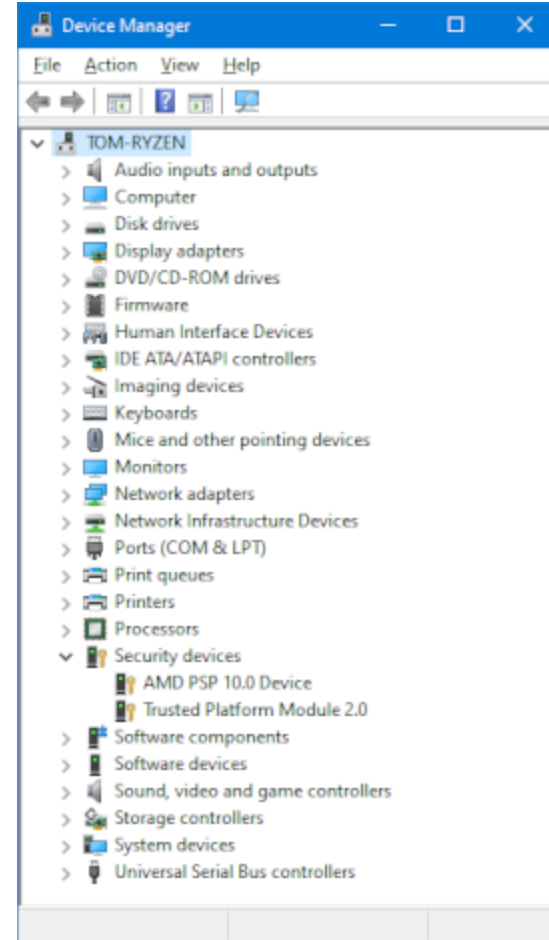
# To Upgrade or Not?

- **Windows 11 Home ships pre-installed on most new PCs.**
    - **$500 to $900 buys a very nice desktop or laptop PC.**
    - **For a desktop, recommend you have a 24" wide-screen flat panel.**
    - **Most new laptops have 1600 x 900 or higher screens, many with touch.**
    - **Biggest issue is transferring apps, settings and data from an old PC to the new one.**

- **Windows 10 is still mainstream and will be supported until 10/14/2025 (maybe longer). For most SCSCC members, there's not much reason to upgrade an existing Windows 10 PC, especially if it's *incompatible*.**

- **If you're already on Windows 10, Windows 11 isn't very different and should be an easy upgrade *if your hardware is compatible*. Windows update should offer this upgrade automatically.**

- **If you decide to upgrade … before starting, make a full image backup of your PC's drives to an external backup drive. Here are two excellent free backup tools …**
    - **Macrium Reflect 8 Free: https://www.majorgeeks.com/files/details/macrium_reflect_free_edition.html**
    - **EaseUS Todo Free: https://www.easeus.com/backup-software/tb-free.html**

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# Upgrading an Incompatible Windows 10 PC (1)

- **ZDNet Article (Ed Bott) Offers Two Approaches …**

  – **https://www.zdnet.com/article/how-to-upgrade-your-incompatible-windows-10-pc-to-windows-11-two-options/**

- **Official Windows Registry Key Hack – Use Regedit.exe**

  – **Go to or Create: HKEY_LOCAL_MACHINE\SYSTEM\Setup\MoSetup**

  – **Create: AllowUpgradesWithUnsupportedTPMOrCPU       REG_DWORD             1**



- **Download the latest Windows 11 Setup as an .iso file: https://www.microsoft.com/en-us/software-download/windows11**

- **Now run the Windows 11 Setup.exe and it will install over the existing Windows 10.**

- **Existing Data, Settings and Installed Apps will be preserved.**

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# Upgrading an Incompatible Windows 10 PC (2)

- **Use the Free Rufus Utility to Create a Special Windows 11 Setup**

  - This is best for old PCs with *NO hardware or software TPM*.

  - Download and install Rufus 4.6: **https://rufus.ie/en/**
    (Note … Setups made with earlier versions of Rufus won't work with Windows 11 24H2)

  - Download the latest Windows 11 Setup as an .iso file:
    **https://www.microsoft.com/en-us/software-download/windows11**

  - Provide a 16GB flash drive for Rufus to write the bootable Setup image.

  - Launch Rufus, select the downloaded Windows 11 .iso and the flash drive.

  - In the "Windows User Experience" options, check the box to remove the hardware requirements.

  - Click OK to create the bootable flash drive.

- **Now run the Windows 11 Setup.exe from that flash drive and it will install over the existing Windows 10.**

- **Existing Data, Settings and Installed Apps will be preserved.**

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# Upgrading an Incompatible Windows 10 PC (3)

- **Run the Windows 11 Setup in "/Product Server" Mode
  This method came from Cyber CPU Tech (See last slide)**

  – **This is best for old PCs with *NO hardware or software TPM*.**

  – **Create the bootable Windows 11 setup media (Dual-layer DVD or flash drive)**

  – **Insert the flash drive or mount the DVD, note the assigned drive letter (e.g. X: )**

  – **Start the command prompt – Win-key + R > "cmd.exe"**

  – **Change to the setup drive by typing in its drive letter (e.g. X: )**

  – **Enter the command: "setup.exe /Product server"**

- **The setup will run, saying it is installing Windows Server, but when it is finished,
  it will actually have installed Windows 11 24H2 Home or Pro**

- **Existing Data, Settings and Installed Apps will be preserved**

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# Moving Data, Settings and Programs

- **Automatic if you do an in-place *upgrade* over Windows 10.**
- **The following are for new PCs and clean (from scratch) installs on old PCs.**

- **Windows 11 has no built in "Easy Transfer Tool"**
  - You can *manually* transfer data files from an old PC to a Windows 11 PC.
  - Transfer via an Ethernet LAN or an external USB flash or hard drive.
  - You still need to reinstall <u>all</u> your applications.

- **Consider Ease US Todo PCTrans Free 12.2**
  - http://www.easeus.com/free-pc-transfer-software/
  - Claims to be a more complete solution.
  - Moves programs as well as settings and data.
  - Review indicates process is complex.
  - Also offer a paid "Pro" version for $49.95.

- **For complex situations, consider Zinstall Easy Transfer Tool ($119)**
  - http://www.zinstall.com/

# Windows 11 Settings

- **Winkey+I brings up the Settings panel to access many settings tools.**
  - *Can also reach via Start > Settings (gear icon).*
  - *Includes Control Panel, Network and "Change PC Settings".*

- **Winkey+X brings up the Desktop Quick Menu, which links to many system management functions.**

- **Right click on the Desktop background and choose "Personalize" or "Screen Resolution".**

- **Windows 11 "God Mode" Folder**
  - *Comprehensive categorized panel of links to change Win 11 settings.*
  - *On Desktop, right click and choose New > Folder.*
  - *Name it "God Mode.{ED7BA470-8E54-465E-825C-99712043E01C}"*
  - *Demo …*

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# Windows 11 – Web Links

- **Tech Republic Article: What's New in Windows 11 24H2**
  **https://www.techrepublic.com/article/microsoft-windows-11-2024-update-24h2/**

- **TechRadar Article: https://www.techradar.com/news/windows-11-home-and-pro**

- **Microsoft's Windows Site: http://windows.com**

- **Cyber CPU Tech – Windows 11 Upgrade on Unsupported PCs**
  **https://www.youtube.com/watch?v=ug__CVQQQsc**

- **Linus Tech Tips - Windows 11 Upgrade Hacks:**
  **https://www.youtube.com/watch?v=NivpAiuh-s0**

- **ZD-Net: Windows 11 | ZDNet**
  - **https://www.zdnet.com/article/hate-windows-11-heres-how-to-make-it-work-more-like-windows-10/**

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# Questions
# And
# Answers

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