



# Windows 7 Security Sunset What to Do This Year



APCUG VTC - 5/4/19

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# Operating Systems – Who Uses What?

- For world OS market (all devices, as of 7/2018), the market shares are:
  - Android - 40%
  - Windows (all versions) - 36.5%
- For the PC market:
  - Microsoft Windows – 82.79%
  - Apple OS X – 12.63%
  - Linux – 1.61%
  - Chrome – 0.86%

# Windows Market Shares

- For the Windows PC market (as of 7/2018), market shares are:
  - Windows 10 – 42.37%
  - Windows 7 – 42.14%
  - Windows 8.1 – 8.59%
  - Unsupported versions (XP, 8, Vista, others) – <7%

# Windows Lifecycle Support

- Begins when product is released
- Ends when no longer supported
- Mainstream Support
  - Includes non-security (function and feature) updates, complementary and paid support
- Extended Support
  - Security updates only, paid support only
- End of Support - No more security updates

# Windows Lifecycle - Existing

- Windows 10 - supported based on version
  - Automatic updates (assumes HW compatibility)
  - If version updates applied, support should continue
- Windows 8.1
  - Released 8/1/12, mainstream support ended 1/9/18, extended support ends 1/10/23
- **Windows 7 (SP1)**
  - Released 7/22/09, mainstream support ended 1/10/15, extended support ends **1/14/20**

# Windows Lifecycle - Expired

- Windows Vista
  - Released 11/08/06, extended support ended 4/11/17
- Windows XP
  - Released 8/24/01, extended support ended 4/08/14

# **For Win7 Users, 2019 is “The Year of Living Dangerously”**

- No security updates after 1/14/20
- Connected use after this date carries a security risk
- Microsoft could extend support, but this is highly unlikely
- Users need to consider their situation and start down some path to continue safe computing

# Windows 7 User Alternatives

- Continue using Windows 7
- Update Windows 7 PCs to Windows 10
- Buy new Win10 computers as replacements
- Abandon Windows and convert to another OS
  - Linux, OS X
- Abandon PCs and use only mobile devices
  - Smart phones, tablets, Chromebooks
- And when to make a change?



# Continue Using Windows 7?

- It may be safe for a short time after 1/14/20
- Eventually uncorrected security flaws will be exploited by hackers
  - Use online, especially for financial accounts, will be very risky
  - Can be safely used if isolated from the Internet
- No need to learn a new OS
- May need to keep a PC to run off-network

# Why a Win7 Off-Network PC?

- May have software that won't run under Win10
  - Updated software may not be available (especially to support other devices)
  - May not want to pay for replacement software
  - Mapping, photo editing, scanning, games
- May have interfaces not available on Win10 computers
  - Serial port

# Update Win7 PCs to Windows 10?

- Likely a cost to upgrade to Windows 10
- Probably keeps many programs running
- Likely to still have some programs not be compatible with Windows 10
- Computer hardware likely to be older
  - May not support Win10 (now or in the future)
  - Spending money on OS and replacement programs for a computer with possibly a limited life
- Must learn Windows 10

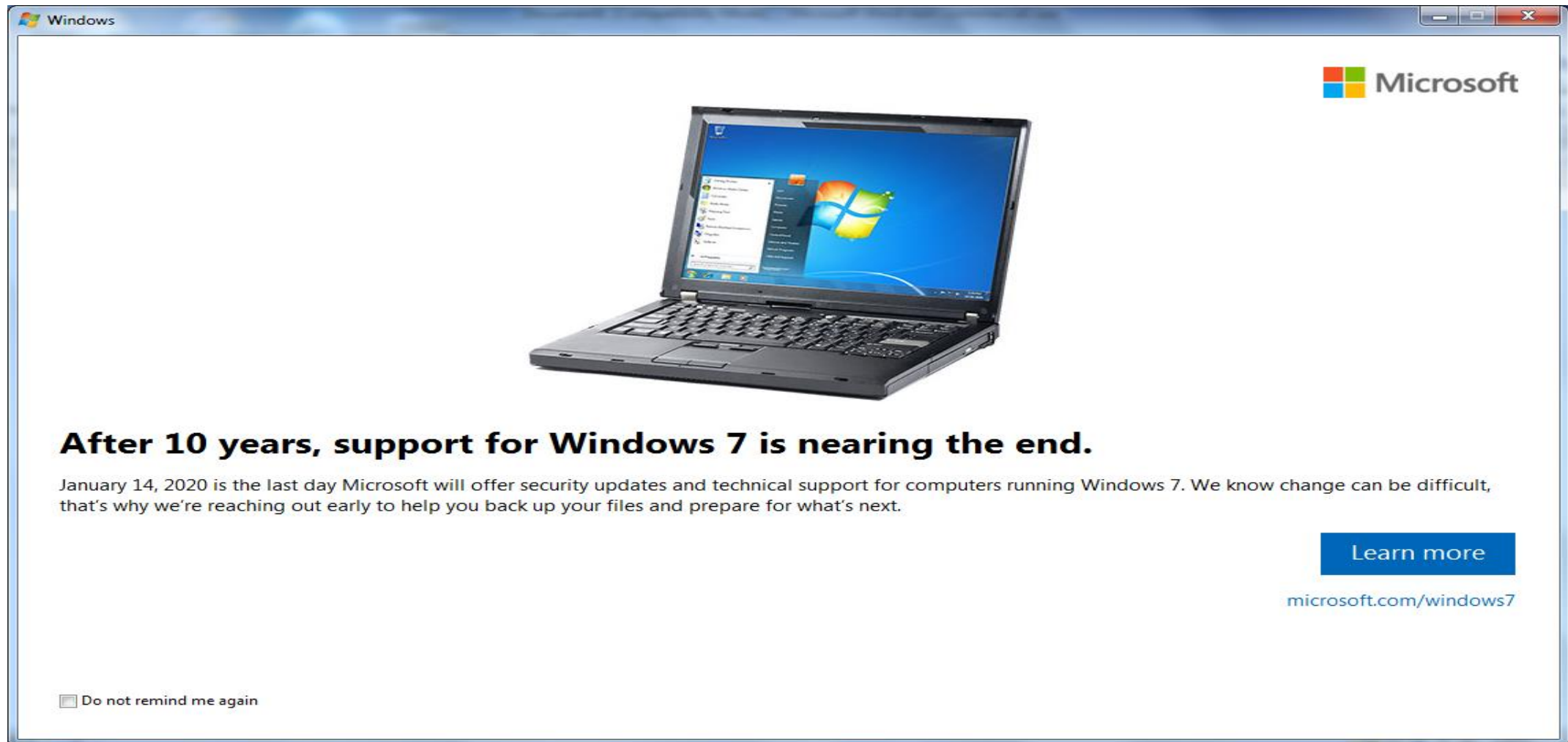
# Cost to Update to Windows 10?

- Windows 10 Home Download - \$110 on Amazon
- Windows 10 Pro Download - \$185.99 on Amazon


# Buy New Win10 Replacement PCs?


- Would be the most expensive option
- Assures compatibility with Windows 10
  - Easy, no OS installation, all set up
- May need to buy replacement programs
- Can provide current hardware and interfaces
  - USB3, HDMI, GigE, WiFi (current standard), SSD
- Provides longest PC life going forward
- Must learn Windows 10

# What Microsoft Sent Me on 4/18/19



Windows



 Microsoft

**After 10 years, support for Windows 7 is nearing the end.**

January 14, 2020 is the last day Microsoft will offer security updates and technical support for computers running Windows 7. We know change can be difficult, that's why we're reaching out early to help you back up your files and prepare for what's next.

[Learn more](#)

[microsoft.com/windows7](https://microsoft.com/windows7)

Do not remind me again

# What Does Microsoft Recommend?

- Microsoft recommends buying a new computer with Windows 10, to replace Win7 computers
  - Upgrade of Win7 computers not recommended
    - Consider replacing PCs older than 3 years
    - Win 7 PC could be 10-year old technology
  - New computers are faster, safer, more capable and more compatible
- <https://www.microsoft.com/en-us/windows/windows-7-end-of-life-support-information>

# Abandon Windows and Change OS?

- Switch to a Mac?
  - Apple products more costly, less common
- Switch to Linux?
  - Low cost, could use old hardware, less common
- Switch (update old PC) to Chrome OS?
- A new OS still has a learning curve
- Windows is still more universal and compatible
  - More programs / apps available
  - Compatible with more hardware / devices



# How About a Mac?

- Uses a different approach
- Closed ecosystem
  - May need to buy new accessories
    - Printers, input devices?
  - Will need all new software (programs / apps)
    - Added costs and learning curve
- Apple computers are typically more costly
  - \$950 to \$2400 or more

# How About Linux?

- Many good Linux distros
  - Mint, OpenSUSE, Manjaro, Debian, Fedora and others
- Most run easily on your old Win7 PC
  - Mint only needs x86 processor, 1 GB RAM, 15GB drive space, 1024 x 768 graphics, CD/DVD or USB
- Most Linux distros (like Mint) are free
  - Can run from a USB Flash drive to try

# More About Linux

- Can look like Windows 7
  - Mint's default Cinnamon interface looks and works a lot like Windows 7 Aero
    - Maybe easier for Win7 users to adapt to than Win10
- Mint comes with many essential desktop programs
  - LibreOffice for office work
  - Thunderbird for email
  - Firefox for web browsing

# Software for Linux?

- There are usually free open-source programs
  - Gimp (instead of Photoshop)
  - Evolution (instead of Outlook)
  - LibreOffice (instead of Microsoft Office)
- Can run most non-Microsoft browsers
- If Microsoft Office is absolutely essential, run Microsoft Open Office
  - Online office suite offered by Microsoft

# Help for Linux?

- There are probably Linux users in your group or a nearby user group that would be happy to provide advice and support

# How About Chrome OS (as an update)?

- Another way to reuse hardware that can't run Win10
  - Install open source Chrome OS (or run from USB drive)
- Has Chrome OS limitations like Chromebooks
- <https://www.howtogeek.com/217659/how-to-get-a-chrome-os-like-operating-system-on-any-pc>

# Abandon PCs and Go Mobile Only?

- Use only smart phones, tablets, Chromebooks
  - More people switching to handheld devices and online devices
- Convenience of mobility
- Limited in screen size and compatible accessories / interfaces
  - Screens, keyboards, printers, scanners
- Difficult to use for some applications
  - Resumes, spreadsheets, taxes, photo/video editing

# How About a Chromebook?

- Mainly an online device
- Small, light, mobile, low-cost, Wi-Fi
  - Are now offering larger and more powerful and expensive models
- Can use Google Docs or Microsoft Office Online to perform office tasks in the cloud
  - Must be online to use
- Limited offline capabilities
  - Can create/edit .docx and .txt files



# More About a Chromebook

- Can't view all video file types that Windows can
- Printing is not as straightforward
- Still, Chromebooks are great for web access

# What to Do?

- It's up to the user to weigh alternatives
  - Cost, compatibility, capability, longevity, ease of use, security, user needs
  - Might require a multi-pronged approach
- Black Friday 2019 sales for new hardware
  - If you can wait that long
- Win7 users should take action soon, as the sun is setting on Windows 7

# Questions?

**Windows 7 Security Sunset**

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