



Alan German & Chris Taylor
Ottawa PC Users' Group

August 13, 2025



Windows 10 EOL

- Extended Security Updates (ESU) programme
- Updates through October 13, 2026.
- Free options (reward points, synchronize settings)
- **Ten licenses** to continue using Windows 10
- Use for **multiple machines**

Mid-August

You can use your existing ESU license on up to 10 devices once you enroll in ESU. Just go to *Settings > Update & Security > Windows Update* and select *Enroll now*.

<https://support.microsoft.com/en-us/windows/windows-10-consumer-extended-security-updates-esu-program-33e17de9-36b3-43bb-874d-6c53d2e4bf42>



Animated GIFs and PDFs

- At 2025-08-06 Q&A

Do animated GIF files remain animated when converted to a PDF file?



Nope

- at least not with *Microsoft Print to PDF*



Animated GIF and PDFs

- At 2025-08-06 Q&A

Do animated GIF files remain animated when converted to a PDF file?



Follow Up



Is there no way?



- Can't create PDF retaining animation of an embedded GIF
 - animation lost, static image of the GIF is shown in the PDF
- Applies to all major PDF conversion tools
 - including Microsoft PowerPoint's built-in export & Adobe Acrobat
- PDF format does not natively support animated GIF playback
- Alternatives and workarounds
 - convert the GIF to MP4 video and embed video in PDF
 - allows video to play when viewed in *some* compatible PDF viewers
 - online platforms (e.g., FlipHTML5):
 - publish with animated GIFs
 - split animations across slides
 - when saved to PDF, each frame appears as successive pages
 - preserves logic of animation, but not the actual motion effect
- Bottom line
 - PDF format does not support animated GIFs natively
 - only workarounds exist, and they come with important limitations



Confusing SD Cards

- We all know about the capacity of an SD card that goes in our phones, dash cams, security cams or just our favourite camera for taking pictures
- But when it comes to buying them, the info on SD cards is somewhat confusing
- What sets one card ahead of a different but apparently similar card, other than what we can clearly read on the labeling?
- What makes one brand better than another when prices seem to vary quite a bit?
- Does anyone have any advice on how to choose?



It's complicated!



- Two form factors –
Standard and Micro
- Four card capacities – up to 2 GB, 32 GB, 2 TB, 128 TB
(Watch out for fakes online!)
- Eleven speed classes – Class 2-10, UHS I-III, V 6-90,
SD Express E150-600
2 MB/s to 600 MB/s
- Two application performance classes – A1 and A2
- Nine bus interface standards – Default, High-speed,
UHS-I, UHS-II, UHS-III, SD Express (4 variants)



Explaining SD Cards: 2025 Update



ExplainingComputers ✓

1.12M subscribers

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12K



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<https://www.youtube.com/watch?v=HtgIHfqQiC8>

SD cards for cameras

- The wide variety of SD card features lead to a wide range of prices
- If the card is intended for use in a digital camera, you should check the camera's manual
- You will find the minimum specifications required for your particular camera
- Generally speaking, going beyond those specifications will be wasting money



Follow Up Buying a new computer

- 2025-08-06 Q&A
 - difference between processors
 - extended warranties
 - new vs. used



Buying a new computer coming next week...

- These questions deserve
 - some pondering
 - more fulsome responses than we can cover tonight
- Looking for a new computer
 - what's the difference between a series 7 and 5 CPU (Intel & AMD)
 - will processing speed significantly impact programming or data processing?
 - when in doubt would it be better to stick with a 7 series?
 - extended warranties cost up to $\frac{1}{3}$ or $\frac{1}{2}$ the price of a new computer
 - is there value in buying the extended warranty?
 - is it better to go a place that can fix computers should it be required?
 - price of refurbished computer can be $\frac{1}{2}$ that of new computer
 - what considerations when purchasing a used computer?
 - are there any disadvantages?
 - any opinions on **PC Room** vs **Trailing Edge**?

Rosemary

Do you have some opinions?

- let us know now or at SuggestionBox@opcug.ca

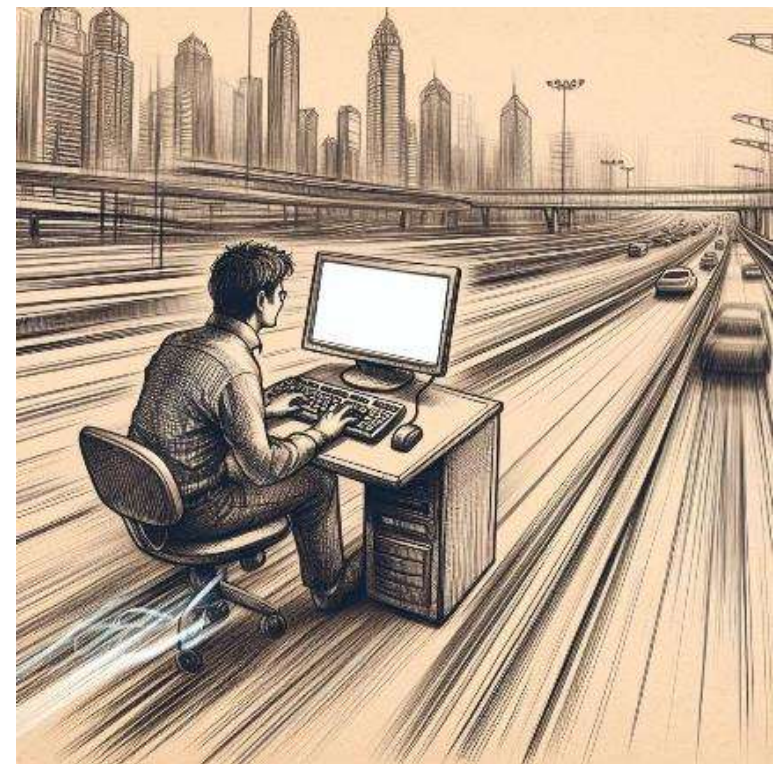
Follow Up What makes a CPU faster?

- Speed
- More processing cores
- Higher family within manufacturer's lineup (usually)
- Newer generations within family (usually)



Specifications	
Processor	
Processor Type	Intel Core i5-13420H
Processor Generation/Series	13th Generation
Processor Cores	8
Processor Speed	2.1 GHz

Ads should specify all factors



Follow Up Comparing CPUs



- Tough comparing with single manufacturer
 - Intel 8-core Core-i7 10700K @ 3.8 GHz

Fewer cores, higher level, older generation, running faster

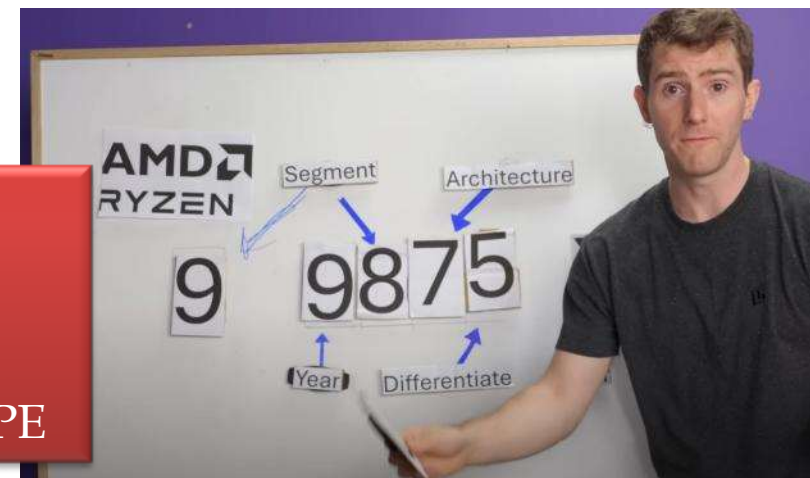
VS

- Intel 14-core Core-i5 13600KF @ 3.5 GHz

More cores, lower level, newer generation, running slower

Even tougher

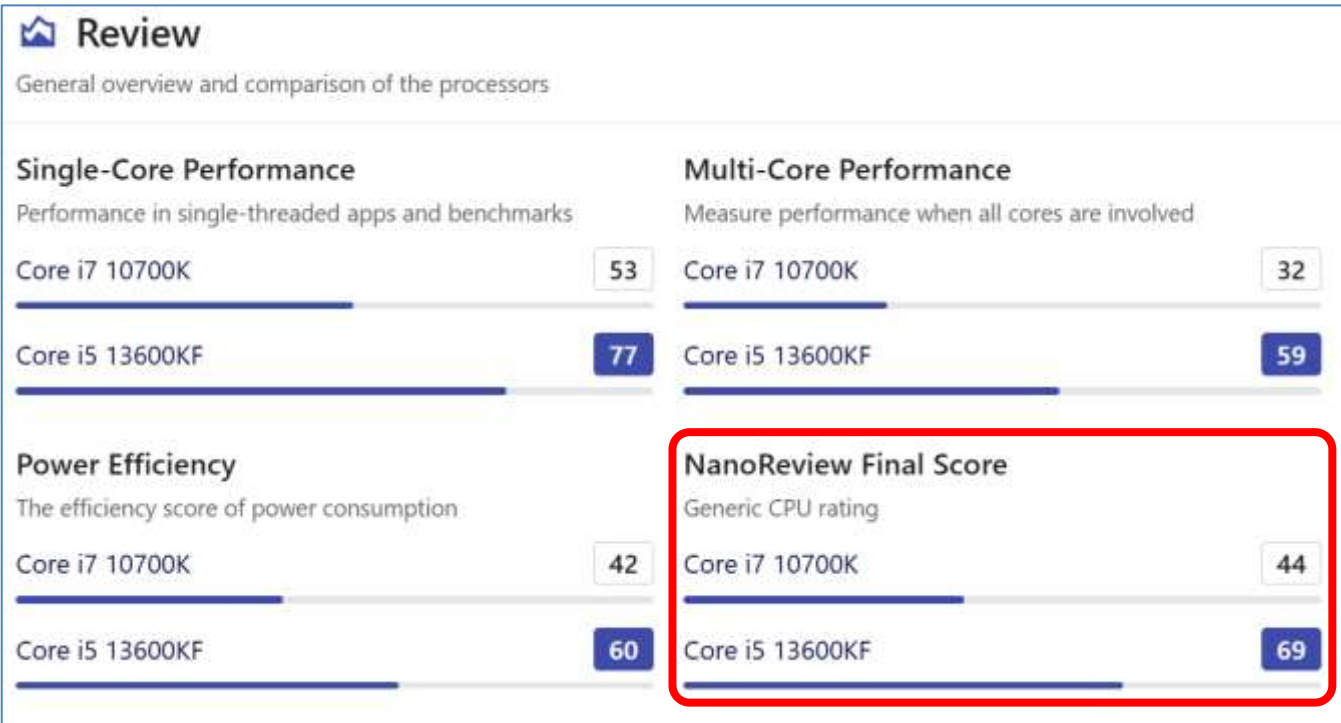
- across manufacturers
- Intel and AMD playing games with naming
 - <https://www.youtube.com/watch?v=k3jDxPXZuPE>



Follow Up

Intel 8-core Core i7 10700K @ 3.8GHz
Intel 14-core Core i5 13600KF @ 3.5 GHz

<https://nanoreview.net/en/cpu-compare>



Key Differences
What are the key differences between 13600KF and 10700K

Advantages of Intel Core i7 10700K

- + Includes an integrated GPU Intel UHD Graphics 630

Advantages of Intel Core i5 13600KF

- + Newer - released 2 years and 6 months later
- + Around 43.8 GB/s (96%) higher theoretical memory bandwidth
- + Has 6 more physical cores
- + Newer PCI Express version – 5.0
- + 59% faster in a single-core Geekbench v6 test - 2713 vs 1711 points
- + Has 8192 KB larger L3 cache size
- + Supports up to 192 GB DDR5-5600 RAM
- + More modern manufacturing process – 10 versus 14 nanometers

Core-i5 wins by significant margin!



Fly in ointment: Copilot+ PCs

- Microsoft branding for PCs with next-gen AI functions
- First Copilot+ PCs use ARM processors
 - Qualcomm ARM Snapdragon X Plus
 - 10 cores, speeds up to 3.4 Ghz
 - Qualcomm ARM Snapdragon X Elite
 - 12 cores, speeds up to 3.8 GHz
 - excellent performance and stellar battery life
- Copilot+ capable x86 CPUs from Intel & AMD
 - Intel: Core Ultra 200V series
 - AMD: Ryzen AI 300 series & Ryzen AI PRO 300 series

Follow Up Compatibility with ARM

- ARM processors not compatible with all Windows apps
 - compiled for ARM
 - not all programs have version compiled for ARM
(but many popular apps are coming along)
 - run under emulation
 - not all programs can run under emulation
- Qualcomm list of native ARM apps
 - <https://www.qualcomm.com/products/features/windowsapps>
- Short answer
 - check that the programs you want to run can run on ARM

Follow Up Extended warranties

- Just another insurance policy
- Usually very expensive
- **You** have to do **your** own cost analysis

Follow Up New vs. used computer

- Considerable savings can be had with used computer
- Shelf-life reduced
 - may be looking to replace it sooner due to performance
- May break down sooner
 - if MBF 8 years and you buy 4-year-old computer...
- Is vendor trustworthy?
 - can you get some kind of warranty?
- Will latest version of your operating system work?
 - Windows 10 end-of-life October 14, 2025
 - Extended Security Updates: October 13, 2026
 - <https://support.microsoft.com/en-us/windows/windows-10-consumer-extended-security-updates-esu-program-33e17de9-36b3-43bb-874d-6c53d2e4bf42>

Follow Up Email to SuggestionBox@opcug.ca

Experiences with purchasing computers



José Costa <josep0531@gmail.c...>

Aug 7, 2025, 2:45:11 p.m. (5 days ago)



to SuggestionBox@opcug.ca

If you are gathering information on experiences with purchasing computers, I've had two good ones purchasing refurbished laptops through Best Buy at <https://www.bestbuy.ca/en-ca/collection/best-buy-outlet/>

March 2022: HP EliteBook 840 G3 14" Laptop (Intel Core i5-6300U / 16GB RAM / 512GB SSD / Windows 10 Pro) - Labelled by Best Buy as "Refurbished (Excellent)" - \$250

Since this laptop cannot be upgraded to Windows 11 (due to its processor) and I was not aware earlier of the possibility of extending free support beyond October 2025, this year I purchased another laptop:

April 2025: HP EliteBook 840 G5 14" Laptop (Intel Core i5-8350U / 16GB RAM / 512GB SSD / Windows 11 Pro) - Labelled by Best Buy as "Refurbished (Excellent)" - \$300

Cheers,
José

If buying through a **Marketplace** seller, you have to deal with **seller** rather than **marketplace** if you have any issues e.g.

- Amazon – *when not shipped by Amazon*
- BestBuy
- eBay

Share

AI Beats Medical Experts

IOP Publishing

physicsworld

MEDICAL PHYSICS | RESEARCH UPDATE

Deep-learning model outperforms cardiologists in identifying hidden heart disease

Evaluating electrocardiogram (ECG) traces using a new deep-learning model known as [EchoNext](#) looks set to save lives by flagging patients at high risk of structural heart disease (SHD) who might otherwise be missed.

<snip>

EchoNext also outperformed 13 cardiologists in making diagnoses based on 3200 ECGs by correctly flagging 77% of structural heart problems while its human colleagues were only 64% accurate – a result so good that it shocked the researchers.

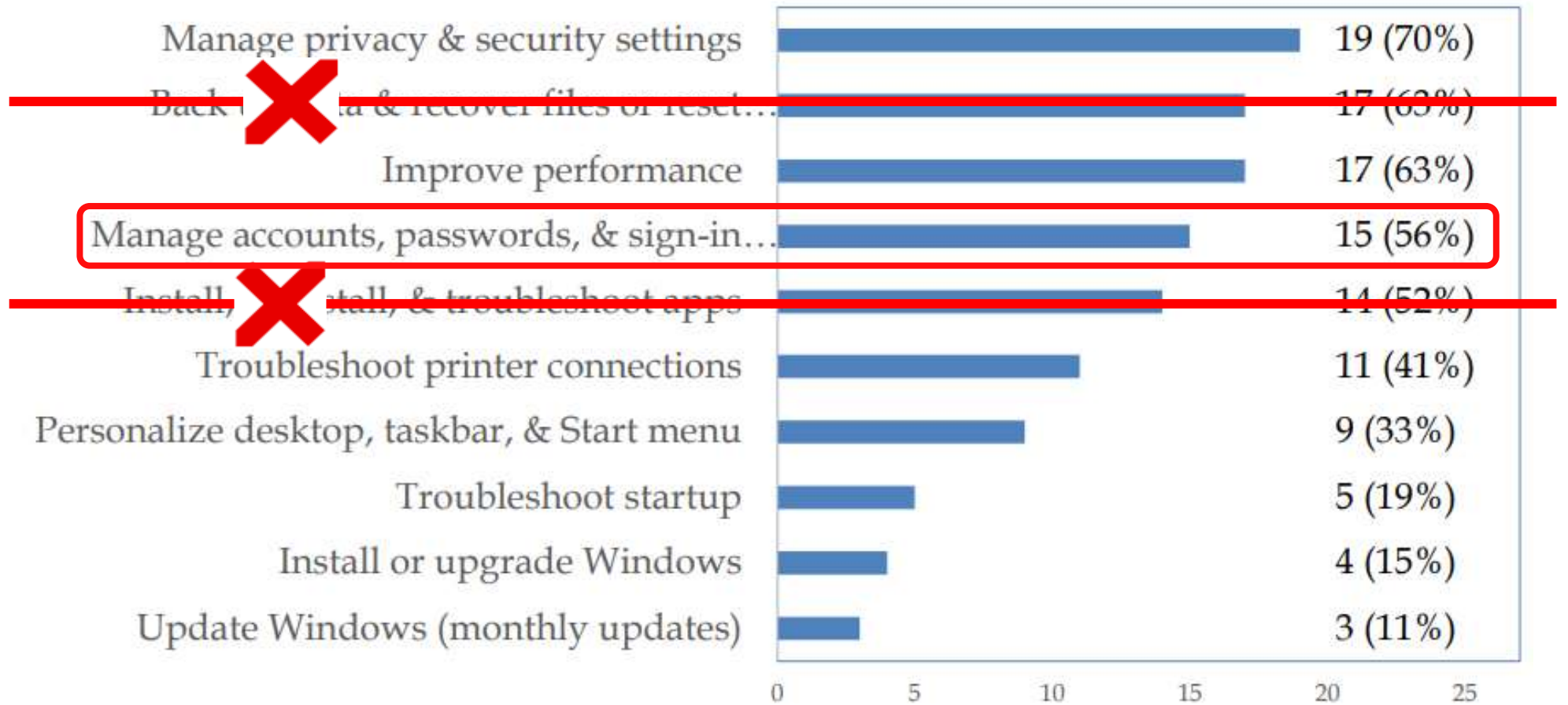
77%

vs.

64%

<https://physicsworld.com/a/deep-learning-model-outperforms-cardiologists-in-identifying-hidden-heart-disease/>

Follow Up Which questions about Windows interest you?





Manage accounts (part 1 of 3?)

Windows has two types of accounts

- *Standard User*
- *Administrator*

Each type has two flavours

- *Local Account*
- *Microsoft Account*

These flavours will be covered next week

Simple to choose account type?

- nope: this requires a...



Standard User vs Administrator



Standard User vs. Administrator

- *Standard Users*
 - can only do things that affect their own account and files
- *Administrators*
 - can make any changes
 - *even if they affect other users and the stability/capability of the entire system*

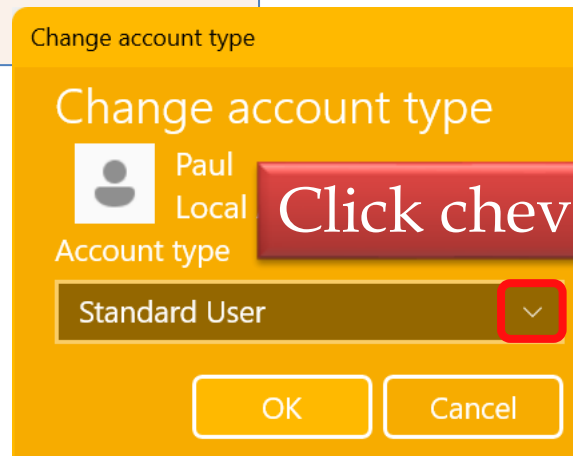
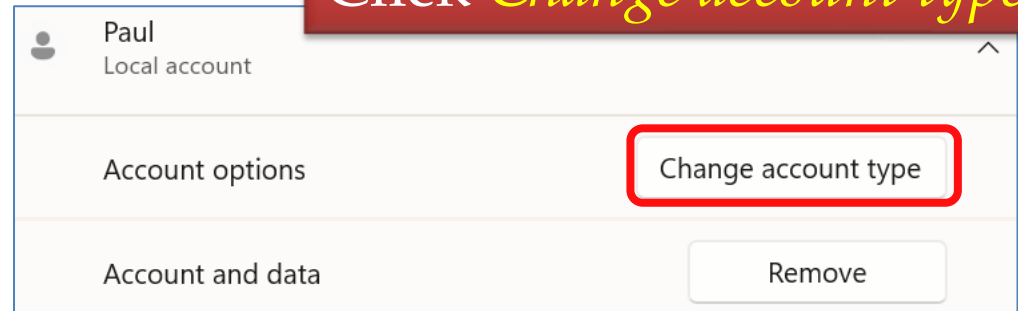
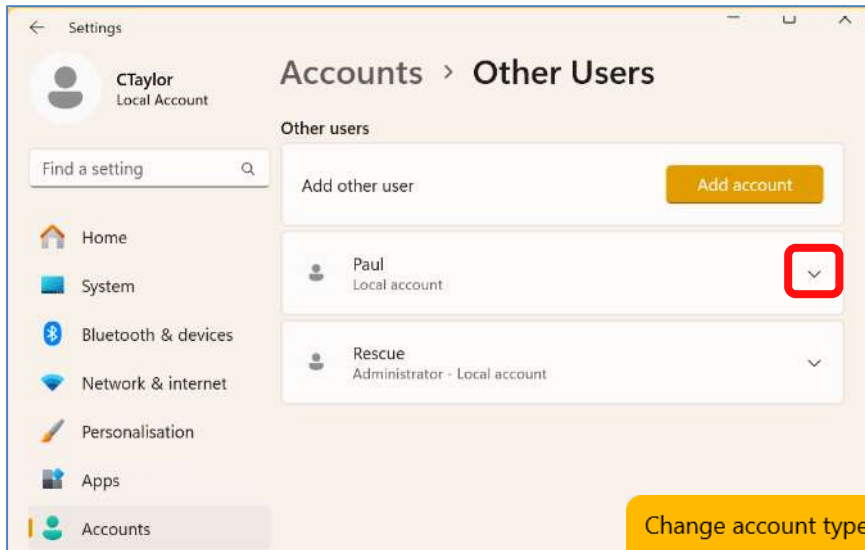


Choosing an account type

Settings > Accounts > Other users

- click chevron beside account name

Click *Change account type*



Click chevron



Choose account type

DEEP DIVE

A line drawing of a hand holding a bucket, positioned between the words 'DEEP' and 'DIVE' in the title.

Standard User

- Can't install programs
- Can't make changes to system-critical settings, e.g.
 - changing anti-virus settings
 - modifying services critical to Windows' operation
 - user accounts: creating/ deleting/ changing password etc.
 - changing *Windows Update* settings
 - taking ownership of files owned by other users
- Can operate features that don't affect other users, e.g.
 - run programs already installed
 - create/ modify files under your profile (C:\users*username*)
 - access the network
 - run program that don't require installation (portable apps)



Administrator Accounts

- **Member** of the built-in group *Administrators*
 - not technically *the Administrator* account
 - a special, disabled account
- Have full control over the system and can:
 - install/uninstall software
 - manage user accounts: add/delete/change password
 - change system settings including security and network configurations
 - access all files on the computer.
 - make any configuration or system-wide changes
- Higher security risk, right?
 - ...maybe



Security access tokens

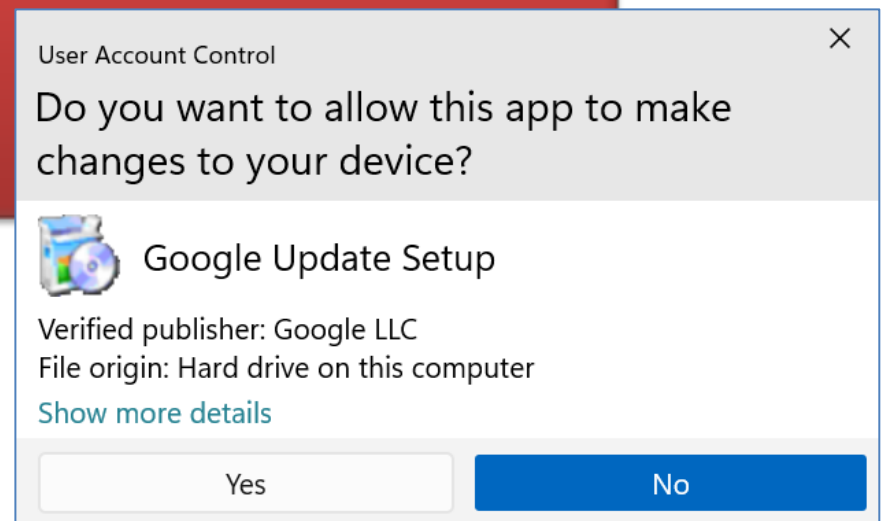
Administrators have two security access tokens

- Standard User
- Administrator

Uses **Standard User** security token by default

If an operation requires **Administrator** permission

- User Account Control (UAC) prompt
- if you answer yes to prompt
- **Administrator** security access token used for this operation

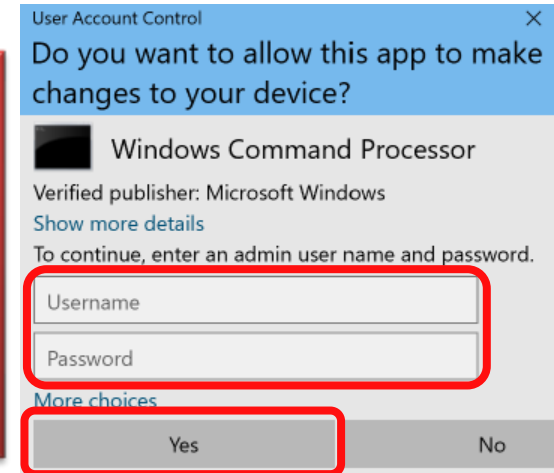




Which is safest way to operate?

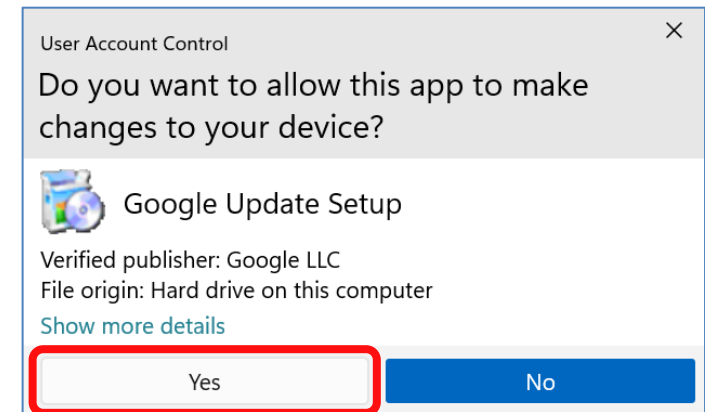
Have your account *Standard User*

- when you get UAC prompt
- if you want to allow the change
 - supply credentials of an *Administrator* account
 - click *Yes*



Have your account an *Administrator*

- when you get UAC prompt
- if you want to allow the change
 - click *Yes*



Being *Standard User* slows you down a bit

- maybe makes you think twice as you dig up credentials of *Administrator* account?



Elevating Standard User

- If an operation requires **Administrator** permission
 - User Account Control (UAC) prompt:
must supply credentials of an **Administrator** account
 - **by definition this is NOT your account**
 - if supplied: *Administrator* account...*using its Administrator access token*...**used for operation**





Elevating Standard User

- Some (most) operations will work normally
 - installing most software
 - most software installed so all users can run it
 - changing settings for anti-virus
 - changes normally affect all accounts
 - changing the password for a different account



Elevating Standard User

- Some operations will **not** work as expected
- Keep in mind:
Operation is completed *in the context of the **Administrator** account*
- Which is...*by definition*...not your account!
- Some examples of problems:
 - installing software for current user only
 - installs for the **Administrator** account
 - take ownership of another user's files
 - **Administrator** account becomes owner
 - change that affects HKEY_CURRENT_USER in registry
 - change ends up **Administrator's** section of HKCU



So what's best?

Have your account an *Administrator*

- when you get UAC prompt, don't just automatically click *Yes*
- think for a couple of seconds
 - the operation may enable a change that *could* affect
 - security of the computer as a whole
 - stability of the computer as a whole
 - other accounts on the computer

Sounds like *Standard User* accounts are useless, right?



Standard User accounts are a good thing

- If you have someone else using the computer
- You don't want them to be able to
 - change anti-virus settings
 - modify services critical to Windows' operation
 - create/delete accounts and change passwords
 - change Windows Update settings
 - take ownership of files owned by other users
- Make their account a **Standard User**
 - don't give them credentials for an **Administrator** account!
 - when they get a UAC prompt, they can't say **Yes**

Follow Up Next week



- Differences between
 - Local Account
 - Microsoft Account
- How to choose which flavour of account to use



Personalized Settings



- How do you revert personalized font and text settings after a monitor switch or system change?
- Note that it's the settings that are personalized, not the fonts themselves
- The problem occurs because Windows doesn't keep the settings for each external monitor or TV when you disconnect them
- It also affects Scroll Bars, Menu Bars, Title Bars, Status Bars, Menus, Messages and Icons.
- The only solution I've come up with some far is to combine *Winaero Tweaker* exports.

Steve Parker

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Stopping Spam E-mails



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Newsletters

Here's how I stop spam emails from ever reaching my inbox

Give your inbox a break from unwelcome clutter!

By [Dominic Bayley](#), Australian Editor, PCWorld | AUG 8, 2025 5:00 AM PDT

<https://www.pcworld.com/article/2865310/heres-how-i-stop-spam-emails-from-ever-reaching-my-inbox.html>

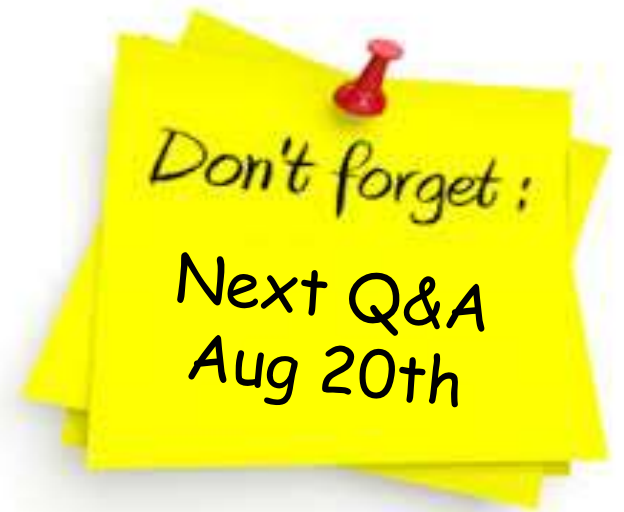
I've discovered a way to stop the spam ever reaching my inboxes. I now use DuckDuckGo's Email Protection feature to disguise my real email addresses so that spam emails are sent to the DuckDuckGo designated address instead of my own, but real emails make it through to my real address.



- Set up a free “@duck.com” Email address
- Install the DuckDuckGo browser and make it your default
- Install DuckDuckGo’s Search and Tracker Protection extension
- Navigate to Email Protection
- Choose a personalized Duck address
- Enter the Email address to which messages to your Duck address should be forwarded
- Use your Duck address instead of the “real address” to prevent spam reaching your inbox
- You can reply to messages directly from your Duck address if you wish



**Any other:
Questions
Comments
Shares?**



**Send your questions,
answers, and topics
you wish to share to:**

SuggestionBox@opcug.ca