Sun City Computer Club

Windows SIG

May 13, 2024

Questions, Comments, Suggestions welcomed at any time

Even Now

- Audio Recording of this session
- Use the link above to access MP4 audio recording
- Audio Recording in Progress
- SIG attendees are required to be members of the chartered club sponsoring that SIG.
 - Sun City Community Association By-law
- Sig leader anyone?
- Contributors Tom McBride
 Tip Tipton

Windows Update



Updates available

Last checked: Today, 12:19 PM

2025-05 Cumulative Update for Windows 10 Version 22H2 for x64-based Systems (KB5058379)

Status: Downloading - 0%

Windows Malicious Software Removal Tool x64 - v5.133 (KB890830)

Status: Installing - 0%

Windows 10 Patch Tuesday

Windows Update



Updates available

Last checked: Today, 12:15 PM

Download & install al

Windows Malicious Software Removal Tool x64 - v5.133 (KB890830)

Downloading - 100%

2025-05 Cumulative Update for Windows 11 Version 23H2 for x64-based Systems (KB5058405)

Downloading - 0%

Windows 11 Patch Tuesday

- The May 2025 Patch Tuesday update includes several important fixes and improvements:
- Windows 10 Update (KB5055612) This update for Windows 10 version 22H2 brings security patches and maintenance updates. It also fixes GPU paravirtualization issues in the Windows Subsystem for Linux (WSL) and updates the Windows Kernel Vulnerable Driver Blocklist to prevent Bring Your Own Vulnerable Driver (BYOVD) attacks.
- Windows 11 Update (KB5055627) The Windows 11 24H2 update introduces new AI features, including Windows Recall, Click to Do, and Semantic Indexing for Copilot+ PCs.
 Security Updates – Microsoft has released cumulative security updates for Windows 10 and Windows 11, addressing vulnerabilities across multiple system components.

Microsoft Patch Tuesday May

- Visit Microsoft Store for those updates
- Check Office 365 for updates
- MANY vendors do Patch Tuesday updates
- 78 vulnerabilities
- 11 critical
- 66 important
- 5 actively being exploited
- 2 publicly known

Patch Tuesday

A possible topic of discussion might be the options for people not wanting (or able) to migrate to Windows 11.

Purchase EOL support extension? I've heard that may or may not be available for home users.

Move to Linux distro – Mint is mentioned frequently.

Has there ever been any interest in a Linux SIG? Do nothing but need to create a windows installer before EOS happens.

Member Contribution

I don't usually get involved with the Windows SIG because I mainly use use a Mac but one thing worth mentioning is that Microsoft is ending support for RDP (Remote Desktop Program) on May 27 and removing it from the Windows store though it will still be downloadable from <a href="https://learn.microsoft.com/en-us/previous-versions/remote-desktop-client/connect-windows-cloud-services?tabs=windows-msrdc-msi#download-and-install-the-remote-desktop-client-for-windows-msi.

Microsoft created the Windows App which is available in the Windows store but cannot be used to remotely connect to another stand-alone Windows machine but only to systems running in their cloud. Rather surprisingly, they also developed and support versions of the Windows app for Android, ChromeOS, IOS, and Mac which are available free in their respective stores. This makes if very easy to connect to a Windows system from any of these operating systems and the connections work quite well. Why they don't support Windows-to-Windows connections is beyond me. The link for more information is https://learn.microsoft.com/en-us/windows-app/troubleshoot-known-issues-limitations?tabs=web. I assume that this app will eventually support the Windows-to-Windows connections but I can't find any actual statement to that effect from Microsoft.

The easiest alternative I've found for machine-to-machine connections is RustDesk which can be downloaded from <u>rustdesk.com</u>.

 https://techcommunity.microsoft.com/blo g/windows-itpro-blog/windows-app-toreplace-remote-desktop-app-forwindows/4390893

Corrected Link Member Contribution

 Unified Access – Instead of juggling multiple apps, Windows App provides a single interface to connect to Cloud PCs, virtual desktops, and remote services. Cloud PCs, virtual desktops, and remote services. Enhanced Display Options – Supports multi-monitor setups, dynamic display resolutions, and customizable home screens for a smoother experience. Optimized for Microsoft Teams – Improves audio and video performance for remote meetings, reducing lag and enhancing collaboration. Easy Account Switching – Allows users to seamlessly switch between multiple accounts, making it more efficient for professionals managing different environments. Device Redirection – Offers better peripheral support, including printers, USB devices, and local storage, for a more integrated remote experience.

Windows App vs RDP Copilot version

- <u>Techradar article Reinstall Windows 11 every 2 months</u>
- Split drive storage OS C: drive data D: drive
- We're removing the bypassnro.cmd script from the build to enhance security and user experience of Windows 11. This change ensures that all users exit setup with internet connectivity and a Microsoft Account.

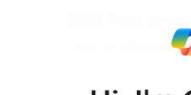
Reinstall Windows

- New gamepad keyboard layout for Windows 11
- Xbox controller



 Cannon printer drivers for Windows CVSS 9.4

Low complexity, lack of user interaction high impact compromise & confidentiality Bring your own vulnerable driver Signed by Microsoft Period of exploit potential



Hi, I'm Copilot, your Al companion.

Set up Copilot

Share optional diagnostic data to help improve Microsoft products



Start Copilot on login to keep it handy



Open Copilot using Alt+Spacebar shortcut



Continue

Privacy

Terms



Hi, I'm Copilot, your Al companion.

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Copilot Update

- Nadella asking the Copilot to "wrap it up by asking or maybe roast giving us each an AI roast?" to which Microsoft's AI-powered assistant says, "Alright, Satya. Let's spice it up."
- Copilot: "Steve, we'll start with you. Your enthusiasm is legendary, but do you ever worry that your energy might short-circuit the AI? I mean, even robots need a coffee break after your pep talks."
- Ballmer replied saying, "Come on, dude. If you can't handle me, you can't handle a huge percentage of the world's population. We're counting on you."
- Fair point, Steve", the Copilot responds and shifts it's attention to Bill Gates. It said, "Now, Bill, you've got that signature thoughtful gaze, but do you ever think the AI might feel intimidated by your intense thinking face? I mean, it's like it's waiting for a blue screen moment".
- Gates countered, "I hope so. I mean, that's all I've got left is these AIs get so damn intelligent. It's just that gaze and my willingness to criticise that differentiates me."

Copilot AI roast Microsoft execs

The Copilot then compliments Gates saying, "And it's a formidable gaze indeed, Bill." On that Steve came up with a witty comeback, "Copilot, would you ever be willing to criticize him?"

- "Absolutely. Criticism is where growth happens", the Copilot answers.
- Lastly, the Copilot asked Nadella a thoughtful question, "Satya, AI seems
 to be your best buddy. But ever worry that your deep passion for AI could
 one day have it running the show, leaving you to just enjoy the ride?"
 Nadella chose a cricket analogy to support his answer, "Well, the day AI
 can play like the best cricket player that I enjoy, that's the day it can run
 the show as far as I'm concerned."
- "Touche, Satya. Let's see if it can hit a century in cricket, and then we'll talk. This has been a blast, gentlemen," the Copilot added.

Copilot AI roast Microsoft execs

- AI event
- Actions (agent), Memory, Vision, Pages, Shopping, Search
- Deep Research
 Reliable sources, research document with cites sources
 5 Deep Research queries/month
- AI Podcasts
- Microsoft Blog Copilot Your AI Companion

Copilot

 Browser based, playable level "Playing the Model, not playing the game" Quake II demo

- 15-top-windows-11-tips-everyone-needs-to-know
 "This folder should not be deleted regardless of whether Internet Information Services (IIS) is active on the target device."
- Windows 11 hardware requirements
 TPM, Secure boot, 8th generation CPU, resources for AI
- Microsoft Copilot Vision
 Sees your screen
 Guide use of apps like Photoshop
 Was limited to Edge browser
 Guide through Minecraft game
- Also AI file search
- Windows Enterprise & Education "hotpatching"
 Once-a-quarter cold boot no-reboot-required
 Immediate protection, consistent security, minimal disruption

 Microsoft also adds its usual reminder that "on October 14, 2025, Windows 10 will reach end of support. After this date, devices running Windows 10 will no longer receive fixes for known issues, time zone updates, technical support, or monthly security and preview updates containing protection from the latest security threats."

- Windows 11 24H2 new folder inetpub
 "This folder should not be deleted regardless of whether Internet Information Services (IIS) is active on the target device."
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Windows inetpub folder
 April security update
 non-admin user create junction point in c:\
 Result: blocked security updates
 Part of ISS

Windows April Patch Tuesday error – ignore this error too

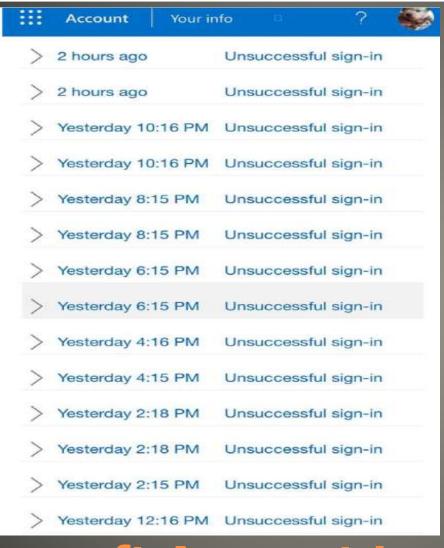
Windows PCs might experience error 0x80070643 with an "ERROR_INSTALL_FAILURE" message when attempting to install an update for the Windows Recovery Environment or WinRE."

"this error is observed when the device installs the WinRE update when there is another update in a pending reboot state. Although the error message suggests the update did not complete, the WinRE update is typically applied successfully after the device restarts. Windows Update might continue to display the update as failed until the next daily scan, at which point the update is no longer offered and the failure message is cleared automatically."

Restart

"If you run into Windows Update error code 0x80070643, don't try to fix it because you can't do that."

Cannon printer drivers for Windows
 CVSS 9.4
 Low complexity, lack of user interaction
 high impact compromise & confidentiality
 Bring your own vulnerable driver
 Signed by Microsoft
 Period of exploit potential



Microsoft Account Login Activity

Security



Change password Last update: 9/11/2015

Microsoft helps you stay protected online

How you sign in, the devices you're signed into, and the files you save to the cloud are all important pieces to your account's online security.



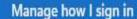
Account

Strengthen sign-in options beyond a strong password

Manage how I sign in

Never lose access to your account

Make sure you (and only you) can always get into your account with increased security options like two-step verification and a backup email or phone number.



View my sign-in activity



Microsoft Account Login Activity

- Microsoft has introduced the Windows 365 Link, a compact mini PC designed for businesses and enterprise users. This device connects directly to the Windows 365 cloud service, offering a seamless cloud-based computing experience. Key features include:
- Compact Design: Measuring just 4.72 x 4.72 x 1.18 inches, it's highly portable.
- Cloud-Based Operation: Boots in seconds and provides access to Windows 11 via the cloud.
- Connectivity: Equipped with USB-A, USB-C, HDMI, DisplayPort, Ethernet, Wi-Fi 6E, and Bluetooth 5.3.
- Security: Includes features like secure boot, BitLocker encryption, and TPM 2.0.
- Energy Efficiency: Made with recycled materials and ENERGY STAR-certified.
- Priced at \$349.99, it's available in select markets, including the US, UK, Canada, and Japan

Microsoft 365 Link



Microsoft 365 Link

- eMail spray-and-pray
 Security issues, volume issues, ...
 Microsoft new security rules May 5 email authentication outlook.com, Hotmail.com, live.com
- SPF: Must pass for the sending domain, and your domain's DNS record should accurately list authorized IP addresses/hosts.
- DKIM: Must pass to validate email integrity and authenticity.
- DMARC: Must ensure, at least, p=none is in the configuration as well as aligning with SPF or DKIM, and preferably both.
- Reduce likelihood of spam & spoofing
- More than 5,000 emails per day
- Non-compliant messages routed to junk
- Legitimate senders gain stronger brand protections & deliverability

Microsoft Outlook security change

- Five obscure Windows tools article
 Live Captions hearing impaired
 Windows Sandbox light weight Virtual Windows instance
 Phone Link Android and iPhone
 Virtual Desktops productivity
 Dynamic Lock security feature
- Windows 24H2 updates fail with ox80240069 error

"Devices which have installed the April Windows monthly security update, released April 8, 2025, or later (starting with KB5055528) might be unable to update to Windows 11 24H2 via Windows Server Update Services (WSUS)," Microsoft says in a Windows release health update.

Microsoft 365 Copilot Wave 2 Spring Release
 AI agent digital colleagues
 perform workplace tasks with reasoning capabilities
 Researcher
 Analyst
 Agent Store
 Copilot is browser for AI world
 Copilot Notebooks

Capacity Gap Burnout & Interruptions

Employees as Agent Boss

• Microsoft:

"AI has started to lower the technical bar for fraud and cybercrime actors looking for their own productivity tools, making it easier and cheaper to generate believable content for cyberattacks at an increasingly rapid rate... AI-powered fraud attacks are happening globally."

- Microsoft Recall back Opt in as default
 YEAHBUT if anyone uses Recall ...
- ActiveX to be blocked by default in Microsoft 365 1996 Interactive Content

"ActiveX is a powerful technology that enables rich interactions within Microsoft 365 applications, but its deep access to system resources also increases security risks.

- Windows NT LAN Manager (NTLM) flow exploited Patch March 11, 2025
- Microsoft Secure Future Initiative <u>report</u>
 28 objectives 5 completes 11 with significant progress

- Passwords disappearing from Microsoft Accounts
- Password spraying for Microsoft accounts greatly increasing
- Microsoft Authenticator app will stop storing passwords June 1
- Streamline password autofill process
- Passwords removed yet passkeys will not
- DO NOT REMOVE Authenticator -> passkeys will be removed
- Microsoft Authenticator -> Microsoft Edge browser
- "passwordless by default" new accounts
- Passkeys in Microsoft Authenticator app
- Creation of public/private key pair
- Public key to account service
- Private key to phone, computer, YubiKey, or similar
- Account service sends unique challenge
 Challenge signed by private key and sent back to account service
 Account service used public key to validate user

Microsoft & Passwords

Windows Sandbox is a lightweight, isolated desktop environment designed for safely running applications. It is ideal for testing, debugging, exploring unknown files, and experimenting with tools. Applications installed within the sandbox remain isolated from the host machine using hypervisor-based virtualization. As a disposable virtual machine (VM), Windows Sandbox

provides quick launch times and a lower memory footprint compared to full VMs. Windows 10 and 11 Pro

Part of Windows: Everything required for this feature is included in supported Windows

editions like Pro, Enterprise, and Education. There's no need to maintain a separate VM

installation.

- Disposable: Nothing persists on the device. Everything is discarded when the user closes the application.
- Pristine: Every time Windows Sandbox runs, it's as clean as a brand-new installation of Windows.
- Secure: Uses hardware-based virtualization for kernel isolation. It relies on the Microsoft hypervisor to run a separate kernel that isolates Windows Sandbox from the host.
- Efficient: Takes a few seconds to launch, supports virtual GPU, and has smart memory management that optimizes memory footprint

Microsoft Windows Sandbox

- NO Windows Defender
- Introduced Windows 10 version 1903 (2018)
- Utilizes host OS thus host OS compromise – Sandbox compromise
- Or
- enable Sandbox
- restarts system vis task scheduler
- hides Sandbox
- Using different account
- Drop malware on infected host
- Share access to the host file in the sandbox
- Malware executed in Sandbox (No Defender)
- Opens backdoor
- Access host files via sandbox without ANY logging
- More Sandbox features -> More malware abuse
- Default-enabled clipboard Severe Abuse
- Sandbox signed by Microsoft

Microsoft Windows Sandbox

- Windows 11 enhancements
- Background execution lack of user awareness
- Execution without WSB file command line arguments
- Persistent data in Sandbox
- Disable Intel Virtualization in BIOS
- YOUR Vendor will vary

Microsoft Windows Sandbox

 CISA Known Exploited Vulnerabilities Catalog CVE-2025-24054
 NTLM credential stealer
 Fixed

 Improper access control in Windows Cross Device Service allows an authorized attacker to elevate privileges locally. CVE-2025-2476

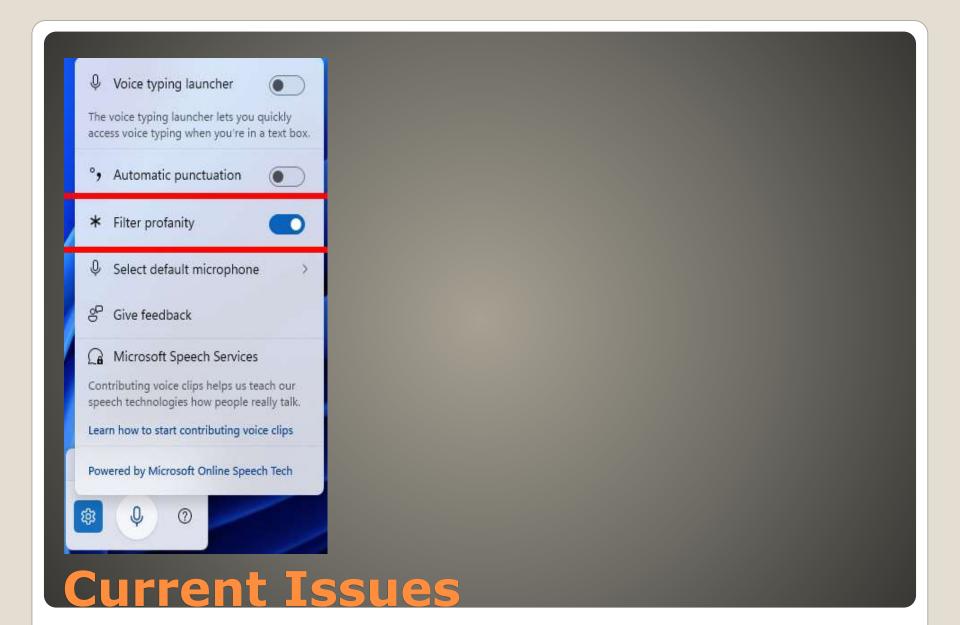
Feature to use phone camera as webcam

Just 300 milliseconds -> no more than 300 milliseconds

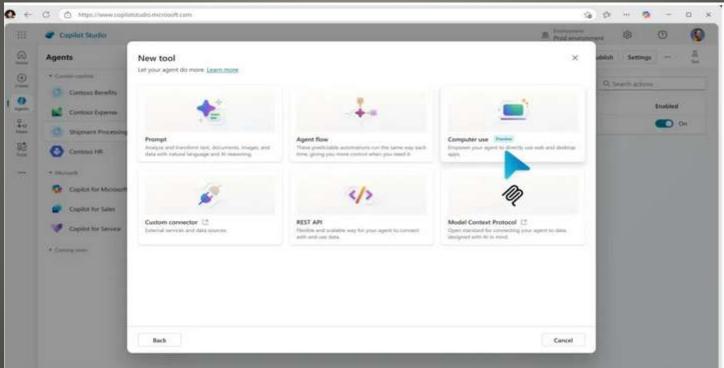
Fixed

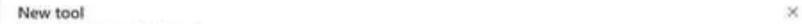
- Microsoft "the future of work"
 Hybrid work
 Upskilling
 Agent Bosses
- Microsoft Windows 24H2 preview KB5055627
 Bug fixes
 Features:

Recall (preview) Copilot+ PCs
Click to Do (preview) Copilot+ PCs
Improved Windows search Copilot+ PCs
Narrator speech recap, copy, follow along
Phone Link functions from Start menu
File Explorer – pivot based curated views File Explore Home



 Microsoft Copilot Studio Ai agent interact with web & apps OpenAI Operator Claude computer use click buttons, select menus, typing into fields





Let your agent do more beam more



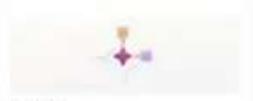
Prompt

Analyse and transform test, documents, images, and data with natural language and Al resources.



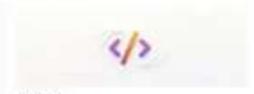
Custom connector 😂

External senaces and data yourses.



Agent flow

These productable automations run the same way earth time, groing you more control when you need it.



REST API

Resthin and activities was for your agent to convent with and see data.

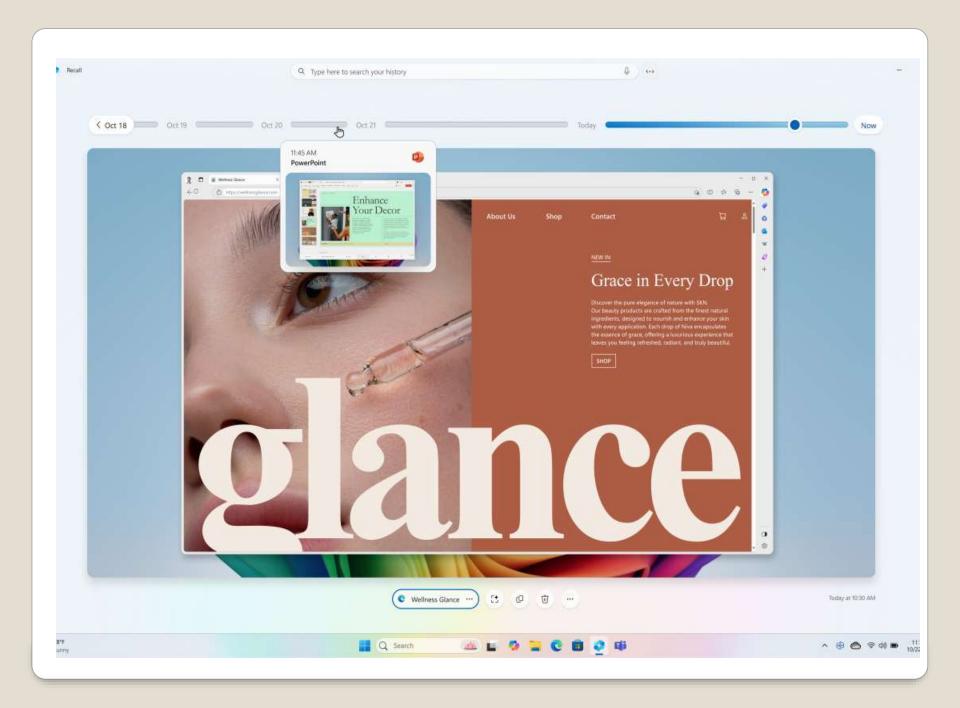


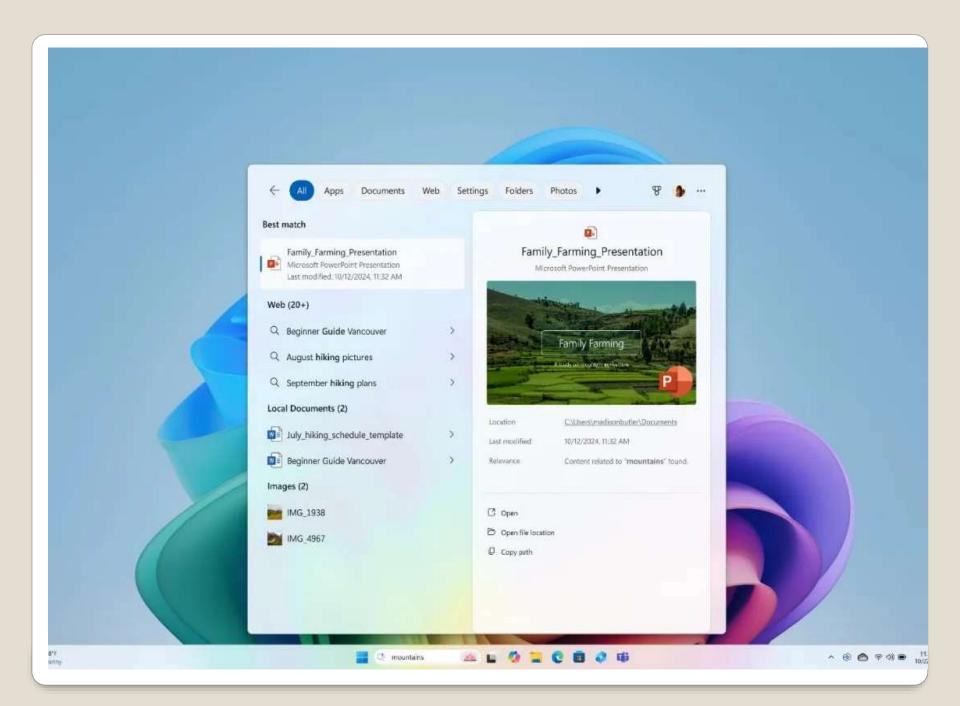
- Microsoft Copilot Vision
 Sees your screen
 Guide use of apps like Photoshop
 Was limited to Edge browser
 Guide through Minecraft game
- Also AI file search

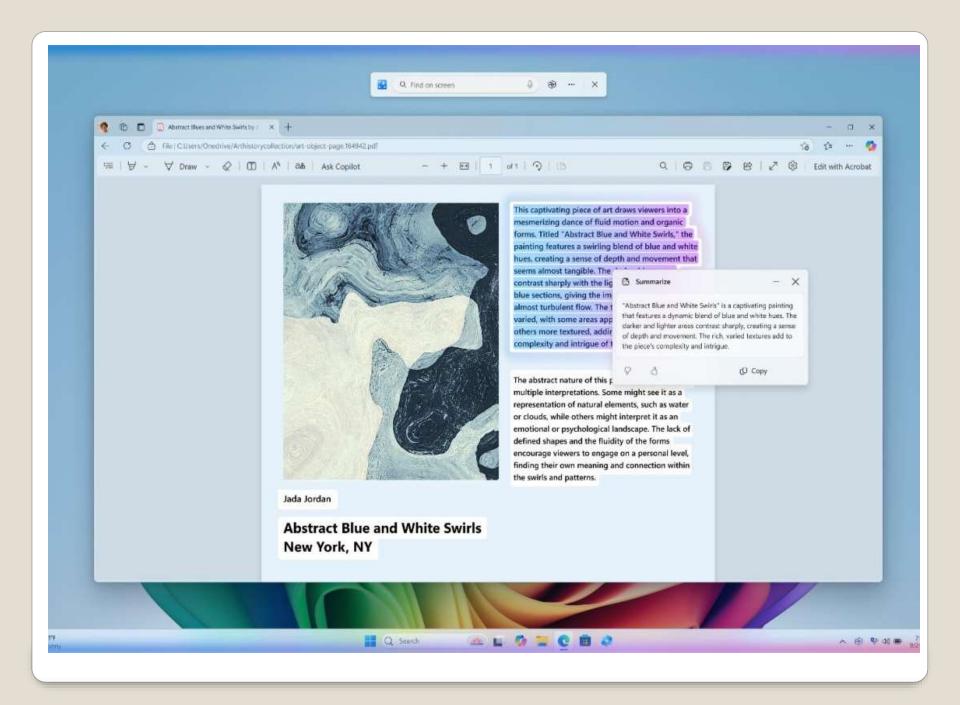


- WEB site "locked" " frozen"
- Hosted on Windows.net (Open platform for Azure apps)
- Exploited hosting services Windows.net
- Randomized rapidly changing subdomains
- Well designed
- Anti-bot & CAPTCHA
- Microsoft ant-scareware in Edge browser
- Thus the move to MAC
- MAC page layout and design
- Code adjustments
- Still using windows.net & subdomains
- MAC users now prime targets

Sophisticated Phishing campaign







Why is TPM so important in Windows 11?

Windows 11 takes security seriously, and TPM is one of its cornerstones. Here's why it matters:

- Protects your data: TPM can encrypt your data, making it difficult for hackers to access sensitive information. This is especially critical for things like personal details, financial data, and confidential files.
- Ensures trusted software: TPM verifies the integrity of your system's software and firmware. This feature, called secure boot, helps stop malicious software from launching during startup.
- Guards against physical tampering: If someone tries to physically tamper with your device's hardware, TPM can detect changes and prevent your system from booting, keeping your device secure from physical attacks.
- Supports advanced security features: Many of Windows 11's most powerful security features rely on TPM. These tools help keep your data safe, even if your device is lost or stolen.

TPM Trusted Platform Module



Sweepstakes

Microsoft Rewards

\$ 2000000 B

One Million Dollar Grand Prize & 100 Winners

Claim your 5 entries for a chance to win \$1 Million USD

Congratulations, Microsoft Rewards member! By spending \$25 or more at Microsoft Store, you've earned 5 entries towards the grand prize of \$1 million USD¹. Well done on activating your Microsoft Rewards membership.

- Copilot+ PCs
- On device AI
- Understand your intent
- With permission automate & execute task(s)

AI Agents to change Windows Settings



- What to know about Copilot CNET Article
- Chatbot, Image generator, sidebar assistant
- More and more embedded in Microsoft ecosystem
- Available on iOS & Android
- ChatGPT-4o Dall-E 3 Prometheus
- Updates to Updates

Copilot

 Microsoft to cut 3% of its workforce Dynamic marketplace FY25 Q3 \$70.1 B revenue \$25.8B net income

- None of us are as experienced as all of us
- Awareness, Preparedness, Understanding
- Participate
- Topic Suggestions
- Questions: scccwindows@gmail.com