



Alan German & Chris Taylor
Ottawa PC Users' Group

February 28, 2024

The Last Ten...



The last ten minutes of our Q&A session will not have any prepared material - so, give some thought to the question that you want to ask!

Share

Google Sheets Tips

by Ben Collins

<https://benlcollins.ck.page/profile>

- Huge collection of weekly tips on using Google Sheets
- Can subscribe to get them every Monday via email

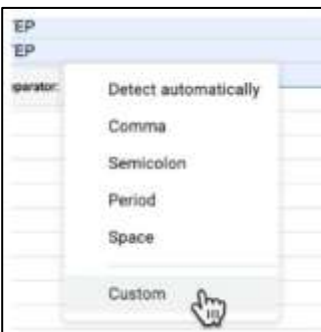
Spot the Difference (How to Compare Lists, includes Template)

Welcome to the Google Sheets Tips newsletter #290, your Monday morning spreadsheet form! A big thank you to this week's sponsors who help keep this...

Sheets Tip 288: Divide and Conquer! (Text Splitting)

Hi Reader, Welcome to the Google Sheets Tips newsletter #288, your Monday morning espresso, in spreadsheet form! A big thank you to this week's sponsors who help keep this...

25 days ago • 1 min read



Google Workspace Developer Summit

October 17 | Singapore

Sheets Tip 271 & AI Tip 4: The power of the INDIRECT function

Hi Reader, Welcome to the Google Sheets Tips newsletter #271, your Monday morning espresso, in spreadsheet form! A big thank you to this week's sponsors who help keep this...

Sheets tip 251: Use heatmaps to show trends in your data

Hi Reader, Welcome to the Google Sheets Tips newsletter #251, your Monday morning espresso, in spreadsheet form! A big thank you to this week's sponsors who help keep this...

10 months ago • 1 min read

	E	F	G	H
	Apr	May	Jun	Jul
7	48.9	59.0	68.9	73.9
8	65.5	73.9	81.4	85.5
4	69.2	76.6	81.9	84.0
6	63.1	65.8	69.2	73.3
9	53.4	62.8	71.8	76.9
5	54.0	63.8	73.2	78.1
3	72.8	82.1	90.9	94.8
2	69.5	77.0	82.5	84.7
9	62.3	64.5	67.0	70.5
9	59.3	64.0	68.3	70.9

Sheets tip 257: I've lost count how many times I've used this formula...

Hi Reader, Welcome to the Google Sheets Tips newsletter #257, your Monday morning espresso, in spreadsheet form! A big thank you to this week's sponsors who help keep this...

9 months ago • 1 min read

Chris at Windows Intelligence
<https://theintelligence.com/windows/>



Loonie Links

FortNine



- This channel looks at motorcycles and associated products
- It tests some things, analyses some aspects, and looks at some old/iconic motorcycles
- It's consistently entertaining if you have the slightest interest in motorcycling
- Seldom involves any selling or shilling
- Great laconic presenter with a sideways sense of humour

Tom Trottier

<https://www.youtube.com/@FortNine>

Popular videos ▶ Play all



Motorcycle Riders - You're Leaning the Wrong Way

7.7M views • 2 years ago



Motorcycle Airbags Exist - But No One Uses Them?

5.3M views • 2 years ago



Cheap vs Expensive Motorcycle Helmet - Crash...

4.8M views • 6 years ago



Best Beginner Motorcycle Gear - What Do You Really Need?

2.3M views • 3 years ago



Honda's \$225 Million Mistake - Rune Review

1.6M views • 1 year ago



Tesla Autopilot Crashes into Motorcycle Riders - Why?

991K views • 1 year ago



YouTubeTech

ThioJoe



- ThioJoe has consistently surprising details mostly about Windows
- Touching especially on hidden and useful aspects of the OS

"I make technology videos, including tech news, reviews, and discussions. I also try to make complex topics not-boring."

<https://www.youtube.com/@ThioJoe>

Tom Trottier

Some of the videos...

- You Should Know About the "Public" Folders in Windows
- Windows 11's NEW CPU Requirements (Why You Shouldn't Care)
- Hidden “Emergency Restart” in Windows
- Never Press the BIOS Key Again
- Insane Computer Trick! (April Fools)
- What is the Windows.old Folder - Can You Delete It?





YouTubeTech

The PC Security Channel



- I find this channel interesting
- They test antivirus products live (in a Virtual Machine) against a huge load of malware
- They also have useful security settings and tips
- Malware and the associated defences are ever changing
- This channel navigates them all.

<https://www.youtube.com/@pcsecuritychannel>

Tom Trottier



Best Virus Removal Tools: Cleaning a deeply infected system ⋮



Fake MSI Afterburner with Hidden Malware ⋮



Do you need antivirus on your phone? ⋮



Best Browser Security: Edge vs Firefox vs Chrome ⋮



Ransomware disables AV using Safe Mode: Avos Locker ⋮



How to know if your PC is hacked? Digital Forensics 101 ⋮



Storage Media Life Expectancy: SSDs, HDDs & More!



<https://www.youtube.com/watch?v=xA9Xq7hb6Q0>

Explaining Computers
Christopher Barnatt





Windows Update Broken

Windows Update



Error encountered

Last checked: Yesterday, 3:32 PM

Your device is missing important security and quality fixes.

Some update files are missing or have problems. We'll try to download the update again later. Error code: (0x80073712)

Retry

 HomeFind a setting 

Update & Security

 Windows Update Delivery Optimization Windows Security Backup Troubleshoot Recovery Activation Find my device For developers

Troubleshoot

If something on your device isn't working, running a troubleshooter might help find and fix the problem for you.

Recommended troubleshooting

Recommended troubleshooters can help improve your Windows experience. How much do you want Microsoft to help when we find issues on your device that troubleshooters might be able to fix?

Share Full Diagnostic data to get additional troubleshooting recommendations.

No recommended troubleshooters right now

Last checked: never

[View troubleshooting history](#)[Additional troubleshooters](#)

Additional troubleshooters

Get up and running



Internet Connections

Find and fix problems with connecting to the Internet or to websites.



Playing Audio

Find and fix problems with playing sound



Printer

Find and fix problems with printing



Windows Update

Resolve problems that prevent you from updating Windows.

Run the troubleshooter

Find and fix other problems



Bluetooth

Find and fix problems with Bluetooth devices



Windows Update



Troubleshooting couldn't identify the problem

You can try exploring other options that might be helpful.

→ Give feedback on this troubleshooter

→ Close the troubleshooter

[View detailed information](#)

Close

Windows Update error 0x80073712

If you receive Windows Update error 0x80073712 or 80073712, it means that a file needed by Windows Update is damaged or missing. Windows has troubleshooting tools that can help you address this problem. Try one of these methods to resolve the problem.

- Reboot
- Anti-Virus Scan
- Disk Cleanup
- System File Check
sfc/scannow
- Deployment Image Servicing and Management
DISM.exe /Online /Cleanup-image /Scanhealth
DISM.exe /Online /Cleanup-image /Restorehealth

- Reset Windows update components

(Run cmd as Administrator)

net stop wuauser

net stop cryptSvc

net stop bits

net stop msiserver

*ren C:\Windows\SoftwareDistribution
SoftwareDistribution.old*

*ren C:\Windows\System32\Catroot2
Catroot2.old*

net start wuauser

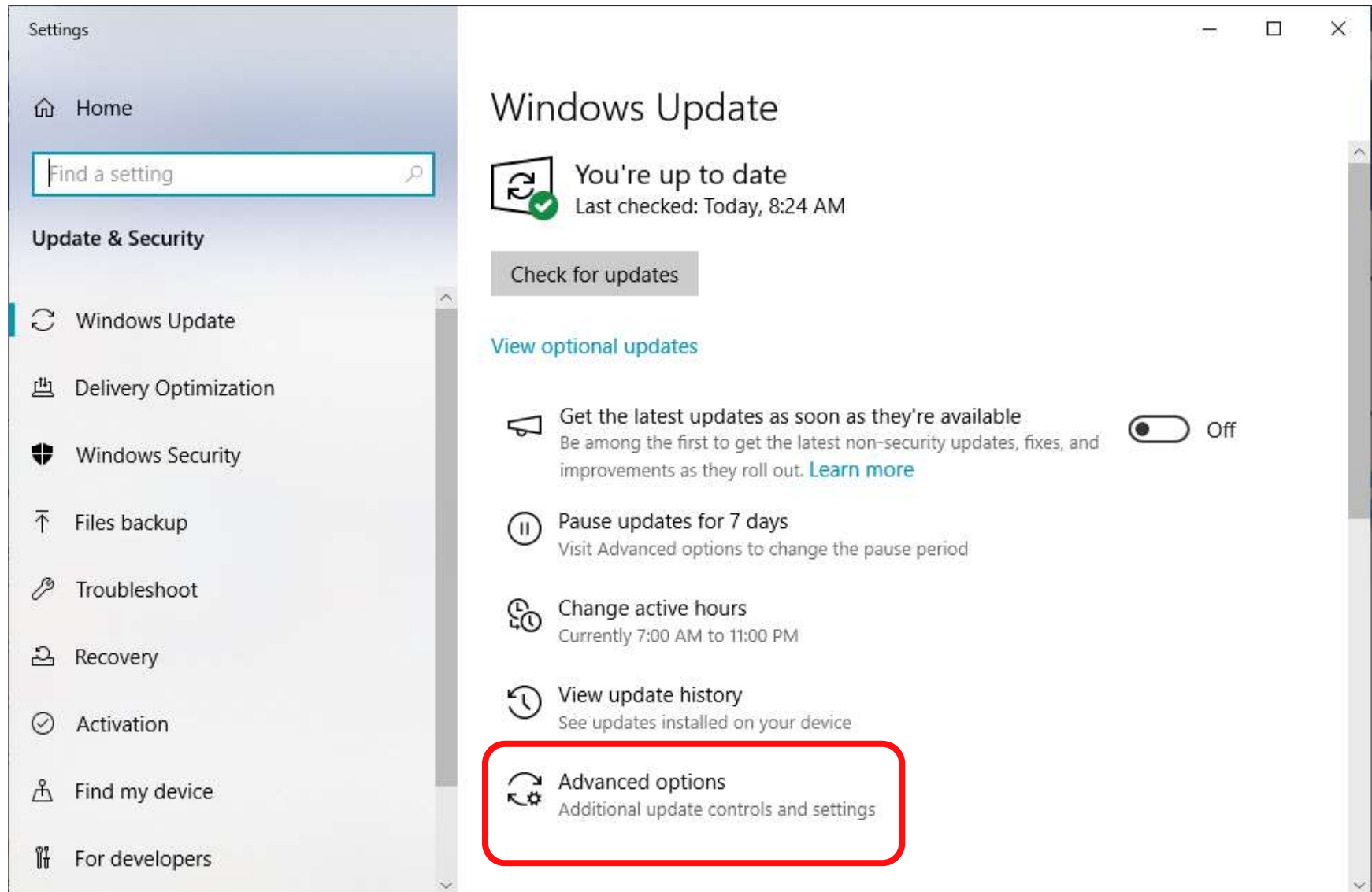
net start cryptSvc

net start bits

net start msiserver

Reboot

- Install updates one after the other



🏠 Advanced options

Disable

Update options

Receive updates for other Microsoft products when you update Windows



Off

Download updates over metered connections (extra charges may apply)



Off

Restart this device as soon as possible when a restart is required to install an update. Windows will display a notice before the restart, and the device must be on and plugged in.



Off

Update notifications

Show a notification when your PC requires a restart to finish updating



Off

 Home

Update & Security

 Windows Update Delivery Optimization Windows Security Backup Troubleshoot Recovery Activation Find my device For developers

Windows Update



Updates available

Last checked: Yesterday, 5:16 PM

Your device is missing important security and quality fixes.

2024-02 Cumulative Update for Windows 10 Version 22H2 for x86-based Systems (KB5034763)

Status: Downloading - 0%

[View optional updates](#)



This PC doesn't currently meet the minimum system requirements to run Windows 11

Get the details and see if there are things you can do in the PC Health Check app.

[Get PC Health Check](#) 



Pause updates for 7 days

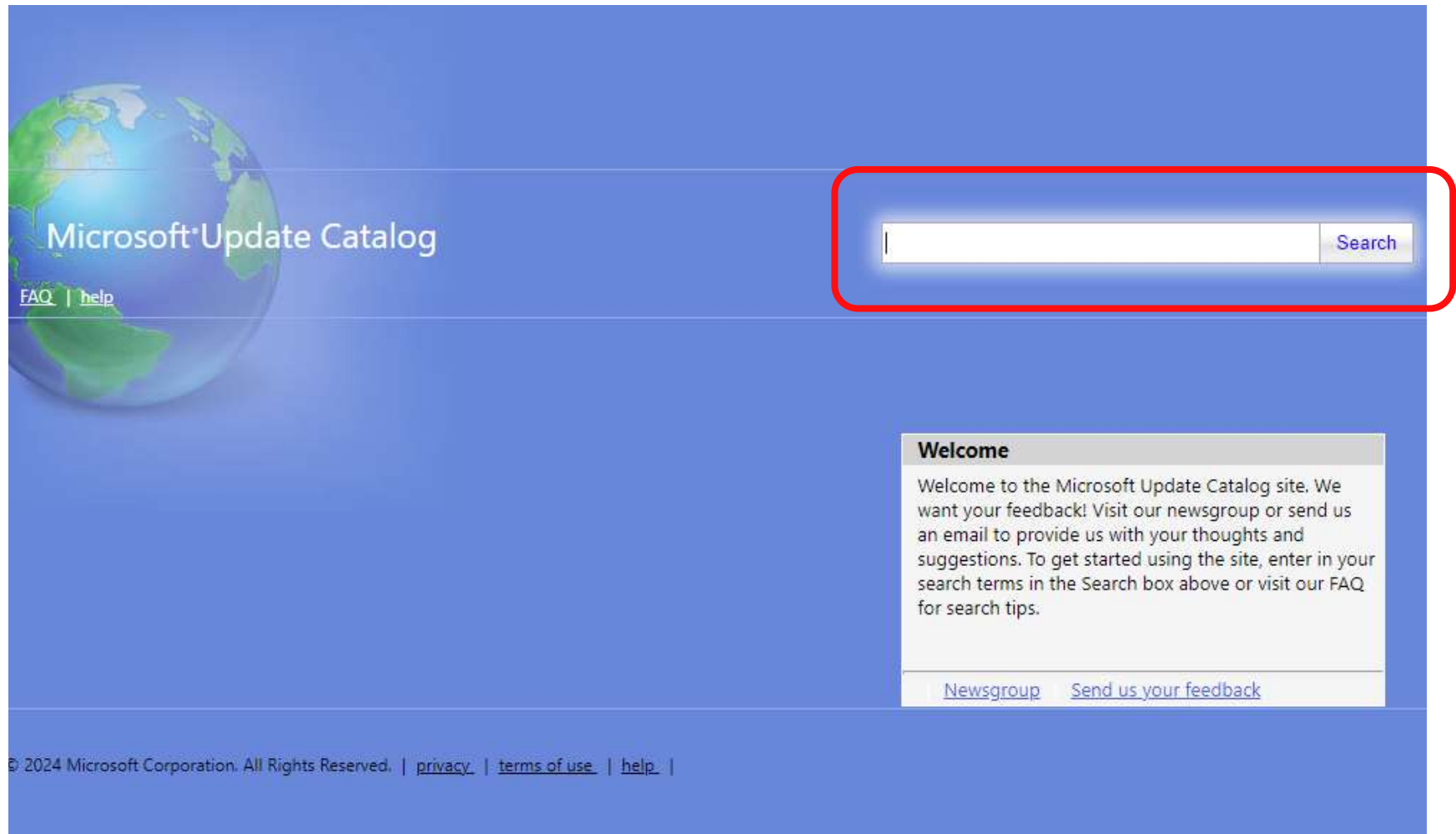
[Get latest updates to pause again](#)



Install updates as soon as possible

We'll notify you before the restart, and you can postpone if needed

- Download and Install Updates Manually From Windows Update Catalog



<https://www.catalog.update.microsoft.com/Home.aspx>

Microsoft Update Catalog

[FAQ](#) | [help](#)

"KB5034763"

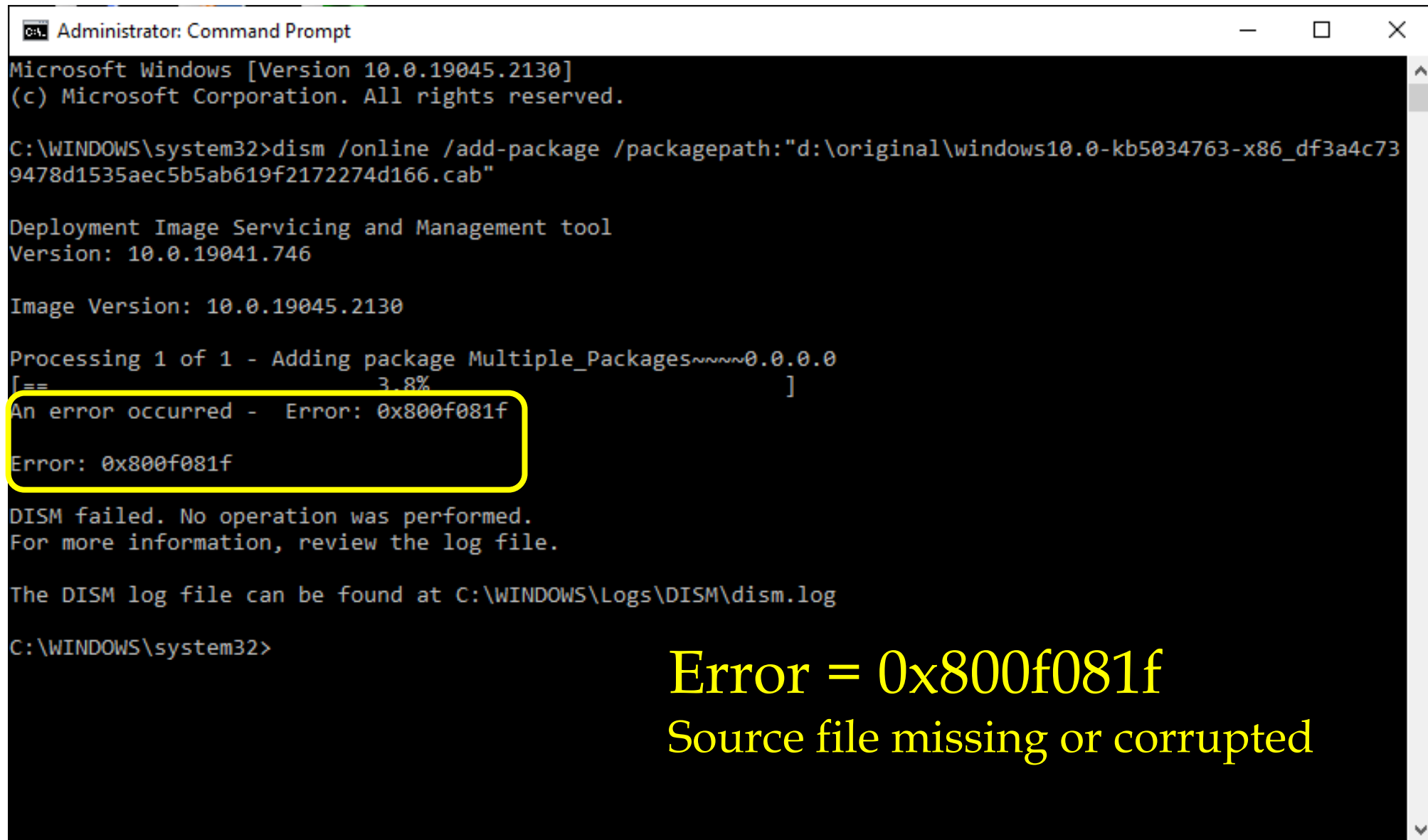
Updates: 1 - 12 of 12 (page 1 of 1)

[Previous](#) | [Next](#)

Title	Products	Classification	Last Updated	Version	Size	Download
2024-02 Dynamic Cumulative Update for Windows 10 Version 21H2 for x64-based Systems (KB5034763)	Windows 10 and later GDR-DU	Security Updates	2/13/2024	n/a	773.0 MB	Download
2024-02 Dynamic Cumulative Update for Windows 10 Version 22H2 for x86-based Systems (KB5034763)	Windows 10 and later GDR-DU	Security Updates	2/13/2024	n/a	427.5 MB	Download
2024-02 Cumulative Update for Windows 10 Version 21H2 for ARM64-based Systems (KB5034763)	Windows 10 LTSP, Windows 10, version 1903 and later	Security Updates	2/13/2024	n/a	815.2 MB	Download
2024-02 Cumulative Update for Windows 10 Version 22H2 for x86-based Systems (KB5034763)	Windows 10, version 1903 and later	Security Updates	2/13/2024	n/a	434.7 MB	Download
2024-02 Cumulative Update for Windows 10 LTSP	Windows 10 LTSP					

windows10.0-kb5034763-x86_df3a4c739478d1535aec5b5ab619f2172274d166.cab

dism /Online /Add-Package /PackagePath:"PATH\TO\CAB"



The screenshot shows a Windows Command Prompt window titled "Administrator: Command Prompt". The window has a black background with white text. The command entered is `dism /online /add-package /packagepath:"d:\original\windows10.0-kb5034763-x86_df3a4c739478d1535aec5b5ab619f2172274d166.cab"`. The output shows the Deployment Image Servicing and Management tool version 10.0.19041.746 and the image version 10.0.19045.2130. It then shows the process of adding a package, which fails with the error `0x800f081f`. The error message is highlighted with a yellow box. Below the error, it says "DISM failed. No operation was performed. For more information, review the log file." and provides the path to the log file: `C:\WINDOWS\Logs\DISM\dism.log`. The prompt ends with `C:\WINDOWS\system32>`.

```
C:\WINDOWS\system32>dism /online /add-package /packagepath:"d:\original\windows10.0-kb5034763-x86_df3a4c739478d1535aec5b5ab619f2172274d166.cab"

Deployment Image Servicing and Management tool
Version: 10.0.19041.746

Image Version: 10.0.19045.2130

Processing 1 of 1 - Adding package Multiple_Packages~~~~0.0.0.0
[=====3.8%]
An error occurred - Error: 0x800f081f

Error: 0x800f081f

DISM failed. No operation was performed.
For more information, review the log file.

The DISM log file can be found at C:\WINDOWS\Logs\DISM\dism.log

C:\WINDOWS\system32>
```

Error = 0x800f081f
Source file missing or corrupted

When all else fails...



- Microsoft Update Assistant or Media Creation Tool

A screenshot of the Microsoft Software Download page for Windows 10 2022 Update | Version 22H2. The page has a blue header with the Microsoft logo, 'Software Download', and navigation links for 'Windows' and 'More'. On the right, there are links for 'All Microsoft', a search icon, and a user profile icon. The main content area has a blue background with the heading 'Download Windows 10' and a paragraph: 'Before updating, please refer to the [Windows release information status](#) for known issues to confirm your device is not impacted.' Below this is a grey section with the heading 'Windows 10 2022 Update | Version 22H2' and a paragraph: 'The Update Assistant can help you update to the latest version of Windows 10. To get started, click **Update now**.' A blue button labeled 'Update now' is at the bottom left of the grey section.

Microsoft | Software Download Windows ▾ More ▾ All Microsoft 🔍 👤

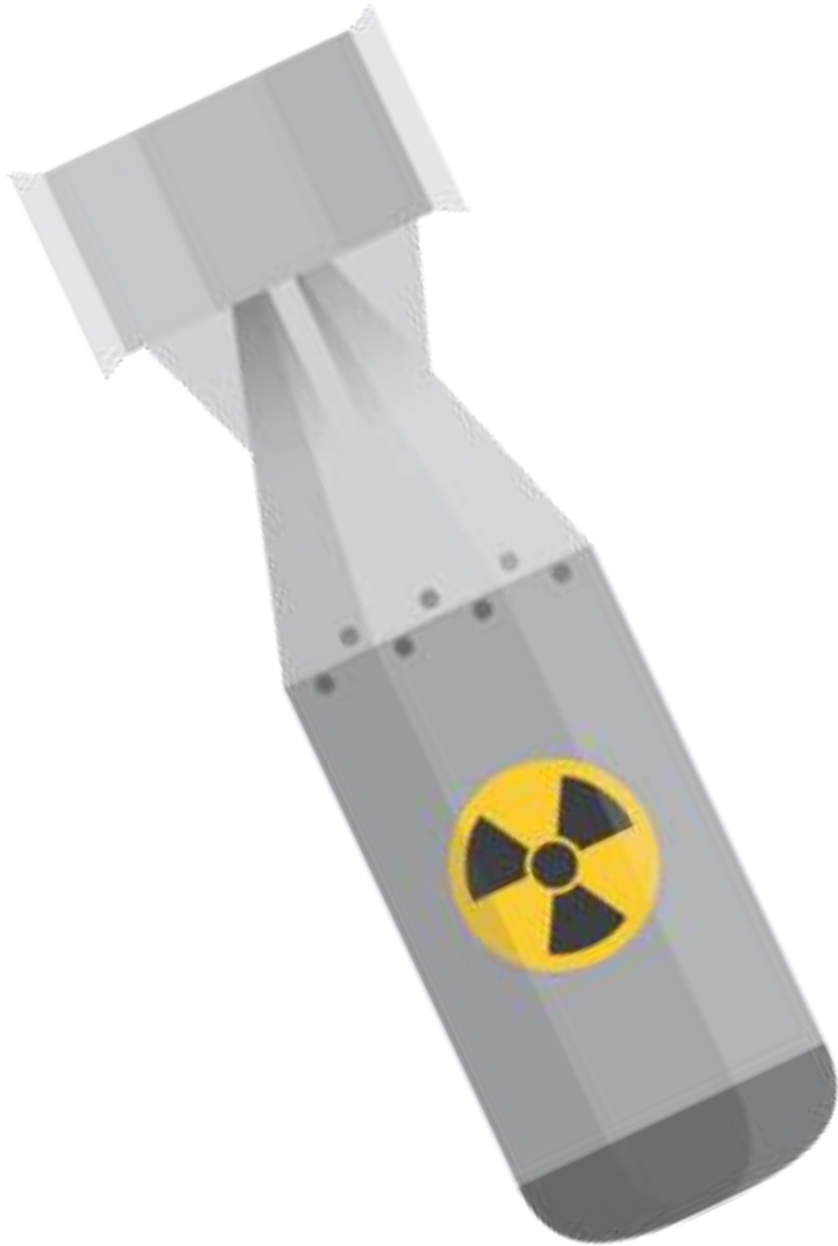
Download Windows 10

Before updating, please refer to the [Windows release information status](#) for known issues to confirm your device is not impacted.

Windows 10 2022 Update | Version 22H2

The Update Assistant can help you update to the latest version of Windows 10. To get started, click **Update now**.

Update now



**Is there anything
else I can do –
other than the
nuclear option?**

Share

What is Right Browser for both
You and **Your** Windows PC?

OPCUG



*Users helping users
for over 40 years*

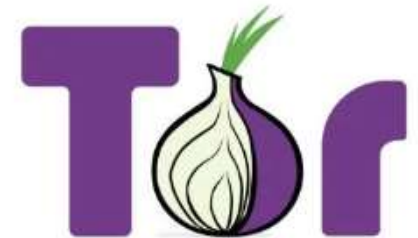
Q&A





I use Windows, with a Chrome Browser.

Let's look at some Windows Browsers...



in alphabetical order...

Your comments are encouraged...



Brave Browser

Privacy

Ad blocking

Fast browsing

Fast and efficient browsing

Desktop version may require more RAM than some browsers.

It has a smaller selection of extensions, as compared to Chrome and Firefox



Brave Browser

OUR FASTEST BROWSER EVER

Brave Browser Download

The new Brave browser blocks ads and trackers that slow you down and invade your privacy. Discover a new way of thinking about how the web can work.

Download Brave for Windows

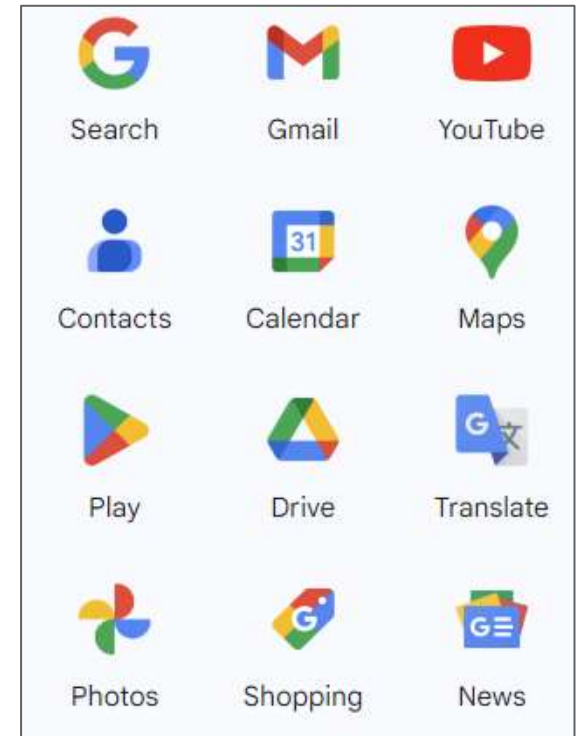
Downloads of this version of the Brave Browser (desktop) are available for [Windows](#), [macOS](#) and [Linux](#).

<https://brave.com/download/>



Chrome Browser

Fast and efficient browsing
Extensive extension library
Seamless integration with Google services



Requires a large amount of memory,
especially if many tabs are left open.
Some users have issues with privacy



Chrome Browser



**The browser
built to be**



safe



Download Chrome

google.com/intl/en_ca/chrome/



DuckDuckGo Browser

Strict no-tracking policy

Privacy-focused search engine

Minimalist design

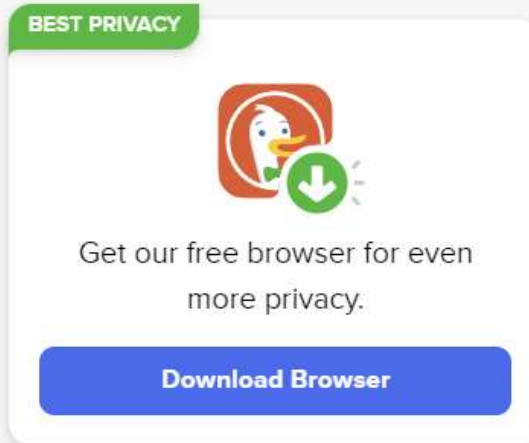
Less features than commonly used browsers

Limited integration with other services



DuckDuckGo Browser

Switch to DuckDuckGo. It's private and free!



Over 295 million browser downloads to date!

duckduckgo.com



Edge Browser

Integrates well with Windows

Improved performance

Enhanced security features

Uses less than 800MB of RAM w 10 tabs open

Limited extension availability

Less customizable



Edge Browser



Browse with **Microsoft Edge**
across all of your devices



Windows

Microsoft Edge is the best
browser for Windows

Download
for Windows 11 / 10



<https://www.microsoft.com/en-us/edge/download?form=MA13FJ>



Firefox Browser

Strong focus on privacy.

Open-source and customizable

Offers extensive add-on support

May be slower than some browsers, **but** it also blocks website trackers that can slow down browsing.

May be a good option for browsing with low RAM usage.

Less integration with Microsoft services



Firefox Browser



Firefox Browser

Get the browser that protects what's important

No shady privacy policies or back doors for advertisers. Just a lightning fast browser that doesn't sell you out.

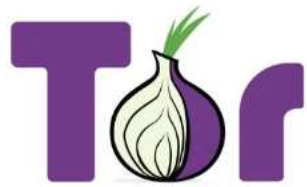
[Download Firefox](#)

[Firefox Privacy Notice](#)

[Download options and other languages](#)

[Firefox Browser support](#)

mozilla.org/en-CA/firefox/new/



Tor Browser



TOR "The Onion Router"

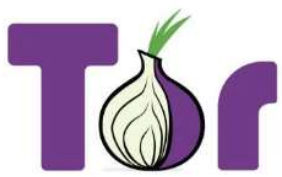
Anonymized browsing via the Tor network
Hides your IP, with enhanced privacy features

Offers access to "onion sites" aka "Dark Web"

Tor offers 3 Layers of Encryption

Secure browsing with open-source code

Connection could be slow due to routing



Tor Browser

"The Onion Router"

Download Tor Browser

Protect yourself against tracking, surveillance, and censorship.



Download for Windows

[Signature](#) ⓘ



Download for macOS

[Signature](#) ⓘ



Download for Linux

[Signature](#) ⓘ



Download for Android

[Download for another platform](#)

[Download the latest alpha build](#)

[Download Tor](#)

torproject.org/download/



Opera Browser

Built-in ad blocker and VPN

Has “Do Not Track” request option

Customizable start page

Minimal strain on computer memory

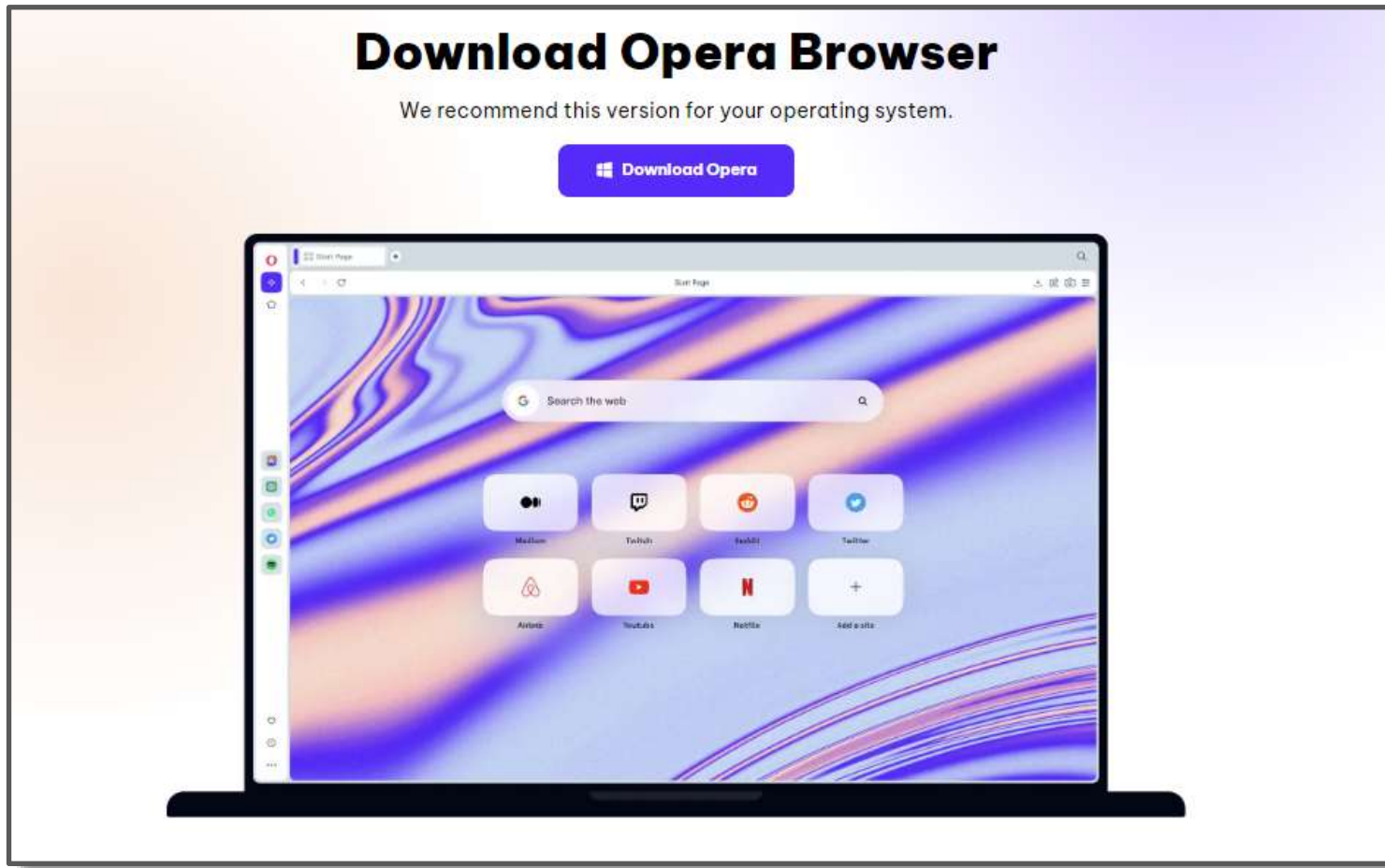
Needs only 900MB of RAM, w 10 open tabs

Offers a Private browsing mode.

Limited extensions, yet still offers ad blocking.



Opera Browser



opera.com/download



Vivaldi Browser

Customizable with visual bookmarks

Built-in tools for Power Users

Efficient tab management, with Preview

Use Google plugins from the Chrome Web Store

Does not track user behavior

Allows user to block ads & popups

Create notes directly within the browser.

Vivaldi offers “Factory Automotive Browsers” to Volvo, Mercedes, Ford, Lincoln, Audi and many more...



Vivaldi Browser



Desktop iOS Android Automotive

Powerful. Personal. Private.

Get unrivaled customization options and built-in browser features for better performance, productivity, and privacy.

 [Download Vivaldi](#)

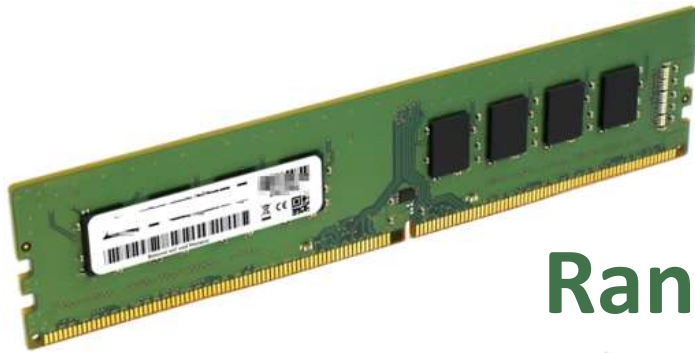
[Explore features](#)

Available for [Windows](#), [Mac](#), [Linux](#), [Android](#) and [iOS](#).

vivaldi.com

As you should decide which browser features you will enjoy the most...

You may want to consider the age of your computer, and how much **RAM** it has?



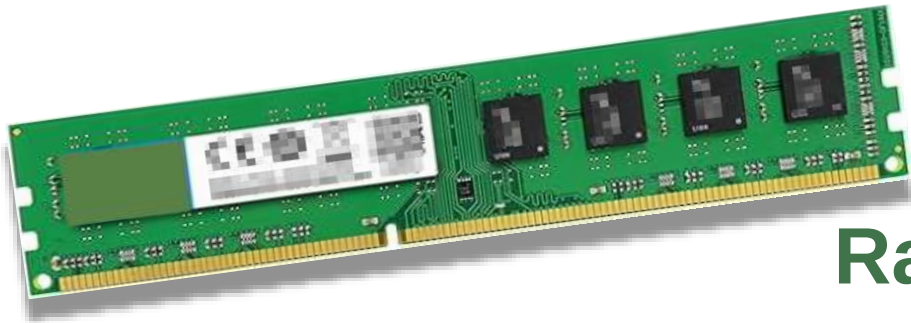
RAM

Random Access Memory

Some browsers may work better than others, on systems with limited resources.

RAM is one of many factors...

Some computers, may have **4GB** of RAM.
This may be okay for basic web browsing,
emailing, and document editing.



RAM

Random Access Memory

1 Kilobyte (KB) = 1,024 Bytes (B)

1 Megabyte (MB) = 1,024 Kilobytes (KB)

1 Gigabyte (GB) = 1,024 Megabytes (MB)

1 Terabyte (TB) = 1,024 Gigabytes (GB)

For optimum performance on a
Windows 10 or 11 PC or laptop...
some suggest a minimum of **8GB** of RAM



For Photo editing or other large tasks,
16GB of RAM may be advisable.

As Video editing etc. is more demanding,
32GB of RAM may be beneficial.

How much RAM does your Computer have?



For Windows 10:

Open the **Windows Start menu**, start typing "About your PC," and click the option to open it when it appears. In the Device Specifications section, your total RAM capacity is displayed next to Installed RAM

For Windows 11:

Start typing "About your PC" in the **Windows search box** and click the option to open it when it appears. In the Device Specifications section, your total RAM capacity is displayed next to Installed RAM

for Windows PC's and laptops
with limited RAM...



Microsoft Edge

or



Opera

may be a good choice?

If you already using a “Chrome Browser...”

Brave, Opera & Vivaldi

are all based on the Chromium Engine



You can find these at: **The Chrome Web Store**

These will be *very close* a “Full Browser Installation”
and you should be able to use most features.



Edge is usually pre-installed, with Windows 10 & 11

Share

What Features were missed?

Which Browsers are Better?

Please share your comments...

Q&A





**Any other:
Questions
Comments
Shares?**

March Meeting



Building a Website – No Coding Required!

Alan German
(*OPCUG*)

March 13, 2024

7:30 pm





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

SuggestionBox@opcug.ca

