

# Timed test results: Comparing Copilot+ PCs to a Windows 11 PC, a Windows 10 PC, and an Apple MacBook Pro, all without Copilot+

## ABOUT OUR TESTING

In this study, we assessed the following devices:

- Three Copilot+ PCs running Windows 11
  - Microsoft Surface Pro 11th Edition
  - ASUS ProArt P16
  - Microsoft Surface Laptop 7th Edition
- Two non-Copilot+ PCs
  - Lenovo® ThinkPad X1 Yoga (3rd Gen) running Windows 10
  - HP Spectre x360 2-in-1 Laptop 14 running Windows 11
- An Apple® MacBook® Pro 14" running macOS® Sequoia

To demonstrate how users can save time with new Copilot+ PC experiences—improved Windows search, Click to Do, and Recall—we hand-timed several tasks on each device. We ran each test three times and report the average of the times across the three runs; we also report the average across the three Copilot+ PCs.

Note that we tested the Copilot+ PCs with pre-release software and a corpus of data Microsoft provided, which added up to a workweek of user history. Note that all results may vary by device, configuration, and usage—all the results we report reflect the specific configurations we tested. For complete results, methodologies, and hardware/software disclosures, see [the appendices](#).

According to our tests:

- On Copilot+ PCs, you can find images and copy them to a new folder using improved Windows search in **up to 70% less time** than on a Windows 10 device using traditional search\*
- With Click to Do actions on Copilot+ PCs, you can remove an object from an image you see in a PDF file in **up to 55% less time\*\***
- Get to your PowerPoint in **up to 71% less time** with Copilot+ PCs\*\*\*
- On Copilot+ PCs, you can **save up to 61% of the time** you spend finding and editing content with Recall, Click to Do, and improved Windows search\*\*\*\*

A full report—including additional results, a deeper look at Copilot+ PC experiences, and what these results can mean for users—is forthcoming.

*\*based on testing comparing pre-released versions of improved Windows search on Copilot+ PCs to traditional search on Windows 10 PC*

*\*\*based on testing comparing Copilot+ PCs running pre-released Click to Do and a Windows 10 PC with manual workflows*

*\*\*\*based on testing using Recall (preview) on Copilot+ PCs compared to a Windows 10 PC with manual workflows*

*\*\*\*\*based on tests searching for a PowerPoint, removing an object from an image in a PDF, and saving the image to the PowerPoint on Copilot+ PCs vs. a Windows 10 PC with manual workflows*



## TIME SAVINGS WITH IMPROVED WINDOWS SEARCH

### Finding images and copying them to a new folder

In this test, we searched for images containing certain objects and copied them to a new folder. As Table 1 shows, improved Windows search on the Copilot+ PC enabled us to find images and copy them to a new folder in up to 70.2 percent less time compared to the non-Copilot+ PCs—a time comparable to the MacBook Pro.

**Table 1: Average time, in seconds, to find images and copy them to a new folder. Less time is better. For complete results and our step-by-step process, see [the appendices](#).**

	Copilot+ PCs - Average	Non-Copilot+ Windows 10 PC	Non-Copilot+ Windows 11 PC	Apple MacBook Pro
Total duration (seconds) - Average	25.8	86.9	82.1	25.7
Percentage less time with Copilot+ PCs - Average	N/A	70.2%	68.5%	-0.2%

## TIME SAVINGS WITH CLICK TO DO

### Removing an object from an image in a PDF

In this photo editing test, we opened a PDF with an image that included a logo. We isolated and removed the logo, and then we saved the image. Click to Do on the Copilot+ PCs enabled us to make these edits with just a few clicks, taking up to 55.2 percent less time than the devices without Copilot+ (see Table 2).

**Table 2: Average time, in seconds, to remove an object from an image in a PDF. Less time is better. For complete results and our step-by-step process, see [the appendices](#).**

	Copilot+ PCs - Average	Non-Copilot+ Windows 10 PC	Non-Copilot+ Windows 11 PC	Apple MacBook Pro
Total duration (seconds) - Average	23.6	52.8	51.8	39.8
Percentage less time with Copilot+ PCs - Average	N/A	55.2%	54.3%	40.6%

## TIME SAVINGS WITH RECALL

### Finding and reopening a PowerPoint

This test reflects a scenario where a user remembers seeing a PowerPoint slide with handwriting on it, but they can't remember which presentation they saw it in. With the Copilot+ PCs, we simply opened Recall and used our own words to search for "slide with handwriting." Recall did the rest, quickly locating the PowerPoint presentation and slide, and allowing us to jump back into it. With the other devices, searching "slide with handwriting" yielded no results, so we had to manually search through several PowerPoint files on the devices until we found the slide. With Copilot+ PCs, it took us up to 71.3 percent less time to locate the correct file (see Table 3).

**Table 3: Average time, in seconds, to find a specific PowerPoint and reopen it. Less time is better. For complete results and our step-by-step process, see the appendices.**

	Copilot+ PCs - Average	Non-Copilot+ Windows 10 PC	Non-Copilot+ Windows 11 PC	Apple MacBook Pro
Total duration (seconds) - Average	14.0	48.7	43.7	36.0
Percentage less time with Copilot+ PCs - Average	N/A	71.3%	67.9%	61.1%

## TIME SAVINGS ON WORKFLOWS

### Productivity workflow

We timed several tasks in a row to measure how the three Copilot+ PC experiences can work together to save users time. In the productivity workflow, we

- Searched for PowerPoint file with red handwriting without knowing the filename
- Searched for an image with the word "Contoso" in it without knowing the filename
- Removed an object from the image in a PDF
- Saved the image
- Searched for the image we edited
- Added the image to the PowerPoint

On the Copilot+ PCs, we used Recall, Click to Do, and improved Windows search to complete this example workflow in up to 61.8 percent less time than the other devices we tested. With intuitive actions and just a few clicks, the Copilot+ PCs saved significant time compared to completing the workflow manually (see Table 4).

**Table 4: Average time, in seconds, to search for a PowerPoint file, search for an image, remove an object from an image, search for the image, and add the image to the PowerPoint. Less time is better. For complete results and our step-by-step process, see [the appendices](#).**

	<b>Copilot+ PCs - Average</b>	<b>Non-Copilot+ Windows 10 PC</b>	<b>Non-Copilot+ Windows 11 PC</b>	<b>Apple MacBook Pro</b>
Total duration (seconds) - Average	53.3	139.8	128.1	87.7
Percentage less time with Copilot+ PCs - Average	N/A	61.8%	58.4%	39.2%

## APPENDIX A: OUR RESULTS

We concluded hands-on testing on April 8, 2025. During testing, we determined the appropriate hardware and software configurations and applied updates as they became available. The results in this report reflect configurations that we finalized on April 2, 2025 or earlier. Unavoidably, these configurations may not represent the latest versions available when this report appears.

To learn more about how we have calculated the wins in this report, go to <http://facts.pt/calculating-and-highlighting-wins>. Unless we state otherwise, we have followed the rules and principles we outline in that document.

**Table 5: Results of our testing with improved Windows search, Click to Do, and Recall. Less time is better.**

	Microsoft Surface Pro 11th Edition Copilot+ PC	ASUS ProArt P16 Copilot+ PC	Microsoft Surface Laptop 7th Edition Copilot+ PC	Lenovo ThinkPad X1 Yoga (3rd Gen)	HP Spectre x360 2-in-1 Laptop 14	Apple MacBook Pro 14"
<b>Finding images and copying them to a new folder</b>						
Total duration (seconds) - Run 1	25.3	24.1	27.3	88.5	81.3	25.5
Total duration (seconds) - Run 2	27.0	25.4	26.1	87.8	80.7	26.0
Total duration (seconds) - Run 3	26.3	25.8	25.2	84.5	84.3	25.8
Total duration (seconds) - Average	26.2	25.1	26.2	86.9	82.1	25.7
<b>Removing an object from an image in a PDF</b>						
Total duration (seconds) - Run 1	18.6	21.0	31.5	51.6	52.6	40.5
Total duration (seconds) - Run 2	18.5	21.0	30.9	53.0	51.9	39.2
Total duration (seconds) - Run 3	19.9	20.4	30.5	53.8	50.8	39.7
Total duration (seconds) - Average	19.0	20.8	30.9	52.8	51.8	39.8

	Microsoft Surface Pro 11th Edition Copilot+ PC	ASUS ProArt P16 Copilot+ PC	Microsoft Surface Laptop 7th Edition Copilot+ PC	Lenovo ThinkPad X1 Yoga (3rd Gen)	HP Spectre x360 2-in-1 Laptop 14	Apple MacBook Pro 14"
<b>Finding and reopening a PowerPoint</b>						
Total duration (seconds) - Run 1	15.1	12.6	14.4	49.9	43.5	34.7
Total duration (seconds) - Run 2	14.6	12.5	14.9	48.9	44.4	37.3
Total duration (seconds) - Run 3	14.41	12.8	14.5	47.4	43.1	36.1
Total duration (seconds) - Average	14.7	12.6	14.6	48.7	43.7	36.0
<b>Productivity workflow (searching for a PowerPoint file, searching for an image, removing an object from an image, searching for the image, and adding the image to the PowerPoint)</b>						
Total duration (seconds) - Run 1	49.2	48.7	61.6	140.3	128.6	87.5
Total duration (seconds) - Run 2	48.3	50.2	63.1	141.8	130.4	87.9
Total duration (seconds) - Run 3	48.6	49.8	60.5	137.2	125.4	87.8
Total duration (seconds) - Average	48.7	49.5	61.7	139.7	128.1	87.7

## APPENDIX B: SYSTEM CONFIGURATION INFORMATION

Table 6: Detailed information on the systems we tested.

System	Microsoft Surface Pro 11th Edition Copilot+ PC	ASUS ProArt P16 (H7606W) Copilot+ PC	Microsoft Surface Laptop 7 <sup>th</sup> Edition (2108) Copilot+ PC	Lenovo ThinkPad X1 Yoga (3rd Gen)	HP Spectre x360 2-in-1 Laptop 14-ef2023dx	Apple MacBook Pro A1 Model A3112
<b>Processor</b>						
Vendor	Qualcomm	AMD	Intel®	Intel	Intel	Apple
Name	Snapdragon X Elite	Ryzen AI 9 HX 370	Core™ Ultra 7 268V	Core i7-8650U	Core i7-1355U	M4
Core frequency (GHz)	3.4–4.0	2.0–5.1	2.2–5.0	1.9–4.2	3.7–5.0	2.9–4.4
Number of cores	12	12	8	4	10	10
Number of threads	12	24	8	8	12	10
<b>Memory</b>						
Amount (GB)	16	32	32	16	16	24
Type	LPDDR5	LPDDR5x	LPDDR5x	LPDDR3	LPDDR4x	LPDDR5X
<b>Graphics</b>						
Vendor	Qualcomm	AMD	Intel	Intel	Intel	Apple
Model number	Adreno X1-85 GPU	Radeon 890M	Arc 140V GPU	UHD Graphics 620	Iris® Xe graphics	M4 Integrated Graphics
<b>Storage</b>						
Amount (GB)	1,000	2,000	1,000	500	1,000	1,000
<b>Connectivity/expansion</b>						
Wireless internet	Qualcomm FastConnect 7800 Mobile Connectivity System	Wi-Fi 7	Wi-Fi 7	Intel Dual Band Wireless-AC 8265	Intel Wi-Fi 6E AX211	Wi-Fi 6E
<b>Battery</b>						
Rated capacity (Whr)	53	90	66	54	66	72.4
<b>Display</b>						
Size (in.)	13	16	15	14	13.5	14.2
Resolution	2880 x 1920	3840 x 2400	2496 x 1664	2560 x 1440	3000 x 2000	3024 x 1964
<b>Operating system</b>						
Vendor	Microsoft	Microsoft	Microsoft	Microsoft	Microsoft	Apple
Name	Windows 11 Enterprise	Windows 11 Pro	Windows 11 Pro	Windows 10 Pro	Windows 11 Home	macOS Sequoia
Version	24H2 (Build 26120.3360)	24H2 (Build 26120.3653)	24H2 (Build 26120.3653)	22H2 (Build 19045.5487)	24H2 (Build 26100.3194)	15.3.1
<b>Dimensions</b>						
Height (in.)	8.2	9.72	9.41	9.02	8.68	8.71

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System	Microsoft Surface Pro 11th Edition Copilot+ PC	ASUS ProArt P16 (H7606W) Copilot+ PC	Microsoft Surface Laptop 7 <sup>th</sup> Edition (2108) Copilot+ PC	Lenovo ThinkPad X1 Yoga (3rd Gen)	HP Spectre x360 2-in-1 Laptop 14-ef2023dx	Apple MacBook Pro A1 Model A3112
Width (in.)	11.3	13.97	12.96	13.11	11.73	12.31
Depth (in.)	0.37	0.68	0.72	0.67	0.67	0.61
Weight (lb.)	1.97	4.08	3.67	3.08	3.01	3.40



## APPENDIX C: HOW WE TESTED

### Testing with improved Windows search: Finding images and copying them to a new folder

In this test, we searched for a paint brush image and a piano image.

#### Running the test on the macOS device

1. Simultaneously start the timer and open the Photos application.
2. In the Search bar, type `paint brush`
3. Select the images that appear, and copy them.
4. Create a new folder on the Desktop, and paste the images into the new folder.
5. Open the Photos application.
6. In the Search bar, type `Piano`
7. Select the images that appear, and copy them.
8. In the newly created folder on the Desktop, paste the images.
9. When the images have finished pasting, stop the timer.
10. Repeat steps 1 through 9 twice more.

#### Running the test on the Windows 10 and Windows 11 non-Copilot+ laptops

1. Simultaneously start the timer and open File Explorer.
2. Navigate to the Picture folder.
3. In the Search bar, type `paint brush`
4. If no pictures appear, delete the search, and return to the pictures folder.
5. Scroll through the pictures folder, and find all the pictures that include a paint brush.
6. Select the images that include a paint brush, and copy them.
7. Create a new folder on the Desktop, and paste the images into the new folder.
8. Open the Pictures folder.
9. In the Search bar, type `Piano`.
10. If no pictures appear, delete the search, and return to the pictures folder.
11. Scroll through the pictures folder, and find all the pictures that include a piano.
12. Select the images that include a piano, and copy them.
13. In the newly created folder on the Desktop, paste the images.
14. When the images have finished pasting, stop the timer.
15. Repeat steps 1 through 14 twice more.

### Running the test on the Windows 11 Copilot+ laptop

1. Simultaneously start the timer and open File Explorer.
2. Navigate to the Pictures folder.
3. In the Search Pictures search bar, type `paint brush`
4. Select the images that appear, and copy them.
5. Create a new folder on the Desktop, and paste the images into the new folder.
6. Open the Pictures folder.
7. In the Search Pictures search bar, type `Piano`
8. Select the images that appear, and copy them.
9. In the newly created folder on the Desktop, paste the images.
10. When the images have finished pasting, stop the timer.
11. Repeat steps 1 through 10 twice more.

### Testing with Click to Do: Removing an object from an image in a PDF and saving the new image

In this test, we opened a PDF containing an image that included a logo. We isolated and removed the logo, and then we saved the image.

### Running the test on the macOS device

1. Simultaneously start the timer and open the test PDF file in Preview.
2. To open the screenshot tool, press `Command+Shift+5`.
3. Highlight the image you wish to edit.
4. Open the screenshot, and click the share button → Add to Photos.
5. Open the Photos application, and double-click the saved screenshot.
6. Click Edit.
7. Click Clean Up.
8. In the image, highlight the object you wish to remove.
9. Click `File` → `Export` → `Export 1 Photo`.
10. Click Export.
11. Select where you'd like to save the image, and click Export.
12. Stop the timer when the image saves.
13. Repeat steps 1 through 12 twice more.

### Running the test on the Windows 10 and Windows 11 non-Copilot+ laptops

1. Simultaneously start the timer and open the test PDF file in Edge.
2. Click the Windows Start button.
3. In the search bar, type Snipping Tool
4. Open Snipping Tool.
5. Click New.
6. Highlight the image you wish to edit.
7. Click Save.
8. Select where you'd like to save the image, and click Save.
9. Navigate to the folder in which you saved the image.
10. Right-click the image, and select Edit with Photos.
11. Click the Erase tool.
12. In the image, highlight the object you wish to remove.
13. Click Save options → Save as a copy.
14. Select where you'd like to save the image, and click Save.
15. Stop the timer when the image saves.
16. Repeat steps 1 through 15 twice more.

### Running the test on the Windows 11 Copilot+ laptop

1. Simultaneously start the timer and open the test PDF file in Edge.
2. Hover over the image you wish to edit, and to open Click to Do, press the Windows key and click.
3. Click Erase Objects with Photos.
4. In the image, highlight the object you wish to remove.
5. Click Save options → Save as a copy.
6. Select where you'd like to save the image, and click Save.
7. Stop the timer when the image saves.
8. Repeat steps 1 through 7 twice more.

## Testing with Recall: Finding and reopening a PowerPoint

In this test, we simulated a scenario where a user remembers a PowerPoint presentation on their system that included red handwriting on a slide, but they do not remember the name of the PowerPoint file.

### Running the test on the macOS device

1. Simultaneously start the timer and open Finder.
2. Navigate to the Documents folder.
3. In the Search bar, type `slide with handwriting`
4. If no documents appear, delete the search, and return to the Documents folder.
5. Open the Conscious Interior Design PowerPoint file.
6. Scroll through the slides to see if there are any slides with red handwritten text.
7. Close the PowerPoint file.
8. Open the Contoso Designs\_Client Presentation PowerPoint file.
9. Scroll through the slides to see if there are any slides with red handwritten text.
10. Close the PowerPoint file.
11. Open the Contoso Electronics Sales Presentation PowerPoint file.
12. Scroll through the slides to see if there are any slides with red handwritten text.
13. Close the PowerPoint file.
14. Open the Contoso-Financial-Calendar PowerPoint file.
15. Scroll through the slides to see if there are any slides with red handwritten text.
16. Close the PowerPoint file.
17. Open the Eco House PowerPoint file.
18. Navigate to the slide with the red handwritten text and stop the timer.
19. Repeat steps 1 through 18 twice more.

### Running the test on the Windows 10 and Windows 11 non-Copilot+ laptops

1. Simultaneously start the timer and open File Explorer.
2. Navigate to the Documents folder.
3. In the Search bar, type `slide with handwriting`
4. If no documents appear, delete the search, and return to the Documents folder.
5. Open the Conscious Interior Design PowerPoint file.
6. Scroll through the slides to see if there are any slides with red handwritten text.
7. Close the PowerPoint file.
8. Open the Contoso Designs\_Client Presentation PowerPoint file.
9. Scroll through the slides to see if there are any slides with red handwritten text.
10. Close the PowerPoint file.

11. Open the Contoso Electronics Sales Presentation PowerPoint file.
12. Scroll through the slides to see if there are any slides with red handwritten text.
13. Close the PowerPoint file.
14. Open the Contoso-Financial-Calendar PowerPoint file.
15. Scroll through the slides to see if there are any slides with red handwritten text.
16. Close the PowerPoint file.
17. Open the Eco House PowerPoint file.
18. Navigate to the slide with the red handwritten text and stop the timer.
19. Repeat steps 1 through 18 twice more.

### Running the test on the Windows 11 Copilot+ laptop

1. Simultaneously start the timer and open Recall.
2. In the Recall search box, type `slide with handwriting`
3. Click the Eco House – PowerPoint file match that pops up with the handwritten text on the slide.
4. At the bottom, click the Jump back to PowerPoint button.
5. Stop the timer when the PowerPoint file opens to the slide with handwriting.
6. Repeat steps 1 through 5 twice more.

### Testing the productivity workflow

In this test, we simulated a scenario where a user remembers a PowerPoint presentation on their system that included red handwriting on a slide, but they do not remember the filename of the PowerPoint. The user also remembers an image with the word “Contoso” in it but does not remember the filename of the image. The workflow consists of finding the PowerPoint, removing an object from an image in a PDF, and searching for an image to add to the PowerPoint.

### Running the test on the macOS device

1. Simultaneously start the timer and open Finder.
2. Navigate to the Documents folder.
3. In the Search bar, type `slide with handwriting`
4. If no documents appear, delete the search, and return to the Documents folder.
5. Open the Conscious Interior Design PowerPoint file.
6. Scroll through the slides to see if there are any slides with red handwritten text.
7. Close the PowerPoint file.
8. Open the Contoso Designs\_Client Presentation PowerPoint file.
9. Scroll through the slides to see if there are any slides with red handwritten text.
10. Close the PowerPoint file.
11. Open the Contoso Electronics Sales Presentation PowerPoint file.
12. Scroll through the slides to see if there are any slides with red handwritten text.
13. Close the PowerPoint file.

14. Open the Contoso-Financial-Calendar PowerPoint file.
15. Scroll through the slides to see if there are any slides with red handwritten text.
16. Close the PowerPoint file.
17. Open the Eco House PowerPoint file.
18. Navigate to the slide with the red handwritten text.
19. Navigate out of the PowerPoint and open the test PDF file in Preview.
20. To open the screenshot tool, press Command+Shift+5.
21. Highlight the image you wish to edit.
22. Open the screenshot, and click the share button → Add to Photos.
23. Open the Photos application, and double-click the saved screenshot.
24. Click Edit.
25. Click Clean Up.
26. In the image, highlight the object you wish to remove.
27. Click File → Export → Export 1 Photo.
28. Click Export.
29. Select where you'd like to save the image, and click Export.
30. Open the Photos application.
31. In the Search bar, type `contoso`
32. If no pictures appear, delete the search.
33. Scroll through the Photos application, and find the picture that includes the word Contoso in it.
34. Drag and drop the picture into the PowerPoint on the slide with red handwritten text.
35. Resize and move the picture to the desired location and stop the timer.
36. Repeat steps 1 through 35 twice more.

### Running the test on the Windows 10 and Windows 11 non-Copilot+ laptops

1. Simultaneously start the timer and open File Explorer.
2. Navigate to the Documents folder.
3. In the Search bar, type `slide with handwriting`
4. If no documents appear, delete the search, and return to the Documents folder.
5. Open the Conscious Interior Design PowerPoint file.
6. Scroll through the slides to see if there are any slides with red handwritten text.
7. Close the PowerPoint file.
8. Open the Contoso Designs\_Client Presentation PowerPoint file.
9. Scroll through the slides to see if there are any slides with red handwritten text.
10. Close the PowerPoint file.
11. Open the Contoso Electronics Sales Presentation PowerPoint file.

12. Scroll through the slides to see if there are any slides with red handwritten text.
13. Close the PowerPoint file.
14. Open the Contoso-Financial-Calendar PowerPoint file.
15. Scroll through the slides to see if there are any slides with red handwritten text.
16. Close the PowerPoint file.
17. Open the Eco House PowerPoint file.
18. Navigate to the slide with the red handwritten text.
19. Navigate out of the PowerPoint and open the test PDF file in Edge.
20. Click the Windows Start button.
21. In the search bar, type `Snipping Tool`
22. Open Snipping Tool.
23. Click New.
24. Highlight the image you wish to edit.
25. Click Save.
26. Select where you'd like to save the image, and click Save.
27. Navigate to the folder in which you saved the image.
28. Right-click the image, and select Edit with Photos.
29. Click the Erase tool.
30. In the image, highlight the object you wish to remove.
31. Click Save options → Save as a copy.
32. Select where you'd like to save the image, and click Save.
33. Open File Explorer.
34. Navigate to the Picture folder.
35. In the Search bar, type `contoso`
36. If no pictures appear, delete the search, and return to the pictures folder.
37. Scroll through the pictures folder, and find the picture that includes the word Contoso in it.
38. Drag and drop the picture into the PowerPoint on the slide with red handwritten text.
39. Resize and move the picture to the desired location and stop the timer.
40. Repeat steps 1 through 39 twice more.

### Running the test on the Windows 11 Copilot+ laptop

1. Simultaneously start the timer and open Recall.
2. In the Recall search box, type `slide with handwriting`
3. Click the Eco House – PowerPoint file match that pops up with the handwritten text on the slide.
4. At the bottom, click the Jump back to PowerPoint button.
5. Once the PowerPoint opens to the slide with red handwriting, navigate out of the PowerPoint and open the test PDF file in Edge.
6. Hover over the image you wish to edit, and to open Click to Do, hold down the Windows key and click.
7. Click Erase Objects with Photos.
8. In the image, highlight the object you wish to remove.
9. Click Save options → Save as a copy.
10. Select where you'd like to save the image, and click Save.
11. Open File Explorer.
12. Navigate to the Pictures folder.
13. In the Search Pictures search bar, type `contoso`
14. Drag and drop the picture that appears into the PowerPoint on the slide with red handwritten text.
15. Resize and move the picture to the desired location and stop the timer.
16. Repeat steps 1 through 15 twice more.





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