



Sync files more quickly with Dropbox

In our hands-on testing, Dropbox* lets you upload, download, and sync files and folders faster than other popular business options we tested



Providing work-from-anywhere employees and customers with seamless access to valuable content can be a game-changer for companies of all sizes. The faster individuals can get things done and teams can collaborate, the faster your company can reach its goals.

A team of Principled Technologies engineers tested the speed of four popular cloud storage services at our offices in Durham, North Carolina (NC). For a comprehensive look at services from Box, Dropbox, Google, and Microsoft, we signed up for business versions of each app and installed them locally.

Then, using sets of Windows 11 Pro and macOS® laptops, we timed how long it took each cloud service to transfer a variety of files and folders to and from the cloud. We also measured how long it took each service to synchronize files between these laptops. Dropbox crossed the finish line first in 75 out of 84 comparisons versus Google Drive, Box, and Microsoft OneDrive®.



Upload a 250MB file in 78% less time

*vs. Microsoft solution we tested***



Sync a 25MB file across devices in 98% less time

*vs. Box solution we tested***



Upload a folder of 10K files in 71% less time

*vs. Google solution we tested****



Sync a 100KB edit to a 25MB file across devices in 89% less time

*vs. Box solution we tested****

IN DURHAM, NC



*PT tested using the Dropbox Advanced plan, Microsoft OneDrive for business (Plan 1), Box Business, and Google Workspace™ Business Plus. Further details of which offerings we tested appear on page 2.

**On a 13-inch Apple® MacBook Pro® 2022 laptop running macOS 13.5.1

***On a Dell™ XPS 13 9315 laptop running Windows 11 Pro

How we tested

At our offices in Durham, NC, a team of PT engineers conducted comparisons of the four service plans on matching sets of two device and operating system combinations:

- **PC:** Two Dell XPS 13 9315 laptops running Windows 11 Pro
- **Mac:** Two 13-inch Apple MacBook Pro 2022 laptops running macOS 13.5.1 (Ventura) using File Provider

We used the following plans of service when testing:

- **Dropbox Advanced**
- **Google Workspace Business Plus**
- **Box Business**
- **Microsoft OneDrive for business (Plan 1)**

For easier reading, we also refer to these plans of service as Dropbox, Google Drive, Box, and Microsoft OneDrive throughout the report.

84 individual comparisons of Dropbox vs. competitors



Device-to-cloud and cloud-to-device tests*

Upload and download a 100MB folder of 400 miscellaneous files distributed across 40 sub-folders

Upload and download a folder of 400 zero-byte files distributed across 40 sub-folders

Upload and download a 25MB file

Upload and download a 250MB file

*8 PC + 8 Mac tests = 16 tests x 3 competitors = 48 total comparisons



Device-to-cloud only tests**

Edit a 50KB local file and upload changes

Edit a 25MB local file and upload changes

Upload a local folder containing 10,000 1KB files

**3 PC + 3 Mac tests = 6 tests x 3 competitors = 18 total comparisons



Device-to-cloud-to-second-device tests***

Synchronize a 50KB file

Synchronize a 25MB file

Synchronize an edited 25MB file

***3 PC + 3 Mac tests = 6 tests x 3 competitors = 18 total comparisons

We ran these 14 tests three times on both a Mac and a PC (or laptop set for syncing tests), conducting a total of 84 individual comparisons. We found that Dropbox completed 75 out of the 84 individual comparisons in less time than Google Drive, Box, and Microsoft OneDrive. In the following pages, we compare the results of each competitor in several key tests: uploading a 25MB file, a 250MB file, and a 100MB folder; syncing a 25MB file and a 100KB edit to a 25MB file; and uploading a folder with 10,000 1KB files. You can see the median results of all 84 individual comparisons in the [science behind the report](#).

Note: The graphs in this report use different y-axis scales to keep a consistent size. Please be mindful of each graph's data range as you compare.

Maximize efficiency and minimize wasted time with Dropbox

The less time it takes to deliver and receive important information, no matter how big or small that transfer is, the more time users have to focus on the end goal. In Durham, NC, we found that transferring a curated selection of files and folders to the cloud took less time using Dropbox compared to Google Drive, Box, and Microsoft OneDrive.

Transfer a 25MB file in less time

To represent something that many users do, we uploaded and downloaded a 25MB file. For reference, 25 MB is the maximum size of all attachments on an outgoing Gmail™ message.¹

On the Windows 11 Pro and macOS devices we tested, uploading a 25MB file was significantly faster with Dropbox than it was with Google Drive, Box, and Microsoft OneDrive options to which we compared it. Dropbox was twice as fast as Box in the macOS comparison. On the Windows 11 Pro device, Dropbox was 4 times faster than Google Drive.

Time to upload a 25MB file

Seconds | Lower is better

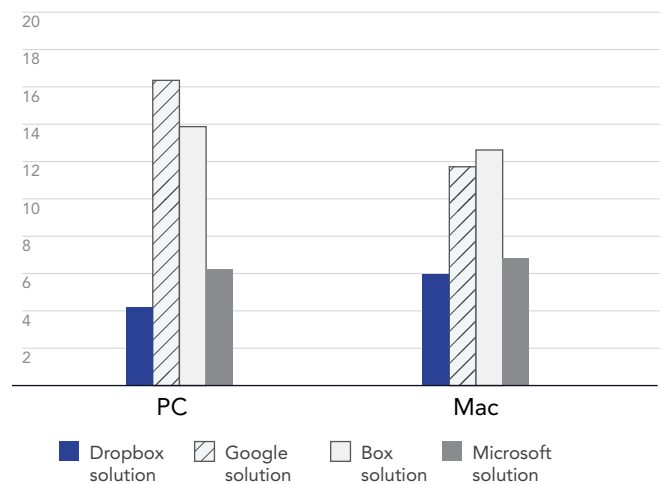
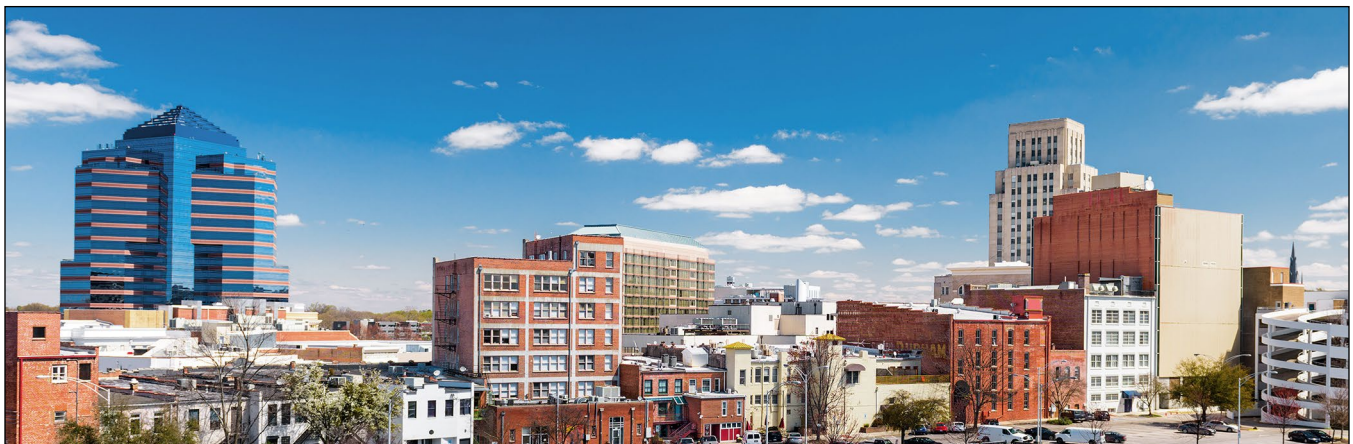


Figure 1: Median 25MB file upload times for Dropbox Advanced, Google Workspace Business Plus, Box Business, and OneDrive for business (Plan1) in Durham, NC. Lower is better. Source: Principled Technologies.



Transfer a 250MB file in less time

While not many users will transfer a single 250MB file, we wanted to see how each cloud service handled the types of files used in areas such as social media management, business performance reporting, and data analysis. For reference, a three-minute 4K video with a 10 Megabits per second (Mbps) bitrate is approximately 250 MB.²

When we uploaded a 250MB file from both sets of laptops, Dropbox was the fastest and Microsoft OneDrive was the slowest. Google Drive was the runner-up in this comparison, but uploading the 250MB file was still 19 seconds slower on the MacBook Pro and 12 seconds slower on the Windows 11 Pro device compared to Dropbox.

Time to upload a 250MB file

Seconds | Lower is better

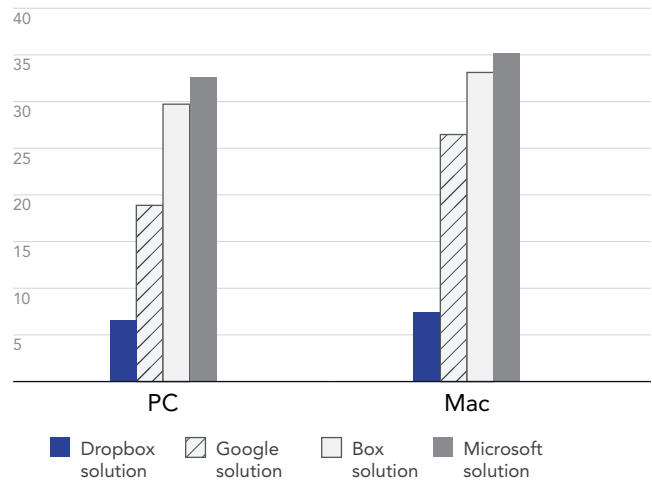


Figure 2: Median 250MB file upload times for Dropbox Advanced, Google Workspace Business Plus, Box Business, and OneDrive for business (Plan1) in Durham, NC. Lower is better. Source: Principled Technologies.

Transfer a 100MB folder in less time

We also uploaded and downloaded a 100MB folder. For context, 100 MB is the maximum upload size for presentations converted to Google Slides using Google Drive.³ Here, the biggest wins for Dropbox were against Box. In Durham, we uploaded the 100MB folder using Dropbox over a minute faster on the PC and two and a half minutes faster on the Mac versus Box.



Time to upload a 100MB folder

Seconds | Lower is better

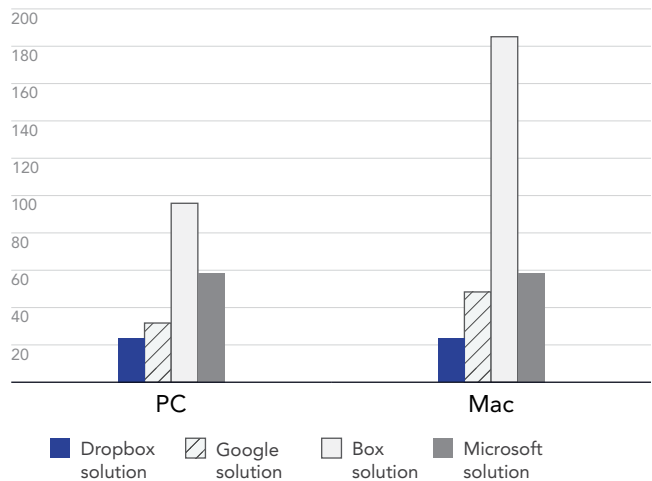


Figure 3: Median 100MB folder upload times for Dropbox Advanced, Google Workspace Business Plus, Box Business, and OneDrive for business (Plan1) in Durham, NC. Lower is better. Source: Principled Technologies.



Access and work on files from anywhere with Dropbox

For on-the-go users and remote employees, the less time it takes to get everybody (and every device) on the same page, the less likely anyone needs to budget time to play catch-up later. We found that end-to-end synchronization of a 25MB file and syncing an edited version of the 25MB file took less time using Dropbox compared to Google Drive, Box, and Microsoft OneDrive.

Sync across devices in less time

We timed how long it took each cloud service to sync information from one laptop to another. To do this, we uploaded a 25MB file from one laptop and stopped the timer as soon as we could see that file on the second laptop. Then, we inserted text edits into that file and synced again. On the PC, Dropbox completed both tasks in a fraction of the time it took the others, with Box taking over a minute and a half to complete the initial sync. Dropbox completed the same task in under five seconds. On the Mac, syncing both devices took 4.7 seconds on Dropbox versus 371 seconds on Box—that’s a savings of over six minutes with Dropbox.

Time to sync a 25MB file

Seconds | Lower is better

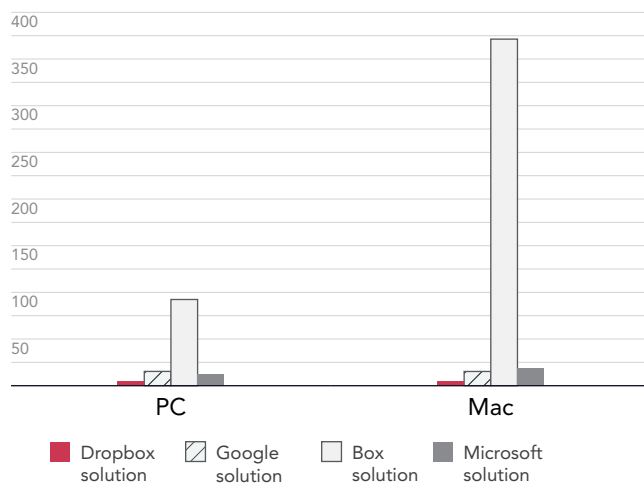


Figure 4: Median time to sync a 25MB file for Dropbox Advanced, Google Workspace Business Plus, Box Business, and OneDrive for business (Plan1) in Durham, NC. Lower is better. Source: Principled Technologies.

Time to sync a 100KB edit to a 25MB file

Seconds | Lower is better

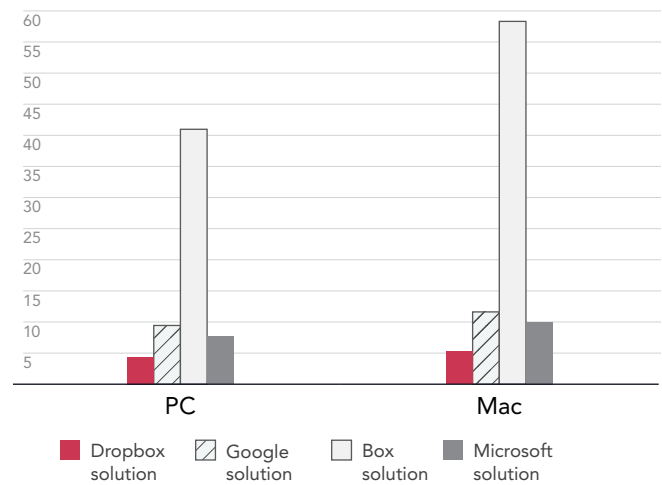


Figure 5: Median time to sync an edited 25MB file for Dropbox Advanced, Google Workspace Business Plus, Box Business, and OneDrive for business (Plan1) in Durham, NC. Lower is better. Source: Principled Technologies.

Upload large folders in less time

While not many teams will collaborate on a single folder containing 10,000 1KB files, we wanted to see how each cloud service handled large quantities of files typically accessed by sales personnel, HR teams, faculty departments, hospital support units, and creatives. For reference, 1KB files represent a very short email, half a page of unformatted text, an icon, or a small image button.⁴

We timed how long it took each cloud service to upload a local folder containing 10,000 1KB files and show the file as synced. In this comparison, Dropbox was faster than everything else we tested. In fact, Dropbox was 16 times faster on the PC and 21 times faster on the Mac when compared to Microsoft OneDrive.

Time to upload a folder with 10,000 1KB files

Minutes | Lower is better

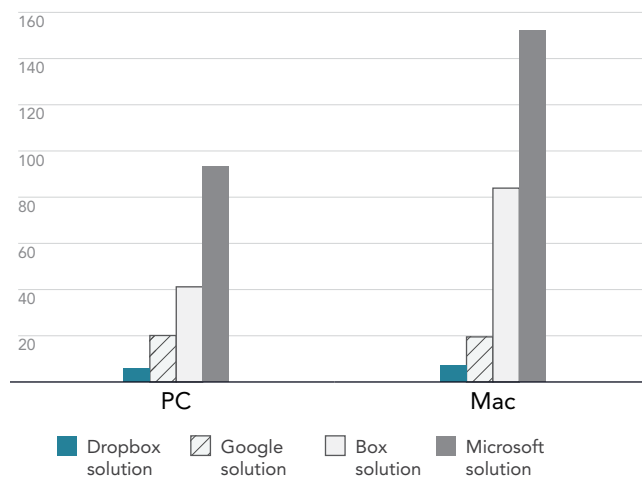


Figure 6: Median time to upload a local folder containing 10,000 1KB files for Dropbox Advanced, Google Workspace Business Plus, Box Business, and OneDrive for business (Plan1) in Durham, NC. Lower is better. Source: Principled Technologies.





Conclusion

Providing your users with speedy access to valuable content helps maximize efficiency and minimize time waste—especially when time matters. Plus, partnering with a capable and reliable cloud service provider has the added benefits of not having to purchase company laptops with extensive storage or invest in in-house servers and hardware to store all that data.

The Principled Technologies team in Durham, North Carolina found Dropbox beat Google Drive, Box, and Microsoft OneDrive in 75 out of 84 one-on-one match-ups. Our results highlight the advantages of using Dropbox on laptops running Windows 11 Pro and macOS operating systems. This flexibility and speed can help boost employee productivity and improve your bottom line.

1. GreenNet, "Understanding files sizes," accessed August 29, 2023, <https://www.greennet.org.uk/support/understanding-file-sizes>.
2. Circle HD, "How to Accurately Calculate Video File Size (Plus: Bonus Glossary)," accessed September 5, 2023, <https://www.circlehd.com/blog/how-to-calculate-video-file-size>.
3. Google Drive Help, "Files you can store in Google Drive," accessed September 5, 2023, <https://support.google.com/drive/answer/37603?hl=en>.
4. GreenNet, "Understanding files sizes," accessed August 29, 2023, <https://www.greennet.org.uk/support/understanding-file-sizes>.

Read the science behind this report at <https://facts.pt/OdHpvG8> ►



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This project was commissioned by Dropbox.