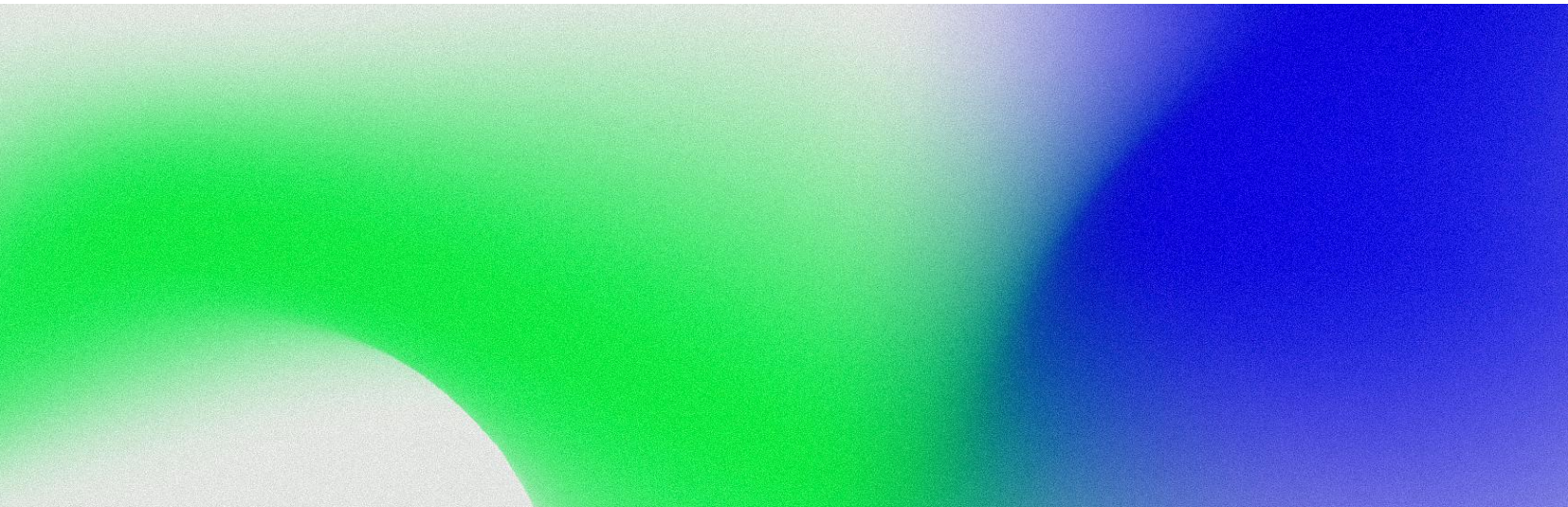


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Google Workspace

How to
Drop
Dropbox →



Technical and logistical considerations to ensure a successful migration from Dropbox

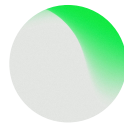
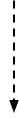


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Google Workspace



Odds are, you're here because you already know this, but it bears repeating: Dropbox and Box migrations are likely among the most difficult migrations you'll have to conduct.

Why?

Unfortunately, Dropbox is poorly structured for migrations out of their platform. They are prone to errors, fault-intolerant, lack proper support, and affect time and efficiency compared to other migration sources. By no means are they impossible, though! With a little homework, you can set Dropbox where it belongs: in your past. Let us help you successfully move forward to a system more suitable for your company's needs.

To ensure that a Dropbox migration is successful, it is important to follow the best practices detailed in this white paper (personally prepared by one of our expert 66degrees!) and approach the migration with the utmost care.

To begin, let's explore just why it's so difficult, so you can start off on the right foot and plan accordingly.



Like all endeavors, proper planning is the cornerstone of success.

Why Dropbox Migrations are Difficult

Dropbox is a challenging data migration source due, in part, to the fact that the structure of their data storage and permissions works directly against the structure of their application programming interface (API). Furthermore, the performance of Dropbox's API is rather suspect, and the support offered when help is needed is reliably lacking.

Data Structure is Not Conducive to Migration

Dropbox asserts ownership from the top-level on all shared folders. This means that even though a massive folder structure may have many contributors, the owner of the parent folder is considered to be the owner of all files contained within.

Because of this, it is extremely important to understand how your data is structured as well as how to split the data ownership across the existing users to enable the data to be migrated in a faster fashion.

API Performance Can Be Unreliable

During a migration, it is extremely common to encounter “REST API” failures from the source that can lead to a migration failure. Should this happen, the longer a migration will continue and the more likely it is to be slowed down from the source.

Support is Hard to Come By

If migration errors are encountered, there are a few options for support, depending on the root of the issue. If imports are failing, it is likely that Google Support must be contacted. If database issues or process problems occur, support will be tagged in. If export failures occur, Dropbox support would appear to be the most appropriate path to troubleshooting.

Unfortunately, this is not always fruitful. Dropbox support has not been able to produce results when asked to analyze performance or provide detailed information (such as logging or debug info).



66degrees Recap

Dropbox migrations are typically difficult because:



Data is organized well for user access but poorly for migration. Large amounts of data are squeezed into very few migration threads, which leads to extremely slow migration speeds.



API performance is unstable and can be throttled, slowing the migration even more and causing errors that can derail the migration.



Support is non-existent. They are not able to provide detailed information and not incentivized to assist customers who are leaving their platform.

Now that we understand more about just why these migrations are challenging, let's take a look at a step-by-step process to make it much, much easier.

Preparation for Migration

Planning is critical for migration projects from Dropbox. From a technical perspective, data must be prepared (this likely will require an edit of the structure as mentioned above) and testing must be performed.

Step 1: Analyze the Data

Run a source environment scan to identify user accounts that “own” more than a fair share of data. If any accounts make up a significant majority of data ownership, it will be necessary to dig deeper into their data structure. At this time, you are attempting to determine if data structure will be an issue. Be aware: the environment scan, of course, has its limitations as well. This feature does not scan Dropbox Team Folders, so a separate audit will need to be performed. In the Team Folders Audit, you will need to record total item counts and storage. If you see any Team Folders that exceed the Google Shared Drive limits, it’s necessary to audit the first level subfolders as well.



Folders tend to slow down the migration process as the migration tool indexes the folder hierarchy first before importing.

Step 2: Prepare/Alter the Data

If step 1 highlights any majority owner users, their data must be adjusted so that the entire structure is not added to a single migration thread. It is likely that this massive quantity of data lies inside a larger folder structure that is shared with users inside the company. If this is the case, identify even shares that could be split into service accounts or other owners.

Data must be moved to other user accounts (preferably service accounts) so that they can be processed in dedicated threads. Complete this step before proceeding.

In the event that some Dropbox Team Folders exceed the Google Drive Shared Drive limits, you will either need to split them up on the source or when migrating to the destination.

Step 3: Test

Choose a service account that is available for testing and conduct a migration for no less than 5 consecutive days. Record the migration progress daily during this period so that throughput and performance can be extrapolated and applied to the remaining accounts. Metrics that must be accounted for (at a minimum) are:

- + EXPORTED SUCCESSES/FAILURES
- + IMPORTED SUCCESSES/FAILURES
- + ITEMS/S
- + MB/S
- + DATE/TIME



This data will help chart a migration path and inform the project plans.

Step 4: Communication

The results of testing should properly prepare your migration team to set expectations and build a plan around timelines for migration. It is key to explain to stakeholders exactly what will happen during the migration. While they may already be aware that this process may be slow, they may not know just how slow. They may also be aware that errors are common, but they also need to know exactly what is planned to mitigate those errors.

Step 5: Monitoring and Controlling

This is a good time to commit to migration updates as well. We recommend that a minimum of one migration update be prepared and shared with internal teams. This does not mean that the migration should be unmonitored. In fact, this migration must be monitored at a much higher frequency. On a daily basis, the engineer should be tracking performance against planned throughputs, checking for errors, and addressing open risks to continue to meet client expectations.



Conclusion

Are Dropbox migrations possible? Absolutely. No matter how much data exists in Dropbox, with proper planning, data prep, and thorough communication, this data can be migrated into a stronger system that scales much better with your organization's growth and usage.

This is a good thing!

However, if the steps above are not taken -- if the preparation, communication, and education is not conducted properly for each Dropbox migration -- the results can be extremely uncomfortable for both 66degrees and the client. If it is not possible, or you are unsure about how to follow these best practices, we strongly recommend that the project not be undertaken.

We know how much rides on a successful migration, and we know this can feel like a daunting task on your own. But we're here to help. If you have more questions, or would like to bring on the experts, we're just a click away.

Frequently Asked Questions

Why are Dropbox migrations so expensive?

It may seem that Dropbox migrations are more expensive up front than other types of migrations. This is due largely to the reason mentioned above in “Why Dropbox migrations are difficult.” The added effort here reflects the processes tied to detailed analysis, risk mitigation, higher levels of communication, longer migration timelines, and frequent errors.

In fact, without the added effort to perform these tasks before the migration starts, we have seen migrations continue for over a year (we’re guessing you’d like this done sooner!).

What other options are available instead of migrating?

Dropbox does not currently have a mass export tool or a method to sync all data to a local machine. It could be possible to transfer all data into a single account and keep it licensed if the data is archival. If you have access to the data, it could also be used to upload directly to Google Cloud Storage for archival purposes.

If the data is live, it is likely that the only option is migration.

What else can users do to prepare?

Delete unused data, reduce overall storage, remove code repositories and high-volume folder structures.

The logo for 66 degrees, featuring the number '66' in a stylized, bold font followed by the word 'degrees' in a lowercase, sans-serif font. A vertical line is positioned to the right of the logo.

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