Intentional Migration

7 Best Practices for a Successful Enterprise File Migration

Analyzing & Planning the Route Through Troubled Waters

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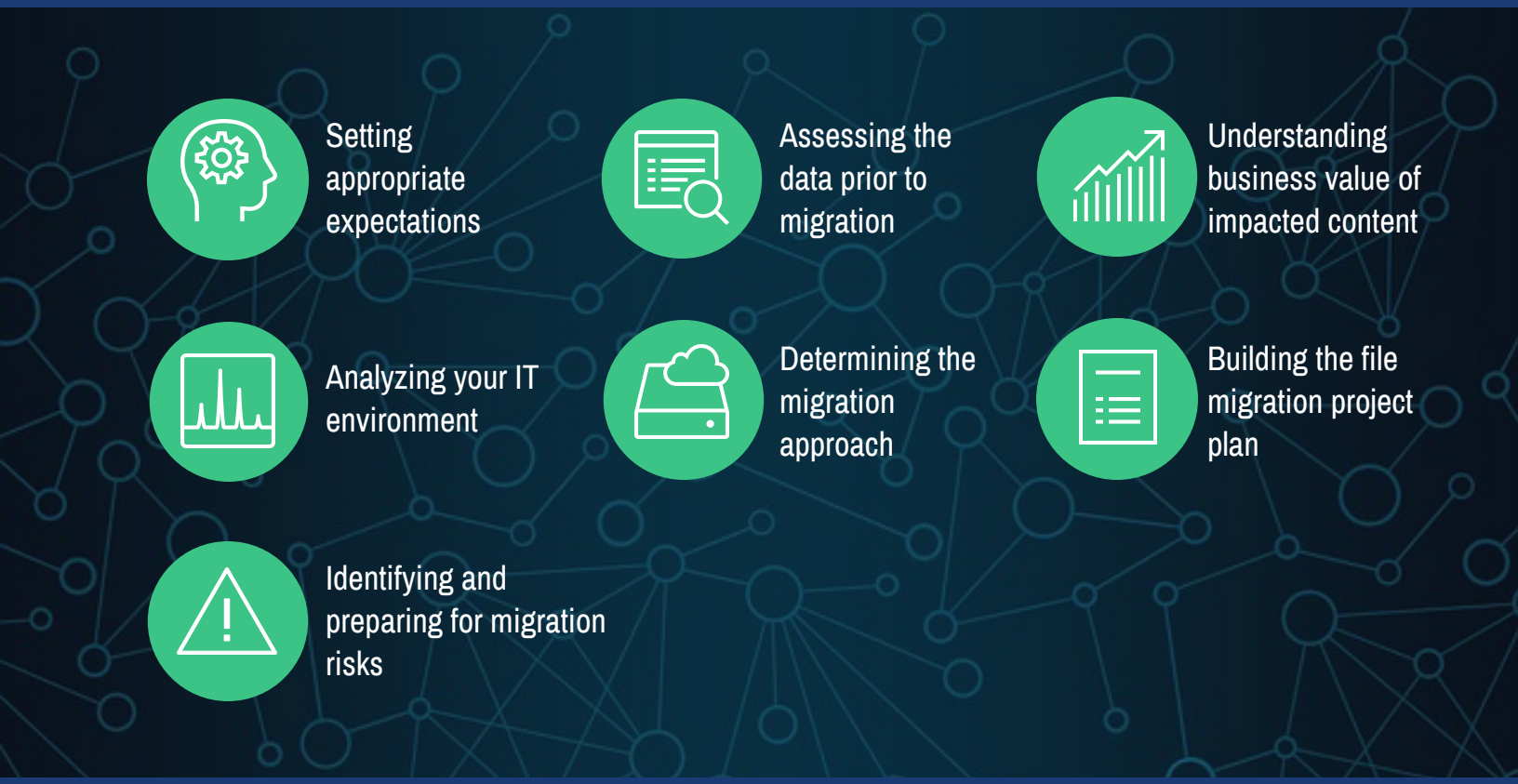
7 Steps to Migration Success

As organizations consider migrating content to cloud sharing services, it is important to understand that there are many business and technical considerations that can affect the quality and the duration of the migration. In our experience completing incredibly complex file migrations for some of the world's largest enterprises, our team has discovered seven best practices that organizations of any size should employ for a successful project.



We'll take a deep dive into each of these seven steps to success so that you're armed with the knowledge as you prepare for a disruption-free enterprise file migration.

Step 1: Setting appropriate expectations

An intentional migration begins with the establishment of goals and expected outcomes for the project. This first step will guide the entire project plan, enabling organizations to identify the potential hurdles that must be overcome along the way. As part of this process, there are several questions that organizations must ask themselves:

- How will users be impacted? What is our change management plan and how can we mitigate disruption?
- Which aspects of our data must be preserved in the move? Ownership, permissions, folder hierarchy, etc.
- And, most importantly, how long will the migration take, and how much will it cost?

In addition to the top level questions, there are further technical considerations - particularly regarding throughput - that must be acknowledged at the outset of the project, as they can greatly impact the duration and cost of the migration.

The Corpus Profile

The corpus refers to the data set to be migrated. Keep in mind that more, smaller files will always take longer than fewer, larger files.

Rate Limiting

Occasionally, the source platform will implement rate limiting when resources are limited and significant throttling must occur to keep the environment responsive for all tenants. This could impact the rate that files are accepted by the source platform, ultimately slowing down the project.

Database Performance

Migration is highly transactional, so you need a strong input/output subsystem in your database.

Network Performance

Legacy document retrieval, external binary storage and uploading to Azure/Office365 are all affected by network performance. Cloud-to-cloud migrations are almost always much faster than on-prem to cloud, for instance.

Step 2: Assessing the data

Data assessment can feel overwhelming, usually because organizations have so much of it. But this process can be separated into more manageable pieces. Start by gathering your metrics and then analyze your corpus profile.

Gather

- total storage size for all content
- a total number of files
- average versions count
- average file size
- record-only (list) data row count

Discover

- embedded links
- permissions, sharing and other collaboration details
- records management policies
- content-disposition policies

Analyze

- content by business unit
- existing file and folder taxonomy
- topology breakdown

Step 3: Understand business value

Data can fall into different categories based upon how it's used within a business. Knowing the business value of the content involved in the migration ultimately enables you to prioritize and figure out which files truly need to be moved, which can be archived, and which should be purged entirely, resulting in a more cost-effective and efficient migration process.

Collaboration Data

- SharePoint Team Site / Document Libraries
- business unit file shares
- legacy platform business unit storage
- group-level collaboration / declared records

User Data

- MySites
- OneDrive for Business,
- “U” drives
- individual cloud storage accounts
- personal or temporary collaboration

Transaction Data

- often integrated with a business process or automation
- often long-term archive / rarely accessed content

Step 4: Analyzing the IT environment

Knowing the limitations of your business's IT environment is essential when planning your migration. Migration expectations are highly dependent on the business's technical capabilities. For example, lower bandwidth allocation will result in a slower migration. Here are some things to check for within your particular IT environment:

Source & Destination Platforms

Disk input/output limitations, API limitations or rate limiting practices, network/internet bandwidth, or server/service resources available (affecting end users)

Migration Resources

Network/internet bandwidth, scalable machine resources, SQL Disk input/output, processing server CPU & RAM

Elasticity

Overall ability to scale up/down resources based on the migration project phase

Step 5: Determining the Migration Approach

There are two common ways to approach a migration: "Grouped Waves" or Phases, and "Big Bang." The Grouped Waves approach is a means of dividing up one large migration into smaller, manageable migrations. This approach may make sense depending on whether a business is unable to dedicate a large chunk of time to the migration. A Big Bang migration approach is a strategy that businesses use to do a migration all at one time. This may include shutting down operations for a period of time, but sometimes the investment in time to do the migration more quickly makes sense.

One more thing to remember is that the features and functionality of your selected migration tool can make a world of difference here. An integral component for a disruption-free migration is "continuous copy" one-way synchronization of the source and destination platforms, to copy the delta in near-real time. This can have a significant impact on the migration approach as well as cut-over time and any required change management communication.

Next, we'll break down the pros and cons of each of the above migration approaches.

The Grouped Waves Approach

Pros

- Easier change management for smaller groups
- Works well when business units operate in isolated collaboration
- Reduced impact on IT resources during cut-over

Cons

- Can have a significant impact on collaboration across business units
- More phases require more spin up/down of operations, resulting in higher costs
- Slower cutover process can lead to increased cost while operating on two platforms

The Big Bang Approach

Pros

- Much smoother cut-over when collaboration is high (allows the entire organization to operate on a single platform at all times)
- A single-phase requires just a single spin-up/spin-down operation, resulting in lower migration cost
- Much faster overall cut-over process can lead to a reduced cost because the old platform is decommissioned quickly

Cons

- Change management happens for the entire organization at once
- Can result in a significant impact on IT resources during cut-over
- Can also require significant hardware resources to process rapid cut-over of large data volume

Step 6: Build the migration plan

The migration plan defines all of the processes, timing, resources, and technical configuration necessary to execute the migration. At a minimum, it should include:

- The migration approach and wave/phase order if necessary
- Testing and turning processes
- Execution management processes
- Exception remediation plan
- Change management plan
- Project timeline & milestones for all of the above

Step 7: Identify the risks

Even the best laid plans often go awry. It's important to understand that all large-scale enterprise migration projects come with risk. But there are a few things that you can keep an eye out for to ensure that you've got options when you do encounter any hurdles. Here are some of the most common hangups we see once a migration gets underway:

- Collaboration interruption (particularly when using a phased/wave approach)
- Failure to minimize cut-over duration
- Conflicts with externally shared content
- Automated processing dependencies
- Communication and acceptance criteria
- Defining success with “Am I done yet?” when content is constantly changing

Migrations are most effective when customized to an organization's particular needs, expectations, and limitations. By planning ahead and implementing these seven best practices, many common migration issues can be simply avoided.

Ready to get started?

SkySync is an enterprise content integration and orchestration platform that empowers organizations with enhanced business and IT agility—rapidly migrating files across your network of storage repositories at incredible speed and scale.

The platform enables organizations to intelligently analyze, move, copy, or synchronize content across all existing systems—no matter where it resides.

Contact us today to discuss your upcoming enterprise content migration.

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