

# Four Steps to Migrate Your Organization to Office 365

Every day, organizations are making the decision to migrate to Office 365. This is done for a host of reasons, including being on the latest and greatest platform, to get superior functionality, cost savings, or being in the cloud. No matter the reason for moving to Office 365, the IT group must migrate to Office 365 in the quickest and most cost-efficient way, with minimal downtime to the business.

There is really no way around it; migrating to Office 365 is hard. The challenges posed are many, specifically in the areas of planning, user and data migration, email and SharePoint.

Some issues that can come up when moving to Office 365 software include potential loss of functionality, redundancy, security, archiving, total costs, licensing and authentication.

## Common Migration Problems

### Planning and Preparation

Without proper planning and testing, migrating to Office 365 can be a lengthy and costly process. Every organization has something that can create a problem during a migration. It is important to ask these questions:

- Is only data that is actually used being moved?
- How is the data being used and by whom?
- What access, roles, and permissions are needed?
- What is the backup strategy?
- How much downtime (if any) is the business willing to tolerate during the migration?
- Can the migration be done from the current version, or do interim upgrades need to be done first? Microsoft has specific system requirements for Office 365 that will require many organizations to update desktop software.
- What is the current licensing? Licensing moves from two licenses (for clients and servers) to one user subscription license for Office 365.

Usage and space should be monitored to save time and money migrating data that's not being used. Also, if the data being migrated is disorganized, it will still be disorganized after it is moved. It pays to take the time to organize the data (if necessary) before moving it.

The costs and potential savings are significant. Office 365 often ends up being less expensive because it allows retiring assets, managing costs and data-center space savings.

Before migrating user accounts, correct any existing Active Directory issues. Office 365 extends the Active Directory user store to the cloud via federation. Microsoft and third parties have federation tools that can set up a hybrid identity management environment.

## Email

Email migration includes moving mailboxes, contacts, calendars, and archives. Firewall and proxy configurations, security settings, and migration server problems can make mail migration extremely slow. Email archives in particular can be problematic. Moving a mailbox to the cloud can break the connection that allows users to access archived emails.

Hybrid solutions allow existing archives to stay where they are. This can be done as a temporary move while the business moves to the service; a hybrid architecture also addresses business continuity. Unfortunately hybrid deployments involving a mix of on-premises Exchange servers and Office 365 can also be the most challenging. Some organizations have found it difficult to get email archives out of their existing archiving product.

## SharePoint

SharePoint migration includes moving site collections, lists, libraries, workflows, permissions, documents, metadata, and version history. Searching in SharePoint is adversely affected if metadata is not moved correctly. Business content must be migrated into SharePoint without losing context or metadata.

SharePoint has a number of boundaries and limits for a variety of different structural elements. Approaching or surpassing these limits can seriously impact the success of your migration. Items known to cause issues during a SharePoint migration include:

- Large site collections – be sure to analyze the number and size of content databases
- Checked-out files - migrating a checked out file without the latest changes results in frustrated users
- Many large files – large files can be slow to migrate

## The Limits of Out-of-the-Box Tools

It is possible to use SharePoint as an out-of-the-box tool to migrate to Office 365.

### Copying Files with Explorer

Files in a library can be viewed, copied, and moved using the [Open with Explorer](#) command in SharePoint Online. Using this command displays the folder structure on the server computer hosting the site. The files in the folder can then be dragged into libraries or between site collections. Multiple documents can also be deleted at once.

Any SharePoint documents that use versioning will not be visible using this option – only the most recent version of the document will be available.

Errors received while attempting to open libraries may require installing a hotfix, authenticating to Office 365, adding SharePoint sites to trusted sites, or troubleshooting the WebClient service.

## Exporting Files

SharePoint Central Administration website or Windows PowerShell can be used to export a site, list, or document library in SharePoint 2013. The existing environment and backup schedule requirements determine [which tool to use](#).

Limitations of this method:

- Only one site, list, or document library can be exported at a time.
- SQL Server tools or Data Protection Manager cannot be used to export a site, list or document library.

### *Using PowerShell*

Administrator privileges are needed to export from the SharePoint management shell. If a large site, list, or document library is being exported, a parameter can be used to mark the site collection as deleted. This prevents any further access to its content. The data in the deleted site collection is then deleted gradually over time by a timer job instead of at once. It is also possible to specify whether file compression is done during the export process.

### *Using SharePoint Central Administration*

Exporting using SharePoint Central Administration requires a user account that is a member of the Farm Administrators group. This option allows export of all versions, last major version, the current version, or the last major and last minor version of the list or library.

## Four Steps To Office 365 Migration

While it is possible to do an Office 365 migration using out-of-the-box tools, that is not the easiest way. Below, we will look at the four steps to Office 365 migration, and how Metalogix tools can be used to simplify the process. These tools are:

- Migration Expert – for Preparation
- Content Matrix Email Edition – for email migration
- Drive2Office365 – for file migration
- Content Matrix – for SharePoint migration

Each of these tools is available as part of the [Cloud Acceleration Suite for Office 365](#).

## Preparation

Nothing makes a migration longer or more costly than finding and fixing issues in the middle of the migration. Since large site collections, checked-out files, and many large files are all known to cause issues during a SharePoint migration, it is best to uncover these issues before the migration starts.

Metalogix Migration Expert provides insight into your existing SharePoint farm, uncovering issues that could halt a migration. Migration Expert has an easy-to-use interface and simple reporting options. [Migration Expert](#) is free to download and simple to use.

Metalogix Migration Expert can help:

- Analyze your content databases - having too many in the farm or having any that are too large are potentially problematic during the migration and within the new farm. Migration Expert can provide insight if this will be a problem in the migration.
- Find checked-out and large files - large files can be slow to migrate. Migrating a checked-out file without the latest changes is frustrating to users. Migration Expert can search for both of these exceptions.
- Identify rarely modified sites - rarely modified SharePoint sites usually have content that is no longer used and should be dropped, or have reference content. Use Migration Expert to identify these sites and then consult the business users whether these sites are used for reference or unused.

## Email Migration

[Metalogix Content Matrix Email Edition](#) (formerly Email Migrator for Office 365) is a powerful, feature-rich email migration solution for organizations moving Exchange to Office 365.

Many factors should be considered before moving business critical email data to the cloud. The complexity of such a migration can be both lengthy and costly. Careful management is needed to migrate email content, especially if zero downtime is a requirement. Content Matrix Email Edition makes the move to the cloud as smooth and effortless as possible.

Content Matrix Email Edition does not require any software or agents to be installed on the target or source Microsoft Exchange servers. Content Matrix Email Edition maintains total platform co-existence and complete end user transparency.

Content Matrix Email Edition is easy to install and configure. It connects directly to the existing email platform. The entire migration process can be managed through the unified source and target interface. The migration is transparent to end-users, as email is migrated and new cloud mailboxes are provisioned on the fly. This is a positive migration experience for both end users accessing their mailboxes and administrators migrating large volumes of mail.

Content Matrix Email Edition migrates all Exchange content from the source environment, including calendar and mailbox information. It reduces the complexity of standard email migration procedures and improves speed and fidelity using Fast Transfer Stream technology. Email is copied straight from the source and written directly into MS Exchange in Office 365. Administrators can apply granular filters to each user and manage both existing and new Exchange environments in real time. An advanced tool set provides comprehensive reporting and job statistics.

The process of working through staged migrations is greatly simplified by Content Matrix Email Edition. It maintains a true hybrid Exchange Server deployment, and allows search and discovery across the on-

premises and Office 365 environments. The migration engine that connects directly to O365 using Fast Stream and the Exchange Web Services (EWS) API carries out the whole move.

Direct one-hop migrations from Exchange can also be done by Content Matrix Email Edition. It provides the option to migrate directly into the in-place archive mailbox in Exchange 2013. This is useful for organizations that need to keep archived emails separately in the cloud. Emails are filtered by age, size and message class during the pre-migration phase. This helps decrease storage requirements and improve performance in the cloud.

Content Matrix Email Edition offers the following advantages:

- Nothing is installed on the source (zero footprint)
- High-speed migrations can be carried out (even in larger environments) by connecting source and target directly (fully scalable).
- Unlimited Incremental migrations - jobs can be stopped and restarted, and email will not be migrated twice.
- Accurate calendar scheduling is maintained as directories are synchronized and free/busy lookups between Exchange and Office 365 are provided.
- Live reporting - react to any issues in real time
- Groups, mailboxes, calendars and public folders are synchronized automatically
- Apply policies to emails based on age, size and message class
- Ensure an accurate migration as folders are fully migrated and structure is maintained.
- Easy-to-use help contextual help is provided
- Administrator Interface provides a comprehensive dual view of the complete migration
- Multiple, high-speed migrations can be carried out in parallel due to multi-threading technology

## File Migration

[Drive2Office365](#), available as a free download from the Office Store, allows users to easily move files to SharePoint Online (Office 365) from their personal OneDrive, Google Drive or Box accounts.

Consolidating business content stored in disparate personal cloud storage services allows organizations to accelerate and complete Office 365 deployments.

Drive2Office365 can be added directly into the Ribbon User interface of SharePoint Online. From within SharePoint Online, users can then connect to their Google Drive, Box or personal OneDrive accounts, selecting the relevant files, and migrating with one click. Drive2Office365 can be deployed instantly to thousands of users, allowing them to move content into Office 365 without sharing personal login information.

## SharePoint

[Content Matrix](#) is a single product for migrating to both the Cloud or SharePoint on-premises. It is the easiest and most reliable way to move some or all of your content to Office 365 or other SharePoint

Cloud providers. It is the only MSO-CAF certified SharePoint migration tool for migrating to Office 365 Dedicated that is pre-approved by Microsoft.

SharePoint is mission-critical and users demand availability. Content Matrix allows migration of SharePoint by site collection, site, list, library, business unit, or department with zero downtime. Run old and new farms in parallel and test and re-arrange as often needed. Content Matrix allows unlimited testing, reorganization and management of SharePoint sites and content.

### *Ease of Use*

Content Matrix is easy to download, install, learn, and use. It connects directly to SharePoint and source systems either without server-side components.

Content Matrix gives you the power to analyze and compare your SharePoint sites. Search your sites to discover what content you have or compare two sites to check if new content has been added to your existing farm while you build your new farm in parallel. Content Matrix also includes some advanced migration capabilities such as support for migrating and mapping term stores and the ability to choose how many versions of a file is migrated.

Content Matrix does not require an empty site collection or document library to exist before the migration. Instead, these items can be created and configured during the migration, consolidating the process into a single operation. If the site collections being moved are too big, or a site should be a site collection, the current farm can be reorganized prior to migration. This simplifies and accelerates the SharePoint migration.

Based on the migration scope (farm, site, database, etc.), Content Matrix allows easy connection to SharePoint. This connection is the starting point for *all* migrations. Each site does not have to be individually connected or configured. Microsoft's API can be used to connect directly to a SharePoint 2013 on-premises farm or SharePoint Online site collection.

### *Migration Capabilities*

Content Matrix offers many capabilities to make SharePoint migration easier:

- Migrate directly to Office 365 from SharePoint 2007 or SharePoint 2010 without intermediate SharePoint versions or an on-premises staging farm.
- When SharePoint business content is migrated, it must be moved without losing context or metadata, and including permissions and information structure. Content Matrix connects and moves terabytes of content from file shares, websites, blogs and wikis, Exchange Public Folders, PST files and eRoom content.
- Easy selection of all the different elements for a migration. Depending on which migration elements are selected, there are multiple migration options that provide flexibility and granularity of control. It is possible to keep the current SharePoint running during migration by

adding only new content or changed items. This provides the flexibility to run large migrations over a weekend while running smaller, incremental migrations overnight.

- Discrete SharePoint elements (such as permissions and content types) can be migrated or copied without their associated documents or list items without having to do it manually in SharePoint.
- Improve SharePoint search results by Improving metadata. Content Matrix can add, organize, and edit metadata based on content location and other properties. This can be done during and after migration, and helps ensure users easily find needed content on the first search.
- Lists often exceed the limits Microsoft has set for the number of list items. Content Matrix allows the selection of items using multi-select from the List Items view or using filtering to migrate.
- Migration tasks are reusable in Content Matrix – previous tasks from job lists can be reused (with any necessary adjustments to the settings).
- Only a few mouse clicks are needed to select files, choose a destination, and configure options for migration into SharePoint. File shares can easily be migrated as new SharePoint sites or document libraries, with the file permissions mapped to SharePoint's permissions. Filtering options allow selection of only the files that need to be migrated.
- The user interface makes it easy to analyze and edit all the metadata associated with the files, including Microsoft Office metadata. Metadata can be exported to a spreadsheet, which enables content owners to help identify current files. To simplify the migration, additional metadata can be appended in the spreadsheet for importing back. Filters can also be applied to file metadata to select the files to migrate based on modified date or custom metadata added by content owners.
- To reduce SQL storage costs and speed the migration, Content Matrix can be used with Metalogix StoragePoint to transparently offload the majority of data associated with a file to cheaper storage. This can be done without impacting the user experience.

### *Post Migration*

Content Matrix and Content Matrix Migration Express provide all the post-migration capabilities needed to keep SharePoint maintained going forward. The Content Matrix Organizer feature facilitates ongoing management of SharePoint sites, content and metadata as business needs evolve.

## **Summary**

Migrating to Office 365 is a difficult task even for the most seasoned IT staff. SharePoint offers some tools, but they require a lot of configuration, testing, and manual intervention. Metalogix tools can help ease the burden on an already overburdened IT staff.

- Use **Metalogix Migration Expert** to prepare for the migration. Use it to analyze your content databases, find checked-out and large files that can be slow to migrate. Use it to identify rarely modified or used sites and sites used for reference only.
- Use **Metalogix Content Matrix Email Edition** to make the move to the cloud as smooth and effortless as possible. Managing the entire migration process can be managed through the unified source and target interface makes the migration transparent to end-users.
- Use **Metalogix Drive2Office365** to easily move files to SharePoint Online (Office 365) from their personal OneDrive, Google Drive or Box accounts. Consolidating business content stored in disparate personal cloud storage services allows organizations to accelerate and complete Office 365 deployments.
- Use Metalogix Content Matrix as the easiest and most reliable way to move some or all of your content to Office 365. Content Matrix allows migration of SharePoint by site collection, site, list, library, business unit, or department with zero downtime. Run old and new farms in parallel and test and re-arrange as often needed. Content Matrix allows unlimited testing, reorganization and management of SharePoint sites and content.

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