

Office 365 Migration Guide: Approaches, Techniques and Challenges

With the release of Office 365, Microsoft has cemented its place as a provider of cloud-based services. Many organizations are considering a move to Office 365; it promises all of the key features and benefits of Exchange Server, Lync Server, and SharePoint Server, but without any of the overhead, hassle, or maintenance. Because Outlook will probably continue to be the main email client for your users, they will remain in a familiar application environment. All that's changing, after all, is where the email is kept.

Once your organization has conducted your Office 365 pilot and decided to proceed, you will likely run into a big roadblock: *How will you actually migrate your users?*

Anyone who has conducted an email migration knows how painful it can be. For most organizations, email is *the* mission-critical application. Users notice immediately if it isn't available, and email downtime has a massive, negative impact on productivity. There's a significant risk of data loss in a migration, too, which is obviously something you'll want to avoid.

This guide discusses the key considerations and decisions in a migration to Office 365, including what to look for when choosing migration tools.

1. Choose a Migration Approach

One common thing you'll notice about Office 365 migration tools is that they're cloud-based solutions. That means you'll have no software to install, no scripts to write, and no maintenance to perform. Pricing for these solutions is generally per-mailbox, meaning you'll simply pay for each mailbox that you migrate – without any ongoing fees.

Compared to the on-premises solutions that were used in the past to migrate between different on-premises email solutions, this cloud-based approach is great: When the migration is over, there won't be any software to uninstall, there won't be any maintenance contracts to maintain, and there won't be any ongoing licensing to worry about.

However, because your user and mailbox data will necessarily be traveling through the public Internet to its new home, you'll want to ensure that your migration solution has strong security support.

This should include strong encryption capabilities, as well as detailed logging that lets you review exactly what happens during each step of the migration.

Depending on the size of your organization, you'll take one of two general approaches to your migration:

- All-at-once migration Smaller organizations can often get away with an all-at-once migration, perhaps moving all of their users to Office 365 overnight or over a weekend maintenance period.
- Staged migration Larger organizations may prefer a staged migration in which both their internal legacy email system and Office 365 coexist for a period of time. With staged migrations, users' mailboxes are moved in blocks or phases.

The staged approach obviously involves more work, making the all-atonce approach more attractive if you can pull it off.

2. Decide Who Will Run the Migration

You'll need to decide how you want to manage your mailbox migration. The best migration tools out there offer two approaches: administrator-run or self-service.

- Administrator-run The administrator-run model is probably the most familiar; your own IT team coordinates and manages the migration. The nice part about this model is that your users have nothing to worry about: They leave work one day, and show up the next, and their email still works but it's been moved to the cloud. On the other hand, administrator-managed migrations can be difficult in highly-distributed environments where users are widely scattered and where coordinating everyone's activities and expectations can be complicated.
- Self-service In a self-service model, your IT team sets up the
 parameters of the migration, but lets users actually migrate their
 own mailboxes on their own. The migration tool must explicitly
 support this model by providing an appropriate self-service, Webbased user interface. Essentially, an administrator "nominates" email
 addresses for migration, and the migration system invites those
 users to begin their migration. Users simply need to complete their

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migration by using their email address and password. Administrators can monitor the progress of the migration through a status page, enabling them to send reminders to users who might fall behind.

Conceivably, you could also adopt a hybrid model, where administrators handle the bulk of your migration and offer self-service to outlying users. Or you might offer self-migration to the bulk of your users, and rely on an administrator-managed cleanup of any mailboxes left after a certain period of time.

Bear in mind that the administrator-run model tends to offer the most flexibility. For example, migration features such as data filtering might not be available for self-service migrations, simply because the nature of a self-service interface is to remain as simple and straightforward as possible.

3. Understand Key Features of Migration Solutions

Actually performing the migration will require the use of tools. Microsoft provides a basic migration assistant as part of the Office 365 suite. There are also third-party migration tools that provide extended functionality and capabilities. While most solutions offer very similar approaches, they do differ in the fine details; in particular, be sure to consider the following:

- Platform support Make sure the migration tool you choose supports the platform you're coming from, as well as supporting Office 365 as a target. Migration tools commonly support various versions of Exchange Server and may also support Gmail and other Web-based platforms.
- Performance Particularly if you choose an administratormanaged migration, your solution should support a high degree of concurrency. This enables multiple mailboxes (potentially thousands of them) to be migrated at once, which is crucial to fitting bulk migrations into today's tiny maintenance windows.
- Data filtering Office 365 mailboxes have a maximum size. If you've been lenient with your users in the past, then their mailboxes may exceed that size. One way to reduce the amount of data that needs to be migrated and thus reduce destination mailbox size is to intelligently filter the data during the migration. For example, you might set an age limit for Calendar events, exclude source email folders by name, and so forth. Outlook personal folders (PST files) don't present a problem, since your users will be able to continue using those as-is from within Outlook.
- De-duplication A benefit of Exchange Server and many other on-premises email servers is their support for single-instance

storage. When multiple recipients receive the same message, the server can store a single copy per mailbox server, reducing storage requirements. During a migration, however, it's very easy for those single-instance messages to be "expanded" into one copy per recipient, which wastes space. This can happen most easily during a phased migration, when any given message may be migrated in multiple phases. A good migration solution will include deduplication capabilities, ensuring single-instance storage even throughout a phased migration.

- Detailed logging You hope it never happens, but errors and problems are always a possibility during any migration. Detailed, real-time logging keeps administrators informed, enabling them to react to failures and problems with minimal end-user impact.
- Passwords A migration solution should not require administrators
 to know, change, or reset users' passwords in order to migrate their
 mailboxes. Instead, the solution should be able to use designated
 administrator or service account credentials to access mailboxes on
 behalf of users.
- Folder migration and mapping Mailboxes consist of numerous folders and item types: mail messages, contacts, Calendar events, and so forth. User-created folders are often present as well.
 Migration solutions should assist you with remapping and migrating these folders as necessary.
- Non-migrated items Be sure that you're aware of any item types
 that may not be migrated by a migration tool. For example, some
 tools may not migrate items that are of a different type than their
 containing folder say, a Contact item in a Calendar folder. Be sure
 that any item types used by your user population are supported by
 the tool you'll use.

4. Consider Coexistence

Directory synchronization is a key part of an Office 365 migration, and it is provided by a Microsoft directory synchronization tool. Note that this tool is one-way: it provides synchronization *from* your local Active Directory to the cloud, but not the reverse. That means your user provisioning should be done locally until your migration is complete.

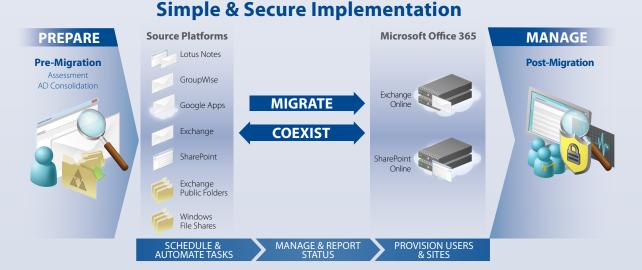
Email routing can be complex during phased migrations, because some users are in the Office 365 cloud and others are on your legacy system. Be sure that you've reviewed Microsoft's guidance on this subject prior to beginning a migration, and note that migration tools don't typically handle this for you. Similar considerations apply to the sharing of free/busy calendar information and other information-sharing activities between the two systems.

Migrations Require Careful Attention. So Does Selecting a Migration Tool.

Selecting a migration solution to assist with your Office 365 migration is fairly straightforward, but remember that the solutions out there – including Microsoft's own – differ in several fine details. Be sure you've thoroughly reviewed each potential vendor's offerings, perhaps taking advantage of trials and pay-as-you-go models to perform a pilot migration, so that you can see exactly how each potential solution works. The information in this paper will enable you to create a checklist or comparison chart that lets you objectively determine which solution will best meet your specific needs.

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When it comes to migration, Quest is a leader—it has successfully migrated more than 30 million global users to Microsoft® technologies. With Quest solutions for Office 365, you can perform pre-migration assessments to determine transition requirements and ensure coexistence to maintain business productivity. Your Office 365 migration will be safe, secure and on time—without breaking the budget.



OnDemand Migration for Email

Migrates email, contacts and calendar data from Google Gmail, BPOS, on-premise Exchange, or Live@edu to Microsoft's Office365 environment.

Migration Manager for Exchange

Migrates email, contacts and calendar data from on-premises Exchange to Office 365. Provides advanced features and functionality for any enterprise migration.

Notes Migrator for Exchange

Migrates from Lotus Notes to Office 365. Converts users' mail, calendars, tasks and personal address books, and stores them in the users' new Exchange mailboxes, either on-premises or in Office 365 environments.

GroupWise Migrator for Exchange

Migrates GroupWise email, calendars, tasks, personal address books, frequent contacts and archives to on-premises Exchange or Office 365.

To learn more about Quest's Office 365 migration solutions, visit www.quest.com/Office365.

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