

## Data Ingestion into Office 365

Data ingestion sounds like something you need to go to the doctor for because over the counter stuff just isn't helping enough. The fact is that while some start-up greenfield business cases may allow for the creation of brand spanking new mailboxes in the cloud, most folks are going to be migrating from something else. How you do that migration will depend on how many mailboxes you have to migrate and what kind of solution will work best for you. You may also have a legacy archive solution on-premises that you are looking to migrate either over to Office 365 or to some other cloud-based archive solution. All of this is part of the "conversation" around Office 365 so it would be good for you to grasp the concepts.

For starters you need to consider the type of migration you'll need to make and how you would like to accomplish the goal. For some, the built in tools from Microsoft may be your approach. For others, a third-party solution like CodeTwo would make your migration easier.

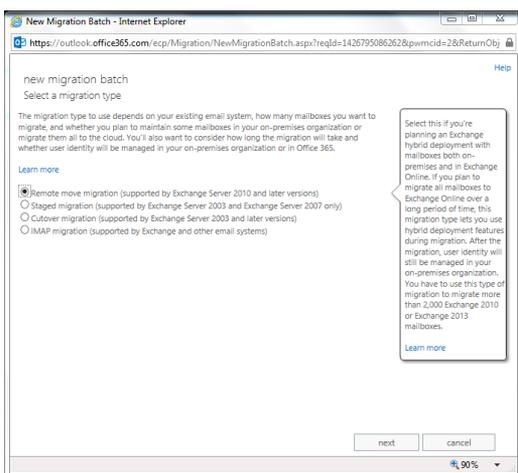
To begin making decisions on what you'll need/want to do first look at which platform of Exchange (or alternative on-premises email solution) you're using. Then consider the number of mailboxes you wish to move to the cloud and the amount of data typically per mailbox (easy to work with if you have been using quotas). Decide if you wish to move all mailboxes to Office 365 or wish to maintain an on-premises/cloud hybrid mixture.

If you have an Office 365 portal, look into the Exchange Admin Center for your organization and explore the Migration tab (under the Recipients feature). Options include:

- Remote move migration (supported by Exchange Server 2010 and later versions). This requires a hybrid

configuration between your on-premises Exchange and Office 365.

- Staged migration (supported only by Exchange Server 2003 and 2007).
- Cutover migration (supported by Exchange Server 2003 and later versions). Use of this option is permitted only if you have fewer than 2,000 mailboxes. If you have more than 2,000 mailboxes, you must use either staged migration (on Exchange 2003 and 2007) or remote migration (on Exchange 2010 and 2013). Note: It's not just about the number of mailboxes, but also the size of those mailboxes. Cutover must be done all at once, so it may not be your best choice depending on your business.
- IMAP migration (supported by both Exchange and other email systems) for those of you folks looking to migrate from Google and so on. (Only capable of migrating email, not contacts, calendar items and tasks).



## Built-in Migration Options

## Hybrid On-Premise/Office 365

Some call it the best of both worlds. The organization can keep mailboxes in-house that are of a more sensitive nature while allowing Office 365 to handle non-critical mailboxes (like temporary workers perhaps). Or they can use the archive features of Office 365 combined with on-premises mailboxes.

The hybrid deployment option provides a variety of features, including:

- a shared domain space (such as companyname.com)
- a unified global address list (GAL)
- free/busy calendar sharing
- onboarding and offboarding at will between the two platforms (note that bandwidth and throttling affect the speed of these processes)
- centralized mailbox management through a single console (the Exchange Admin Center from on-premises Exchange 2013).

It's not necessarily an easy process to setup and configure the hybrid environment. It starts with dropping in an Exchange 2013 system into your environment (which will not be possible if you have an Exchange 2003 server in your mix, you'll need to upgrade off of 2003). Once the 2013 system is in play you can run the Hybrid Configuration Wizard (HCW) from it. BUT... there are prerequisites you need to consider and handle first.



You can make a hybrid configuration work with Exchange 2010 SP3, but Microsoft details the process with a 2013 server, which provides for the smoother experience.

The prerequisites for setting up a hybrid environment vary, but include Active Directory synchronization through the Azure Active Directory Sync tool. This prerequisite helps keep your on-premises Active Directory and your Office 365 directory in sync. And although it's not a requirement for hybrid deployments, you might want to setup single sign-on (SSO) so that users can access on-premises and online features with the same username and password.

Note: Both the Active Directory sync and SSO services should be deployed before running the hybrid configuration wizard.



One of the best step-by-step discussions on setting up a hybrid configuration can be found on [msexchange.org](http://msexchange.org) and is written by Henrik Walther

<http://tinyurl.com/c9ayqp4>

Within a hybrid configuration you use AD synchronization to replicate mail-enabled user account AD information from on-premises up to your O365 organization. This ensures a unified global address list (GAL). Note: You need a separate server on-premises to install AD synchronization.

When you run the HCW you'll need to determine mail flow. You have to determine if you want mail to flow through Exchange Online Protection (EOP) for Office 365 security scrubbing, down into your on-premises environment... or flow through on-premises and up to Office 365 (aka centralized mail transport). You must also determine if that flow includes an Edge Transport server or if you want secure mail transport to go through your Client Access/Mailbox servers (which is the typical configuration).

When you make the connection for a hybrid configuration and move mailboxes, you'll be using Exchange Web Services (EWS) and an RPC over HTTPS connection. EWS has limitations if used

directly, but third party companies have worked out ways to perform multiple connections and increase performance.

How fast can you make all of this happen? Well, the Exchange Web Services (EWS) has a throttled limitation for data ingestion so if you have 20TB, 100TB, etc... of data you are going to have a bit of a hard time getting it all moved over fast. Keep in mind, you're in a multi-tenant situation with Exchange Online through O365. In other words, you are sharing space with other companies on that server, so Microsoft has to throttle each company to ensure no one company gets all the processing power.



Whether I'm going all-in with Office 365, going Hybrid, or even sticking with an on-prem deploying of Exchange, I like to use the Exchange Server Deployment Assistant to help me make sure I haven't forgotten anything and have a smooth deployment.

This is especially true with a Hybrid deployment. The Deployment Assistant is an awesome tool because you can select what you are looking to do, answer a few simple questions and it spits out your steps for making it happen.

## Exchange Server Deployment Assistant



The Exchange Server Deployment Assistant is the IT pro's source for Exchange deployment technical guidance. Tell us what kind of deployment you're interested in, answer a few questions about your environment, and then view Exchange deployment instructions created just for you.

<p><b>On-Premises</b> </p> <p>Install a new on-premises Exchange 2010 or 2013 deployment or upgrade your current environment to Exchange 2010 or Exchange 2013</p>	<p><b>Hybrid</b> </p> <p>Configure Exchange 2010 or Exchange 2013 to support both on-premises users and cloud users in Office 365</p>	<p><b>Cloud Only</b> </p> <p>Take your Exchange deployment completely to the cloud in Office 365</p>
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**Choose Hybrid, and then choose 2010 or 2013 Hybrid**