

Conversational Microsoft 365 Migrations

By J. Peter Bruzzese (8-time Microsoft Office 365 MVP)



**In this
book, you
will learn:**

- Microsoft 365 services that are provided through Microsoft's cloud-based solution.
- Migration methods including: data ingestion, hybrid migrations and more.
- The value of using a third-party solution like CodeTwo for a move to Microsoft 365.

6th
Edition

Sponsored by

CODETWO

Sponsored by CodeTwo

CodeTwo is a leading worldwide provider of enterprise solutions for Microsoft Exchange and Microsoft 365 that meet ISO/IEC 27001 and 27018 compliance requirements. Their applications aid group-work and email administration by streamlining tasks such as: email signature management, server migrations, mailbox backups, and control over email flow and content.

Established in 2007, CodeTwo is a Microsoft Gold Partner and two-time Microsoft Partner of the Year Award winner. Most importantly, they are a respected brand among users and experts alike; their products are currently used in over 85,000 organizations in 150+ countries around the globe.

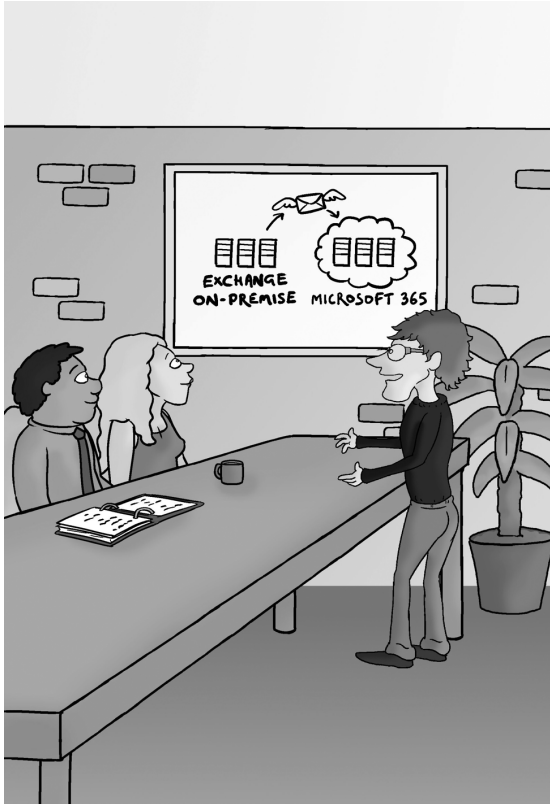


To learn more, visit
www.codetwo.com

Conversational Microsoft 365 Migrations

By J. Peter Bruzzese

© 2020 Conversational Geek



Conversational Microsoft 365 Migrations

Published by Conversational Geek® Inc.

www.conversationlgeek.com

All rights reserved. No part of this book shall be reproduced, stored in a retrieval system, or transmitted by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission from the publisher. No patent liability is assumed with respect to the use of the information contained herein. Although every precaution has been taken in the preparation of this book, the publisher and author assume no responsibility for errors or omissions. Nor is any liability assumed for damages resulting from the use of the information contained herein.

Trademarks

Conversational Geek, the Conversational Geek logo, and J. the Geek are trademarks of Conversational Geek®. All terms mentioned in this book that are known to be trademarks or service marks have been appropriately capitalized. We cannot attest to the accuracy of this information. Use of a term in this book should not be regarded as affecting the validity of any trademark or service mark.

Warning and Disclaimer

Every effort has been made to make this book as complete and as accurate as possible, but no warranty or fitness is implied. The information provided is on an “as is” basis. The author and the publisher shall have neither liability nor responsibility to any person or entity with respect to any loss or damages arising from the information contained in this book or programs accompanying it.

Additional Information

For general information on our other products and services, or how to create a custom Conversational Geek book for your business or organization, please visit our website at ConversationalGeek.com

Publisher Acknowledgments

All of the folks responsible for the creation of this guide:

Author: J. Peter Bruzzese

Project/Copy Editor: Pete Roythorne

Content Reviewer(s): Jacek Szafran

Note from the Author

I've been working with Exchange for over 20 years and I've enjoyed seeing the product evolve with each new on-premises release. I don't see Microsoft 365 as the end of Exchange, but rather the opportunity for organizations to have Exchange, SharePoint, Teams, OneDrive, and yes, even Yammer; all in one administrative console without all the stress of hardware infrastructure, installation, management, and so forth.

Maybe you've made the decision to move to Microsoft 365. Maybe that decision has been made *for* you by others within your organization or as a result of increased work-from-home requirements. No matter the catalyst, the task is before you and you have to figure out how you're going to make that happen. Are you going to move all mailboxes and data directly to Microsoft 365 in one weekend migration? Is that even possible for your organization? Or will you be setting up a 'hybrid' environment so that you can move your mailboxes over in batches? Do you have legacy data you need to worry about retaining on-premises or moving to the cloud? These are the questions you need to be asking and answering first.

Migration to Microsoft 365 isn't "easy" by any means. However, it can be made easier with proper understanding of what is provided to you by Microsoft and where you might seek assistance from outside, third-party sources. This book will help to outline terminology, concepts, and potential solutions.

J. Peter Bruzzese



The “Conversational” Method

We have two objectives when we create a “Conversational” book: First, to make sure it’s written in a conversational tone so that it’s fun and easy to read. Second, to make sure you, the reader, can immediately take what you read and include it into your own conversations (personal or business-focused) with confidence.

These books are meant to increase your understanding of the subject. Terminology, conceptual ideas, trends in the market, and even fringe subject matter are brought together to ensure you can engage your customer, team, co-worker, friend, and even the know-it-all Best Buy geek on a level playing field.

“Geek in the Mirror” Boxes

We infuse humor into our books through both cartoons and light banter from the author. When you see one of these boxes it’s the author stepping outside the dialog to speak directly to you. It might be an anecdote, it might be a personal experience or gut reaction and analysis, it might just be a sarcastic quip, but these “geek in the mirror” boxes are not to be skipped.



Greetings. They call me J. Within these boxes I can share just about anything on the subject at hand. Read 'em!

Exchange Migration: Past, Present, Future



*"Wait... did you just email me to ask how it's going?
Seriously?! I'm like... right here J!!"*

Exchange migrations from one on-premises version to another have been part of the fabric of Exchange administration for two decades. A score, if you will.

In-place upgrades from one Exchange Server to another are not possible. You cannot take an Exchange 2013 server and upgrade to 2016 or 2019. The architectural changes and internal workings between Exchange flavors are too unique. That, combined with the typical need to upgrade the aging hardware, make it so that you need to install a new server and add it to the environment, migrate services and data, and decommission the old server.

In some cases, if enough time has passed between migrations, you have to do a double-hop migration from one flavor to another, and then again. Upgrade scenarios are described as N-2, meaning you can migrate from the previous two versions back. So, 2007 can migrate to 2010 or 2013 (no further). 2010 can go to 2013 or 2016. 2013 to 2016/2019.

Some organizations continue to migrate their on-premises environment, while others have decided to move to Exchange Online with Microsoft 365. And that, too, may be problematic depending on what flavor of Exchange on- premises they're using. They may need a single or double hop on- premises migration first before being ready to make the move to the cloud.

The Clock is Ticking

Exchange 2010 hit end of support on October 13, 2020. The 10-year lifecycle is over and technical support, bug fixes, and security fixes are no longer provided. Exchange 2013 is next in line. If you happen to be on a 2010/2013 server, then you may want to start thinking about Exchange Online. But you still may want to hop to Exchange 2016 first.

Note: 2019 would require a double-hop for Exchange 2010.



Exchange Team Blog:
Exchange On-Premises Best Practices for
Migrations from 2010 to 2016

<https://bit.ly/32UEc0o>

Exchange Server 2016 entered the Extended Support phase of its product lifecycle on October 14th, 2020. Cumulative Updates have been provided and the last one will come in December 2020 (CU19). During the Extended Support phase, Microsoft will

only provide critical updates to the latest CU, once the standard three-month transition has passed. If you are currently running 2016, you need to consider your next move. Either update to the latest CU and/or move into a hybrid mode with Exchange Online. Or move to Exchange 2019.



Exchange Team Blog:
Exchange Server 2016 and the End of
Mainstream Support

<https://bit.ly/3cqGxmU>

Some are migrating or have migrated to Exchange Online, but have Exchange 2016/2019 servers on-premises for management purposes because there are issues with Exchange Online sync with Azure AD that require you to keep at least one Exchange Server on-premises. If that server is a 2016 server then you, again, want to move toward the latest CUs for support purposes, and/or move to Exchange 2019.

Recent News for Exchange 2019 and Beyond

At Microsoft Ignite 2020, the question that has been on many Exchange admins' minds for years was finally answered: will there be another on-premises Exchange version released? The answer is... yes. And unique to this version, in-place upgrades from Exchange 2019 WILL be supported for about two years post-release. In addition, you can install Exchange vNext in the same environment as Exchange 2013, 2016, or 2019.



Exchange Team Blog:
Exchange News and Announcements –
Microsoft Ignite 2020 Edition

<https://bit.ly/2S5XDgN>

The Big Takeaways

It's time to make a move.

If you are still using legacy Exchange environments (pre-2016), you need to move forward (or upward). The question is HOW? Do you work with native tools, those provided by Microsoft to get you to the latest flavor of on-premises Exchange or to the cloud? Or do you seek out third-party assistance?

If you have Exchange 2013 or 2016 servers and plan to stay on-premises, Microsoft is recommending you make the move to Exchange 2019 as soon as possible. This will put you in the perfect position to do the in-place upgrade to the subscription-based Exchange vNext going forward.

And, if you aren't looking to stay on-premises but are looking to move to the cloud, Microsoft recommends you move your servers forward to Exchange 2016 CU19 or Exchange 2019 to ensure support during and post-migration (while in hybrid).

Migrating to Microsoft 365



Have you ever moved house before? The stress of moving your belongings from one home to another, especially one that is far away (we're not just talking about an around-the-corner move, here) can be overwhelming. And if you have lived in your current residence for any length of time, it becomes even more difficult deciding what to take with you and how to make it happen.

Migrating to Microsoft 365 can have similar levels of stress attached.

The data that your company has accumulated over the years within mailboxes and public folders is now going to be shipped in some way to the far-away Microsoft 365 datacenter. How is that really going to work?

Note: You may wish to check out Microsoft FastTrack for assistance in adopting Microsoft 365. <https://bit.ly/3cqOMQ7>

Data Ingestion into Microsoft 365

Data ingestion sounds like something you need to go to the doctor for because over-the-counter stuff just isn't helping. 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 (typically Exchange on-premises, but possibly Lotus or another hosted/cloud-based solution like G Suite from Google).

How you proceed with 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 Microsoft 365 or to some other cloud-based archive solution. All of this is part of the "conversation" around Microsoft 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 you'll want to consider the number of mailboxes you wish to move to the cloud and the amount of data, typically per mailbox (easier to work with if you have been using quotas). Decide if you wish to move all

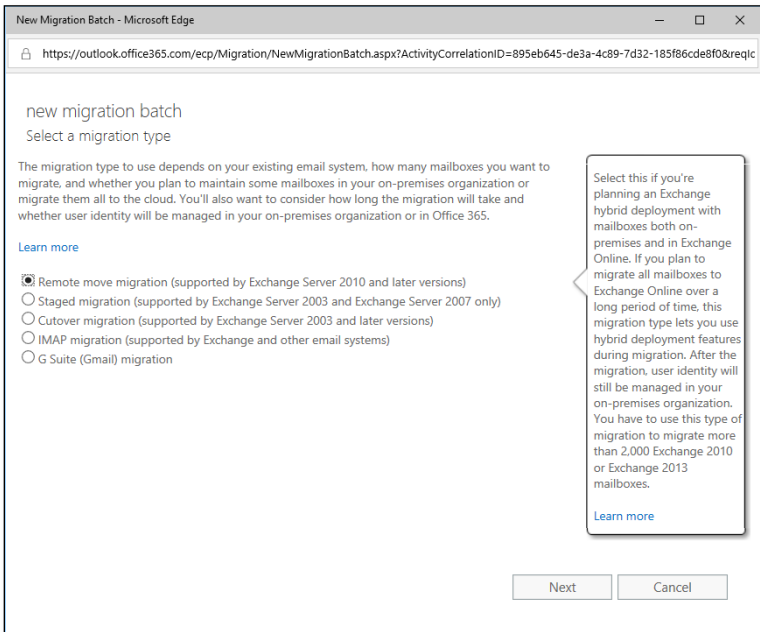
mailboxes to Microsoft 365 or wish to maintain an on-premises/cloud hybrid mixture.

If you have a Microsoft 365 portal, look into the Exchange admin center for your organization and explore the Migration tab (under the Recipients feature).



A newer version of the Exchange admin center is coming and includes a migration wizard. To see the new version, log into your M365 portal and go here:

<https://admin.exchange.microsoft.com/>



New Migration Batch - Microsoft Edge

<https://outlook.office365.com/ecp/Migration/NewMigrationBatch.aspx?ActivityCorrelationID=895eb645-de3a-4c89-7d32-185f86cde8f0&reqid>

new migration batch

Select a migration type

The migration type to use depends on your existing email system, how many mailboxes you want to migrate, and whether you plan to maintain some mailboxes in your on-premises organization or migrate them all to the cloud. You'll also want to consider how long the migration will take and whether user identity will be managed in your on-premises organization or in Office 365.

[Learn more](#)

- Remote move migration (supported by Exchange Server 2010 and later versions)
- Staged migration (supported by Exchange Server 2003 and Exchange Server 2007 only)
- Cutover migration (supported by Exchange Server 2003 and later versions)
- IMAP migration (supported by Exchange and other email systems)
- G Suite (Gmail) migration

Select this if you're planning an Exchange hybrid deployment with mailboxes both on-premises and in Exchange Online. If you plan to migrate all mailboxes to Exchange Online over a long period of time, this migration type lets you use hybrid deployment features during migration. After the migration, user identity will still be managed in your on-premises organization. You have to use this type of migration to migrate more than 2,000 Exchange 2010 or Exchange 2013 mailboxes.

[Learn more](#)

Next Cancel

Built-in Migration Options: Classic Exchange admin center

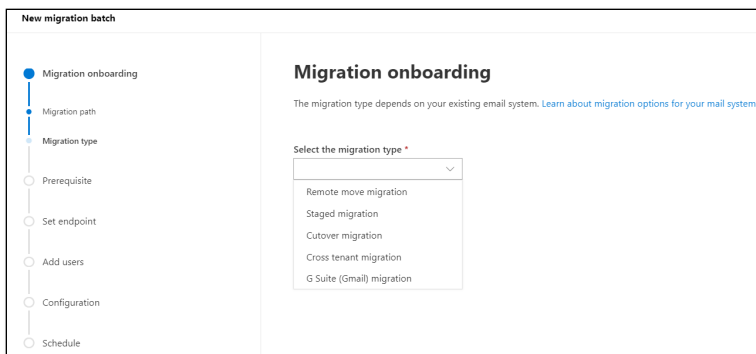
Options include:

- Remote move migration (supported by Exchange Server 2010 and later versions). This requires a hybrid configuration between your on-premises Exchange and Microsoft 365. The hybrid approach is the only Microsoft solution that offers an “exit strategy” to migrate back.
- Staged migration (supported only by Exchange Server 2003 and 2007). You can migrate batches of mailboxes until all are moved to the cloud. User identity is still managed through your on-premises organization.
- 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 or higher).

***Note:** Microsoft says, “Even though cutover migration support moving up to 2000 mailboxes, due to the length of time it takes to create and migrate 2000 users it is more reasonable to migrate 150 or less.”*

- IMAP migration (supported by both Exchange and other email systems) for those of you folks looking to migrate from Yahoo and so on. (Only capable of migrating email; not contacts, calendar items, and tasks).
- G Suite (Gmail) migration. Copy the contents of user mailboxes from a G Suite (Gmail) organization to Exchange Online. You can migrate batches until all mailboxes are migrated.

In the new wizard-based migration solution under the enhanced Exchange admin center, the options vary slightly.



You can still perform a remote move migration, a staged migration, a cutover migration and a G Suite migration (with some under-the-hood modifications that use Google’s REST APIs). But now, there is a cross tenant migration that allows you to migrate the contents of mailboxes from one Exchange Online Organization (or tenant) to another tenant.

There are some important prerequisites for the cross-tenant migration such as the use of Azure Key Vault in the target and an Organization Relationship in both the source and target tenant.

Migration Planning

Once you have an idea of where you’re at and where you’re going, choosing your migration path is somewhat easy. But going from point A to B? Not so much.

There are tools to help you perform the tasks you’re looking to perform. For example, there is a Mail Migration Advisor. To locate this tool, you can log into your Microsoft 365 admin center and click Setup. From here, you’ll see a “Data migration” section and can select the link to either “Migrate your users’ data” or “Migrate G Suite users to Microsoft 365”. Selecting the first option you’re taken to a page with some informational links and a “View migrations” option. From here, it asks you to select your data service (including PSTs, Gmail, Outlook, Hotmail, Yahoo, etc.)

Select your data service

Select the appropriate source where you plan on migrating data from. We will then guide you through the rest of the migration experience.

 Upload PST files

 Gmail

Important: Before you migrate data, you need to complete a few steps to prepare.

 Outlook

Important: Before you migrate data, you need to complete a few steps to prepare.

 Hotmail

Important: Before you migrate data, you need to complete a few steps to prepare.

 Yahoo

 Other email sources...

 Exchange

Use this option if your environment has at least one Exchange 2010, 2013, and/or 2016 server.

 SharePoint

Use this option if your environment has SharePoint server.

 File share

Use this option if your environment has at least one network or local file share system.

Just below that you can see the “Onboarding and migration guidance”.

Onboarding and migration guidance

Select the appropriate source option below to learn more about onboarding and migration for a specific service.

 Exchange

Set up Office 365 email with the deployment or migration option that's best for your organization.

 Gmail

Use these instructions to migrate your Gmail contacts and Google Calendar items to Microsoft Office 365.

 Office

Deploy Microsoft 365 Apps for enterprise to your users in a way that works for your organization.

Microsoft 365 Apps for enterprise quick start guide

Get your users up and running quickly with the latest versions of Office.

 OneDrive for Business

OneDrive for Business quick start guide for your organization helps businesses configure file storage for users.

 SharePoint

This SharePoint Microsoft Online deployment advisor has file storage solutions that work for your organization.

SharePoint quick start guide

This SharePoint Microsoft Online quick start guide has file storage solutions that will get you up and running fast.

 Microsoft Teams

Teams gives your team a dedicated workspace that brings together all their chats, content, people, and tools.

By selecting the Exchange option, it will bring you to a variety of different tools including the “Mail migration advisor”, which will provide step-by-step guidance for moving mailboxes from your current system to Exchange Online using the built-in tools.



The Mail Migration Advisor was previously known as the Deployment Assistant, which still exists. The Deployment Assistant is great for on-premises roll-outs and/or moves to Exchange Online. You can access it here: <https://assistants.microsoft.com/>.

Hybrid On-Premises/Microsoft 365

A hybrid Exchange connection allows you to take two Exchange organizations – your on-premises Exchange and your Exchange Online – and make them appear as if they are one Exchange organization. They aren't... but they look and act like one to the end-users, and you can use a hybrid to migrate mailboxes at a slow(er) pace and maintain coexistence long-term.

A hybrid deployment provides a variety of features, including:

- a shared domain space (such as companyname.com)
- a unified global address list (GAL)
- free/busy calendar sharing
- at-will onboarding and offboarding 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)

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

features and/or cross-premises e-discovery features of Microsoft 365 combined with on-premises mailboxes.



It was announced at Microsoft Ignite 2020 that the Hybrid Configuration Wizard (HCW) would now support and enable admins to configure multiple on-premises to cloud tenant configurations. Learn more here: <https://bit.ly/2RQgfkH>

Configuring Hybrid

It's not necessarily an easy process to set up and configure the hybrid environment. It starts with dropping in an Exchange 2016/2019 system into your environment (which will not be possible if you have a legacy Exchange server in your mix that cannot coexist with the newer versions of Exchange. In this case, you'll need to upgrade to 2010/2013).

Once the 2016/2019 system is in play, you can run the Hybrid Configuration Wizard (HCW) from it. Keep in mind, this is not a "hybrid server," it's just an Exchange server in your organization that will perform hybrid tasks.



The HCW can detect and license your on-premises Exchange 2016 hybrid server for free without going to a separate site or calling for support. However, this does not apply to Exchange 2019 hybrid server.

Exchange 2010 Hybrid?

Yes, you could do a hybrid from a 2010 environment, but it was a more difficult process and the reality is that Microsoft has ended

support of 2010. The recommendation is to install 2016 into the environment and remove your 2010 servers. This ink provides an outline of some best practices to go along with this migration path: <https://bit.ly/2HvGRpj>

Hybrid Configuration Flavors

The latest Microsoft 365 Hybrid Configuration Wizard (HCW) is available at <https://bit.ly/32WGvjs>.

It's good to know that hybrid migrations come in full, minimal and express options.

Full: Use for larger organizations with a lot of mailboxes (thousands) with a need for complete integration between Exchange on-premises and Microsoft 365. AD is synchronized along with free/busy information and more.

Minimal: Better for medium organizations with a few hundred mailboxes or more where it's going to be a quicker migration (weeks or a couple of months, not many months). AD synchronization works but other features like free/busy don't work.

Express: Best for small organizations that can get the migration done in days/weeks. Does a one-time AD sync and that's it.

Obviously, if you're reading this and you know the size of your environment (and we'd hope you do) then focus in on one of these types of hybrid flavors to research and drill down a bit more into what they do and how.

Hybrid Configuration 101

There are prerequisites you need to consider and handle first. Search Microsoft Docs (formerly Technet) for the latest "Hybrid deployment prerequisites" before running the HCW.

The prerequisites for setting up a hybrid environment vary but include Active Directory synchronization through the Azure Active Directory Connect tool (aka AAD Connect).

This prerequisite helps keep your on-premises Active Directory and your Microsoft 365 directory in sync. It includes password hash synchronization, pass-through authentication, federation integration, synchronization, and health monitoring (through Azure AD Connect Health).

Note: *The predecessors to AAD Connect are DirSync and Azure AD Sync.*

Another option (although not a prerequisite) you might want is single sign-on (SSO) so that users can access on-premises and online features with the same username and password through password hash synchronization (aka the synchronized identity model) and/or Active Directory Federation Services (ADFS) or a third-party (aka the federated identity model).

Both options allow users to log in with the same credentials they use on-premises, but some don't have (and don't want to implement) an ADFS infrastructure. The difference with ADFS federated identity management is that the password is verified by the on-premises ADFS as opposed to being synchronized to Azure AD. A third-party identity provider might also be considered in place of ADFS.

Note: *Both the Active Directory Connect and SSO services should be deployed before running the Hybrid Configuration Wizard.*

Within a hybrid configuration, you use AD synchronization to replicate mail-enabled user account AD information from on-premises up to your Microsoft 365 organization. This ensures a unified global address list (GAL).

Note: *You need a separate server on-premises to install AD synchronization.*

Directory synchronization works mostly one-way, from on-premises AD to Azure AD. And that can lead to some odd issues. Mitigating those issues can be a bit of a bear (think ADSI Edit tool). It's all part of the deal though and, yes, Microsoft is aware of the problems: <https://bit.ly/361tt6k>

The HCW does a ton of behind-the-scenes work. It configures Exchange Federation (unless you already have federation trusts established), sets up web services for mailbox moves, and configures send/receive connectors for mail flow coexistence, to name a few.

Note: *Make sure your certificates are in order and provided by a trusted third-party agency.*

When you run the HCW, you'll address a few questions regarding your environment and your needs; you have to choose the Exchange server you want to connect to, provide administrative credentials for your on-premises and M365 environments, and tell the wizard if you want to establish bi-directional mail transport through your Mailbox/Client Access servers (which is the typical configuration) or through an Edge Transport server (if you have one).

You can also determine if you want mail to flow top-down through Exchange Online Protection (EOP) for Microsoft 365 security scrubbing, down into your on-premises environment, or to flow through on-premises and up to Microsoft 365 (aka centralized mail transport).

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.

One negative of the hybrid configuration is that it is now a single point of failure. Some have asked "how long can I run in hybrid?" and the answer is indefinitely, to be honest. Some organizations

have no choice but to wait for the Microsoft 365 solution to advance far enough, or for the third-party tool they need on-premises to learn to work with Microsoft 365 in whatever capacity they currently have; so the hybrid mode must stay in place. But that means you will be looking at a point of failure until you can make the full swap.

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 Microsoft 365. In other words, you are sharing space with other companies on that server, so Microsoft has to throttle each company to ensure no one gets all the processing power.

It's essential to take your time during the planning stages to ensure a smooth migration. Mailboxes are an important aspect of the move, but not the ONLY aspect. You also want to ensure a continuation of services from the ground to the sky. And there are risks involved, so you need to plan well to mitigate those risks. Don't just sleepwalk into the cloud!

Confirm Your Hybrid Configuration Works

There are a couple of ways to test if your hybrid is working. First, you can open PowerShell in your on-premises server and type `get-hybrid configuration` to see the results of the wizard.

You can also go check the logs, which are located in AppData for the currently logged-on user (just follow the breadcrumbs to `Roaming/Microsoft/Exchange Hybrid Configuration`). Look for the text file (not the `xhcx` file, which is used for the troubleshooter tool).

Personally, I don't relax until I can use the Exchange admin center to create mailboxes, move mailboxes, and so forth. There

are several tests you may want to perform to convince you all is well.



Paul Cunningham is an MVP with a solid blog called practical365.com that includes configuration and testing articles like the following three that I recommend you review:

<https://tinyurl.com/hybridconfig1>

<https://tinyurl.com/hybridconfig2>

<https://tinyurl.com/hybridconfig3>

The Big Takeaways

Migrating to Microsoft 365 isn't the easiest thing in the world. There are a lot of variables to consider and several built-in migration options.

You can choose from cutover, staged, remote/hybrid, IMAP, or G Suite migration. Choosing a hybrid flavor (full, minimal, express) and approach has its advantages but requires some prerequisite work for AD directory synchronization (and possibly SSO) to ensure you can run the hybrid configuration wizard, then you'll be able to onboard mailboxes to Exchange Online.

The speed with which you can move mailboxes is limited by bandwidth and throttling issues. Data may have to be extracted from a legacy solution or pooled from rogue PST files within your environment to push up to the cloud.

Some of the concerns that come up with migration using native/built-in tools include problems with migration from Exchange 2003 (and older) environments, the complexity of the hybrid configuration setup, the need to be PowerShell savvy (although everyone in the Exchange admin world these days should at least be PowerShell proficient), the lack of time filters, auto-match, granularity, and so forth.



Rather than allowing the concerns to make the migration prohibitive, a third-party tool may be just what you need to make this process – which feels overwhelming to many – a piece of cake.

Vendor Sponsored Chapter: CodeTwo



"Man... those guys are like IT Superheroes!"

It's true, I'm going to tell you about CodeTwo's products. But it's not a "product pitch" in the strictest sense of the word. It's not marketing jargon or whitepaper spin. We're going to stick to the same concept we've held to through this entire booklet, a conversational discussion of the subject.

If you jump over to the CodeTwo website, you can see that they have a bevy of products for Microsoft 365 and Exchange on-premises that can assist with email signatures, email flow control, attachments, autoresponders, migration, synchronization, sharing and online collaboration, backup, and much more.

The solutions that they design are laser-focused on the intended task, with crisp GUI interfaces that make it easy to get the job done. In fact, CodeTwo is a 100% GUI-based product; no PowerShell scripting or scripting of any sort is required.

CodeTwo's Migration Tools

Migration is a key solution (which is fitting considering our booklet's focus here). Their migration tools help to speed up and automate the migration process significantly.

They have tools to help you migrate from one flavor of Exchange (or legacy Exchange) to another on-premises flavor, or to Microsoft 365 (considering the book you're reading). With IMAP and EWS as source server options, you can also migrate from any IMAP server (like hosted Exchange, G Suite, or Zimbra) or from Microsoft 365 itself to the on-premises Exchange or to Microsoft 365.

Security Oriented Solutions

Data encryption or support for TLS 1.2 and MFA are only some of the security-related measures used in CodeTwo's migration tools. The software itself is developed and supplied in accordance with ISO/IEC 27001 and 27018, and by following the privacy by design and privacy by default principles, so you can rest assured it has what it takes to offer maximum security at all stages of migration.

The migration tools are deployed locally, which means the data used within and by the software cannot be accessed from outside your organization. In addition, there are no other third parties involved in the data migration whatsoever – you are solely in charge of the entire process.

With Microsoft gradually disabling basic authentication in Exchange Online, it is also worth noting that CodeTwo's solutions implement modern authentication experience (OAuth 2.0 authorization framework) to connect to your tenant (serving as

source and/or target of the migration). This also means that your Microsoft 365 credentials are always transmitted in a secure manner and are not stored anywhere by the software at all.

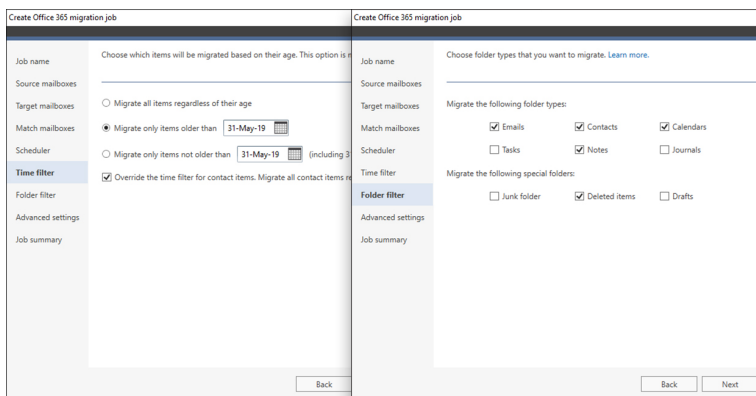
Seven Exciting Advantages Over Native Solutions

1. **Migrate directly from Exchange 2003** – no need for double- or triple-hop migrations, as you don't have to upgrade your on-premises server at all. Direct migration of public folders from Exchange 2003, 2007 and later versions is also possible.
2. **No limitations on number of migrated mailboxes** – you can migrate all source mailboxes, from any version of Exchange, within a single migration task or in batches, whichever option best serves your needs.
3. **Auto-matching of source and target mailboxes** – with just a click of a button. Mailboxes are matched based on first/last/display name attribute by default, but it is also possible to customize the matching mechanism.

First name	Last name	Email/Login	Target user mailbox	Target user name	Migration status	Action
Ann	Lewis	a.lewis@dstdomain2.lan	✓ AnnL@M365x527373.onmicro...	Ann Lewis	⊙ Not started	➔ Migrate to existing mailbox
Agnes	Pearson	A.Pearson@dstdomain2.lan	✓ AgnesP@M365x527373.onmicro...	Agnes Pearson	⊙ Not started	➔ Migrate to existing mailbox
Julie	Keiser	Administrator@dstdoma	✓ JulieK@M365x527373.onmicro...	Julie Keiser	⊙ Not started	➔ Migrate to existing mailbox
Eugenia	Clark	e.clark@dstdomain2.lan	✓ EugeniaC@M365x527373.onmicr...	Eugenia Clark	⊙ Not started	➔ Migrate to existing mailbox
Elisabeth	Corner	e.corner@dstdomain2.lan	✓ ElisabethC@M365x527373.onmicr...	Elisabeth Corner	⊙ Not started	➔ Migrate to existing mailbox
John	Doe	j.doe@dstdomain2.lan	✓ JohnD@M365x527373.OnMicro...	John Doe	⊙ Not started	➔ Migrate to existing mailbox
Jeff	Harris	j.harris@dstdomain2.lan	✓ JeffH@M365x527373.OnMicros...	Jeff Harris	⊙ Not started	➔ Migrate to existing mailbox
Julie	Mcgee	j.mcgee@dstdomain2.lan	✓ JulieM@M365x527373.onmicros...	Julie Mcgee	⊙ Not started	➔ Migrate to existing mailbox
Jane	White	j.white@dstdomain2.lan	✓ JaneW@M365x527373.OnMicro...	Jane White	⊙ Not started	➔ Migrate to existing mailbox
Kate	Fox	k.fox@dstdomain2.lan	✓ KateF@M365x527373.OnMicros...	Kate Fox	⊙ Not started	➔ Migrate to existing mailbox
Kristy	James	k.james@dstdomain2.lan	✓ KristyJ@M365x527373.OnMicro...	Kristy James	⊙ Not started	➔ Migrate to existing mailbox
Linda	Thompson	l.thompson@dstdomain2.lan	✓ LindaT@M365x527373.OnMicro...	Linda Thompson	⊙ Not started	➔ Migrate to existing mailbox
Michael	Anderson	m.anderson@dstdomain2.lan	✓ MichaelA@M365x527373.OnMicr...	Michael Anderson	⊙ Not started	➔ Migrate to existing mailbox
Monica	Jones	m.jones@dstdomain2.lan	✓ MonicaJ@M365x527373.OnMicr...	Monica Jones	⊙ Not started	➔ Migrate to existing mailbox

4. **Automatic creation of target mailboxes** – if there is no match for any of your source mailboxes, you can create a new mailbox in the target environment directly in CodeTwo’s migration tool (user AD attributes will be copied as well). The software can also automatically assign Microsoft 365 licenses.

5. **Time and folder filters** – you can, for example, migrate data from the past 30 days, switch MX records, and let your users start using Microsoft 365. Then you can migrate the rest while your users are already live in the cloud. With the folder filter option, you can also exclude Calendars, and Tasks, as well as special mailbox folders such as Deleted Items, Junk Email, etc. from the migration.



6. **No hybrid required** – you don’t need to synchronize your on-premises environment with M365 at any time prior to, during, or post the migration process.

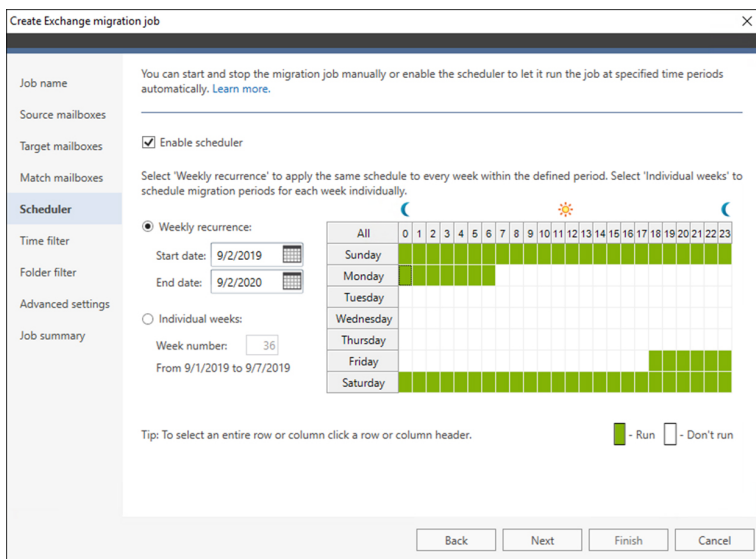
7. **No impact on end users** – the software migrates mailboxes transparently in the background, which

means the users will have access to their mailboxes all the time, with no downtime.

Other notable features in CodeTwo's migration tools that are also worth mentioning include:

- **Migration jobs** – this is used to configure several migration tasks with different settings (e.g. migrate different groups of users or have alternative time filter settings) or source server selected (on-prem Exchange, Microsoft 365, Microsoft 365 Germany or IMAP).
- **MAPI or EWS** – you can choose either MAPI or EWS to connect to the source environment. While MAPI lets you migrate data directly from legacy Exchange Servers (e.g. Exchange 2003 or 2007), EWS accelerates and simplifies the migration process from newer Exchange editions including Exchange Online, which means you can also migrate mailboxes between different Microsoft 365 tenants.
- **Mailbox Automatch** – automatically matches source and target mailboxes before the migration.
- **Support for a hybrid environment** – used either as a source and/or target of the migration process.
- **Active Directory attributes support** – allows migrating AD attributes, such as Company, Department, Title, Phone, etc. together with mailboxes.
- **Delta migration option (with unlimited rescans)** – allows you to copy new items that were created in the source environment after the initial migration process.
- **Detailed migration reports and email alerts** – these let you monitor every step of the migration process and send overall reports to your clients or to management.

- **Built-in scheduler** – used to activate and deactivate migration jobs automatically. This allows you to prepare you migrations in advance and run them, for example, only on weekends or outside of office hours.



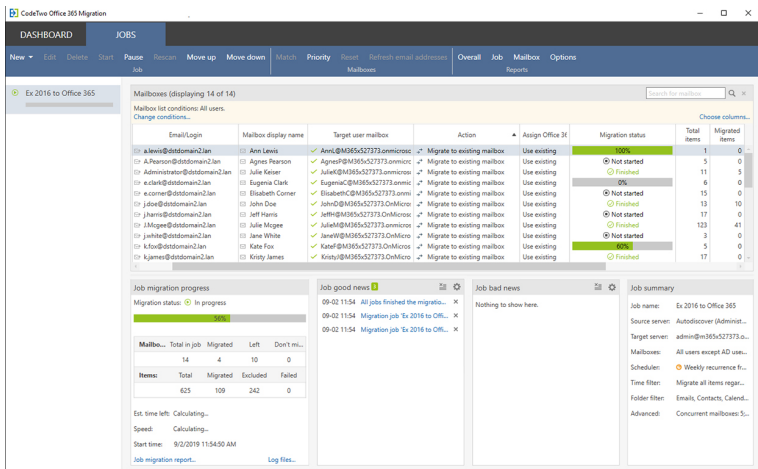
- **Setting size limit for migrated items** – this is helpful in two ways: it excludes the items that Microsoft 365 will not be able to accept anyway in the course of the migration, and it can filter out larger files in the initial migration stage, accelerating the transition process.
- **Refresh email addresses feature** – this feature lets you experience a seamless migration even when a domain changes during the transition process.
- **EX to SMTP conversion on the fly** – especially useful while migrating from Exchange 2003 or 2007 straight to Microsoft 365.

- **Role-based Access Control model** – the software doesn't require the domain/global admin's privileges to perform a migration. The migration account only needs necessary management roles to run the migration, and the program can assign the required roles automatically.
- **MSP-friendly licensing model** – thanks to the new licensing model, CodeTwo's migration tool can be installed on multiple machines using the same license key. It can be used to speed-up the migration process. Moreover, the remaining seats can be used for another migration project. This enables partners to migrate an unlimited number of clients/orgs (from an unlimited number of locations) using just a single license key.
- **Improved migration and throttling algorithms** – with each new version of the software, the migration process is significantly faster, more stable, and throttling is handled more efficiently, minimizing the chance of getting errors during migration.
- **Free tech support** – provided live over the phone or through email.

From an installation perspective, it is a simple N-N-F (next/next/finish) and as easy as can be. The connection to your Microsoft 365 is performed through a simple wizard.

Once the connection is complete, you're taken to the administration portion of the tool. You can perform migration tasks using the interface which is intuitive and easy to work with.

As I've said in my review of CodeTwo migration tools for MExchange.org, I love a tool that is advertised as being able to perform a task, and it does just that. Smooth, elegant functionality with a polished interface.



In addition to migration solutions, CodeTwo also has a backup solution with the ability to perform an offline backup of Exchange Online, SharePoint Online as well as OneDrive for Business data directly from Microsoft 365. Incremental backups let you keep the copies up to date and allow for a full restore.

You can also perform granular restores of selected mailbox folders, SharePoint lists, and libraries, or even selected items (like a single email message, a calendar event, or a contact). CodeTwo Backup can be also used to migrate SharePoint data between sites within the same Microsoft 365 tenant or even between different tenants.

CodeTwo is also known as an email signature management software vendor. Their cloud solution, CodeTwo Email Signatures for Microsoft 365, will let you centrally add email signatures and disclaimers to emails sent from any email client and device (including mobiles and Macs handhelds).

This solution allows you to, among other things, unify email signatures throughout your entire organization, add Microsoft 365 users' photos to signatures, and view email signatures and

disclaimers as you type or in the Sent Items folder. Admins can even delegate signature-related tasks to other departments without compromising the security of your Microsoft 365 tenant.

Notes

CODETWO[®]

Already migrated to Microsoft 365?

Now it's time for your email signatures to shine

Create and manage signatures across all users in Microsoft 365 and add them to emails sent from any device

Personalize signatures by using Azure AD data and user photos

Boost your branding with logos, social icons and banners

Natalie Lynch
Sales Representative

mobile: 202-555-0141 | telephone: 504-899-7214
email: natalie.lynych@example.com
648 S. Sobieski Ave. Richmond Hill, NY 11418

Please rate the quality of the support you received: 😊 😐 😞 😡

Get IT done faster than ever
[LEARN MORE](#)

example.com newsletter subscription join our community visit our store discounts

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error, please notify us immediately and delete the message from your system.

Stay compliant with legal regulations by adding disclaimers to your messages

...and do much more with



CodeTwo
Email Signatures for Office 365

Get a free trial at www.codetwo.com/email-signatures



ISO 27001
ISO 27018



Microsoft Gold Partner
2020 Customer Experience Award
2019 Partner of the Year

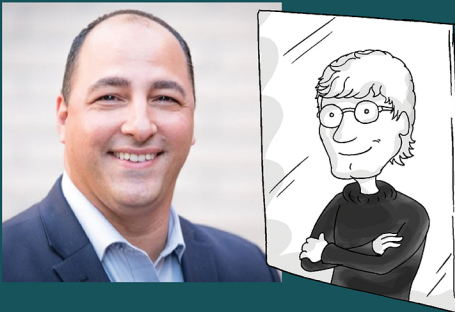


AVAILABLE ON

Microsoft AppSource

Get conversational about Microsoft 365 migrations in any setting.

Microsoft 365 is taking the world by storm, but it can be an overwhelming task to plan and execute a solid migration strategy. In this booklet, we'll focus on the value of Microsoft 365 as a solution and work through the migration strategies available. The goal is to assist you, the reader, to be able to speak intelligently about migration options, the pros and cons of those options, and the key tools provided by Microsoft and third-party solution CodeTwo.



About J. Peter Bruzzese

J. Peter is an 8-time Microsoft Office 365 MVP, holds a variety of certifications (MCSE/MCITP: Messaging, A+/Network+, etc.), is an internationally published author and conference speaker, InfoWorld journalist, ClipTraining Co-Founder and CIO, and more. Follow him on Twitter @JPBruzzese



ConversationalGeek®

For more books on topics geeks love visit

conversationalgeek.com