

Exchange On-Premises to O365 (Exchange Online) Migration in Hybrid environment

Author:

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The run book walks you through migration process used to migrate mailboxes from YourDomain on-premises to exchange online (O365).

Using Exchange Admin Center to migrate a mailbox from on-Premises to Exchange online:

A1) Here in all the archived emails are restored to user's on-premises mailbox prior to migrating the same to exchange online so as to avoid emails moving up as stubs.

A2) As a protective measure to avoid any email loss during migration , user mailbox is enabled for litigation hold prior to moving up on cloud.



A3) We need to update UPN to 'firstname.lastname@yourdomain.com' prior to migration:



A4) Ensure mailbox has @YourDomain.mail.onmicrosoft.com as one of its proxy addresses and Primary SMTP is set to @YourDomain.com

A5) Here in we assign valid Licenses to user that needs to be migrated per Microsoft Office 365 E3 plan . Alternatively we may use below cmdlets that will assign all licenses except SKYPE.

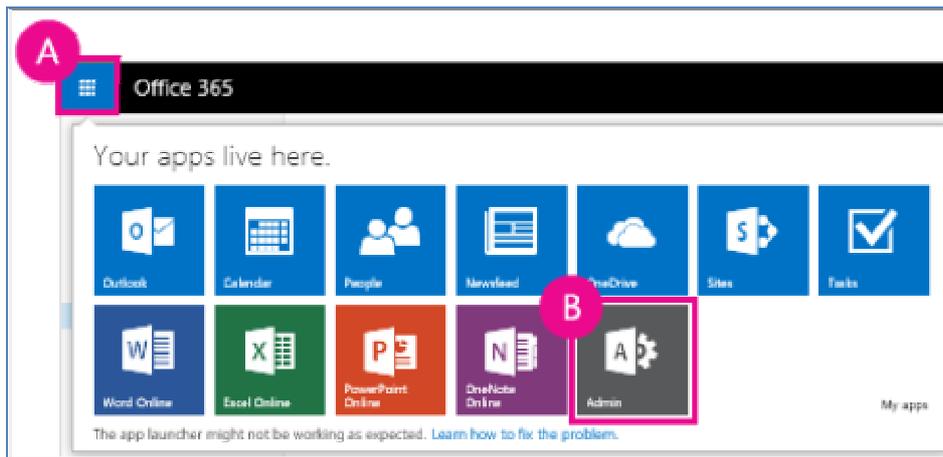
```
Connect-MSOLService

$options = New-MSolLicenseOptions -AccountSkuld YourDomaincorp:ENTERPRISEPACK -
DisabledPlans MCOSTANDARD

Set-MSolUserLicense -UserPrincipalName "email.support@YourDomian.com" -
LicenseOptions $options
```

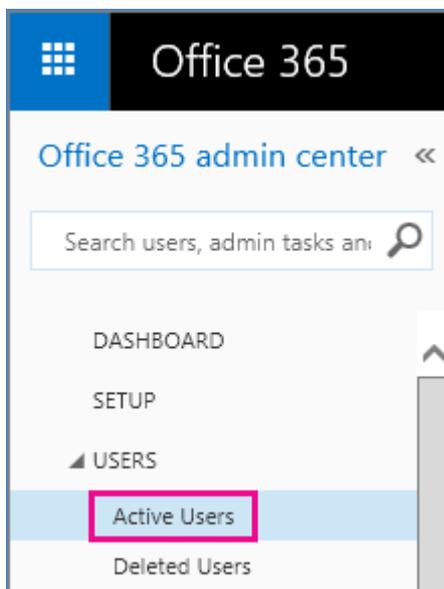
Add licenses from exchange Online Admin Center

1. Sign into your office 365 account with your admin account.
2. Select the app launcher icon  in the upper-left and choose **Admin**.

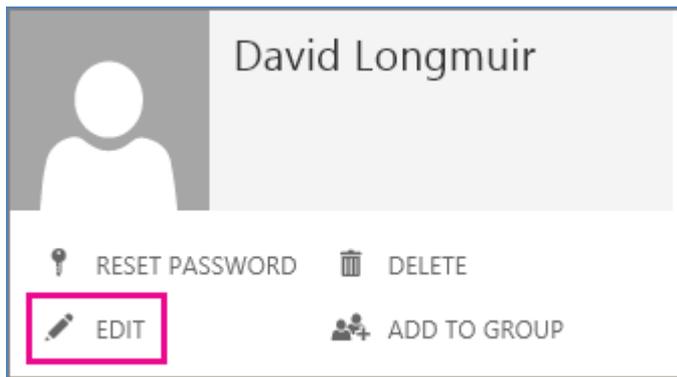


NOTE You won't see the Admin selection if you're not signed in as an admin.

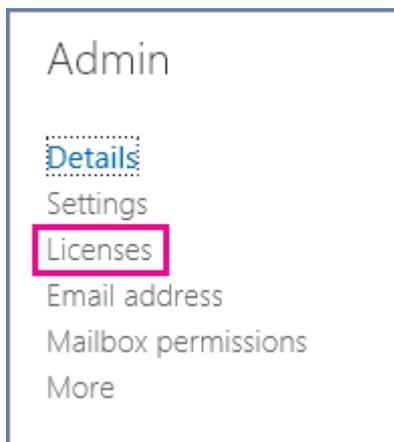
3. Select **Users > Active Users**.



4. Check the box for the name of the user who you want to add or remove a license for.
5. Click **Edit** 



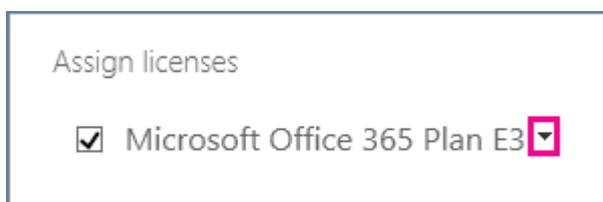
6. Select **Licenses**.



7. Under **Assign licenses**, do one of the following:

- To assign a license to the selected user, select the box for the license you want to assign.

TIP When assigning a license to a user, you can also select which services are enabled by that license the user can use by selecting the down-arrow next to the name of the license and unselecting the services that you want to restrict from that user.



For example, if you want the user to have access to all available services except Lync Online, you can unselect the Lync Online service.

Assign licenses

- Microsoft Office 365 Plan E3 ▲
 - Yammer Enterprise (These licenses do not need to be individually assigned)
 - Azure Rights Management
 - Office 365 ProPlus
 - Lync Online (Plan 2)
 - Office Online
 - SharePoint Online (Plan 2)
 - Exchange Online (Plan 2)

- To unassign a license from the user, unselect the box for the license you want to remove.

Assign licenses

- Microsoft Office 365 Plan E3 ▼

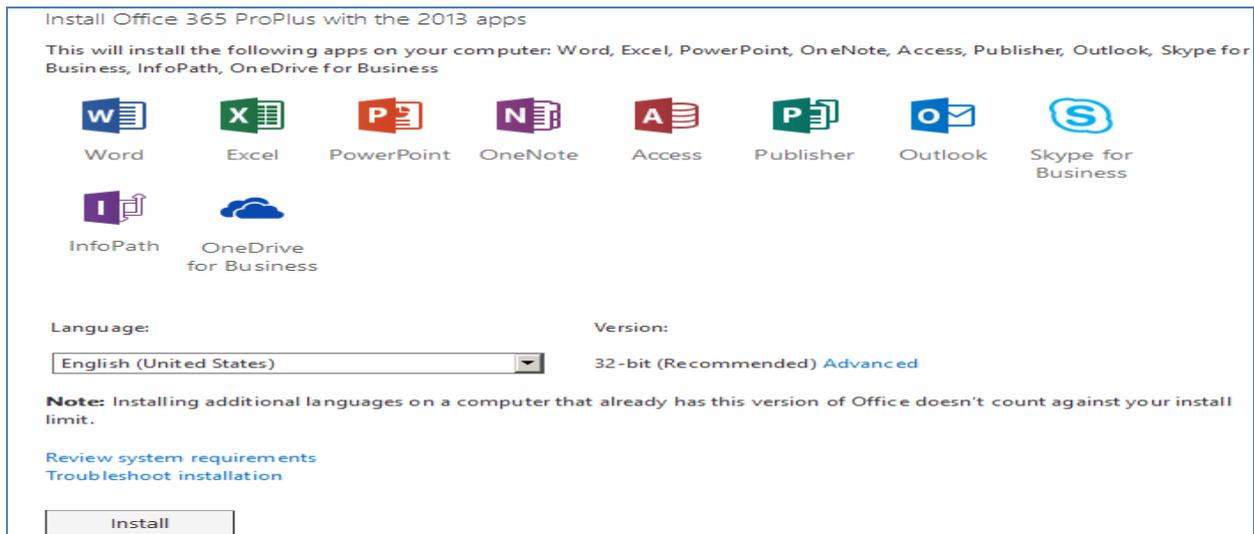
8. Click **Save**.
9. If you have removed a license from a user and want to assign it to another user, repeat this procedure.

A6) What User needs to do at his end ?

After license is assigned as a user (the one being migrated) may to login to <https://portal.office.com> and point to **Settings>Office 365 Settings>Install and manage software** to install software package as per license assigned to user :

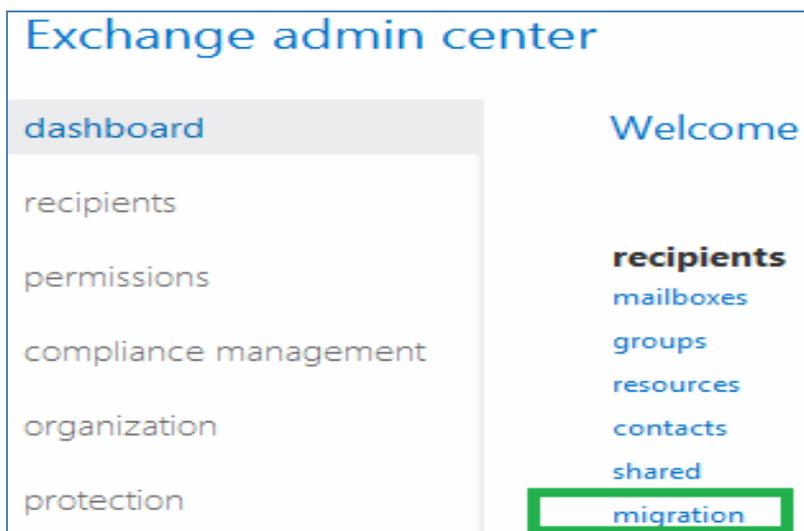
Software
[Install and manage software.](#)

Here in per the E3 license use may choose the software package to be installed on his machine.

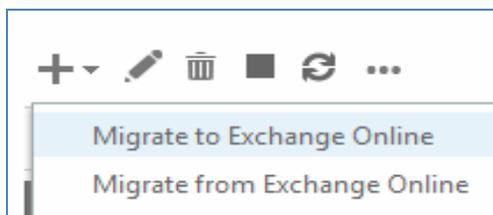


A7) What Migration Admin needs to do next ?

Now we login back as migration admin on O365 portal, we need to point to **Admin >Exchange Dashboard > Recipients > migration** .



A8) To begin with we first need to create a migration a batch. We hit the '+' icon and choose 'Migrate to Exchange Online' whereby we proceed further with wizard.



A9) Going up with wizard we choose Remote move migration option as per hybrid configuration in YourDomain exchange environment .

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)

A10) Mark 'Specify the user with a CSV file' and choose a CSV file containing list of mailboxes to be migrated over to O365 in the batch.

Specify the users with a CSV file

Allow unknown columns in the CSV file

mig.csv

1 mailboxes to migrate

A11) Choose Next. Ensure we have 'hybrid.YourDomain.com' (depending upon MRS proxy you specify in your domain) as MRS proxy server specified and hit next.

new migration batch

Confirm the migration endpoint

The connection settings for this migration batch have been automatically selected based on the migration endpoints created in your organization. [Learn more](#)

Remote MRS proxy server:
The FQDN of the Exchange server that the Mailbox Replication Service (MRS) Proxy is on.

hybrid. [redacted] ●

A12) Specify the name of migration batch and provide a value for 'Bad item limit'

new migration batch
Move configuration

These configuration settings will be applied to the new batch. [Learn more](#)

*New migration batch name:
mig001

*Target delivery domain:
mail.onmicrosoft.com

Archive:
 Move the primary mailbox and the archive mailbox if one exists
 Move archive mailbox only, without moving primary mailbox
This option is only valid for mailboxes on Exchange 2010 and Exchange 2013.

Bad item limit:
50

Large item limit:

After you create a migration batch, it could fail by exceeding the number of bad items. This value specifies how many bad items to ignore. If you change this value after a batch has started, you must stop and restart the batch for the change to take effect.

A13) Specify the admin mailbox where in you want to receive the notification when migration is complete.

new migration batch
Start the batch

A new migration batch will be created after you click new. [Learn more](#)

*After the batch is complete, a report will be sent to the following recipients. You must select at least one recipient to receive this report.

Recipient selection field with 'Browse...' button

Please select the preferred option to start the batch:
 Manually start the batch later (by selecting it in the migration dashboard and then clicking Start)
 Automatically start the batch

Please select the preferred option to complete the batch:
 Manual Complete the batch (by clicking the "Complete this migration batch" link on the right pane, after the link becomes active)
 Automatically complete the migration batch

Dashboard gives us the status of the migration batch, alternatively use Get-Migrationbatch .

NAME	STATUS	TOTAL	SYNCED	FINALIZED	FAILED
3BackSam	Synced	3	0	3	0
mig001	Syncing	1	0	0	0
O365	Completed	1	0	1	0
paulED	Completed	1	0	1	0

A14) Once the Object is synced up on the cloud, we receive a email stating sync status

Migration batch mig001 has finished initial sync

Started by: [REDACTED]

Date: Wednesday, October 14, 2015

Run time: 10 minutes

Synced: Mailboxes - 1

Total: Mailboxes - 1

B1) On the migration day initial sync is completed. You need to hit 'Complete this migration batch' to complete migration batch, after which status will show as completed on dashboard.

Complete this migration batch

Type: Exchange remote move
 Direction: ' onboarding
 Status: Synced

Mailbox status
 Synced mailboxes: 1 of 1
 Finalized mailboxes: 0 of 1
 Failed mailboxes: 0
[View details](#)

Statistics
 Created by: [REDACTED]
 Create time: 10/14/2015 4:20:48 PM
 Start time: 10/14/2015 4:20:50 PM
 Initial sync time: 10/14/2015 4:31:22 PM
 Initial sync duration: 00:05:09
 Last synced time: 10/14/2015 4:29:16 PM

Associated endpoint
 [REDACTED] | [View details](#)

To flip a single user from a batch once the user is synched :

```
Get-Moverequest "User's display name" | Set-MoveRequest -  
SuspendWhenReadyToComplete:$false
```

```
Get-Moverequest "User's display name " | Resume-Moverequest
```

C1.1) You may than connect to Exchange online Power shell and Verify the configurations

```
$cred=get-credential
```

```
$s=New-PSSession -ConfigurationName microsoft.exchange -ConnectionUri  
"https://ps.outlook.com/powershell" -Authentication basic -AllowRedirection -  
Credential $cred
```

```
Import-PSSession $s -AllowClobber
```

Part-II

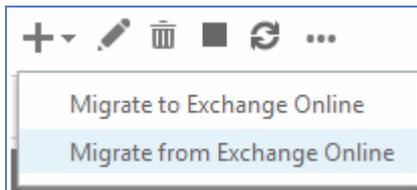
Off-board a mailbox from the Office 365 to Exchange On-Premises in Hybrid exchange environment:

Author : Aditya Mediratta

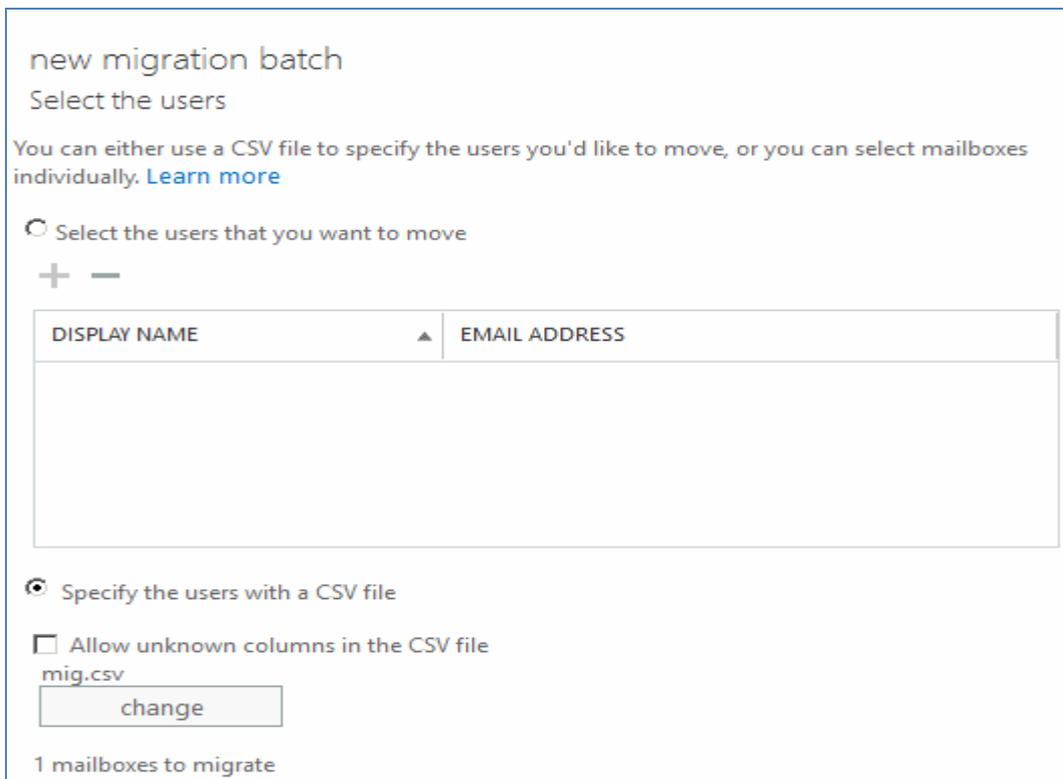
The run book walks you through migration process used to off-board a mailbox from O365 back to on-premises exchange environment.

A.1) Here in we follow a similar process we used while on-boarding the mailbox up on the cloud . Firstly you need to login with your O365 migration admin account and point to **Dashboard > Recipients > migration .**

A2) To begin with we first need to create a migration a batch. We hit the '+' icon and choose **'Migrate from Exchange Online'** whereby we proceed further with wizard.



As previously we proceed to create a new migration batch and provide the path to CSV file containing information about mailbox to be migrated back to on-premises.

A screenshot of a web-based wizard titled "new migration batch". The subtitle is "Select the users". Below this, there is a paragraph: "You can either use a CSV file to specify the users you'd like to move, or you can select mailboxes individually. [Learn more](#)". There are two radio button options: "Select the users that you want to move" (which is currently unselected) and "Specify the users with a CSV file" (which is selected). Under the first option, there is a "+ -" icon and a table with two columns: "DISPLAY NAME" and "EMAIL ADDRESS". The table is currently empty. Under the second option, there is a checkbox "Allow unknown columns in the CSV file" which is unchecked. Below this checkbox, the text "mig.csv" is displayed, and there is a "change" button. At the bottom left of the form, it says "1 mailboxes to migrate".

Ensure that MRS proxy is populated as hybrid.YourDomain.com or whatever you configure per your business blueprint and click Next

new migration batch

Confirm the migration endpoint

The connection settings for this migration batch have been automatically selected based on the migration endpoints created in your organization. [Learn more](#)

Remote MRS proxy server:
The FQDN of the Exchange server that the Mailbox Replication Service (MRS) Proxy is on.

[Redacted]

Next in we specify 'name of migration batch', 'Target database name' (where mailbox shall be placed once same is brought down from the cloud) & 'Bad item limit'. In Target database name we specify GUID of database as opposed to database name.

new migration batch

Move configuration

These configuration settings will be applied to the new batch. [Learn more](#)

*New migration batch name:
[Redacted]

*Target delivery domain:
[Redacted]

Archive:

Move the primary mailbox and the archive mailbox if one exists

Move primary mailbox only, without moving archive mailbox
This option is only valid for mailboxes on Exchange 2010 and Exchange 2013.

*Target database:
Enter the database name you'd like to move this mailbox to:
[Redacted]

Target archive database:
Enter the database name you'd like to move the archive mailbox to:
[Redacted]

Bad item limit:
[50]

Large item limit:
[Redacted]

Next we specify the mailbox name where alert will shoot once mailbox is off-boarded.

new migration batch
Start the batch

A new migration batch will be created after you click new. [Learn more](#)

*After the batch is complete, a report will be sent to the following recipients. You must select at least one recipient to receive this report.

× Browse...

Please select the preferred option to start the batch:

- Manually start the batch later (by selecting it in the migration dashboard and then clicking Start)
- Automatically start the batch

Please select the preferred option to complete the batch:

- Manual Complete the batch (by clicking the "Complete this migration batch" link on the right pane, after the link becomes active)
- Automatically complete the migration batch

The above steps create a migration batch , we can monitor the status of particular batch from dashboard or alternatively we may user **Get-Migrationbatch** cmdlet in exchange online

Click to view the status for all current migration batches. [Status for all batches](#)

NAME	STATUS	TOTAL	SYNCED	FINALIZED	FAILED
3BackSam	Synced	3	0	3	0
O365	Completed	1	0	1	0
paulED	Completed	1	0	1	0

Refer attached steps to connect power-shell to exchange online :

```

$cred=get-credential

$s=New-PSSession -ConfigurationName microsoft.exchange -ConnectionUri
"https://ps.outlook.com/powershell" -Authentication basic -AllowRedirection -Credential
$cred

Import-PSSession $s -AllowClobber

```

Once the Object is synced, you'll receive a email stating sync status of request.

Started by:	[REDACTED]
Date:	Monday, October 12, 2015
Run time:	12 minutes
Synced:	Mailboxes - 1
Total:	Mailboxes - 1

[Click here to download the success report. You may be required to sign in.](#)

Please don't reply to this e-mail. It was sent from an unmonitored account.

After initial sync is complete you need to hit '**Complete this migration batch**' to complete migration batch, after which status will show as completed on dashboard.

Complete this migration batch

Type: Exchange remote move
 Direction: ' onboarding
 Status: Synced

Mailbox status

Synced mailboxes: 1 of 1
 Finalized mailboxes: 0 of 1
 Failed mailboxes: 0

[View details](#)

Statistics

Created by: [REDACTED]
 Create time: 10/14/2015 4:20:48 PM
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 Initial sync time: 10/14/2015 4:31:22 PM
 Initial sync duration: 00:05:09
 Last synced time: 10/14/2015 4:29:16 PM

Associated endpoint
 [REDACTED] [View details](#)

Hitting complete button brings down mailbox up from cloud back to on-premises exchange environment .

To flip a single user from a batch once the user is synced.

Get-Moverequest "User's display name" | Set-MoveRequest - SuspendWhenReadyToComplete:\$false

Get-Moverequest "User's display name " | Resume-Moverequest