

# Mail migration

Admin guide for Office 365 to Office 365 migrations

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## 1 Mail migration with Cloudiway

Cloudiway's mail migration solution helps businesses perform elaborate technical migrations through a simple SaaS interface. As a result, mail migrations require no additional software installation or overhead, and migrations can be performed securely and quickly.

The Cloudiway platform is flexible enough to support all types of migration paths. Your migration strategy will depend on your business setup, type and size. Whichever migration path you choose, Cloudiway provides all the essential features including automatic account provisioning, license assignment, archive migration, mail routing and calendar coexistence (free/busy scheduling).

Two of the most common migration strategies are cutover and staged migrations. Cutover strategies involve migrating all mailboxes over a weekend, ready for your users on Monday morning. Staged strategies provide more flexible migration options, as discussed below.

### 1.1 Cutover migration

You migrate everybody over a weekend and perform a single migration pass. This strategy is the simplest to implement. After you have switched your MX records to point to the new system, you start mailbox migration.

Cutover migration is therefore a strategy where the entire company is switched at the same time.

#### 1.1.1 Cutover migration benefits

- Fastest, simplest form of migration.
- Your users can start using the new mail system immediately.
- New mails are received in the target messaging system.
- Old mails are migrated in a single pass.

#### 1.1.2 Cutover migration considerations

You can combine your cutover migration with pre-staging, if required. In this case, during the days or weeks leading up to your cutover, you would migrate all mails up to a week or so ago along with calendars and contacts, then on the day of your cutover, you would run a quick delta pass to migrate the remaining items.

## 1.2 Staged migration

A staged migration allows you to migrate batches of mailboxes over the course of a few weeks or months. This strategy is useful for migrations with large volumes of data (very full mailboxes or many mailboxes) and you estimate that you won't be able to do your migration over a single weekend.

Cloudiway offers you additional flexibility in your approach to a staged migration. For example, you could migrate the last six months of emails over a weekend and leave older emails and email archives to be migrated after cutover, explaining to users that their older emails will appear soon.

Prestaging is also an option on the Cloudiway platform. For example, you could perform a multi-pass migration where you migrate most mailbox items before performing the final cutover. During the days or weeks leading up to your cut-over, you would migrate all the mails up to a week or so ago along with calendars and contacts, then on the day of your cutover, you would run a quick delta pass to migrate the remaining items.

Cloudiway provides a number of options to help you find the best strategy for a staged mail migration. We provide coexistence services, plus mail routing, and batch migration of users, which you can define in any way you like. Basically, you can choose who, when and what gets migrated during each pass.

### 1.2.1 Staged migration benefits

- Many flexible migration strategies when using the Cloudiway platform.
- Allows more time before final cutover, avoiding tight deadlines.
- Complex migrations can be completed without disrupting end users.
- Can be performed in batches according to your needs.

### 1.2.2 Staged migration considerations

Staged migrations tend to be more complicated than single cutover migrations. Therefore, it's important that you have planned your approach thoroughly prior to starting any migration.

## 1.3 Supplementary tools

Cloudiway has developed a number of tools to enable seamless migration for the most intricate migrations. Our supplementary tools include:

- automatic account provisioning (users, distribution lists, shared contacts);
- mail routing; and
- calendar free/busy display.

These tools are available as additional modules, and therefore incur an extra cost. Please contact us for more information on [presales@cloudiway.com](mailto:presales@cloudiway.com).

### 1.3.1 Automatic provisioning

Automatic account provisioning is handled by the IAM module. It synchronizes your Active Directory infrastructure with Office 365 and lets you manage your cloud users from your local Active Directory. It synchronizes users, groups and contacts, and also provides real time password synchronization. It supports multi-domain and multi-forest environments and avoids costly directory consolidation projects. Visit [www.cloudiway.com](http://www.cloudiway.com) for more information, or contact us.

### 1.3.2 Mail routing

If you wish to migrate a domain name from one Office 365 tenant to another, you face some challenges. A domain can only be attached to one Office 365 tenant, and detaching a domain from a tenant is complex and time consuming: no mail addresses referencing the domain can remain. Furthermore, the domain cannot be reattached until it's completely detached from the first tenant, which can take up to two days. Cloudiway provides a mail routing platform that routes mail automatically and transparently from source domains to target domains. Please get in touch to discuss what options are available.

### 1.3.3 Calendar free/busy

Cloudiway provides a coexistence tool for calendar free/busy time display. For example, an Office 365 user on one tenant can check the free/busy time of an Office 365 user on a different tenant. Coexistence manages cross-platform communication with no impact on the end user. It provides a seamless connection between two different remote systems during migration.

To discuss any of these supplementary tools further, please get in touch with your existing Cloudiway contact, or via [sales@cloudiway.com](mailto:sales@cloudiway.com).

## 2 Security

We take your privacy and security seriously at Cloudiway, and we have invested significant effort into making our platform and your data secure. Cloudiway provides a cloud-based application hosted in Windows Azure. It means that the software and data are centrally hosted and accessed by clients using a web browser and internet connection. In addition, Cloudiway's SaaS benefits from Windows Azure's certifications, ensuring security of the infrastructure, network and physical security layers of the Cloudiway cloud.

For total assurance, Cloudiway provides auditing tools, secure, authenticated data connections and a logging system. More specifically:

- Cloudiway doesn't store your mail, files or site data
- the migration takes place in memory only: the migration engine connects to the source, pulls data and pushes it in real time;
- connections to the source and the target are done using HTTPS so no data is transferred unencrypted over the internet; and,
- nothing is stored internally: no data persists in the platform.\*

\*For the delta pass mechanism, the messageID of each email is used. This ensures that no data is duplicated, and for efficiency, only the changes are propagated. We automatically delete inactive records after 90 days, or upon request.

In addition, because the Cloudiway platform needs credentials to connect to the source and the target, you define connectors to connect to them and enter credentials that will be used for the connection. These credentials are stored encrypted using AES 256.

For complete peace of mind, we recommend that you create a temporary migration account during your migration which you can delete at the completion of your project.

### 3 Performance

There are several considerations regarding email migration performance. The Cloudiway migration platform uses all available resources to provide the fastest migration possible and can support both small and large migrations. The on-demand migration engine allocates the capacity that you need to migrate the volume of data of your choice in the time slot you have allocated.

However, there are limitations. Many mail systems can heavily throttle users. When you perform too many calls, the remote server will begin throttling and decrease the number of calls that can be performed each minute, thus reducing the migration throughput. Cloudiway constantly attempts to work at the maximum capacity allowed to achieve excellent throughput.

#### *Office 365 limitations*

Office 365 uses throttling policies to limit the resources consumed by a single account. To maximize throughput and limit throttling, Cloudiway follows Microsoft best practice and uses impersonation.

An account that has impersonation privileges can impersonate 100 users concurrently to migrate 100 mailboxes in parallel. The platform uses EWS (Exchange Web services) protocol; Microsoft theoretically allows throughput of around 300 MB per user per hour. The Cloudiway platform typically sees throughput between 200 Mb and 300 MB per mailbox per hour. This gives an average throughput of around 500 GB per day with a constant migration of 100 concurrent mailboxes.

If you wish to further improve throughput, you can create distinct migration accounts and create additional connectors in the platform. For example, if you create two target Office 365 connectors (each with its own distinct migration account), you can migrate 200 mailboxes concurrently and reach a throughput of around 1 TB per day.

Mailbox item count is also a factor: because Office 365 throttling policies limit migration to 1500 to 1800 mails per user per hour. Therefore, a mailbox with 1,000,000 small emails will be slower to migrate than a mailbox with 1,000 large mails containing attachments.

## 4 Mail migration scope

### 4.1 What can be migrated

When migrating from one Office 365 tenant to another, all of the following mail-related items can be migrated:

- Emails
- Contacts
- Calendars
- Secondary Calendars
- Folders
- Delegations
- Rooms and resources
- Archives (each mailbox requires one separate archive license)
- Tasks
- Journal
- Notes
- Inbound Rules
- Shared Mailboxes
- Litigation hold folders
- Provisioning (users, distribution lists, shared contacts) requires an additional component (IAM component)

### 4.2 Migration limitations

Domain name migration between Office 365 tenants can be tricky: the domain name can only be attached to one Office 365 tenant at a time, so during a typical migration, it would remain unavailable for two days and mail delivery would be affected.

However, Cloudiway provides a solution that makes the transition trouble-free. Cloudiway's mail routing platform enables emails to continue to be received and delivered to the correct inboxes during a domain name change. Mail headers are not modified.

Once you've pointed your MX records to our mail routing platform, it will deliver incoming mails to the target domain of your choice (ie, targettenant.onmicrosoft.com). You then detach the domain from your source tenant, and once it's completely detached you attach it to the target tenant, point your MX records to the target Office 365 tenant and stop using the Cloudiway mail routing platform.

The mail routing service is not available by default, so if this functionality interests you, please get in touch for more information and a quote.

During migration, Outlook profiles are not recreated. Cloudiway provides a tool to perform this if you need help.

### 4.3 Considerations

There are several important factors that you should be aware of before starting a mail migration.

Firstly, migration takes place between existing mailboxes. This means that mailboxes must exist in the target at the time of migration. Please ensure that all mailboxes to be migrated have had their target mailbox created in the target domain (steps are included in this guide). If required, you can use the optional IAM module to provision the target.

Secondly, to migrate a user, you must provide the primary source SMTP address and the primary target SMTP address. If you specify an alias, the mailbox migration will fail.

Finally, if you decide to use Cloudiway's mail routing platform during your migration, please refer to Cloudiway's mail routing documentation before you begin your migration to ensure you fully understand what you need to do before and after a migration for an uninterrupted flow of emails.

### 4.4 Audience

This guide is aimed at experienced system administrators who are capable of connecting to remote systems and using a variety of administration tools.

**Although we provide support for our own products, we do not provide support for third party products such as PowerShell or server administration of Google or Exchange.**

If you are concerned you might have any difficulty completing these steps, please consider a solution with our consulting team, contactable via [presales@cloudiway.com](mailto:presales@cloudiway.com). This will ensure a fast, cost-effective and stress-free implementation.

## 5 Pre-migration configuration

### 5.1 Before you start

Before you start, you will need to ensure you have the details outlined in the following table.

Name	Description	Location
Cloudiway login	Stores details and provides communication between the systems you already use.	<a href="https://apps.cloudiway.com">https://apps.cloudiway.com</a>
Knowledge base access	Our extensive knowledge base is always accessible, with videos, troubleshooting tools, samples and more.	<a href="http://kb.cloudiway.com">http://kb.cloudiway.com</a>
Office 365 account with impersonation privileges	Used for impersonation to access mailboxes (read or write). This doesn't have to be the tenant's admin account. However, it must be an administrator account if you wish to migrate the permissions. The account must be able to bypass SSO and authenticate using username/password credentials with the format: user@tenant.onmicrosoft.com (with a password set to never expire).	We recommend you create a non-federated domain account (on your *.onmicrosoft.com domain) especially for migration. After all migrations are complete, simply delete this account. We provide steps below to help you set up an account with impersonation privileges if you don't already have one.

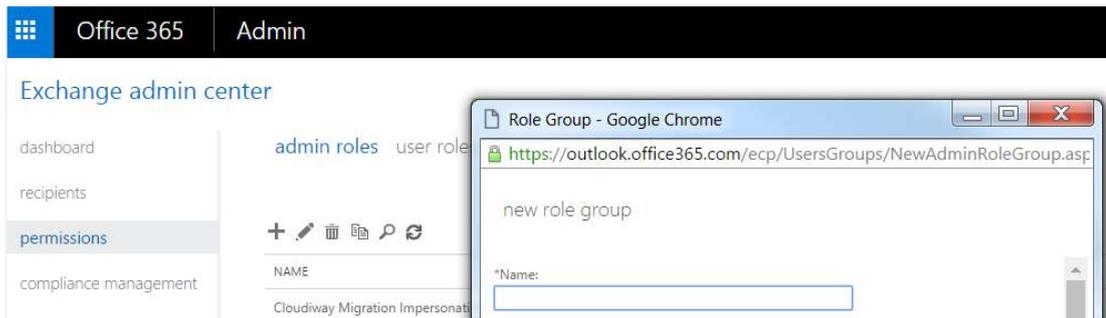
### 5.2 Set up an Office 365 account with impersonation privileges

An account with impersonation privileges can access up to 100 mailboxes concurrently. Therefore, by default, Cloudiway allows you to migrate 100 concurrent users. If you wish to speed up your migration, you should set up additional Office 365 connectors (both source and target) on the Cloudiway platform and associate different accounts with admin access to each one.

Below are the steps to show you how to set up impersonation using the Office 365 Exchange Admin Center. If you don't already have impersonation set up, please follow the steps below.

1. Login with your administrator account to the Office 365 portal
2. Go to the **Exchange admin center**, then click on **permissions** and the **admin roles**

3. Click on the plus sign (+) to create a new role



4. Give your group a name and assign it the roll of **ApplicationImpersonation**, then add a user to the group:

\*Name:

Description:

Write scope:

Roles:  
 + -  
  
**ApplicationImpersonation**

Members:  
 + -  

NAME	DISPLAY NAME
Security Administrator	

Select the members of this role group.  
[Learn more](#)

5. Click on the **Save** button to save your group

### 5.3 Recreate your shared mailboxes (using provisioning)

Cloudiway provides a tool to provision resources, as well as scripts to provision shared mailboxes and reset permissions on them. The tool is available on the Cloudiway migration platform and will be covered later in this guide. This section covers shared mailbox provisioning.

To run the scripts, you will need to use Windows PowerShell. You should check that you have high enough access on your PC to run scripts and a basic working knowledge of PowerShell.

The scripts can be downloaded in zipped format from the Cloudiway knowledge base article, which contains full details and examples of script output, plus the correct running order of the scripts, here:

<http://kb.cloudiway.com/resource-and-shared-mailbox-migration-between-office-365-tenants/>

1. Download the scripts at <http://kb.cloudiway.com/resource-and-shared-mailbox-migration-between-office-365-tenants/> and unzip into your preferred folder for running PowerShell scripts
2. Edit script **WriteSharedMailboxesPerms.ps1** to replace `targetdomain.com` with your target domain name in the **Constant Variables** section.
3. Run the scripts in the following order:  
DumpSharedMailboxes.ps1  
WriteSharedMailboxesPerms.ps1

When the scripts have completed, your shared mailboxes will be created on your target tenant. Nothing else needs to be done.

Please note that Cloudiway provides these scripts as a courtesy to clients, and we do not in any way provide support or warranty for these scripts. If you need further help to recreate resources, please consider getting in touch with our consulting team via [sales@cloudiway.com](mailto:sales@cloudiway.com) to discuss what options are available.

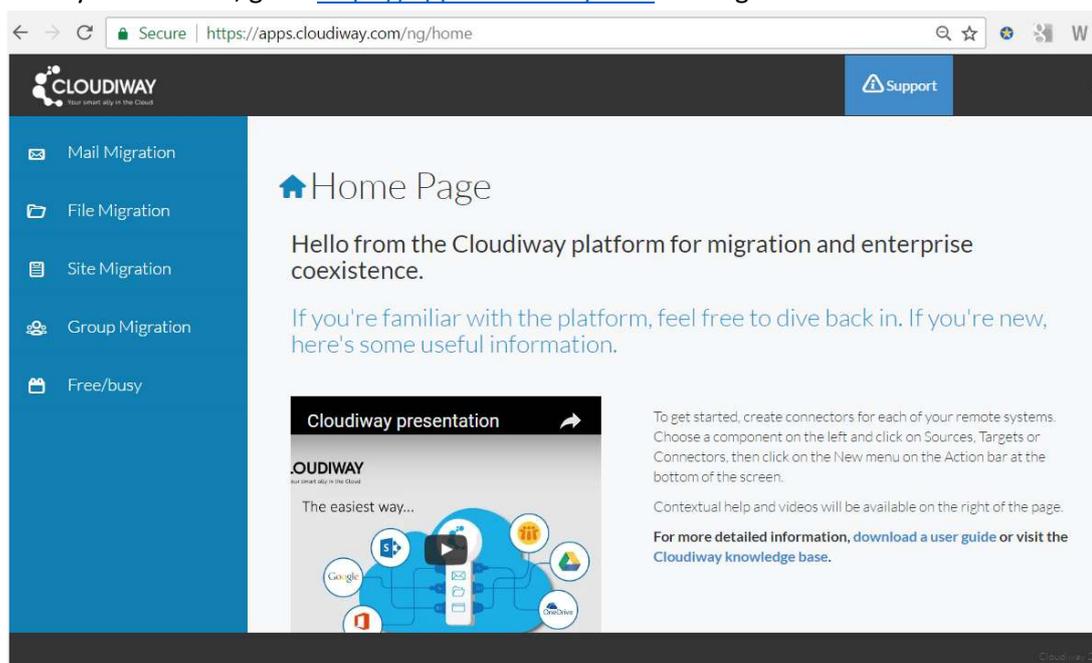
## 6 Use the Cloudiway platform to migrate your mail

### 6.1 Create your source and target connectors

For Cloudiway to migrate your email, it needs to be able to communicate with both your source and target domains. To do this, Cloudiway uses connectors, which are configured on apps.cloudiway.com. You will need to set up a connector for each source tenant you wish to migrate and each target tenant that mail should be migrated to. Follow the steps below to configure Office 365 connectors.

Remember, each account with impersonation privileges can access up to 100 mailboxes concurrently. Therefore, by default, each Cloudiway connector can migrate 100 concurrent users. If you wish to speed up your migration, you should set up additional Office 365 connectors (both source and target) on the Cloudiway platform and associate different accounts with admin access to each one.

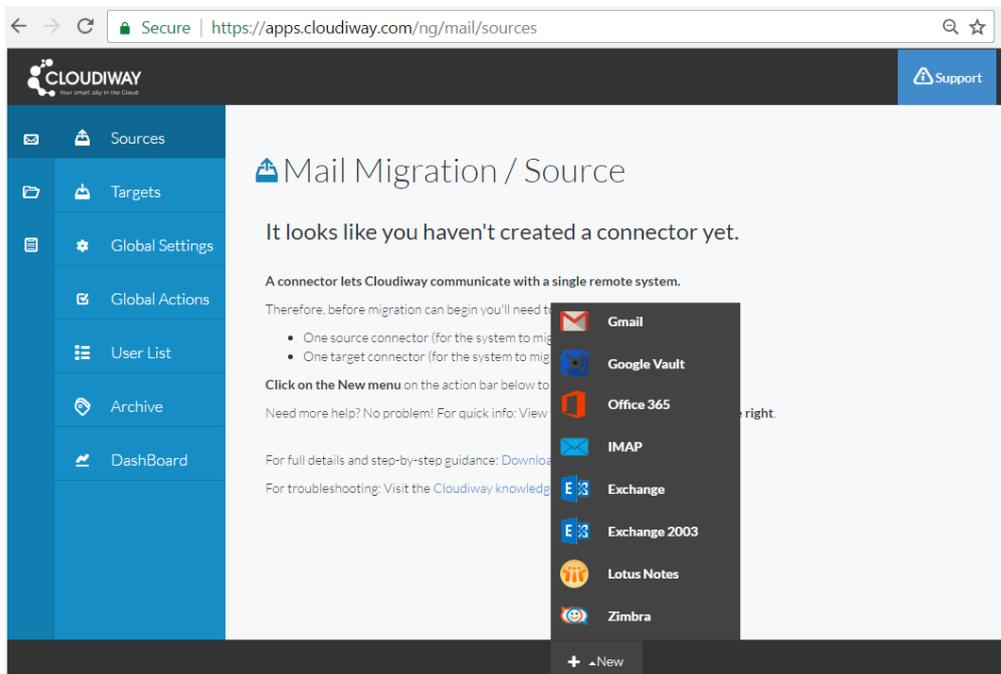
1. From your browser, go to <https://apps.cloudiway.com> and login



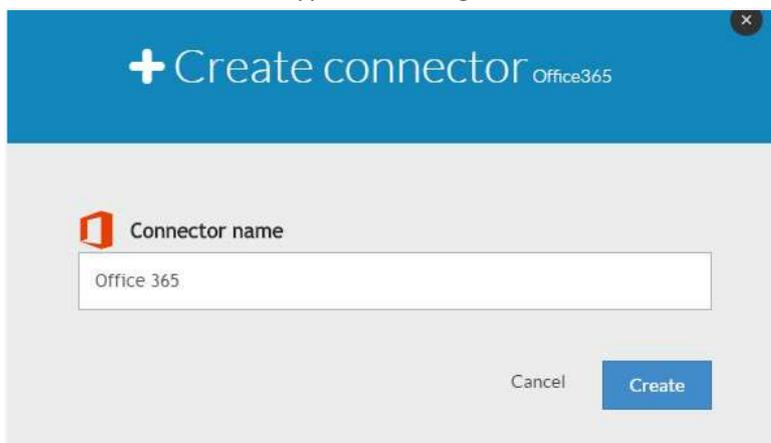
You can choose to manually set up your connectors, or you can use the simpler process of the wizard. The steps below will walk you through the manual process.

2. Click on **Mail Migration** on the left, then **Sources**

3. Click on the **+ New** option at the bottom of the screen

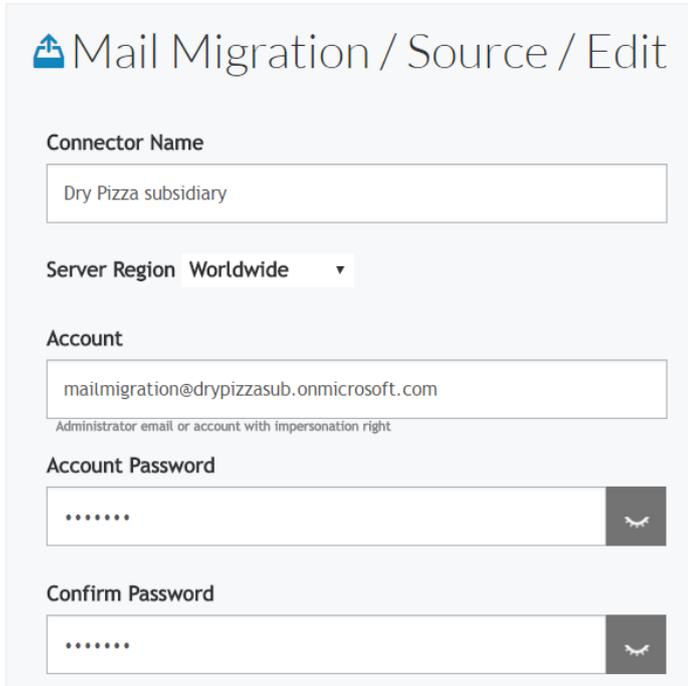


4. Click on **Office 365** and type a meaningful name in **Connector name**



5. Click on the **Create** button

6. Check that the **Server Region** is correct, type the email address of the account you set up with admin access in **Administrator**, then fill in the password fields



The screenshot shows a web form titled "Mail Migration / Source / Edit". It contains the following fields and controls:

- Connector Name:** A text input field containing "Dry Pizza subsidiary".
- Server Region:** A dropdown menu currently set to "Worldwide".
- Account:** A text input field containing "mailmigration@drypizzasub.onmicrosoft.com". Below the field is the text "Administrator email or account with impersonation right".
- Account Password:** A password input field with a toggle icon on the right.
- Confirm Password:** A password input field with a toggle icon on the right.

7. Click on the **Save** button at the bottom of the screen
8. Repeat the steps above to create a target connector, but before saving, take note of the option to automatically migrate old emails to the online archive:



The screenshot shows a section of the form with the following elements:

- Administrator Password:** A password input field with a toggle icon on the right. Below the field is the text "Administrative password of domain".
- Confirm Password:** A password input field with a toggle icon on the right.
- Archive mails older than:** A toggle switch currently set to "OFF" (with "ON" also visible), followed by a text input field containing "0" and the word "months".

9. Leave the **Archive mails old than x months** option off for now (it's covered in the next section)

## 6.2 Create a partial archive from a normal inbox

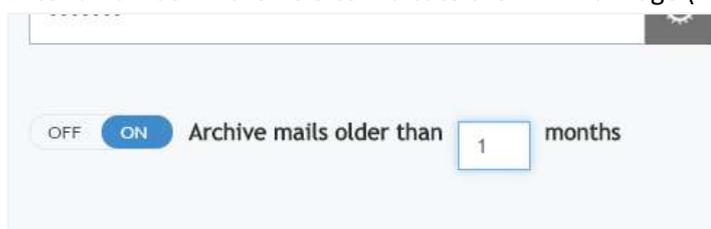
Creating a partial archive of emails provides a number of benefits. From a migration perspective, the biggest benefit is reduced bandwidth. End-users who access mail via Outlook have their mailbox locally cached (in .ost file format). After a mail migration, Outlook will download all migrated mailboxes the first time users access their mailboxes. Therefore, if many users are likely to access Outlook at around the same time after migration (for example, if you've completed a cutover migration one weekend before staff arrive at 9am Monday morning), your bandwidth might slow down due to a glut of downloads.

This can be avoided by partially migrating data to the online archive. For example, you could choose to migrate all items older than 30 days to a mail archive, which would be performed prior to the final cutover. The data will remain online and accessible from each user's inbox as an In-Place Archive folder. The most recent 30 days of emails will be migrated and downloaded when each user first logs in, reducing overall bandwidth usage due to smaller mailbox sizes.

**Note:** you must ensure that In-Place archiving is switched on within your Exchange Admin center (you can bulk-activate using the instructions on TechNet as [https://technet.microsoft.com/en-us/library/jj984357\(v=exchg.150\).aspx](https://technet.microsoft.com/en-us/library/jj984357(v=exchg.150).aspx)).

In-Place archives at the source are treated differently to standard mail and are **not** migrated by default. You can buy a mail archive quota package to perform an archive migration (see section 7.3).

1. With your target connector selected, click on the **Edit** button on the action bar at the bottom of the screen
2. Click on the **ON** button to activate the **Archive mails old than x months** option
3. Enter a number in the field to indicate the minimum age (in months) of mails to be archived



4. Click on the **Save** button at the bottom of the screen

Now, when your migration starts, any emails older than the number of months you specified will be migrated to an In-Place archive. Younger items will be migrated to the target mailbox. The user can continue to use the source mailbox until final cutover, whether it be the following day or in a month's time.

During final cutover, all new and remaining emails will be migrated. Note that migrated items are never re-migrated, so the In-Place archive will contain items older than the months you specified from the date of the first migration pass.

### 6.3 Configure the global settings for migration

Now that you have set up at least one source and target connector, you're ready to configure your global settings. Using the Cloudiway platform, this is simply a matter of selecting what you want to migrate.

By default, the global migration settings are configured to migrate everything but the Trash folder. You can toggle these and change the date and time settings from the Global Settings option on the Cloudiway platform.

Most of the options are self-explanatory. The **Convert Email Address** option needs further explanation. When activated, this option rewrites email addresses found in the header and replaces source email addresses with their corresponding target email addresses.

For example, if Bob sends an email to his colleague to Chloe from his source address bob@source.com to chloe@source.com and a week later, after migration, chloe@target.com replies to Bob, the Cloudiway platform has already updated SMTP header in Bob's original email in her inbox, so her reply will be sent to bob@target.

For migrations where the only email address change is the domain name (such as Bob's email address above), the Cloudiway platform uses the domain name defined in the target connector to convert source email addresses.

For migrations where both the domain name and the username change (for example, bob@source.com becomes newbob@target.com), the Cloudiway platform already uses a mapping table to link each user. This mapping table is also used by the Convert Email Addresses option in this situation. *Therefore, it's important that all users exist in the mapping table before migration begins* (this guide contains instructions).

Note that users in the mapping table do not require a license until you're ready to migrate them. Therefore, you can assign the free 'No license' option to all your users prior to migration. Having a complete mapping table is also required if you plan to use Cloudiway's free/busy calendar tool in conjunction with mail migration.

The Convert Email Address option is switched on by default (and is best left on). Make sure your user list is up to date to benefit from this functionality.

#### **X.500 address migration**

The Cloudiway platform automatically converts any X.500 addresses to SMTP during the mail migration. However, X500 entries are not converted during the calendar migration. It's necessary to migrate the LegacyExchangeDN. If you do not migrate the LegacyExchangeDN, your users will not be able to modify their calendar entries after the migration.

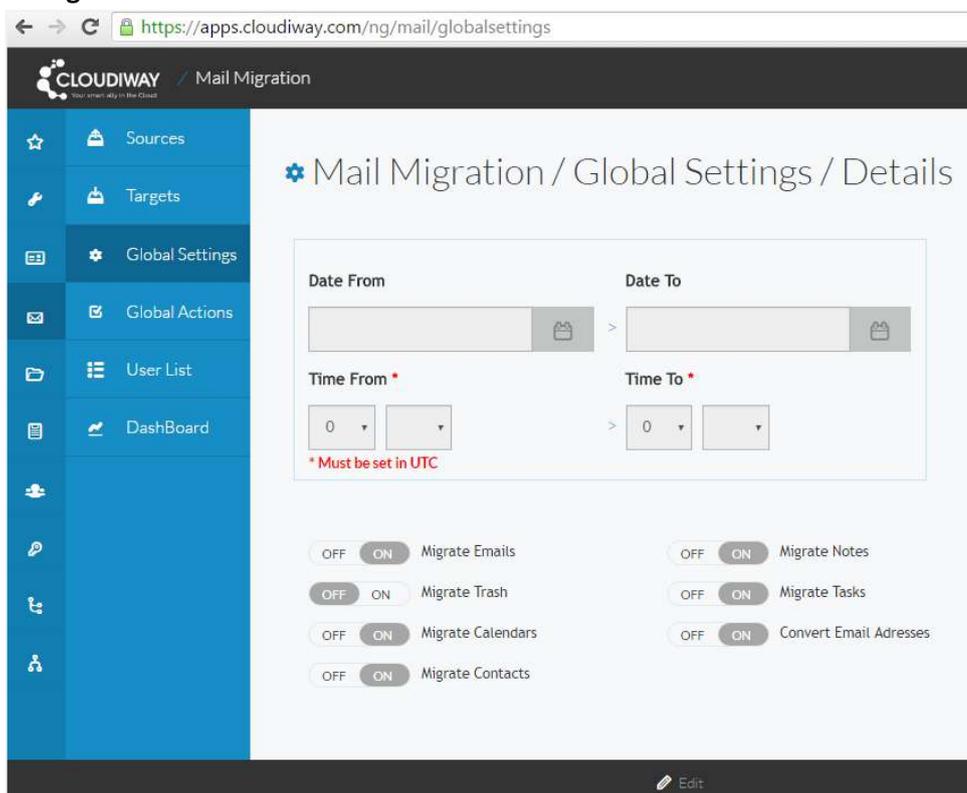
Please follow this article to know how to migrate the LegacyExchangeDN.

<https://kb.cloudiway.com/article/migrate-legacydn/>

This task can be done at any time of the project. However, the best practice is to do it before the migration.

1. From the same Mail Migration area of <https://apps.cloudiway.com>, click on

### Global Settings



By default, the global migration settings are configured to migrate everything but the Trash folder. You can toggle these and change the date and time settings in Edit mode. Please refer to the text above these steps for more information on the Convert Email Addresses option.

2. Click on the **Edit** button at the bottom of the screen  
The grey buttons will turn blue, indicating you can now edit these to your preferred global migration plan.
3. Update any settings you wish to alter, remembering that time and dates are set to the UTC time zone
4. Click on the **Save** button at the bottom of the screen to update your global settings

## 6.4 Import or create your users

There are a number of ways to add users that you wish to migrate. These include:

- CSV file upload;
- Cloudiway's Import Users tool (using IAM); and,
- creation of single users.

Regardless, each user will need to be assigned a license type — Trial (limited to 100 MB), Education, Standard, Archive, or No License (used for adding users to your mapping table regardless of migration plans).

### 6.4.1 Option 1: CSV import

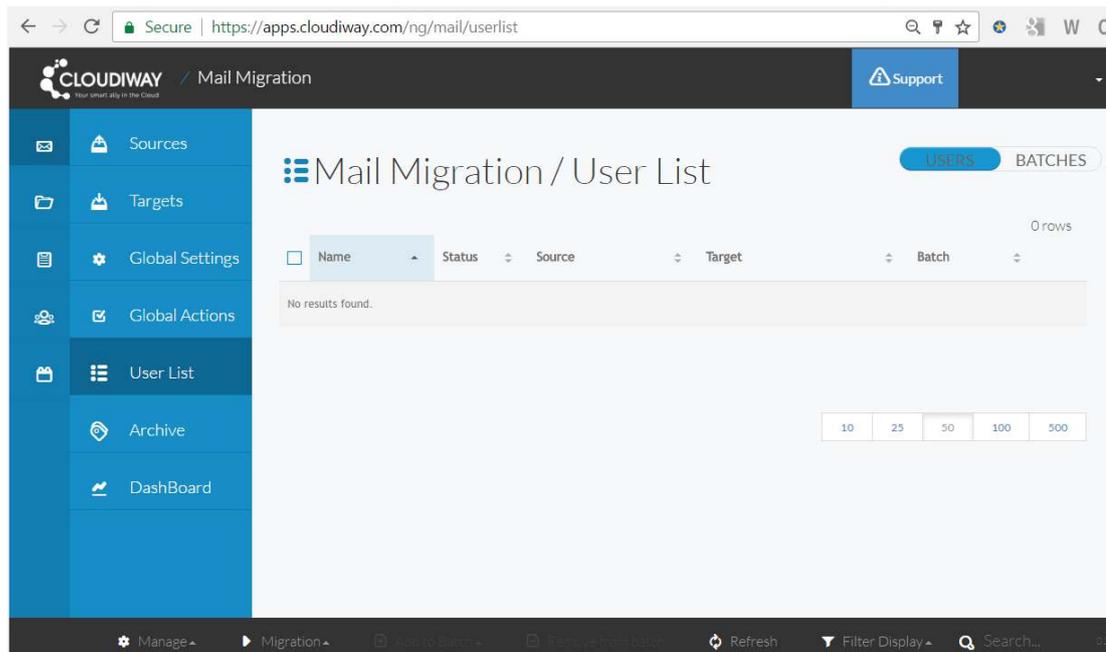
If you have a CSV file of all your users, you can upload the file to Cloudiway. The file must have the following fields in the header row:

```
FirstName;LastName;SourceEmail;TargetEmail;BatchName
```

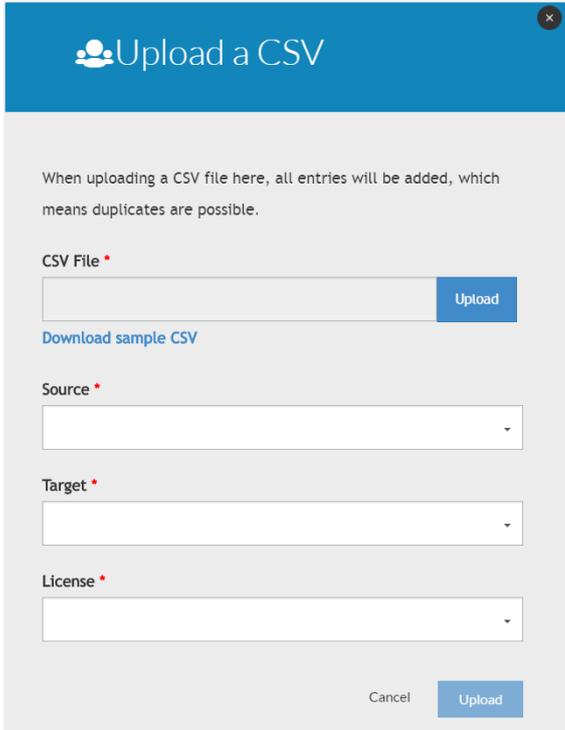
Note that many browsers limit CSV file uploads to 5000 lines, so files larger than that should be split up and uploaded separately. Data already uploaded will not be overwritten, so you can upload as many files as required.

The **BatchName** field can be left blank. If required, you can use this field to name different batches so they can be run in a certain order. A sample CSV file is available for download during the steps outlined below.

1. Ensure you're still in the Mail Migration area of apps.cloudiway.com and go to **User List**



2. Click on **Manage** on the action bar at the bottom and select **Upload CSV**



Upload a CSV

When uploading a CSV file here, all entries will be added, which means duplicates are possible.

CSV File \*

Upload

[Download sample CSV](#)

Source \*

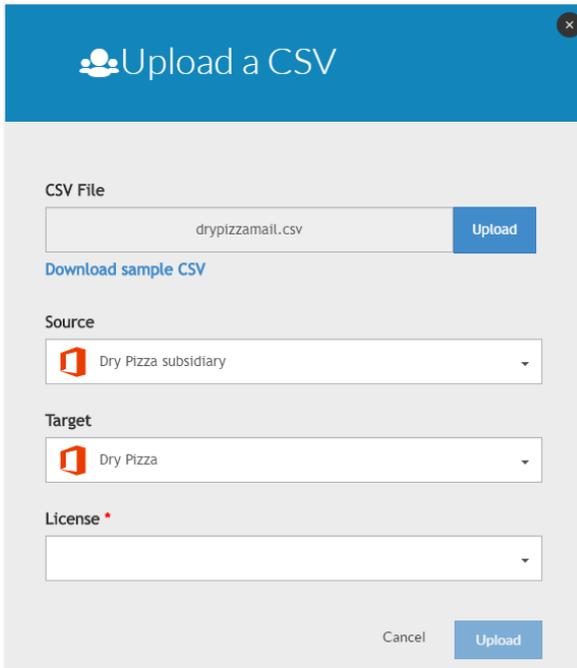
Target \*

License \*

Cancel Upload

3. If required, click on **Download sample CSV** and add your users to the CSV file using the sample headers (FirstName;LastName;SourceEmail;TargetEmail;BatchName)
4. When you have a complete CSV file with the correct headers, click on the **Upload** button
5. Locate your CSV file within your own file system, and double-click on it to select it

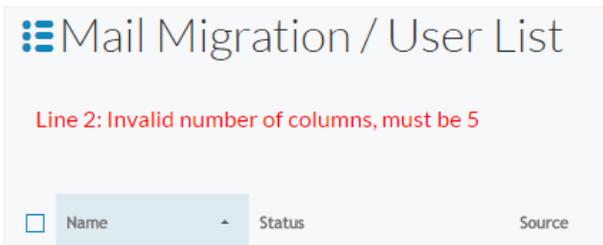
6. Select the appropriate connectors in the **Source** and **Target** fields



7. Select the license type from the **License** drop-down list

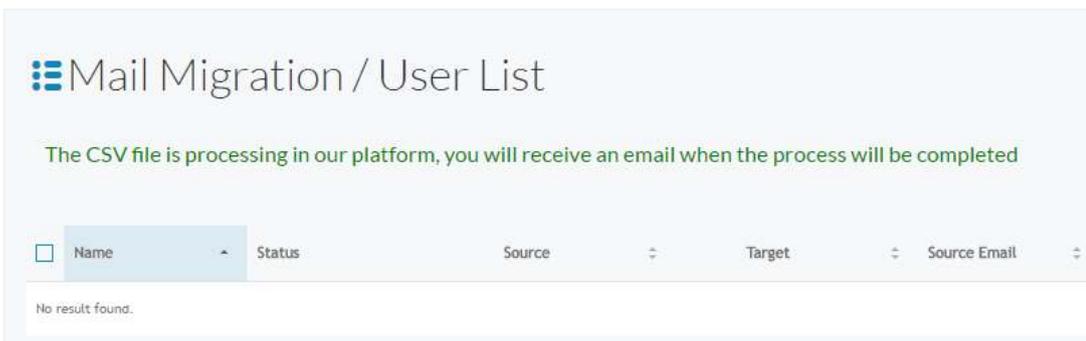
8. Click on the **Upload** button.

If the CSV file format is not correct, you will see an error message on your screen:



9. If you see any error messages, check your CSV file to ensure it has five columns with a separator between each and try uploading again

10. Once the CSV file format is correct, you will see a confirmation message at the top of your screen:



11. Check your email. When you have received confirmation that the upload has been completed, you can refresh the Cloudiway platform to display your imported users

#### 6.4.2 Option 2: Import Users tool

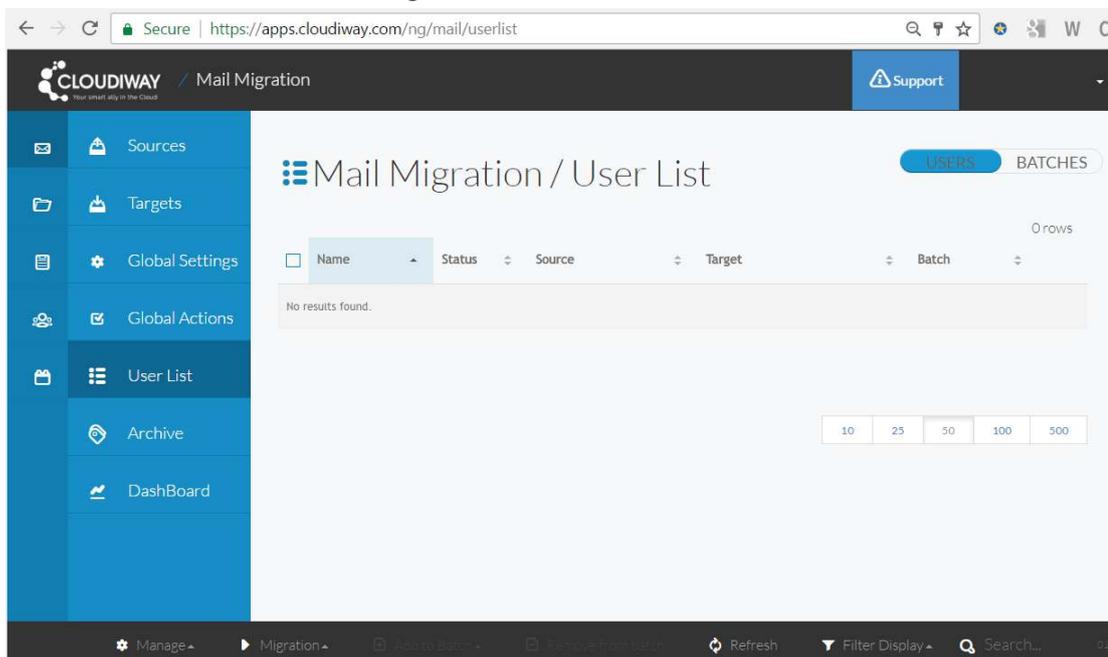
Cloudiway's Import Users tool helps you to retrieve users from your source tenant. The functionality works via Identity Access Management. The tool requires you to specify any transformation rules you wish to apply. It will then add new users in the Mail Migration User List view within the Cloudiway platform.

This is an advanced tool that is best used in partnership with Cloudiway consultants. If you are interested in using this option, please get in touch with your Cloudiway contact.

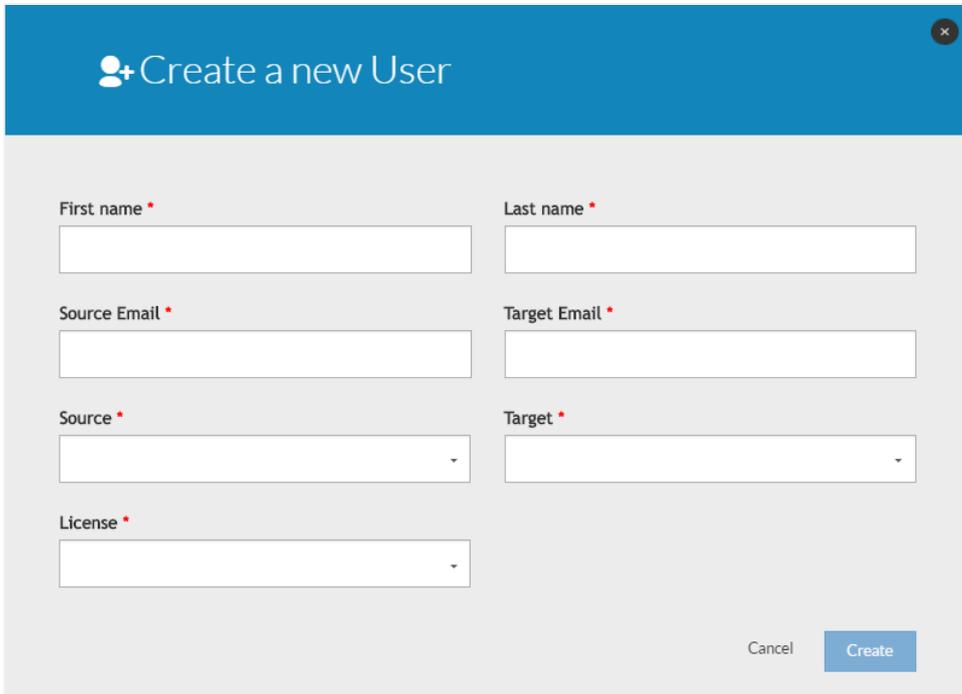
#### 6.4.3 Option 3: Single user creation details

Many of our first-time customers create a single user for testing purposes. This provides a means of watching the migration process without affecting all users. Single users can also be created for migrations affecting just a few users.

1. Go to the **User List** of the **Mail Migration** menu



2. Click on **Manage** on the action bar at the bottom and select **Create Single** to display the following screen:

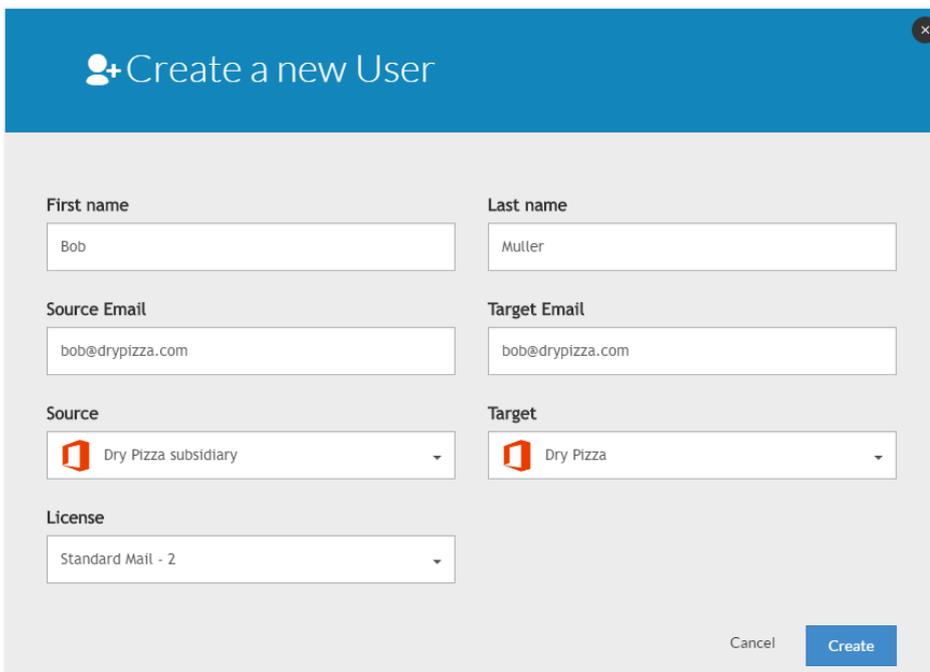


The screenshot shows a modal window titled "Create a new User" with a close button in the top right corner. The form contains the following fields:

- First name \* (empty text input)
- Last name \* (empty text input)
- Source Email \* (empty text input)
- Target Email \* (empty text input)
- Source \* (empty dropdown menu)
- Target \* (empty dropdown menu)
- License \* (empty dropdown menu)

At the bottom right, there are "Cancel" and "Create" buttons.

3. Fill in all details for a new user



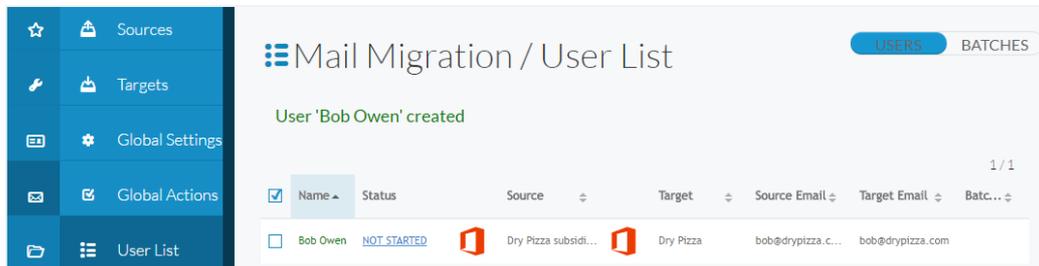
The screenshot shows the same "Create a new User" modal window, but with the following details filled in:

- First name: Bob
- Last name: Muller
- Source Email: bob@drypizza.com
- Target Email: bob@drypizza.com
- Source: Dry Pizza subsidiary (with a dropdown arrow)
- Target: Dry Pizza (with a dropdown arrow)
- License: Standard Mail - 2 (with a dropdown arrow)

At the bottom right, there are "Cancel" and "Create" buttons.

- Click on the **Create** button

The new user will be added to the Mail Migration / User List screen:

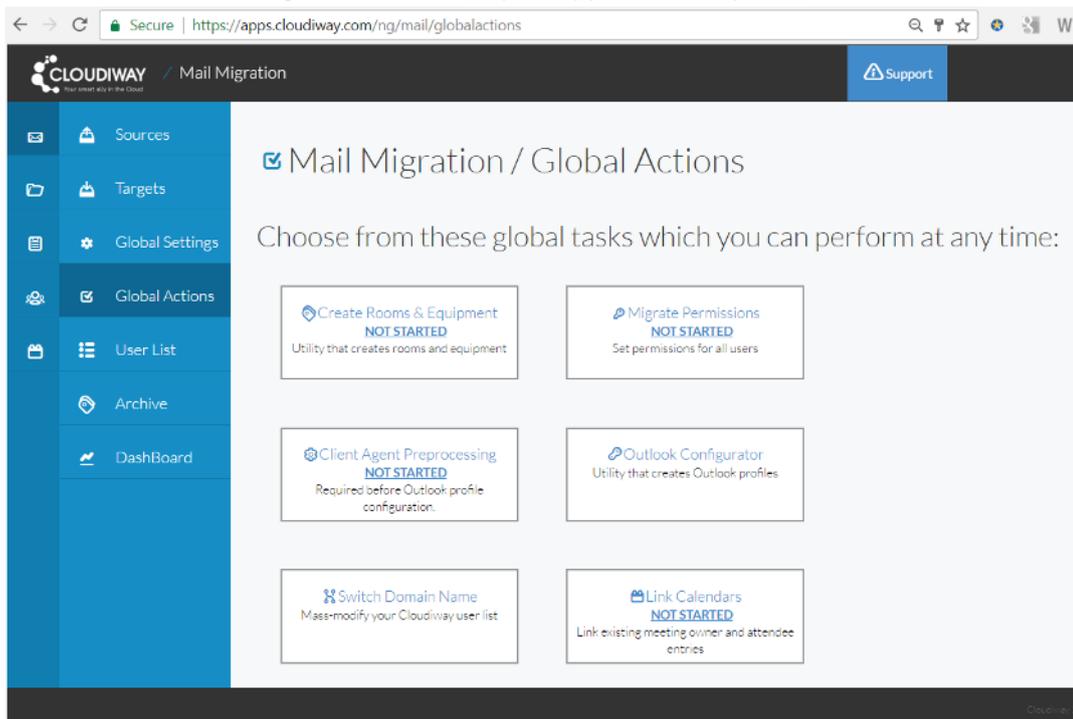


- Repeat steps 1 to 4 for any more users you'd like to create

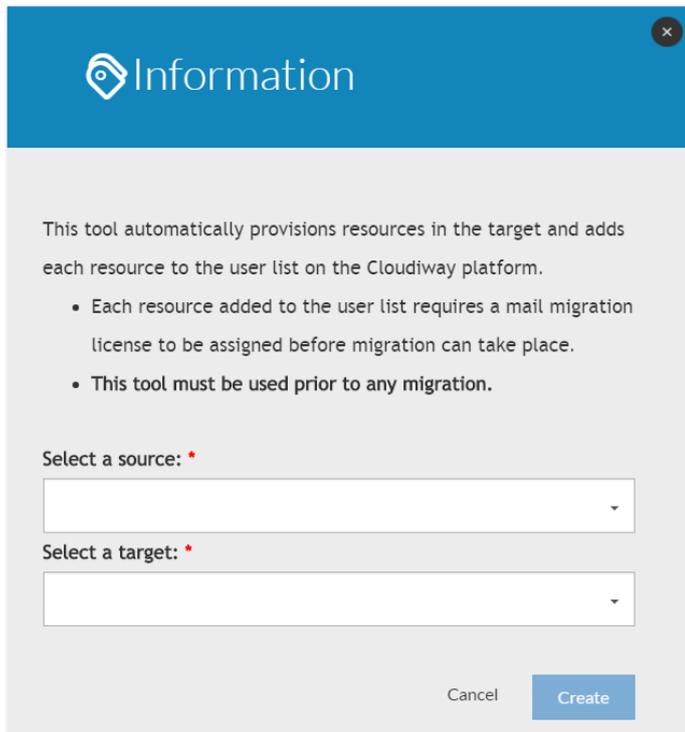
## 6.5 Recreate your resources (using provisioning)

The Cloudiway platform provides a free resource creation tool to customers performing mail migrations between Office 365 tenants. Recreate rooms and equipment using the steps below.

- From the same Mail Migration area of <https://apps.cloudiway.com>, click on **Global Actions**



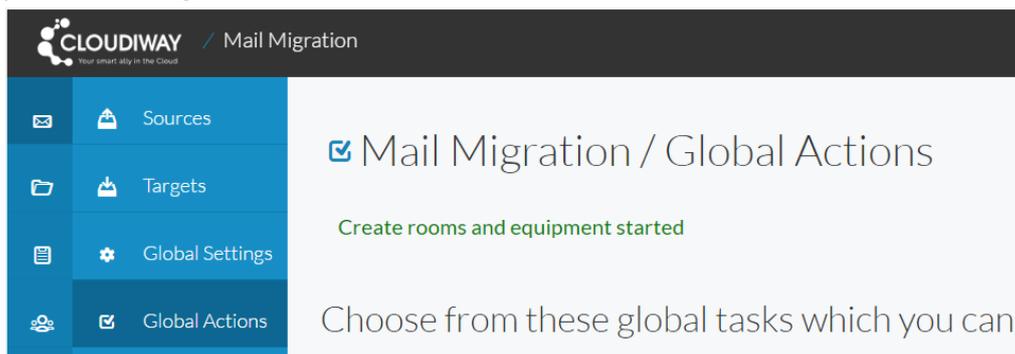
2. Click on the **Create Rooms & Equipment** option to display the following dialog box:



The dialog box has a blue header with the Cloudiway logo and the word "Information". Below the header, there is a paragraph of text: "This tool automatically provisions resources in the target and adds each resource to the user list on the Cloudiway platform." This is followed by a bulleted list: "• Each resource added to the user list requires a mail migration license to be assigned before migration can take place." and "• This tool must be used prior to any migration." Below the list are two dropdown menus: "Select a source: \*" and "Select a target: \*". At the bottom right, there are two buttons: "Cancel" and "Create".

3. Select the source that contains the rooms and equipment to be provisioned
4. Click on the **Create** button to trigger the process

The dialog box will disappear and you will receive a confirmation on your screen that the process has begun.



You can watch further progress by refreshing the **Global Actions** screen, where a progress bar will be displayed during processing, and 'DONE' will be displayed when the process is complete.

5. Click on the **User List** sub-menu of the Mail Migration area and verify that all resources have been created.

## 6.6 Activate and monitor your migration

Now that you have performed all the pre-migration steps within your tenants and within Cloudiway, you're ready to migrate. We recommend you run a test migration on a single user first to check that your configuration produces the outcome you expect.

To start your migration, select the users or batch you wish to migrate and click on the **Start** button. Your batch will be scheduled and will begin as soon as resources are available. By default, a hundred migrations can be run concurrently per connector.

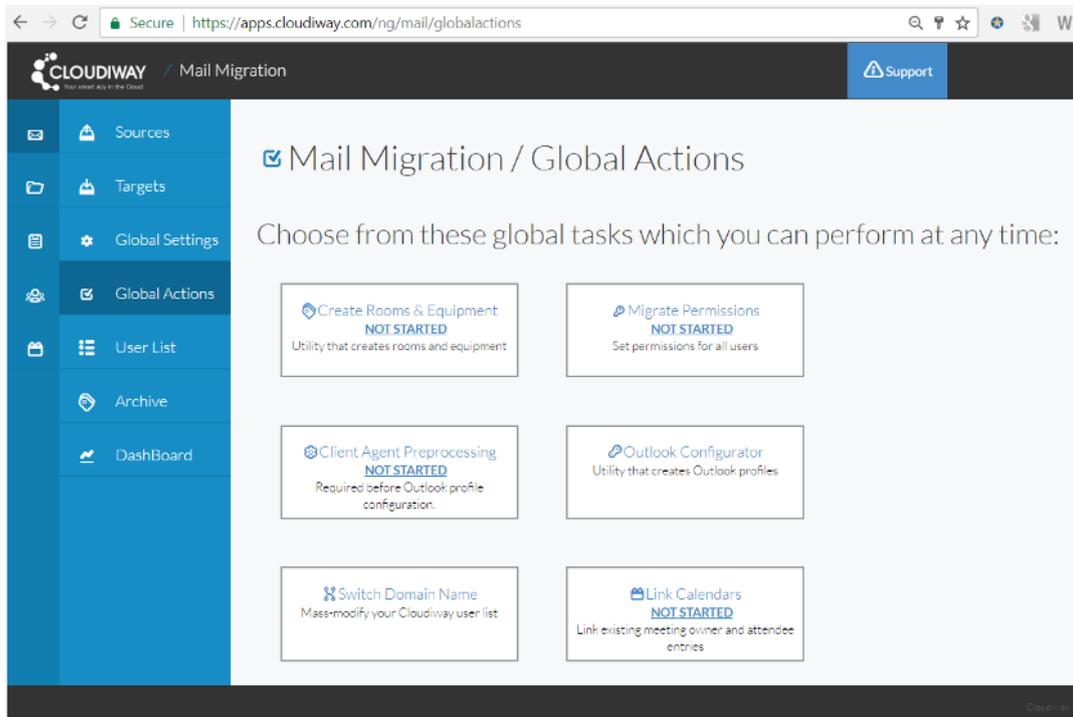
Don't forget that Cloudiway migration platform supports delta passes and that migrations are therefore incremental; every time you restart the migration of a mailbox, only items that haven't already been copied to the target will be migrated. The platform therefore does not duplicate items in the target.

## 6.7 Migrate permissions globally

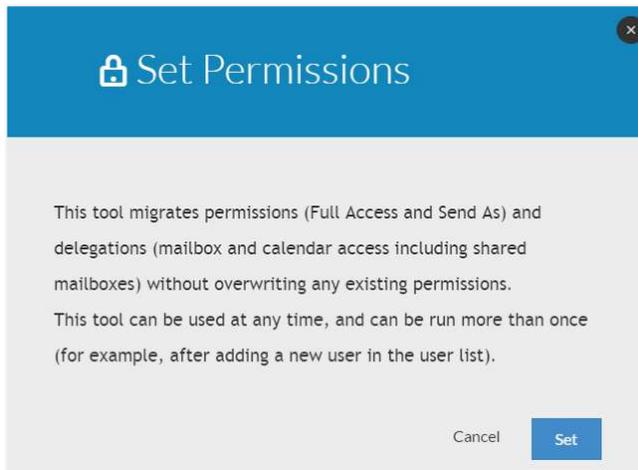
You can globally migrate permissions for mailboxes through the Cloudiway platform.

NOTE: Once you start the process of setting permissions, it cannot be stopped.

1. From the same Mail Migration area of <https://apps.cloudiway.com>, click on **Global Actions**



2. Click on the **Migrate Permissions** option on the screen to display the following dialog box:



3. Click on the **Set** button to trigger the Cloudiway platform into setting permissions on all mailboxes

## 7 Post-migration options

### 7.1 Migrate a domain name between tenants

Remember, a domain name can only be attached to one Office 365 tenant at a time, so during a typical migration where the domain name is moved from the source to the tenant, it could remain unavailable for up to two days and mail delivery would be affected.

However, Cloudiway provides a solution that makes the transition trouble-free. Cloudiway's mail routing platform enables emails to continue to be received and delivered to the correct inboxes during a domain name change. Mail headers are not modified.

Once you've pointed your MX records to our mail routing platform, it will deliver incoming mails to the target domain of your choice (ie, targettenant.onmicrosoft.com). You then detach the domain from your source tenant, and once it's completely detached you attach it to the target tenant, point your MX records to the target Office 365 tenant and stop using the Cloudiway mail routing platform.

The mail routing service is not available by default, so if this functionality interests you, please get in touch for more information and a quote.

The following steps explain how to transfer a domain name between two Office 365 tenants. They require use of administration tools such as AD Sync and PowerShell. Remember, Cloudiway does not provide support for the use of these products, so if you don't have the required experience, please contact Cloudiway who can put you in touch with expert partners to assist you.

1. Modify the TTL value of each source domain MX record to the smallest time allowed
2. Provide Cloudiway with your source and target SMTP details so we can configure mail routing between the source domain names and the technical target domain. For example:

Source SMTP	Target SMTP
company1.com	target.onmicrosoft.com
company2.com	target.onmicrosoft.com

3. Point your MX records to the Cloudiway IP
4. Run a final delta pass
5. Clean up all references to the domain in the tenant's objects to ensure every reference is remove. This includes all primary SMTP addresses, aliases and userprincipalnames of users, resources, rooms, contacts and group objects. This should be done in your local Active Directory. Use AD Sync if you it's already part of your set up. If not, you could use a PowerShell script to clean everything up. We have provided the following sample script, but

please be aware that this is not exhaustive, and we do not provide any PowerShell script support:

```
Get-MsolUser | ForEach { Set-MsolUserPrincipalName -ObjectId  
$_.ObjectId -NewUserPrincipalName  
($_.UserPrincipalName.Split("@")[0] +  
"@THesourcedomain.onmicrosoft.com") }
```

Once you're certain that all references to the domain have been removed, you're safe to detach it.

6. Detach the domains from the source tenant from within Office 365 Admin portal (go to **Admin**, then **Office365**, then **Domains**, then **Delete a domain**)
7. Wait until the domain is completely detached, and then in the Office 365 Admin portal, attach the domain to the target tenant
8. Set the TXT record in the domain's DNS settings
9. In the Office 365 Admin portal, verify domain ownership
10. Reassign the primary SMTP addresses to all your users  
At this point, your target tenant is configured. You can now safely point your MX records to the target.
11. Point your MX records to the target Office 365 tenant

Your Cloudiway mail migration has now been completed (but other administrative migration tasks might still exist). Cloudiway cannot provide post-migration reconfiguration advice about your AD Sync environment or client computers. If you need further help with these, we have a range of partners who can work with you, depending on your needs. Please get in touch via [sales@cloudiway.com](mailto:sales@cloudiway.com).

For your convenience, Cloudiway does provide a tool to create new Outlook profiles. If you would like to use this product, please get in touch.

## 7.2 Migrate existing archive mailboxes

Office 365 In-Place archive folders can be migrated between tenants. These folders are not migrated during standard mail migration.

Office 365 archives can be entirely migrated to the In-Place Archives folder within an Office 365 inbox or directly to an inbox, or a mixture of both. Cloudiway requires a special archive license to ensure archive mails are migrated from the source In-Place archive to the correct target. (You can buy archive packages the same way you buy a standard user license for Cloudiway, or you can contact us at [sales@cloudiway.com](mailto:sales@cloudiway.com) to request archive packages.)

The Cloudiway platform ignores In-Place archives during standard mail migration. During archive migrations, the platform ignores everything but In-Place Archive folders, so there's no risk of other inbox items being migrated.

The most straightforward way to migrate archives is to create a new target connector to use especially for archive migrations. This allows you to begin an archive migration even if a user's inbox migration is ongoing.

For example, the following steps are required to migrate a user who has an inbox and an archive:

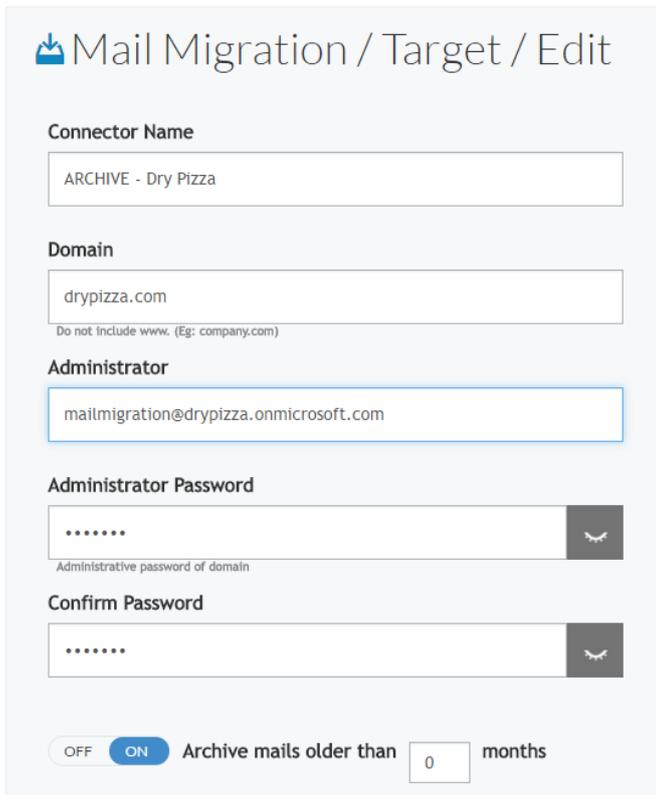
1. Create a source connector for standard email migration
2. Create a target connector
3. Create a mail user with a standard license and link to both the source and target connectors
4. Buy one or more mail archive quota packages
5. Create a second target Office 365 connector (perhaps with 'archive' in the name) with the archive option switched on and set to zero
6. Create an archive user and link the user to the Google Vault source connector and the archive target connector

If you have followed this user guide, you will have already performed steps 1, 2 and 3. You can now perform steps 4 to 6 for the archive migration.

For example, if Bob has a normal mailbox and an In-Place archive, he will appear on the Cloudiway platform twice: once in the standard **User List** section and once in the **Archive** user list section. Bob's entry in the **User List** section will be associated with the standard mail migration connectors you set up in steps 1 and 2. Bob's entry in the **Archive** user list section will be associated with the archive target connector you set up in steps 5.

As these two migrations are treated separately, you have the flexibility to migrate archives before, during or after the standard mailbox migration has taken place. If you choose to migrate both at the same time, ensure that you provide different admin credentials for each target connector, and consider duplicating the source connector with different admin credentials so the migration is not limited by throttling on a single account.

1. Create a new **target** connector of the type **Office 365** and fill in the details: remember, you can choose to specify a different admin account if you wish to perform different types of migrations at the same time (such as an archive migration and a standard email migration), and you may wish to duplicate any source connectors and add different admin accounts to prevent throttling limitations
2. If you wish to migrate all archives to a target archive, activate the **Archive mails older than x months** option and make sure the zero stays in the box so that all emails are migrated to the archive



Mail Migration / Target / Edit

**Connector Name**  
ARCHIVE - Dry Pizza

**Domain**  
drypizza.com  
Do not include www. (Eg: company.com)

**Administrator**  
mailmigration@drypizza.onmicrosoft.com

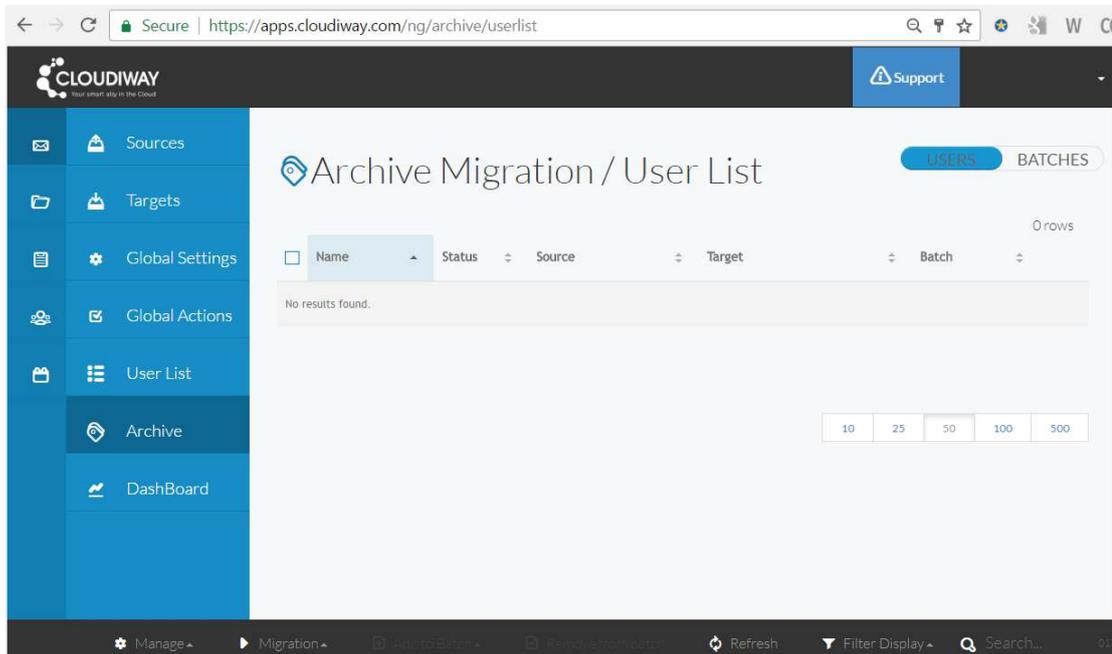
**Administrator Password**  
.....  
Administrative password of domain

**Confirm Password**  
.....

OFF  ON Archive mails older than  months

**NOTE:** If you wish to migrate all In-Place archives to a user's inbox directly, leave this option switched off. To migrate only older archive emails from a user's In-Place archive to a user's target In-Place Archive folder and all newer archive mails to a user's inbox directly, activate this option and change the zero to the age (in months) of emails you wish to send to the target In-Place Archive folder.

3. Click on the **Archive** menu of the Cloudiway platform to display the archive migration user list area



4. Add any In-Place archive mailbox users to this user list area (see *section 6.4* if you need a refresher the different ways users can be added) and ensure you assign the standard Office 365 source connector and the Office 365 archive target connector to each archive user
5. To start the migration, select the users or batch in the user list and click on the **Migration** menu on the action bar, then click on the **Start** button

## 8 Troubleshooting

Cloudiway provides an extensive knowledge base with many resources, including common error messages, video guides and downloads.

Please visit the mail migration knowledge base area here:

<http://kb.cloudiway.com/category/faq-cloudiway/cloudiway-migration-products/mail-migration-faq-cloudiway/>

Please visit the entire knowledge base here (where you can search for keywords or read through topics): <http://kb.cloudiway.com/>

The knowledge base also contains information on how you can ask for further support, should you require it.