Cloudiway Google Groups migration

Migrate from Google Groups to Office 365 groups

Document history

Date	Editor	Change details
14/10/2016	WR	First publication.
29/11/2016	WR	Added user import section and updated group import section.
17/03/2017	WR	Updated with Google migration user default language information.

Table of contents

1   Group migration with Cloudiway

Google Groups can be migrated as part of your entire migration plan or as an independent project, depending on your business needs. You can choose to migrate each group to an Office 365 group or to a shared mailbox.

By default, the Cloudiway platform migrates a group to an Office 365 group. An Office 365 group is used to communicate, collaborate, and schedule events from within a user's inbox, in an area dedicated to groups. In comparison, an Office 365 shared mailbox is used when a group of people need to monitor and send email from a common email address rather than from individuals.

You can override the default on a per-group basis with the Cloudiway group migration platform. As a result, you can achieve total flexibility during a Google Groups migration to Office 365.

The path to migration is straightforward. In five steps and with very little setup, your Google Groups will be migrated to your intended target. The steps are:

1. You set up a migration account and tell the Cloudiway platform where to find your groups.
2. Cloudiway retrieves a list of groups that the migration account has access to.
3. You choose which groups to migrate and their target and activate migration.
4. Cloudiway creates the target object (Office 365 group or shared mailbox).
5. Cloudiway creates the target content and adds members and permissions

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 URL of the source group 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

Cloudiway's software platform has been designed and developed to support large migrations.

The on-demand migration engine is able to allocate the migration capacity that you need to migrate the volume of data of your choice in the time slot that you have allocated for your migration.

Please bear in mind that Office 365 can heavily throttle users. When you perform too many calls, Office 365 begins throttling and decreases 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 by Office 365 and is able to achieve excellent throughput.

The Cloudiway platform doesn't use any Google APIs so there are no limitations imposed. The speed of migration will only be limited by internet speed and the transfer protocol (HTTP).

4 Group migration scope

4.1 What can be migrated

When migrating from Google Groups, all of the following items can be migrated:

- Conversation content, including:
  - Answers
  - Attachments
  - Metadata (author, date of creation)

- Group memberships
- Membership roles

During migration, Cloudiway creates the target objects (Office 365 group or shared mailbox) and automatically adds its existing members and their roles.

4.2 Migration considerations

Some content from Google Groups cannot be migrated:

- embedded Google files and folders in posts;
- the Manager role (no equivalent in Office 365);
- tags/categories (no equivalent in Office 365); and,
- ratings and resolution status (no equivalent in Office 365).
- Welcome page (no equivalent in Office 365).
- Pinned topics are migrated, but not pinned (no equivalent in Office 365).
- Announcements and Discussions are migrated as simple conversations (No equivalent in Office 365).

It's important to distinguish between attachments and embedded files. When a file is attached to Google Groups content, it is migrated. However, embedded files and folders are not migrated during Google Groups migration. As a result, their links will continue to work after the migration is complete. If you choose to migrate Google Drive files separately, bear in mind that any embedded files in a migrated group will continue to be accessed from the source rather than the target.

The Cloudiway platform doesn't use any Google APIs to access Google Groups. To perform the migration, you will need to create a new Google user to use during migration and manually give it manager permission to each source Google group that you wish to migrate.

If any of your users have created a group, they will also need to add the new Google user to the group with manager permission. It's therefore important that you notify your users that any groups they have created cannot be migrated unless this new user is added.

Delta passes can be used with group migration to ensure all batch migrations are completed. The Cloudiway platform uses the URL of the source group as the unique ID during migration. This ensures a group is only migrated once. However, this also means that a new reply on a group that has already been migrated will never be migrated.

4.3   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. 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.	https://apps.cloudiway.com
Knowledge base access	Our extensive knowledge base is always accessible, with videos, troubleshooting tools, samples and more.	http://kb.cloudiway.com
Google account with group management rights	This standard Google account must have group management rights to each Google group you wish to migrate. It must also have its default language set to English for migration to work.	We recommend you create a migration account especially for migration. After all migrations are complete, simply delete this account.
Office 365 account with global admin rights	Used to create security groups and manage membership. 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 migration account especially for migration. After all migrations are complete, simply delete this account. We provide steps below to help you set up an account if you don't already have one.

5.2   G Suite — Set up migration account with manager access

For the Cloudiway platform to connect to each of your Google Groups, it will use a standard user account which has been granted manager access to each of your groups. You will need to add the user's credentials to the Cloudiway platform, so we recommend that you create a new G Suite user especially for migration, then delete the user when migration is complete.

1.   In your G Suite admin area, create a new standard user (eg, groupmigration@yourcompany.com), and make sure you set the default language to English.

2.   In each of your Google Groups to be migrated, grant the new user manager access (in a group, click on **Manage** on the right, then **Roles** from the list on the left, then **Manager**, and add the migration user).

3.   If there's a chance that any of your end-users have created their own groups, notify them of the upcoming migration and ask them to add the migration user to their groups with the manager role assigned.

4.   Take note of the username and password: it will be used with the Cloudiway platform shortly.

5.3   Office 365 — Set up an account with impersonation privileges
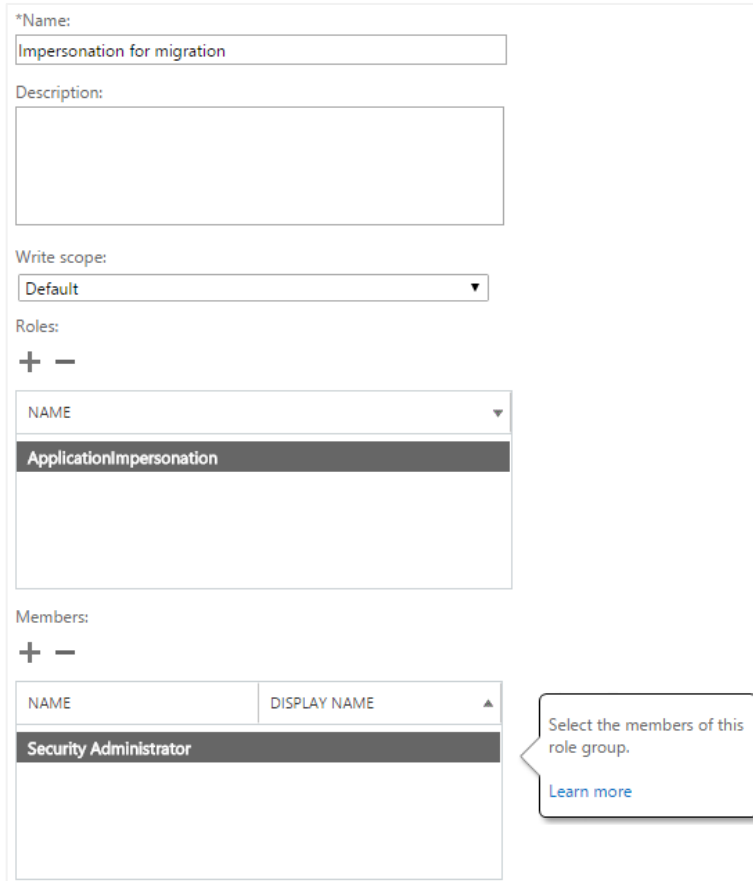
An account with impersonation privileges can access up to 100 groups concurrently. Therefore, by default, Cloudiway allows you to migrate 100 groups concurrently.

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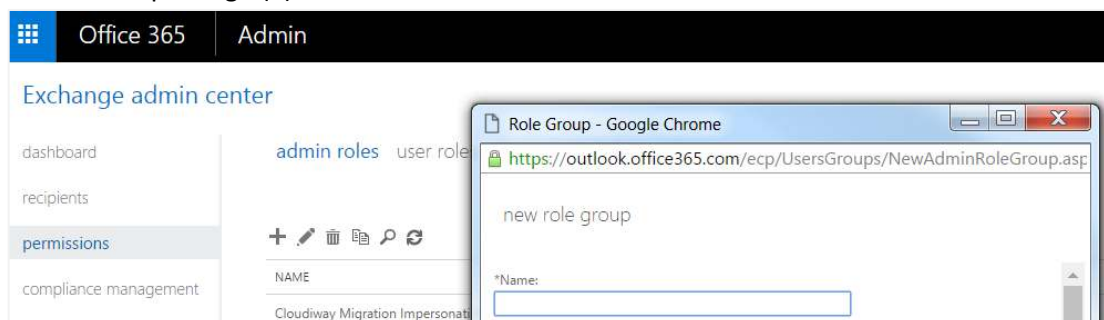
4. Give your group a name and assign it the roll of **ApplicationImpersonation**, then add a user to the group:


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

6 Use the Cloudiway platform to migrate groups

## 6.1 Create your Google Groups source connector

For Cloudiway to migrate your groups, 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. Follow the steps below to configure a Google Groups source connector.

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

   2. Click on **Group Migration** on the left, then **Sources**
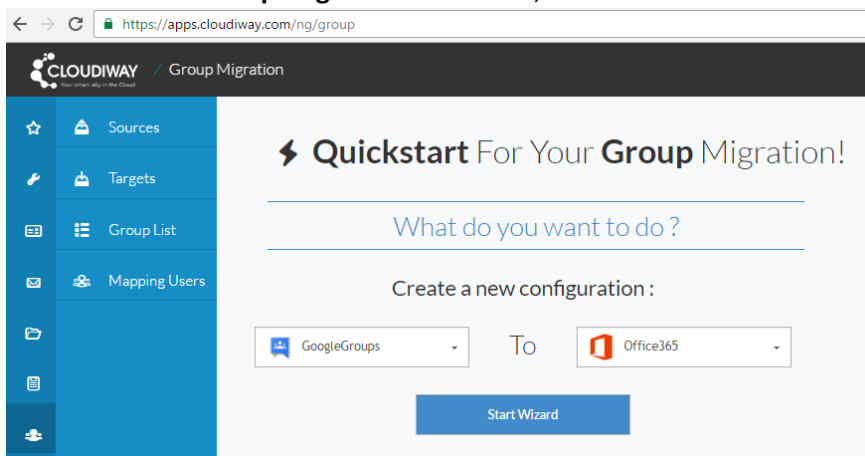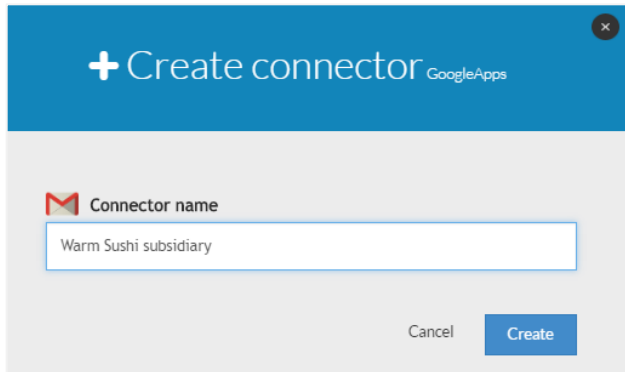
You can choose to manually set up your connectors, or you can use the simpler process of the wizard. The steps below will walk you through the manual process.
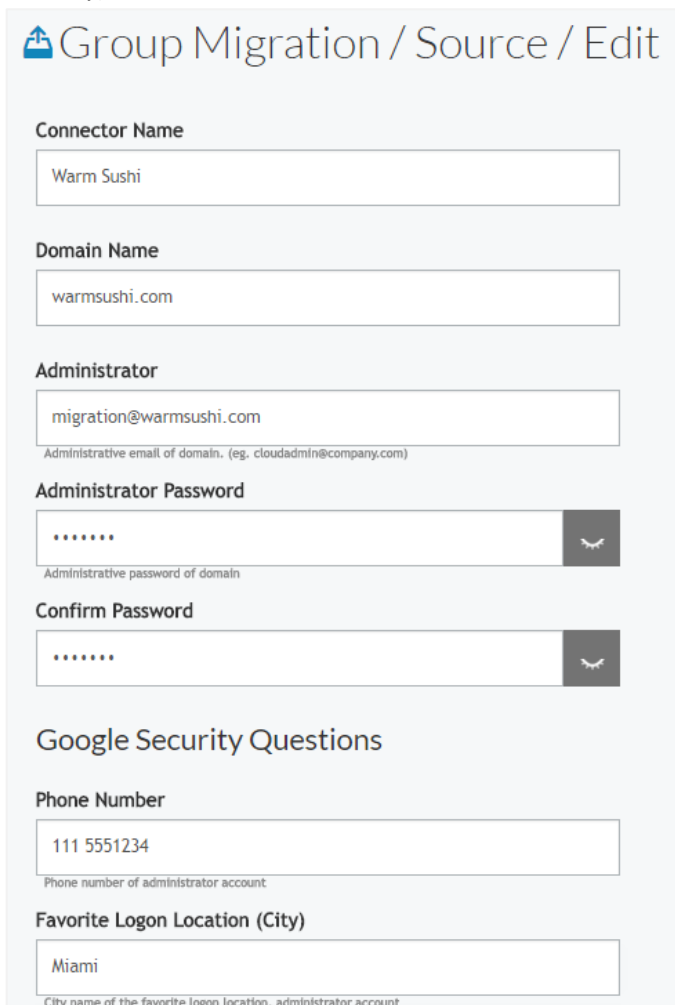
3. Click on the **+ New** option at the bottom of the screen
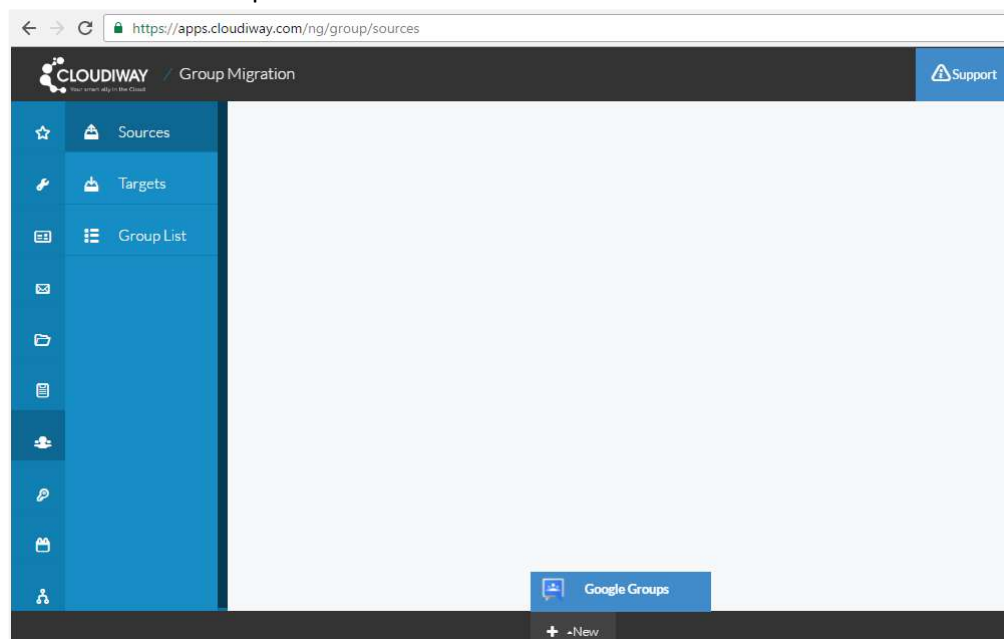
4. Click on **Google Groups** and type a meaningful name in **Connector name**

5. Click on the **Create** button

6. Fill in the remaining details (domain name, migration user email and password and Google security)
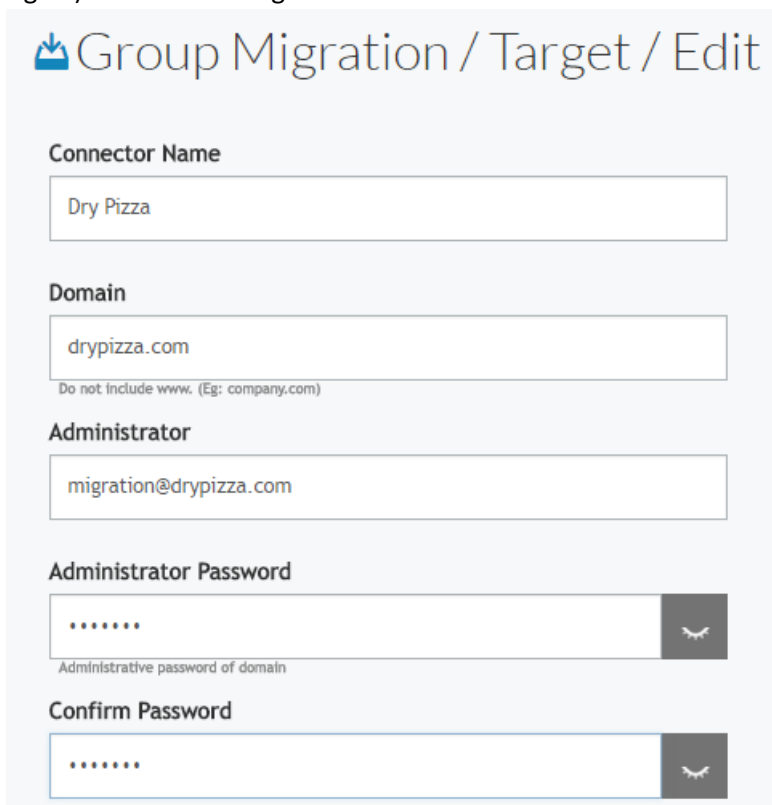

8. Click the **Save** button at the bottom of the screen
    Your source connector has now been created. Next up is the target connector.

6.2　Create your Office 365 target connector

With the source connector now configured on the Cloudiway platform, it's time to create and configure the target connector. Follow the steps below to configure an Office 365 target connector.

Each account with impersonation privileges can access up to 100 groups 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 target connectors on the Cloudiway platform and associate different accounts with admin access to each one.

1.　From the **Source Migration** area of apps.cloudiway.com, click on **Targets**

2.　Click on the **+ New** option at the bottom of the screen and click on **Office 365**

3.　Type a meaningful name in **Connector name** and click on the **Create** button

4.　Type your target domain name in **Domain**

5.　Type your Office 365 migration account credentials (with administrator and impersonation rights) in the remaining fields

Group Migration / Target / Edit

Connector Name

Dry Pizza

Domain

drypizza.com

Do not include www. (Eg: company.com)

Administrator

migration@drypizza.com

Administrator Password

•••••••

Administrative password of domain

Confirm Password

•••••••

7.　Click the **Save** button at the bottom of the screen

## 6.3 Import groups with the Get Groups command

The Cloudiway platform provides a tool called **Get Groups** which returns a list of all your groups that have had the Google migration user added. This is a useful tool to run after your end-users have had time to add the Google migration user to their own groups as it will provide you with a complete picture of groups to be migrated.

You should therefore run this tool after an agreed deadline with your end-users, and prior to group migration. The output will be used as your default group migration list. This is by far the simplest method of listing the groups to be migrated because no other steps are required.

1. Ensure you're still in the Group Migration area of apps.cloudiway.com and go to **Group List**
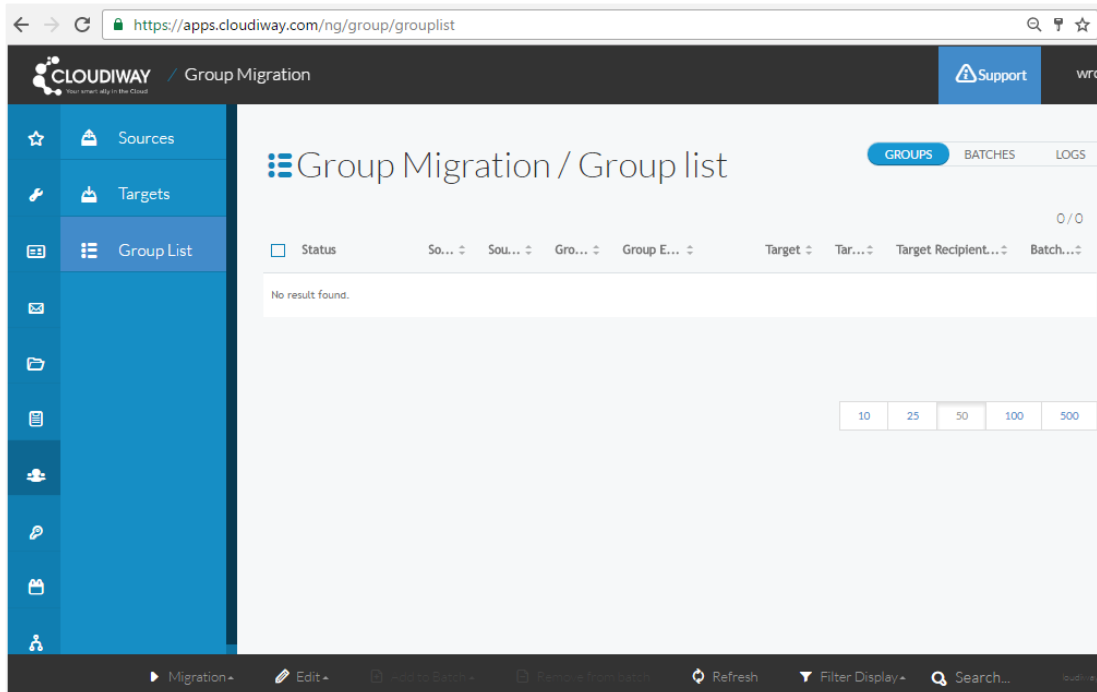
2. Click on the Migration menu at the bottom and select **Get Groups** to display the following dialog box:
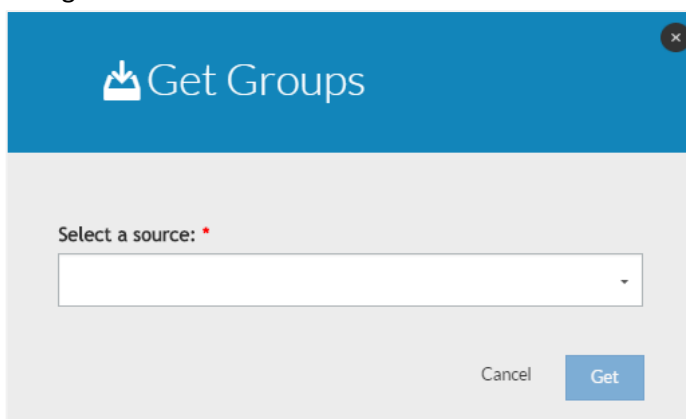
3.   Select your source from the dropdown list and click on the **Get** button

The tool will return a list of all groups that the 'migration' user has been added to with manager access. The list will appear in the Group List area of the Cloudiway platform. From this list, you can check what is due to be migrated prior to migration, edit target URLs, change target recipients and delete any groups that don't need to be migrated.

You can also download the results in CSV format for your own records or to make editing changes, and then upload the updated CSV file to the Cloudiway platform as your final list of groups to be migrated.
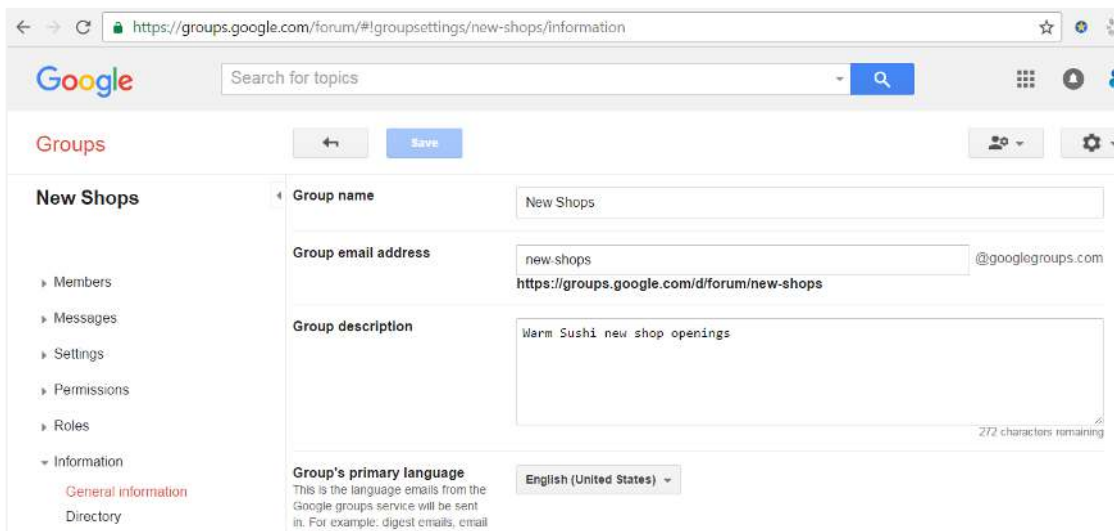
Note: you cannot add new entries to the CSV file: they must exist on the Cloudiway platform already. If you need to add a new Google Group, either re-run the Get Groups command (which will add newly-available groups to the existing list) or add a site manually using the steps below.

6.4   Add a Google Group manually to Cloudiway

You can manually add the details of a Google Group to your list on the Cloudiway platform. Due to the lengthy URLs, we recommend you only use this option if it's impossible to rerun the Get Groups command.

You might wish to test migration on a test group you've set up especially for that purpose. In this case, adding the group manually might be preferable to using Get Groups.

1.   Visit the Google Group you wish to add, making sure you're logged in with at least manager access

2.   On the left, scroll down to and click on **Information**, then **General information**

3.   Take note of the **Group email address** as well as the URL beneath the field in bold (or leave the screen open to copy and paste later in these steps)

4.   On the Cloudiway platform, go to the **Group List** of the **Group Migration** menu
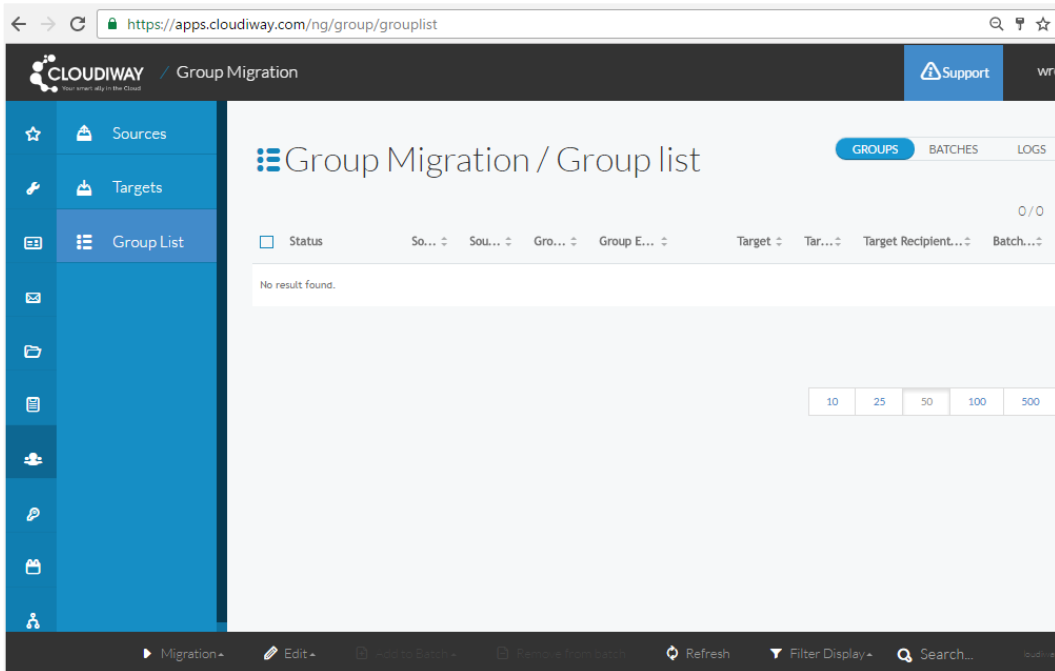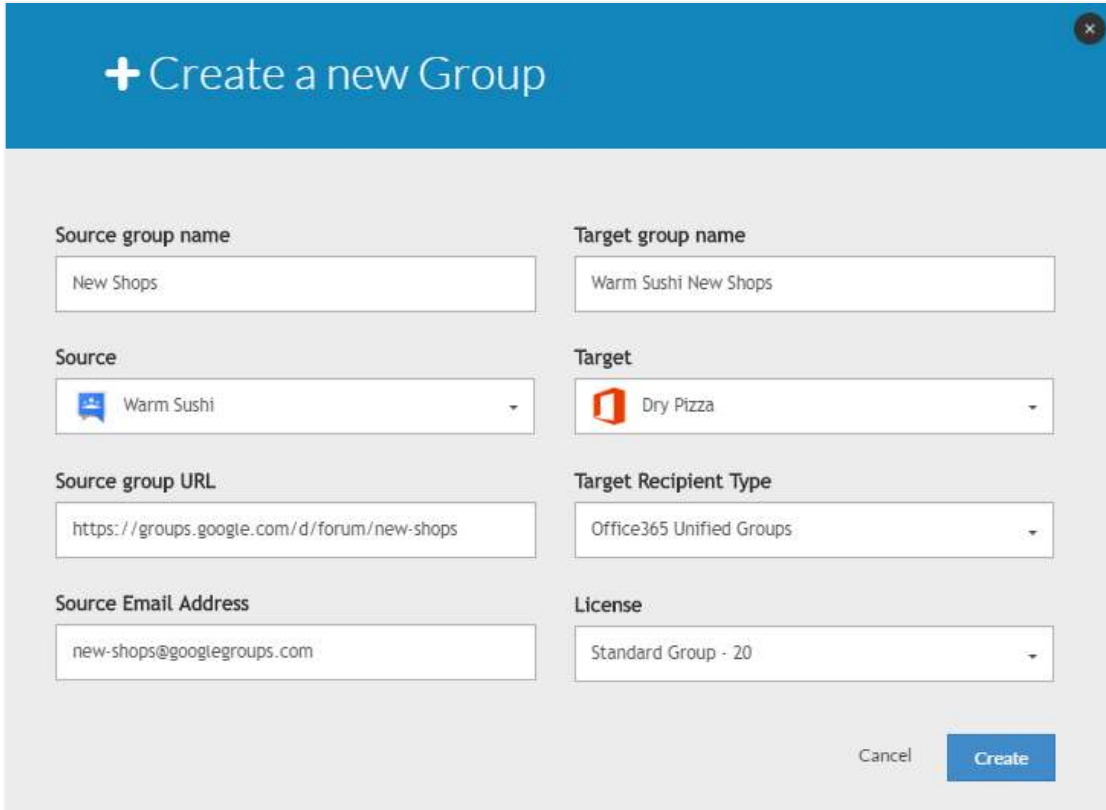

5.   Click on **Edit** in the bottom left corner and select **Create Single** to display the following screen:

6. Fill in all details for the group to be migrated, using the email address and URL from the Google Group details in step 3
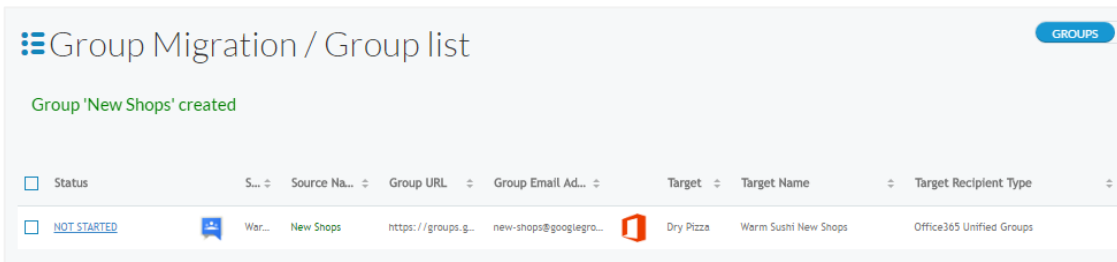

7. Click on the **Create** button
   The new group will be added to the Group Migration / Group List screen:

8. Repeat steps 1 to 7 for any more groups you'd like to add manually

6.5   Import or create your user details

In order to migrate access rights for the list of users who have subscribed to the Google group, a mapping table of users must be defined. A list of mail users is used as a mapping table as it defines who has access to the different groups.

If you have already migrated mail via Cloudiway, your users will already be available on the **Mapping Users** menu of Cloudiway's group migration. If not, you can upload a user list via CSV, or manually add each user on the Cloudiway platform.

You can add a user to the mapping table without assigning a migration license. Each user will, however, need to be assigned a license type — Standard or No License (used for adding users to your mapping table regardless of migration plans).
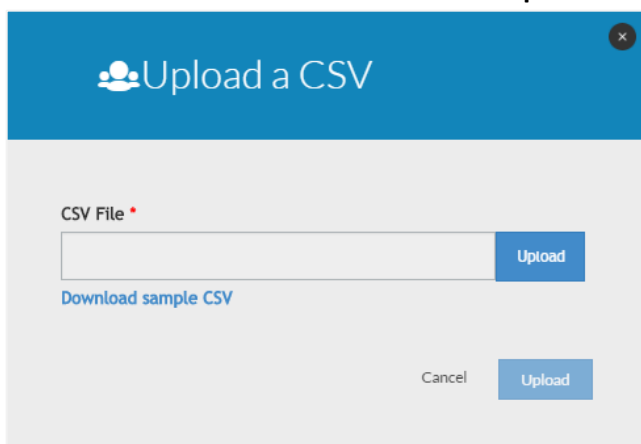
6.5.1   Option 1: CSV import

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

`FirstName;LastName;SourceEmail;TargetEmail`

A sample CSV file is available for download during the steps outlined below. If you perform more than one upload, any user data already uploaded will not be overwritten by following uploads. Therefore, duplicates can occur.

1.   Ensure you're still in the Group Migration area of apps.cloudiway.com and go to **Mapping Users**

2.   Click on **User** on the action bar and select **Upload CSV**

3.   If required, click on **Download sample CSV** and add your users to the CSV file using the sample headers (FirstName;LastName;SourceEmail;TargetEmail)

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

If the CSV file format is not correct, you will see an error message on your screen:
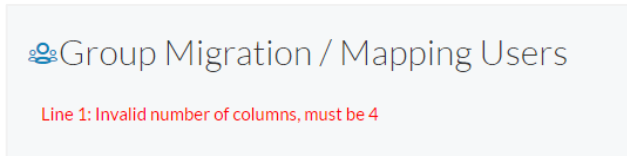
6.   If you see any error messages, check your CSV file to ensure it has six columns, each with a separator (including the last) and try uploading again

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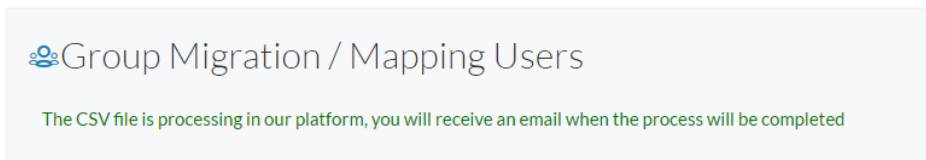

7.   Check your email for confirmation that the upload has been completed. You can refresh the Cloudiway platform to display your imported users

8.   If you wish to edit any user that's been uploaded, click on the user from the user list to display the editable list of fields
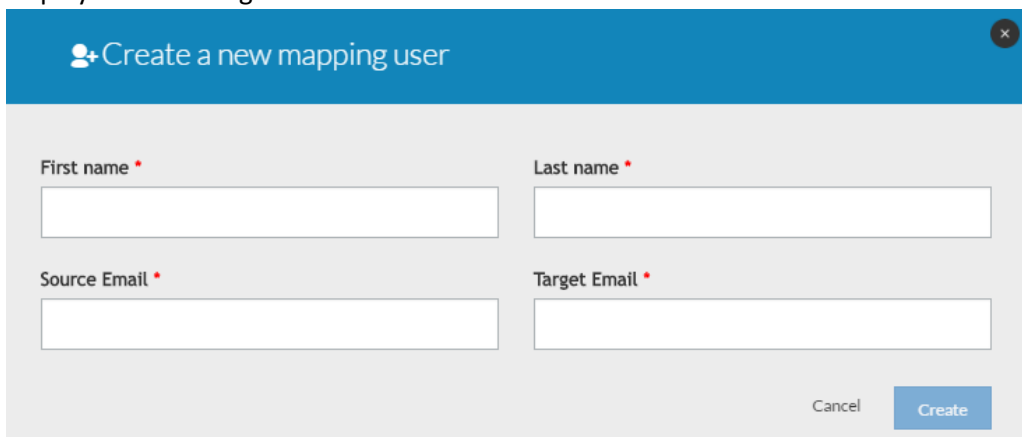
6.5.2 Option 2: Create a single user

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.
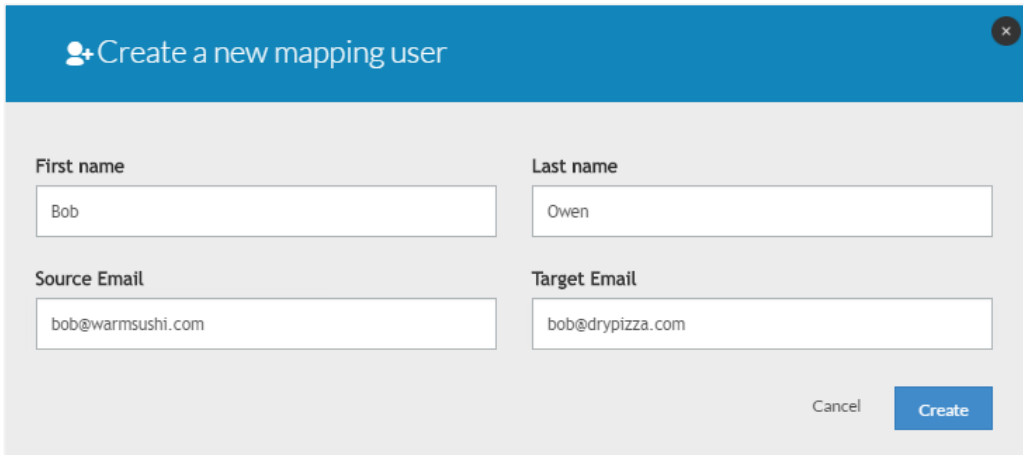
1. Go to the **Mapping Users** area of the **Group Migration** menu
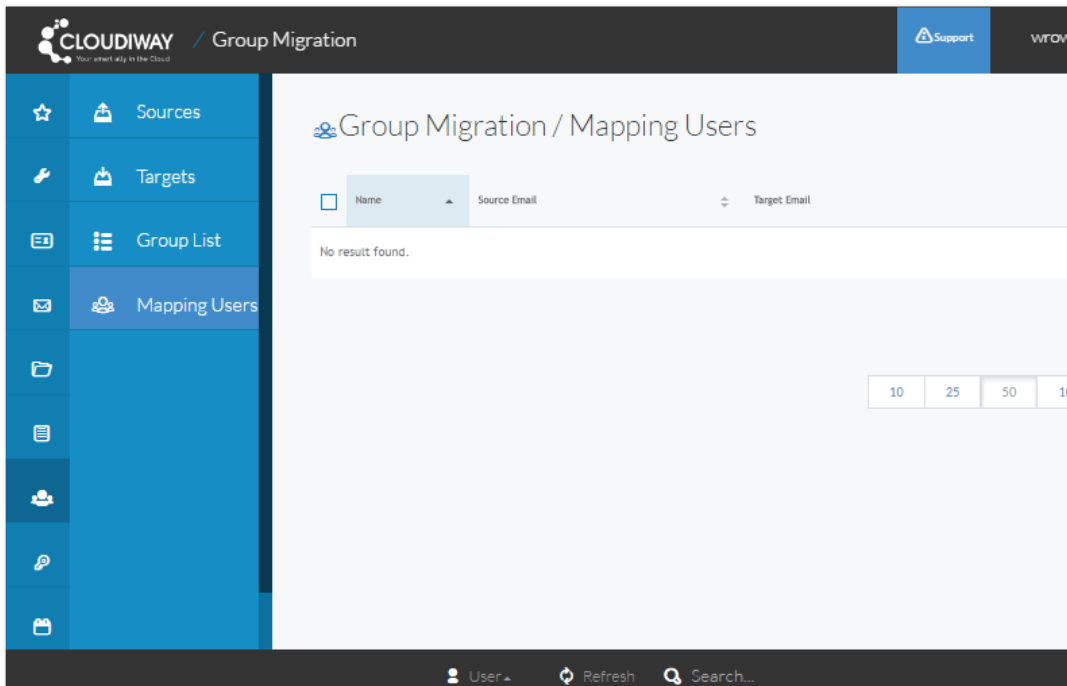
2. Click on **User** on the action bar at the bottom of the screen and select **Create Single** to display the following screen:

3. Fill in all details for a new user

4. Click on the **Create** button
   The new user will be added to the Group Migration / Mapping Users screen:

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

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 group first to check that your configuration produces the outcome you expect.

To start your migration, select the group(s) or batch you wish to migrate and click on the **Start** button on the **Migration** menu at the bottom. Your batch will be scheduled and will begin as soon as resources are available. By default, a hundred migrations can be run concurrently.

7 Troubleshooting

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

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.