

User's Guide

audriga Groupware Migration

from Google Workspace

to Microsoft 365 / Exchange Online

Version 1.7

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Contact <https://www.audriga.com/en/Contact>

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audriga migration service for emails and groupware

audriga's Migration Service migrates the **content of mailboxes** from your current hosting provider to a new hosting provider in an easy, fast, and secure way. A migration can be configured on our self-service website, which can be accessed with most common web browsers (e.g. IE, Firefox, Safari or Chrome). No software needs to be installed on your machine. The service connects to your mailbox similarly to the way as your e-mail client does. Emails, attachments, folders and depending on the involved systems also contacts, task, and calendar data are being copied to the destination account. The data in the source mailbox will not be deleted or altered in any way. To configure a migration, only three simple steps in our self-service portal have to be completed. After the migration has started, its status can be continuously monitored on the website.

It may not be possible to complete especially large or complex migrations with only this guide. If you identify issues related to I/O issues, bandwidth, timeline constraints, or anything else that makes the migration more complicated than you feel comfortable handling, you may need more than audriga's self-service level. If you find that you need a higher level of support, please contact audriga at support@audriga.com.

Data migration

What data can be migrated

- Emails
- Contacts
- Calendars
- Tasks

What data cannot be migrated

- Public folders
- Archives
- Journals
- Notes
- Filters (Inbox Rules)
- Files
- Signatures
- User Configuration
- Distribution Lists
- Permissions

Limitations

Google Workspace specific limitations

Google Workspace uses some concepts, which differ from other traditional email and groupware solutions and you need to take them into account, when configuring a migration:

- Google Workspace uses labels instead of folders. You can use labels to organize your email into categories, like work, family, or any other category. They work like folders, but you can add more than one to a message. audriga Migration Service is going to copy the messages with multiple labels into multiple folders (corresponding to the labels) in Microsoft 365.
- Google Workspace allows for approximately 2.5 GB mail traffic per day. Beyond this limit, an account may be blocked for 24 hours. While our service respects this limit (which results in a slower migration) we cannot completely rule out problems. You should not extensively access your account with other devices during the migration process (e.g., mobile phone synchronization or other email clients).
- Messages without labels are being archived into the "All mail" tab in Google Workspace. You can find them by searching for "*has:nouserlabels*". audriga Migration Service will migrate these messages into a folder called "All mail" in Microsoft 365. If you want to have them migrated into another folder, you will need to assign them the corresponding labels.
- "All mail" serves another purpose besides holding the archived messages and that is keeping a copy of each labeled message. audriga Migration Service will migrate each labeled message into the corresponding to the label folder in Microsoft 365 but will exclude it from the "All mail" folder in order to save storage.

EWS Limitations

- The owner of the mailbox will become the organizer for each of his appointments
- Meeting participant status (accepted or declined) will not be migrated
- The service tries to resolve system internal addresses e.g. X500 addresses and replace them with valid email addresses. If it is not possible, the addresses will be removed.

- The service also filters invalid entries like non-valid URLs in Website fields which are not accepted by the destination platform.

General limitations

Certain limitations may apply due to the specific combination of the source and the destination. This includes:

- Display of certain email messages (special MIME formats) may differ on the destination side
- Mapping of item properties (e.g., if not supported by the destination)
- Mapping of folder permissions

If in doubt, we recommend migrating a few mailboxes initially to check the results.

Preparation

Before starting the migration you need new (or already provisioned) Microsoft 365 mailboxes.

Prepare access to source and destination

While the authentication on the Google side has to use Auth Scopes, for your Microsoft 365 accounts you have to use modern authentication with a service account.

Access to Google Workspace using Admin Scopes

audriga Migration Service uses the OAuth 2.0 protocol to access to data in Google services like mails, contacts or calendars.

You can read more about OAuth 2.0 here:

<https://developers.google.com/identity/protocols/OAuth2>

You have to authorize audriga API client to access your user data without your users having to individually give consent or their passwords. In addition to that our service needs you to create a special email group.

Both steps need to be completed before starting the migration and are explained now.

Authorize audriga API client

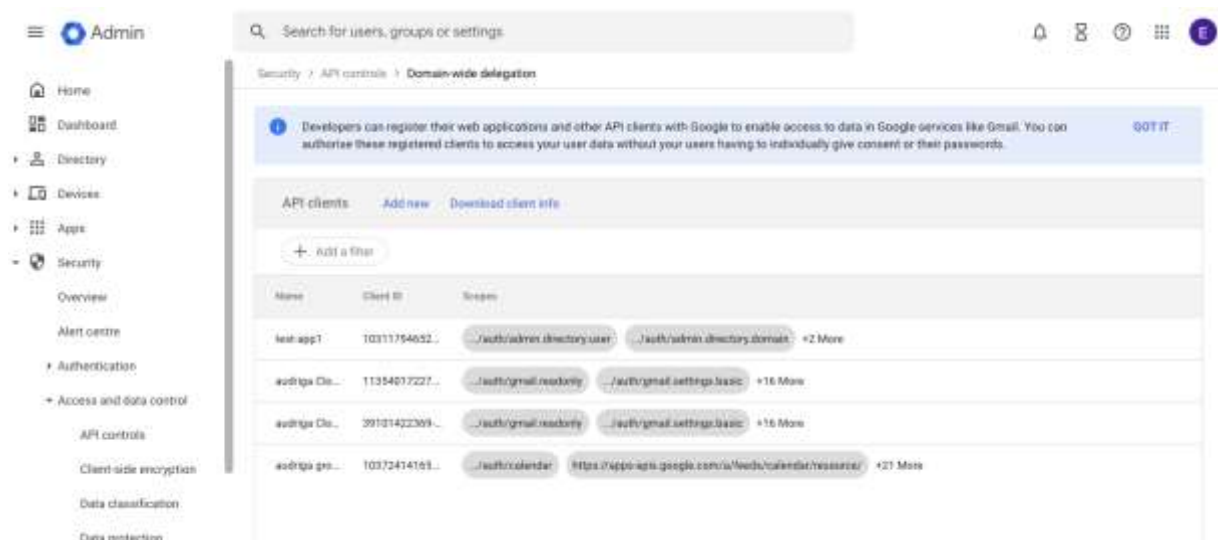
1. Log-in to your Google Workspace Admin console (<https://admin.google.com>)
2. Go to Security -> API controls -> Manage domain-wide delegation -> *Add new*
3. Click the button *add new*. Into the client ID enter: 113540172277121928717

- Copy and paste these scopes into the field OAuth scopes (separating them with a comma):

<https://www.googleapis.com/auth/gmail.readonly>,
<https://www.googleapis.com/auth/gmail.settings.basic>,
<https://www.googleapis.com/auth/gmail.settings.sharing>,
<https://apps-apis.google.com/a/feeds/emailsettings/2.0/>,
<https://www.google.com/m8/feeds>,
<https://www.googleapis.com/auth/contacts.readonly>,
<https://www.googleapis.com/auth/calendar.readonly>,
<https://www.googleapis.com/auth/tasks.readonly>,
<https://www.googleapis.com/auth/drive.readonly>,
<https://www.googleapis.com/auth/admin.directory.user.readonly>,
<https://www.googleapis.com/auth/admin.directory.userschema.readonly>,
<https://www.googleapis.com/auth/admin.directory.group.readonly>,
<https://www.googleapis.com/auth/admin.directory.orgunit.readonly>,
<https://www.googleapis.com/auth/admin.directory.domain.readonly>,
<https://www.googleapis.com/auth/admin.directory.resource.calendar.readonly>,
<https://www.googleapis.com/auth/apps.groups.settings>,
<https://www.googleapis.com/auth/userinfo.email>,
<https://www.googleapis.com/auth/userinfo.profile>

- Click on *Authorize* to complete the process.

You should now see something like this:



Create special email group

For security reasons an email group must be created containing "j3dwmd" or "audriga" plus any secret. This group email address is used as the password in the audriga Migration Service. Group email address must contain "j3dwmd" or "audriga"

1. Log-in to your Google Workspace Admin console (<https://admin.google.com>)
2. From the dashboard, click *Groups* (If not available, click on MORE WIDGET)
3. Click at the bottom of the page
4. Enter the following details in the *Create new group box*:
 - o A name for the group.
 - o An email address for your new group. If your organization's Google Workspace account has multiple domains, select the appropriate domain from the drop-down list. Group email address must contain "j3dwmd" or "audriga" + any additional secret e.g. audriga-test@my-domain.com
5. Click *Create*. You'll be taken to the group's page in the Admin console.
6. Click on *Save* to complete the process. The user will now be listed under Mailbox permissions.

You can read more about Google Groups here:

<https://support.google.com/a/answer/33343?hl=en>

Access to Microsoft 365 with Modern Authentication

In order to be able to use the audriga migration service in combination with Microsoft 365, the following points must be followed prior to the start of your migration.

Microsoft 365 only allows the usage of modern authentication.

You have to pick one account to serve as a service account, an app has to be installed and a secret email group has to be created.

1. Select one account to serve as a service account

Please note that the account that shall serve as the service account requires a Microsoft 365/Exchange online license (mailbox).

Hint: If you want to designate your Admin account as service account you have to provide the Admin with a license.

2. Register the audriga app in your tenant

To register our audriga app in your tenant, log into your admin account and go to (Copy and paste the link in your browser - please remove line breaks):

https://login.microsoftonline.com/organizations/v2.0/adminconsent?client_id=3cd27a72-a19e-4945-9715-fc24d940428f&redirect_uri=https://umzug.audriga.com/SMESwitchWebApp/oauth_complete.jsp&scope=https://outlook.office.com/.default

- Accept the App audriga CloudMavr migration
- You will be redirected to an audriga page which you can close
Note: our application is created under the "Enterprise application" tab in AzureAD console

3. Create a "secret" group in the customer tenant

Create a "secret" group in the customer tenant.

- Go to <https://aad.portal.azure.com> => Azure Active Directory => Groups => *New group*
- Choose a group name and group email address that includes "audriga" or "birest" (e.g. test-audriga@my-domain.com) (please note: case sensitive! Audriga won't work!)
- Choose group type *Microsoft 365*
- Appoint your service account (see 1.) as the owner of this group

Configure a migration with audriga migration service

Select current and new provider

Go to the *Provider selection* screen.

Choose Google GSuite as your current / source provider and *Microsoft 365 / Exchange Online (Admin)* as your destination provider.

Hint: you may need to start typing Google for it to appear in the list.



Add accounts for migration

You have two possibilities of adding users. You can add single accounts one by one or you can add multiple accounts using a CSV-File.

Add single G Workspace accounts

tab **Add account**



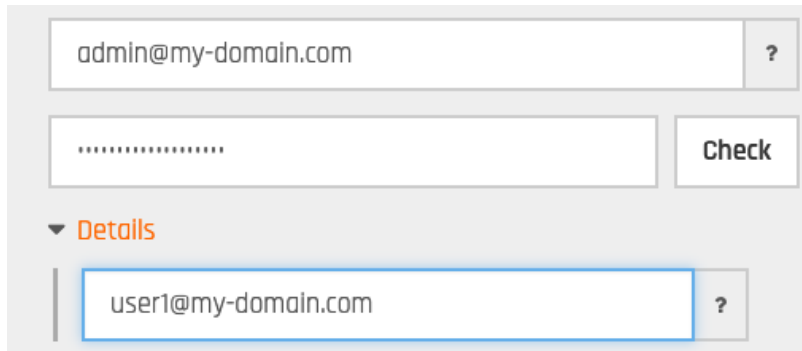
Google Workspace

Username: enter the username of the admin

Password: enter the special group **email address**

(e.g. test-audriga@my-domain.com from the example above)

Details: enter the user's mailbox you want to migrate



Click on check to verify the credentials. If the data is correct, a green check will appear ✓ .
If the credentials are incorrect, a red cross will be displayed ✗ .

Add single Microsoft 365 Accounts

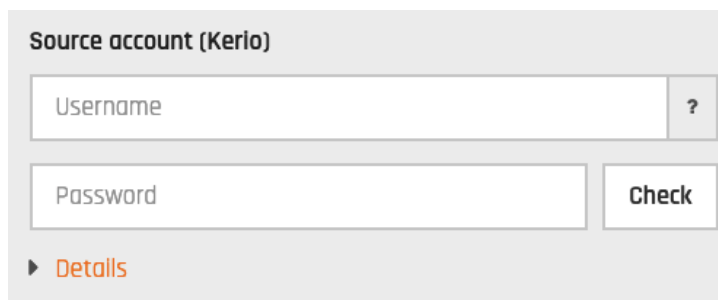
As described you have to use modern Authentication here, you cannot use the username and password of each mailbox alternatively.

Username: enter the username of the service account

Password: enter the special group email address

(e.g. test-audriga@my-domain.com from the example above)

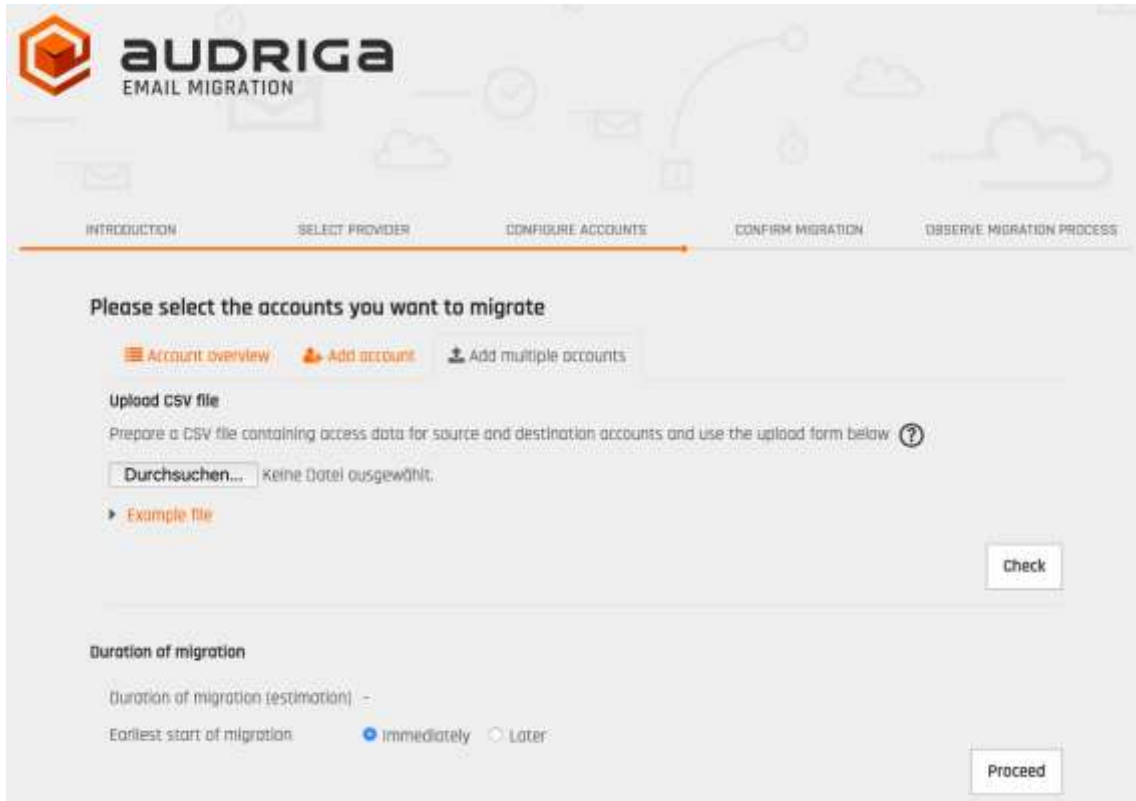
Details: enter the user's mailbox you want to migrate



Click on *check* to verify the credentials. If the data is correct, a green check will appear ✓ .
If the credentials are incorrect, a red cross will be displayed ✗ .

Add multiple Accounts

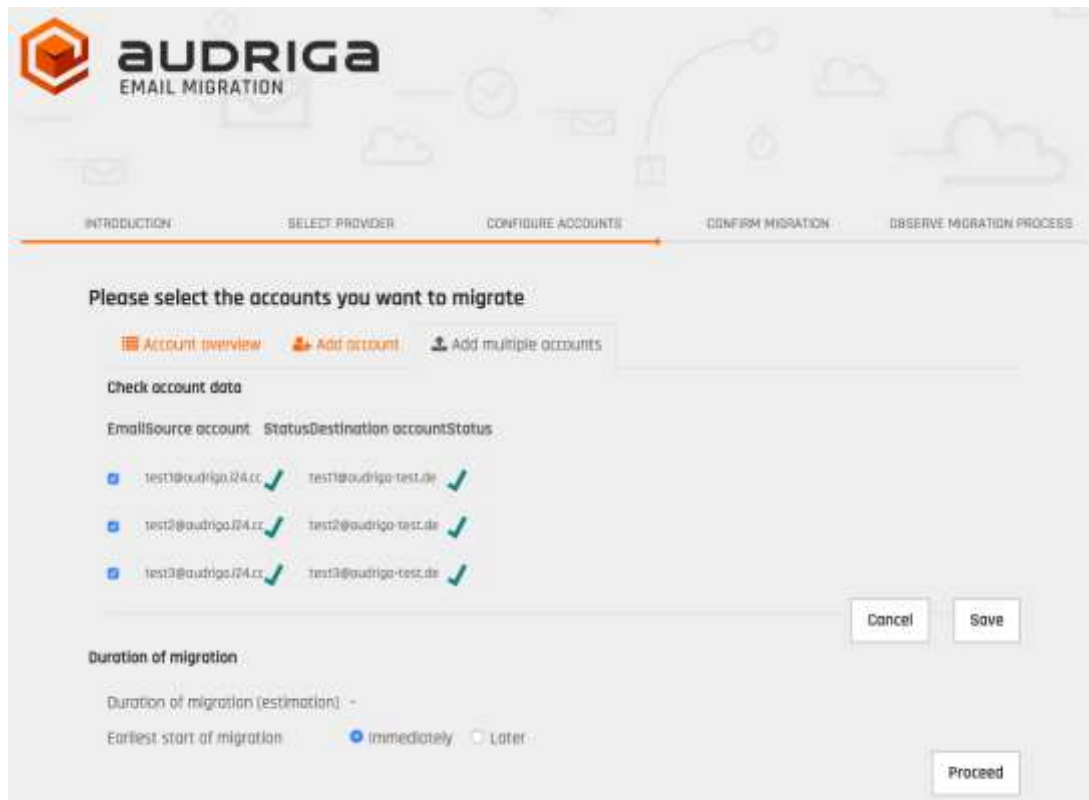
Choose tab *add multiple accounts* if you want to add users using a CSV-File.
Add a maximum of 50 mailboxes per CSV-File for an optimal performance.



The screenshot shows the AUDRIGA EMAIL MIGRATION interface. At the top, there is a navigation bar with five tabs: INTRODUCTION, SELECT PROVIDER, CONFIGURE ACCOUNTS (which is the active tab), CONFIRM MIGRATION, and OBSERVE MIGRATION PROCESS. Below the navigation bar, the main content area is titled "Please select the accounts you want to migrate". There are three tabs: "Account overview", "Add account", and "Add multiple accounts" (which is selected). Under "Add multiple accounts", there is a section for "Upload CSV file" with instructions to prepare a CSV file containing access data for source and destination accounts. A file selection button labeled "Durchsuchen..." is present, with the text "Keine Datei ausgewählt." below it. A link for "Example file" is also visible. A "Check" button is located at the bottom right of this section. Below this, there is a "Duration of migration" section with a "Duration of migration (estimation) -" field and "Earliest start of migration" options: "Immediately" (selected) and "Later". A "Proceed" button is located at the bottom right of this section.

Prepare and upload a text file with all of the account credentials. An example file is provided in the dialog.

Authentication with admin credentials on Google Workspace and Microsoft 365 side
admin@googlemail.com,group@googlemail.com,user1@googlemail.com,serviceaccount,groupemailaddresss,mailbox1
admin@googlemail.com,group@googlemail.com,user2@googlemail.com,serviceaccount,groupemailaddresss,mailbox2



All accounts entered will be listed.

The migration service will try to check the capacity in the destination accounts. This check may take a while for larger mailboxes. If you do not want to wait, you can proceed.



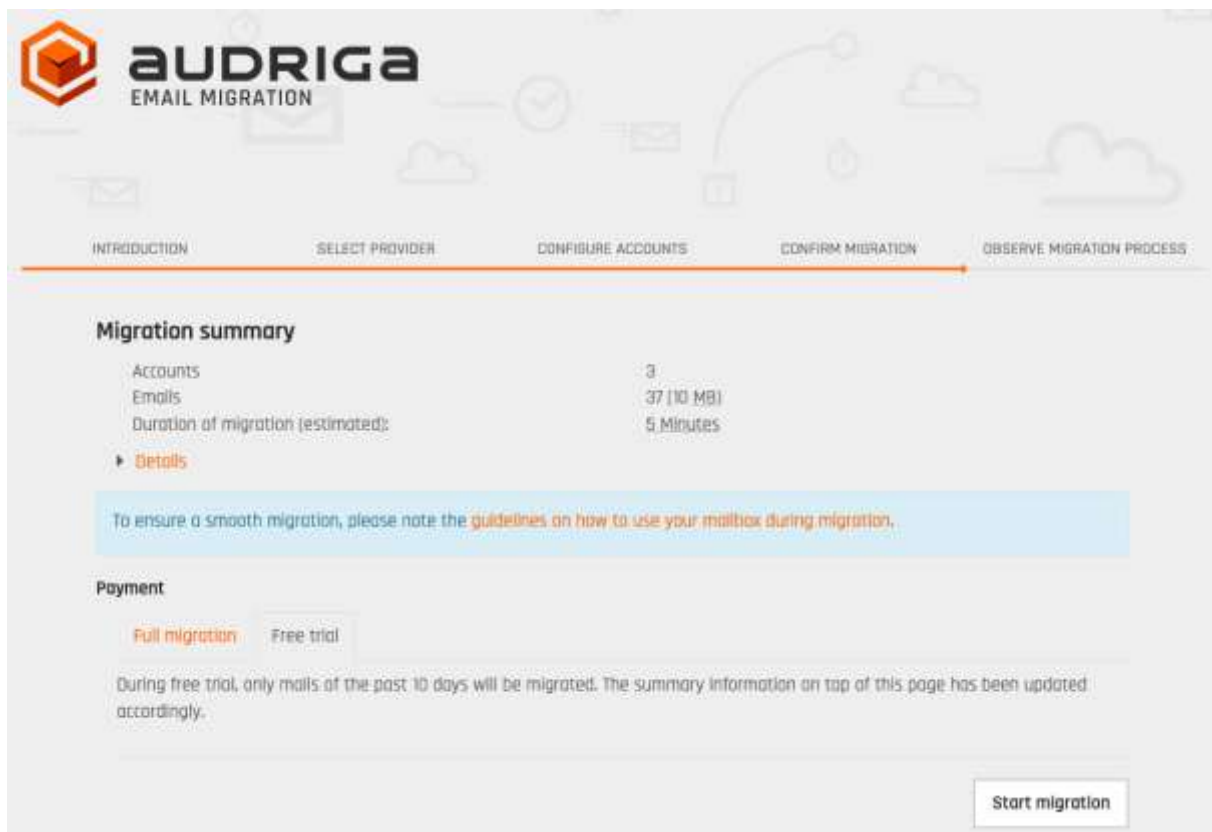
Start the migration

You will see a summary of the migration, including the number of accounts and the amount of data. Even if the analysis of the Microsoft 365 account is not yet completed you can proceed. In order to start the migration, you will need to provide a valid migration voucher code if this voucher was not part of the URL you called to start this website.

Press *Start Migration* to proceed.

Free trail

The UI provides the option to set up a free trail migration. This transfers the email and groupware data from the last 10 days. To start a trial migration, please click on *Free trail*:



The screenshot shows the Audriga Email Migration interface. At the top, there is a progress bar with five steps: INTRODUCTION, SELECT PROVIDER, CONFIGURE ACCOUNTS, CONFIRM MIGRATION, and OBSERVE MIGRATION PROCESS. The 'CONFIRM MIGRATION' step is currently active. Below the progress bar, there is a 'Migration summary' section with the following details:

Accounts	3
Emails	37 (10 MB)
Duration of migration (estimated):	5 Minutes

Below the summary, there is a 'Details' link and a blue box with the text: "To ensure a smooth migration, please note the [guidelines on how to use your mailbox during migration](#)."

Under the 'Payment' section, there are two radio buttons: 'Full migration' (selected) and 'Free trial'. Below this, there is a note: "During free trial, only mails of the past 10 days will be migrated. The summary information on top of this page has been updated accordingly."

At the bottom right, there is a 'Start migration' button.

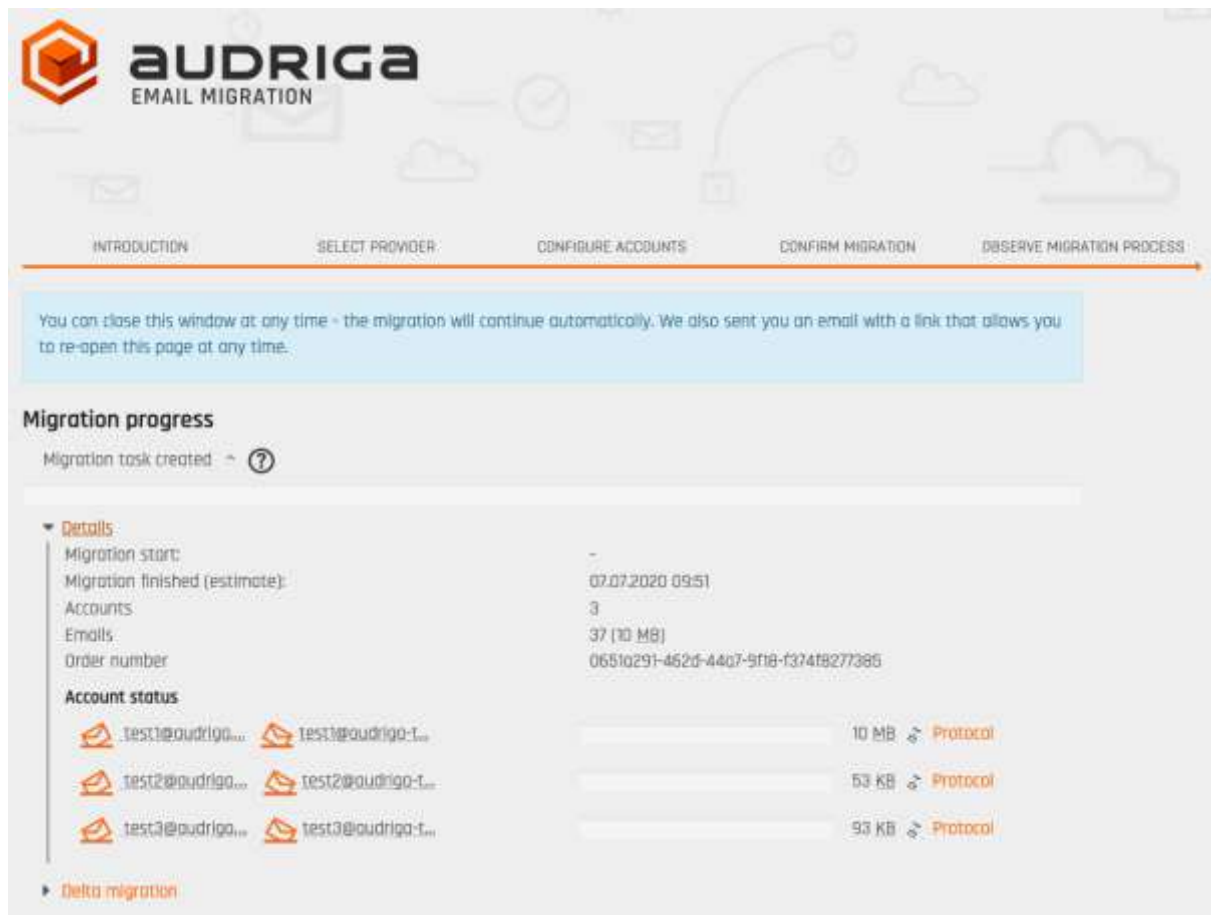
The migration summary will be adjusted. To start the trial migration, click on *Start migration*.

Monitor migration status

It may take some time until the migration process starts. A migration may take a couple of hours for large amounts of data.

We are going to send you status emails for your migration job submission, the migration job's start, and the migration job's end. For this, we use the email address you have entered during

the configuration. Those mails include a link to the status website, so that you can easily keep track and monitor your migration. Once the migration has been started, you can safely close the status website and shut down your computer - the migration will continue to run. You can open the status website anytime by clicking on the link.



Click on *Details* to get further information about the migration.

For each account, you can access a detailed log. Click *Protocol* on the right hand side. Detected duplicates or encountered errors (e.g., if e-mails cannot be transferred due to size limitations of your provider) are listed here.

Protocol

Log summary **Progress (EMail)**

Job:	test1@audriga.i24.cc → test1@audriga-test.de ⓘ
Status:	Migration job done
Migration start:	7/7/20, 11:36 AM
Migration finished:	7/7/20, 11:45 AM
Data:	476 MB
Emails migrated:	1575 (2,477 duplicates) ⓘ
General errors:	0 ⓘ

[Refresh](#)

Delta Migration for Domain Transfer

When you transfer a domain to your new provider or update the MX record to point to your new provider, emails may still be routed to the old provider for some time, this is most probably due to DNS caching issues. In order to transfer these mails into your new account we offer a delta migration feature which can be used after the initial migration has finished and after the domain transfer/DNS change is effective.

Allow some time for the DNS cache propagation (recommended: 24 h - 48 h). To start a delta migration, click then **start delta migration**. All emails which arrived in the old account after the initial migration finished will now be copied. Again, you will receive notification emails about the status of your delta migration.



aUDRIGA
EMAIL MIGRATION

INTRODUCTION SELECT PROVIDER CONFIGURE ACCOUNTS CONFIRM MIGRATION OBSERVE MIGRATION PROCESS

Migration progress

Migration task finished 

Details

Migration start:	07.07.2020 11:36
Migration finished:	07.07.2020 12:21
Accounts:	3
Emails:	4,950 (511 MB)
Order number:	0651a291-462d-44a7-5f18-f374f8277385

Account status

 test1@audriga...	 test1@audriga-t...	<div style="width: 100%; height: 10px; background-color: orange;"></div>	475 MB		 Protocol
 test2@audriga...	 test2@audriga-t...	<div style="width: 100%; height: 10px; background-color: orange;"></div>	17 MB		 Protocol
 test3@audriga...	 test3@audriga-t...	<div style="width: 100%; height: 10px; background-color: orange;"></div>	18 MB		 Protocol

Delta migration

After this migration has finished, you can start a second pass "delta migration" which copies all emails that have been arriving in the source mailbox since the migration had started 

Happy with your migration? Follow us on [Twitter](#)  or [Facebook](#) 

Note:

In order to allow running a delta migration the migration service still needs access to the mailboxes at Microsoft 365 after the domain is transferred. This is not possible with all providers. Please check with your provider for further details.

Please note that a delta migration is neither intended nor capable of correcting any errors that may have occurred in the main job.