



Email Migration from Metalogix Archive Manager Exchange Edition to Office 365

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Table of Contents

1	Introduction			1
2	Source and target environment			2
	2.1	Sou	urce environment	2
	2.2	Tar	get environment	2
3	cor	ntent	tGATE installation	3
4	cor	ntent	tGATE welcome interface	4
5	Mi	grati	on "How to"	7
	5.1	Cre	eating a new migration project	8
	5.1	1	Specifying Source and Target archive connection settings	9
	5.2	Mig	gration project configuration	17
	5.2	.1	Interface overview	18
	5.2	2	Default project settings	22
	5.2	3	Loading source objects	26
	5.2	.4	Loading target objects	29
	5.2	5	Mapping source objects to target objects	30
	5.2	6	Creating migration group(s) and adding group members	35
	5.2	7	Creating migration job(s) to your migration project	38
	5.3	Sta	rting the migration	40
5.4 Job details			42	
5.5 Migration reports			46	

1 Introduction

This guide will explain how contentGATE migrates data from *Metalogix Archive Manager Exchange Edition (MAM EE)* to *Office 365* and the required settings before starting the migration process.



Note: O365 throttling policy must be managed on the **O365 side**. To read more about Microsoft throttling policy, please, check <u>this</u> page.

2 Source and target environment

2.1 Source environment

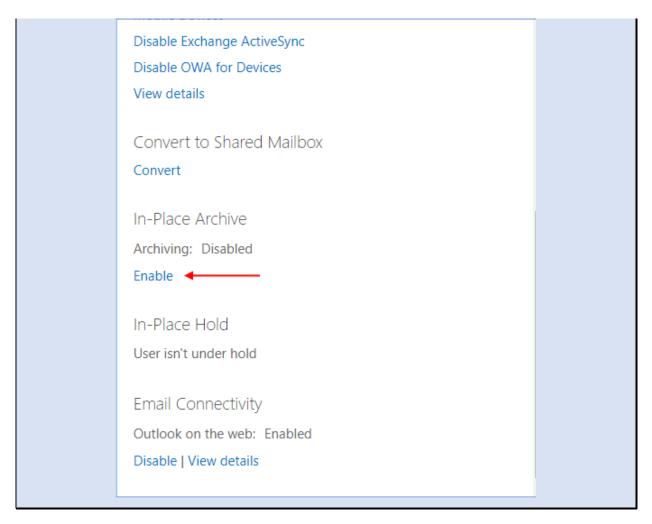
Windows server with Metalogix Email Archive Exchange Edition.

2.2 Target environment

Office 365 Exchange server with necessary roles (permissions) for the SuperUser. To read more about the necessary roles, please, check out <u>this</u> section of our online documentation.

Note: If you wish to use the O365 "Archive mailbox", do not forget to enable it in advance.





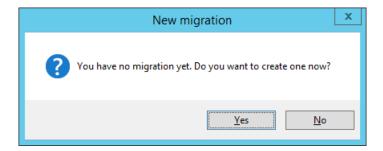
3 contentGATE installation

Installation of contentGATE is common for all migration types and is described on this page.



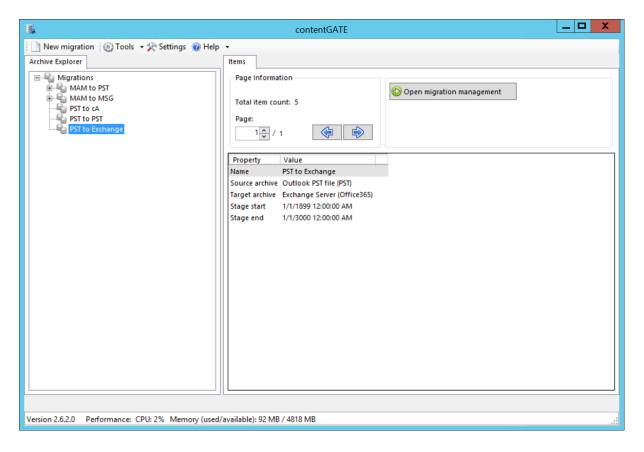
4 contentGATE welcome interface

When contentGATE is started for the first time, no migration is defined. The application prompts you to create one. You can click **No**. New migration unit can be created anytime by clicking on the **New migration** option in the toolbar. The migration creation/configuration process is described later in this guide (chapter <u>Creating new migration project</u>). First, the interface and general settings are detailed.



The contentGATE welcome interface features a toolbar, offering easy access to general settings and functions:





New migration – creates a new migration unit under which the source archive, target archive, user mapping etc. can be configured

Tools – connector specific tools are accessible from here

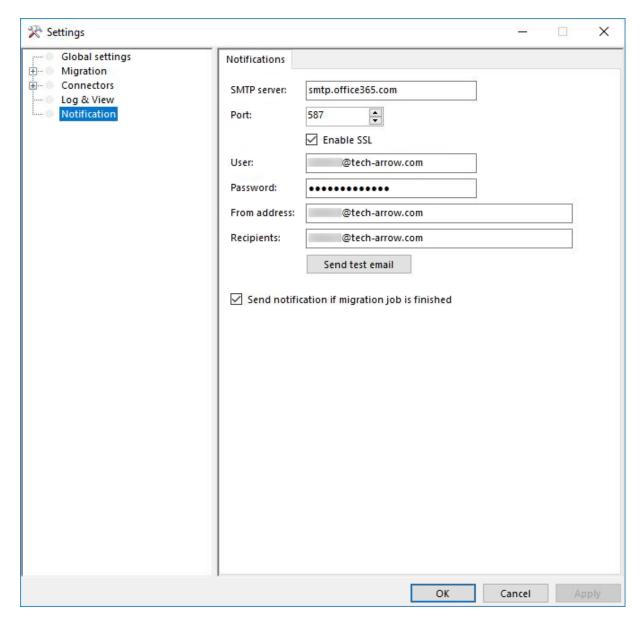
Note: These tools can be disregarded for this migration.

Settings – the general contentGATE settings and individual connectors (archives) settings are accessible from here.

Note: For **MAM EE to O365** migration only the Exchange servers must be added to the Exchange settings configuration section. More information in chapter <u>Configuring Exchange server settings</u>.

If you would like contentGATE to send you notification email when migration job is finished, you can configure it in this section.





SMTP server: the SMTP server that you want to connect to

Port: 25 or 587 (for secure connection)

Enable SSL: check this checkbox if you want your secure connection to use the SSL (Secure Socket Layer) protocol to encrypt communication

User and Password: credentials of the user you want to authenticate with

From address: email address from which the notification emails will be sent (the email address of the authenticated user)

Recipients: email addresses that will be receiving notification emails from the job; multiple addresses need to be separated by semicolon



Send notification emails if migration job is finished: do not forget to check this checkbox, otherwise notifications won't be sent. No matter if you stop it manually or it finishes by itself, the email will be sent.

Help – information about license, version etc.

The user interface below the toolbar is divided into two panes:

- Archive Explorer pane with a list of created migrations. Initially the pane is empty.
- Items pane that displays the content of a node selected in the Archive Explorer pane. Initially the pane is empty.

Use the **Open migration management** button to open the management interface of an advanced migration project that is selected in the **Archive Explorer** pane.

The **Page information** section in the **Items** pane allows you to adjust and handle items per page functionality.

5 Migration "How to"

This chapter will describe how to create and configure a new migration project managing the migration of archived emails from **Metalogix Archive Manager Exchange Edition** to **Office 365.** The configuration process can be divided into 2 main stages:

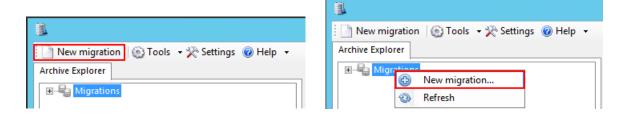
- **1st.Creating the migration project** a new migration project is created using the **contentGATE's welcome interface** described above; the Exchange server settings must be done using this interface, too (subchapters <u>5.1</u>–<u>5.2)</u>
- 2nd. Configuring the migration project the configuration of the migration project is done on its own management interface; the migration process is triggered from this interface, too (subchapters 5.3 5.6)

Note: If you would also like to restore shortcuts in **public folders**, the additional necessary steps are described in <u>this</u> document.



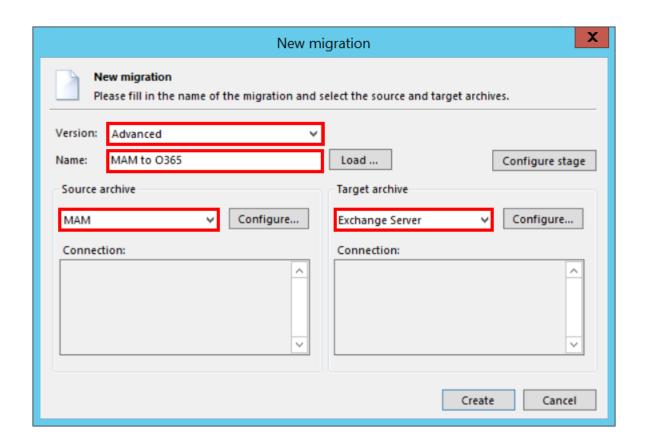
5.1 Creating a new migration project

The desired migration can be defined by using the "**New migration**" button, which is reachable on the toolbar and also in the context menu of the contentGATE. By clicking this button, the **New migration** window opens.



In the **New migration** dialog:

- Select the "Advanced" version from the "Versions" dropdown list.
- Name your migration project.
- Configure the Source archive and Target archive connection settings (more details in section Specifying Source and Target archive connection settings).

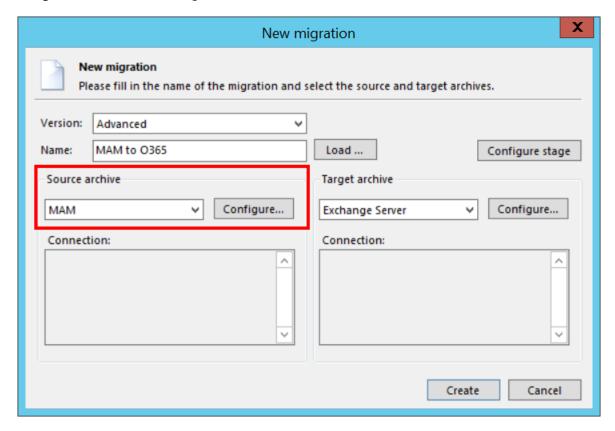




5.1.1 Specifying Source and Target archive connection settings

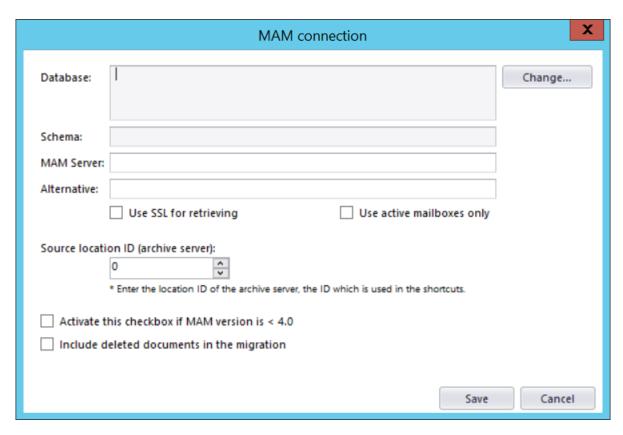
The Source archive (Metalogix Archive Manager Exchange Edition - MAM EE)

To configure the **MAM** connection, select it in the **Source archive** dropdown-list and click the **Configure** button in the dialog.

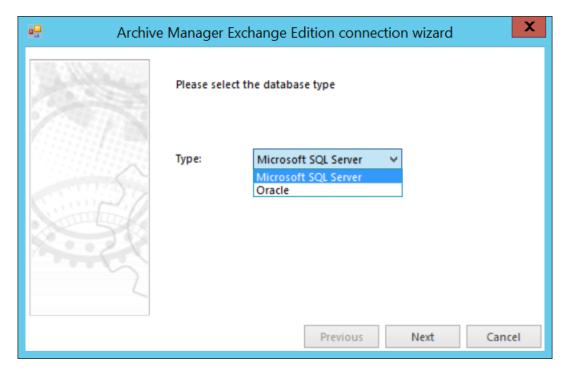


The **MAM connection** dialog opens. First, you will be required to configure the MAM database connection. Click on **Change...** button.



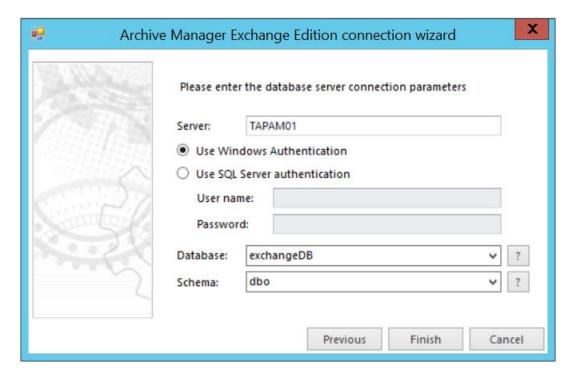


Select the database type from the dropdown list. Click **Next**.





Specify the database server and the applicable database user credentials. You may use either Windows integrated authentication or specify an explicit user. The **Database** list lists all databases on the selected server. Pick the one where you have your desired data. Enter the scheme and click **Finish**.



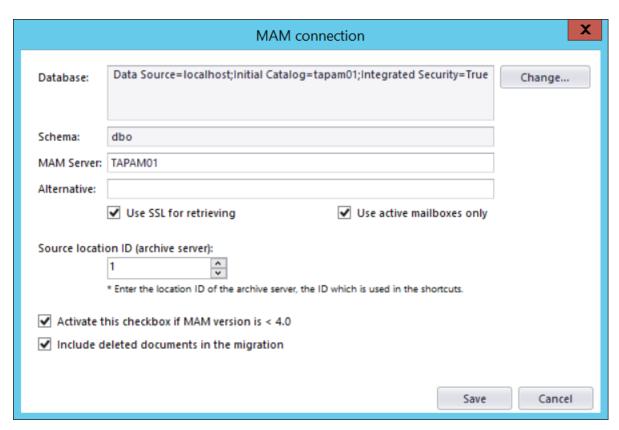
Back in the initial dialog specify the **Source MAM server.** It is highly recommended to specify here the MAM retrieve server name. Use "localhost" if the MAM retrieve server is on the local server, where also contentGATE is installed. If you want to use SSL for retrieving or use only active mailboxes for the migration, check the respective checkboxes.

Source location ID must be defined due to shortcut retrieve. The location ID of MAM can be found in MAM.

Note: Please ignore the text written with small letters.

If MAM version is lower than 4, the **Activate this checkbox if MAM version is < 4.0** checkbox must be activated. If the user wants to include also deleted documents in the migration, the last checkbox must be checked. Click **Save** to save your settings.

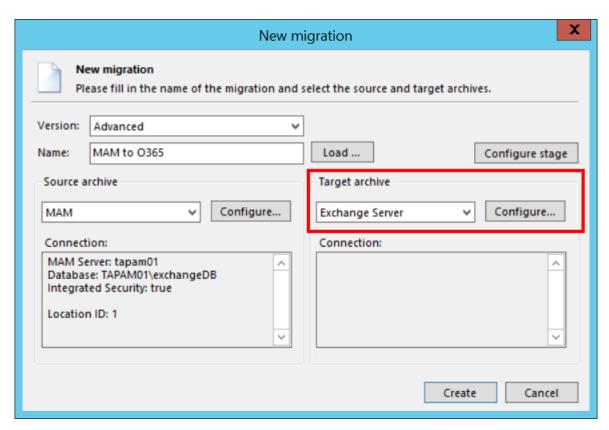




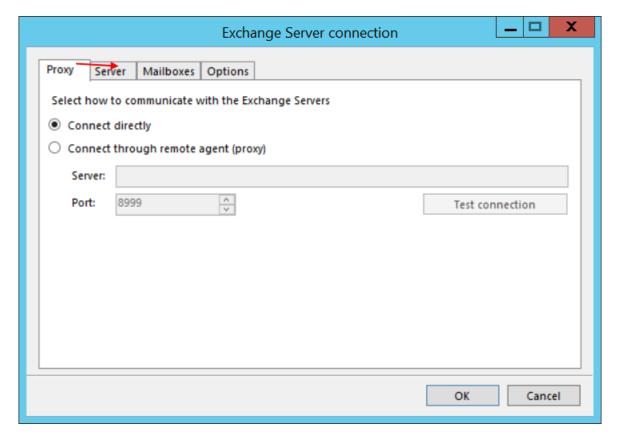
The Target archive (contentACCESS Email archive)

Choose *Exchange server* from the list of target archives and click on *Configure*.



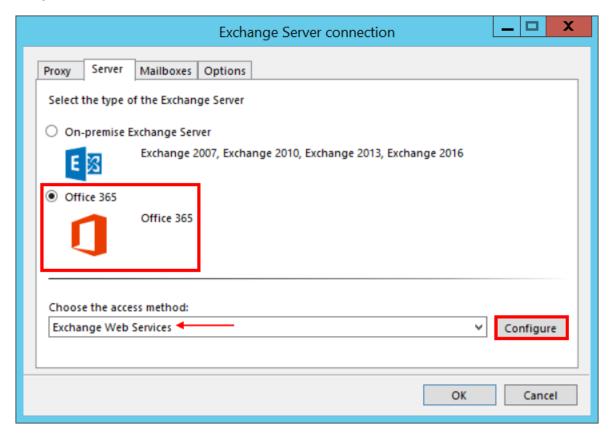


We will connect to the server directly, so we can switch to the **Server** tab.



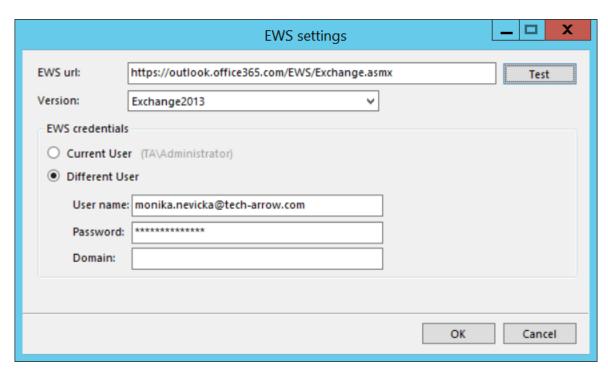


Select Office 365 and choose Exchange Web Services from the access method list. Click on Configure.

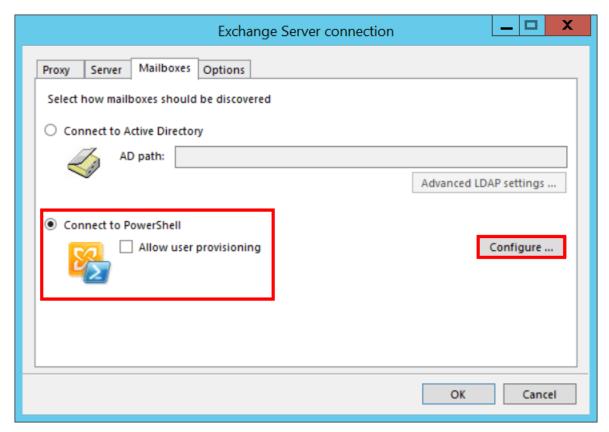


Enter the EWS URL, select the exchange version from the dropdown list and enter the credential of the exchange user with the necessary rights (at least view only organization management rights on the exchange and full access rights on the archived mailboxes to be migrated). Click OK.



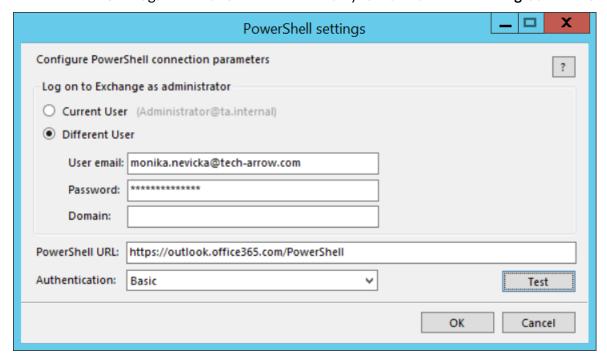


Switch to the Mailboxes tab. Select option Connect to PowerShell and click on Configure....



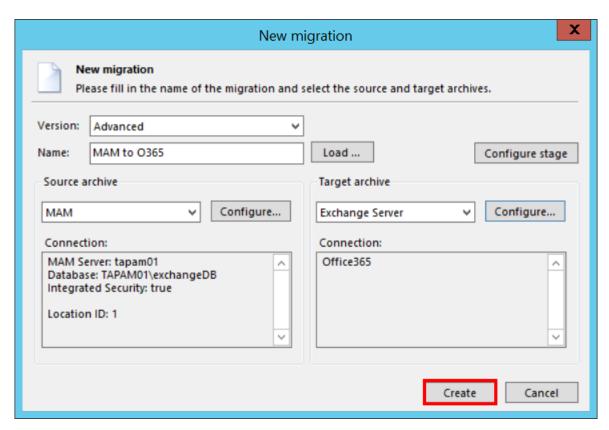


Configure the account that PowerShell will use to connect to the mailboxes. In case of O365 being the target archive, the **Domain** doesn't need to be filled in. PowerShell URL will be generated automatically. Choose **Basic** authentication type, run a test connection and click **OK**. Then click **OK** again - this will redirect you to the **New migration** dialog.



Once the source and target archive connection is set, click on "Create" back in the very first "New migration" dialog:



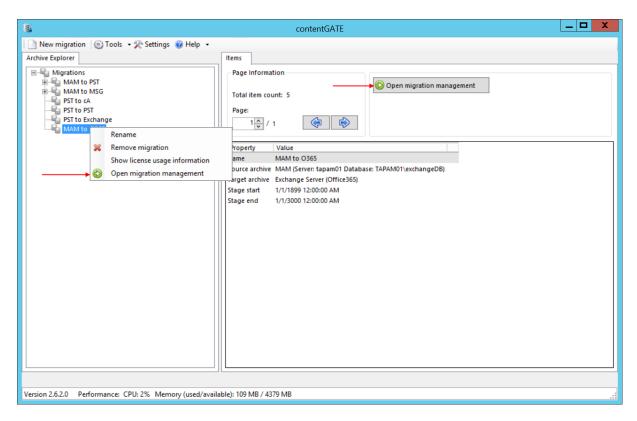


The migration project is now added to the Archive Explorer pane of contentGATE.

5.2 Migration project configuration

Open the MAM to O365 migration's management interface from the node's context menu (or via the "Open migration management" button in the **Items** pane).





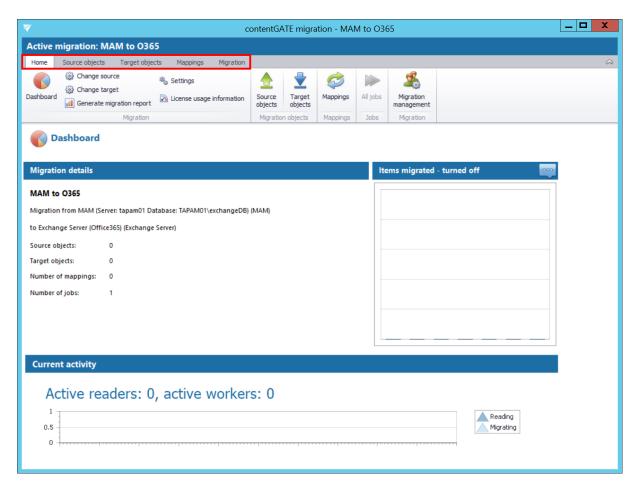
By clicking the **Open migration management** button, its management interface opens. We will walk through the configuration settings of our newly created migration project. These configurations enable to set

- the exact mailboxes to be migrated/excluded from the migration process
- the exact migration workflow (email and shortcut migration)
- the retention category migrations
- migration performance etc.

5.2.1 Interface overview

The migration project's settings are available in the respective sections of the migration's management interface.

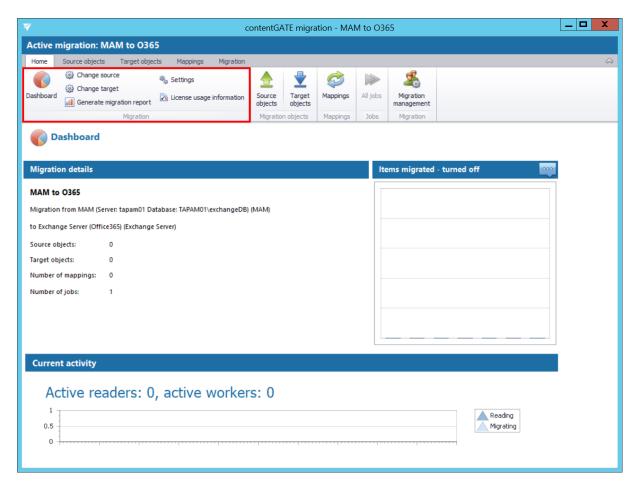




The following settings are available in these sections:

• **Home** – Migration settings can be viewed and connector settings can be viewed or edited on this page.





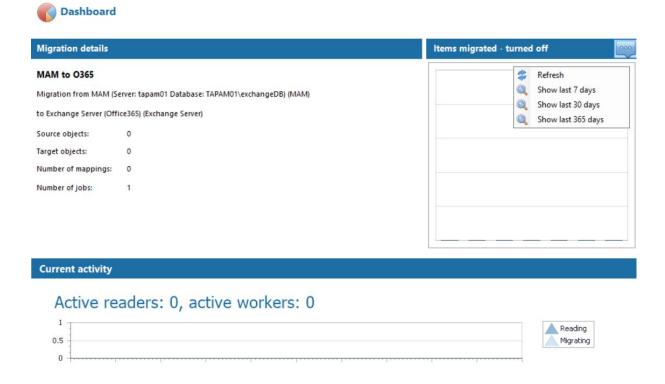
The toolbar of this page features the following options:

- Change source source archive connections can be edited using this option
- Change target target archive connections can be edited using this option
- Generate migration report an overall migration report for all mappings can be created using this option (more details <u>here</u>)
- Settings item filtering settings, global and performance settings can be configured here (more details <u>here</u>)
- License usage information displays the data volume and number of items in the migration
- Dashboard displays the basic parameters of the source and target connectors

The graph in section "Migration details" displays the number of migrated items in the last 7, 30 or 365 days. The time period is configurable using the triple dot menu in the upper right corner of the graph. Move with your cursor over the graph and the information gets displayed. Initially the value is "0".



The current activity of reader and worker threads can be also viewed using the graph at the bottom of the window.



- Source objects This section represents the list of the source objects (in this case MAM archive mailboxes) that are available on the source connector. Initially the grid is empty.
 Source objects can be loaded either manually or automatically. (For more details click here.)
- Target objects Target objects (Office 365 mailbox(es)) can be loaded here either manually
 or automatically. The grid collects the targets of the migration WHERE the data will be
 migrated. The list is initially empty and the objects can be added either manually, or it is
 possible to load them all. (For more details click here.)
- Mappings Before starting the archive migration procedure, the MAM objects must be
 mapped to the O365 objects. This action is called object mapping. The objects that have not
 been mapped cannot be migrated. Object mappings are specified in "Mappings" section.
 Manual and automatic mappings are both enabled. (For more details click here.)
- Migration Migration jobs and groups can be created and viewed on this tab. The workflow of a migration is defined in the migration job. The job's workflow defines what exactly will be

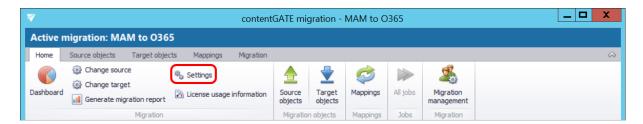


migrated. A migration job must be always assigned to a migration group, because only the mailboxes added to groups can be migrated. (For more details click <u>here</u> (jobs) and <u>here</u> (groups)).

All the above mentioned sections are initially empty. To configure these settings refer to the following sections of this user guide.

5.2.2 Default project settings

Before you start to configure a migration job, you can set default settings that will be applied in your migration project. To configure these default settings, click on "Settings" in the **Home** tab's toolbar.



The "Settings" window opens. The navigation pane of this window features 3 types of settings:

- Global settings
- Filtering settings
- Performance settings

Global settings

Use this option to specify a target mailbox folder for mailbox items with path that cannot be found during the migration process. By default, the items without the folder path information are saved into folder "Unknown", but this folder can be changed here.

When checked, the option **Preserve shortcut properties during the shortcut migration** does the following:

- Finds a shortcut in the mailbox
- Reads properties that can be preserved (categories, follow up flags, read status, etc.)



- Migrates the item 1:1 the item will be the exact same as it is in the source archive
- Upgrades the shortcut (creates new item from the .msg file)
- Applies properties that can be preserved on the new shortcut

Note: Information like category, follow up fag, read status, etc. are Outlook/user specific information and might be changed multiple times during an email lifetime. Therefore, it can be considered not as email specific, but rather user specific information.

This option is recommended in case the migration needs to be fully compliant. The migrated message is kept as it is, but the shortcut of the user is not losing the user specific Outlook information.

When checked, the option Modify migrated message by applying the actual shortcut properties on it will modify the migrated email before it is transferred to the target system and do the following:

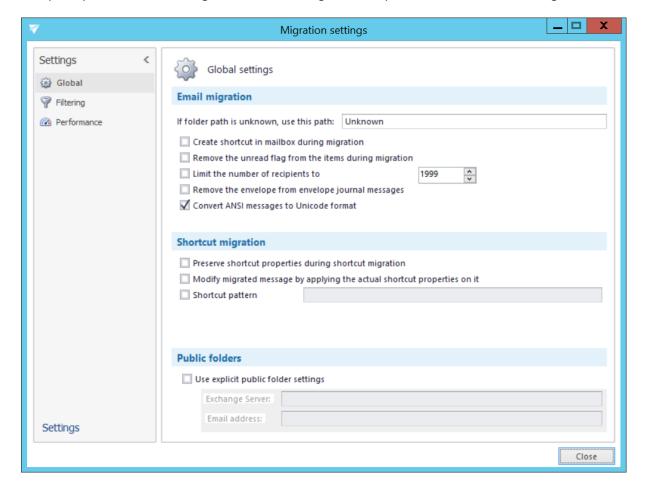
- Find a shortcut in the mailbox
- Read properties that can be preserved (categories, follow up flags, read status, etc.)
- Read the message from the source archive and apply properties that can be preserved on the message
- Migrate the modified message to the target archive
- Upgrade the shortcut (create new item from the modified .msg file)
- The properties that can be preserved are already available on the new shortcut

This option is recommended in case the customer requires to "update" the status of the migrated emails to the current status. The email is modified during the shortcut migration; therefore, it can't be considered as fully compliant migration.

Important: If the item migration has already finished on the given mailbox, the option **Modify** migrated message by applying the actual shortcut properties on it makes no sense anymore, because the email was already migrated 1:1 to the target archive and can't be modified later. Therefore, please plan the migration strategy in advance, especially the sequence of the migration.



If explicit public folder settings need to be configured, it is possible to allow and configure it here.



Filtering settings

Filtering settings enable to exclude certain mailboxes from the migration process. The list of mailboxes to be excluded can be imported from a CSV file, from an SQL database that the source archive is connected to or from Oracle that the source archive uses. It is possible to import multiple list of entries to be excluded. Already added entries will not be deleted, the list will be only updated.

To add mailboxes to be excluded, click the "import" button, select the import type (CSV file, SQL Server or Oracle) and specify the items that shouldn't be processed by the migration project.

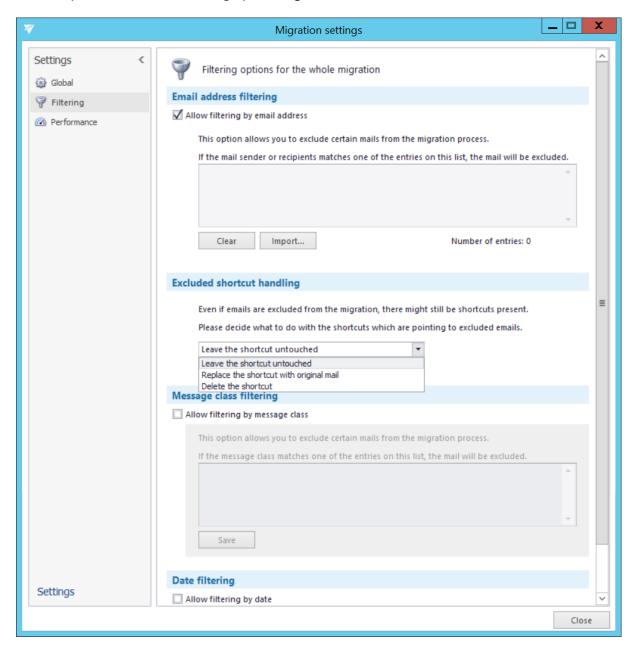
Even if certain mailboxes are excluded from the migration, there can still exist shortcuts pointing to the excluded mailboxes. The dropdown list allows the administrator to decide what to do with these shortcuts:

leave them untouched



- replace with the original item
- or to delete them.

It is also possible to allow filtering by Message class and Date.

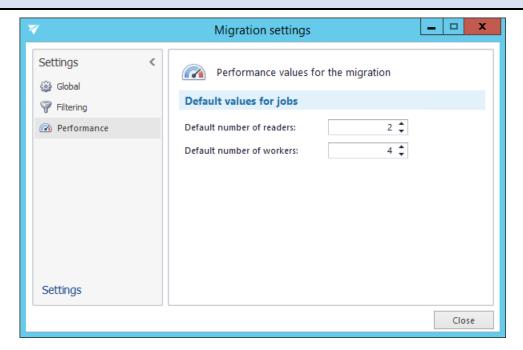


Performance settings

Performance settings enable to set the default performance values for every migration job of a migration project. The administrator may set here the default number of reader and worker threads. The thread count defines the number of tasks running in parallel. The default values will be prepopulated in the migration job's settings.



Note: The thread count may be changed in the job settings. Values defined in the migration job have always priority.



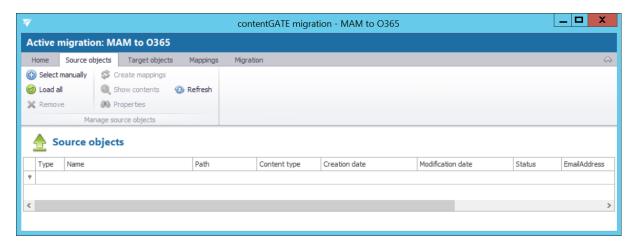
5.2.3 Loading source objects

Definition of terms: source objects = mailboxes available in the source MAM EE archive

Open the "Source objects" tab. The grid of the page is initially empty and the source mailboxes must be loaded. You have multiple options how to load them:

- Load all use this option to load all objects available on the source archive
- Select manually if you do not want to load all available objects from the source connector (e.g. if you do not want to migrate all), you can use this option to pick the desired objects manually.





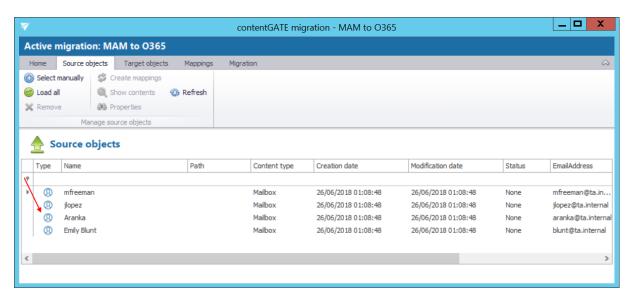
By **manual selection** of the objects the "Migration objects" dialog opens. Pick up the desired objects from the list and click "Add". The source objects will be shifted to the lower part of the dialog. The dialog offers to select subfolders of a source object, too (option "Add folder").

Click "Save".

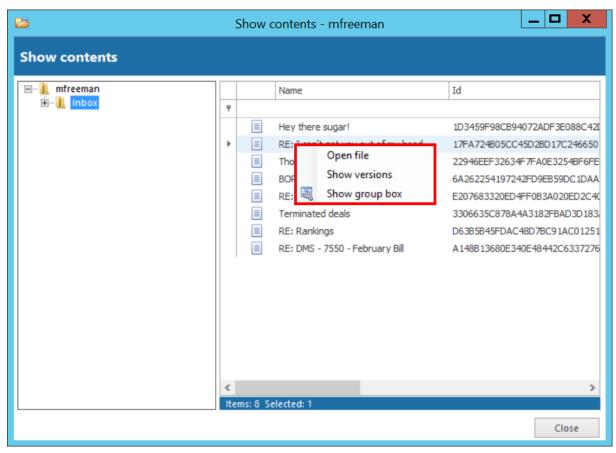


The selected source objects are now added to the grid:



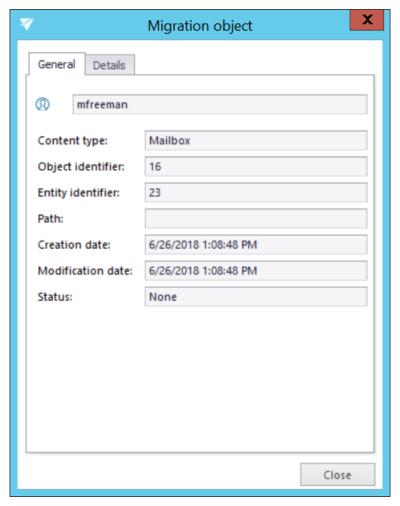


The mailbox items, attachments and file versions may be viewed using the **Show contents** option in the toolbar. Use option **Properties** to view the basic properties of a mailbox.



Show contents of a mailbox item





Mailbox item properties

Once the demanded source objects are loaded, switch to section "Target objects".

5.2.4 Loading target objects

Definition of terms: target objects = Office 365 mailbox(es)

Open the "Target objects" tab from the toolbar. Initially the grid is empty. The Office 365 mailboxes are loaded on this page. These mailboxes will be the targets of the migration.

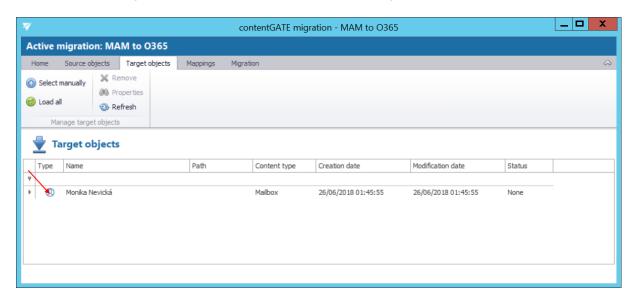
You have multiple options how to load the mailboxes from the contentACCESS archive:

• Load all - use this option to load all objects available on the source archive



• **Select manually** – if you do not want to load all available objects from the source connector, you can use this option to pick the desired objects manually.

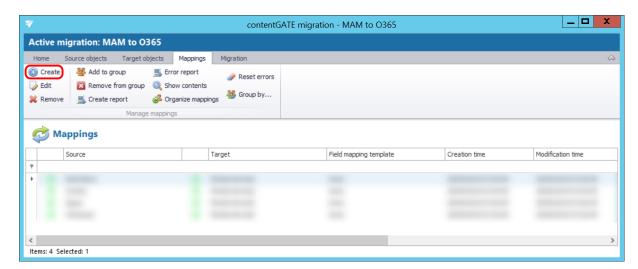
The process is the same as with the source objects. Load the desired objects on the target (where you will migrate TO) and switch to section "Mappings".



5.2.5 Mapping source objects to target objects

Note: The Error report and Reset errors buttons are explained in the section Migration reports.

Open the "Mappings" tab and click "Create" in the toolbar to create the desired object mapping(s).





The "Mappings" dialog features the

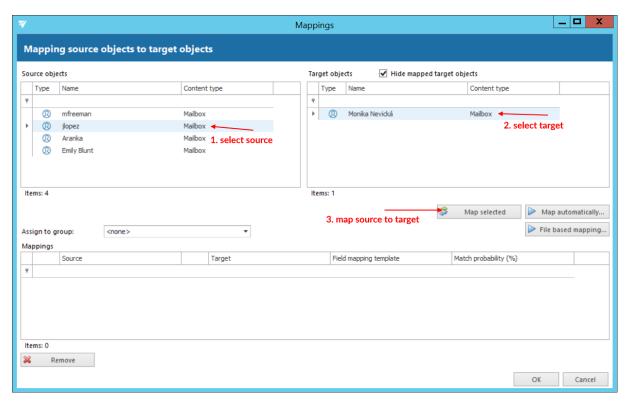
- **source** object(s) TO BE MIGRATED on the source side, and
- target object(s) WHERE the source objects can be migrated on the target side.

Note: One source object can be mapped to one target only, but one target object may be associated to multiple source objects. This action is called **merging**. Wish you associate multiple source objects to the same target, uncheck the "Hide mapped target object" option above the grid.

Mappings may be specified either

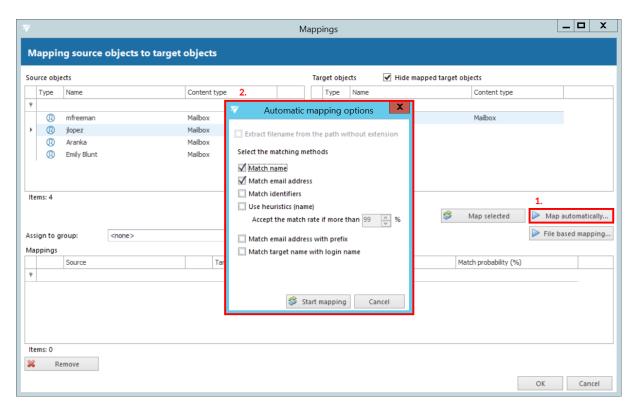
- manually or
- automatically.

By **manual selection** select each source and target one-by-one, and map them together using the "Map selected" option.



Wish you use **automatic mapping**, 1) click on the "Map automatically" button and 2) select the mapping criteria.





There are 6 auto-mapping methods available:

Match name - maps the objects based on name

Match email address – maps the source to target based on the email address included in the object properties

Match identifiers – maps the source to target based on the IDs included in the object properties (e.g. object ID, entity ID etc.)

Use heuristics (name) and accept match if rate is more than the selected amount

Match email address with prefix - map email addresses with the same email prefix (part of email address that appears left of the "@" symbol)

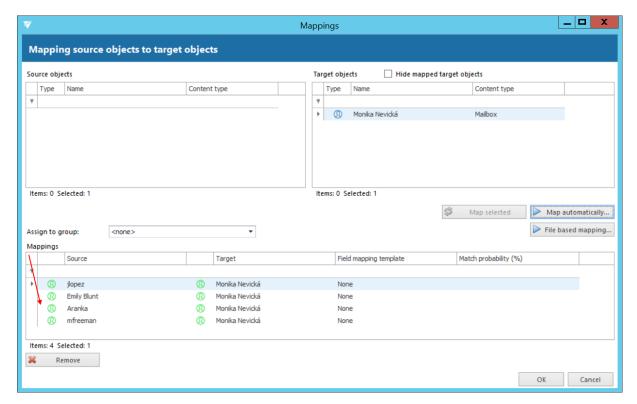
Match target name with login name – maps the objects if the target name matches the login name of the source.

Once the criteria are selected, click on the "Start mapping" button, and the objects will be paired automatically.

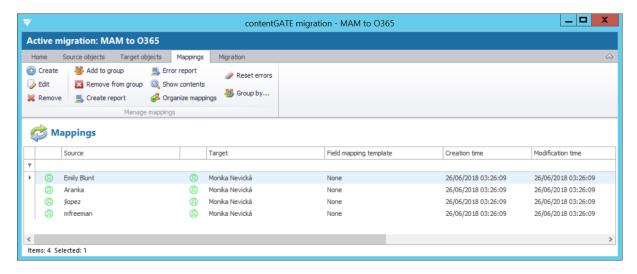
Note: If no matches have been found by the automap, the application will warn about it. In this case the user needs to map the objects manually.



Added mappings are shifted to the lower part of the Mappings dialog.



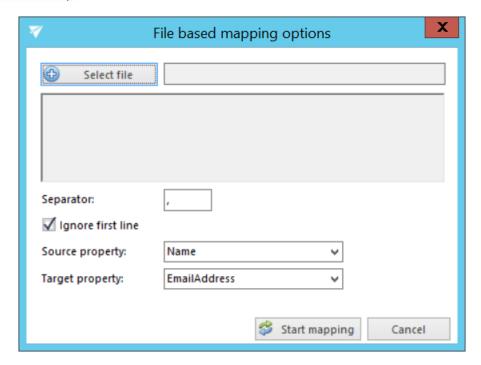
Click "OK" to add them to the grid.



Note: Mapped objects are marked with green color in the source and target grids, while unmapped objects are blue.

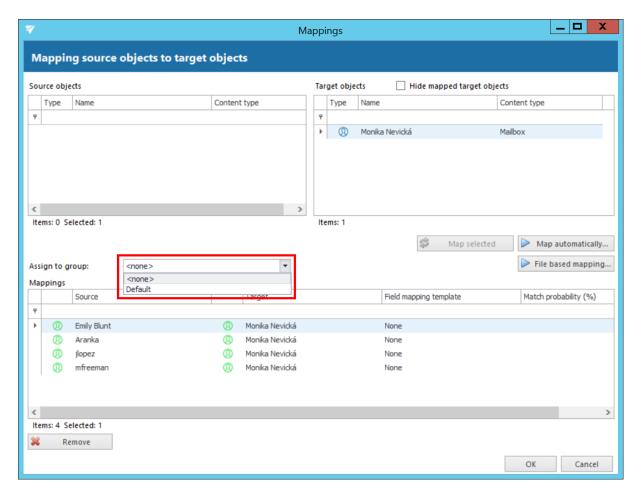


It is also possible to map objects based on a .CSV file. Click on **File based mapping** in the mappings dialog and select the desired file. Specify the **separator** of the properties. If you want to ignore the first line of text in your file (e.g. header), check the **Ignore first line** checkbox. Select the **Source** and **Target** properties from the dropdown lists respectively. Click on **Start mapping** and then **Apply changes**. The remaining steps are the same as when mapping manually and/or automatically.



It is also possible to assign the mapping to a **Group** directly from the **Mappings** tab. Select the desired group from the **Assign to group** dropdown list.





5.2.6 Creating migration group(s) and adding group members

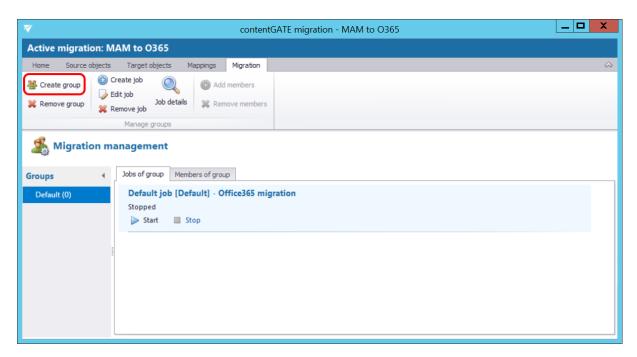
In the next step we need to create a migration group and associate our mapped mailboxes with it. Since a migration can be started on group level only, mailboxes that are not group members cannot be processed.

Group management makes the migration process more transparent and manageable. It makes easier to check which mailboxes have been already migrated, and it also helps to define priorities, i.e. to migrate the most important mailboxes in the first round.

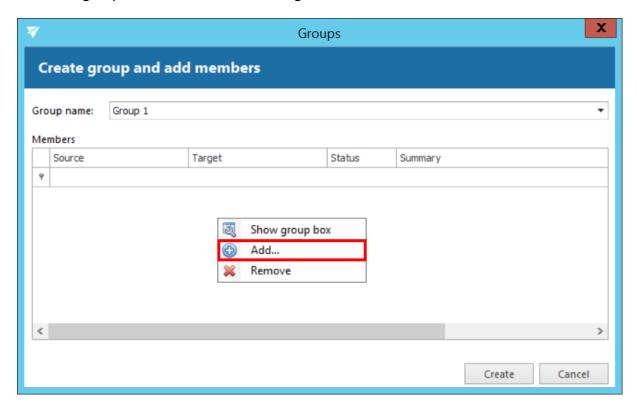
Create a migration group and add members to it

Navigate to "Migration" tab. As you can see, there is initially a **Default** group. Click "Create group" in the toolbar to create a new group (if you don't want to use the default one).



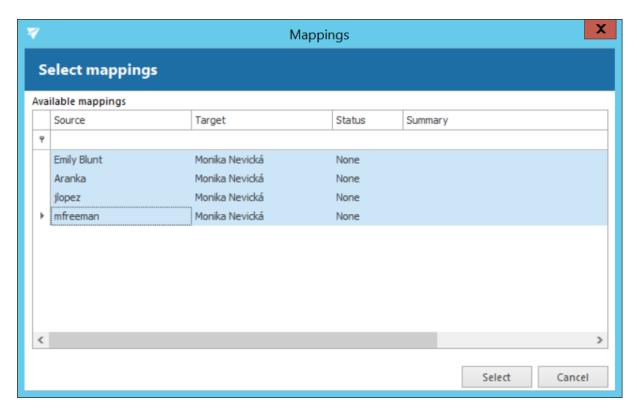


Name the group and add members to it using the context menu:

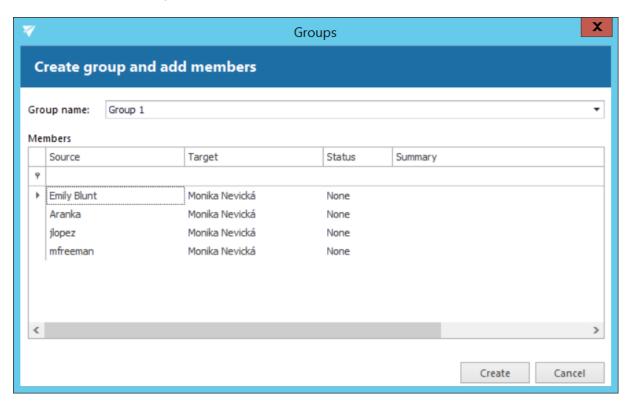


The next pop-up dialog displays all available mappings that can be added to the group. Pick the desired mappings and click "Select".



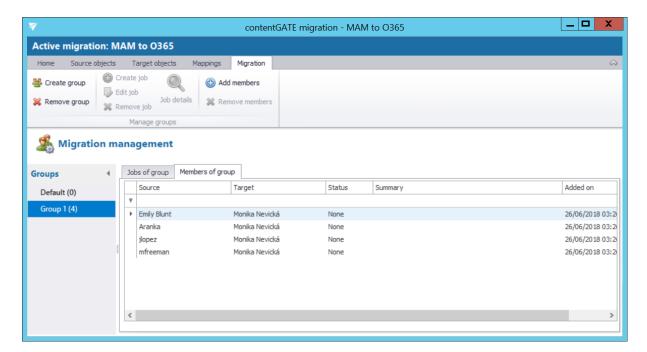


In the next pop up dialog click "Create".





Mailboxes to be migrated are now added to the "Members of group" grid as seen on the picture below:



The "Jobs of group" grid is still empty. In the following subchapter we will learn how to add migration job(s) to our migration group. There will be 2 jobs created: 1^{st} for email migration, 2^{nd} for shortcut migration (shortcut conversion).

5.2.7 Creating migration job(s) to your migration project

A migration job manages the migration process and it defines what exactly will be migrated. For migration to *Office 365* 4 migration jobs are available:

- Office365 migration job
- On-premise migration job
- Office365 shortcut restore job
- Office365 shortcut restore to archive job

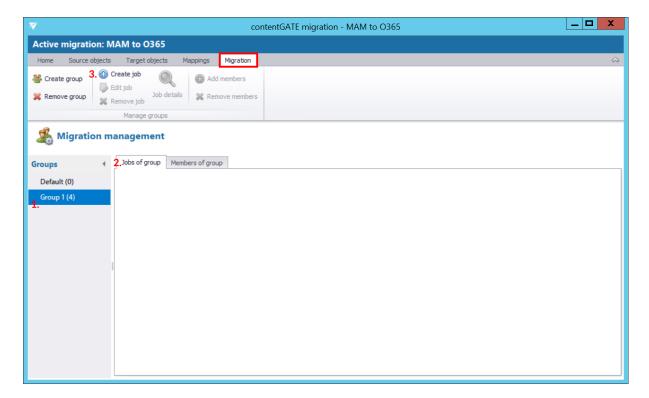
The administrator decides the migration strategy. If everything must be migrated, it is recommended to create an **Office365 migration job**. The job migrates all email data from the source archive in the background, not visible to the user.



Note: The job crawls the normal, backup and delayed MAM EE shortcuts in the mailbox as well.

Important: Items that do not have a backup, delayed or normal MAM EE shortcut in the mailbox will not be migrated! This step must be done by a separate **migration job** if necessary.

A migration job is always assigned to a migration group. It can be created by 1. selecting the group in the pane, 2. switching to "Jobs of group" tab and 3. clicking option "Create job" in the toolbar:



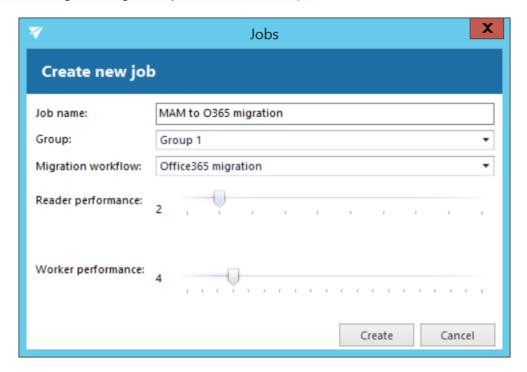
By clicking the **Create job** button, the "Create new job" dialog opens. It requires to:

- name the job
- assign the job to a **group** The group is already selected, if the job is created to a group directly (from the Migration tab). The job will process the members of this migration group.
- specify the migration **workflow** The workflow defines what will be migrated by the job. For this migration we chose **Office365 migration** workflow.



adjust thread performance; this is set to the default values specified in <u>Default project</u>
 <u>settings</u>. The configurations of the migration job have always priority.

According to the below displayed screenshot, we have created an **Office365 migration job**, which will manage the migration process of the **Group 1**.



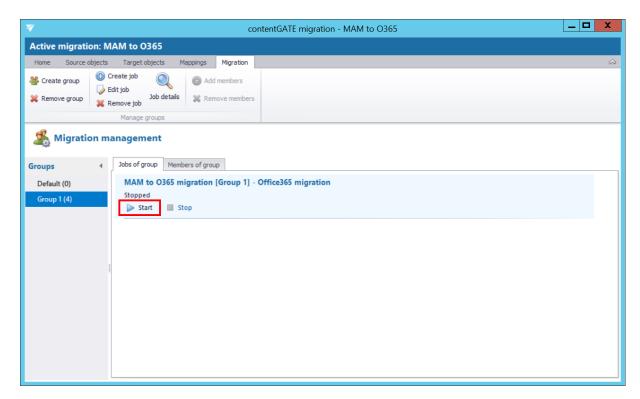
Now every configuration is done and you can proceed with the migration.

5.3 Starting the migration

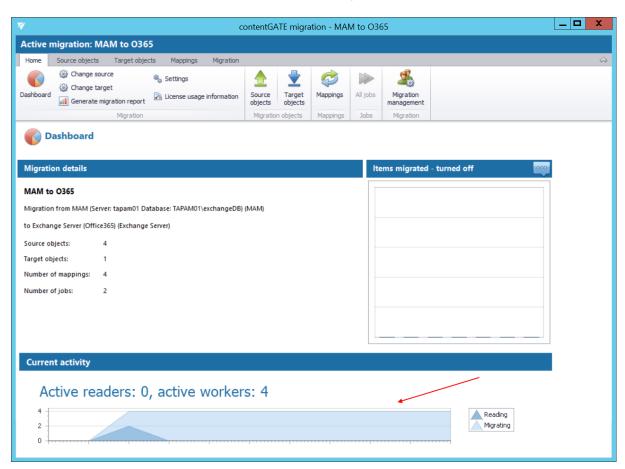
The migration job can be started from the grid of jobs on the **Migration** page. The job can be stopped or paused from this grid, too. If paused, the migration will continue from the point where it was aborted.

Click on **Start** in the grid and wait until the job completes the migration process.





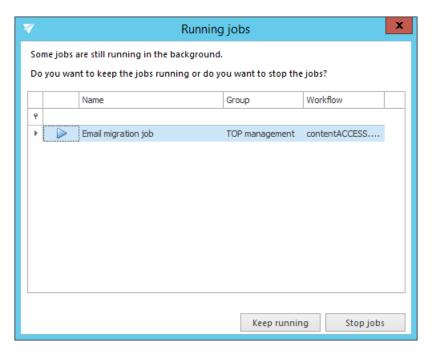
The current thread activity can be checked on the project's dashboard, too:





If the project management interface is closed when one or more migration job(s) are already running, the application will prompt about this. The administrator can choose what to do with the running job(s):

- keep them running this option allows to complete the tasks in the background
- stop the job(s)

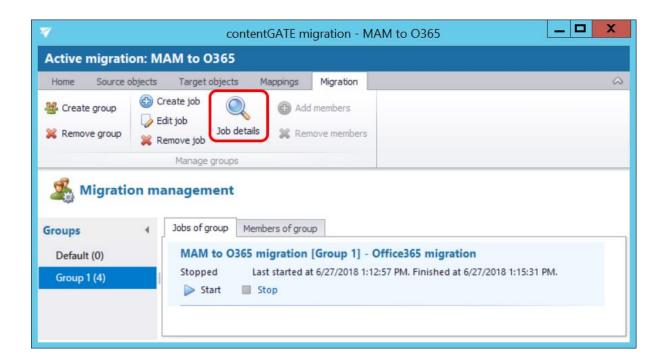


5.4 Job details

The details of a respective job's last running can be viewed in jobs details, which are accessible by clicking on the **Job details** option in the **Migration** toolbar. In case that the job is currently running, the current progress will be displayed.

Select the group with the desired job, click **Job details** and the **Job details** window will open.



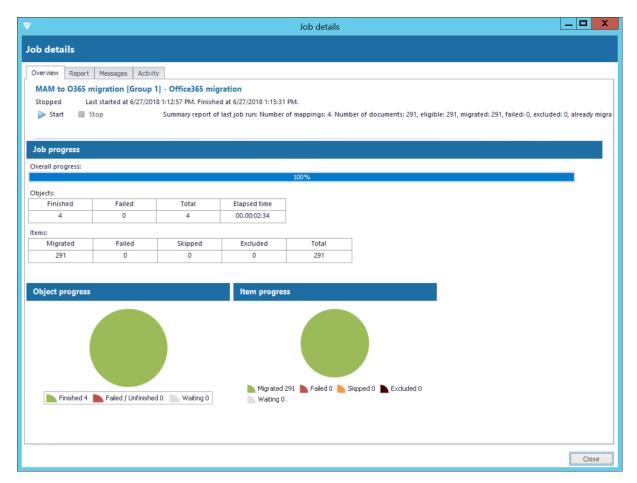


The window consists of 4 tabs:

Overview

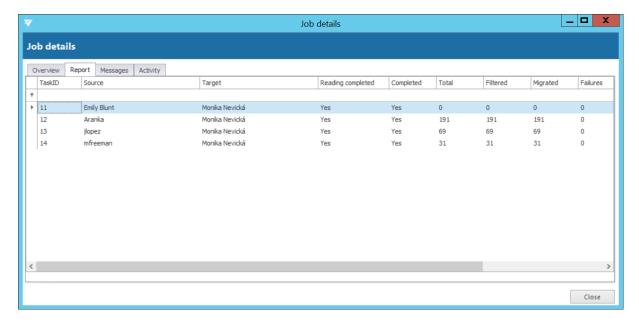
An overview of the selected job's last run/current running can be viewed here.





> Report

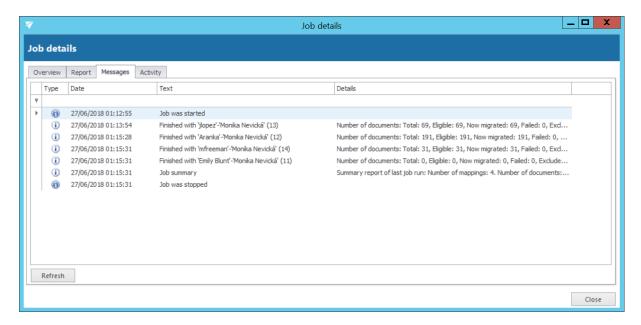
The tab features the source and the target objects, the total number of migrated items, the number of filtered, last migrated and failed. The user may sort by these column headers, too.





Messages

The **Messages** tab shows the last activities of the selected job in more details; when the job was started, if the job was paused/stopped, how many items the given job processed etc. Any possible failures in the migration process can be easily detected here. The messages related to the job's running are listed in a grid consisting of the following columns: Type, Date, Text and Details. Sorting by these columns is enabled. The grid of messages can be refreshed by clicking the "**Refresh**" button at the bottom of the window.



Activity

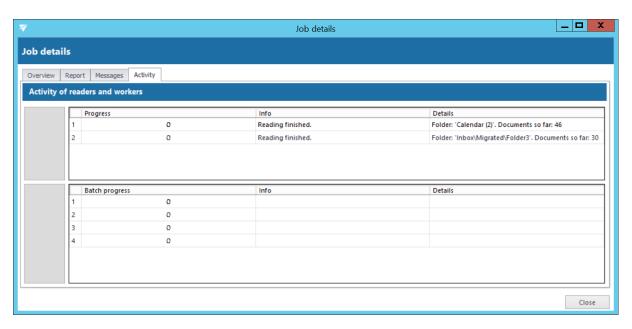
The **Activity** tab features the

- progress of reading and working threads
- batch progress

The **Batch progress** table is filled by the reading thread that is grouping the documents into batches and pre-fills the common information.

Note: Migration batch is a collection of documents belonging to the same mapping (task).





5.5 Migration reports

A migration report is used to keep the results of the data migration in a document of optional format. The reports can be viewed at any time in the future to verify, that the migration has been completed successfully.

A report can be created to the:

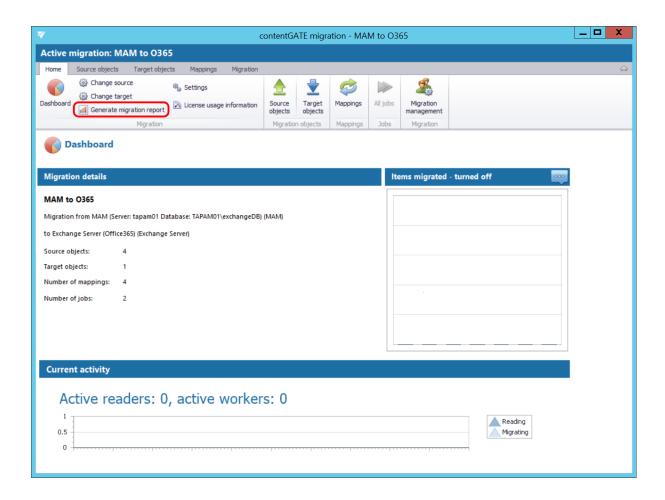
- a) **migration project as a whole** (e.g. project "MAM to O365" like in this use case) this report contains the
 - status of the migration project
 - item migration details of all objects available in the migration project
 - shortcut migration details of all objects available in the migration project

This report type can be created from the dashboard using the "Generate migration report" option in the toolbar

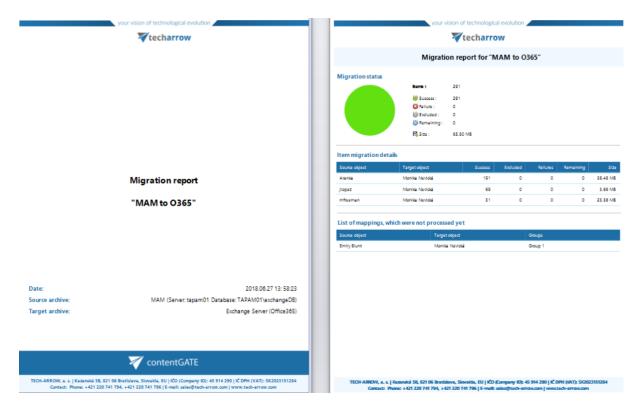
- b) mapped object(s) this report type contains the
 - general information about the selected migration object
 - migration status of the selected migration object
 - migration details of the selected migration object



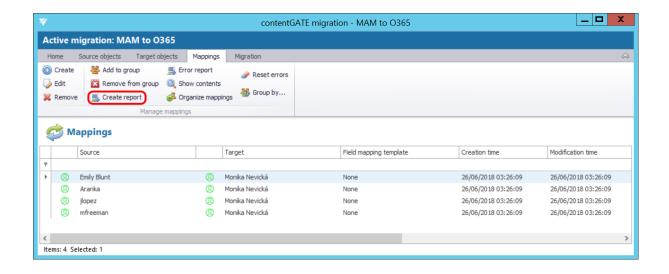
This report type can be created from the **Mappings** tab using the "Create report" option in the toolbar. In this case the administrator can select if he wants to create **only one report file**, or **one report file** per user.



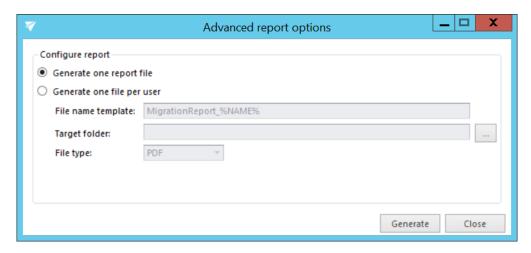


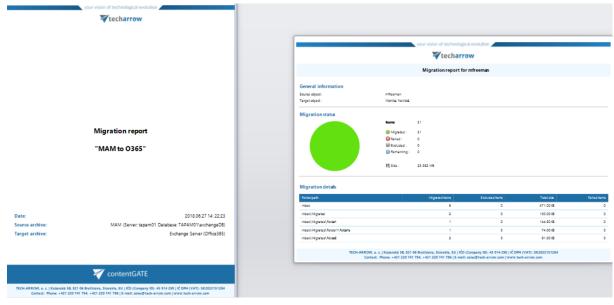


Screenshot A: Migration report for project "MAM to O365"





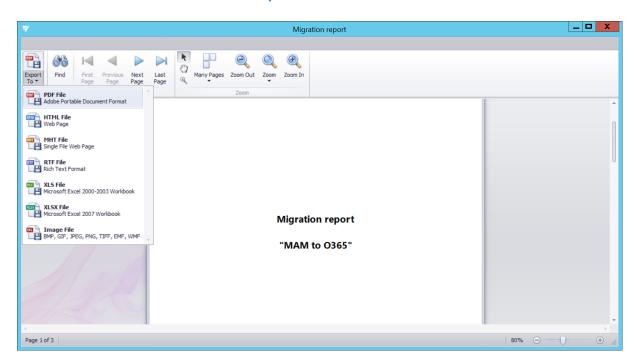




Screenshot B: Migration report for "mfreeman@ta.internal"

Migration reports can be saved in one of the following formats: PDF, HTML, MHT, RTF, XLS, XLSX and as an image file.



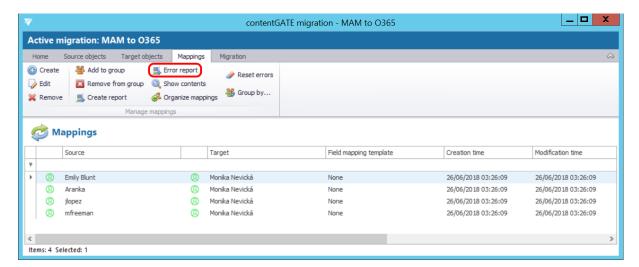


Error handling

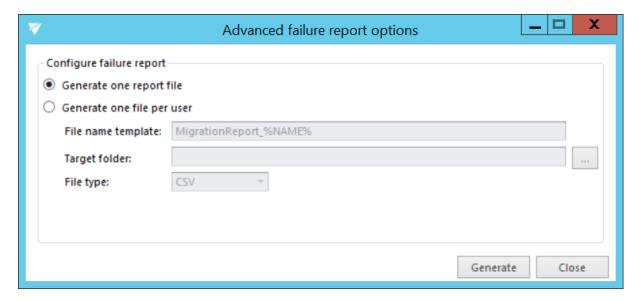
To handle errors better and have a better overview of them, there are two buttons on the <u>Mappings</u> tab:

Error report

This button allows you to save the migration failures/errors of a selected mapping to a CSV file.

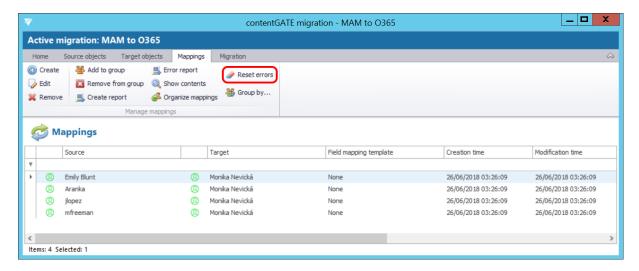






Reset errors

This button allows you to reset the shortcut migration errors. This is very useful in case you want to get rid of the errors in shortcuts that are no longer in the mailbox but are still figuring in the migration report.



A pop-up window will open. If you are sure you want to reset the errors, confirm the process by clicking on the **Reset** button.



