

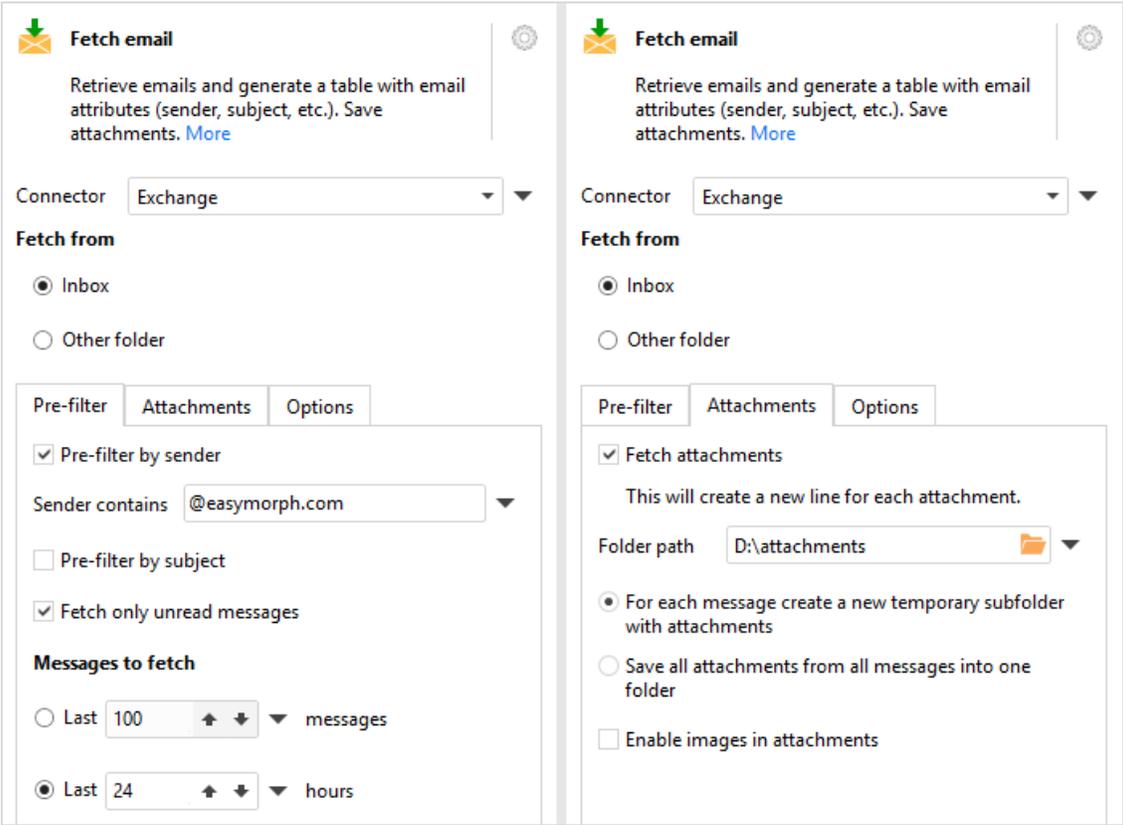
# Release notes for version 3.9

**Important!** Create a backup copy of your projects and connector repositories before updating to the new version. Projects saved in version 3.9.x can't be opened in earlier versions.

## What's new

### Fetching emails with attachments

With the help of the "Fetch email" action it is now possible to retrieve email messages and their attachments from Microsoft Exchange and email servers that support the IMAP protocol. The action produces a table with a list of attributes such as sender, received date/time, subject, etc. for each email message. If the action is instructed to fetch attachments then for each attachment the table will have a file name and path to the folder where the attachment has been saved. Later, the attachments can be loaded using either the new "Load file list" mode in import actions (described below), or using iterations.



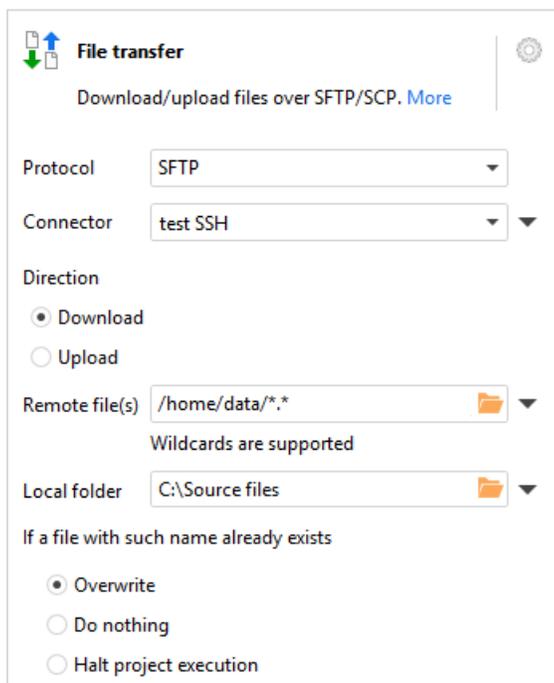
Screenshot 1: The "Fetch email" action.

A typical workflow that fetches email attachments and loads them in EasyMorph would be as follows:

1. Use the “Fetch email” action to retrieve email messages and save their attachments into a designated folder. The action produces a table with message attributes and paths to folder(s) with attachments.
2. Filter messages/attachments based on their attributes, if necessary.
3. Use an import action in the “Load list of files” mode (described below) to load retrieved attachments into EasyMorph.
4. Use the “Clean folder” command of the “File command” action in order to purge attachments. In some scenarios, this step may come before fetching emails.

### *SFTP/SCP file transfer*

EasyMorph now has a built-in SFTP/SCP client that allows downloading and uploading files from/to a remote computer over an SSH connection. A typical use case would be collecting source data from a remote computer, or publishing transformation results to a remote server.

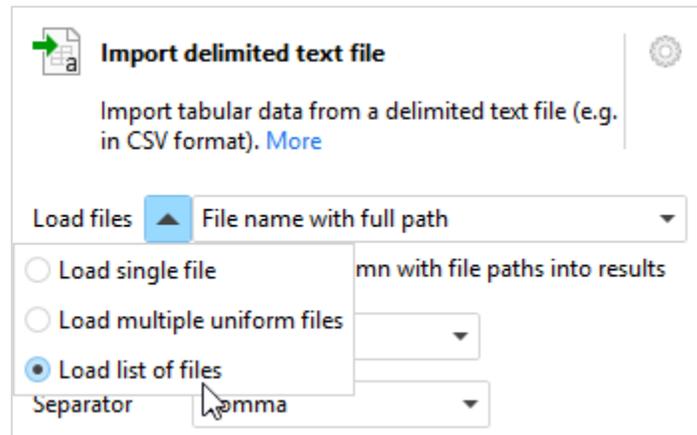


*Screenshot 2: The "File transfer" action.*

### *Loading a list of files without iterations*

All import actions now have a new mode – “Load list of files”. In this mode the list of file paths to load is obtained from a column in the input dataset (i.e. the output of previous action). This mode allows loading multiple files at once without using iterations. It can be helpful in cases when uniform files are

located in different folders, or need to be filtered using a complex condition based, for instance, on file size or file creation date. In most typical cases, an initial list of files would be generated using the “List of files” action or the “Fetch email” action.

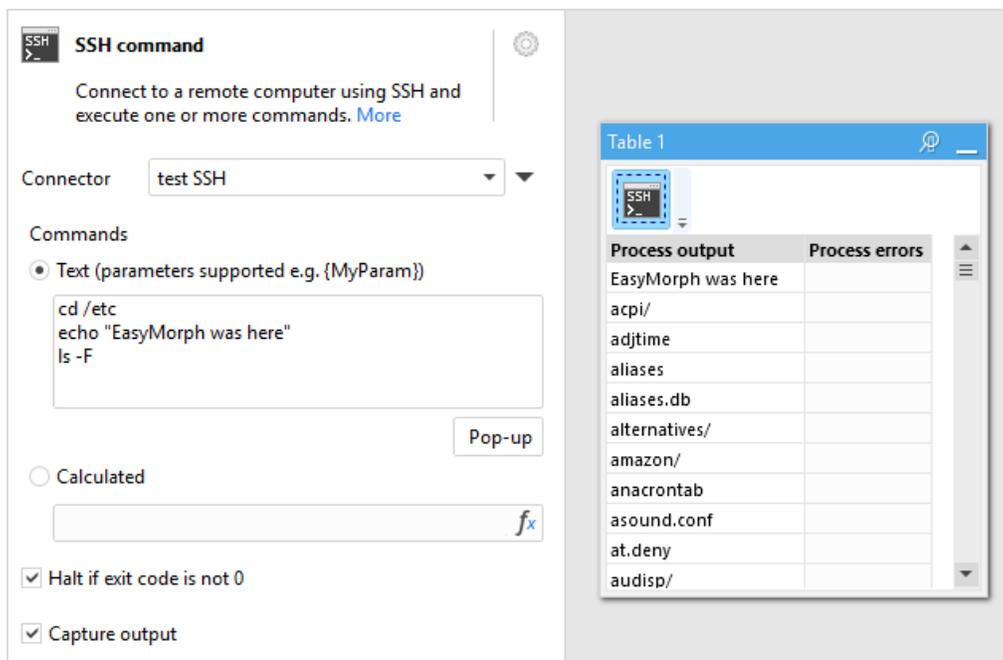


Screenshot 3: The "Load list of files" mode.

## SSH Command

The **SSH Command** action allows executing one or multiple commands on a remote computer over an SSH connection. The commands can be composed using project parameters. The output of commands can be captured in EasyMorph.

A typical use case for “SSH Command” would be triggering a process on remote server and later fetching files (using the “File transfer” action) that were produced by that process.



Screenshot 4: SSH Command.

## *Native data format*

The native data file format stores data in a form that is very close to internal data representation in the EasyMorph's in-memory engine. Therefore, saving a dataset into a file and reading a dataset from a file doesn't have performance overhead such as data conversion or compression/decompression, and therefore is very fast.



The **Export dataset** action saves an EasyMorph dataset into a file in the native format.



The **Import dataset** action loads an EasyMorph dataset from a file.

## *Changes to existing actions*

The **File Command** action now has a few new commands to deal with folders and zip archives:

- Create folder
- Delete folder
- Zip file
- Zip folder

Also the "Clean folder" command now allows removing subfolders or cleaning them recursively.

The **Send email** action now doesn't fail if the message body contains a missing parameter. This is done in order to enable embedded CSS stylesheets in HTML messages.

## *New functions*

**weekdayname(date\_as\_number)** – returns the abbreviated name of day. Example:

`weekdayname(#2018-08-22)` returns "Wed".

## *New limits of the free edition*

The limits for actions and iterations in the free edition have been reduced to 24 actions per project (including iterated projects) and 24 iterations. The free edition now allows using the "Input" action.

## *Connectors*

This version introduces a new connector type – "SSH connection". The connector can be used in two actions: **File Transfer** and **SSH Command**. It can use authentication with a key pair. The private key should be in the Open SSH format (for keys generated with PuttyGen see instructions [here](#)).

The email connector has been extended with options for configuring IMAP.

## Miscellaneous

- The minimal version of .NET Framework required for EasyMorph is now 4.6.2.
- Database drivers and Tableau SDK have been updated to the latest versions.

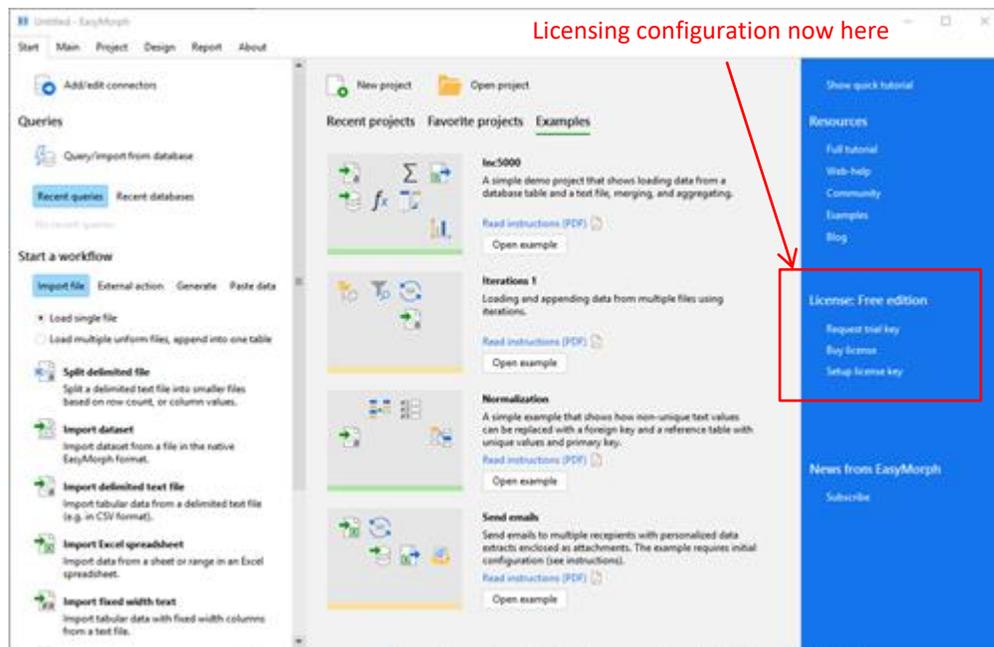
## What's new in EasyMorph Desktop

### Editing operations with multiple actions

Now it is possible to copy, paste, move to another/new table, or delete multiple actions at once. To select multiple actions, *click* the first action then *Shift+click* the last action. After selecting multiple actions, right-click for context menu, or drag them to another location.

### New Start screen

The Start screen has been significantly redesigned to simplify onboarding experience for new users and dealing with many projects for existing users. A trial license key can be requested right from the Start screen. Also license key configuration has been moved from the About menu to the Start screen.



Screenshot 5: New Start screen.

## Miscellaneous

- On the first launch EasyMorph now shows a wizard to help configure licensing (e.g. request a trial key) and subscribe to news and updates.

# What's new in EasyMorph Server

## Monthly Schedule

EasyMorph Server now allows scheduling tasks using a monthly schedule. Days of execution can be defined in one of the two ways:

- As one or more month days (1, 2, ..., Last day, 1 day before last day, 2 days before last day).
- As one or more week days (Sun, Mon, ...) for one or more weeks (First, Second, ..., Last).

The screenshot shows a configuration form for a task in EasyMorph Server. At the top left are two buttons: "Save changes" (highlighted in blue) and "Revert". At the top right is a checkbox labeled "Task disabled" which is currently unchecked. The form fields are as follows:

- Project:** A text input field containing "train.morph" with a file icon and a "Browse..." button to its right.
- Note:** A text input field containing "Some description of the project".
- Project parameters:** A button labeled "Assign more parameters".
- Schedule:** A dropdown menu set to "Monthly".
- Days:** A radio button labeled "Days" is selected, followed by a dropdown menu containing "1, 14, Day before last day".
- On:** Two radio buttons are present. The first is labeled "On" and is selected, followed by a dropdown menu containing "1st, 3rd". The second radio button is unlabeled and is followed by a dropdown menu containing "Mon, Thu".
- Time:** A text input field containing "11:45 am" with a clock icon to its right.
- Enable Get:** A checkbox which is currently unchecked.

Screenshot 6: Monthly schedule