Release notes v5.1.2

Important! Create a backup copy of your projects and connector repositories before updating to the new version. Projects saved in the new version can't be opened in versions earlier than 5.1.2. Also, if your organization uses EasyMorph Server, please make sure that the Server is upgraded to this version before Desktops.

Warning! This version automatically modifies on opening repositories created in a version before 5.0. Versions 5.0 and later introduce strong repository encryption and automatically encrypt the current repository on opening (a backup copy is created automatically). An encrypted repository can't be reverted and made usable again for earlier versions. If you accidentally convert your project or repository to v5, **we won't revert it**. Use the backup copy.

A few words from the creators of EasyMorph

While a minor release, version 5.1.2 introduces a few important improvements to EasyMorph:

The new, improved JSON parsing algorithm produces a cleaner, denser tabular output without extra empty rows or columns. In many cases, it produces a clean, ready-to-use dataset that requires no additional transformation.

Besides that, we've made a few improvements to Excel actions. The improvements enable the generation of highly formatted PDF reports from pre-designed Excel templates. The reports can have multiple pages and include charts and formatted tables. Note that this feature is not suitable for high-volume PDF generation (such as thousands of PDFs per day) due to the technical limitations of Excel.

What's new

New JSON parsing algorithm

The actions that parse JSON now use by default the new "dense" mode. In this mode, EasyMorph creates fewer empty rows and columns, and therefore results of JSON parsing require less additional shaping (frequently, none at all). The "dense" mode is available in the following actions:

- Parse JSON
- Import JSON
- Import from Web API

In existing projects, the previous "sparse" mode is preserved to avoid breaking changes. The mode can be changed in the action's advanced settings.

Support for Excel tables

The "Export to Excel" action can now create new or replace existing Excel tables (the ones that are native to Excel). This makes it possible to use EasyMorph for updating complex Excel templates with dynamic charts and pivot tables. Note that EasyMorph can update only one table in a sheet.

New Excel commands

The "Excel command" action has two new commands added:

- "Save as PDF" – the action allows saving Excel spreadsheets as PDF files. Combined with the support for Excel tables mentioned above, this command makes it possible to create highly formatted multi-page PDF reports from Excel templates populated with data using EasyMorph.
- "Re-save workbook" –re-saves the selected workbook. Its purpose is to fix possible XLSX format problems frequently found in spreadsheets generated programmatically by 3rd party utilities/libraries.

Improved breakpoints

The "Breakpoint" action has undergone a few changes:

- The new mode "Break, continue on manual run" requires the user to manually run project actions in order to go through the breakpoint. The breakpoints in this mode are reset on re-calculation (e.g. when an action upstream was changed).
- EasyMorph Desktop now automatically shows (selects) the table and the "Breakpoint" action that caused the break when a break occurs in a breakpoint.
- The "Alternate on each run" mode has been removed. The "Break, continue on manual run" mode is used instead.

What's new in EasyMorph Server

Parameters entry dialog

Starting from this version, when a Server task has parameters and a user triggers the task, the parameters are prompted in a modal dialog rather than an inline form. Prompting for parameters in a dialog is a new UI flow that will also be used in new features of EasyMorph Server, such as the upcoming data catalog.

Miscellaneous

- New spaces, by default, don't allow the execution of arbitrary code

Release notes v5.1.1

Important! Create a backup copy of your projects and connector repositories before updating to the new version. Projects saved in the new version can't be opened in versions earlier than 5.1.

Warning! This version automatically modifies on opening repositories created in version prior to 5.0. Version 5.0 (and later) introduces strong repository encryption and automatically encrypts the current repository on opening (a backup copy is created automatically). An encrypted repository can't be reverted and made usable again for earlier versions. If you accidentally convert your project or repository to v5, **we won't revert it**.

What's new

Miscellaneous

- Actions that work with Google Drive now support file shortcuts
- The "Export to Google Sheets" now retries automatically if the request quota has been exceeded
- Resolved the issue with repository file locking
- Improved basic HTTP authorization flow in the "Web location" connector
- The "Excel command" action is no longer experimental

What's new in Server

Hot-reloading space tasks

Gateway Administration	4	Default	No	Full access	Full access	↻ 🗑

Screenshot 1: Button "Reload tasks".

The list in tab "Spaces" now has buttons for reloading the list of tasks in spaces without restarting the Server. This enables promotion of tasks from one space (e.g. "dev") to another (e.g. "prod") using a version control system such as git or simply by copying the respective XML files from one space to another. After copying/promotion, press the "Reload tasks" button to make the Server use the updated task definitions in the space.

Free RAM indicator

Memory is a critical resource for EasyMorph Server. To simplify monitoring available memory, we've added a respective indicator to the admin tabs and to the "Tasks" tab. The indicator becomes yellow if the available memory falls below 20%, and red, if below 10%.
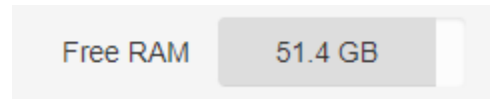
Miscellaneous

- Workers now can have optional labels to help distinguish workers that operate under the same Windows account
- Email notifications about failed tasks now have a new, more polished look
- Fixed/improved layouts of some tables in admin tabs

Release notes v5.1

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What's new

Connector for OneDrive

A connector for OneDrive is now available. It allows performing file operations with personal OneDrive.

Changes in existing connectors

The "Gmail" now uses the new Google API under the hood. This was required by Google in order to verify the connector.

The "Amazon AWS" connector now allows specifying a secure session token for S3 connections that require advanced security.

The "Web location" connector now has an option "Refresh token never expires" that manages OAuth refresh token expiration. It should be disabled for web services with short-lived refresh tokens.

The "Tableau Online" connector now has a new sign in option "Personal access token (PAT)" that supports MFA authentication that will be enforced for all Tableau Online accounts starting from February 1st, 2022.

New actions

The **Breakpoint** action is intended for limiting calculation scope during workflow editing, or making a user-controlled calculation flow. It stops project execution without an error. There are three operation modes available:

- Always break / never break
- Break on condition
- Break on every other run, continue on next run (stop / go)

The **OneDrive command** action executes several commands with files stored in OneDrive:

- List files
- Upload a file
- Upload a list of files
- Download a file
- Download a list of files
- Delete a file
- Delete a list of files

The identity function

The new system function 'identity' returns the Windows identity of the user that triggered the current workflow. The function can be used for enforcing row-level security. Example:

```
system('identity') // returns user identity
```

Support for UIDs

Database-related actions and queries now support a new data type – UID (universal identifier). UIDs are distinguished from text values and treated respectively in actions and query conditions.

What's new in Desktop

Miscellaneous

- The table name in the Query Editor can now be specified using a parameter
- Filtering conditions in the Query Editor now support using first column values
- The Query Editor now supports the data type "UID".

What's new in Server

Read/write passwords for repositories

It is now possible to set (and remove) read/write passwords for connector repositories right from the Server UI. Note that read and write passwords work a bit differently:

The read password is required to read a repository. It ensures that a repository can't be used on another machine without providing a password. They are used on Server to read a repository. Desktop users that

access a Server-hosted repository don't have to provide the read password (Server does it for them). However, only the users that know the write password can change/update connector settings.

As of version 5.1, Desktops can't use directly a repository file that is protected with a read password. Such repositories can only be used via Server. Support for read passwords for file repositories used in Desktops will be added in version 5.1.1.

Warning! There is no password recovering mechanism. If you lost a read password and the repository becomes inaccessible, it can't be recovered even by EasyMorph technical support. There are no backdoors.

Space notifications

Previously, if a Server task failed an email notification could be sent to the address(es) specified in the Server settings. However, for customers with a large number of spaces having a single email notification address was inconvenient.

In version 5.1 it is now possible to specify one or more email addresses for notifications in each space. When one or more addresses are provided, all notifications about failed tasks in the space are sent to the specified address(es) instead of the default recipients defined in the Server settings.

Miscellaneous

- The "Stop task" has been moved closer to the "Start task" button
- The global selector of spaces has been removed for admin tabs
- The height of lists of running tasks/active user sessions can now be configured (3/5/10 lines)
- The Server no longer sends email notifications for tasks that can't be started because another instance of this task is already running, or the task has reached the limit for simultaneous task runs.
- The Server no longer sends repeating error notifications if a scheduled task started failing on each scheduled run and producing the same error. The error notifications resume if a task was successfully executed at least once and then failed again, or if it produces a different error. This removes excessive notifications and increases significance of each error notification
- Now when a space is created its worker can be specified right on the space creation page

Previous release notes

Link: Release notes for v5.0.