Release notes v5.4.3

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 5.4. Also, if your organization uses EasyMorph Server, please make sure that the Server is upgraded to this version before Desktops.

A few words from the creators of EasyMorph

In this release, we're finishing a series of usability improvements which goal is to simplify using the Data Catalog: adding new datasets calculated with EasyMorph workflows, opening projects that calculate workflow items, and using dynamically computed Catalog items (datasets) as data sources for other workflows.

Besides that, version 5.4.3 adds the Basic edition of EasyMorph Server. Also, it enforces memory limits according to Server editions (see the [pricing page](#)). Note that these memory limits DO NOT APPLY to the existing customers of EasyMorph that purchased a Server license before version 5.4.3 was released.

What's new in EasyMorph

Changed actions

Actions **Web Request** and **Iterate Web Request** now allow specifying request parameters together with an uploaded file.

What's new in EasyMorph Desktop

Adding data from the Catalog

The "Add data" menu has got a new option: "Retrieve Catalog item". The new menu option simplifies adding data from the Catalog to a workflow.

When selected, it opens a dialog where you can select a Catalog item (and, optionally, enter its parameters). After that, it creates the "Retrieve Catalog item" action that is automatically configured to retrieve the selected Catalog item (such as dynamically computed dataset).

Miscellaneous

- New button "Open project from Catalog" on the Start screen (shown only when Desktop is linked to Server). When pressed, opens the project that calculates the selected Catalog item.
- New button "Publish project to Catalog" in the Project menu. When pressed, opens a dialog for creating/updating a calculated Catalog item.
- The Thumbnail Editor has been deprecated and removed from the application.

What's new in EasyMorph Server

Support for the recent licensing changes

EasyMorph Server now supports the recent licensing changes:

- New Server edition: "Basic"
- Enforced memory limits depending on the Server edition. The limits only apply for customers that purchase their first Server license after the release of v.5.4.3. For existing customers (that purchased a Server license before v.5.4.3) **no memory limits apply**.

See also: [the current licensing for EasyMorph Server](#).

Release notes v5.4.2

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 5.4. Also, if your organization uses EasyMorph Server, please make sure that the Server is upgraded to this version before Desktops.

A few words from the creators of EasyMorph

In this release we've revised the licensing model for the Data Catalog. Now the Catalog is available free of extra charge in all spaces that don't use Active Directory. Any customer with a Server license can now start using the Catalog. Other notable additions are:

- A connector and import action for Google Search Console as we keep moving towards making EasyMorph a better tool for digital marketing analysts (expect more marketing integrations soon).
- The "Roll up" action that sums up amounts from sub-accounts and is intended to simplify calculations for accounting and finance analysis.

We're also adding remote file and folder commands and integrations that later will power the "File browser" in EasyMorph Desktop.

Breaking changes

Breaking changes in actions and connectors

Old behavior	New behavior
The "Import delimited text file" action <u>returned an empty dataset</u> in the "Load only selected column" mode when no headers are found in the imported file.	The "Import delimited text file" action now <u>raises an error</u> in the "Load only selected column" mode when no headers are found in the imported file.
The "Import delimited text file" action <u>returned an empty dataset</u> when no headers are found, but the "Add new columns when rows have more values than headers" option is turned on.	The "Import delimited text file" action now <u>imports data in the "Load all columns" mode</u> when no headers are found, but the "Add new columns when rows have more values than headers" option is turned on.
The option "Bulk export timeout" in the "SQL database" connector affected <u>only</u> the "Bulk export to database" actions.	The option "Bulk export timeout" in the "SQL database" connector has been <u>renamed</u> to "Export timeout" and now affects <u>both</u> the "Bulk export to database" and the "Export to database" actions.
The "Incoming HTTP request" action <u>didn't return</u>	The "Incoming HTTP request" action now <u>returns</u>

columns with request body, parameters, and headers if they were assigned to module parameters in the API endpoint settings.	columns with request body, parameters, and headers even if they were assigned to module parameters in the API endpoint settings.

Breaking changes in the Data Catalog

The Data Catalog is now available without the Catalog add-on in all Server editions in spaces that don't use Active Directory for authentication (non-AD spaces). Also, we've removed the role "Regular user" in the Data Catalog in non-AD spaces. Now all users can create Catalog items of any type in non-AD spaces (in AD-spaces the role of "Regular user" remains unchanged). Finally, we've significantly reduced the Catalog Add-on pricing. The add-on is now only required for AD-spaces.

Old behavior	New behavior
The Data Catalog was unavailable in non-AD spaces without the Catalog add-on in the license key.	The Data Catalog is now available in all non-AD spaces. For non-AD spaces the Catalog add-on is no longer required.
The "Regular user" role was available in non-AD space when the Catalog add-on was applied.	The "Regular user" role has been discontinued in non-AD spaces. Any Catalog user now has full permissions in the Catalog in non-AD spaces.

Changes in default settings

While these changes aren't breaking, they change the default settings in newly created Server spaces:

- The Data Catalog is now enabled by default in new spaces
- Sharing connectors with Desktop users is now enabled by default in new spaces

What's new

New connectors

The "Google Search Console" connector has been added.

Changes in existing connectors

The option "Bulk export timeout" in the "SQL database" connector has been renamed to "Export timeout" and now affects both the "Bulk export to database" and the "Export to database" actions.

New actions

The **Roll-up** action sums values up a hierarchy path for every value in a column that references a parent value in the same table (i.e. for parent-child relationships). For instance, it can be used to sum up balances in sub-accounts and put the resulting sum as the amount of the parent account.

The **Import from Google Search Console** action pulls metrics and search queries for the specified date period from Google Search Console.

Changes in existing actions

The **Excel command** action now supports spreadsheets in the XSLB format.

The **Import from Google Sheets** action now has a mode to list sheets.

The **Amazon command** action has got two new commands:

- Create folder
- Delete folder

The **OneDrive command** action has got tree new commands:

- Create folder
- Rename folder
- Delete folder

The **SharePoint command** action has got four new commands:

- List folders
- Create folder
- Rename folder
- Delete folder

The **List folders** action now can return three more columns:

- Date modified
- Date created
- Read-only

What's new in Desktop

Improvements to publishing projects to Server

For projects that were opened from EasyMorph Server in EasyMorph Desktop and then later published back to the Server, the Desktop shows a warning in case the project copy on the Server was changed since it was open in the Desktop. The warning also shows the Windows account of the user who changed the project on the Server.

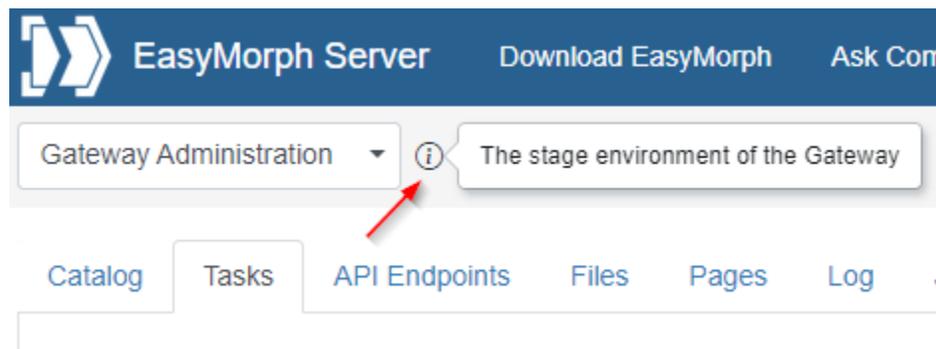Also, the "Publish to Server" dialog now has a button to create new folders.

What's new in Server

Changes to Catalog licensing

- The Catalog add-on is no longer required to make the Catalog available in anonymous and password-protected spaces (non-AD spaces).
- All users can now use the Catalog in non-AD spaces.
- All users have full permissions for the Catalog in non-AD spaces.

Annotations in spaces

It is now possible to describe a space in the space settings. A space with a description (annotation) has a special icon next to its name. The annotation can be seen as a tooltip of that icon.

Screenshot 1: Space annotation.

Miscellaneous

- In new spaces, the Catalog is now enabled by default
- In new spaces, the space repository can be accessed from Desktops by default
- The date picker now has the "Today" link for quick selection of the current date

Release notes v5.4.1

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 5.4. Also, if your organization uses EasyMorph Server, please make sure that the Server is upgraded to this version before Desktops.

A few words from the creators of EasyMorph

Version 5.4.1 is a minor update that adds a few useful features, including numerous improvements for the "Web request" and "Iterate web request" actions as well as an easier way to create derived tables in EasyMorph Desktop.

Breaking changes

Halt/warn on condition

In version 5.3.1 we've made a change to the "Halt/warn on condition" action that started prepending error messages with the phrase "Halted because:" and warnings with "Warning:". As we learned, the change broke error handling in some workflows and also introduced unnecessary challenges for UI localization. Based on user feedback, the change has been reverted back in the current release. Now the action produces error and warning messages exactly as specified in the action properties, without prepending any non-editable text.

Before	Now
The "Halt/warn on condition" action produced error messages prepended with the phrase "Halted because:".	The "Halt/warn on condition" action produces error messages exactly as specified in the action settings.
The "Halt/warn on condition" action produced warning messages prepended with the phrase "Halted because:".	The "Halt/warn on condition" action produced error messages exactly as specified in the action settings.

Export into delimited text

In this version, the "Export to delimited text" action has a bugfix that potentially break existing workflows. Previously, in the "Append" mode, when appending was done to an empty file (i.e. file size is 0 bytes) the action didn't write column headers even if the "Don't write column headers" option was not checked. Now, column headers are written in the "Append" mode when a file is created or when appending to an empty file.

Before	Now
The "Export to delimited text" action didn't write column headers when appending to an empty text file (i.e. file size is 0 bytes).	The "Export to delimited text" action writes column headers when appending to an empty text file (i.e. file size is 0 bytes) unless the "Don't write column headers" option is checked.

What's new

Changes in data connectors

The **Gmail** connector is now verified by Google. By the way, it required EasyMorph to undergo a non-trivial security audit from Google that was successfully passed.

EasyMorph now supports the [Denodo](#) SQL dialect in the **ODBC** data connector.

The **Web location** connector has a few changes:

- Added support for HTTP Digest authentication
- New option "Don't send User-Agent automatically"

New actions

The **Hierarchy path** action generates a hierarchy path for every value in a column that references a parent value in the same table (i.e. for parent-child relationships). It is similar to the Path function in the DAX language used in Power BI.

Changes in existing actions

The **Web request** and **Iterate web request** actions now can preserve input dataset columns in the output. They append the result columns with response attributes to the input dataset. This option can be convenient when a web request is done to look up additional information that extends records in existing dataset.

Also, both actions now automatically send the User-Agent HTTP header (e.g. "User-Agent: EasyMorph 5.4"), unless this behavior is disabled in the "Don't send User-Agent automatically" option (described above) in the "Web location" connector. Note that only the first two numbers from the current EasyMorph version are sent.

The **Iterate web request** action now can send web-requests in parallel to speed up API requests. To enable parallel requests, check the "Send requests in parallel" option in the action settings and select the degree of parallelism (from 2 to 20).

The **File transfer** action has been re-designed to have commands. In addition to the existing "Download file" and "Upload file", the action has got 3 new commands in the SFTP mode:

- List files
- List folders
- Delete file

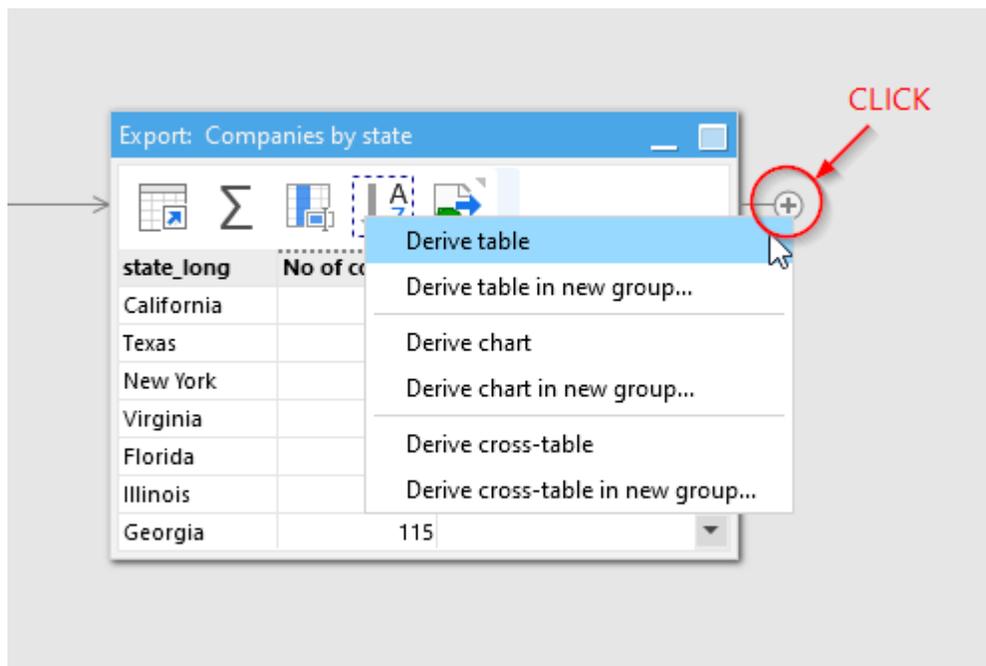The **Google Drive** command action now has folder commands:

- Create folder
- Rename folder
- Delete folder
- List folders

The **Export plain text** action now has the "Append" mode for appending rows to text files created earlier.

What's new in Desktop

Easier table derivation

Deriving new tables and charts has become easier in the new version. When a table is selected, click the "plus" sign in the circle right to the table, and select a menu command to derive a table or a chart.

Screenshot 2: Easier table and chart derivation.

Miscellaneous

- The "Derive table" button has been removed from the "Main" menu (although, it remains in the "Design" menu)

Release notes v5.4

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 5.4. Also, if your organization uses EasyMorph Server, please make sure that the Server is upgraded to this version before Desktops.

A few words from the creators of EasyMorph

The headliner feature of this release is the custom API functionality that is now available in EasyMorph Server. Now, EasyMorph Server allows quickly creating custom web APIs without coding, with just visual drag-n-drop workflows. This dramatically simplifies and speeds up designing custom APIs. With this addition, EasyMorph Server becomes a no-code ETL **and** API server, and is even better suited for its purpose – simplify data automation in your organization.

Traditionally, designing a web API used to be a complex software development project that required a team of developers, testers, a project manager, etc. With EasyMorph Server, designing and deploying a custom web API is so much simpler and faster that it becomes a configuration task rather than a software development project. Due to the drastically lowered entry barrier, you can now quickly build a web API basically for anything: a website, a database, a legacy system, or even a spreadsheet.

To learn how to create API endpoints, read this article: How to create API endpoints without coding.

Also, the new release introduces 7 new actions. Some of the actions support the custom API server functionality while the rest aim at simplifying workflows.

Finally, we're introducing the integration with Pushover, a simple (and very inexpensive) service for sending and receiving notifications on mobile devices. We're curious to see if our customers find mobile notifications convenient and useful.

What's new

New connectors

The new release adds a connector for Pushover.

New actions

The **Skip on condition in another table** action is very similar to the "Skip actions on condition" action except the condition is calculated using another table, not the current one. For instance, it

can be a condition that is calculated on aggregated data. The new action helps designing cleaner workflows where the main dataset is separated from data used to calculate a condition.

The **Concatenate text** action concatenates values of a column into one text value separated with a delimiter. The action is equivalent to the "Concatenate" mode of the "Aggregate" action. However, the existence of the "Concatenate" mode isn't apparent for new users and therefore we've decided to have a dedicated separate action for text concatenation.

The **System information** action provides various information, mostly related to Windows:

- Windows account of the current Windows process
- Windows identity of the user that triggered the workflow
- Free RAM, MB
- Current machine name
- UTC offset
- Temporary directory

The **Send Pushover message** action sends a message to Pushover. The message title and text can be parameterized.

The **Incoming HTTP request** action is intended for workflows used that process incoming requests sent to custom API endpoints of EasyMorph Server. The action receives an incoming request (or one of the sample requests) and returns it as a 1-row table.

The **Construct HTTP response** action helps construct a result dataset that can be used by EasyMorph Server to produce a web response of an API endpoint.

The **Parse web form submission** action parses a key-value collection of data in the "x-www-form-urlencoded" format. The format is used to encode web-form submissions sent in web requests.

Updated actions

The **Bulk export to database** action now supports Oracle (native connectors only) in experimental mode.

The **Excel command** action now can produce warnings instead of errors, if the executed VBA script failed for some reason.

The actions **Export to SharePoint list** and **Update/delete rows in SharePoint** list now can intelligently resolve values when inserting data in lookup columns.

The **Create list** action now permits empty lists. It can be convenient when you need to create an empty column.
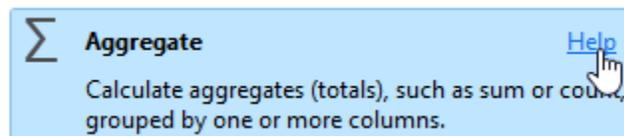
What's new in Desktop

New chart controls

We're unifying chart controls between the Workflow Editor and Dataset Catalog in EasyMorph Desktop, as well as [CSViewer](whose version 2.0 to be released later this year). Therefore chart controls and settings may look different, although they have the same functionality.

The "Help" link in action catalog

Now, when hovering an action in the action catalog, the "Help" link is displayed. When clicked, it leads to the corresponding article in EasyMorph Help.
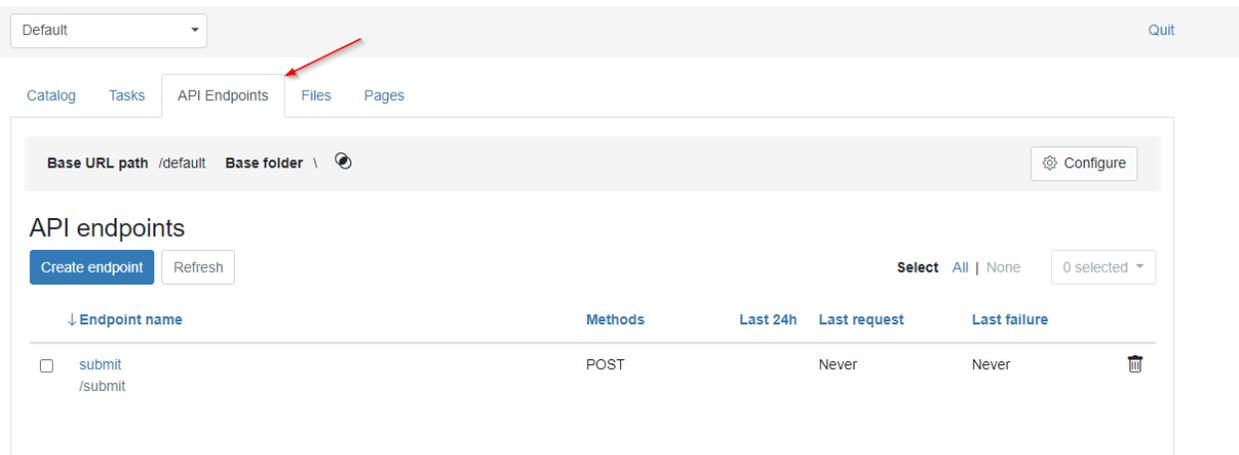

Screenshot 3: The "Help" link.

What's new in Server

Custom API endpoints

With EasyMorph Server it is now possible to create and configure web API endpoints to process HTTP requests. Similarly to tasks, each Server space can have its own set of endpoints. The feature is disabled by default and has to be enabled in the space settings.

Screenshot 4: API endpoints in EasyMorph Server.

Features of the API endpoints:

- Processing HTTP requests in real time, sending a dynamically calculated HTTP response to each HTTP request
  - Performance-wise, EasyMorph Server can process up to millions of API requests per day
- Support for all HTTP methods: GET, POST, PUT, DELETE, PATCH, HEAD
- Authentication via API keys, HTTP basic, or Windows Identity (requires Active Directory)
- API configuration is compatible with version control systems such as git
- Flexible configuration to support multiple environments (e.g., dev/test/prod)
- Support for API versioning
- Zero-downtime updates of API endpoints
- Automated API testing using the "Web request" action
- Support for automated deployment pipelines (including deployments via git)

To learn how to create and configure API endpoints read this article: How to create API endpoints without coding.

Miscellaneous

- Rendering of tabs Notifications and Gateway is now much faster
- Improved look & feel of some pages

Previous release notes

Link: Release notes for v5.3.4