

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:

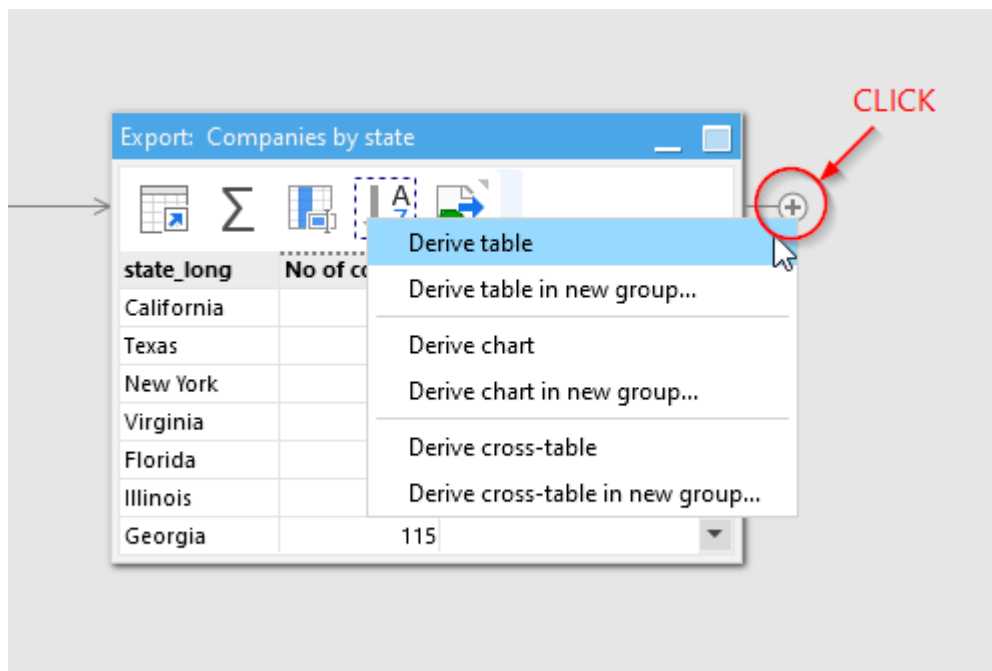
- Create folder
- Rename folder
- Delete folder
- List folders

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 1: 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.

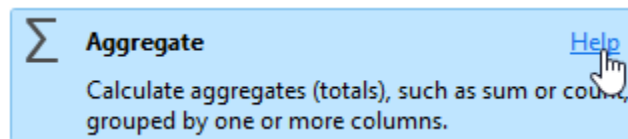
What's new in Desktop

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.

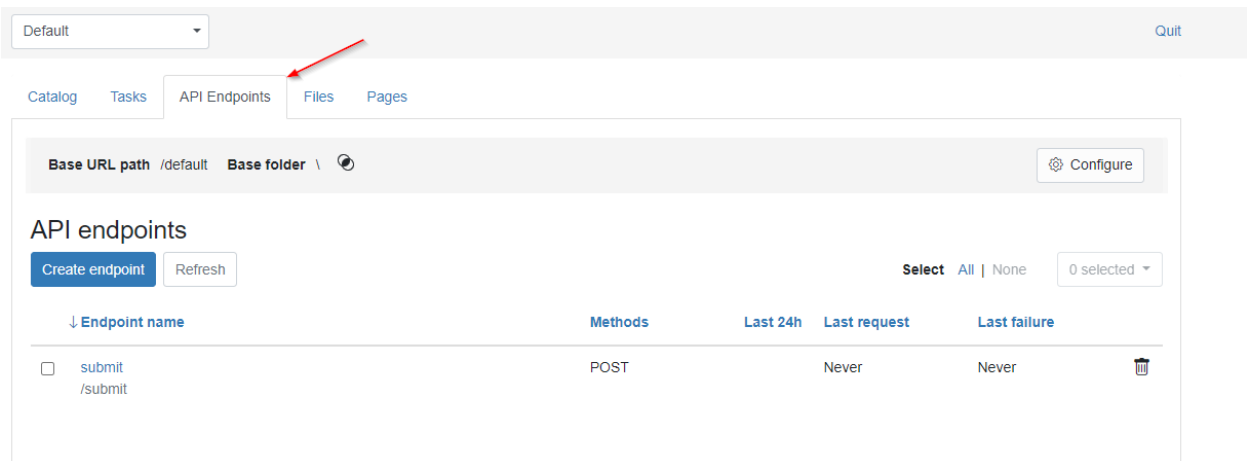


Screenshot 2: The "Help" link.

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 3: 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](#)