Release notes v4.2.1

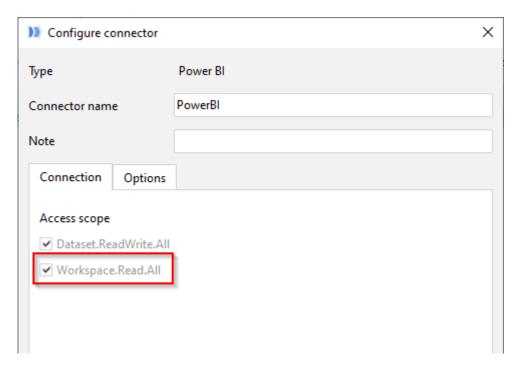
A few words from the creators of EasyMorph

This minor release brings in a few bugfixes and support for shared workspaces in Power BI actions.

What's new

Shared workspaces in Power BI actions

The actions "Export to Power BI" and "Power BI command" now support Power BI datasets in shared workspaces. In order to work with shared workspaces, all existing "Power BI" connectors already configured in EasyMorph must be re-authorized with the new scope "Workspace.Read.All" enabled in the connector settings (it was missing in previous versions).



Screenshot 1: Scope Workspace.Read.All in connector settings.

When the Power BI connector is configured to work with workspaces, all operations in EasyMorph that could work with private Power BI datasets now can work with shared workspaces too – exporting to a dataset, creating a new dataset, deleting dataset rows, and listing datasets. Additionally, the "Power BI command" action has got a new command: "List workspaces". It can be helpful when a workspace name in action settings should be specified using a parameter.

Release notes v4.2

Important! Create a backup copy of your projects and connector repositories before updating to the new version. Projects saved in version 4.2 can't be opened in earlier versions.

A few words from the creators of EasyMorph

The headliner of this release is **integration with Power BI**. For a long time, the two most popular applications for ETL / data preparation for Power BI users were PowerQuery and SSIS. PowerQuery is typically considered more user-friendly while SSIS is a powerful enterprise-grade ETL platform that has a steep learning curve and requires strong technical skills. We believe EasyMorph can be the golden middle between the two, combining computational power and programmatic flexibility with the ease of use and the interactivity of authoring. In this release we're adding the ability to export into Power BI datasets in *personal* workspaces. In the next minor release (v4.2.1) EasyMorph will start supporting *shared* workspaces in Power BI.

Another novelty is the new Parameter Editor. While it may look like an insignificant change, it prepares EasyMorph for adding new parameter types (e.g. checkbox, fixed list) in future versions. Also, it introduces parameter validation rules which put restrictions on acceptable parameter values. Parameter validation helps make EasyMorph workflows more robust and error-resistant.

Finally, we're introducing a new action for dealing with web APIs – the "Import from web API" action. It's simpler and more light-weight than the "Web request" action. It automatically parses a JSON/XML response into a tabular dataset in EasyMorph. The new action is intended for less technically savvy users who might find "Web request" and "Parse JSON" overly complex.

Breaking changes

What changed	What it can break
The "Import from XML" action in the "Load only selected paths"	Projects that use the "Import from
mode creates error values "#Path not found" if a path is selected	XML action" and expect that in
but is missing in some (but not all) elements. Previously, in such	cases when a selected path is
cases an empty value was created.	missing for some elements, the
	respective column contains empty
If a selected path is missing in all elements, then the behavior	values.
remains unchanged – the action will fail with the "Missing path"	
error.	

What's new

The "Power BI" connector

A configured "Power BI" connector is required for all actions that interact with Power BI. The connector uses OAuth authentication provided by Azure AD and must be authorized using a Power BI account before use. All operations with the connector will be performed using the Power BI account used for authorization.

New actions



The **Export to Power BI** action exports data from EasyMorph into a new Power BI dataset, or appends it to an existing one. The action allows modifying the target table metadata, thus automatically adding or removing columns from it.



The Power BI command action allows performing a number of actions with Power BI:

- List all Power BI datasets
- Refresh a Power BI dataset
- Delete all table rows in a table in a Power BI dataset



The **Import from web API** action imports data from a web API and automatically parses it into a tabular dataset in EasyMorph.



The **Parse XML** action is similar to "Parse JSON". It parses XML from values in a specified column into a tabular dataset.

Changes to existing actions

The Label columns action now allows using a separator for merging row values into labels.

The **Fill down** action now supports grouping.

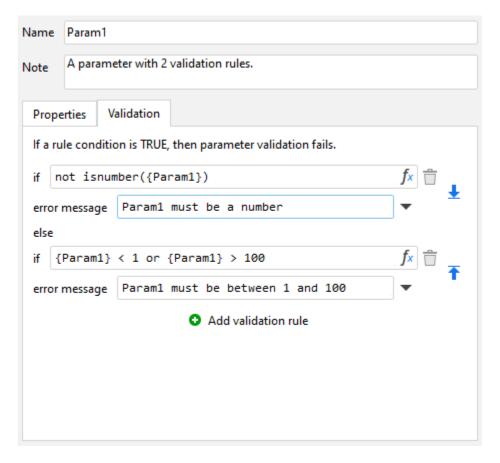
Columns to import can now be selected in the **Import from SAS** action.

The **Status** action now can send the status text as a Windows desktop notification right from EasyMorph Launcher. While it may look like a minor improvement, it simplifies creating various alerts. For instance, schedule a project to run once a day in the Launcher and send you a desktop notification if some data wasn't submitted in time, or <u>cold weather</u> is approaching, or <u>air quality</u> drops. Get creative!

Parameter validation rules

The new Expression Editor provides the ability to specify validation rules for a parameter. The validation rules are very similar to the rules you can see in the "Rule" action, except the result is the text of the validation error produced when a rule condition is met.

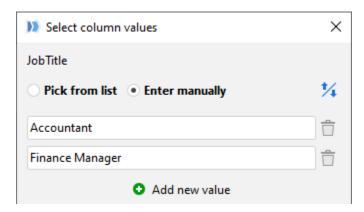
Note that a validation condition *must* always include the name of the parameter that is validated, and *may* refer to other parameters as well.



Screenshot 2: Parameter validation rules in the Parameter Editor.

Query Editor: manual value entry for the "in list" condition

In addition to retrieving a list of available field values from the target database, it's now possible to provide such values by entering them manually.



Screenshot 3: Manual value entry for the "In list" condition.

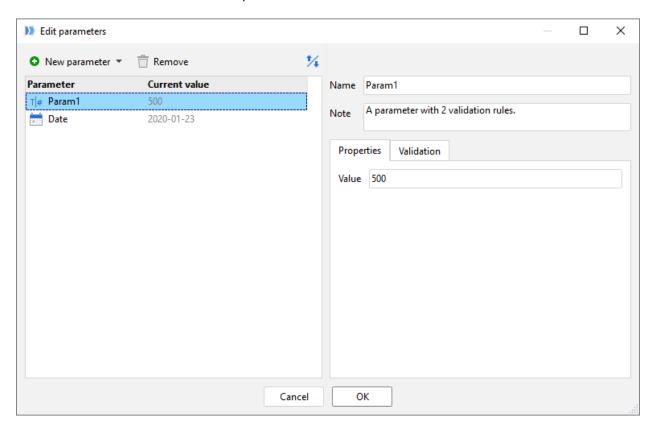
SQL dialect for Google BigQuery (limited support)

With the help of the new SQL dialect "Google BigQuery" for ODBC connector it's now possible to query tables in Google BigQuery using the visual query builder. Also, the dialect is supported in the "SQL command" action. However, exporting to Google BigQuery using the "Export to database" is not possible yet.

What's new in Desktop

New Parameter Editor

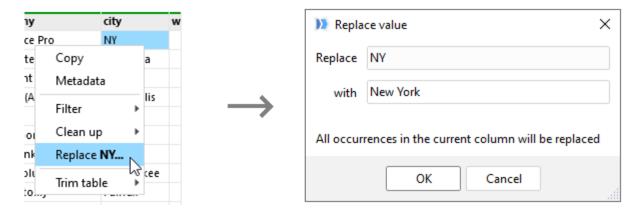
The Parameter Editor has been revamped.



Screenshot 4: The new Parameter Editor.

The "Replace" command in the cell context menu

The cell context menu has got a new command – "Replace". When selected, it shows a dialog to replace the cell value (e.g. "NY") with a new value (e.g. "New York"). This automatically inserts the "Replace" action with the desired replacement configured.



Screenshot 5: The "Replace" command opens the "Replace value" dialog.

The "Go to tab" command

Large EasyMorph projects can easily have tens of tabs. To simplify switching to a tab a new command has been added to the tab context menu – "Go to tab". When selected, it shows a list of tabs in the current module. Selecting or double-clicking a tab in this list makes EasyMorph immediately switch to the tab.

What's new in Server

Automatic log rolling

Task logs and the Server log are now rolled automatically. When a log file size reaches 100KB it's automatically renamed and a new log file is created.

Miscellaneous

- The "Clear log" button has been removed
- When a task is deleted the task logs are now deleted too

Previous release notes

Link: Release notes for v4.1.0.