

# Release notes v4.7.2

**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 4.7.1.

*A few words from the creators of EasyMorph*

This version is a minor release that introduces cumulative bugfixes. It has no new features. It's backward compatible with version 4.7.1.

# Release notes v4.7.1

**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 4.7.1.

## *A few words from the creators of EasyMorph*

This version is a minor release that introduces a few minor but useful improvements and cumulative bugfixes.

## What's new

### *SQL Dialect for MS Access*

EasyMorph now supports visual queries, export, and other database operations with MS Access via an ODBC driver. Make sure you're using a 64-bit ODBC driver for MS Access.

### *Changes in existing actions*

Multiple actions now have an option for the thousand digits delimiter:

- Convert data types
- Import delimited text
- Import fixed-width text
- Import XML
- Parse XML
- Split delimited text into columns
- Split fixed-width text

The option is also available in the "Paste data" dialog in actions Input and Sandbox as well as in the settings of parameters with multiple values.

The **Web request** and **Iterate web request** actions now can use just a URL instead of the Web Location connector. This feature enables sending one-off requests without creating a connector.

The **Project metadata** action now can display the following project metadata:

- Edited by – the Windows account of the last person who edited the project
- Last edited (UTC) – the time of the most recent edit (UTC timezone)
- Application version – the version of EasyMorph Desktop that was used to edit the project
- Start module – the start module of the project

- Project validation – displays "OK" if the project wasn't tampered with using a 3<sup>rd</sup> party application

Note: The editor information is quite reliable as it's protected with a digital signature that certifies the integrity of the project file.

The **Export to Tableau** action now has two more settings:

- The "Append" mode
- The optional "About" field that contains a description that is displayed in Tableau Server after publishing; the field can be used, for instance, to indicate the author of the dataset

The "Delete all rows" command in the **Power BI Command** action now has an option "If dataset doesn't exist".

Actions **Import fixed width text** and **Split fixed width text** now have the option "Treat numerics as text".

The **Fetch email** action now allows specifying an alternative message folder using a parameter.

### *New functions*

**coalesce(value, value,...)** – returns the first value that is not an empty value. The function can have at least 2 and at most 6 arguments. Example:

```
coalesce(empty(), ' ', 'ABC') returns ".
```

## What's new in Desktop

### *Miscellaneous*

- A new column format "dd/MM/yyyy" has been added to support the European date format.
- The "Application preferences" dialog now has a setting for the default decimal delimiter.
- The term "Default module" has been renamed to "Start module" to explain better what it means.
- The Launcher, when a task fails, now has the "Open project" button in the errors pane.

## What's new in Server

### *Miscellaneous*

- The task settings page now displays the Windows account of the person who last edited the project as well as the last edited time (in the Server's time zone)
- Clean installations of EasyMorph Server now automatically configure service auto-restart (it also can be configured manually, see [here](#))
- When EasyMorph Server starts, it now sends an email notification if it was shut down improperly (e.g. crashed). This feature requires email integration configured in the Server settings.

# Release notes v4.7

**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 4.7.

Besides the new features and improvements, the new release contains a few important bugfixes and is therefore recommended to update to even if none of the improvements looks particularly interesting.

## *A few words from the creators of EasyMorph*

The new version is the last major release in the 4<sup>th</sup> generation of EasyMorph before the 5<sup>th</sup> generation is released later this year. Version 4.7 contains mostly incremental improvements and closes a few feature requests. One of the requested features added in this release is the ability to mark certain actions as favorite and hide actions that are never used from the action catalog. This will help customize EasyMorph's action catalog according to your needs and simplify action browsing.

The addition of dependencies to the workflow diagram completes the series of improvements aimed to provide better visibility into complex workflows. As a result, EasyMorph now provides 3 views on a workflow, each with a different level of details:

- The regular "tabbed" view provides a balanced view that combines both data and workflow.
- The Analysis View provides a closer look at data with less emphasis on workflow. The view is akin to "zooming in" and is intended for data analysis and profiling.
- The Diagram offers a high-level overview of a workflow (module). It is akin to "zooming out" and is focused mainly on workflow, its entities (tables), phases (groups), and dependencies rather than on data or individual actions. However, it's still possible to jump from the Diagram to the regular view or the Analysis View in a single click.

Finally, we're adding elapsed execution time to help analyze workflow performance. The metric is available for each calculated action and table.

## Breaking changes

The **Spreadsheet metadata** action now gives the result column different names depending on the selected mode.

*Previously (before v4.7)*

Mode	Result column name
Sheets only	Sheet name
Named ranges only	Sheet name

*Now (v4.7)*

Mode	Result column name
Sheets only	Sheet name
Named ranges only	Range name

Sheets and named ranges	Sheet name	Sheets and named ranges	Sheet or range name
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## What's new

### *New connector: Google Analytics (experimental)*

Google Analytics is probably the most well-known web analytics service. The connector is in the experimental status as of this release and will remain so until it gets verified by Google. The verification may take weeks and even months. Note that you can use the connector with a custom OAuth client, which may help circumvent an unverified connector's limitations in case you run into them.

### *New SQL dialect: Sybase IQ*


SAP (Sybase) IQ is a popular columnar database designed for analytical workloads. The Sybase IQ SQL dialect is now supported in the ODBC connector, the Query Editor, and all the database-related actions.


### *Changes in existing connectors*


The **Email** and **MS Exchange** connectors now have a setting for maximum allowed attachment size. Note that this setting is enforced by EasyMorph and not by the email server (which may have its own restrictions on the max size of attachments). Also, the **Email** connector now allows omitting the account.


The **Web location** connector now has a new mode for authentication via an API key. Previously, an API key had to be specified in the tabs "Headers" or "URL parameters" of the connector, which wasn't apparent for users. The new setting is equivalent to adding an API key explicitly to one of these tabs and is more convenient and easier to find.


### *New actions*

 The **Import from Google Analytics** action imports a set of dimensions and measures for a Google Analytics property for the specified range of dates.

 The **Replace with lookup** action replaces all matching substrings in each text value according to a lookup table. For instance, the action can be used to standardize product descriptions or replace accented Latin characters with non-accented ones.

 The **Export to Airtable** uploads data from EasyMorph to a table in an Airtable base.

 The **Delete/update Airtable** action deletes or updates rows in a table in an Airtable base.

 The **Generate documentation** action generates or updates the automatically generated HTML documentation for the specified project. The action can be used to keep project documentation

up to date automatically.

### *Changed actions*

The **Pivot** action now can preserve formatting and can calculate the "Average" aggregate.

The **Import from Pipedrive** action now can import Leads.

The **Sanitize text** action has a new option for removing repeating line breaks and tabs.

The **Export to database** action now displays full error messages in the batch result column.

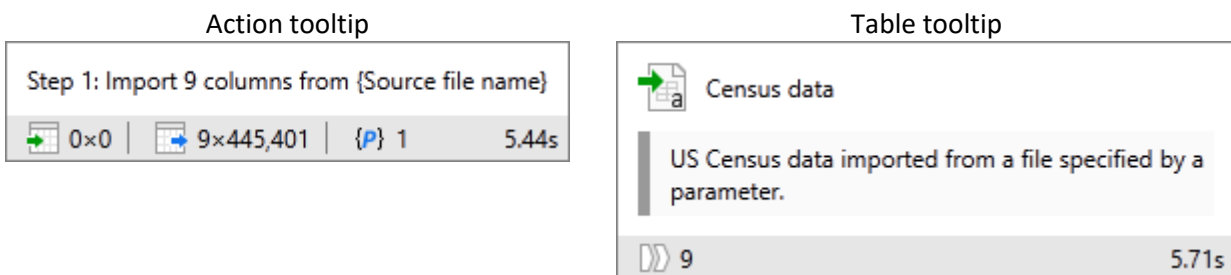
The **Export to Excel** action now displays hidden sheets.

The **Import plain text** action now allows leaving the column name empty.

## What's new in Desktop

### *Elapsed time*

The rich tooltip for actions and tables (where applicable) now displays the elapsed execution time for calculated actions and tables.



**Screenshot 1: Elapsed time for actions and tables.**

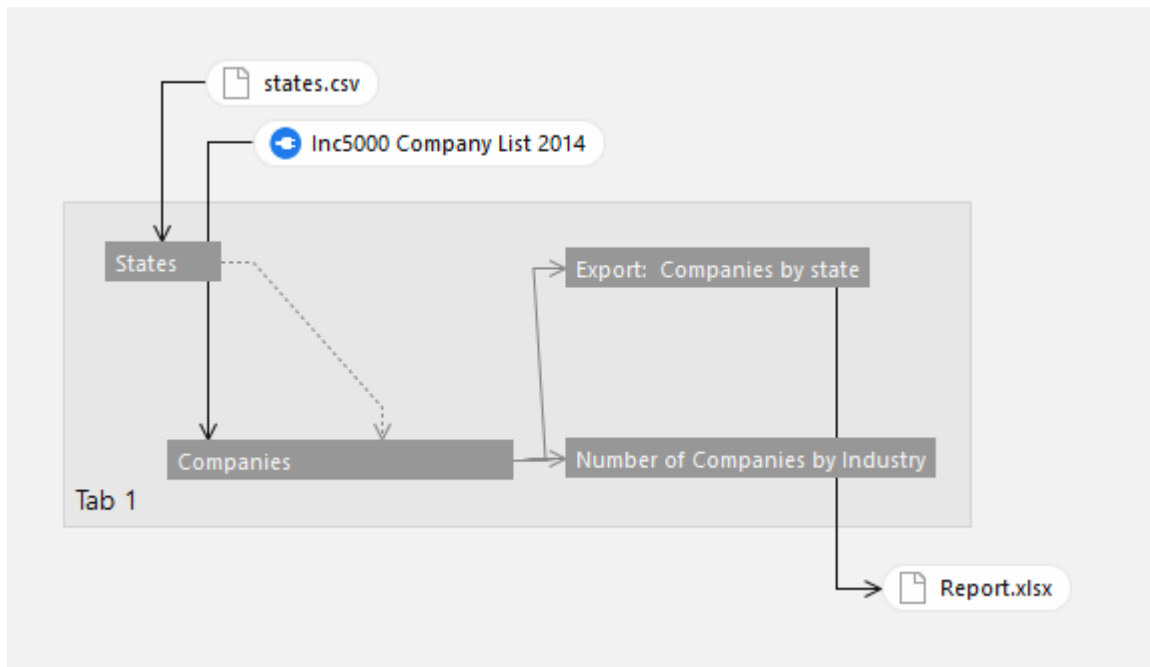
### *Dependencies in Diagram*

The workflow diagram now displays external and internal dependencies. It makes it possible to understand external data sources, affected files, and iterated modules of a complex workflow from a single view.

Hovering a dependency with the cursor provides additional details such as database type, annotation, and the action that uses it. Dependencies related to the same connector or file are highlighted simultaneously.

Clicking a dependency provides a few additional menu commands, such as going to connector properties or locating an external file in Windows Explorer.

Dependencies can be disabled or shown only for the selected group.



Screenshot 2: Dependencies in Diagram.

### Application settings

The "Application settings" dialog available in the tab "About" and can be used to configure application settings such as:

- Default project Auto-run state
- Default query Auto-run state
- Diagnostic trace logging (logs action execution time and sequence)

The dialog also has a button to reset dialog positions. This can be of help when you disconnect a second monitor or switch to another screen resolution.

### Miscellaneous

- The action context menu now has the "Annotate" command
- The table context menu now has two new commands: "Open in Analysis View" and "Show in Diagram"
- The action catalog now has an option to hide action descriptions
- Workspace links to tables in other tabs now display rich tooltips with additional table metadata
- Custom SQL statements now allow inserting JSON



- The XML elements for tables in .morph files are now sorted by table names to improve reading git diffs

## What's new in Server

### *Diagnostic tracing*

The task settings now have an option to produce a diagnostic trace log that shows the sequence of executed actions with elapsed execution time. The trace log can be used for task performance diagnostics.

### *Miscellaneous*

- Improved memory consumption in high-intensity workloads

## Previous release notes

Link: [Release notes for v4.6.2.](#)