

# Release notes for version 3.6

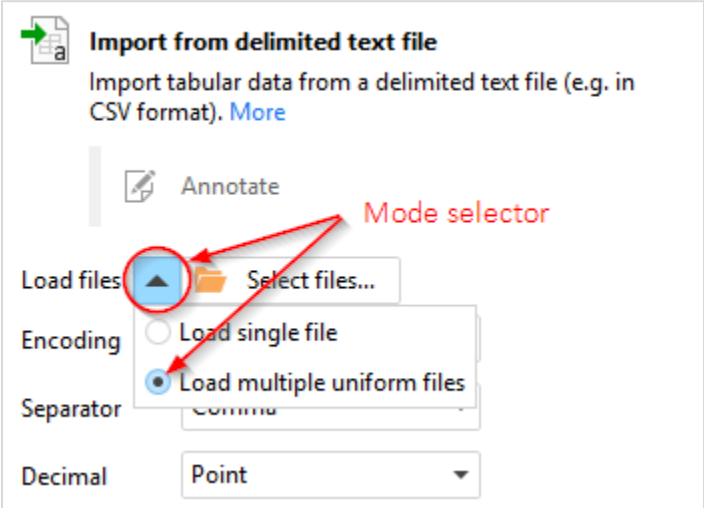
**Important!** Create a backup copy of your projects before updating to the new version. Projects saved in the new version can't be opened in earlier versions.

## What's new

### Multiple file loading

Previously, loading multiple uniform files (i.e. files with the same type and similar set of columns) required using iterations. Starting from this release, all file import transformations allow loading multiple files at once without using iterations.

To switch to loading multiple files click the black arrow as in the image below:




Screenshot 1: Load mode selector.

Files to load can be selected either explicitly, by selecting particular files in target folder, or by applying a filter which can be a search substring, a wild card, or a regular expression.

Note that the free edition has a limit of 30 uniform files loaded per project.

### New transformations

 **Fill Right** transformation is similar to the “Fill down” transformation. It fills empty cells to the right, in specified row. This transformation helps dealing with spreadsheets where table headers contain merged cells.



**Download File** transformation fetches a file over the internet using the HTTP(S) or the FTP network protocol. It supports basic login/password authorization.



**Import Fixed Width Text** transformation allows loading text files with columns of fixed width (e.g. logs). It has an interactive preview pane that allows visually splitting text into columns.

Date	Time	LineNo	Record Type	Message
06/11/2017	04:32:33 PM	000001	INFO	Job started manually.
06/11/2017	04:32:33 PM	000002	ERROR	Job failed: 1 error(s).
06/11/2017	04:32:33 PM	000003	ERROR	Scheduler: Error:Couldn't read shared data connectors: The type initializer for 'System.Data...
06/11/2017	04:37:22 PM	000001	INFO	Job started manually.
06/11/2017	04:37:22 PM	000002	ERROR	Job failed: 1 error(s).
06/11/2017	04:37:22 PM	000003	ERROR	Scheduler: Error:Couldn't read shared data connectors: The type initializer for 'System.Data...
06/12/2017	08:53:51 AM	000001	INFO	Job started manually.
06/12/2017	08:53:52 AM	000002	ERROR	Job failed: 1 error(s).
06/12/2017	08:53:52 AM	000003	ERROR	Scheduler: Error:Couldn't read shared data connectors: The type initializer for 'System.Data...
06/12/2017	08:57:26 AM	000004	INFO	Job started manually.
06/12/2017	08:57:26 AM	000005	ERROR	Job failed: 1 error(s).
06/12/2017	08:57:26 AM	000006	ERROR	Scheduler: Error:Couldn't read shared data connectors: The type initializer for 'System.Data...

Screenshot 2: The preview pane of the Import Fixed Width Text transformation.



**Split Fixed Width Text** transformation is similar to the “Import fixed width text” transformation, but splits an already loaded column (e.g. loaded from a database or spreadsheet).



**Split Delimited Text** transformation is similar to the “Import delimited text file” transformation (introduced long time ago), but splits an already loaded column into new columns. It can be used for instance for dealing with CSV data imported from a spreadsheet, or a database.



**Status** transformation is a workflow transformation. When reached it displays a custom message. Typically, it’s used for signaling on project execution progress. For desktop versions of EasyMorph the message text appears in the “Run progress” dialog window. For EasyMorph Server the message appears as task status in the web-console, and also is logged into the task log. Custom statuses of called/iterated projects pop up into their calling projects, which allows displaying iteration progress (e.g. “Processed 15 files out of 132”).



**Regular Expression** transformation find matches for specified [regular expression](#). The transformation works in two modes: find 1<sup>st</sup> match, and find all matches. In the latter case, new

rows can be inserted into the table to store matches beyond 1<sup>st</sup>. Most common use cases for the transformation include data quality checks and text parsing.



**Select By Lookup** transformation select columns which names exist in another (lookup) table. It is intended for advances scenarios in which a resulting set of columns depends on user input or calculation logic.



**Convert Data Type** transformation converts text dates in one or more columns into number dates. The date format in selected columns can be auto-detected by pressing “Detect” button, if it matches one of 1,000+ formats known to EasyMorph. If no format detected then it should be entered manually in transformation properties. The format specification is the same as for the [format\(\)](#) function.

### *Changes to existing transformations*

**Export to Tableau** transformation now allows publishing data sources to Tableau Server.

The Concatenate function of **Aggregate** now allows specifying a separator and concatenating only distinct values.

**Running Total** transformation has got a [competition ranking](#) mode in addition to the default dense ranking.

**Select Matching Database Rows** and **Delete Matching Database Rows** transformations now allow matching on dates (without times).

**Iterate** transformation now runs faster and is more memory-efficient.

### *New functions*

**system(keyword)** – a special function that return various system values. The keyword must be a text constant. References to fields and expressions are not supported. Currently supported keywords:

Keyword	Description
<b>projectpath</b>	Full path to the current project including file name.
<b>projectfilename</b>	Current project’s file name only.
<b>programpath</b>	Full path to morph.exe.
<b>currentpath</b>	Working directory.
<b>user</b>	Current user. Replaces function user().
<b>callerpath</b>	Full path of the calling project including file name.
<b>utcoffset</b>	UTC offset to the system time zone ( e.g. "-04:00:00").

Example:

`system('projectfilepath')` returns 'C:\Documents\myproject.morph'.

**filename(text)** – extracts the filename from a full file path. Example

`filename('C:\Documents\myproject.morph')` returns 'myproject.morph'.

**combinepath(path1, path2)** – combines two paths into one, intelligently dealing with backslashes and relative paths. This function is convenient in cases when a file path is combined from a root folder (such as defined in an EasyMorph Server task) and a relative path. For example, when {Root} = 'C:\data':

`combinepath({Root}, 'file.txt')` returns 'C:\data\file.txt'.

`combinepath({Root}, '..\file.txt')` returns 'C:\file.txt'.

**div(number, number)** – returns the quotient of two numbers. Example:

`div(10, 3)` returns 3.

**rem(number, number)** – returns the remainder of quotient of two numbers. Example:

`rem(10, 3)` returns 1.

### *Custom HTML in generated documentation*

Auto-documentation now allows including custom HTML into the head and body of generated HTML page. This can be used for inserting corporate logos, links to other HTML pages, change logs, custom project metadata.

### *Miscellaneous*

- The visual condition builder in Query Editor now has undo/redo buttons.
- Added support for SAP HANA SQL dialect (for ODBC connections).
- Query preview now have a context menu invoked by right-clicking on datagrid cells.
- Expression editor has got a button for inserting date constants.
- Project tabs can be switched back and forth by pressing *Ctrl+Tab* and *Ctrl+Shift+Tab*.
- The "Input" transformation can now be enabled in Plus license as an add-on feature.