

# Release notes for version 3.3

**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.

## Licensing/editions

### *The free edition*

Starting from this release we're re-balancing the free edition of EasyMorph. It now includes Export to Database transformation (described below) without any limitations on data volume or supported target database type. Together with the existing limitation of 30 transformations per project this makes the free EasyMorph a rather capable free ETL utility, useful in many scenarios when data transformation of low and medium complexity is required.

To balance the free edition with paid editions, "Run program" and "Iterate program" transformations are no longer available in the free edition. From now on they will be supported only in Plus and Professional editions. PDF reports are limited to 3 pages. If this change affects your workflows let us know it at [support@easymorph.com](mailto:support@easymorph.com).

Also with the free edition it is now possible to open, view, edit and save (but not run) projects with more than 30 transformations.

### *Plus license*

The Plus licensing model has been redesigned. Now it allows selecting and purchasing necessary features *à la carte* in addition to the base price. Additional features can be purchased separately when they become needed. Version 3.3 requires new Plus license keys which will be sent out to all Plus users shortly after release.

## Changed behavior

### *Queries without columns*

Version 3.3 no longer supports queries without columns. Previously, Import from Database transformation allowed such queries, that were implicitly converted to SELECT \* statements. Starting from the new release such queries return nothing. If your project contains Import from Database transformation with a query without columns then open it, select all column by clicking "Select All", then apply and save changes.

# What's new

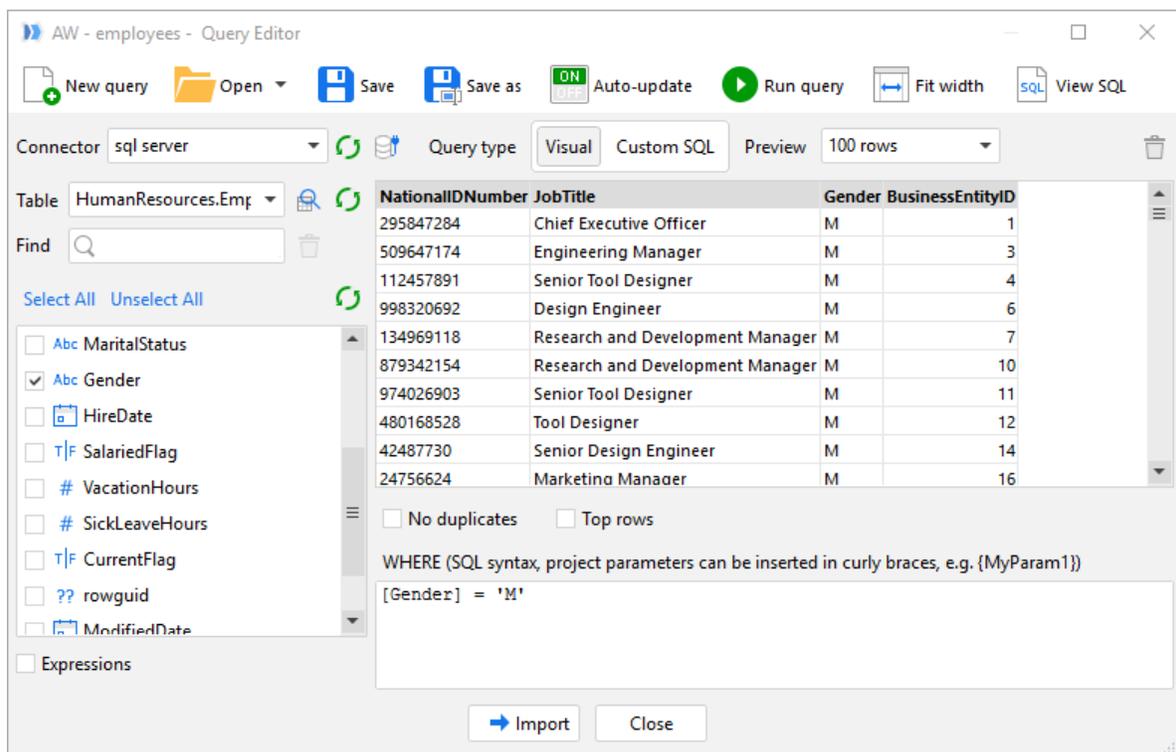
## New transformations

 **Export to database** transformation performs direct export into a database table. Under the hood it uses SQL INSERT for inserting batches of 10, 100 or 1000 rows. All export is wrapped into transaction which is automatically rolled back in a case of failure. Note that this transformation doesn't create a database table. Use "Database command" transformation for this, if necessary.

 **Interval merge** transformation is similar to "Merge" transformation, but it allows performing merge on whether a value falls into an interval defined by two values in another table. E.g. merge rows where column [Date] is between [StartDate] and [EndDate]. This transformation is useful for dealing with so called [slowly-changing dimensions](#), or creating buckets (e.g. [Age] from 0 to 5, 5 to 10, etc.).

## Queries

This release introduces queries. Queries can be used for exploring database tables without creating a temporary transformation which was required in previous versions. Also, they are used for importing data from databases into EasyMorph.



Screenshot 1: Query Editor

Queries are created with the help of Query Editor (see above), and can be saved, shared and re-used. Recent queries are accessible right from the Start screen. You can keep open multiple Query Editors, if needed. The hot key for opening a new Query Editor window is F8.

In terms of functionality Query Editor is almost equivalent to Query Panel in “Import from database” transformation in previous releases. The most notable differences are:

- Asynchronous non-blocking query execution and query cancellation.
- Added search for tables.
- When no columns selected the query returns an empty dataset (previously it was equivalent to SELECT \* FROM). Queries in existing projects that have no columns selected will be automatically converted to custom SQL as SELECT \* FROM <table> in this release.
- Message log in the Custom SQL mode.

### *Changes to existing transformations*

**Import from QlikView** now runs 30-50% faster and can load QVD files bigger than 2GB. Also it is renamed to “Import from Qlik” because it works with QVD files created in Qlik Sense as well.

**Import from ODBC** transformation is deprecated. It will keep working for existing projects even in this release, although we recommend setting up ODBC connectors in the Connection Manager and using “Import from database” transformation for ODBC sources.

**SQL command** is renamed to “Database command” because it supports ODBC data sources which may employ other API than SQL. Also now it allows defining custom timeout in advanced settings.

**Calculate and replace column(s)** is renamed to “Modify column(s)”.

### *New functions*

**distance(string, string)** – calculates edit distance (per [Damerau-Levenshtein](#)) between two strings. Maximum detected distance is 100. This function can be used for finding similar strings, e.g. words with typos. Example:

```
distance('New York', 'New Yokr') returns 1.
```

**monthnamelocal(number)** – returns the month name as per current regional settings. Example:

```
monthnameLocal(8) returns 'Août' in the French Windows locale.
```

### *Additional settings for database connectors*

Database connectors have got three new tabs with additional settings:

- Tab *Schemas* allows black/white-listing particular database schemas.
- Tab *Custom properties* allows providing additional properties for the database connection string.
- Tab *Advanced* contains timeout settings.

## *Better cancellation*

Previously it wasn't possible to cancel some transformations that can potentially take long time to complete. In this release the cancellation capability is added to transformations "Run program", "Iterate program" and to all file export transformations. Note that cancelling "Run/Iterate program" stops project execution, but it doesn't terminate external applications (processes) spawned by these transformations in order to avoid uncontrollable data loss in these applications. Terminate them manually, if needed.

## *Optimized memory consumption in the command line mode*

Starting from this release when running projects in the command line mode (i.e. without GUI) EasyMorph purges results of some transformations when they are not needed anymore which leads to noticeably lower memory consumption and slightly faster project execution.

## *User interface improvements*

- Access to the column context menu by clicking the "hamburger" icon on column headers.
- In the column context menu "Replace" command is renamed to "Modify" and contains 4 more sub-commands that automatically create transformations: Uppercase, Lowercase, Trim and Compact.
- Column formats now include two new formats for dates with timestamps.
- Connector Manager now has two tabs – one for shared connectors and one for embedded ones.
- "Getting started" slides on the Start screen are updated.
- New buttons on the Start screen: "New project" and "Query database".
- Hovering the data type icons in Query Editor now shows also native database types.
- Buttons for opening default applications added to all export transformations.
- Double-click on a cell to automatically creates a filter transformations that keeps only the cell value; similarly, Ctrl + double-click creates a filter transformation that removes the cell value.
- The preview of SQL queries generated in the Query Editor is now formatted.

## *Miscellaneous*

- In the command line mode the option `/projectlogpath` allows specifying another location of the project log file
- New Conversion Report dialog that shows conversion warnings when opening a project created in an earlier version of EasyMorph.
- Uninstalling the application no longer opens the uninstall survey.