

# Example “Inc5000”

A simple demo project that does the following:

- Loads a list of 5000 companies from a database (comes with the example). It includes number of workers, revenue, state code and industry for each company. The list only includes companies with number of workers greater than *Min workers* parameter.
- Calculates a new column using expression.
- Merges full state names from another table (loaded from a CSV file).
- Counts number of companies in each state.
- Exports final result into a spreadsheet.
- Generates a simple PDF report.

## How to use this example

- Open the project – it will run all transformations automatically (except “Export to text file” transformation, see [1]).
- Notice parameter *Min workers* in the side bar. Change it to 500 and see how the chart and data in tables are automatically updated.
- Click transformation icons in tables to explore transformation properties (shown in sidebar) and results (shown in data grid). Explore properties of **Merge another table** transformation. Notice that the dotted line from *States* table points right into the **Merge** transformation showing a dependency.
- Press “Run project” button on the Main toolbar (or F5) to run the remaining uncalculated transformation which is the export transformation. Find Report.xlsx in the example folder, and open it in Excel. See that it has data from “Export...” table in EasyMorph.
- Return to EasyMorph. Filter states in “Companies”: right-click *state\_uppercase* column header, select “Filter...”, pick a few states in the checklist, and press Apply. Notice that the project was recalculated automatically and tables and chart now contain only the selected states.
- Run the export transformation manually again (by pressing F5). Open Report.xlsx in Excel and notice that now it contains data for the selected states only.

The screenshot displays the EasyMorph interface with three main components:

- States Table:** A table with columns *state\_long* and *state\_short*. It lists states like California (CA), Virginia (VA), Massachusetts (MA), Maine (ME), Arizona (AZ), Oregon (OR), North Carolina (NC), Colorado (CO), and Kansas (KS). A blue arrow labeled "Import" points to this table.
- Companies Table:** A table with columns *rank*, *company*, *Revenue per...*, *city*, *state\_uppercase...*, and *metro*. It lists companies such as One Technology Resources, ProKarma, Snap Fitness, Core Networks, GourmetGift, Xtreme Cons, ReSource Pro, LifeMatters, Adjucent, Radius, Ntiva, and Prep Smarts. A blue arrow labeled "Merge table" points to the *state\_uppercase...* column.
- Export: Companies by state Table:** A table with columns *state\_long* and *# of compan...*. It shows the count of companies per state: California (311), Texas (220), New York (163), Virginia (147), Florida (144), Illinois (129), Georgia (115), Pennsylvania (92), and Massachusetts (90). A blue arrow labeled "Export" points to this table.

Below the Companies table is a **Number of Companies by Industry** chart. The chart shows a horizontal bar chart with the following categories and approximate values:

Category	Value
IT Services	450
Health	350
Business Products & Services	250
Software	200
Advertising & Marketing	150
Financial Services	100
Government Services	80
Human Resources	60
Manufacturing	40

## Notes

1. Export transformations are considered *side-effect transformations*. Such transformations can change data in external files and systems, and therefore are not calculated automatically in order to avoid unnecessary or undesired modifications. Besides all export transformations, side-effect transformations also include **Run external program**, **Iterate external program** and **SQL Command**. Side-effect transformations should be run manually, by clicking “Run project” button, or pressing F5.