

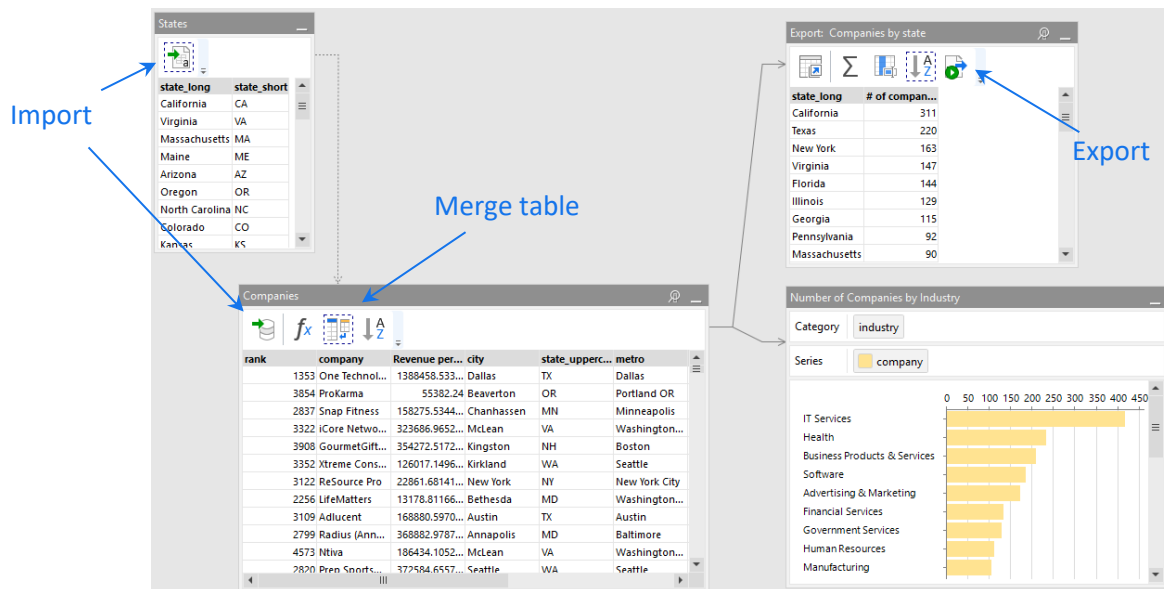
# Example “Inc5000”

A simple demo project that does the following:

- Loads a list of 5000 companies from a database (comes with the example). It includes the 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 actions automatically (except the “Export to text file” action, 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 action icons in tables to explore action properties (shown in the sidebar) and their results (shown in the data grid). Explore properties of the “Merge another table” action. Notice that the dotted line from the *States* table points right into the “Merge” action showing a dependency.



- Press “Run project” button on the Main toolbar (or F5) to run the remaining uncalculated action which is the export action. Find Report.xlsx in the example folder, and open it in Excel. See that it now has data from “Export...” table in EasyMorph.
- Return to EasyMorph. Filter states in “Companies”: right-click the header of column `state_uppercase` column, 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.

## Notes

1. Export actions are considered *side-effect actions*. Such actions 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 actions, side-effect actions also include “Run external program”, “Iterate external program”, “Database command”, “PowerShell”, and a few more. Side-effect actions should be run manually, by clicking “Run project” button, or pressing F5.