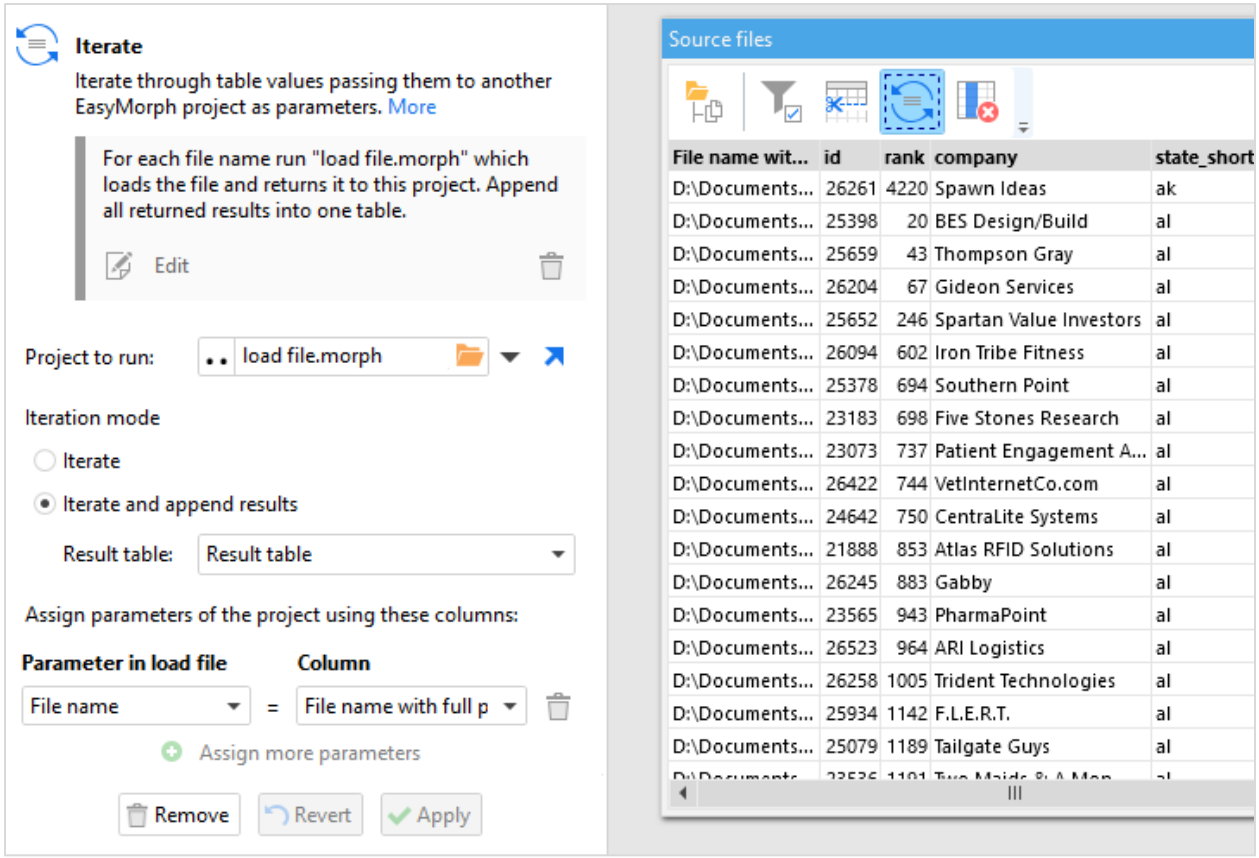
Example “Multiple files”

This example demonstrates the use of iterations in EasyMorph. Iterations is a powerful feature that allows arranging loops, processing lists of files, running projects for a range of dates, and re-using logic between different projects. To understand better how iterations work check out this article: Tutorial – Loops and iterations.

This example loads 30 files from a folder, where each file contains data for one state. The loading process is arranged using iterations in EasyMorph. For iterations there should be 2 projects – one project performs iterations and the other one is iterated – i.e. it’s run once for each iteration.

Here is what **Main.morph** does:

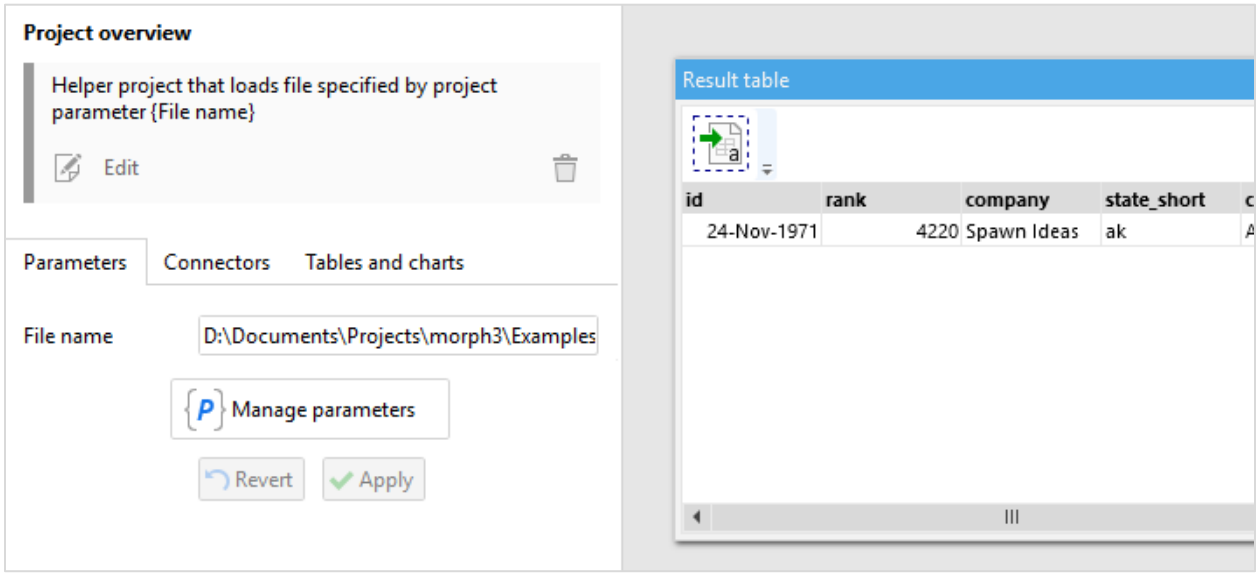
1. Obtain a list of files in ‘Source files’ folder.
2. Filter the list of files – remove non-CSV files (just in case). Also keep only 30 files in the list so that the example doesn’t break the free version limit (up to 30 iterations per project).
3. Iterate (run) **load file.morph** once for each row in the list of files. In each iteration pass full file path to **load file.morph** by assigning its parameter {File name} with value from column [File name with full path] in the main project. Return table named “Result table” from **load file.morph** in each iteration, and append all results into one table (“Iterate and append” mode).



Screenshot 1: Transformation "Iterate" in Main.morph.

Project **load file.morph** has one parameter declared:

- {File name}



Screenshot 2: Parameters in "load file.morph"

Project **load file.morph** simply loads the file specified by parameter {File name}. When this project is iterated from **Main.morph**, this parameter is assigned in **Main.morph**, overriding default value of the parameter.

How to use the example

- Open **Main.morph**.
- Click "Iterate" transformation and explore its properties.
- Notice that result of "Iterate" transformation has data for 30 states, which means that the project have loaded 30 files at once.
- Explore **load file.morph** and find where its parameter {File name} is declared and where it's used.
- Exercise: change parameter name in **load file.morph** from {File name} to {CSV file} and make the example work (hint: you will need to change properties of "Iterate" transformation in **Main.morph**).