

# Welcome to the inFusion FAMIX/MOOSE Exporters



Dear MOOSE user,

We created 4 command-line tools to simplify your work by allowing you to generate quickly FAMIX models for the Java and C/C++ projects that you need to analyze using MOOSE.

Each of the commands can be run from Windows (using the \*.bat scripts) or from Unix/Mac (using the \*.sh scripts).

Here is how to use them...

### I. Creating FAMIX Models from Java Source-Code

**Description**: Starting from one project folder (containing Java sources), this command creates a MSE file with the FAMIX (2.1 or 3.0) model extracted for that project

**Parameters**: There are 3 parameters, all mandatory:

<pre><pre>folder&gt;</pre></pre>	The root folder of a Java project (at least the root folder for all Java sources)
<famix_version></famix_version>	One of the 2 strings: "famix21" or "famix30" (without the quotation marks!)
<pre><output_mse_file></output_mse_file></pre>	The name of the output MSE file (including the .mse extension) where the FAMIX model will be written.

**Remark**: While it is not required, if **project\_folder>** contains all (or most of the) libraries (JARs) used from the project's source code the accuracy of the model will be increased.

# mjava2mse project\_family\_folder> <famix\_version>

**Description**: Starting from one folder, which contains a set of projects (each subfolder being the root folder of project), creates a MSE file with the FAMIX (2.1 or 3.0) model, for each of the projects.

**Parameters**: There are 2 parameters, all mandatory:

<pre><pre><pre>project_family_folder&gt;</pre></pre></pre>	The folder that contains a number of subfolder, one for each project to be analyzed.
<famix_version></famix_version>	One of the 2 strings: "famix21" or "famix30" (without the quotation marks!)

**Remark**: The MSE file will be stored in the **project\_family\_folder>**, each filename being composed from the name of subfolder (corresponding to the project) plus the FAMIX version ("famix21" or "famix30") string plus the ".mse" extension.



### 2. Creating FAMIX Models from C/C++ Source-Code

The two command-lines tools presented below don't take as an input directly the source-code from C/C++ projects; instead, they operate on a set of tables generated by **mcc**, which is a fact extractor that parses C/C++ code and extracts a design model.

Let's see first how to use **mcc**...

**Description**: Starting from one project folder (containing C/C++ source code), the tool generates a raw model in form of a set of 12 (correlated) tables containing design information extracted from the source-code

**Parameters**: There are 3 parameters, the first two being mandatory:

<c_cpp_project_folder></c_cpp_project_folder>	The root folder of a C/C++ project (at least the root folder for all C/C++ sources in the project).
<pre><output_folder></output_folder></pre>	The folder where mcc stores the set of 12 tables that contain the extracted model.
[ <configuration_file>] (optionally)</configuration_file>	You can specify a configuration_file (one of the files in ./tools/mcc/env_c) that contains special instructions for the parser on how to deal with special C++ constructs (e.g. macros) which might differ between various C++ dialects.

### cpp2mse <mcc\_table\_folder> <famix\_version> <output\_mse\_file>

**Description**: Starting from one project folder (containing mcc tables, extracted with mcc from C/C++ source code), creates a MSE file with the FAMIX (2.1 or 3.0) model extracted for that project

**Parameters**: There are 3 parameters, all mandatory:

<pre><mcc_table_folder></mcc_table_folder></pre>	The folder containing the 12 tables generated by <b>mcc</b> for a C/C++ project
<famix_version></famix_version>	One of the 2 strings: "famix21" or "famix30" (without the quotation marks!)
<pre><output_mse_file></output_mse_file></pre>	The name of the output MSE file (including the .mse extension) where the FAMIX model will be written.



### mcpp2mse project\_family\_folder> <famix\_version>

**Description**: Starting from one folder, which contains a set of projects (each subfolder containing the 12 tables generated by mcc), the command creates a MSE file with the FAMIX (2.1 or 3.0) model, for each of the projects.

**Parameters**: There are 2 parameters, all mandatory:

<pre><pre>ct_family_folder&gt;</pre></pre>	The folder that contains a number of subfolder, one for each project to be analyzed.
<famix_version></famix_version>	One of the 2 strings: "famix21" or "famix30" (without the quotation marks!)

**Remark**: The MSE file will be stored in the **project\_family\_folder>**, each filename being composed from the name of subfolder (corresponding to the project) plus the FAMIX version ("famix21" or "famix30") string plus the ".mse" extension.

## One more thing...

These tools are free to use for research, commercial purposes or simply for fun:-)

And they will remain free!

If you can profit in some way from these tools, we would really appreciate if you would acknowledge intooitus in your publications for supporting your activities, and/or if you can recommend our tools to your friends.

And of course, please <u>let us know</u> if you have and problems or wishes...

The intooitus team.

<sup>&</sup>lt;sup>1</sup> under the specified license conditions.