# Running JRC-ENCR Quality Check Software (QCS) in background

## Overview

The JRC-ENCR QCS application can be run in two different modes or "moods". For the time being, the following "moods" are available:

- **GUI** (standard execution): open the main window and wait for user's actions
- **Silent** (background process): run in background and validate the file passed as argument

When executed in *silent* mode, the application accepts the following arguments:

```
-m=<mode> -f=<path_to_data_file> -s=<validation_schema>
```

Supported values are:

- **-m**: gui | silent
- **-f**: path to the file to be validated
- **-s**: incidence | lifetable | mortality | population

**Warning**
Some options are reserved for developing the application, and MUST NOT be used by the final user:

- **-t**: index of the test to be executed
- **-c**: create the "checksum" files used to verify the integrity of the configuration

To acknowledge all options available from the command line, run the application with the **-h** option.

## Sample scripts

The *samples* directory of the application contains two sample files showing examples of usage as a **background** process:

- **Run-qcs.bat**: example of executing the application in Windows OS
- **run-qcs.sh**: example of executing the application in Linux OS

**Remark**: the sample files listed above DO NOT provide complete management of possible execution errors, and DO NOT access (nor read, nor parse) the output reports produced at the end of the validation process. The actual management of the execution outcome MUST BE handled by the caller, with respect of his/her specific client's *execution context* (e.g. type of operative system, execution from webapp, execution as system service, etc.) and of the specific client's *needs and business* (e.g. validation of a single line, validation of big files, synchronous validation, asynchronous validation, etc.).
These sample files are provided only to show an example of executing the application as a background process and how to intercept the possible process outcomes.

# Output reports

At the end of the validation process, the application should produce all output reports in the path:

```
<application base path>/output
```

For details about how to read and interpret the generated report files, see the official user manual: this is the **User_compendium_v1_8.pdf** file, located in the *docs* sub-directory of the application.

# Guidelines

Some of the reports produced in the *output* directory are intended to be accessed directly by the final user, therefore are formatted in a human-friendly style (PDF or TXT). If the client application needs to read, parse, analyze or process the results of the validation process, usage of the following reports is recommended:

 **QCS-Incidence-FormatErrors.txt**: read this file in order to check that the input file was correctly formatted
 **QCS-output-tabular-forExcel.csv**: read this file in order to acknowledge the detailed result of the validation process, line by line. This should be the core report when the application is run as a background process
 **QCS-PrimaryDuplicates-Output.csv**: read this file in order to acknowledge the list of records which triggered a Primary Duplicate warning. This report should be ignored when the application is used to validate a single line

For details about the format of the three reports listed above, please refer to the user compendium.