



Code_Saturne 4.0.1 Quick reference card

User scripts

All *Code_Saturne* commands are available under a single script: `code_saturne`. Here below are the most useful commands for a *Code_Saturne* user from the study creation to the post-processing. Complete information for each command can be obtained by typing:
`code_saturne <command> --help`.

- **info**

Get information on *Code_Saturne*. Open the documentation (user, theory, tutorial).
e.g. `code_saturne info --guide user`

- **config**

Get information on the configuration and installation of *Code_Saturne*.
e.g. `code_saturne config`

- **create**

Create a *Code_Saturne* template study or case.
e.g. `code_saturne create --study study1`

- **gui**

Launch *Code_Saturne* graphical user interface.
e.g. `code_saturne gui --file xmlfile`

- **compile**

Create a specific solver executable when some user subroutines are present.
e.g. `code_saturne compile --test`

- **autovnv**

Launch the auto-Validation tool.
e.g. `code_saturne autovnv --file xmlfile --run`

Main user subroutines

Here below are the most useful user subroutines to run a standard simulation. Some of them are useless if the graphical user interface is used.

- **cs_user_parameters.f90**

Initialization of the main keywords.

- **cs_user_boundary_conditions.f90**

Management of the boundary conditions.

- **cs_user_physical_properties.f90**

Management of the variable physical properties.

- **cs_user_initialization.f90**

Non-standard initialization of the variables.

- **cs_user_extra_operations.f90**

User project files.

- **cs_user_head_losses.f90**

Management of the head loss.

- **cs_user_source_terms.f90**

User source terms related subroutines.

- **cs_user_postprocess_var.f90**

Post-processing related subroutines.

Practical information

<http://www.code-saturne.org>

Related software:

<http://www.syrthes.org>

<http://www.code-aster.org>

<http://www.salome-platform.org>

