

code_saturne 8.3 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 postprocessing. 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). e.g. code_saturne info --guide user

• config

Get information on the configuration and installation of code_saturne. *e.q.* 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*

• trackcvg Launch code_saturne track convergence tool. *e.g.* code_saturne trackcvg RESU/run_name

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

• studymanager Launch studymanager. *e.g.* code_saturne studymanager --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.c Initialization of the main keywords.

• cs_user_boundary_conditions.c Management of the boundary conditions. • cs_user_physical_properties.c Management of the variable physical properties.

• **cs_user_initialization.c** Non-standard initialization of the variables.

• cs_user_extra_operations.c User project files.

• cs_user_head_losses.c Management of the head loss.

• cs_user_source_terms.c User source terms related subroutines.

• cs_user_postprocess.c Post-processing related subroutines.

Practical information

https://www.code-saturne.org

Related software: https://www.salome-platform.org

