
SETTE tools Documentation

Release 1.0.0

Simona Flavoni

20110309

Contents

1	Shell scripts	1
1.1	fcm_job.sh	1
1.2	all_functions.sh	2
1.3	sette.sh	2
1.4	sette_beginner.sh	4
2	Indices and tables	5

Shell scripts

1.1 fcm_job.sh

1.1.1 Simple job for NEMO tests

SYNOPSIS

```
$ ./fcm_job.sh INPUT_FILE_CONFIG_NAME NUMBER_PROC TEST_NAME
```

DESCRIPTION

Simple job for SET TESTS for NEMO (SETTE)

this job creates tree of validation in NEMO_VALIDATION_DIR as follows :

NEMO_VALIDATION_DIR/WCONFIG_NAME/WCOMPILER_NAME/TEST_NAME/REVISION_NUMBER(or DATE)

NEMO_VALIDATION_DIR : is choosen in param.cfg

WCONFIG_NAME : set by makenemo at the moment of compilation

WCOMPILER_NAME : set by makenemo at the moment of compilation

TEST_NAME : convention is LONG=10 days run, SHORT=5 days run

REVISION_NUMBER(or DATE) : revision number by svn info, if problems with svn date is taken

EXAMPLES

```
$ ./fcm_job.sh INPUT_FILE_CONFIG_NAME NUMBER_PROC TEST_NAME
```

```
run a job of config GYRE with 1 processor test REPRODUCTINILITY
```

```
$ ./fcm_job.sh input_GYRE.cfg 1 SHORT
```

```
run a job of config ORCA2_LIM_PISCES with 8 processors test RESTARTABILITY
```

```
$ ./fcm_job.sh input_ORCA2_LIM_PISCES.cfg 8 LONG
```

TODO

option debug

EVOLUTIONS

\$Id: fcm_job.sh 2665 2011-03-07 14:42:12Z flavoni \$

- creation

1.2 all_functions.sh

1.2.1 Set of functions used by sette.sh (NEMO tests)

SYNOPSIS

```
$ ./set_namelist.sh INPUT_NAMELIST VARIABLE VALUE
```

DESCRIPTION

function superegrep input variable value

function set_namelist input namelist_name variable value output namelist

EXAMPLES

```
$ ./set_namelist.sh namelist nn_itend 75
$ ./set_namelist.sh namelist_ice_lim2 cn_icerst_in \"00101231_restart_ice\"
```

TODO

option debug

EVOLUTIONS

\$Id: all_functions.sh 2637 2011-03-02 13:44:33Z flavoni \$

- creation

1.3 sette.sh

1.3.1 Set of tests for NEMO

SYNOPSIS

```
$ ./sette.sh
```

DESCRIPTION

principal script is `sette.sh`, that calls

`makenemo`

creates the executable in `${CONFIG_NAME}/BLD/bin/nemo.exe`

(and its link `opa` in `${CONFIG_NAME}/EXP00`)

`param.cfg` : sets and loads following directories

Executing directory (`EXE_DIR`)

Input files storing (`INPUT_DIR`)

Temporary directory (if needed) (`TMPDIR`)

Validation directory (`NEMO_VALIDATION_DIR`)

(note: this file is the same for all configurations to be tested with `sette`)

`all_functions.sh` : loads functions used by `sette` (note: new functions can be added here)

`set_namelist` : function declared in `all_functions` that set namelist parameters for tests

`fcm_job.sh`

runs job and saves output files (`grid_files`, `restarts`, `ice_evolu`, `ftrace.out`)

and it creates tree of `VALIDATION`, in which there are restart files, `solver.stat` and `ocean.output`

Tree of `VALIDATION` is:

`NEMO_VALIDATION_DIR/WCONFIG_NAME/WCOMPILER_NAME/TEST_NAME/REVISION_NUMBER(or DATE)`

(note this job needs to have an `input_CONFIG.cfg` in which can be found input tar file)

(note other files can be saved adding at the end of `fcm_job` list of saved files)

NOTE: if job is not launched for some problems you have executable ready in `${CONFIG_NAME}/EXP00` directory

NOTE: the changed namelists are leaved in `${CONFIG_NAME}/EXP00` directory

in `${SETTE_DIR}` is created `output.sette` with the echo of commands run

if `sette.sh` is stopped in `output.sette` there is written the last command executed by `sette.sh`

if you run: `./sette.sh 2>&1 | tee out.sette`

in `${SETTE_DIR}` `out.sette` is redirected standard error & standard output

EXAMPLES

```
$ ./sette.sh
```

TODO

option debug

EVOLUTIONS

\$Id: sette.sh 2665 2011-03-07 14:42:12Z flavoni \$

- creation

1.4 sette_beginner.sh

1.4.1 Set of tests for NEMO for beginners

SYNOPSIS

```
$ ./sette_beginner.sh
```

DESCRIPTION

First simple example of how to use SETTE: create GYRE_SHORT configuration, compile it with 1 proc, and test it for a SHORT test: 5days

Indices and tables

- *search*