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# **SETTE tools Documentation**

*Release 1.0.0*

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# Shell scripts

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## 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 2687 2011-03-15 09:27:43Z 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 2675 2011-03-09 08:42:15Z 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 2732 2011-04-08 12:47:53Z rblod \$

- 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



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# Indices and tables

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- *search*