

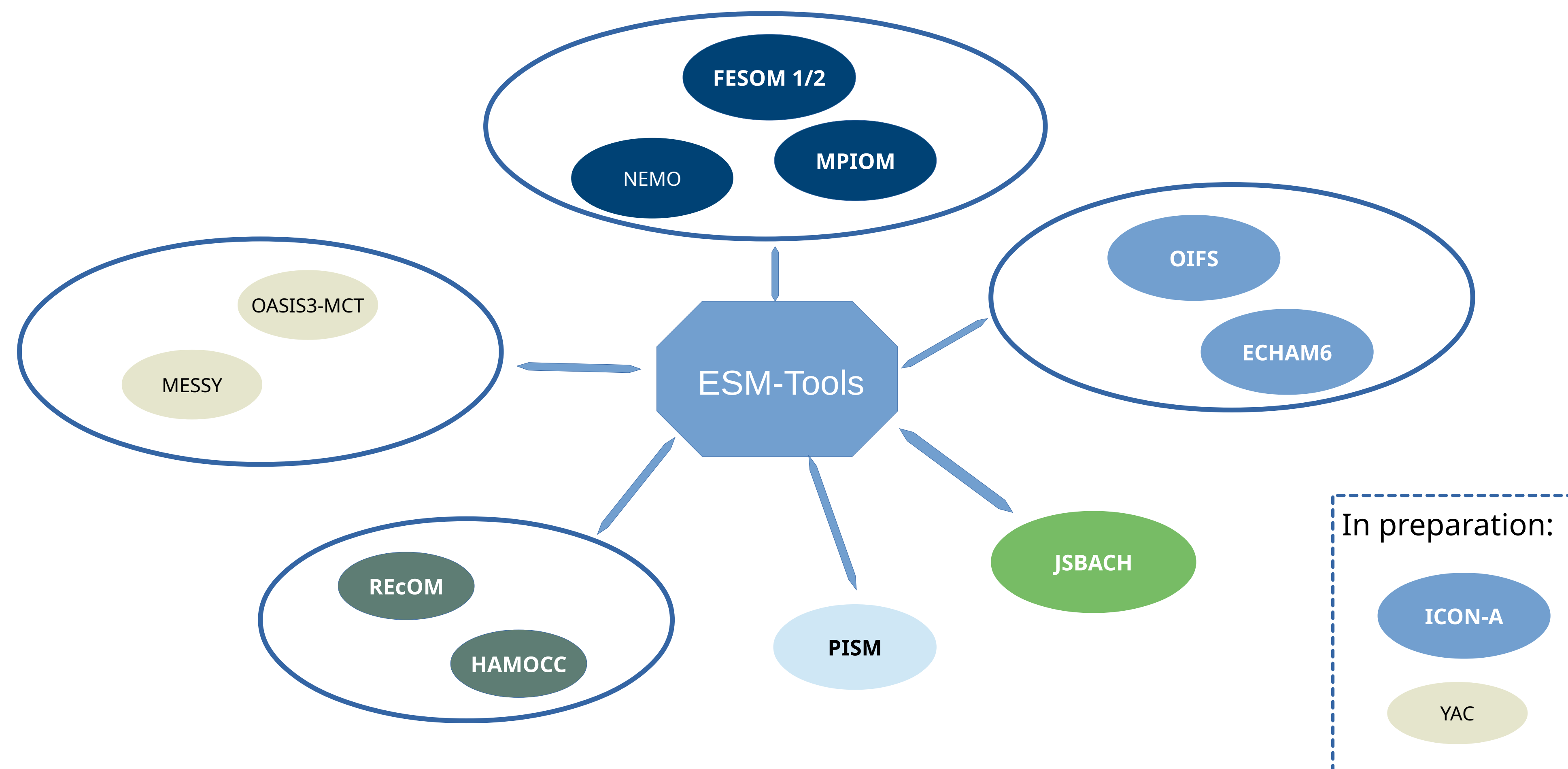
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ESM-Tools

Release 2.0

A Collection of Tools for the Download, Compiling, Execution and Coupling of different Models and Coupled Systems

ESM-Tools



ESM-Runscripsts

- Collection of functions for unified runscripsts to execute different models and coupled systems with only one tool
- Similar runscripsts for all supported models
- Functionality is very modular and easy to extend

Supported Functionality

- Run models and coupled setups
- Run sanity checks
- Pre- and Postprocess Data
- Sort model in- and output for future reference
- Tarball and archive data
- Graphical and error monitoring
- Iterative coupling
- Database logging of activities

Basic usage and syntax

```
$> ./awicm.run -e <experiment-id>
```

```
#!/usr/bin/ksh -l
set -e

export FUNCTION_PATH=/work/esm-master/esm-runscripsts/functions/all #Path to esm-runscripsts
export FPATH=${FUNCTION_PATH}:$FPATH

machine_name="ollie"
setup_name="awicm"
compute_time="00:30:00" # Compute time per run

#####
INITIAL_DATE_awicm=2008-01-01 # Initial date of experiment
FINAL_DATE_awicm=2010-01-01 # Final date of experiment

SCENARIO_awicm=1850 # Scenario of experiment
SCENARIO_fesom=CORE2 # FESOM mesh

NYEAR_awicm=0 # Number of years per run
NMONTHS_awicm=1 # Number of months per run

MODEL_DIR_awicm=${WORK}/esm-master/awicm-CMIP6/
BIN_DIR_echam=${MODEL_DIR_awicm}/bin/ # ECHAM binary
BIN_DIR_fesom=${MODEL_DIR_awicm}/bin/ # FESOM binary

BASE_DIR=${WORK}/esm-experiments/ # Experiment output

POOL_DIR_awicm=/work/ollie/pool/ # Input or forcing
POOL_DIR_echam=/work/ollie/pool/ # data
POOL_DIR_fesom=/work/ollie/pool/FESOM/

MESH_DIR_fesom=/work/ollie/pool/FESOM/meshes_default/ # FESOM mesh path

#####
load_all_functions
general_do_it_all $@
```

ESM-Master/-Environment

Supported tasks

- download (get-)
- configure (conf-)
- clean (clean-)
- compile (comp-)

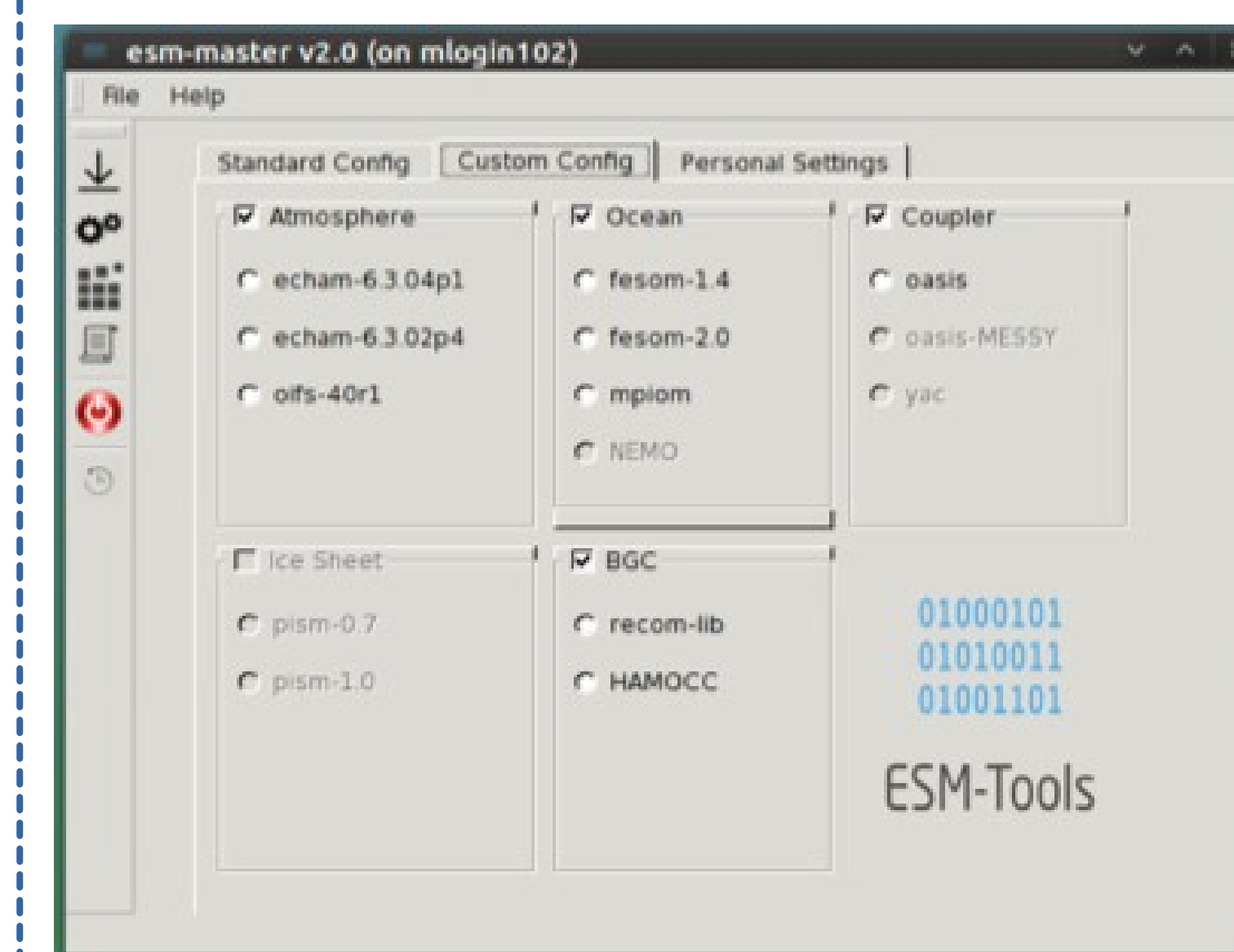
Supported HPC systems

ollie@awi, mistral@dkrz, blogin@hln, glogin@hln, jureca@fzj, juwels@fzj

Example for AWI-CM 2.0

- Downloading the source code
\$ make get-awicm-2.0
- Compiling the source code
\$ make comp-awicm-2.0

GUI



Contact

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