

setup_path script

Included in other scripts to setup paths to components and libraries.

```
export SIDL_DLL_PATH=""

DL_PATH=$BABEL_ROOT/lib
for i in `ls $TUT_COMP_ROOT | grep component`; do
  DL_PATH=$DL_PATH:$TUT_COMP_ROOT/$i;
done

export LD_LIBRARY_PATH=$DL_PATH
export SIDL_DLL_PATH=`echo $LD_LIBRARY_PATH | sed 's/;/g'`
```

1

run_cmdline script

- Run a single interactive job using command line.
- Format: run_cmdline <full_path_to_rc_file>

```
#!/bin/sh

export TUT_COMP_ROOT=`pwd`
• $TUT_COMP_ROOT/setup_path

$CCAFE_HOME/cxx/dc/user_iface/ccafe-single --ccafe-rc $1
```

dot

2

run_gui script

- Run a single interactive job using the GUI
- Format: `run_gui <full_path_to_gui_rc_file>`

```
#!/bin/sh
export TUT_COMP_ROOT=`pwd`

• $TUT_COMP_ROOT/setup_path

$CCAFE_HOME/cxx/dc/user_iface/ccafe-single --type server --port 3314 \
--ccafe-rc $1 &
sleep 2
$CCAFE_HOME/bin/runGUI --builderPort 3314
```

3

run_gui_parallel script (1)

```
#!/bin/sh -f
# Format: run_gui_parallel <num_proc> <full_path_to_gui_rc_file>
# Configuration stuff
export mpirun=/usr/local/bin/mpirun
export CLASSPATH=$CCAFE_HOME/java:$CLASSIC_CCA_ROOT/java
export gui=$CCAFE_HOME/bin/runGUI
export TUT_COMP_ROOT=`pwd`

export javaopts="-Djava.compiler=NONE -classpath $CLASSPATH"
export CCAFFEINE_OUT_DIR=`pwd`
export procfile="/tmp/processors.$$"
export machfile="/tmp/machines.$$"

# This tells CCAFFEINE to put the frameworks output streams
# into the current directory, into files named pOutN and
# pErrN, where N is the process number (starting from 0).
echo "Look for application output in pOut[01] and pErr[01] in
this directory"
```

4

run_gui_parallel script (2)

```
# Create a 'processors' file to tell the framework where to
# find itself and the GUI.
echo 127.0.0.1 server > $procfile
i=0
while [ $i -lt $1 ]
do
    echo $i      client >> $procfile
    i=`expr $i + 1`
done
# Create the mpirun machines file
echo 127.0.0.1 > $machfile
# Start the GUI and wait briefly to give it a chance to
# initialize
echo Launching multiplexer...
java $javaopts \
    gov.sandia.ccaffeine.dc.distributed.MuxingProcess \
    --name 127.0.0.1 --timeout 0 --file $procfile &
sleep 3
```

5

run_gui_parallel script (3)

```
# Launch the framework
echo Launching framework...
$mpirun -np $1 -machinefile $machfile $TUT_COMP_ROOT/run_client\
    --file $procfile --ccafe-rc $2 &
sleep 5
# Launch GUI
echo Launching GUI...
$gui

# Look for any stray files or processes
echo Cleaning up
rm -f $procfile $machfile
# This may be overkill
killall ccafe-client\
    gov.sandia.ccaffeine.dc.distributed.MuxingProcess \
    runGUI \
    gov.sandia.ccaffeine.dc.user_iface.BuilderClient java
```

6

run_client script

```
#!/bin/sh
#### TUT_COMP_ROOT cannot be `pwd` for mpirun reasons #####

export TUT_COMP_ROOT=/home/elwasif/CCA/tutorial/src/sidl

• $TUT_COMP_ROOT/setup_path

$CCAFE_HOME/cxx/dc/user_iface/ccafe-client $*
```

7

tutorial_rc_gui Ccaffeine rc file

```
#!/ccaffeine bootstrap file.
# ----- don't change anything ABOVE this line.-----
path set /home/elwasif/CCA/tutorial/src/sidl/random-component-c++
path append /home/elwasif/CCA/tutorial/src/sidl/function-component-c++
path append /home/elwasif/CCA/tutorial/src/sidl/integrator-component-c++
path append /home/elwasif/CCA/tutorial/src/sidl/driver-component-c++

repository get randomgen.RandRandomGenerator
repository get functions.LinearFunction
repository get functions.PiFunction
repository get functions.NonlinearFunction
repository get integrators.MonteCarloIntegrator
repository get integrators.MidpointIntegrator
repository get integrators.ParallelIntegrator
repository get tutorial.Driver
```

8