

Take-home messages from each training day

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- 1. SessionBasedScript is the "engine" to run GC3Pie workflows and task collections.
- 2. A script must be fed a list of tasks to execute by the new_tasks() method.
- 3. GC3Pie code runs unmodified on different computational resources.

- Utility commands gsession and ginfo help inspect a running session. To debug problems, start with running the session-based script with maximum verbosity: --verbose --verbose --verbose
- Command-line argument and option processing is defined through methods setup_args and setup_options of the SessionBasedScript
- 3. Use requested_cores, requested_memory, requested_walltime to specify environmental requirements of each task.

- 1. Post-processing can be done:
 - in the terminated() method of the Application (or Task) class, or
 - globally in the after_main_loop() method of the SessionBasedScript class.
- 2. Exit code and termination status inspection.

- 1. Applications can be composed into workflows using "task collections":
 - SequentialTaskCollection is for a series of tasks that should be executed in the order given
 - ParallelTaskCollection is for tasks with no inter-dependency (so, all potentially running at the same time)
- task collections are tasks themselves, so collections can be nested to create any kind of directed graph
- 3. StagedTaskCollection is for creating processing pipelines where all the steps are known before runtime

- ► ParallelTaskCollection is for sets of tasks that can all execute in parallel with no inter-dependency or communication.
- ► DependentTaskCollection is for tasks whose dependencies are known before runtime
- ➤ The next() method of
 SequentialTaskCollection can be used to
 create "dynamic" sequences that change while
 running.

...and after the course?

All VMs to be deleted tomorrow morning. So, **copy all data you want to save** today!

Your account will be removed from the training project on Science Cloud. (Any other project membership stays.)

For all things GC3Pie: visit our offices (Y11 F 66) or **send email to** help@s3it.uzh.ch.

Please provide your feedback about this course:

http:

//tinyurl.com/gc3pie-feedback-nov-2016