

QUIZ

1) What is the main feature of a science gateway?

- A. Web-based user interface
- B. Grid workflow management
- C. Capability to run jobs on a grid
- D. Visualization capabilities

Correct answer is a.

2) What is main the difference between a generic and a dedicated science gateway?

- A. Generic gateways run jobs to a public grid, and dedicated gateways run jobs on a private infrastructure
- B. Generic gateways offer various services to access a distributed infrastructure, and dedicated gateways offer services for a specific scientific area.
- C. A generic gateway is a much more complex system than a dedicated gateway
- D. Dedicated gateways can be accessed only by a closed community, whereas generic gateways are open

Correct answer is b.

3) Indicate which of the following sentences is correct

- A. Science gateways always use workflow management systems to run jobs on the grid
- B. Workflow management systems always have a web interface with the user
- C. WS-PGRADE is a workflow management system and a science gateway
- D. All grid workflow management systems support gLite middleware

Correct answer is c.

4) Choose the sentence that does not apply to grid workflows

- A. Represent sequences of steps to carry out some processing
- B. The steps are defined by a programmer using some description language
- C. The steps are executed autonomously by a workflow engine on some grid infrastructure
- D. The steps are executed manually one by one by the user on a grid infrastructure

Correct answer is d.

5) Which sentence better defines the main difference between

“abstract” and a “concrete” workflows in WS-PGRADE?

- A. An abstract workflow defines the jobs, and the concrete workflow defines the names of the queues where the jobs should be executed
- B. An abstract workflow contains no data, but a concrete workflow doesn't
- C. A concrete workflow contains the names of the files that should be sent to the jobs, whereas the abstract workflow contains the names of the scripts that should be executed by the jobs
- D. The abstract workflow defines how the jobs are connected to each other, and the concrete workflow defines the exact scripts to be executed by the jobs.

Correct answer is d.

6) Which of the following is not a reason to use workflow management systems to run complex computations on a grid infrastructure?

- A. Many jobs need to be executed
- B. The jobs are related to each other by data dependencies
- C. Jobs execute faster
- D. A workflow documents the scientific computation.

Correct answer is c.

7) What are the main components of a workflow management system?

- A. Input ports, output ports, job executable
- B. Workflow modeling tool, workflow description, workflow engine
- C. Workflow modeling tool, workflow engine, grid middleware
- D. Workflow description, data resources, compute resources

Correct answer is b.

8) Which of the following cannot be called a grid workflow management system?

- A. WMS
- B. MOTEUR
- C. Pegasus
- D. Askalon

Correct answer is a.

9) Which of the following functions are not executed by a workflow engine?

- A. Prepare the JDL for the jobs
- B. Install software on the worker node
- C. Data transfers
- D. Job monitoring

Correct answer is b.

10) In WS-PGRADE, data is passed to the jobs

- A. As command line arguments for the program that is executed by the job
- B. As files that are downloaded from the WS-PGRADE server to the worker node
- C. As files that are downloaded from a SE to the worker node
- D. All of the above are correct

Correct answer is d.