Introduction to P-GRADE Portal hands-on

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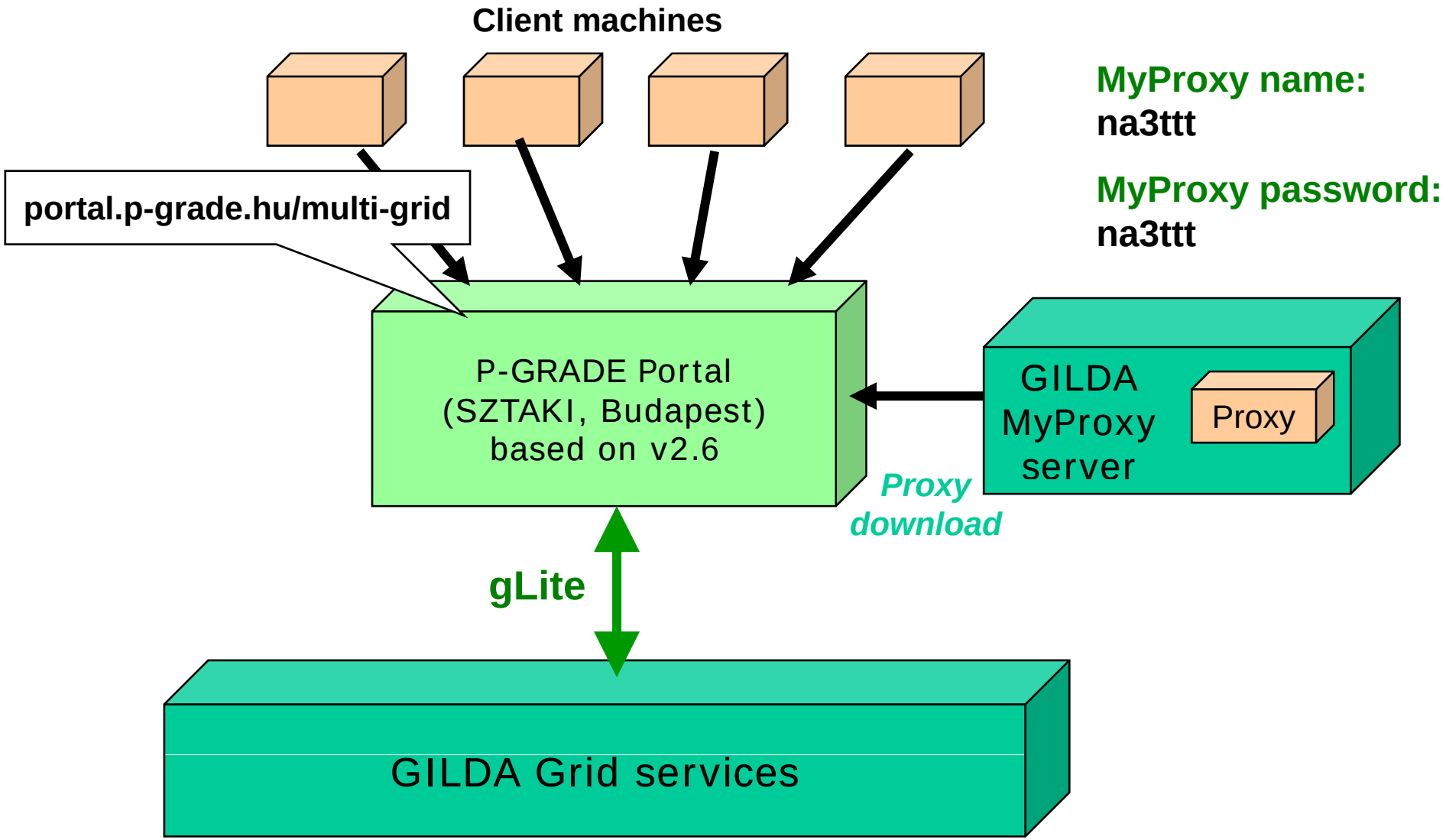
Open the tutorial sheets from the agenda page

http://indico.cern.ch/conferenceDisplay.py?confId=33793

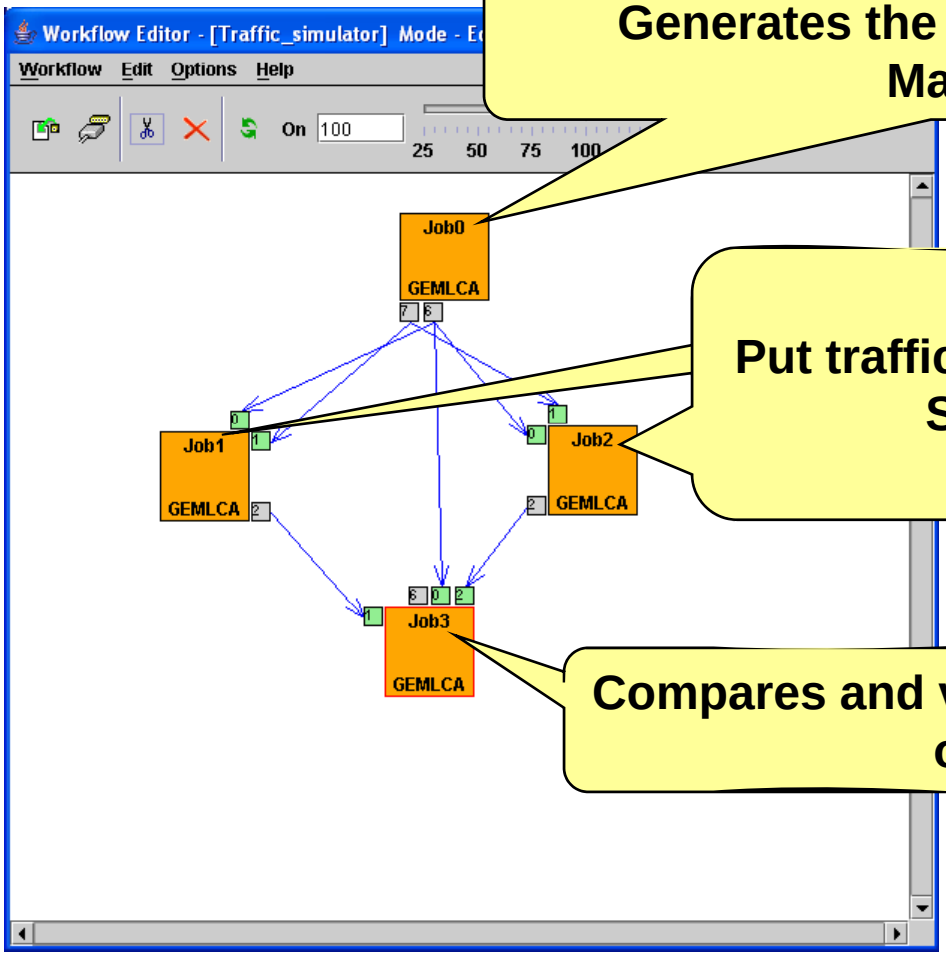
Infrastructure



Tutorial 1, Exercise 1

Import and execute a pre-defined application

Traffic simulation



Generates the road network map of Manchester

Put traffic lights and cars on the map. Simulate road traffic.

Compares and visualizes the density of cars

University of Westminster

Tutorial 1, Exercise 2

Create a matrix multiplication workflow (one job workflow)

Job executable:

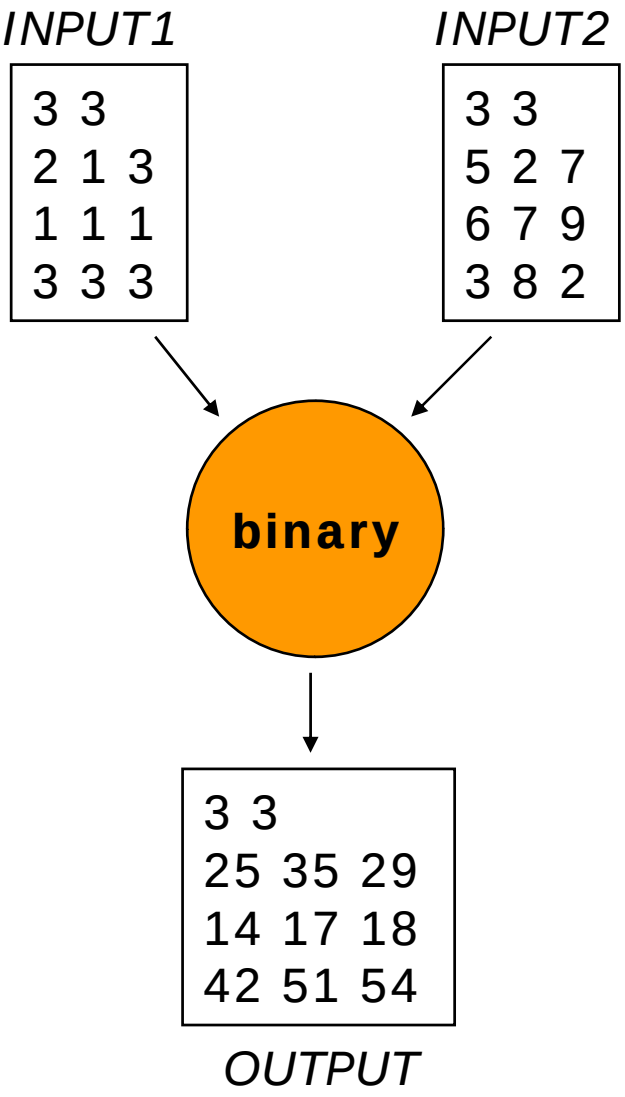
- C code, compiled on GILDA UI
- Expects command line parameters: M V
- Knows nothing about the grid

Job input/output files:

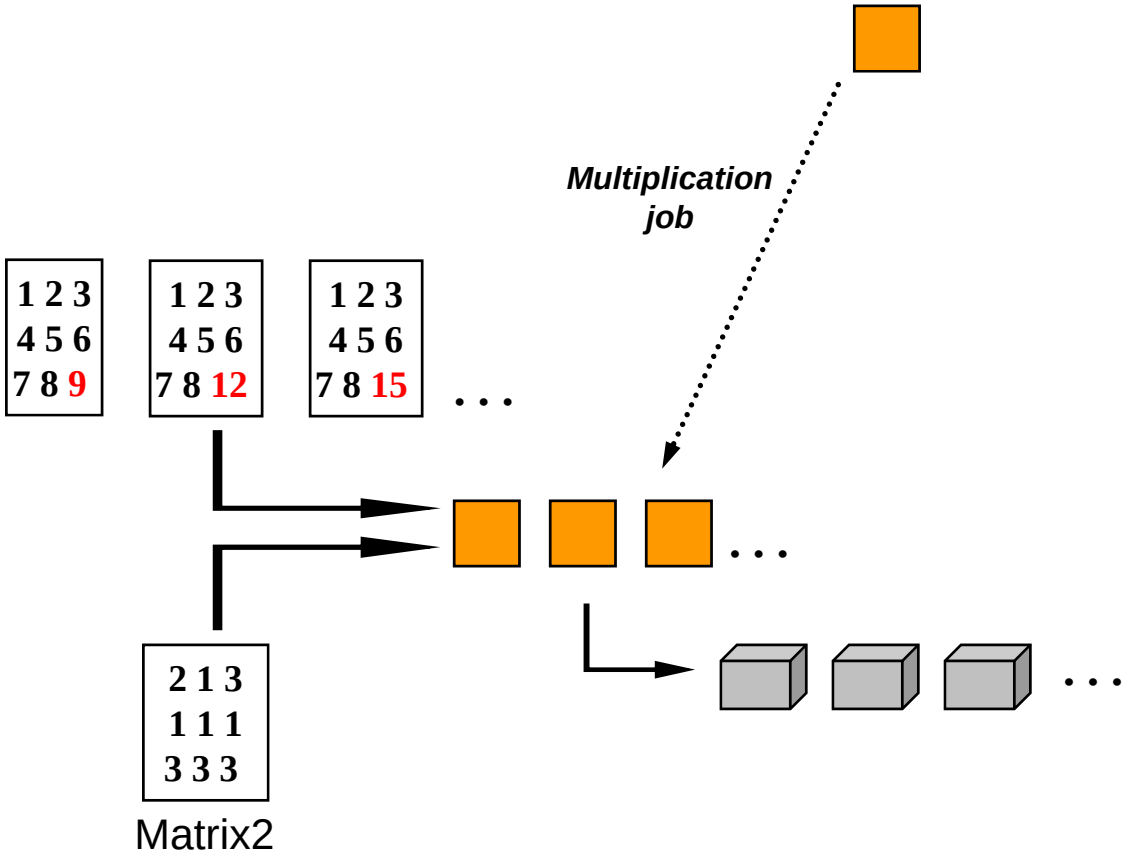
- Program reads matrixes from two files called **INPUT1** and **INPUT2**
- Program writes result matrix into file called **OUTPUT**

Local execution on a PC: **./multiply M V**

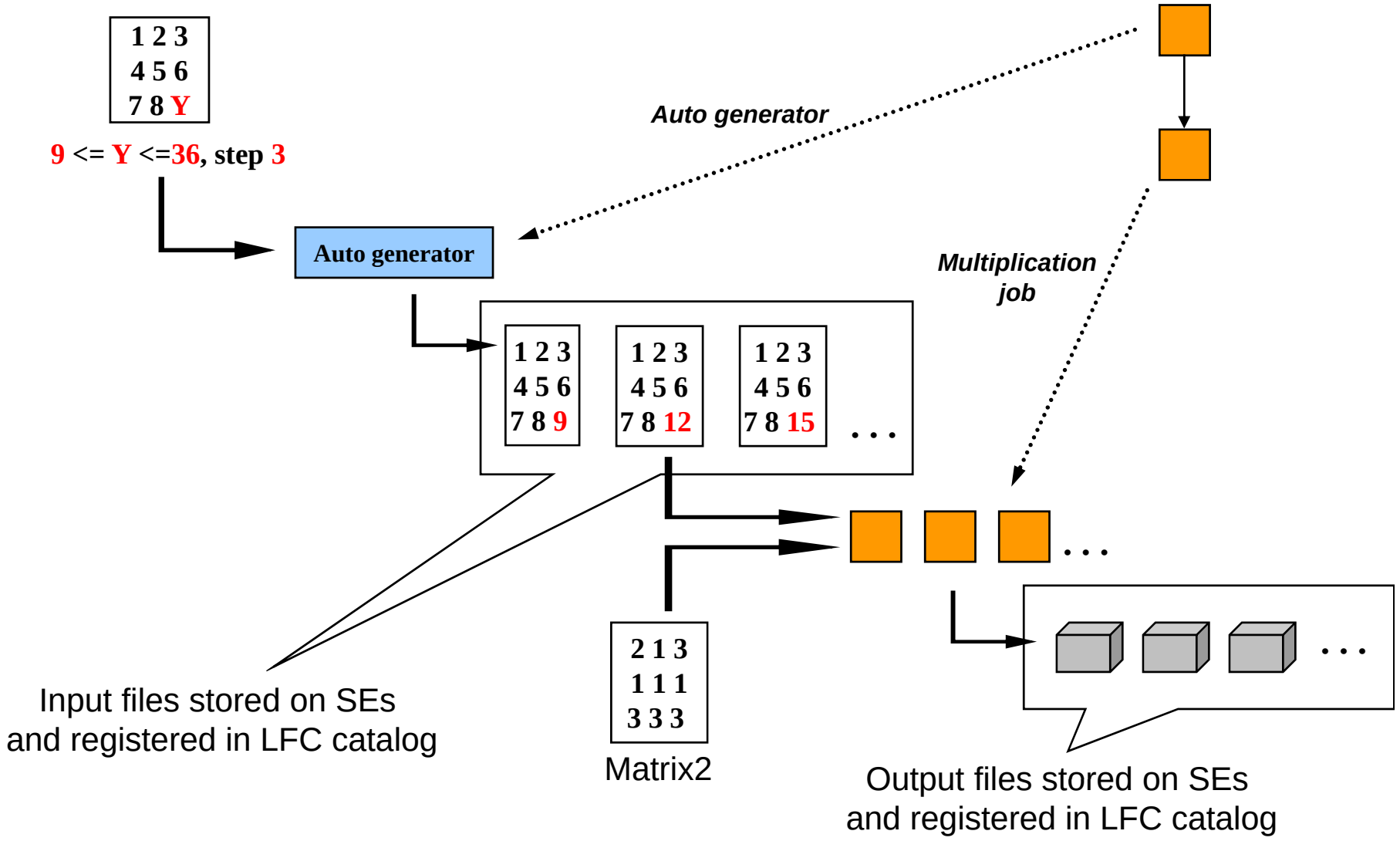
Task: Execute the program on EGEE, transfer input and output files in Sandboxes from the client



Tutorial 2
Matrix multiplication PS
parameter study workflow with 5 parameters



Tutorial 2
Matrix multiplication PS parameter study workflow with 5 parameters



Tutorial sheet:

http://indico.cern.ch/conferenceDisplay.py?confId=33793

Login to Portal:

Portal accounts: ***user01 – user20*** ***use your number***

Portal passwords: ***user01 – user20***

Proxy download information:

Hostname: grid001.ct.infn.it

Port: 7512

Account: na3ttt

Password: na3ttt

No need to wait for jobs to finish – proceed to next exercise

Job level fault tolerance

Tips

- **Exclude erroneous sites from the brokering process:**
  1. **Open the JDL editor of the job**
  2. **Write**

     other.GlueCEInfoHostname != “hostname”

     into the “Ranks & requirements” window
- **Automatic job resubmission:**
  1. **Add ShallowRetryCount = 3 into JDL**

User authentication