



Introduction to P-GRADE Portal hands-on

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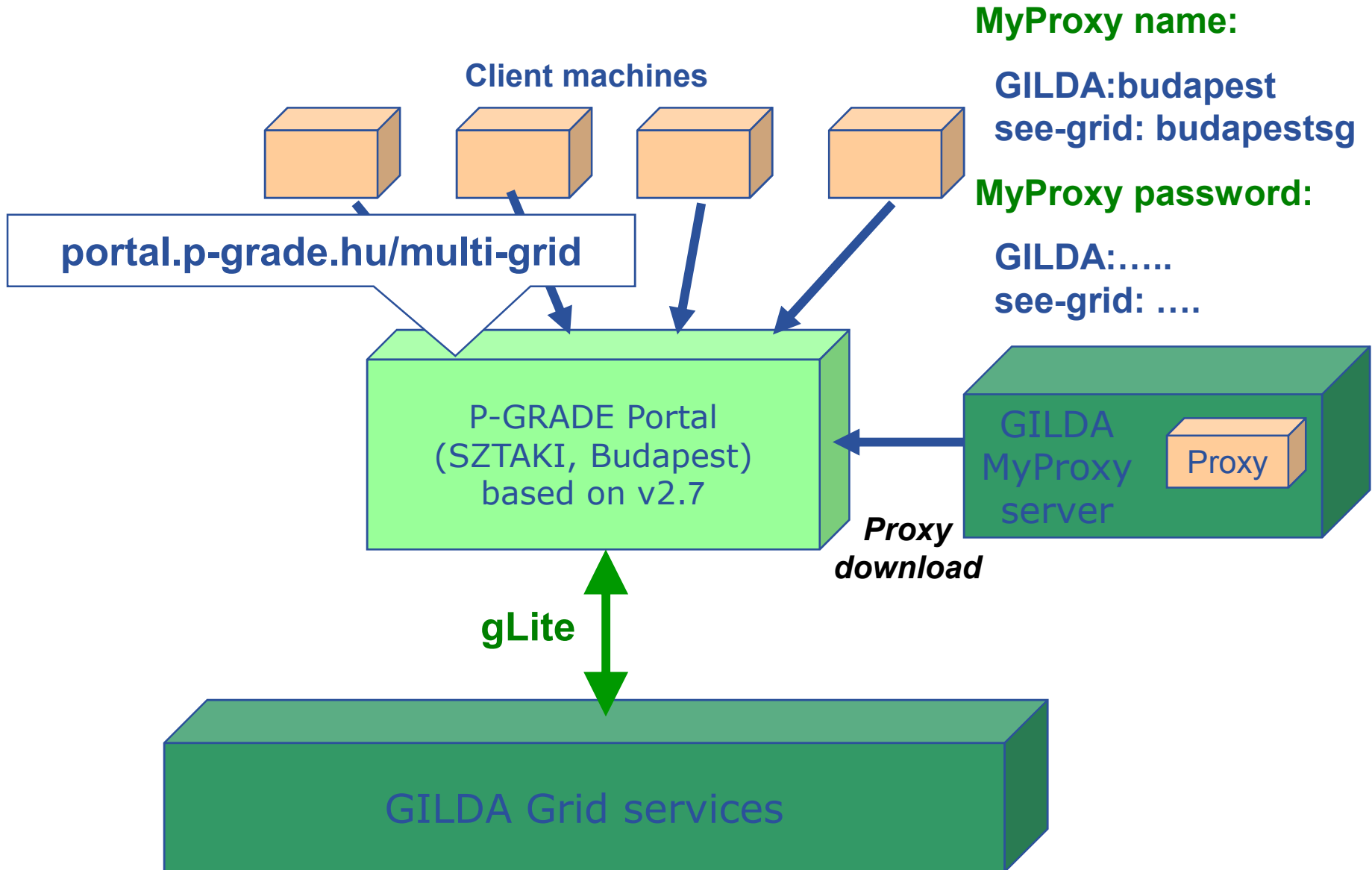
P-GRADE |
portal



**Open the tutorial sheets
on your desktop**



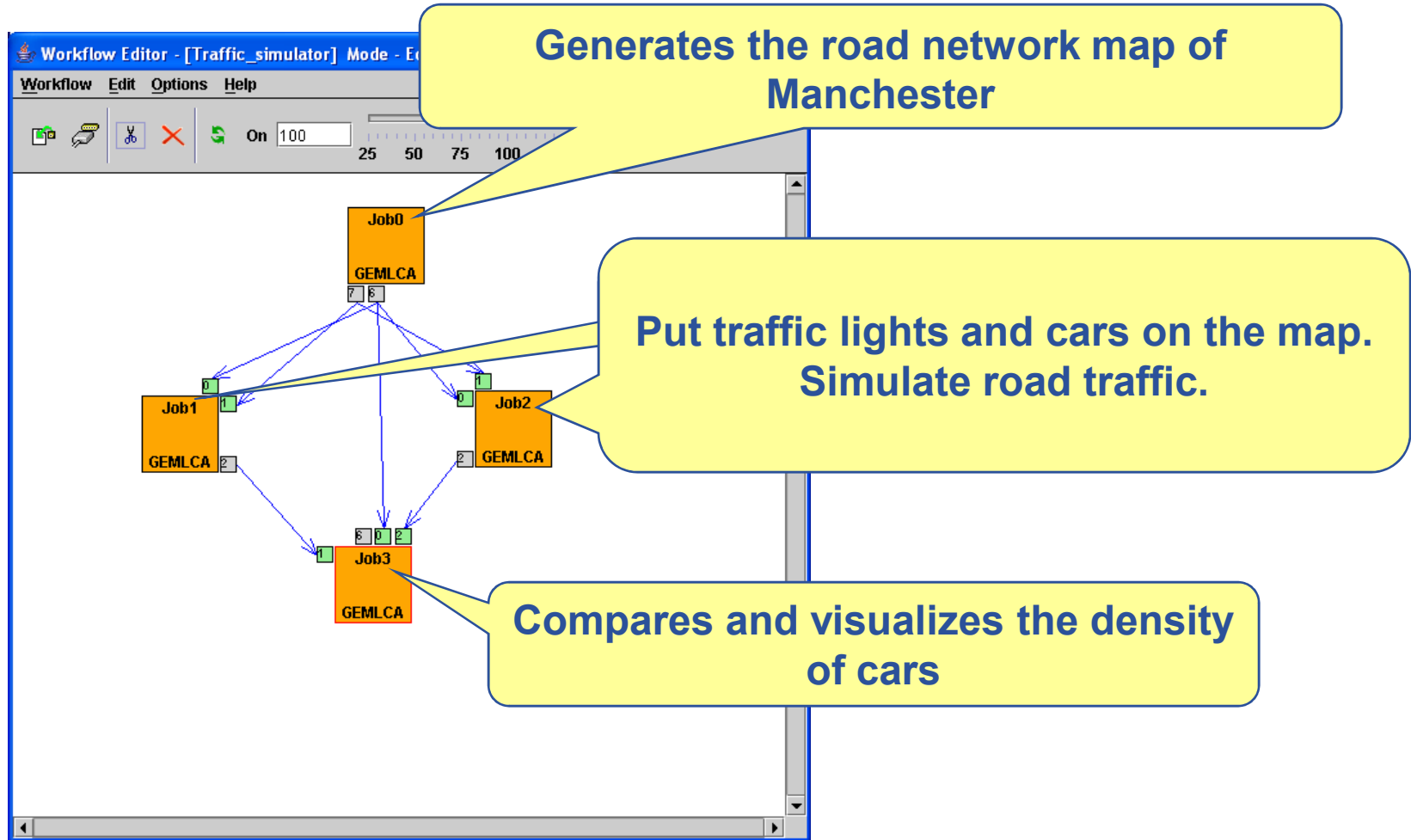
Infrastructure



Exercise 1

Import and execute a pre-defined application

Traffic simulation



Exercise 2

Create a matrix multiplication workflow (one job workflow)

Job executable:

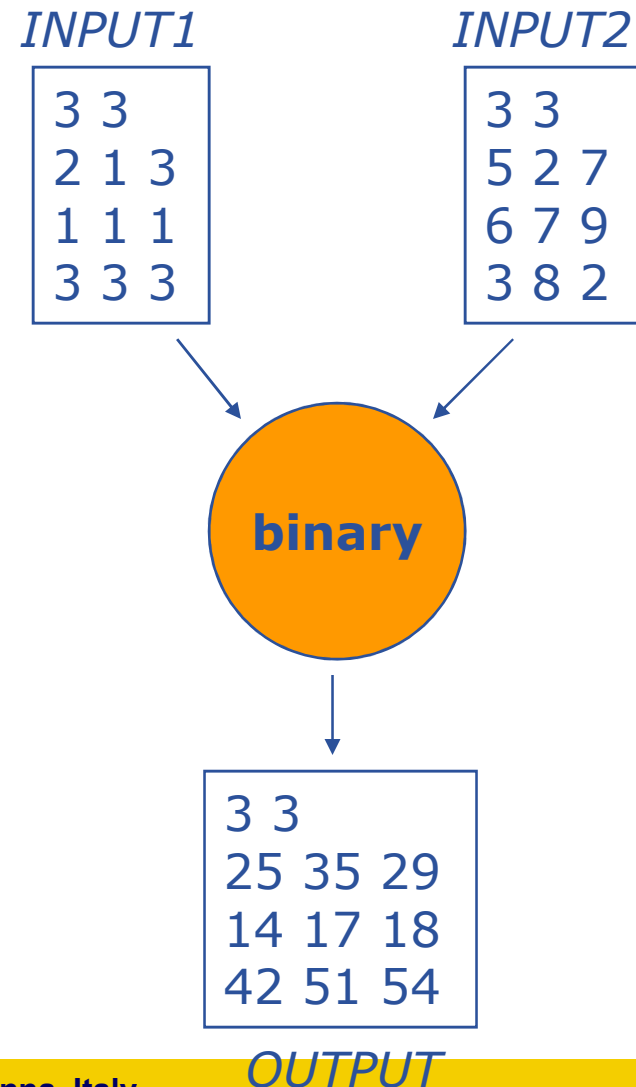
- C code, compiled on GILDA UI
- Expects command line parameters: M V
- Knows nothing about the grid

Job input/output files:

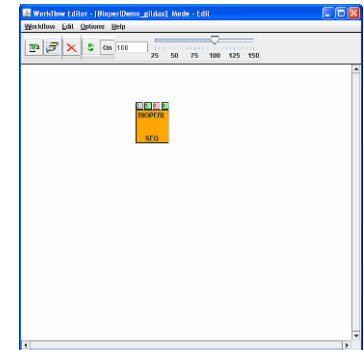
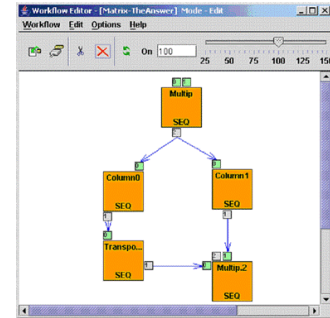
- Program reads matrixes from two files called **INPUT1** and **INPUT2**
- Program writes result matrix into file called **OUTPUT**

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

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



- **Create a matrix multiplication workflow**
 - Multi-job workflow
- **Create and submit a bioperl based application**
 - Single job workflow
- **Create and submit a java based application**
 - Single job workflow



Login to Portal:

Portal accounts: user01 – user40 use your number

Portal passwords:

Proxy download information (login to GILDA):

Hostname: myproxy.ct.infn.it

Port: 7512

Account for GILDA: budapest

Account for SEE-GRID: budapestsg

Password:...

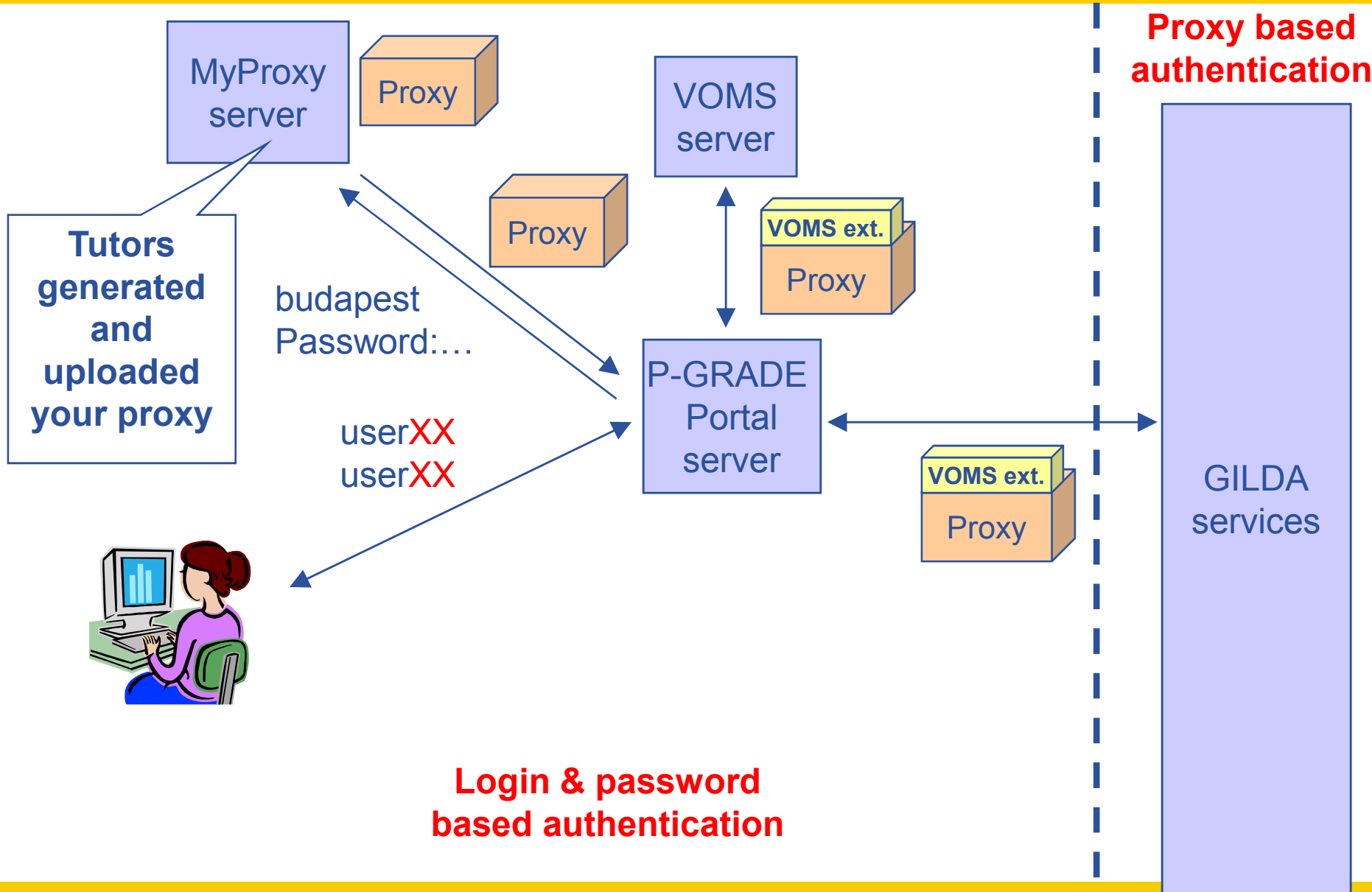
No need to wait for jobs to finish – proceed to next exercise

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



To become a user of P-GRADE/gUSE Portals

- Become user of EGEE if you are still not..
- P-GRADE Portal
 - Select a portal installation & request account: <http://portal.p-grade.hu>

Portal installations

Name of the portal installation	Connected to the following grid(s)	Release
Multi-Grid portal operated by SZTAKI	SEE-GRID South-Eastern European Grid VOCE Virtual Organization Central Europe of EGEE HunGrid Hungarian Grid VO of EGEE GILDA Training VO of EGEE and other projects Biomed Biomedical VO of EGEE Compchem Computational Chemistry VO of EGEE	2.6
HunGrid Portal operated by Eötvös Loránd University	HunGrid Hungarian Grid VO of EGEE	2.5
GILDA Portal operated by SZTAKI	GILDA Training VO of EGEE and other projects	2.5
EGRID Portal operated by Abdus Salam ICTP	EGRID Economics VO	2.4
SEE-GRID Portal	SEE-GRID	

Thank you

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