



Enabling Grids for E-scienceE

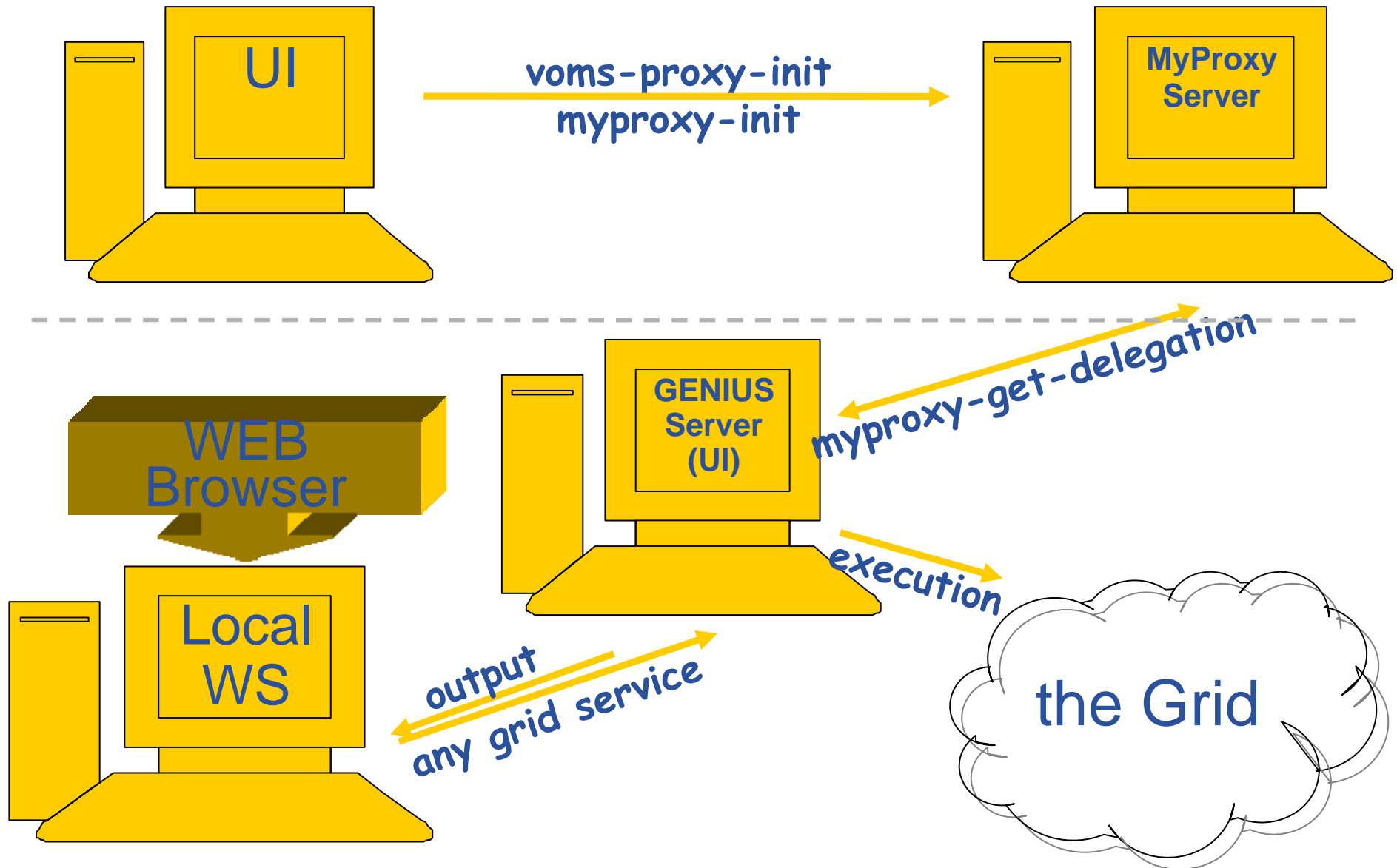
## Practical: MyProxy and GENIUS

[www.eu-egee.org](http://www.eu-egee.org)



- **You may need:**
  - To interact with a grid from many machines
    - And you realise that you must NOT, EVER leave your certificate where anyone can find and use it.... Its on a USB drive only.
  - To use a portal, and delegate to the portal the right to act on your behalf
  - To run jobs that might last longer than the lifetime of a short-lived proxy
  
- **Solution: you can store a long-lived proxy in a “MyProxy repository” and derive a proxy certificate when needed.**

# Grid authentication with MyProxy



```
myproxy-init - - voms gilda
```

- **Please do this command now**
- **Enter your certificate's passphrase and then a myproxy pass phrase (twice)... and remember it!!**

- In a browser go to <https://glite-tutor.ct.infn.it/>
- (When asked: Accept for this session only)
- Select “Set VO/VOMS” and confirm you are acting in the GILDA VO by “set”
- Enter your username and your MyProxy pass phrase
- Choose job service- job submission –single job
- Allow the resource broker to choose
- Submit the job

- **Can be tailored to suit a particular VO and its applications**
- **Allows Grid jobs to be run from any browser**
- **MyProxy enables this by issuing the portal server with a proxy on your behalf**
- **Many VOs members do not have time or inclination to code!**
  - Need to be provided with an easy interface
- **GENIUS is provided by the University of Catania and NICE**

# Has your job run?

- Choose “single job” then “job queue”
- If it has completed, retrieve the output file.
  
- You can return to this later.
  
- Anyone can use GENIUS via <https://grid-demo.ct.infn.it/>

Consists of a server and a set of client tools that can be used to delegate and retrieve credentials to and from a server.

## MyProxy Client commands:

- *myproxy-init*
- *myproxy-info*                      // `myproxy-info -s <host name> -d`
- *myproxy-destroy*
- *myproxy-get-delegation*         // `myproxy-get-delegation -s <host name> -d`  
   `-t <hours> -o <output file> -a <user proxy>`
- *myproxy-change-pass-phrase*

The ***myproxy-init*** command allows you to create and send a delegated proxy to a MyProxy server for later retrieval; in order to launch it you have to assure you're able to execute the `voms-proxy-init` command.

```
myproxy-init -s <host name> -t <hours> -d -n
```

The `myproxy-init` command stores a user proxy in the repository specified by `<host name>` (the `-s` option). Default lifetime of proxies retrieved from the repository will be set to `<hours>` (see `-t`) and no password authorization is permitted when fetching the proxy from the repository (the `-n` option). The proxy is stored under the same user-name as is your subject in your certificate (`-d`).



- **Keep your private key secure.**
- **Do not loan your certificate to anyone.**
- **Report to your local/regional contact if your certificate has been compromised.**
- **Do not launch a proxy for longer than your current task needs.**

**If your certificate or proxy is used by someone other than you, it cannot be proven that it was not you.**

- **MyProxy**
  - Secure storage of long-lived proxy certificates
  - Delegation so services can create and use a proxy on your behalf
    - E.g. portals
    - WMS: renewal of proxy when it is near expiry