

OSG Site Administrators Workshop

Installing and configuring gLExec

by

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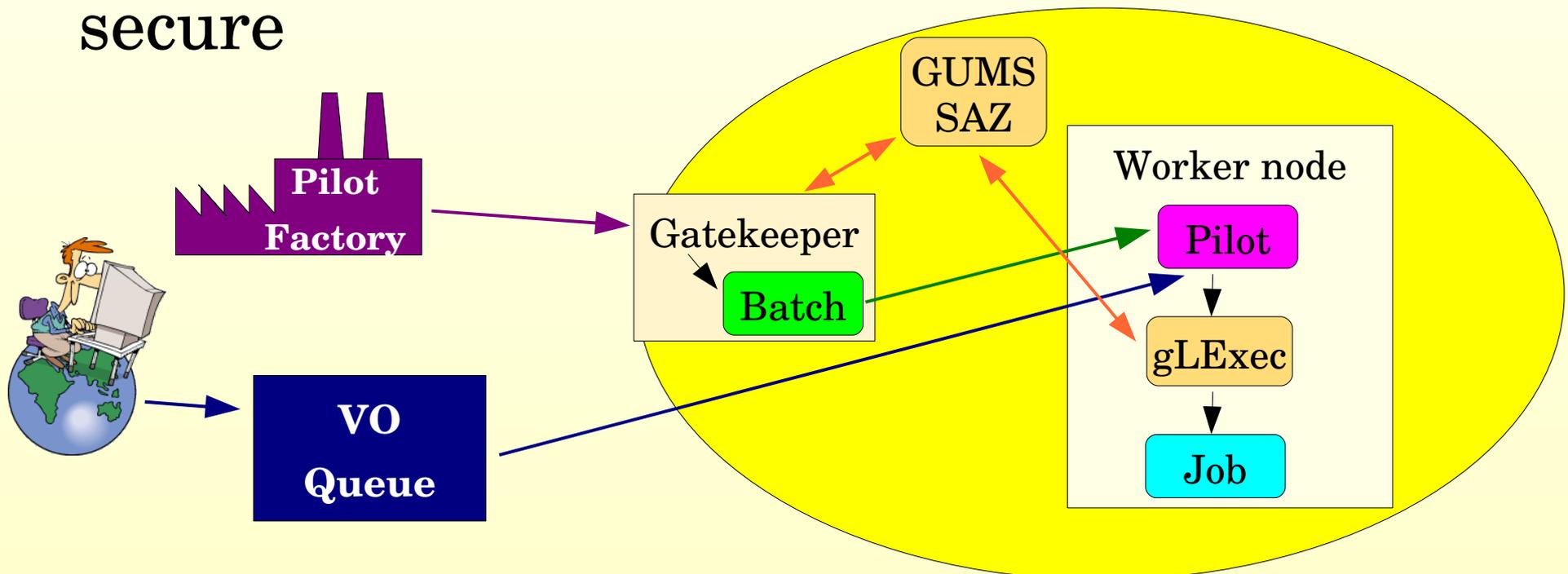
Igor Sfiligoi and Steven Timm

Outline

- What is gLExec
- What do you need before you install
- Where do you get it
- Post-install configuration
- How do you know it works
- Integration with Gratia

What is gLExec

- gLExec is a Grid-aware identity switching tool to be used on the Worker Nodes
- Helps keeping pilot workloads auditable and secure



gLExec requirements

- gLExec needs to be installed on **all the worker nodes**
- Current OSG-distributed gLExec will work only with GUMS
 - You will need a **host certificate** or an equivalent proxy on **all the worker nodes**
- Needs a “glexec” user for privilege separation

gLExec installation

- Distributed in VDT

- as of OSG 0.8

- Pacman cache

- http://vdt.cs.wisc.edu/vdt_181_cache:Glexec

- OSG installation page

- <https://twiki.grid.iu.edu/twiki/bin/view/ReleaseDocumentation/GlexecInstall>

Post-install configuration

- Only one file to change
`/etc/glexec/contrib/gums_interface/getmapping.cfg`
- Specify the GUMS location
`gums_url="https://gums.fnal.gov:8443/gums/services/GUMSAuthorizationServicePort"`
- May need to point to the correct host certificate and key files
`host_x509_file` and `host_key_file`

Testing the installation

- As a non privileged user
`export GLEXEC_CLIENT_CERT=your_proxy`
`<VDTDIR>/glexec-osg/sbin/glexec /usr/bin/id`
 - Should switch to the expected UID
- Log files are in
`/var/log/glexec/`

Integration with GRATIA

- gLExec logs contain accounting information
- GRATIA has a gLExec probe to extract this information
- GRATIA pacman repository
http://vdt.cs.wisc.edu/vdt_181_cache:Gratia-Glexec-Probe
(will install gLExec, too)

Conclusions

- Must be installed on all the worker nodes to be effective
- Requires a host certificate or an equivalent proxy on all the worker nodes
- Simple installation out of VDT
- Integrated with GRATIA