



Open Science Grid

OSG AHM15 Security Demo

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Outline

- Introduction/Test setup
- Configuring glxexec to not require host certificates
- Using gsiftp with ssh
- Introduction to Docker



Setup

- Since network connectivity at conferences is never guaranteed, I set up test cluster of VMs on my laptop.
- Using VirtualBox. New improvements this year include NatNetwork.
- Use dnsmasq to get working dhcp/dns integration. Easy to set up.
- Used XCA for my certificate authority.



Glexec without Certs Demo

- Well documented on the wiki at:
<https://twiki.grid.iu.edu/bin/view/Documentation/Release3/GlexecPilotCert>
- On worker nodes: remove cert options from lcms.db
- On gums server: duplicate hostToGroupMapping stanzas with dn= check in place of cn= check.

Gridftp Over SSH Demo

- Gridftp can be used over existing ssh connections.
- Useful if already authenticating via ssh keys.
- Requires user credentials on all systems.
- Enable 'globus-gridftp-sshftp' service to activate on each server.
- Use 'sshftp:' URLs with globus-url-copy.



Docker Demo

- Docker is a technology for packaging applications for distribution using containers.
- Containers provide more complete isolation than chroot jails.
- Docker uses layered filesystem images so base packages can be re-used.



Links

- <https://www.virtualbox.org/>
- <http://www.thekelleys.org.uk/dnsmasq/doc.html>
- <http://sourceforge.net/projects/xca/>
- <https://twiki.grid.iu.edu/bin/view/Documentation/Release3/GlexecPilotCert>
- <http://toolkit.globus.org/toolkit/docs/4.2/4.2.0/data/gridftp/admin/gridftp-admin-config-security.html>
- <https://www.docker.com/tryit/>



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Questions?
