MetaComputing

• What YOU need to do before hand

• Paths, security, install tests

Legion

• This is the easy one as it is all under local control

• But we need to know that you need a legion account so, email Brett ellis@cs.utk.edu and myself fagg@cs.utk.edu that you need an account. We will email you when we have added you.
Legion

• Once we have added you to the legion users

• Only on the torcs
  – source /usr/local/OPR/setup.csh
    • Or /usr/local/OPR/setup.sh
  – This will set your environment variables such as LEGION, LEGION_OPR and add legion binary directories to your search path

Legion

• To run/test legion

• On torc1 to 8
  – After setting up your path
    • legion_login /users/YOUR_USER_NAME
    • It will ask for your legion password
Legion

• To test
  – Make sure you are logged in
  • legion_whoami
    – This will verify who you are in legion space

• To see resources etc
  – legion_ls /hosts

• To run a simple job
  – legion_run
    » See the manual pages (I.e. man legion_run)

Globus

• Globus is not completely managed locally

  – To allow us to interact with other Globus (Grid) sites we use the Globus Certificate Authority (CA) located at ANL.

• This means you must request a certificate from THEM to be able to use OUR system.
Globus

• First
  – Ssh torc1
    • MUST BE SSH
• Second
  – Setenv GLOBUS_INSTALL_PATH /usr/local/globus-build
• Third
  – $GLOBUS_INSTALL_PATH/tools/i686-pc-linux-gnu/bin/grid-cert-request

This is what it looks like:
– A certificate request and private key is being created.
– torc0.cs.utk.edu> /usr/local/globus-build/tools/i686-pc-linux-gnu/bin/grid-cert-request
– A private key and a certificate request has been generated
– with the subject
– /O=Grid/O=Globus/OU=cs.utk.edu/CN=Graham Fagg
– If the CN=Graham Fagg is not appropriate, run this
– script with the -cn "Common Name" option.
– ----------------------------------------------------------
– Your private key is stored in /ptfe/homes/fagg/.globus/userkey.pem
– Your request is stored in /ptfe/homes/fagg/.globus/usercert_request.pem
– Please e-mail the certificate request to the Globus CA
– cat /ptfe/homes/fagg/.globus/usercert_request.pem | mail ca@globus.org
– Your certificate will be mailed to you within two working days.
Globus

• 4th
  – Run this command: cat 
  ~/.globus/usercert_request.pem | mail 
  ca@globus.org

• 5th
  – When they mail you back, you mail Brett 
  ellis@cs.utk.edu the certificate, and he add you 
  to our local Globus machine.

Globus

• Testing first the paths
  – On a torc
    • setenv GLOBUS_INSTALL_PATH 
      /usr/local/globus-build
    • source $GLOBUS_INSTALL_PATH/etc/globus-
      user-setup.csh
    • setenv SSL_PATH /usr/local/ssl
Globus

• Then
  – globus_setup_test
    • This will tell you that you are on a valid set of resources and that the install is correct

• To test your logging in
  – grid-proxy-init
    • This will ask for your PEM password
      – If this fails we need to get you a new certificate…. 