Service Challenge Meeting

Radiant Transfer Software

James Casey, IT-GD, CERN

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Overview

- Overall Architecture described in proposal from July
  - Currently we use some simple scripts
  - Move to gLite software when ready and of sufficient quality
    - Database schema and semantics are same, so data will be preserved/systems will be interoperable
- Kors wrote some notes on how to use the software
  - We will follow the process in these notes for user transfer submission
  - And talk about channel administration commands too

- All documents available from the web
  - http://cern.ch/service-radiant/documentation.html

Channels

- "Channel"
  - This is a named point-to-point connection in the database
  - We store metadata on the channel
    - Name
    - Source domain
    - Dest domain
    - Bandwidth
    - Contact Email
    - State – 'Active' or 'Inactive'
  - Transfers are allocated to channels by matching against source and dest domain
  - You can suspend transfers on a channel by setting state to 'inactive'
  - Users don't allocate to channels – it happens automatically

Software

- All software installed via RPM in /opt/lcg
- Contains CLI clients that talk direct to database.
- Installed on oplapro80.cern.ch
- Transfer damons uses third-party gridftp
  - Will use SRM-Copy
- Currently no Web GUI interface
  - Will be provided by gLite – alpha version available
  - Also gLite will provide WS based clients for remote job submission.
- No catalog integration yet
  - But is accounted for in the architecture

Initialization

- Get a grid proxy
    - > grid-proxy-init
- Setup MYPROXY_SERVER
    - > export MYPROXY_SERVER=oplapro80.cern.ch
- Check if you already have a proxy
    - > myproxy-info –d
- If not, create one; remember the passphrase
    - > myproxy-init -d

Submit a job

- Start a job, with your credentials
  - > lcg-move-start –pass <PASSPHRASE>
- Get the job-id on the CLI, and use it for submission
  - > lcg-move-submit –id <ID> -file <FILE_OF_TRANSFERS>
  - Transfers file contains sets of three lines:
    - SOURCE URL
    - DEST URL
    - TRANSFER PARAMS (not used)
- Check if the job is submitted
  - > lcg-move-job-ls –l –my
- To cancel a submitted or running job
  - > lcg-move-cancel –id <ID>

Work with Channels

- ## Check status of channels

  > lcg-move-channel-list –l

  ```
  #Chan : State  :     Last Active      :Bwidth:   From   :   To
  FNAL   :Inactive:Unknown              :10240 :cern.ch   :fnal.gov
  NL     :Inactive:Unknown              :1024  :cern.ch   :sara.nl
  BNL    :Inactive:Unknown              :622   :cern.ch   :bnl.gov
  NIKHEF:Active   :04/12/02 10:08:15 :1024  :cern.ch   :nikhef.nl
  IN2P3 :Active   :04/12/02 09:28:47 :1024  :cern.ch   :in2p3.fr
  ```

- ## Activate a channel

  > lcg-move-channel-update –a –c NIKHEF

- ## Deactivate a channel

  > lcg-move-channel-update –i –c NIKHEF

Running a daemon

- This should be done as the 'radiant' user on oplapro80

  > export LCG_MOVE_BIN="/opt/globus/bin/globus-url-copy -p 2 -tcp-bs 10240000 -bs 40960000"

  > /opt/lcg/sbin/daemon-process-pending-jobs -run 2 -c NIKHEF -v >& /var/log/radiant/radiant-NIKHEF.log &

  > tail -f /var/log/radiant/radiant-NIKHEF.log

- This will be automated via rc.d scripts in the next release