Monitoring file transfers

Ron Trompert

SARA

Monitoring file transfers

FTS statistics 01-07-2006 – 31-12-2006:

aborted	14
completed	44868
failed	225574

1237 failed transfers per day

Monitoring file transfers

getRequestStatus timed out on get	14342
getRequestStatus timed out on put	11957
Error reading token data	64307
Could not open connection	8232
Service timeout	5214
Pnfs request timed out	2570
Connection timed out	21
No such file or directory	8111
File exists	40034
Permission denied	2807
can't open data connection	13208
Could not find mapping for …	1375

Monitoring file transfers

Observations

- **File exists**
  - Systems like dCache don't allow files to be overwritten -> the software works as designed so this error is avoidable
  - However, this can be due to a previous failed transfer and srmAdvisoryDelete's don't always work

- **getRequestStatus timed out on get**
  - Occurs often when file is on tape and staging the file on disk takes too long
  - Not really an error, just lack of available resources

Monitoring file transfers

How to turn this into a reliable service?

Monitoring

- Monitoring all the logs (pools, gridftp servers, srm's) on all nodes is not easy due to volume and size and the wide variety of error messages and you have to know what to look for

- File transfers involves two sites and site admins can only look on one end of the line

- Generally you don't get the information the user gets. You only get this kind of information from your own FTS' oracle db.

- Central logging facility for the FTS?

  - Info in FTS oracle db inserted into rgma?

- How about the non-FTS-based transfers?