

GGGG

Enabling Grids for E-sciencE

TPM hands-on tutorial

Goncalo Borges (goncalo @lip.pt)

LIP: Laboratório de Instrumentação e Física Experimental de Partículas, Lisboa, Portugal

Gkamas Vasileios (vgkamas@cti.gr)

Research Academic Computer Technology Institute, Rio, Patras, Greece

TPM Training, 10th -11th November 2008, SARA, Amsterdam

http://indico.cern.ch/conferenceDisplay.py?confld=41895

www.eu-egee.org





Outline



Paradigm of real tickets

- Examples for future reference
 - Some TPM procedures
 - Helping users
 - Helping site admins
 - Opening Savannah tickets
 - Setting Parent / Child ticket relations
- Ticket assignments examples
 - ROCs
 - Middleware SU
 - Monitoring tools SU
 - VO Support
 - Network SU
- Other type of problems

Hands-on

YOU will handle real GGUS tickets ("on the fly")



TPM – Helping a user (I)

Enabling Grids for E-sciencE

- Ticket #26533
 - User "description":
 - I'm trying to create a dteam proxy on my UI, and I get this error: Error: Could not establish authenticated connection with the server.

GSS Major Status: Authentication Failed GSS Minor Status Error Chain: an unknown error occurred

- TPM asks:
 - Can you post the output of the following commands?

```
# rpm -qa | grep lcg-CA
```

- # openssl x509 -text -noout -in /etc/grid-security/vomsdir/lcgvoms.cern.ch.2007-05-07 | grep -A 3 Validity
- Can you check that the CRL's are updated in your ui
 # /etc/cron.d/fetch-crl
- Solution:
 - CRIs needed to be updated.



TPM - Helping a user (II)

Enabling Grids for E-sciencE

Ticket #30059

- User "description":
 - Can't perform an lcg-cp after issuing a "voms-proxy-init –voms imath.cesga.es" followed by a "myproxy-get-delegation"

– TPM asks:

- Run the following sequence of commands and send us the output:
 # voms-proxy-init –voms imath.cesga.es; voms-proxy-info --all
 # myproxy-get-delegation; voms-proxy-info –all
- Origin of the problem and possible solution:
 - The command "myproxy-init" overwrites the voms credentials generated by the "voms-proxy-init -voms <VO>" command
 - If you sent your jobs via WMS, the proxy_renewal mechanism will allow you to properly renew voms proxies...
 - Another solution is to run "voms-proxy-init -noregen --voms imath.cesga.es" after the "myproxy-get-delegation"



TPM – Helping a user (III)

Enabling Grids for E-sciencE

Ticket #10470

- User "description":
 - I have a problem removing a LFN from a local LFC when one of the replicas is not accessible
- TPM answer:
 - Run "lcg-uf (unregister file)" command...

Ticket #34423

- User "description":
 - If the group dpmmgr doesn't exist on the SE and dpmmgr belongs to another group, the service srmv1 can not be started.
- TPM reply:
 - It is so by design. Please have a look at:

https://twiki.cern.ch/twiki/bin/view/LCG/DpmAdminGuide#Create_the_DPMMGR_User



TPM – Helping a user (IV)

- Ticket #36952
 - User "description"
 - TPM reply
 - You are effectively not registered in Dteam VO, but maybe the registration procedure is not complete.
 - TPM explains all the registration procedure
 - Problem origin
 - User VO membership was expired. After re-signing the VO rules everything started to work again.



TPM – Helping site admins (I)

Enabling Grids for E-sciencE

Ticket #10097

- Site Admin description:
 - one user not being able to renew proxy from myproxy
- TPM reply:
 - Add 'authorized_retrievers "/C=CH/O=CERN/OU=GRID/*" to your myproxy-server.config file.

Ticket #17442

- Site Admin description:
 - All jobs from our user X are aborted with the error message "Job proxy is expired" although the user's proxy is valid.
- TPM asks:
 - Try submitting to different RB/CE to see if the problem is in the certificate. Are there any user expired proxies in /opt/edg/var/spool/edg-wl-renewd/?
- Solution:
 - A "zombie" process of user X was running with the cert expired. After killing it, user X can use our RB without proxy problems.



TPM – Helping site admins (II)

Enabling Grids for E-sciencE

Ticket #35423

- Site Admin description:
 - After migrating our CE to gLite 3.1, the RB rejects all jobs with the error:
 Error (1413) certificate verify failed) with the user proxy
- TPM reaction:
 - Realizes problems with the CE GIIS and provides the support for its configuration

Ticket #22016

- Site Admin description:
 - I want to implement a new scheme of UIDs pool accounts. I want to reallocate SIXT VO accounts to another VO. What is the best way to do this in order not to corrupt the DB in DPM/LFC?
- TPM answer:
 - DPM/LFC keeps their own DB of DNs->Internal UIDs independent of the users.conf mappings. Delete the storage path entry "dpns-rmdir /dpm/DOMAIN/home/sixt". If there are any files in here, you will have to first delete them with rfrm.



TPM – Link Savannah Issue

- Ticket #33094
 - User complain
 - The man pages for DPM and LFC are incorrectly formatted so they word-wrap too soon on standard consoles (see below). This makes them hard to read. Could this please be fixed?
 - TPM actions
 - Leaves the ticket assigned to TPM
 - Two Savannah bugs were opened since these enhancement involves code change
 - https://savannah.cern.ch/bugs/index.php?33692
 https://savannah.cern.ch/bugs/index.php?33693
 - The Savannah bugs are market as related issued of the GGUS ticket
 - The GGUS ticket is marked with status "unsolved"



TPM – Parent/Child Tickets

- Ticket # 30658
 - Issue:
 - A user was banned in several sites because of trust issues. He is asking if sites are willing to accept his jobs again
 - After going through several support units, it is decided that from the security point of view, there are no major issues.
 - It is up to the sites to decide if the user may run his jobs there or not
 - Ticket is reassigned to TPM
 - TPM marks the original ticket has parent
 - Opens several child tickets to the different sites from where the user was banned
 - The parent ticket can only be closed after ALL the child tickets are solved.



ROCs related problems (I)

Enabling Grids for E-sciencE

Ticket #41766

- Description: Transfers to PRAGUELCG2 fail
 - The transfers of ccrc08 data from FZK to PRAGUE fail since tonight.
 The FTS error is:

[FTS] FTS State [Failed] FTS Retries [1] Reason [TRANSFER error during TRANSFER phase: [GRIDFTP] the server sent an error response: 426 426 Transfer aborted (Unexpected Exception: java.net.ConnectException: Connection timed out)] Source Host [gridka-dcache.fzk.de]

- TPM action:

- Assigns ticket to ROC_CE
 - Consult GOCDB to know to which federation does the site belong
- Probably the other FTS end should be involved as the ticket evolves.



ROCs related problems (II)

Enabling Grids for E-sciencE

- Ticket # 42820
 - Description: Most of transfers CERN to LYON fail
 - The error started as:

[FTS] FTS State [Failed] FTS Retries [1] Reason [TRANSFER error during TRANSFER phase: [GRIDFTP] an end-of-file was reached (possibly the destination disk is full)] Source Host [srm-atlas.cern.ch]

By the end of the afternoon:

ERROR MSG: [FTS] FTS State [Failed] FTS Retries [1] Reason [DESTINATION error during PREPARATION phase: [USER] failed to contact on remote SRM [httpg://ccsrm.in2p3.fr:8443/srm/managerv2]. Givin' up after 3 tries

O

- TPM action:
 - Assigns ticket to ROC_France
 - Consult GOCDB to know to which site does the node belongs
 - Because of the first error, it would also be good to involve the first party (CERN)



ROCs related problems (III)

Enabling Grids for E-sciencE

Ticket #42770

- Description: SRMv2 failure on dcache-server.tier2-kol.res.in
 - *SRMv2-gt* is failing on dcache-server.tier2-kol.res.in (site: IN-DAE-VECC-02)
 - Failure detected on: 2008-10-15T06:44:20Z (UTC)
 - Test executed for VO: OPS
 - View failure history and details on SAM portal:

https://lcg-sam.cern.ch:8443/sam/sam.py?funct=ShowHistory& sensors=SRMv2&vo=OPS&nodename=dcache-server.tier2-kol.res.in

- TPM action
 - Assigns ticket to ROC_Asia/Pacific



ROCs related problems (IV)

Enabling Grids for E-science

Ticket #42755

- Description: RGMA failure on grid-mon.ics.forth.gr
 - *RGMA-host-cert-valid* is failing on grid-mon.ics.forth.gr (site: GR-04-FORTH-ICS)
 - Failure detected on: 2008-10-20T19:14:58Z (UTC)
 - Test executed for VO: OPS
 - View failure history and details on SAM portal:

https://lcg-sam.cern.ch:8443/sam/sam.py?funct=ShowHistory& sensors=RGMA&vo=OPS&nodename=grid-mon.ics.forth.gr

- TPM action
 - Ticket assignment to ROC_SE



M/W related problems (I)

- Ticket #34099
 - Description: DPM 1.6.7: rfrm timeouts
 - When trying to delete DPM directories by running DPM rfrm on DPM head node, I got several times this error message (for different files): unlink(/dpm/lal.in2p3.fr/home/cms/trivcat/store/PhEDEx_LoadTest0 7/LoadTest07_Debug_IN2P3/GRIF_LAL/10/LoadTest07_IN2P3_21_Q YXqsYeHXIVBhuSM_10): Timed out
 - The server is pretty loaded as CMS is doing a throughput test with an average of 80 MB/s transferred! The command line used was # rfrm -r /dpm/lal.in2p3.fr/home/cms/trivcat/store/
 PhEDEx_LoadTest07/LoadTest07_Debug_IN2P3/GRIF_LAL/10
 - TPM action
 - If you know which logs to look, ask for them...
 - Keep in mind that this is the DPM site admin asking for help...
 - Doesn't make sense to assign this ticket to ROC
 - Ticket assigned to DPM SU.



M/W related problems (II)

Enabling Grids for E-sciencE

Ticket #40314

- Description: WMS timeouts when contacting top-level bdii
 - Sometimes our WMS does not return any results for match making.
 This is probably caused by a timeout described by this log line:

01 Sep, 15:32:16 -W: [Warning] fetch_bdii_ce_info(ldap-utils.cpp:628): Timed out

 Is it possible to increase the mentioned timeout? I have checked http://trinity.datamat.it/projects/EGEE/wiki/wiki.php?n=GliteWms.Conf but with no success

TPM action

- If you know the answer give it...
- If you have a way to check the configuration (comparing with your local config) you should do it
- Ticket assigned to gLite Workload SU



M/W related problems (III)

Enabling Grids for E-sciencE

Ticket #39302

- Description: dCache SRM DB corruption
 - I am transferring files between PIC and IN2P3 and I see a percentage of our transfers failing with:

DESTINATION error during PREPARATION phase:
[GENERAL_FAILURE] at Wed Jul 30 16:08:04 CEST 2008 state Failed:
Marking Space as Being Used failed =>Already have 1 record(s) with pnfsPath=/pnfs/pic.es/data/lhcb/CCRC08/DST/lhcb/test/replication-studies/small-files/5199.file

It seems files do not exist in the nameserver (output of lcg-ls –l <file>)

/pnfs/pic.es/data/lhcb/CCRC08/DST/lhcb/test/replication-studies/small-files/5199.file: could not get storage info by path:
CacheException(rc=10001;msg=path
///pnfs/pic.es/data/lhcb/CCRC08/DST/lhcb/test/replication-studies/small-files/5199.file not found): File with this symptom terminally fail suggesting a corrupted entry in the dCache SRM DB.

TPM action

- This ticket should have been assigned first to the ROC_SW. If site admins do not know how to handle the problem then assign ticket to dCache experts
- Ticket assigned to dCache SU

Monitoring tools related problems

- Ticket #42738
 - Description: access to SAM PI from our Nagios tutorial host
 - We require access under the "WLCG Grid Services Monitoring Profile" for the SAM PI for our nagios host: node59.datagrid.cea.fr
 - The frequence should be one hour for all GRIF sub-sites.
 - For data ranges only the latest tests results are of interest.
 - TPM action
 - Ticket assigned to SAM/SFT SU



Monitoring tools related problems

Enabling Grids for E-sciencE

Ticket #38891

- Description: gstat should display info about CREAM CEs
 - We have got two cream CEs published in the PPS BDII (pps-bdii.cern.ch): cert-ce-03.cnaf.infn.it and pps-cream-fzk.gridka.de.
 - They are detected by gstat (PPS) but a warning is produced

http://goc.grid.sinica.edu.tw/gstat/FZK-PPS/

GIIS Sanity Check: warn Invalid Attribute Syntax:

IN: 'dn: GlueCEUniqueID=pps-cream-fzk.gridka.de:8443/cream-pbs-pps,Mds-Vo-name=FZK-PPS,o=grid'

Searched: 'GlueCEUniqueID: .+:2119/.*' ()

Found: GlueCEUniqueID: pps-cream-fzk.gridka.de:8443/cream-pbs-pps

To test site GIIS:: Idapsearch -x -H Idap://pps-giis-fzk.gridka.de:2170 -b mds-vo-name=FZK-PPS,o=grid

I think there is a bit of configuration needed in gstat to handle the cream CEs

- TPM Action
 - Assign ticket to GStat SU



Monitoring tools related problems

Enabling Grids for E-sciencE

Ticket #42070

- Description: add Thailand to GOCDB country list
 - We (AP) have a new site from Thailand and want to register into GOCDB. Could you please help add Thailand to GOCDB country list.
- TPM action
 - Ticket assigned to GOC DB SU

Ticket #42825

- Description: Gridview not showing information from TRIUMF FTS.
 - Gridview is not showing information from TRIUMF FTM service since October 18.
 - TRIUMF FTM server is showing healthy information according to http://ftm.triumf.ca/transfer-monitor-report/.
 - Looking at other Tier-1 sites, for instance PIC, IN2P3 and FZK, the same issue is observed.
- TPM action
 - Ticket assigned to GridView SU

VO Support related problems

(I)

Enabling Grids for E-sciencE

Ticket #41082

- Description: LHCB users again filling up the /home
 - I have a user (a different one) filling up all the areas it lands to:

```
-rw-r--r-- 1 Ihcb032 Ihcb 297K Sep 18 08:34 myjob.err
-rw-r--r-- 1 Ihcb032 Ihcb 47G Sep 18 12:14 myjob.out
-rw-r--r-- 1 Ihcb032 Ihcb 465K Sep 18 12:14 minin_123.log
```

- This is happening consistently with all his jobs. Until when I am notified by the VO manager the user has been stopped, I am forced to close the Ihcb queue.
- One of the jobs, for reference, is

https_3a_2f_2flb007.cnaf.infn.it_3a9000_2fB3sIhIPoecnA2UbR3PS-Ag

- TPM action
 - Ticket assigned to VOSupport SU



VO Support related problems

Enabling Grids for E-sciencE

Ticket #38423

- Description: some lhcb production jobs are failing at our site
 - I need to contact someone from LHCB's VO support concerning its production running at our site DESY-ZN. Some of those jobs seem to fail here. One example:

http://lhcb.pic.es/cgi-bin/DIRAC/Monitoring/jobdetails.py? jobid=2022932&mode=production

- It looks like all jobs on all our freshly installed systems fail whereas the ones running on systems already longer in use, run fine.
- All systems are setup equally and pass SAM test. Can someone provide the real error message telling why e.g. the above mentioned job failed?
- TPM action
 - Assign ticket to VOSupport SU



Network related problems

Enabling Grids for E-sciencE

Ticket #38863

- Description: no traffic between PIC and BNL
 - Data does not flow between PIC and BNL and viceversa. Network again?
- TPM action:
 - Ticket assigned to NetworkOperations SU

Ticket #17238

- Description: NREN SWITCH has a network maintenance located in CH / CERN-GEANT2
 - NREN SWITCH has a network maintenance from 2007-01-11 10:00:00 UTC to 2007-01-11 15:00:00 UTC in CH / CERN-GEANT2.
 - The router providing CERN access to the Geant2 network will be under maintenance. Trafic should be re-routed via backup path but some instabilities could be noticed.
 - LHCOPN T0-T1 traffic to SARA, NDGF, PIC will be affected.
- TPM action
 - Ticket assigned to NetworkOperations SU



Other type of problems (I)

Enabling Grids for E-sciencE

Ticket #20201

- Description: voms-proxy-init man page is inaccurate
 - The man page for voms-proxy-init is outdated and needs revising.
 - In particular, it states (in "-vomses" section) that the "default filenames are \$PREFIX/etc/vomses and \$HOME/.edg/vomses."
 - Both are now wrong. The defaults are currently (glite-security-voms-clients-1.6.16-2) \$PREFIX/glite/etc/vomeses and \$HOME/.glite/vomses.
 - Also, the man pages delivered with the RPM should not refer to \$PREFIX, but rather "/opt" as the RPM has been built with PREFIX=/opt.

TPM action

- Ticket assigned to VOMS SU
 - Probably a savannah ticket could be open and related to this GGUS ticket



Other type of problems (II)

- Ticket #40763
 - Description: ETICS build doesn't create all rpms
 - I'm trying to build APEL to make a release, but when I trigger the remote build through the etics web interface, only 4 out of the 6 rpms that should have been created appear in the permanent repository.
 - However, when I build it locally with the etics command line client, the 6 rpms are created. Is there a reason why this happens?
 - TPM action
 - Assign ticket to ETICS Infrastructure SU



Other type of problems (III)

Enabling Grids for E-science

- Ticket #41538
 - Description: glite-WN packages in glite 3.1 repository
 - There are no glite-WN metapackages in the repository at http://glitesoft.cern.ch/EGEE/gLite/R3.1/generic/sI4/i386/RPMS.updates/.
 - However, for other node types (AMGA, BDII, FTS, LFC, VOMS, SE_dpm, UI, VOMS) the metapackages are present in this location.
 The glite-WN packages are (only) present in the repository

http://glitesoft.cern.ch/EGEE/gLite/R3.1/glite-WN/sI4/i386/RPMS.updates/

- Is there a particular reason to keep the glite-WN only in this repository? If so, was this documented and announced?
- TPM action
 - Assign ticket to Installation and Configuration/New Release SU