



Enabling Grids for E-sciencE

Pole 3 : COD Tools Parallel session

Cyril L'Orphelin COD 16 CCIN2P3, Lyon 18 th Jun 2008

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eeee.

Failover of Grid Ops Tool

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- Failover mechanisms for GSTAT, SAMAP, CIC and GOC should be achieved quickly
 - CIC: the copy of database in CNAF is not enough, currently we need a downtime to do the recovery of data.
 - No real critical services into read only mode (maybe we can add statistics about % of read and write requests)
 - Automatic failover with a read-only copy in CNAF
 - Frequency of refresh of data?
 - Automatic mechanism with nagios (to change DNS)
 - Automatic synchronization of Lavoisier and Web part.
 - GSTAT
 - Done (automatic failover on going)
 - SAMAP
 - Done (automatic failover on going)
 - SAM
 - 2 interfaces of submission
 - 3 RB
 - Problem with certification update, several instances to update
 - Future model with bus messaging => avoid a single point of failure



GOCDB failover

Phone meeting: Alessandro, Christian (ITWM), Gilles, Osman

Tested ITWM GOCDB web with CNAF DB:

- The web gives a blank page, error message in the logs
- Reason: only data replicated, Oracle procedures are not replicated
- ACTION (GM, AC): share the same Oracle account used by MAIN GOCDB, and replicate all through this account

ITWM Web update policy:

- yum update with RAL server (daily)
- Worked pretty well for last year

Failover scenario:

- When/how/what to switch
- LDAP DB connection method:
 - provides the possibility to instruct the GOCDB customers to use Master or Replica DB
 - LDAP has master/slave feature for failover.
- ACTION (GM): check if LDAP server can be installed at RAL (with backup on another site)
- ACTION (GM): Introduce a flag to mark MAIN and BACKUP webs. Needed to identify that MAIN is Read-Write, and BACKUP is Read-Only on DB. Verify that configuration files are tagged properly in RPM, to avoid also this flag to be overwritten.
- ACTION (AC): list all the use-cases: now, with just TNSNAMES.ORA, and future with LDAP
- ACTION (AC, OA): investigate on GOCDB-DISCUSS what are the connection method used by all the GOCDB customers: JDBC, ADODB, etc.

Frequency of GOCDB update

- ACTION (GM): provide the metric: how many times x day is it updated (written) GOCDB?
- CNAF DB is only 9 MB. If it's really so, it can be refreshed more than daily, probably very frequently

Failover of core Services.



- Top-BDII: there are some developments around failover at the level of clients. Finally Top-BDII name should be extracted from information system
- Another Suggestion : distribution of Top-BDII among different sites . Monitoring by Nagios which updates the DNS .
- VOMS servers : already in place , we need some details on this replication .
- LFC: replication with project 3-D
- We will study between France and Spain what could be the core services "replicated" and how.
- Propose and study also solutions of failover at the site level (clustering, virtual machines...).

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CIC portal integration

Objectives :

- Short terms :
 - Evolution towards N regional instances + 1 specifically dedicated for C-COD. Incl Alarm weighing mechanism.
- Medium terms :
 - Study the merge of GOC DB and CIC portal via a common interface
- For EGI :
 - Deliver a package of a "light CIC Portal " for region
 - Deliver a package of services (OAT presentation)
- From discussion with COD people :
 - Add the possibility to open ticket against Grid Ops Tool into dashboard
 - Add a link into handover log to GGUS metrics and also a template.
 - Modify the default template of tickets to specify a place to put error message.



Integration of tools into EGI

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Immediate Actions:

- Propose another questionnaire to ROC, to know which tools they will used, which they will operate, what constraints they will have (example: Oracle license).
- Study what structure will be used:
 - Central repository with local caches
 - Local repository with local caches ...

- From the discussion with SAM
 - SAM gRB sensor (savannah 32100) on going with SAM
 - SAM MyProxy sensor (savannah 32615) on going with SAM
 - SAM interface to show historical SAM results (savannah 6665) SAM will provide only the schema of the database / Are we suppose to develop our own interface ?
- Identified Issues
 - Core services failures
 - developers OAT does not intend to deal with requests to JRA, they probably need to be done in "one-to-one" manner.



Global info for pole 3

- Update the Actions list
 - https://twiki.cern.ch/twiki/bin/view/EGEE/COD_EGEE_III
- Update the different description of sub group :
 - https://twiki.cern.ch/twiki/bin/view/EGEE/Pole_3

Organization

- 1 coordinator
- 1 responsible for failover => Alessandro (also backup for coordination)
- 1 responsible for TIC => Malgorzata ?
- Integration of tools into EGI => one representative per tool
- Creation of mailing lists? One per pole?