



Projet LCG-France – Coordination technique T2-T3

Compte-rendu de Réunion

31 Août 2006 – 14h00-15h30

Présents :

- Khalil Chawoski [KC] - Subatech
- Jean-Claude Chevaleyre [JCC] – T2 : LPC Clermont
- Frédérique Chollet [FC] – Coord. Technique T2-T3
- Sabine Elles [SE] – LAPP
- Eric Fede [EF] – LAPP
- Fabio Hernandez [FH] – Responsable Technique LCG-France
- Stéphane Jézéquel [SJ] – LAPP - ATLAS
- Michel Jouvin [MJ] – T2 : GRIF
- Edith Knoops [EK] – CPPM
- Christine Leroy [CL] – DAPNIA
- Emmanuel Medernach [EM] – LPC Clermont
- Pierrick Micout [PM] - DAPNIA
- Nadine Neyroud [NN] – T3 : LAPP
- Lionel Schwarz [LS] – CCIN2P3
- Igor Semeniouk [IS] – LLR
- Diego Terront [DT] - LPNHE
- I.Ueda [IU] – T2: Tokyo

Excusés :

- Chris Bee, Thierry Mouthuy - CPPM
- Artem Trunov – CCIN2P3

Lieu : Visio – Téléconférence

Numéro à appeler :

IP : 193.48.95.69

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Le titre de la conférence est "LCG-France T2T3 (juillet)" et son identifiant numérique (pour la connexion téléphonique) est '10581'. Ne pas oublier de composer '#' après l'identifiant. Le mot de passe à 4 chiffres (PIN) sera communiqué par e-mail sur la liste de diffusion LCGFR-TECH.

Président : FC

Secrétaire : FC

Agenda : <http://lappagenda.in2p3.fr/cdsagenda/fullAgenda.php?ida=a061158>

Résumé des actions à réaliser / affaires à suivre :

- *Follow-up of network asymetry problem for Saclay and Tokyo : (FH) Contact CCIN2P3 experts and see if new tests could be planned between Lyon and Tokyo with dcache running on Solaris.*
- *Round of T1-T2 transfers foreseen between 11th and 15th of September*



- *Investigate limitation in transfer rates toward all the T2s*
- *Network bandwidth requirements (LCG Management Board) : FH will extract the relevant information for the LCG-France sites . to be addressed during next meeting.*
- *FC : establish contact with LHCb, Alice, CMS*

Début de réunion : 1400

1. Follow-up of previous minutes/ Approbation des minutes de la réunion précédentes

Minutes of last meeting (thanks to Eric Fede) are available on the agenda page and approved.

<http://lappagenda.in2p3.fr/cdsagenda/fullAgenda.php?ida=a06115>

Please check the list of attendees !

Vous êtes chaque fois invités à vérifier la liste des participants.

2. Tier-2 and Tier-3 sites tour

GRIF - Saclay [PM] évoque la livraison de 23 machines bi-opteron supplémentaires et l'ajout de 2 serveurs de disques. [PM] signale également que le problème de connectivité réseau n'est pas résolu. Sur le site de Saclay, la politique de sécurité réseau a été totalement revue pendant l'été. A l'issue de ces importantes modifications, il subsiste un problème d'asymétrie dans le sens Lyon-Saclay.

Tokyo [IU] Follow-up of the observed network throughput asymmetry between Lyon and Tokyo. Independent test nodes with kernel 2.6 both at Lyon and at Tokyo have been used by Laurent Caillat and H.Matsumoto to perform new tests. The measured transfer rate **with Linux kernel 2.6** on test nodes at both Lyon and Tokyo has shown **it is possible to reach reasonable transfer rate even with the congestion in the link between Lyon and Tokyo.**

So, upgrading the machines doing the data transfer to a newer version of the Linux kernel could significantly improve the situation, due to the improved algorithms of congestion control included in it.

[FH] The upgrade to a RedHat 4 compatible version is already planned for the dCache machines: this should be done before the end of the year. The installation of dCache here at CC-IN2P3 now includes also a machine running Solaris. This machine could be used to perform the new series of tests. FH will contact experts to see if it is possible to schedule these tests. We will be kept informed of the results.

Tokyo has performed tests with Taipei T1 during 4 days achieving 45 MB/s.

GRIF - LPNHE [DT] pas de gros changements durant l'été hormis l'installation d'une UI



CPPM [EK] le site du CPPM dispose désormais d'un SE SRM de 275 Go tournant DPM. Il s'agit de sedpm.mrs.grid.cnrs.fr (Vos supportées : dteam, atlas et lhcb). Les informations permettant la définition des canaux FTS ont été renseignées dans le wiki http://lcg2.in2p3.fr/wiki/index.php/T2T3:2006Q2:Tests_T1-T2T3
Une première série de tests a été réalisée début août et a permis d'observer un débit de 256 Mb/s dans le sens Lyon – Marseille.

Subatech [KC] Une VObox gLite 3.0 est opérationnelle pour Alice. L'IOS du routeur CISCO devrait être mis à jour dans les prochains jours afin de résoudre le problème réseau.

LAPP STORM installation has been performed. [EF] a effectué une installation de STORM, l'implémentation d'un serveur SRM développé par l'INFN pour tourner au dessus au dessus de systèmes GPFS ou bien POSIX ACL.

Voir les sites :

<http://grid-it.cnaf.infn.it/storm/>

<http://www.egrid.it/sw/storm>

Pour le moment, la version disponible s'installe correctement mais ressemble à une version beta. Il n'existe pas de documentation. Toutes les fonctionnalités SRM ne sont pas disponibles.

LPC Clermont [JCC] no more interventions scheduled.

3. On-going tests and foreseen activities

ATLAS news by Stéphane Jezequel : See slides in the agenda.

[SJ] shows results of simultaneous transfers from Lyon to 7 T2s performed on the 27th of July. This has been quote within ATLAS as a successful early initiative.

[IU] We do not seem to reach the transfer rate achieved in one-to-one transfers when transfers are done toward all the T2s at the same time (total transfer rate was about 25MB/s - 4 MB/s (in average to each T2). For example, Lyon-Tokyo achieved 20 MB/s when the transfers were done only to Tokyo. This should be investigated.

Tier-0 to Tiers-1 transfers will go on but Tier-1 to Tiers-2 transfers will be performed by region : Lyonregion, PICregion, FZKregion...

See : http://lcg2.in2p3.fr/wiki/index.php/Atlas:SC4#Information_from_DDM_monitoring

In addition to incoming and outgoing channels from Tier1 to its associated Tier2s, ATLAS has requested a new channel *-IN2P3 to handle all data transfers from anywhere to Lyon and not strictly following the hierarchical topology.

[MJ] assumes that specific channels explicitly defined between Lyon and a Tier-2 will be used first.

Round of T1-T2 transfers is foreseen between 11th and 15th of September. In Lyonregion, transfers will be triggered by Ghita or Stéphane.

Exercise of distributed production will be organised and new activity of distributed analysis is starting.



Data access for analysis requires direct access to files stored in SRM SEs from Athena jobs. Direct access to dcache with root 5.10.0.d (but not with e which was used previously in ATLAS) is working in Lyon but there is no known solution for direct access to DPM SE.

[MJ] For now, rfio client library are not the same in dcache and dpm implementations. To enable root access thru SRM, we need rfio client library compatible with both dcache and dpm. This should come (may be by the end of September)

[FH] During the Management Board meeting on 22/08/2006, the status of the issue regarding incompatibility between RFIO for Castor and DPM was reported. It is a similar problem. There is a presentation attached to the agenda and a summary in the meeting minutes: <http://agenda.cern.ch/fullAgenda.php?ida=a063098>

4. LCG news

Matters arising from LCG Management board

Network bandwidth requirements : LCG Management board has started to collect the network bandwidth necessary for a full year of data taking for exchanging data between T1 and T2s. [FH] will extract relevant information for LCG-France. Topic will be addressed in next meeting. Very first conclusion : observed throughput to Tier-2 is roughly sufficient but 280 MB/s out of Lyon will required the upgrade of the two Gigabit links.

Sites Reliability : it concerns Tiers-1 for now. Sites availability and reliability are computed from SAM (Service Availability Monitoring) data. Reports and information concerning SAM are available from the following page :

<https://twiki.cern.ch/twiki/bin/view/LCG/SamReports>

For now, Tier-1 availability is around 70 % (target > 90 %).

The next GDB meeting will be held at BNL on Sep. 4th and 5th:

<http://agenda.cern.ch/fullAgenda.php?ida=a057709>

The next "LHCC Comprehensive Review of LCG" will be held at CERN on September 25th and 26th. Agenda:

<http://agenda.cern.ch/fullAgenda.php?ida=a057132>

5. AOB

[FC] recalls NEC meeting on the 14th of september in Angers. Practical details will be sent on LCGFR-TECH mailing list. If you would like to attend, please let us know by sending an e-mail to Fabio or Frédérique.

Face-to-face meeting will be held during the JI06 in Lyon (Valpré) late in the afternoon. Visioconference will be as well organised.

[FC] It is important to work as well with LHCB, Alice and CMS. Claude Charlot, Yves Schultz has been already contacted. Something will be organised soon. Note that Artem Trunov artem.trunov@cc.in2p3.fr is involved in Alice support and may help to install and configure Alice Vobox.

Fin de réunion : 15h30

