LCG-France Tier-1 & AF

Réunion de Coordination

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Lyon, 3 avril 2008

Table des Matières

- Réunions CCRC, GDB et MB de mars et avril 2008
- Disponibilité, fiabilité, efficacité du site
- Chantiers en cours
- Thème du jour

GDBs & MBs

- Agendas:
  - GDB: http://indico.cern.ch/categoryDisplay.py?categId=3l181
  - MB: http://indico.cern.ch/categoryDisplay.py?categId=666
  - CCRC: http://indico.cern.ch/categoryDisplay.py?categId=1613
- Principaux sujets traités
  - CCRC
  - Monitoring (y compris NAGIOS)
  - LHCOPN
  - Efficacité d'utilisation des bandes
  - CPU benchmarking

Evolution du middleware

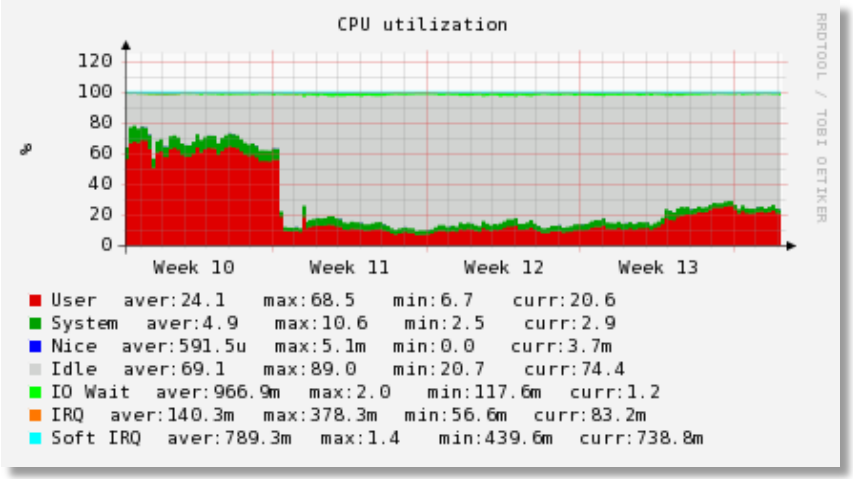
Open Patches

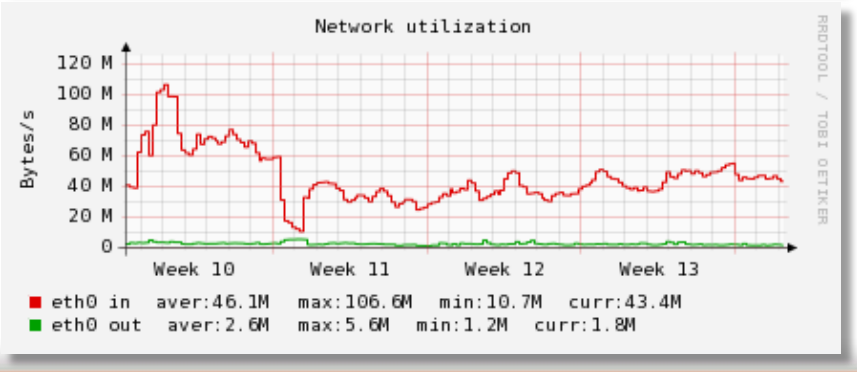
LCG-CE

- Performance enhancement Patch #1752
  - Thanks to Andrey, Di and David
- Currently in packaging
- Has been tested on a subset of CERN production CEs (thanks Ulrich)

- Relevance
  - Improves scalability by handling multiple users more efficiently
    - Load is significantly reduced, more users and jobs can be handled
  - If a site didn't see resources problems on the CE in February it might be less important
    - T1s and T0 definitely can benefit from it

Source: Markus Schulz, CCRC-08 F2F meeting, 01/04/2008





Source: LEMON – monitoring du cluster de CEs au CERN

Détails: Patch #1752

Evolution du middleware (cont.)

Open Patches

64bit WN
- In PPS
- Needs testing by experiments
- Some minor problems with 32/64 selection of binaries

SGE support
in PPS

And a large number of small Patches for:
VOMS ADMIN, RGMA, SE-CLASSIC, MPI, LCG-VO Tag

Open Patches

Glexec
- We have a patch but wait for SCAS
  - The timetable for SCAS seemed to be no problem
    - SCAS is already delayed
    - We now we consider to go ahead with glexec first
  - Not available in May

WMS on SL4

Dependency problems (inversion)
- Non backward compatible version of the jdl-api-cpp had been released to production long time ago
- WMS for SL4 depends on an earlier version
  - Side effect of extended test period (6 months)
- Fixed, received new RPMS
  - Sanity check certification will start
    - No need to rerun 5 days stress test
- Slim chance to see this widely deployed in May

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Source: Markus Schulz, CCRC-08 F2F meeting, 01/04/2008

ATLAS: Suppression centralisée de fichiers

DDM Deletion Service

- DQ2 service for central deletion:
  - Central Multi-queueing systems at VO level
  - One agent defined per storage end-point
- Site-DDM interactions:
  - Get the list of datasets/files to delete
  - Save replica informations
  - Partition files to delete into chunks
  - Throttle deletion on LFC
  - Throttle physical deletion on storage
  - Retry on failures
  - Report deletions/performances/errors
- ATLAS requirement: Deletion rate~1Hz for T1s

SRMV2: Request Times

- Number of files per request: 1000

Site	Storage	# deleted files	s. per req.	files.s-1 (Hz)
INFN-T1_DATADISK	storm	16000	11.68	85.61
RAL-LCG2_DATADISK	castor	17000	66.57	15.02
TRIUMF-LCG2_DATADISK	dcache	15000	167.02	5.98
FZK-LCG2_DATADISK	dcache	15000	228.76	4.37
SARA	dcache	9000	435.16	2.3
TAIWAN-LCG2_DATADISK	castor	16000	560.44	1.78
NIKHEF-ELPROD_DATADISK	dpm	7000	664.66	1.5

- Number of files per request: 100

Site	Storage	# deleted files	s. per req.	files.s-1 (Hz)
LYONDISK	dcache	9400	122.91	0.81
LYONTAPE	dcache	36000	144.88	0.69

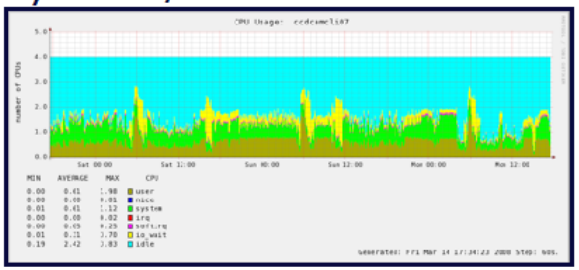
More results;* Problems encountered, see next slides

Source: Vincent Garonne, CCRC-08 F2F meeting, 01/04/2008

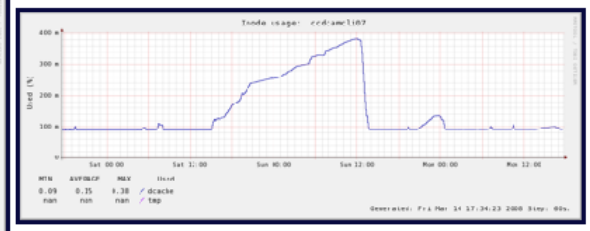
ATLAS: Suppression centralisée de fichiers (cont.)

Dcache: PNFS Congestion Problems For >15.000

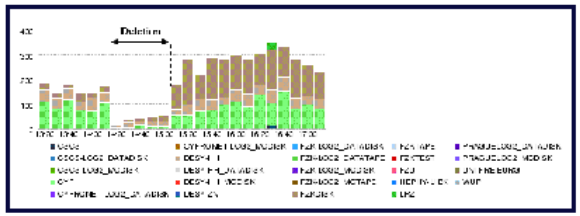
Lyon - I/O wait:



Number of files waiting for deletion:



FZK - MB/s vs. time:



Source: Vincent Garonne, CCRC-08 F2F meeting, 01/04/2008

Tier-2s français dans CCRC'08

Communication Channels

- Many communication channels and difficult to be in
  - An important part of the communication is through informal, bilateral relationship
    - E.g. : ATLAS space token list obtained a few days before start of phase 1 by "unofficial" contacts, several inconsistent sources…
  - Daily meeting by phone is not accessible to people not already well integrated in the "core"
    - More a remote participation to a CERN meeting than a real "collaboration" meeting
    - Site role in this meeting not very clear
- Lack of a lightweight mean to keep "normal", "non-heroic" sites informed
  - No trivial proposal
  - Jamie's idea of T2 coordinators per country/region/federation is probably a corner stone
  - Need to produce a short summary per week
    - Very high level like CCRC08 Calendar

02/04/20081/4/2008 CCRC08 Phase 1 Experience in France 8

Problem Reporting

- GGUS vs. Elog
  - GGUS is THE place for issue tracking
  - Elog value not clear for sites (me)
  - Elog is very difficult to cope with : RSS is just another nightmare (after email!) to read
  - Mainly used as an alert system by experimentsfor T0/T1 ?
- Direct communication between sites and experiments
  - Non optimal for a site, in particular for tracking potentially multi-site issues
  - Duplication of effort between sites
    - E.g. : space tokens not honoured in Atlas transfers to french T2s
  - But required for urgent notification of problems…
    - Not everything can be urgent…
- Experiment specific issue tracker sometimes used as an alternative to GGUS to report problems to sites
  - E.g. : CMS Savanah

02/04/20081/4/2008 CCRC08 Phase 1 Experience in France 9

Source: Michel Jouvain, CCRC-08 F2F meeting, 01/04/2008

WLCG Service & CCRC

Main Lessons Learned

☺ **Generally, things worked reasonably well…**

➢ **Still improvements in communication are needed!**
- Tools still need to be streamlined (e.g. elog-books / GGUS), and reporting automated
- ¿ **Service dashboards – should be in place before May…**
- F2Fs and other meetings working well in this direction!

- **Pre-established metrics extremely valuable!**
  - As well as careful preparation and extensive communication!

➧ **Now continuous production mode –this will continue – as will today's infrastructure & meetings**

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Recommendations

✓ **To improve communications with Tier2s and the DB community, 2 new mailing lists have been setup, as well as regular con-calls with Asia-Pacific sites (time zones…)**

- Follow-up on the lists of "**Critical Services**" must continue, implementing not only the appropriate monitoring, but also ensuring that the WLCG "standards" are followed for **D**esign, **I**mplementation, **D**eployment and **O**peration
- **Clarify reporting and problem escalation lines (e.g. operator call-out triggered by named experts, …) and introduce (light-weight) post-mortems when MoU targets not met**

➢ **We must continue to improve on open & transparent reporting, as well as further automations in monitoring, logging & accounting**

➧ **We should foresee "data taking readiness" challenges in future years – probably with a similar schedule to this year – to ensure that full chain (new resources, new versions of experiment + AA s/w, middleware, storage-ware) is ready**

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Source: Jamie Shiers, Management Board F2F meeting, 01/04/2008

Middleware status (02/04/2008)

Status of individual services scheduled for gLite 3.1 on SL4

service	SL4/SLC4/i386	SL4/SLC4/x86_64	Debian4/i386	Comments
glite-WN	Released	PPS	Build	
glite-UI	Released	Build	Build	
glite-AMGA_postgres	Released	Integration	n/a	
glite-AMGA_oracle	PPS	Integration	n/a	
glite-BDII	Released	Configuration	n/a	
lcg-CE	Released	Build	n/a	
glite-CREAM	Build	Build	n/a	
glite-FTA_oracle	Integration	Build	n/a	
glite-FTS_oracle	Integration	Integration	n/a	
glite-FTM	Released	Integration	n/a	
glite-LB	Certification	Build	n/a	WMS/LB is being installed as an 'experimental service'
glite-LFC_mysql	Released	Released	n/a	
glite-LFC_oracle	Released	Released	n/a	
glite-MON	PPS	Build	n/a	
glite-PX	Released	Integration	n/a	
glite-SE_classic	Certification	Build	n/a	
glite-SE_dcache_*	Released	Released	n/a	
glite-SE_dpm_disk	Released	Released	n/a	
glite-SE_dpm_mysql	Released	Released	n/a	
glite-TORQUE_utils	Released	Build	n/a	
glite-TORQUE_client	Released	Build	n/a	
glite-TORQUE_server	Released	Build	n/a	
glite-VOMS_oracle	Released	Integration	n/a	
glite-VOMS_mysql	Released	Integration	n/a	
glite-VOBOX	Released	Integration	n/a	
glite-WMS	Certification	Build	n/a	WMS/LB is being installed as an 'experimental service'

Source: https://twiki.cern.ch/twiki/bin/view/EGEE/Glite31NodeTracker

Nagios @ RAL

Example SAM integration

Service Status Details For Host 'dcache'

Host	Service	Status	Last Check	Duration	Attempt	Status Information
dcache	DMESG_ALL	OK	01-04-2008 22:21:59	52d 2h 55m 35s	1/2	OK - dmesg output is clear
	Dcache main server out of memory	OK	01-04-2008 22:41:29	52d 3h 22m 1s	1/3	No memory errors in last 10 lines of /opt/d-cache/libexec/apache-tomcat-5.5.20/logs/catalina.out
	LCG SAM SE for Atlas VO	CRITICAL	06-03-2008 08:47:17	75d 9h 26m 6s	1/1	LCG SAM SE for Atlas VO checked error at 2008-02-26 15:02:21
	LCG SAM SE for LHCb VO	OK	08-03-2008 05:49:16	69d 12h 49m 16s	1/1	LCG SAM SE for LHCb VO checked ok at 2008-02-29 09:29:49
	LCG SAM SE for OPS VO	OK	01-04-2008 22:10:02	13d 8h 41m 41s	1/1	LCG SAM SE for OPS VO checked ok at 2008-04-01 20:28:58
	LCG SAM SRM for Atlas VO	CRITICAL	24-01-2008 10:16:15	75d 9h 26m 6s	1/1	LCG SAM SRM for Atlas VO checked error at 2008-01-22 15:23:54
	LCG SAM SRM for LHCb VO	OK	08-03-2008 05:49:16	69d 12h 49m 16s	1/1	LCG SAM SRM for LHCb VO checked ok at 2008-02-29 09:27:57
	LCG SAM SRM for OPS VO	OK	01-04-2008 22:10:02	19d 11h 25m 37s	1/1	LCG SAM SRM for OPS VO checked ok at 2008-04-01 20:52:39
	LOAD	OK	01-04-2008 22:34:09	52d 3h 33m 1s	1/3	OK - load average: 0.26, 0.18, 0.18
	OPT	OK	01-04-2008 22:23:11	52d 3h 4m 1s	1/3	DISK OK - free space: /opt 3386 MB (88% inode=99%):
	PROCS_EXIST_NTPD	OK	01-04-2008 22:27:54	52d 3h 14m 41s	1/3	PROCS OK: 1 process with command name ntpd
	SPACE_POOL	OK	01-04-2008 22:37:26	52d 2h 44m 32s	1/3	DISK OK - free space: /pool 96298 MB (99% inode=99%):
	SPACE_ROOT	OK	01-04-2008 22:37:34	52d 2h 43m 2s	1/3	DISK OK - free space: / 1447 MB (37% inode=77%):
	SPACE_TMP	OK	01-04-2008 22:36:59	52d 2h 59m 36s	1/3	DISK OK - free space: /tmp 89 MB (95% inode=99%):
	SPACE_VAR	OK	01-04-2008 22:37:54	47d 14h 34m 7s	1/3	DISK OK - free space: /var 794 MB (82% inode=92%):
	SWAP	OK	01-04-2008 22:38:52	52d 2h 55m 35s	1/3	SWAP OK - 100% free (2047 MB out of 2047 MB)

GridPP
UK Computing for Particle Physics

Science & Technology Facilities Council
e-Science

Source: Derek Ross, Grid Deployment Board, 02/04/2008

Nagios @ RAL (cont.)

FTS host example

Service Status Details For Host 'lcgfts0421'

Host	Service	Status	Last Check	Duration	Attempt	Status Information
lcgfts0421	DMESG_ALL	OK	01-04-2008 22:21:23	212d 1h 27m 32s	1/2	OK - dmesg output is clear
	DMESG_DMA	OK	01-04-2008 20:07:30	212d 1h 27m 33s	1/2	***dmesg clear.
	LCG FTS service	OK	01-04-2008 22:46:06	34d 19h 10m 46s	1/3	No errors detected on FTS host lcgfts0421
	LCG SAM FTS for Atlas VO	OK	01-04-2008 22:30:02	38d 9h 51m 40s	1/1	LCG SAM FTS for Atlas VO checked ok (as lcgfts, other alias lcgfts0422) at 2008-04-01 20:35:32
	LCG SAM FTS for OPS VO	OK	01-04-2008 22:10:02	14d 11h 40m 0s	1/1	LCG SAM FTS for OPS VO checked ok (as lcgfts, other alias lcgfts0422) at 2008-04-01 20:40:52
	LOAD	OK	01-04-2008 22:38:35	32d 5h 33m 33s	1/3	OK - load average: 1.00, 1.14, 1.19
	PROCS_EXIST_NTPD	OK	01-04-2008 22:36:28	212d 1h 27m 30s	1/3	PROCS OK: 1 process with command name ntpd
	SPACE_ROOT	OK	01-04-2008 22:39:01	212d 1h 27m 28s	1/3	DISK OK - free space: / 96154 MB (92% inode=99%):
	SPACE_TMP	OK	01-04-2008 22:35:24	212d 1h 27m 29s	1/3	DISK OK - free space: /tmp 927 MB (96% inode=99%):
	SSH	OK	01-04-2008 22:37:37	109d 14h 20m 46s	1/3	SSH OK - OpenSSH_3.6.1p2 (protocol 2.0)
	SWAP	OK	01-04-2008 22:41:44	212d 1h 27m 27s	1/3	SWAP OK - 100% free (2047 MB out of 2047 MB)

Source: Derek Ross, Grid Deployment Board, 02/04/2008

Monitoring des jobs grid

GS

Proposal

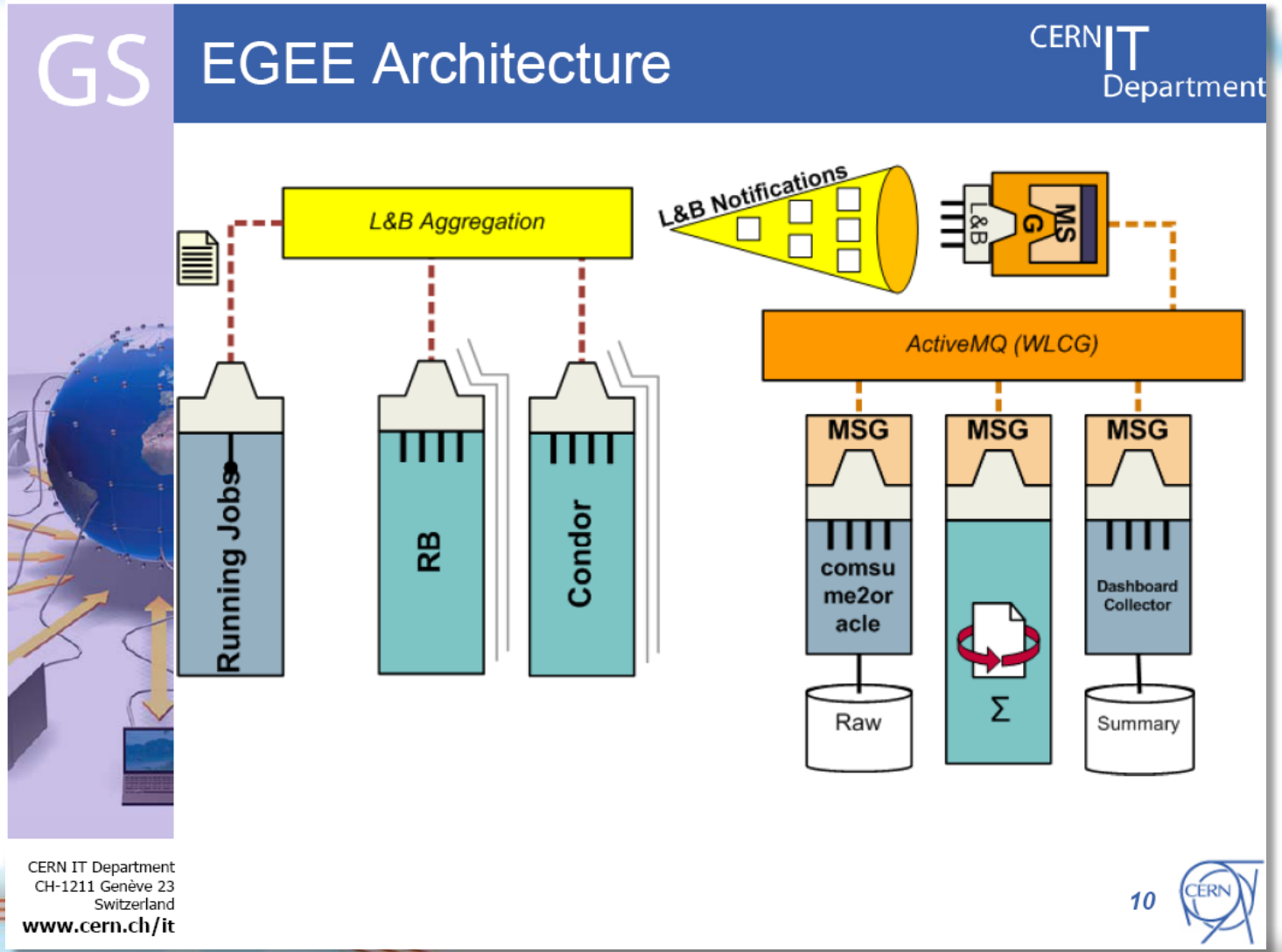
CERN IT Department

- Use WLCG Monitoring infrastructure (MSG) for collecting and transporting the data
  - Messaging system
  - Standard message formats
- Work with expert groups to instrument the job submission systems
- Visualization by Gridview + Dashboards

CERN IT Department
CH-1211 Genève 23
Switzerland
www.cern.ch/it

Source: James Casey, Grid Deployment Board, 02/04/2008

Monitoring des jobs grid (cont.)



Source: James Casey, Grid Deployment Board, 02/04/2008

Multi-user pilot jobs

Batch testing

- **LSF** CERN https://twiki.cern.ch/twiki/bin/view/FIOgroup/FsLSFGridglExec
- **PBS** NIKHEF, LAL http://www.nikhef.nl/grid/lcaslcmaps/glexec/osinterop.php
- **PBS-Pro** FZK still testing
- **BQS** CC-IN2P3 – no problems found
- **SGE** CESGA – no problems found
- **Condor** FNAL – in production
- Others?

- CERN Tests are a good example. NIKHEF will publish a generic set soon.
- glexec version 0.5.23 /afs/cern.ch/project/etics/repository/org.glite/org.glite.security.glexec/0.5.23

Science & Technology Facilities Council

Timescales

- glexec review – done
- Glexec certification and deployment
  - Could happen now
  - But not on SCAS Batch system testing
  - Started Framework Review - started
- SCAS/SCMAPS service
  - 3-4 months away
- Review of Frameworks
- Policies

Science & Technology Facilities Council

7

Source: John Gordon, Grid Deployment Board, 02/04/2008

Activités des expériences: avril & mai

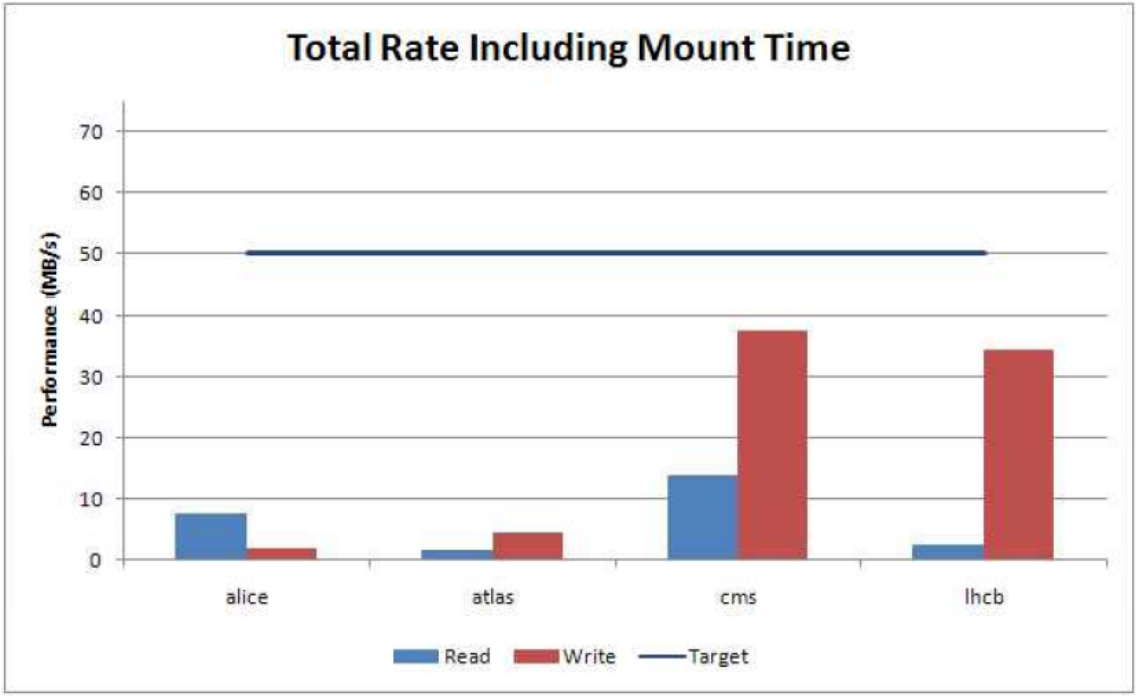
- Intentions des 4 expériences pour les semaines qui viennent ont été présentées
  - Beaucoup d'information pour être synthétisée simplement
    - *Distribution de données, reconstruction, simulation, analyse, etc.*
  - Détails: http://indico.cern.ch/conferenceDisplay.py?confId=30246

Tape performance

FIO

Total performance to tape

CERN IT Department



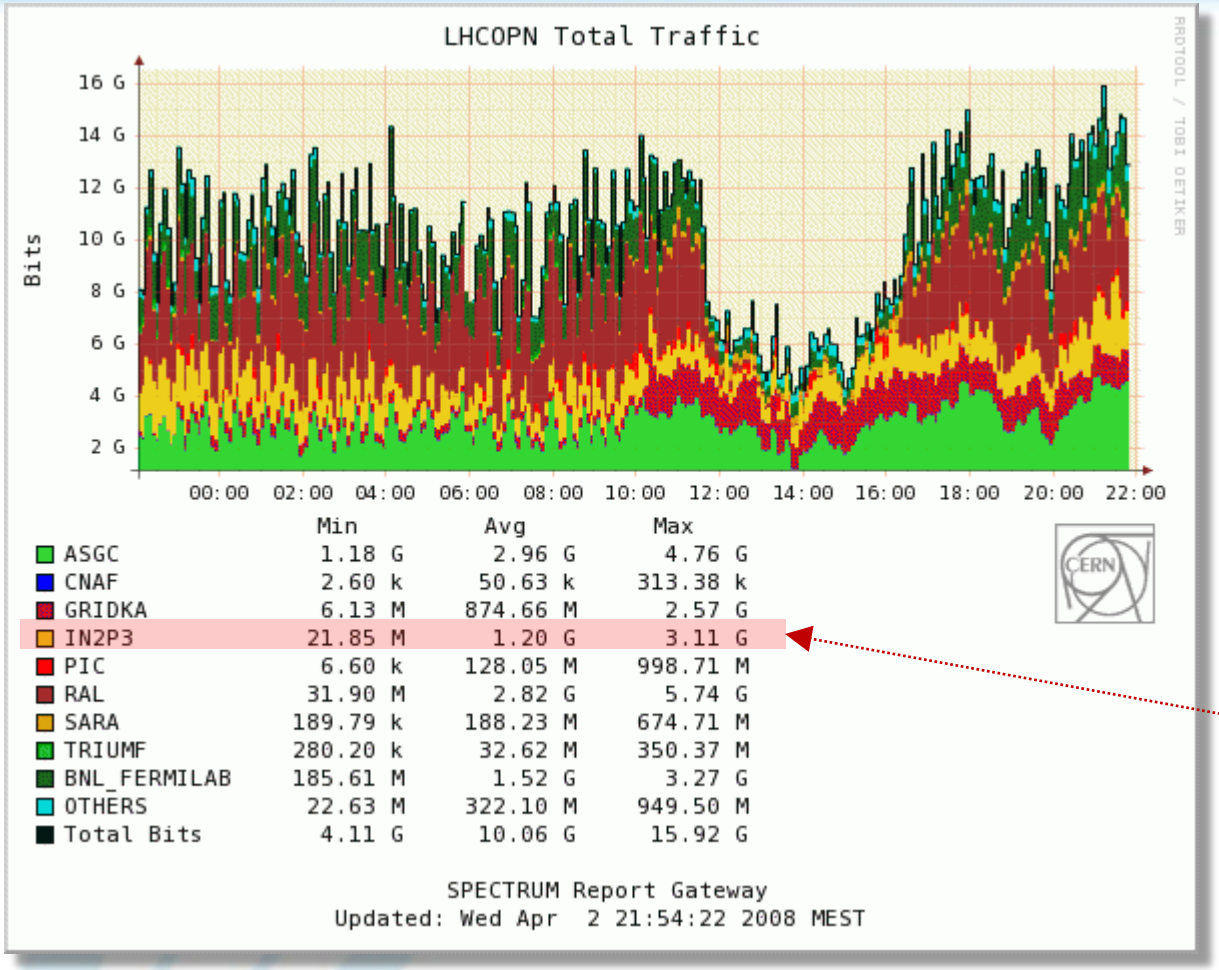
Source: Tim Bell, Grid Deployment Board, 02/04/2008

File Size (MB)

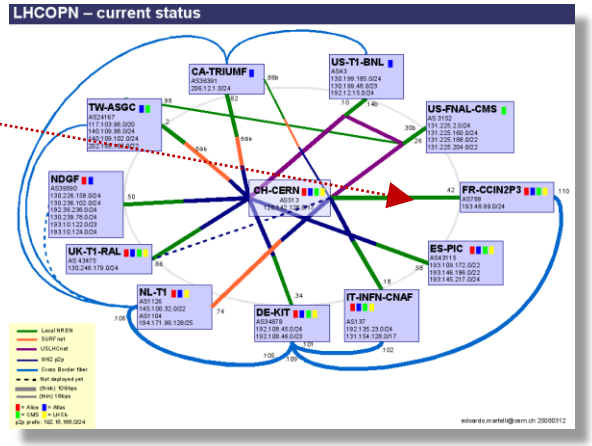
Date	Alice	Atlas	CMS	LHCb
March '08	143 MB	230 MB	1490 MB	865 MB
CCRC Feb '08	340 MB	320 MB	1470 MB	550 MB
Jan '08	200 MB	250 MB	2000 MB	200 MB

CERN - IT Department
CH-1211 Genève 23
Switzerland
www.cern.ch/it

LHCOPN



Source: http://network-statistics.web.cern.ch/network-statistics/ext/?p=sc



Source: LHCOPN network map

LHCOPN (cont.)

Situation

- Network is operational and stable.
  - But, "The first principle is that you must not fool yourself, and you're the easiest person to fool." Richard Feynman
- Several areas of weakness
  - Physical Path Routing
  - IP Backup
  - Operational Support
  - Monitoring

"Live test" prévu le 9 avril 15h30

GDB Meeting
April 2008

David Foster, CERN

Source: David Foster, Grid Deployment Board, 02/04/2008

LHCOPN (cont.)

Operational Support

- EGEE-SA2 providing the lead on the operational model
  - Much initial disagreement on approach, now starting to converge. Last OPN meeting concentrated on "points of view"
    - The "network manager" view
    - The "user" view ("Readiness" expectations)
    - The "distributed" view (E2ECU, IPCU, GGUS etc)
    - The "grass roots" view (Site engineers)
    - The "centralised" view (Dante)
  - All documentation is available on the Twiki. Much work remains to be done.
- Proposal by Dante to manage all network operations but required changing the underlying architecture.
  - Many issues implied by this.
  - Rejected by all concerned T1's

GDB Meeting
April 2008
David Foster, CERN

Contribution de Guillaume Cessieux

Operational Model

- Need to identify the major operational components and formalise their interactions including:
  - Information repositories
    - GGUS, TTS, Twiki, PerfSonar etc.
  - Actors
    - Site network support, ENOC, E2ECU, USLHCNet etc.
    - Grid Operations.
  - Processes
    - Who is responsible for which information?
    - How does communication take place?
      - Actor <-> Repository
      - Actor <-> Actor
    - For what purpose does communication take place?
      - Resolving identified issues
      - Authorising changes and developments
- A minimal design is needed to deal with the major issues
  - Incident Management (including scheduled interventions)
  - Problem Management
  - Change Management

GDB Meeting
April 2008
David Foster, CERN

More Information: LHCOPN wiki

Source: David Foster, Grid Deployment Board, 02/04/2008

CPU benchmarking

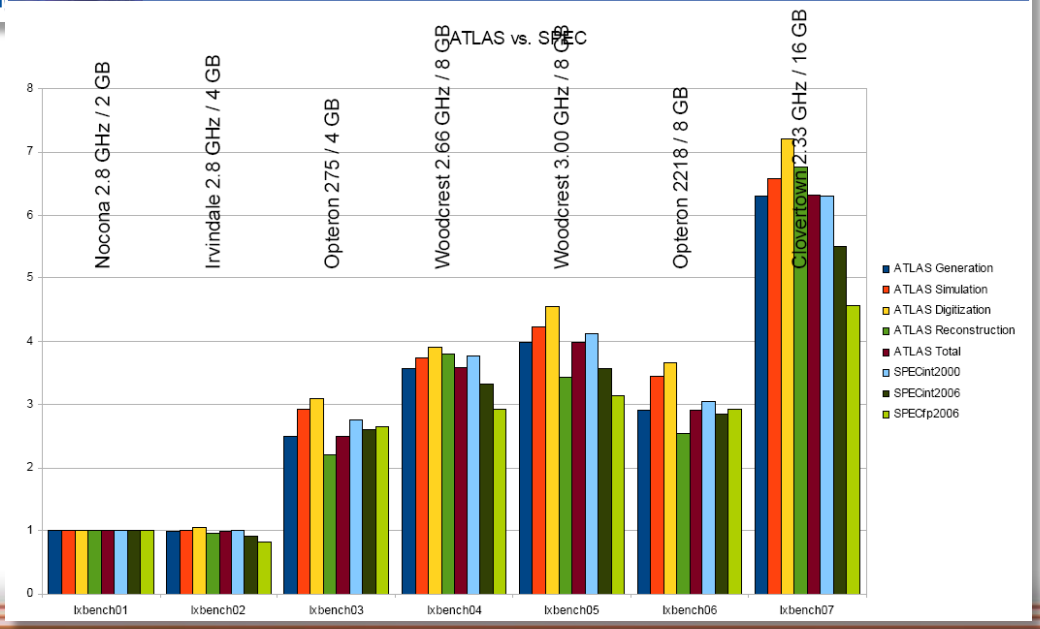
Benchmarking cluster at CERN

CERN IT Department

- 7 machines (rather) permanent:
  - Lxbench01: 2 x Nocona 2.8 GHz, 2 x 1 GB, E7320 board
  - Lxbench02: 2 x Irvindale 2.8 GHz, 4 x 1 GB, E7320 board
  - Lxbench03: 2 x Opteron 275, 4 x 1 GB, AMD-8132/8111 board
  - Lxbench04: 2 x Woodcrest 2.66 GHz, 8 x 1 GB, 5000P board
  - Lxbench05: 2 x Woodcrest 3 GHz, 8 x 1 GB, 5000P board
  - Lxbench06: 2 x Opteron 2218, 8 x 1 GB, HT2000/1000 board
  - Lxbench07: 2 x Clovertown 2.33 GHz, 8 x 2 GB, 5000P b
- Some temporary machines
  - Similar to some of the above, with different memory confi

ATLAS benchmarks (preliminary)

CERN IT Department



Source: Helge Meinhard, Grid Deployment Board, 02/04/2008

WLCG collaboration workshop

CERN, 21-25 avril 2008

Agenda: http://indico.cern.ch/conferenceDisplay.py?confId=6552

Enregistrement jusqu'au 16 avril

Main Workshop Themes

- Mon am: Reliable Services; pm: storage
- Tue: review of February CCRC'08
- Wed: planning for May
- Thu / Fri: Operations Track
- Thu / Fri: Database Track
- Thu pm: Collaboration Board (restricted)

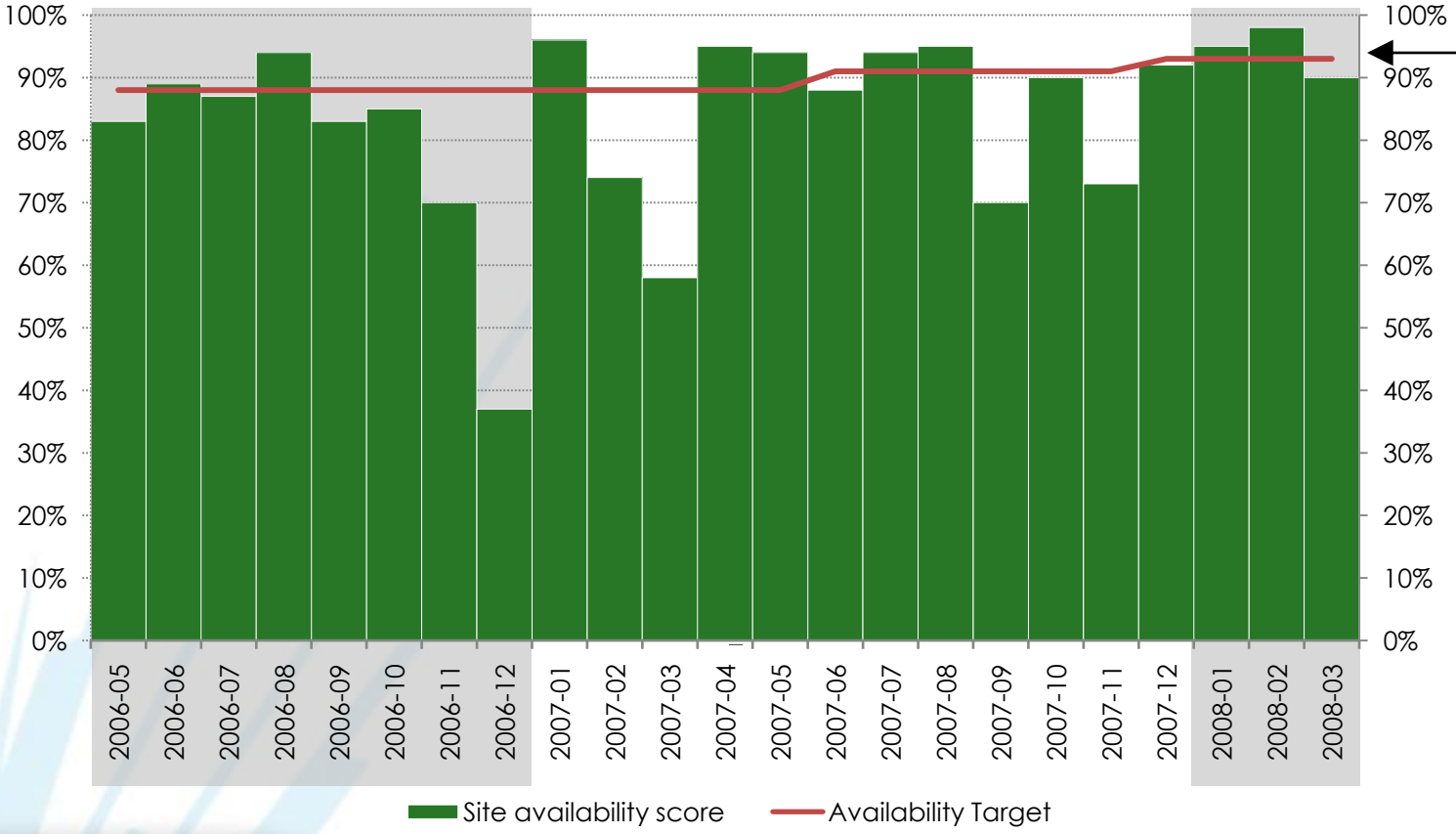
Pourrions-nous contribuer avec des présentations sur ces sujets?

Source: Jamie Shiers, Grid Deployment Board, 02/04/2008

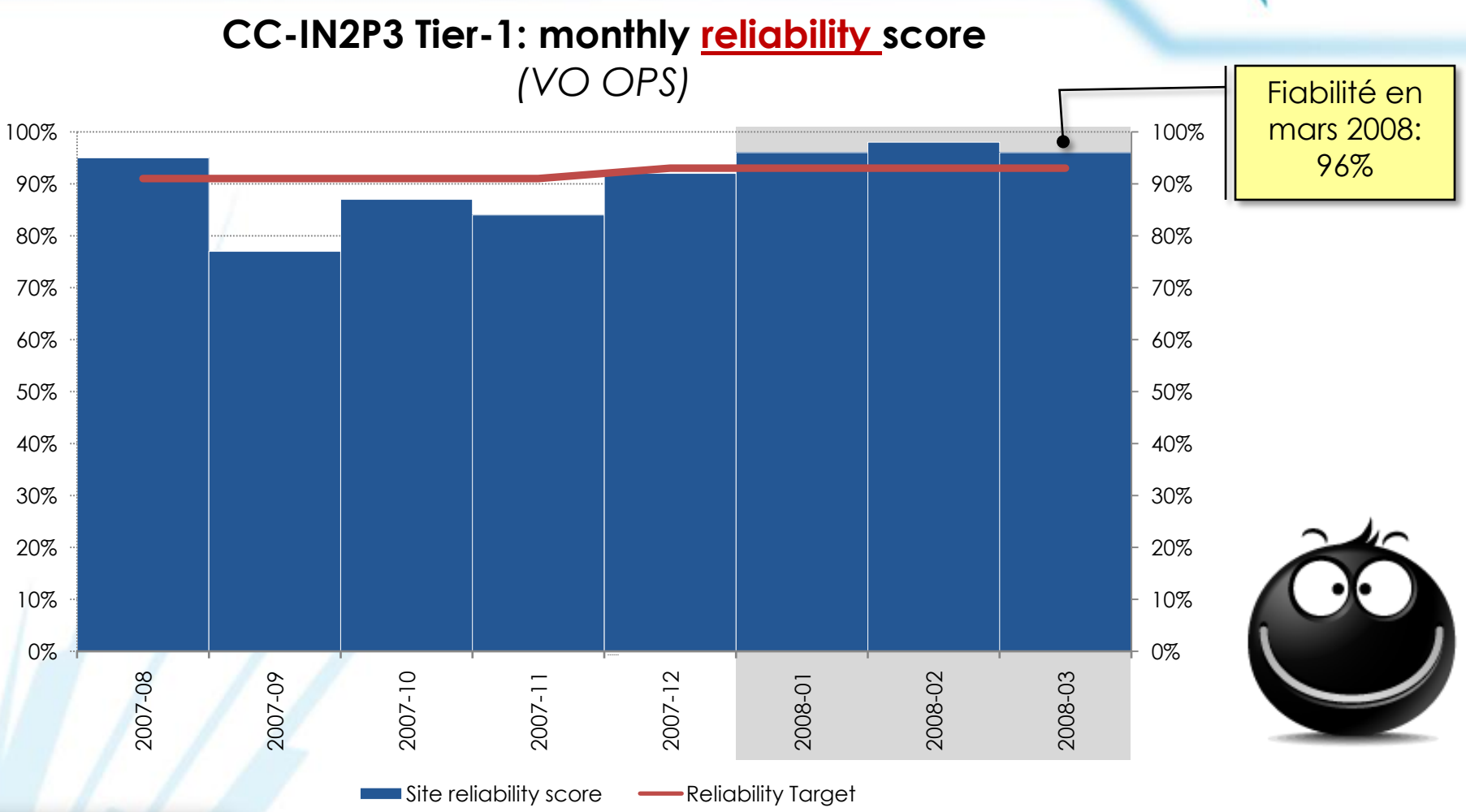
Disponibilité du tier-1

CC-IN2P3 Tier-1: monthly availability score

(VO OPS)



Fiabilité du tier-1



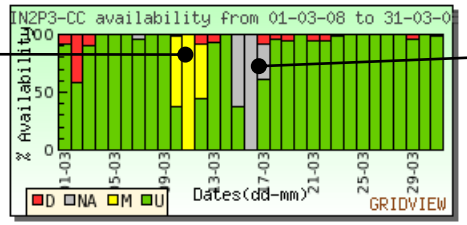
Disponibilité des sites: tier-1 (1/4)

- Mars 2008

Score: 90%

Overall Service Availability for Site:IN2P3-CC VO:OPS (Daily Report)

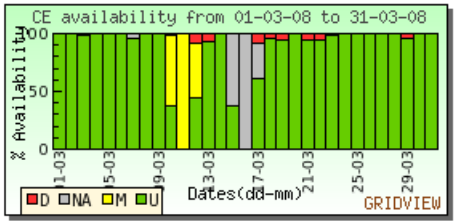
Arrêt programmé du 11/03/2008



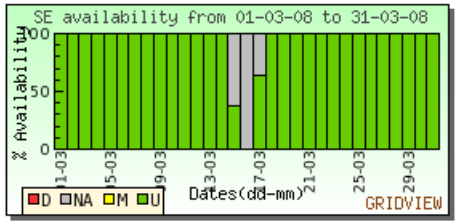
Problème de mesure apparu aussi dans d'autres sites

Individual Service Availability for site:IN2P3-CC VO:OPS (Daily Report)

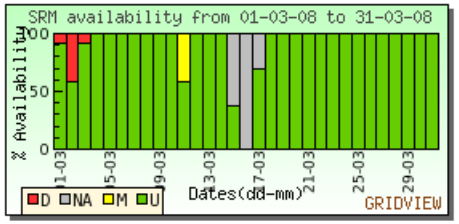
CE



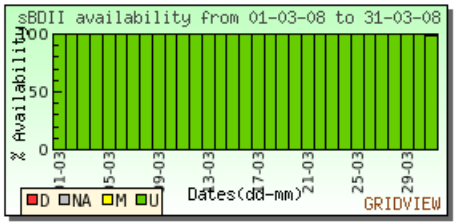
SE



SRM



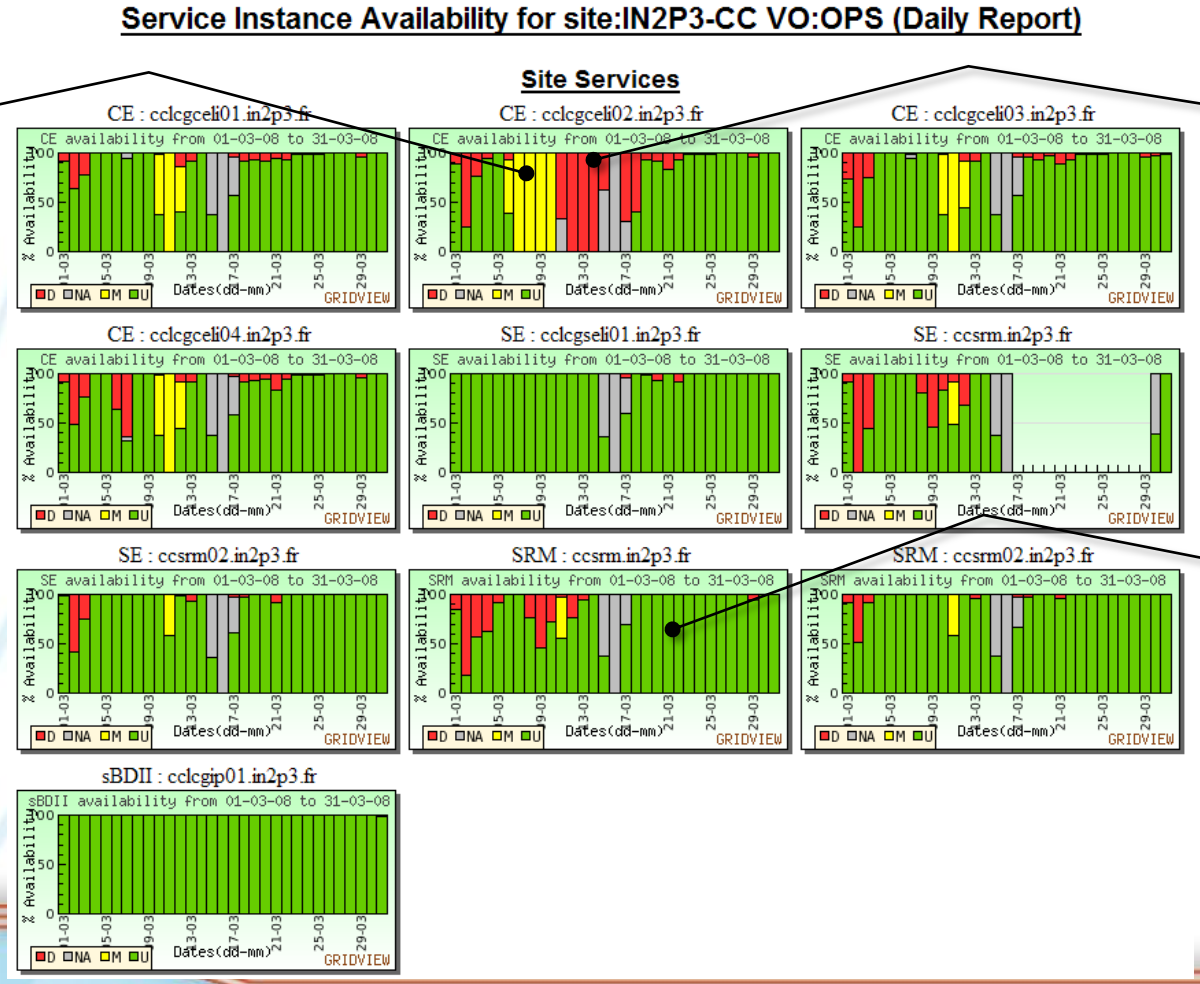
sBDII



Source: http://gridview.cern.ch

Disponibilité des sites: tier-1 (2/4)

- Mars 2008 (suite)



Période d'arrêt différente pour ce CE?

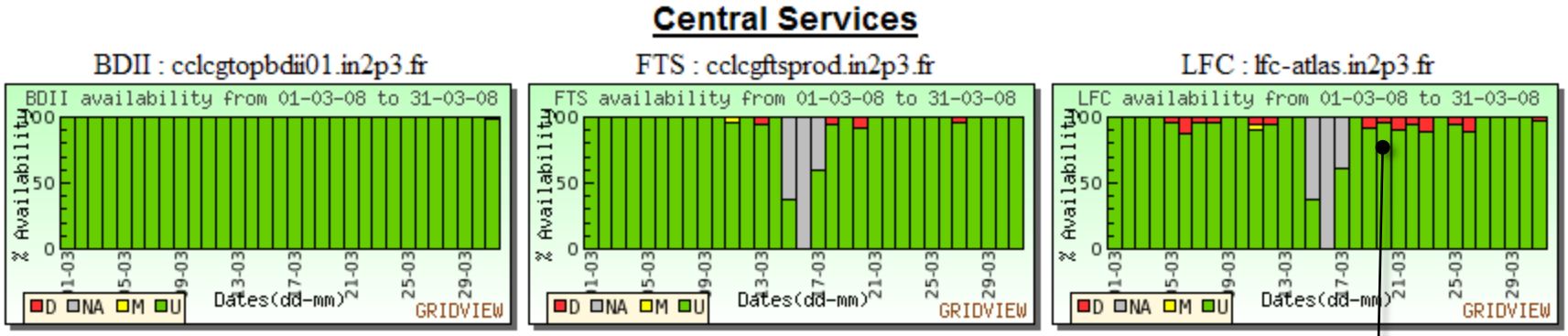
Indisponibilité prolongée de ce CE. Des raisons particulières?

Le service SRM semble plus stable après l'arrêt du 11/03. Est-ce normal?

Source: http://gridview.cern.ch

Disponibilité des sites: tier-1 (3/4)

- Mars 2008 (suite)



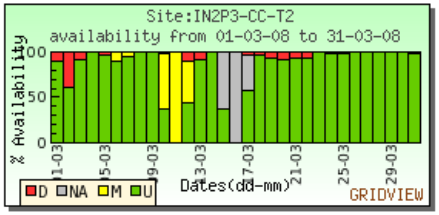
Des instabilités dans LFC et FTS. Avons-nous identifié l'origine?

Disponibilité des sites: tier-2 (4/4)

- Mars 2008

Score: 89%

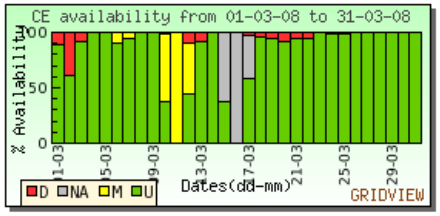
Overall Service Availability for Site:IN2P3-CC-T2 VO:OPS (Daily Report)



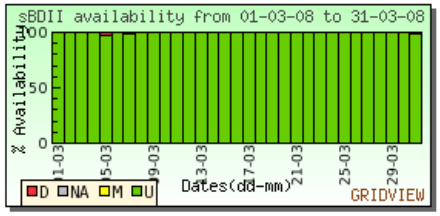
Individual Service Availability for site:IN2P3-CC-T2 VO:OPS (Daily Report)

Ce service a été moins disponible que les autres CE s

CE



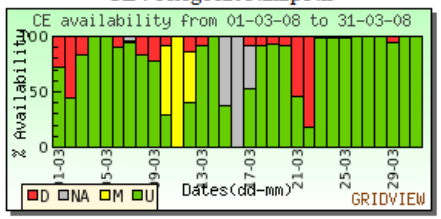
sBDII



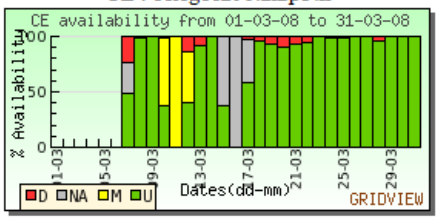
Service Instance Availability for site:IN2P3-CC-T2 VO:OPS (Daily Report)

Site Services

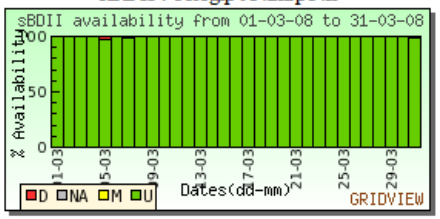
CE : cclcgceli05.in2p3.fr



CE : cclcgceli06.in2p3.fr



sBDII : cclcgip03.in2p3.fr



Source: http://gridview.cern.ch

Disponibilité des sites EGEE-FR

- Mars 2008

AUVERGRID	100 %	100 %
CGG-LCG2	84 %	83 %
GRIF	96 %	97 %
IN2P3-CC	90 %	96 %
IN2P3-CC-T2	89 %	96 %
IN2P3-CPPM	93 %	92 %
IN2P3-IPNL	96 %	98 %
IN2P3-IRES	95 %	96 %
IN2P3-LAPP	86 %	89 %
IN2P3-LPC	100 %	100 %
IN2P3-LPSC	87 %	86 %
IN2P3-SUBATECH	99 %	99 %

Region	Avail-ability	Reli-ability
France	92 %	93 %
UKI	88 %	90 %
GermanySwitzerland	86 %	86 %
CentralEurope	83 %	81 %
NorthernEurope	82 %	83 %
SouthEasternEurope	79 %	81 %
Russia	77 %	76 %
SouthWesternEurope	76 %	83 %
AsiaPacific	74 %	75 %
CERN	70 %	66 %
Italy	69 %	79 %
OpenScienceGrid	64 %	10 %

* US sites in OSG are not yet included in the critical test system

MoU Targets – Tier-1

Service	*Maximum delay in responding to operational problems*			*Average availability[2] measured on an annual basis*	
	Service interruption	Degradation of the capacity of the service by more than 50%	Degradation of the capacity of the service by more than 20%	During accelerator operation	At all other times
Acceptance of data from the Tier-0 Centre during accelerator operation	12 hours	12 hours	24 hours	99%	n/a
Networking service to the Tier-0 Centre during accelerator operation	12 hours	24 hours	48 hours	98%	n/a
Data-intensive analysis services, including networking to Tier-0, Tier-1 Centres outwith accelerator operation	24 hours	48 hours	48 hours	n/a	98%
All other services[3] – prime service hours[6]	2 hour	2 hour	4 hours	98%	98%
All other services[3] – outwith prime service hours[6]	24 hours	48 hours	48 hours	97%	97%

Source: WLCG Memorandum of Understanding

MoU Targets – Tier-2

Service	*Maximum delay in responding to operational problems*		*Average availability[2] measured on an annual basis*
	Prime time	*Other periods*	
End-user analysis facility	2 hours	72 hours	95%
Other services[3]	12 hours	72 hours	95%

Source: WLCG Memorandum of Understanding

Revue des chantiers en cours

- Intégration
  - Tests de prioritisation des jobs basée sur le rôle VOMS
  - Tests de worker nodes SL4 64bits avec middleware gLite 32bits
  - Développement de l'interface BQS pour CREAM-CE
  - Consolidation des services grid: LFC, FTS, CE, SRM, système d'information
- Exploitation
  - **Intégration des VO boxes à l'exploitation standard**
  - Procédures d'exploitation services grid (présentation prévue en mai)
  - Plate-forme de monitoring basée sur NAGIOS (et intégration avec SAM)
  - Séparation de la consommation CPU tier-1 et tier-2 dans la comptabilité interne
  - Système d'alarme basé sur e-mail pour des experts sélectionnés des expériences
  - Rédaction des SLAs pour les VO boxes (en cours)
- Terminés
  - ✓ Tests d'impact du changement d'utilisateur UNIX (par glexec) pour un job BQS
  - ✓ Tests de LCG-CE sous SL4
  - ✓ Déploiement de LFC-RO pour LHCb
  - ✓ Arrêt de FTS v1.5

Aujourd'hui

- Etat des lieux des VO boxes
- Brainstorming monitoring

- Prochaine réunion
  - Jeudi 15 mai 14h salle 104
- Agendas de toutes les réunions
  - http://indico.in2p3.fr/categoryDisplay.py?categId=102

Vos impressions

Questions/Commentaires