

# CCRC'08 Feb Run

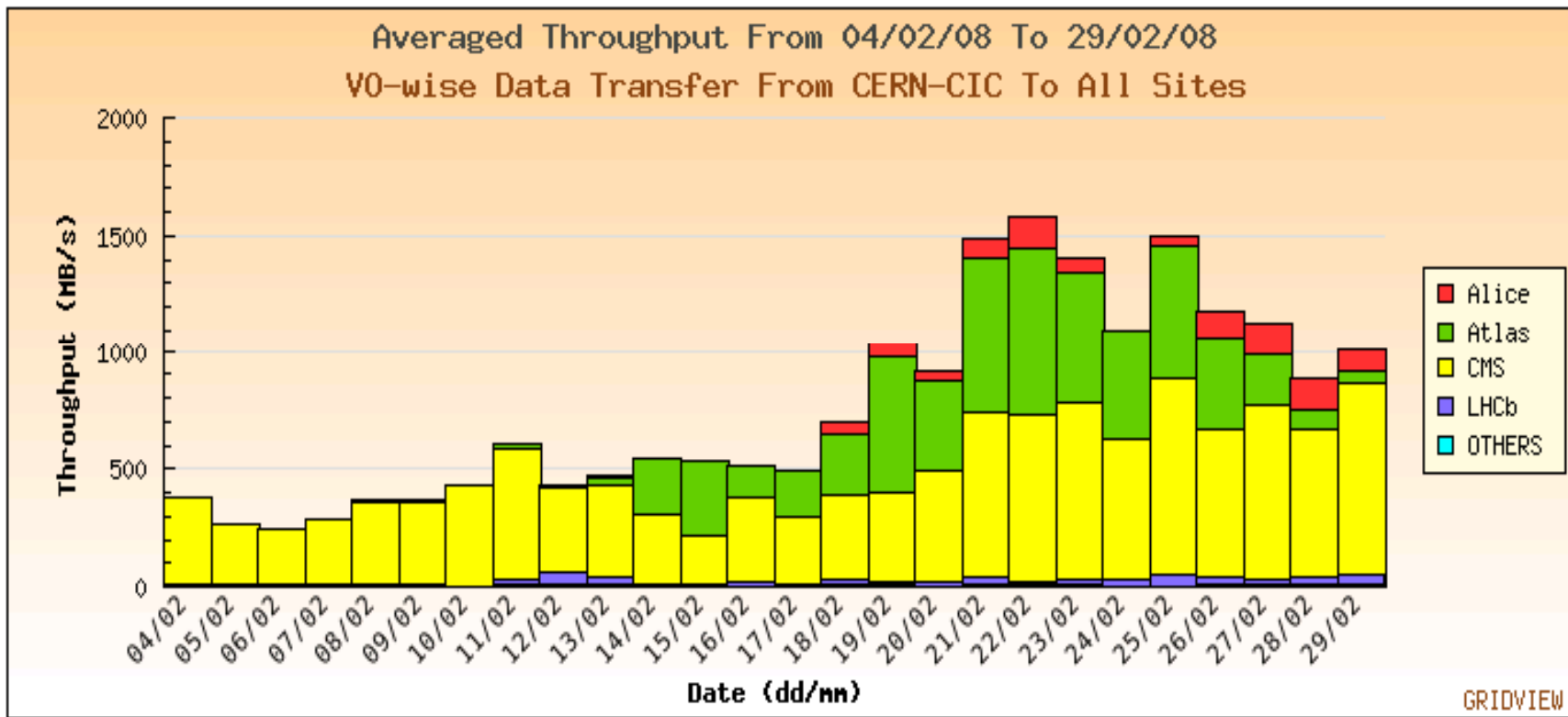
## Preliminary WLCG Report

# Average daily transfer rates

## Daily Report

(VO-wise Data Transfer From CERN-CIC To All Sites)

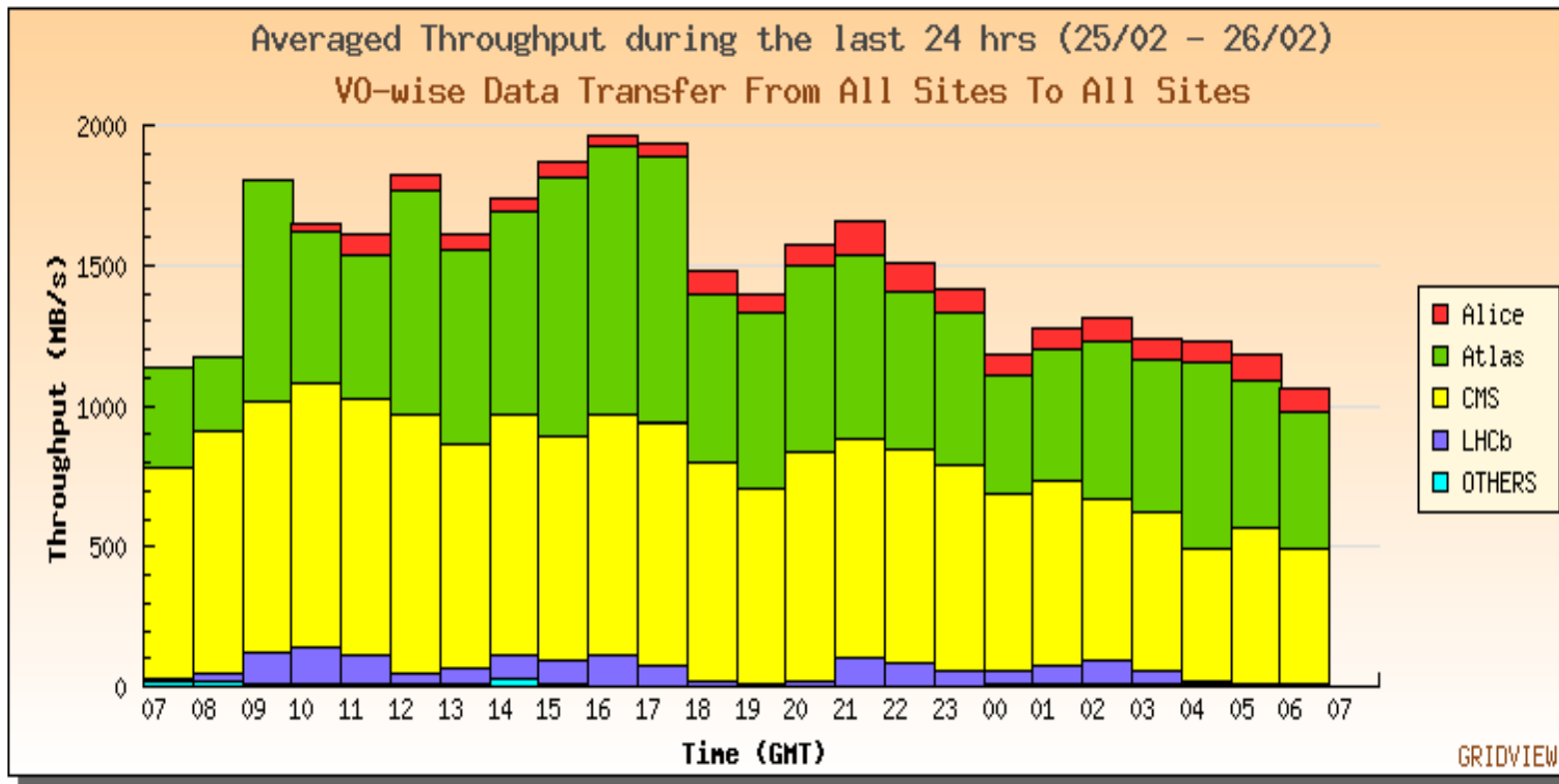
Revert Source/Dest Site(s)



Best short term period- all 11 sites participating at close to or exceeding current nominal rates

### Current Status

(VO-wise Data Transfer From All Sites To All Sites)



(OTHERS: VOs giving throughput less than 1% of max. [click here for names](#))

## Electronic log analysis – per VO

Elog entries were made for service degradations or failures and usually had a GGUS or site ticket associated to them.

Over the 26 days there were 171 entries in 81 threads.

Breakdown per VO and urgency:

	Less Urgent	Urgent	Very Urgent	Top Priority
4 Common	2	1		1 (CERN WMS)
10 ALICE			1	9 (late start)
17 ATLAS	4	9	1	3
21 CMS	5	5	4	7
29 LHCb	12	12	4	1 (disk space)

# Elog analysis – per site

Site	Number of threads	
CERN	34	
IN2P3	10	Did the Tier 1 and 2 look at the elog – only 3 entries from GRIF and 2 from FNAL/CMS ? How did the sites discover/follow reported problems ?
NL-T1	9	
CNAF	8	
RAL	6	
PIC	3	
Tier 2	3	
FZK	2	
BNL	2	
FNAL	2	
ASGC	0	
TRIUMF	0	

## Elog analysis – per subject (fuzzy)

Subject	Number of threads	
Site config	13	most during first 2 weeks
SRM	12	
FTS	11	See Storage-ware Review: Problems Encountered & Roadmap by F.Donno this afternoon.
Gridftp	7	
Dcache	7	
Hardware	5	disks, tape robot, power
Proxy (corruption)	5	workaround propagation took several days
Certificate map	4	wrong user cert used
Phedex (CMS)	4	all single bug
CASTOR	2	
Lcg-utils	2	
Other (1 each)	5	vobox, afs, ftd, wms, lfc

## One detailed post-mortem needed during run

- Elog 115 Monday Feb 18 at 15:00 ATLAS (S.Campana)
  - I would like to have this tracked as "Notification problem in CCRC08". I submitted an ELOG, a GGUS and a Ticket to castor.support@cern.ch (all of them with maximum priority) on Friday and I got no notification from any of the three before Monday.
- Referred to many failures of ATLAS data export during 14 to 18 Feb. Above tickets submitted at 18.35 on Friday but there is no weekend ticket cover. Detailed timeline analysis showed 4 separate problems, illustrating the type of complex operational problems seen, prepared by CASTOR team at:
  - <https://twiki.cern.ch/twiki/bin/view/FIOgroup/PostMortemFeb14>
  - Malformed stager query 14 Feb built up excessive processes on the CERN srm v1 server. Operator alarm triggered 12 hours later only partially understood then machine was seen to be recovering by service manager.
  - Connection timeouts to srm.cern.ch triggered the Friday tickets. A disk server had failed but not dropped out of CASTOR. Found and fixed by regular service check on Saturday. Tickets were followed up on Monday.
  - ATLAS stager failure late Saturday sent SMS to expert who fixed within an hour.
  - Starting Sunday morning there were two long export interruptions due to the corrupted FTS proxy bug. Understood on Monday and hand-fixed till workarounds put in place Tuesday/Wednesday. Discussed in daily meetings.

# Communications Issues

- ATLAS were unaware that GGUS and CERN tickets are not formally looked at out of normal working hours.
- A mechanism is in place for each experiment to raise out of hours alarms to the 24-hour operator using a restricted email list from trusted users but the ATLAS user concerned (who was on the list) was not aware of this mechanism. It triggers escalation to the permanent system administrator rota who in turn can escalate to the permanent FIO group rota covering CASTOR, FTS and LFC operations problems. We also publicise the CERN operator phone number but not as a 24 hour possibility.
- Operator alarms do not extend to high level functionality e.g. ATLAS data export should be happening but it is not. The alarms they got over that weekend did not imply escalation. We should look at using the higher level monitoring – SLS and experiment dashboards – see Julia Andreeva Monitoring for CCRC'08 talk.



# WLCG Twiki Contacts page

## Tier 1 Contact Details

Contact with the Service Challenge teams is through the following email lists ([wlcg-tier1-contacts@cernSPAMNOT.ch](mailto:wlcg-tier1-contacts@cernSPAMNOT.ch) includes all of these except GGUS):

Site	Contact E-Mail Address	Contact Phone Number (office hours unless specified)
GGUS	<a href="mailto:helpdesk@ggus.org">helpdesk@ggus.org</a>	+49 7247 82 8383
CERN	<a href="mailto:grid-cern-prod-admins@cern.ch">grid-cern-prod-admins@cern.ch</a>	+41 22 767 5011
ASGC	<a href="mailto:asgc-t1-op@lists.grid.sinica.edu.tw">asgc-t1-op@lists.grid.sinica.edu.tw</a>	+886-2-2788-0058 ext 1005
BNL	<a href="mailto:bnl-sc@rcf.rhic.bnl.gov">bnl-sc@rcf.rhic.bnl.gov</a>	+1 631-344 5480
FNAL	<a href="mailto:cms-t1@fnal.gov">cms-t1@fnal.gov</a>	+1 630-840-2345 (helpdesk, 24 x 7)
GRIDKA	<a href="mailto:lcg-admin@listserv.fzk.de">lcg-admin@listserv.fzk.de</a>	+49-7247-82-8383
<a href="#">IN2P3</a>	<a href="mailto:grid.admin@cc.in2p3.fr">grid.admin@cc.in2p3.fr</a>	+33 4 78 93 08 80
INFN	<a href="mailto:t1-admin@cnaif.infn.it">t1-admin@cnaif.infn.it</a>	+39 051 6092851
NDGF	<a href="mailto:support@ndgf.org">support@ndgf.org</a>	
PIC	<a href="mailto:lcg.support@pic.es">lcg.support@pic.es</a>	+34 93 581 3308
<a href="#">RAL</a>	<a href="mailto:lcg-support@gridpp.rl.ac.uk">lcg-support@gridpp.rl.ac.uk</a>	+44 (0) 1235 446981
SARA/NIKHEF	<a href="mailto:grid.support@sara.nl">grid.support@sara.nl</a>	+31 20 592 8008
TRIUMF	<a href="mailto:lcg-support@triumf.ca">lcg-support@triumf.ca</a>	+1 604 222 7333 (main TRIUMF control room - 24 x 7)

## Experiments Grid Operations Contacts

The VO online information and contacts are always up to date on the CIC portal:

- Go to <https://cic.in2p3.fr/index.php?id=vo>
- Select the VO (alice, atlas, cms or lhcb) from the long list and click OK
- All the information is shown (scroll down the long page)

## Some observations 1/2

- We must standardise and clarify the operator/experiment communications lines at Tier 0 and Tier 1.
- The management board milestones of providing 24 by 7 support and implementing agreed experiment VO-box Service Level Agreements need to be completed as soon as possible.
- As expected there were many teething problems in the first two weeks as SRMv2 endpoints were setup (over 160) and early bugs found after which the SRMv2 deployment worked generally well.
- Missing functionalities in the data management layers have been exposed (the storage solutions working group was closely linked to the February activities) and follow-up planning is in place.
- The Tier 1 proved fairly reliable and we must follow-up with all of them the ATLAS initiative on asking them to report on how their tape operations were organised and performed.

## Some Observations 2/2

- Some particular experiment problems were seen at the WLCG level:
  - ALICE: Only one Tier 1 (FZK) was fully ready, NL-T1 after several days more then the last 3 only on the last day.
  - ATLAS: Creation of physics mix data sample took much longer than expected and a reduced sample had to be used.
  - CMS: Inter Tier 1 performance not as good as expected.
  - LHCb: New version of Dirac had teething problems – 1 week delay.
  - Only two inter-experiment interferences were logged: FTS congestion at GRIF caused by competing ATLAS and CMS SEs (solved by implementing sub-site channels) and degradation of CMS exports to PIC by ATLAS filling the FTS request queue with retries.
- Detailed experiment reports this afternoon.
- We must collect and analyse the various metrics measurements.
- The electronic log and daily operations meetings proved very useful and will continue. Not many Tier 1 attend the daily phone conference and we need to find out how to make it more useful.
- Overall a good learning experience and positive result. Activities will continue from now on with the May run acting as a focus point.