



CCRC08 Feedback from BNL

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Introduction



- **ATLAS ran two major exercises during CCRC**
 - Replication of datasets generated from random data. Goal was to demonstrate replication performance of datasets according to MoU shares at nominal rate
 - This went very smoothly (results on next slides)
 - Run re-reconstruction of the M5 dataset (ATLAS Cosmic Ray run in November 2007) at the Tier-1's
 - Task with ~5000 jobs was assigned to the U.S.
 - In the U.S. we have made preparations to run re-reconstruction also at the Tier-2's. This worked reasonably well. A number of issues were identified and are solved or a solution is being worked on

Network

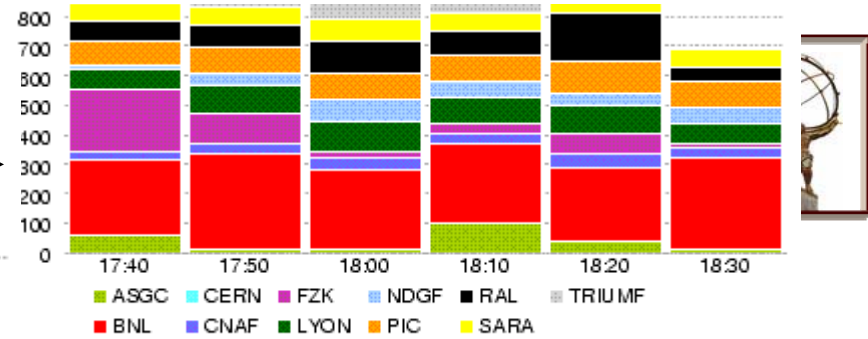
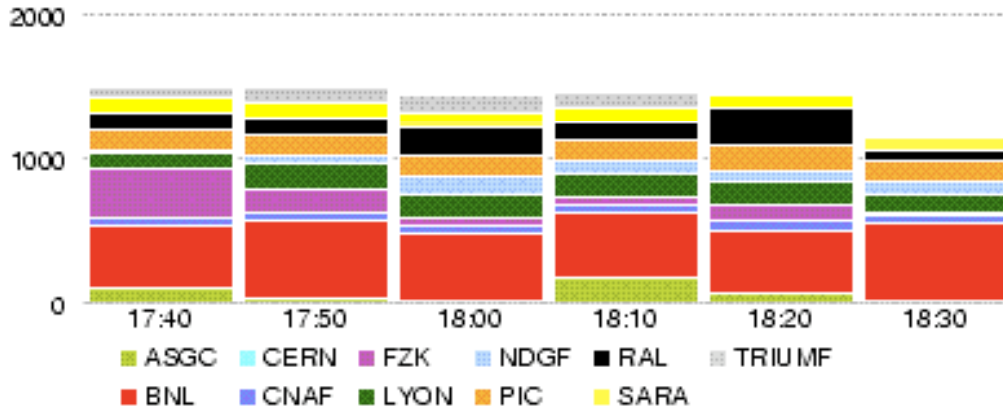


- The day the ATLAS mass data replication started the primary link between CERN and BNL was down
 - ❑ Traffic was re-routed via the backup, but we found the bandwidth limited to 1Gbps
 - ESnet bandwidth reservation system on the backup path was wrongly configured
 - Problem was fixed within 2 hours after it was reported by BNL
 - ❑ Over the period of the second phase of the Throughput Test (05-27-05/30) BNL has received ~50TB
 - Results on slide 7

CERN to all ATLAS Tier-1's

300 GB in 10 minutes

MB/s

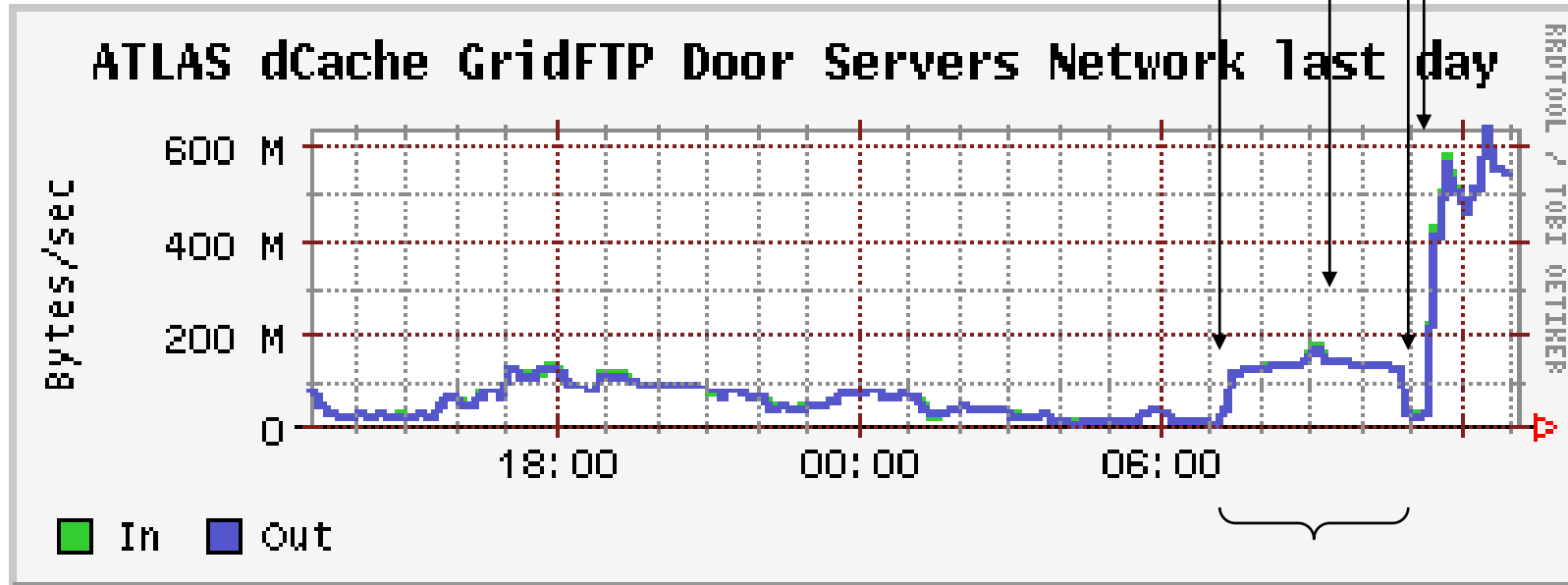


Start of ATLAS CCRC
Transfers to BNL

Castor outage
at CERN

Problem reported to ESnet

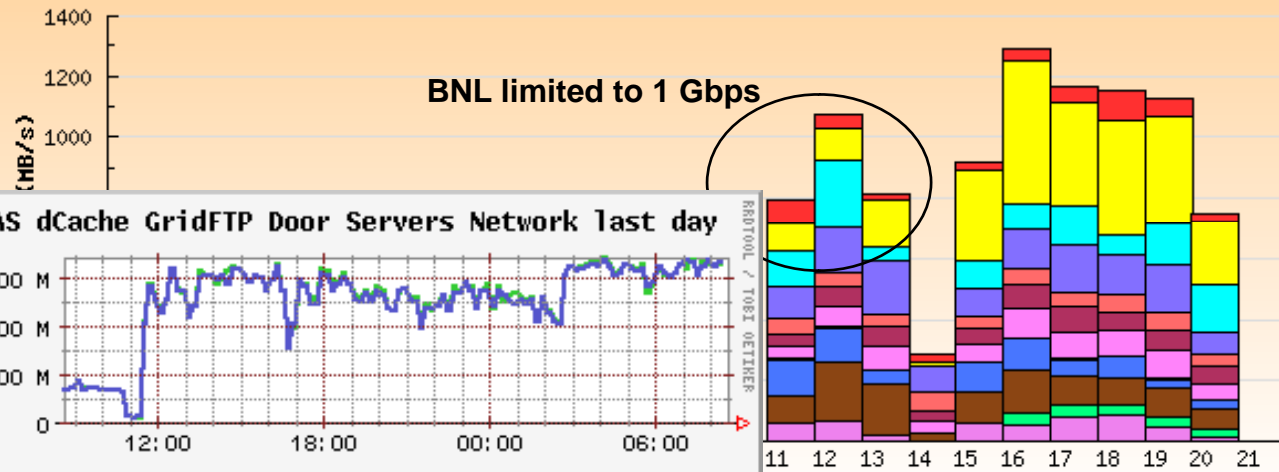
Problem solved by
ESnet



Bandwidth limited to 1 Gbps
Due to configuration problem at ESnet

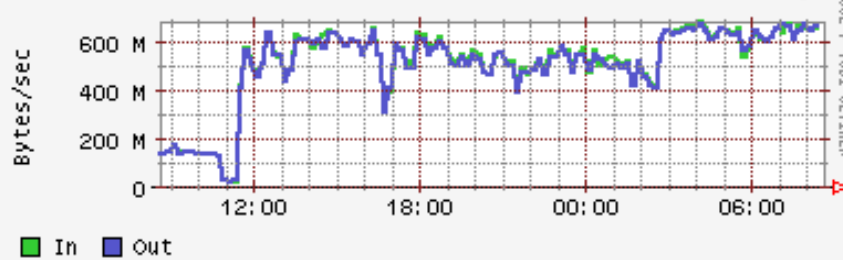


Averaged Throughput during the last 24 hrs (20/05 - 21/05)
Data Transfer For 'Atlas' From All Sites To All Sites

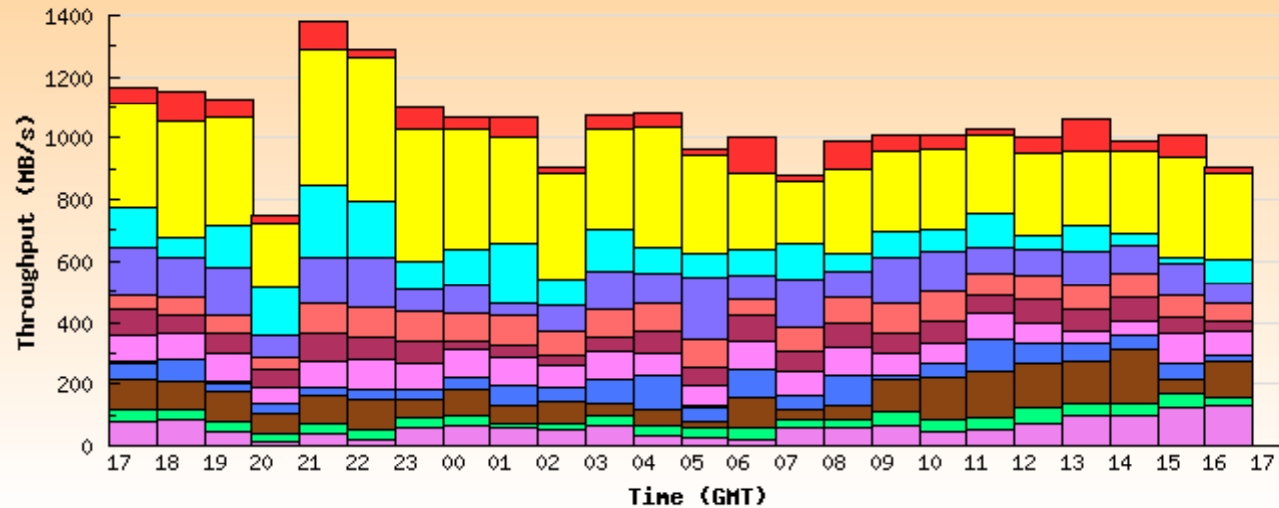


GRIDVIEW

ATLAS dCache GridFTP Door Servers Network last day



Averaged Throughput during the last 24 hrs (21/05 - 22/05)
Data Transfer For 'Atlas' From All Sites To All Sites

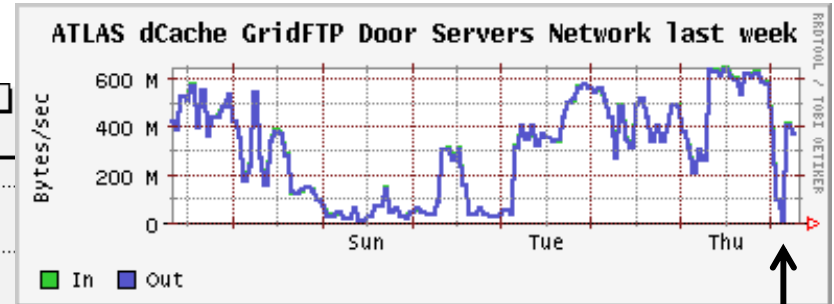
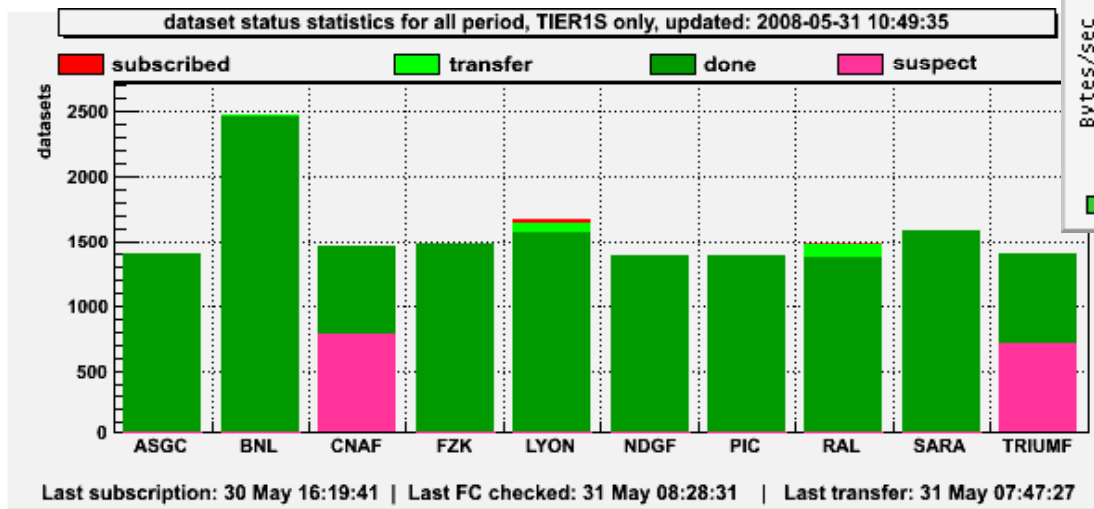


GRIDVIEW

Throughput Test Results (Tier-0 => Tier-1) Second Phase of ATLAS Throughput Test

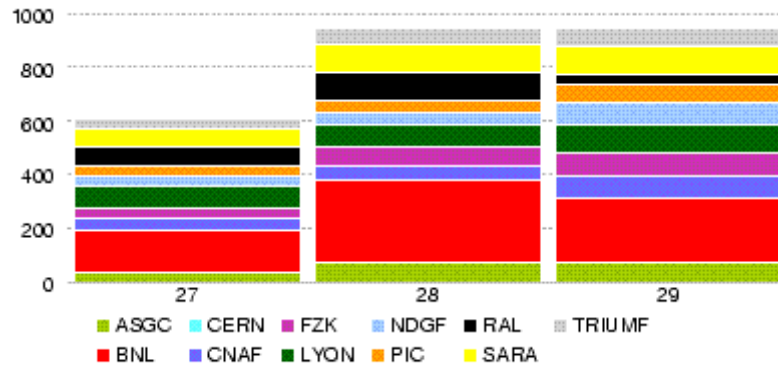


By number of datasets

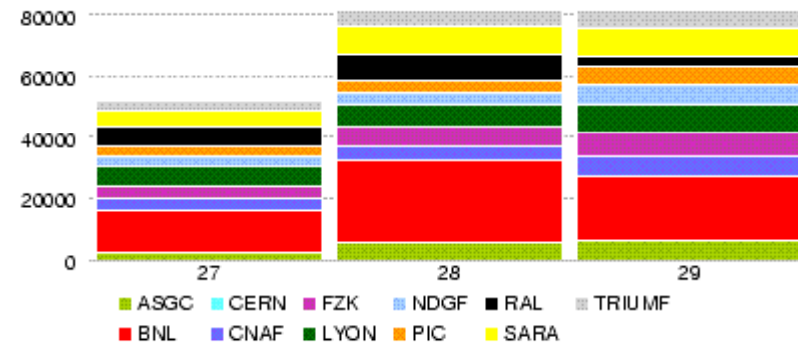


Power Failure at CERN

Transfer rate (MB/s)



Data Volume (GB)





Data Replication Progress

Tier-1's

Datasets	Total Files in datasets	Total CpFiles on sites	Last Subscription	FC Checked	Last Transfer
8953	81466	80820	24 May 09:39	26 May 08:57	24 May 18:16

Tier1	Datasets	Total Files in datasets	Total CpFiles in datasets	Completed	Transfer	Subscribed
BNL	1476	25415	25415	1476	0	0
FZK	893	7694	7694	893	0	0
IN2P3	919	8997	8997	919	0	0
INFN	836	7058	7062	832	0	0
NDGF	774	4096	3346	749	0	25
PIC	776	4156	4156	776	0	0
RAL	811	6337	6367	807	0	0
SARA	912	9308	9208	898	13	1
TAIWAN	758	3559	3559	758	0	0
TRIUMF	798	4846	5016	750	0	0

BNL

Tier-2's

Tier2	Datasets	Total Files in datasets	Total CpFiles in datasets	Completed	Transfer	Subscribed
AGLT2_DATADISK	694	1059	1059	694	0	0
MWT2_DATADISK	694	1059	1059	694	0	0
NET2_DATADISK	694	1059	1059	694	0	0
SLACXRD_DATADISK	694	1059	1059	694	0	0
SWT2_CP_B_DATADISK	694	1059	1059	694	0	0