# News from SC4 ATLAS

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- Wiki pages :
  - ATLAS Service Challenge

  https://uimon.cern.ch/twiki/bin/view/Atlas/ATLASServiceChallenges
  - LCG-France ATLAS SC4

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


- 19/06 – 8/07: Dataset transfer exercice T0 ➡ T1 ⟶ T2
- Conditions :
  - Production of dummy files (1-2 GB) at CERN
  - Daily dcache transfers to Lyon in dedicated area
    /pnfs/in2p3.fr/data/atlas/disk/sc4
  - 24 h lifetime in Lyon Tier-1
  - T2 participation on voluntary basis (not the priority)
  - ATLAS dataset transfert with DDM running in Lyon's VObox

# News from SC4 ATLAS

- **ATLAS SC4 Nominal rates :**

https://uimon.cern.ch/twiki/pub/Atlas/ATLASServiceChallenges/Tier0_SC4.pdf

  - out of the Tier-0 : 720 MB/s
  - to Lyon Tier-1 (on 13,5 % basis)
    - 43 MB/s to TAPE (Raw Data)
    - 47 MB/s to Disk  (ESD+AOD)
  - from Lyon to each Tier-2 (on full AOD set basis)
    - 20 MB/s

- **ATLAS T2 requirements**

  - SRM-based Storage Element
  - FTS channel definition
  - keep the data for 24 h (min. capacity 2 TB)

# News from SC4 ATLAS

- Pratical work of ATLAS and CC support teams (GR,SJ, DB, LS, JS, FS,FW…) :

  - Exercise DDM functionalities & monitoring

  http://atlas-ddm-monitoring.web.cern.ch/atlas-ddm-monitoring/

  - Installation and test of new DDM versions

  - Dcache and FTS tuning, Services load survey…

  - Tier2 of ATLAS (ToA) updating

  - Test transfer stability and scalability

  - very first transfers to T2 initiated  when data available in Lyon :

    - first step : one by one

    - not a throughput test

    - Priority given to T0 to T1 exercise

    - second step : transfer simultaneously to all T2s

# SC4 ATLAS: LCG-France T2-T3

- Tiers-2 and Tiers-3 SRM SEs involved for now :
  - GRIF (LAL, Saclay, LPNHE), LPC Clermont, Tokyo, Beijing, LAPP

- Disk space availability for ATLAS :
  - LAL : grid05.lal.in2p3.fr               no information published *
  - LPNHE : lpnse01.in2p3.fr              no information published *

| | | |
|---|---|---|
| SACLAY : node12.datagrid.cea.fr | Available : 2.5 TB | Used : 2.2 TB |
| LPC Clermont : clrlcgse03.in2p3.fr | Available : 2.2 TB | Used : 267 GB |
| Tokyo : dgse0.icepp.jp | Available : 6.4 TB | Used : 1.1 TB |
| LAPP : lapp-se01.in2p3.fr | Available : 866 GB | Used : 67 GB |
| Beijing : lcg004.ihep.ac.cn | Available : 119 GB | Used : 600 GB |

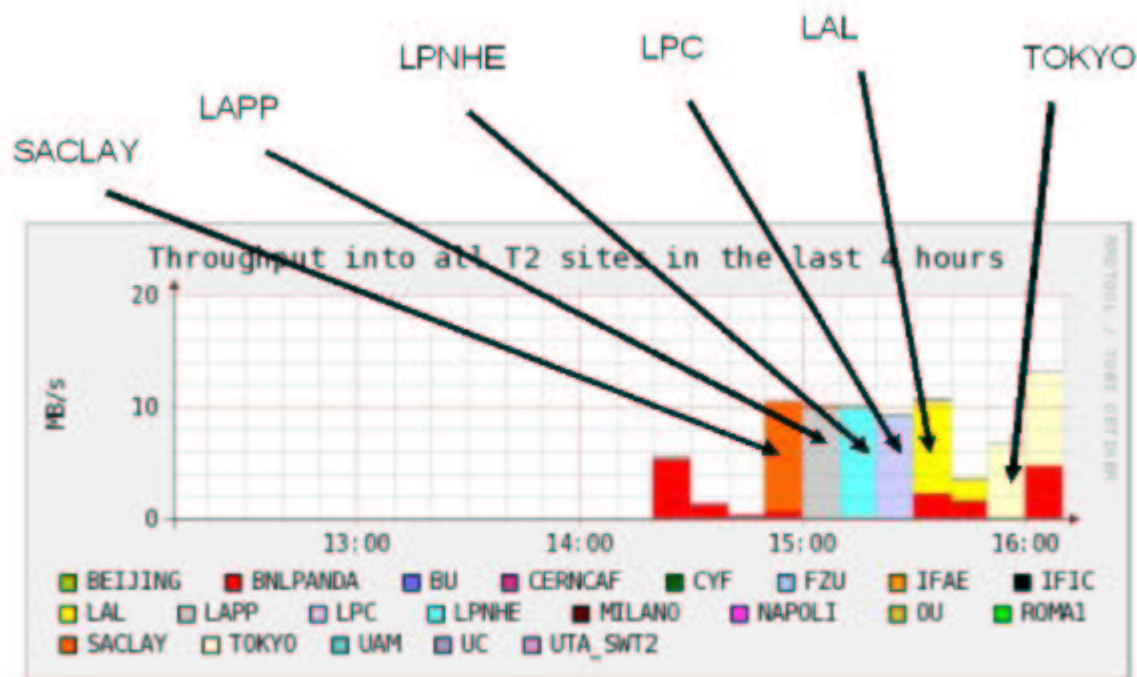*Check : /opt/lcg/var/gip/plugin/lcg-info-dynamic-se*

# SC4 ATLAS: LCG-France T2-T3

- ToA (Tiers of ATLAS) registration

http://atlas.web.cern.ch/Atlas/GROUPS/DATABASE/project/ddm/releases/
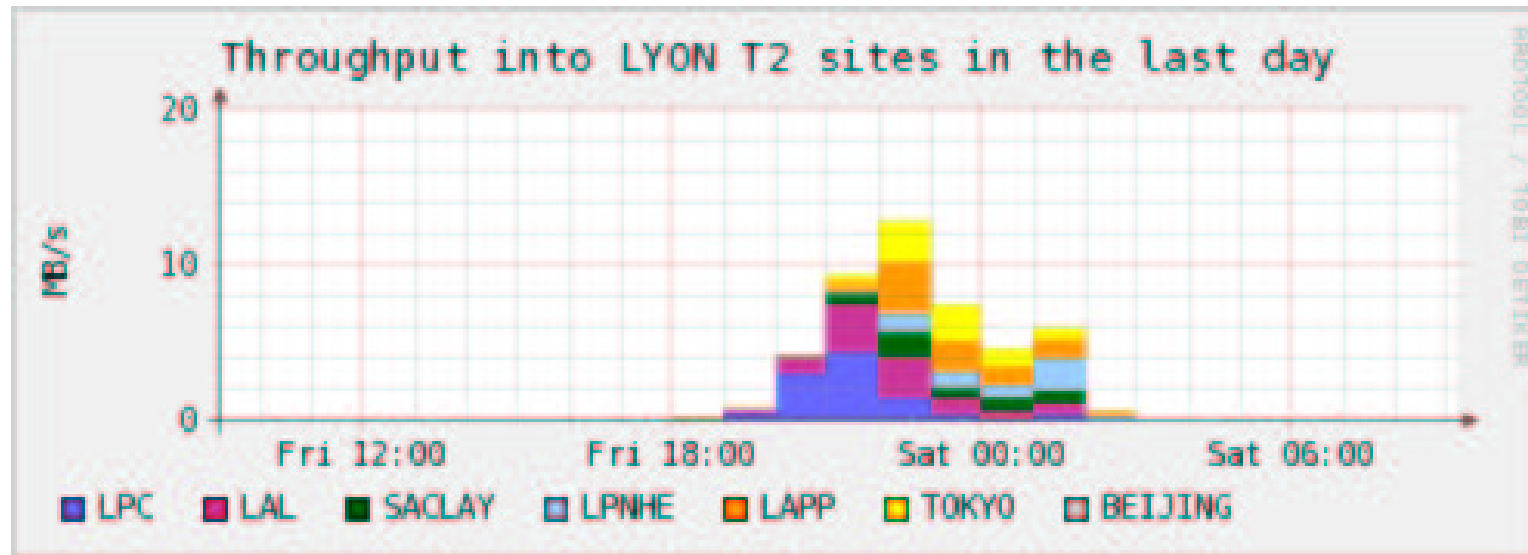
TiersOfATLASCache.py

- Define the set of sites offering resources to ATLAS and the topology
- Change has been requested for all these SEs having the same domain entry 'in2p3.fr'
- 'FRANCESITES': [ 'LYON', 'LPC', 'LAL', 'SACLAY', 'LPNHE', 'LAPP', 'CPPM', 'TOKYO', 'BEIJING' ]
- Stéphane Jézéquel is taking care of that

# SC4 ATLAS: Transfers to T2 & T3(01/07/06)



- 12 MB/s during 1 hour
- 15 concurrent files and 10 streams for LYON-TOKYO
- 10 concurrent files and 10 streams for LYON-French T2s except LAPP (5 concurrent files and 1 stream)
- 5 concurrent files and 5 streams for LYON-BEIJING
- Cleanup of the files was perform by Stéphane's script
- DDM version was unable to support transfer to all sites at the same time

Throughput into LYON T2 sites in the last day

- Test of new DDM version
- Transfer to all sites at the same time
- Not a significant throughput test (limited by DDM)
- Work on DQ2 and mysql to reduce the load on the VObox