ALICE requirements for February phase of CCRC'08
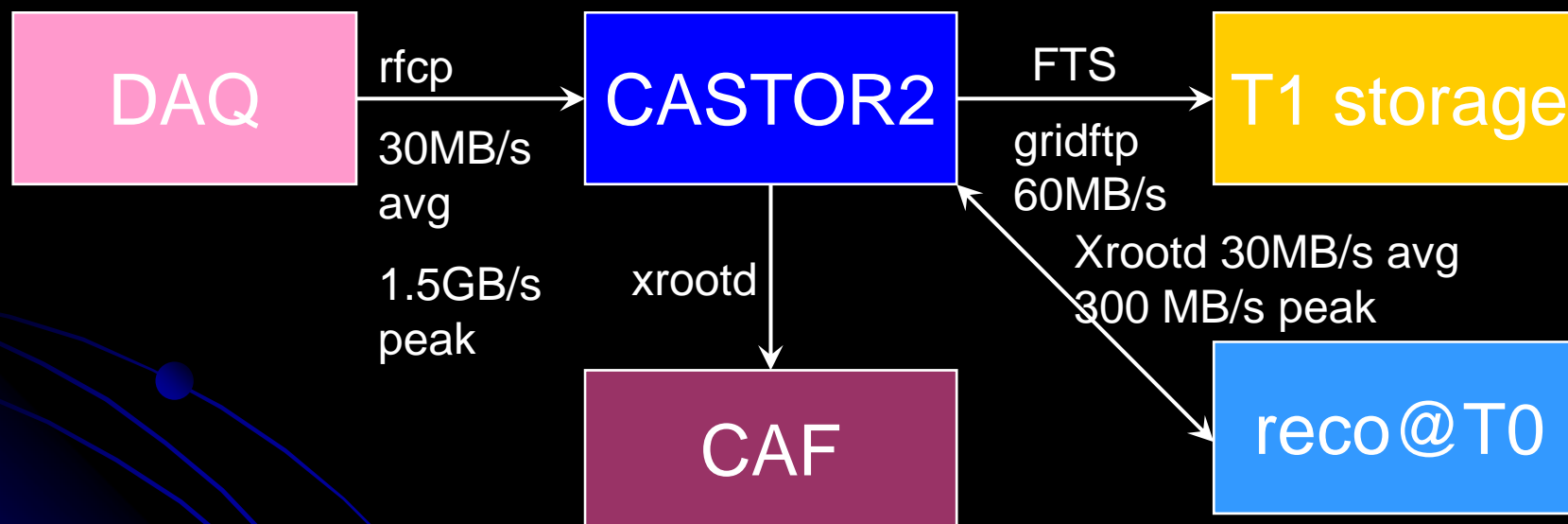
Latchezar Betev (ALICE)

CCRC F2F, January 10, 2008
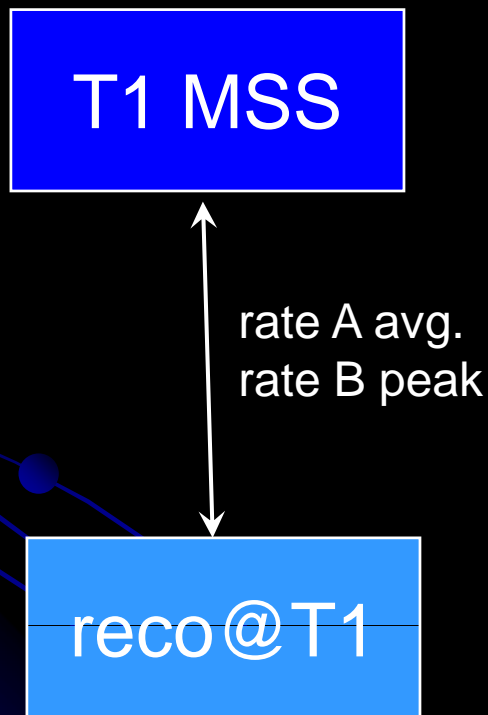
ALICE commissioning run – February 4-29 2007

- ## Second common data taking exercise with partial ALICE detector setup
- ## First CR ran 10-21 December 2007
  - ### Post-mortem analysis of the exercise is going on now
- ## 15-16 January 2008 – CR analysis and planning workshop
  - ### True detector rates, volumes of data and consequently the CCRC'08 ALICE metrics will come out of this workshop

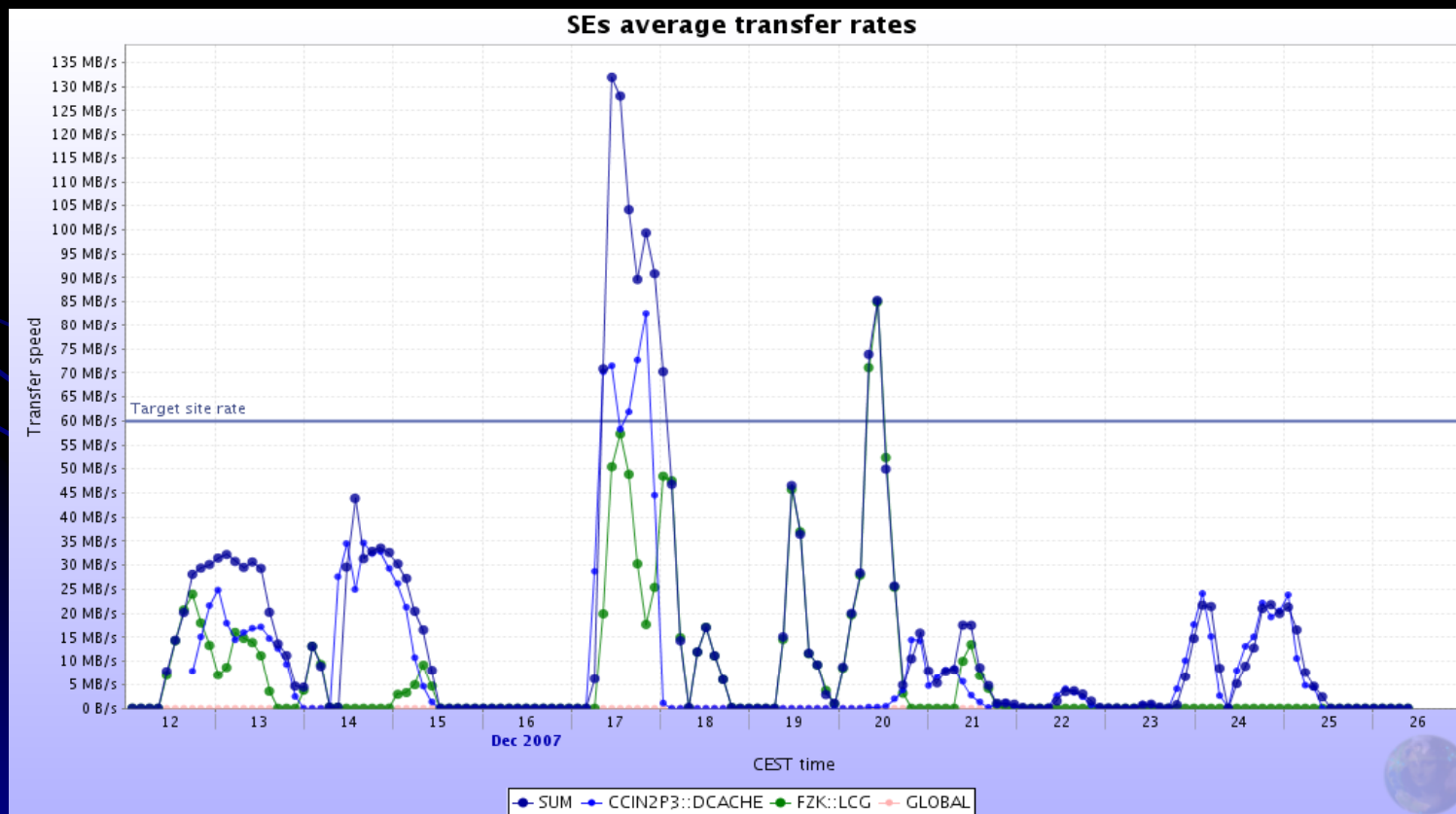# Data taking, replication to T1s, reconstruction and CAF at T0

DAQ → rfcp 30MB/s avg 1.5GB/s peak → CASTOR2

CASTOR2 → FTS → T1 storage

CASTOR2 → xrootd → CAF

CASTOR2 ↔ gridftp 60MB/s, Xrootd 30MB/s avg 300 MB/s peak → reco@T0

Reconstruction at T1s

T1 MSS

rate A avg.
rate B peak

reco@T1

T1	Rate A (MB/s)	Rate B (MB/s)
CCIN2P3	5	300
CNAF	5	300
GridKA	12.5	300
NDGF	5	300
RAL	1.4	300
T1-NL	1.4	300

Activities table

Activity	Week1	Week2	Week3	Week4
Data Taking	✔	✔	✔	✔
Data replication to T1s	✔	✔	✔	✔
Raw data processing to ESDs, Pass 1 at T0, Pass 2 at T1s	✔	✔	✔	✔
MC production	✔	✔	✔	✔

FTS

- December exercise already used it for two T1s (GridKA, CCIN2P3)
  - Replication only of RAW data
  - Continuous rate was not a goal

Site readiness

- **FTS endpoints set up and working at CCIN2P3 and GridKA**
  - For February, it is just a question of adding more resources to these
  - In addition, the 'recyclable' endpoint should be configured everywhere

- **T-NL, NDGF (dCache) – copy of existing configuration**

- **CNAF, RAL (CASTOR2) – more complex issue, need CERN operational experience**

Services and criticality

ALICE Wiki: http://twiki.cern.ch/twiki//bin/view/ALICE/CCRC08

Critical service list

Rank	Definition	Max downtime (hrs)
10	Critical	2
7	Serious disruption	8
5	Reduced efficiency	12

Service	Rank	Comment
Site VO boxes	10	If restored within 2 hours - no loss of jobs
CASTOR2+xrootd@T0	10	Same as above
MSS@T1s	7	
FTS T0->T1	5	Will affect primarily second pass reconstruction at T1s
gLite WMS or RB	5	Failover mechanism 1/3 used, efficiency will be affected if all 3 fail
PROOF@CAF	5	Especially relevant during daytime

Services and criticality

- The set of services and criticality level in February will be the same as in December CCRC
  - In that sense, we are already using the majority of services

Summary December test and follow-up

- Functional test of all building blocks for February CCRC
- No problems observed with workload management
- Concentrating on data management
- FTS is performing well
  - Site configurations are clear (and working) at two T1s
  - For the remaining T1s, we will use the same logic/structure