WLCG Service Report

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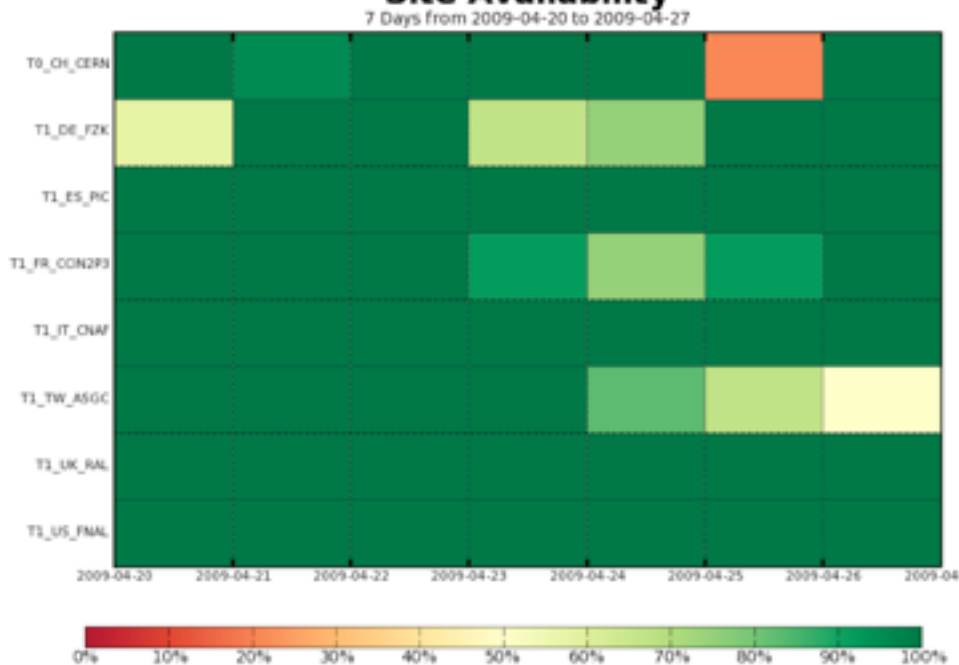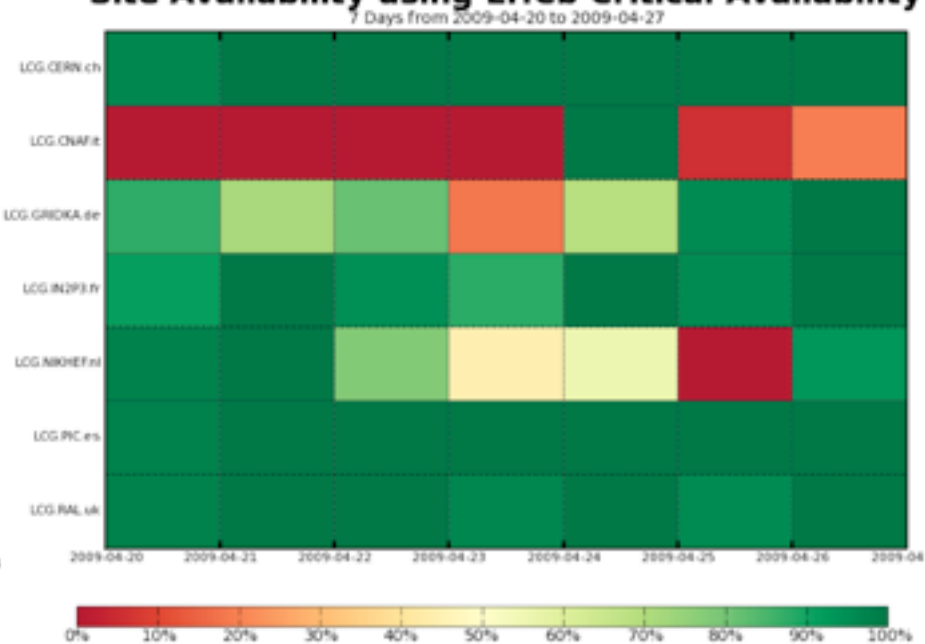
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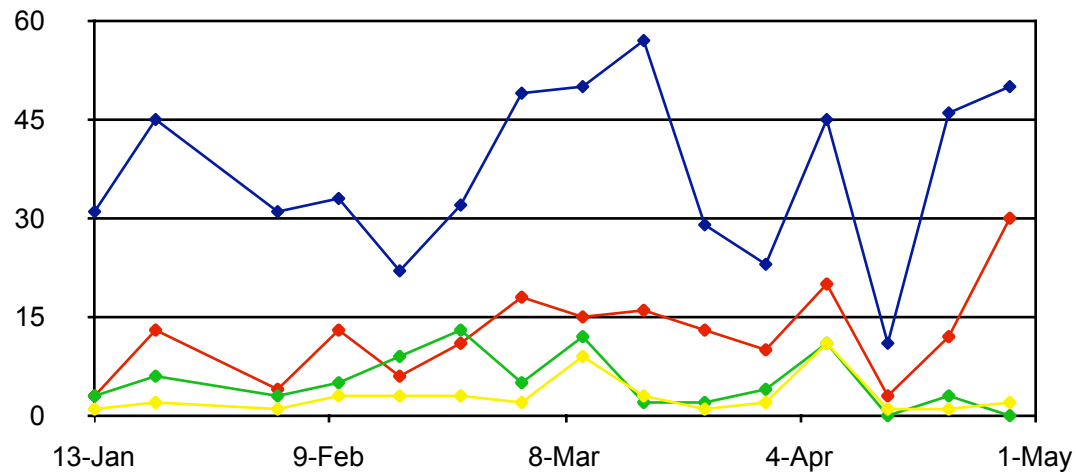**WLCG Management Board, 28st April 2009**

Introduction

- This report covers the service since last week's MB
- Normal week for operations
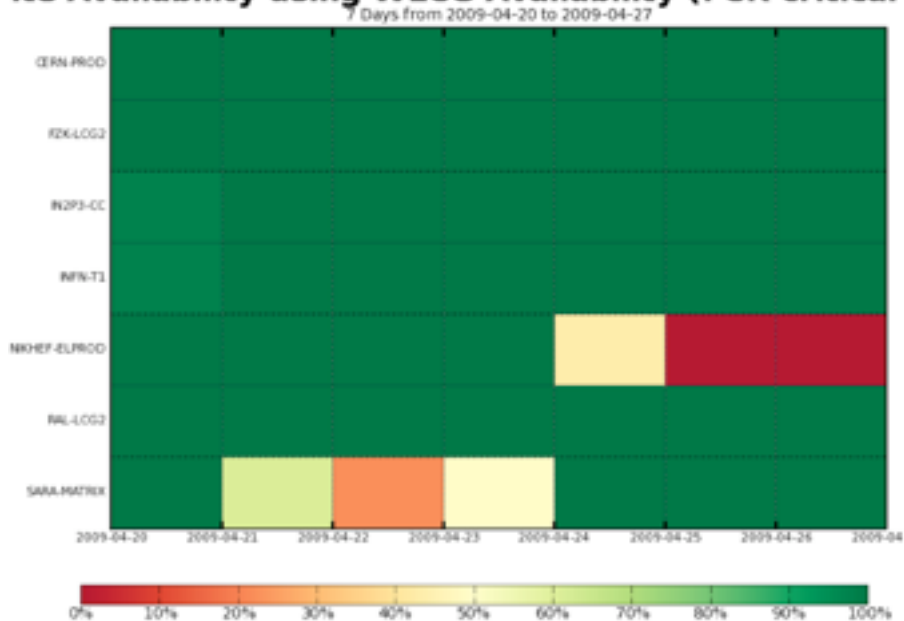 - One Service Incident Report from CC-IN2P3

GGUS Summaries

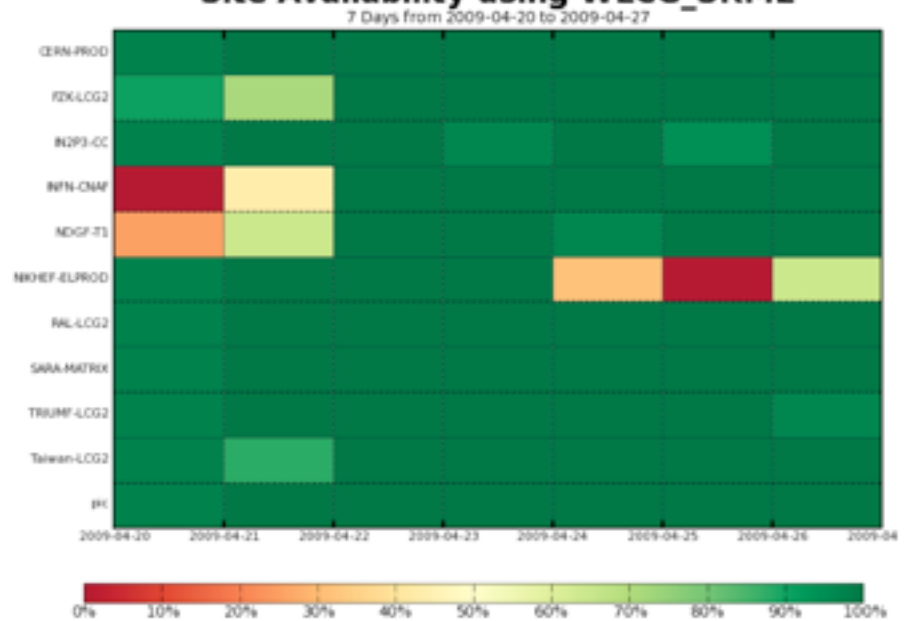| VO concerned	USER	TEAM	ALARM	TOTAL
ALICE	2	0	0	2
ATLAS	13	37	0	50
CMS	0	0	0	0
LHCb	17	13	0	30
Totals	32	51	0	82

GGUS tickets per VO

ite Availability using WLCG Availability (FCR critical
7 Days from 2009-04-20 to 2009-04-27

Site Availability using WLCG_SRM2
7 Days from 2009-04-20 to 2009-04-27

Site Availability
7 Days from 2009-04-20 to 2009-04-27

Site Availability using LHCb Critical Availability
7 Days from 2009-04-20 to 2009-04-27

Tuesday, 28 April 2009

Other site issues/highlights

- ASGC cleanup for ATLAS
  - LFC: purged, isolating ATLAS, adding redundancy
  - Tier 2 cleanup ongoing with help from DPM support
  - Sites should not hesitate to contact service support for help

- CC-IN2P3
  - Service Incident Report received (see next slide)
- CERN
  - Significant performance boost in CASTOR after memory upgrade (8->16GB/node) for repack stager database
  - All sites should regularly review DB clusters for memory utilisation / swapping during increased load periods
  - Common DB monitoring proposed at DB workshop @ PIC

IN2P3 MSS Outage 20th April

Duration: 12 hours
Date: April 20th 2009
Description: Hardware failure of the robotic library inducing a global outage of the MSS.
Impact: MSS

Batch was unavailable for any job depending on MSS.

Local backup service interrupted during the outage.

Estimated 18% shortfall of running (non-grid) jobs during outage (jobs locked in queue).

Timeline of the Incident

Monday April 20th

11:12 incident report opened against our robotic supplier

12:15 robotic supplier on site – hardware and software checks start

18:00 final tests and diagnosis

19:30 hardware change

22:30 robotic library in operational state

23:10 MSS system accessible in degraded mode

Tuesday April 21rst

11:30 Full pledge usage of MSS

Full report at https://twiki.cern.ch/twiki/bin/view/LCG/WLCGServiceIncidents

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Update: Oracle BIGID problem in CASTOR

- Better understanding of the pre-conditions under which the problem occurs
  - Affects Oracle server side data buffer when using "returning into" from OCCI using bulk operations
    - Can't exclude yet a more general Oracle consistency issue
  - Test case has been developed - reproducible now in minutes!
- More Big ID cases observed at CERN and T1s
  - So far, failed CASTOR requests, but no data loss
  - Further investigations with Oracle development
    - Several workaround scenarios being discussed
    - Finding the optimal (risk & effort) needs detailed (Oracle side) knowledge about the corruption process
- Using CERN direct contact into Oracle development to speed up information exchange
  - May need to raise priority for Oracle fix

Other service issues / news

- LHCb : LFC use via CORAL
  - Issues with DB credential look-up from LFC
    - discussion between LHCb, LFC and CORAL team on possible optimisations
  - Is LHCb accessing the correct LFC instance?
    - read-write versus read-only LFC?
    - site local LFC versus Tier 0 instance?

- ALICE : pre-certification WMS 3.2 deployed at two sites (GRIF)
  - issues with job wrapper observed and fixed

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DB Workshop @ PIC

- Chaired by Maria Girone
  - http://indico.cern.ch/conferenceOtherViews.py?view=standard&confId=54037
- Main outcomes
  - Allocated DB resources for STEP'09 and for the 2009/2010 run
  - Positive test and deployment reports for DB set-ups on RHEL 5 - CERN upgrade by summer 2009
  - Tracking and and announcing procedures reviewed and confirmed
  - Good progress with AMI replication preps between IN2P3 and CERN
  - Procedures and responsibilities for for re-instantiation of DB between Tier 1 sites confirmed
  - Final NDGF database setup being setup in Oslo - DataGuard based migration from Helsinki
  - Pilot queries being proposed by ATLAS to throttle DB workload
  - Failover LFC database based on DataGuard between CNAF and ROMA1
  - No plans to upgrade to Oracle 11 before the LHC run - but 11.2 beta evaluations ongoing
  - Several castor DB operational issues and procedures discussed
  - Define a standard castor DB config between T1 sites (test setup at T0)

Summary

- Normal operation and number of GGUS tickets
- Main problems (fixed)
  - MSS outage at IN2P3
  - CNAF/CASTOR publishes incorrectly : FTS problem
  - CERN/CASTOR single user unintended "DoS attac"
    - CASTOR user monitoring in 2.1.8 will address this area
- Test case for Oracle "Big-ID" problem found
  - CASTOR risk assessment and search for workaround ongoing with Oracle development