



WLCG Service Report

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WLCG Management Board, 10th November 2009

Introduction

- Covers the weeks 26th October to 6th November.
- Main Issues arising or closed
 - ASGC ATLAS conditions database re-synchronization.
 - ASGC CASTOR Service outage
 - SARA FTS and LFC database inconsistency after h/w move
 - Large amount of batch queries at CERN from LHCb
 - New LINUX exploits and associated patch campaigns
 - SIR for IN2P3 cooling incident on Nov 3rd

Meeting Attendance Last Week

Site	M	T	W	T	F
CERN	Y	Y	Y	Y	Y
ASGC	Y	Y	Y	Y	Y
BNL	Y	Y	Y	Y	Y
CNAF	Y	Y	Y	Y	Y
FNAL					
FZK	Y	Y	Y	Y	
IN2P3	Y		Y	Y	
NDGF					
NL-T1	Y	Y	Y	Y	Y
PIC		Y	Y		
RAL	Y	Y	Y	Y	Y
TRIUMF					

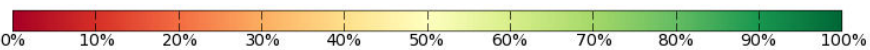
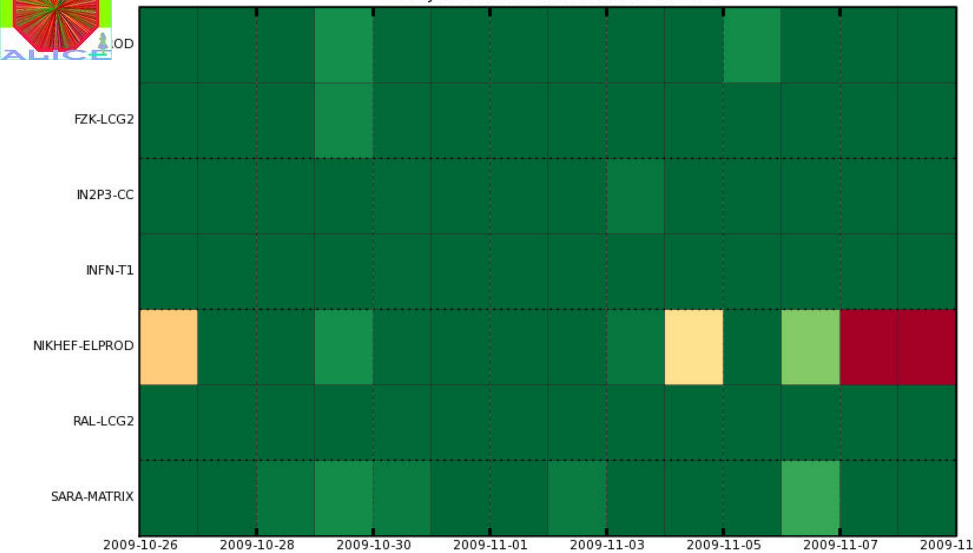
GGUS summary (2 weeks)

VO	User	Team	Alarm	Total
ALICE	2	0	0	2
ATLAS	23	98	0	121
CMS	11	1	0	12
LHCb	1	18	0	19
Totals	37	117	0	154

- NO alarm tickets.

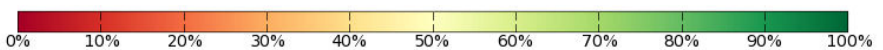
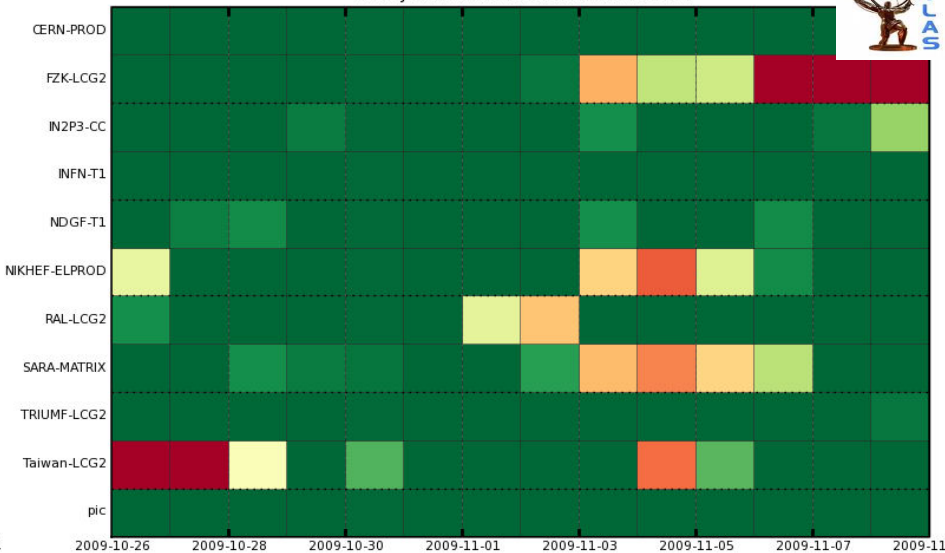
Availability using WLCG Availability (FCR critical)

14 Days from 2009-10-26 to 2009-11-09



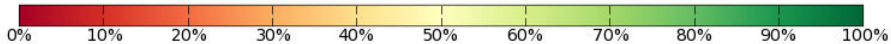
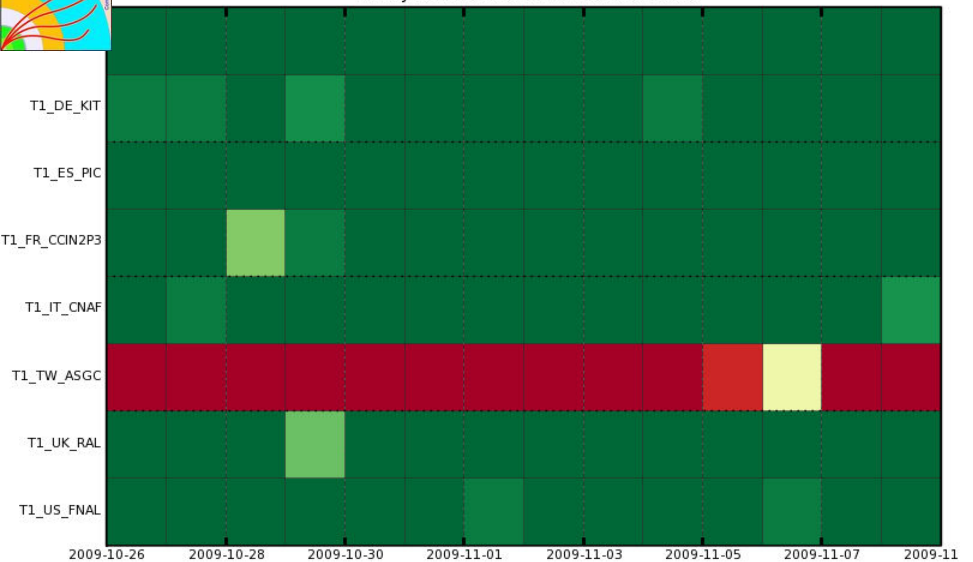
Site Availability using WLCG_SRM2

14 Days from 2009-10-26 to 2009-11-09



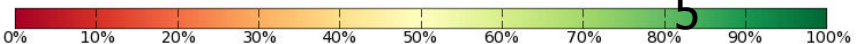
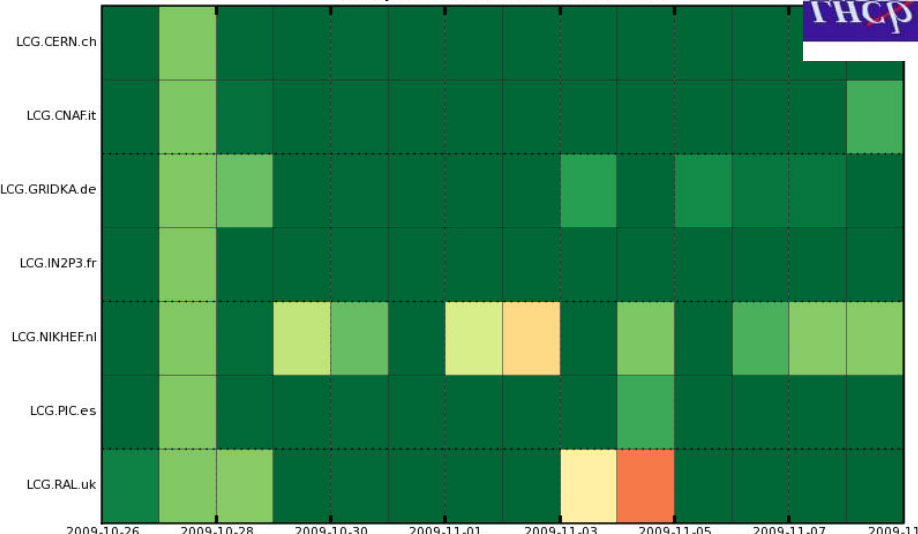
Site Availability

14 Days from 2009-10-26 to 2009-11-09



Site Availability using LHCb Critical Avail

14 Days from 2009-10-26 to 2009-11-09



Security Intervention to protect against new LINUX exploits

- From the EGEE broadcast last Thu
 - A severe vulnerability in 2.4 and 2.6 the Linux kernel(CVE-2009-3547) was published, which leads to a kernel NULL pointer dereference, i.e. it falls into the same category as the previous vulnerabilities which have led to a number of successful root level intrusions. A public exploit has been released, and all sites are asked to URGENTLY APPLY the relevant security patches.
- Large number of installations affected (eg also WNs)
 - Started rapid patching and reboot campaign at CERN and other sites
 - VO responsible reacted quickly for VOboxes
 - Intervention at CERN concluded on last Friday
 - BNL suggested that security team might be able to give some certification information for urgent fixes together with incident announcements

ASGC DB Problems

- 2 major DB problems
 - Atlas Condition DB:
 - After a long outage of ATLAS conditions DB performed a complete re-instantiation using transportable tablespaces. Thanks to BNL who acted as source DB.
 - CASTOR DB:
 - Several dedicated phone meetings with experts from CERN and ASGC
 - All CASTOR DBs (apart from monitoring DB) have been recovered
 - DB config review – resulted in setup of 2 DB clusters using ASM for CASTOR ns and other CASTOR services
- Lessons learned for recovery procedure and setup will be part of upcoming Distributed DB Operations workshop
 - <http://indico.cern.ch/conferenceOtherViews.py?view=standard&confId=70892>

ASGC Castor Service

- Despite the large efforts from ASGC and CERN experts to reestablish the CASTOR service:
 - Still problems for experiments to get a reliable service for data transfers
 - ASGC team is working hard to resolve issues
- Need completion of existing Service Incident report from ASGC
 - CERN experts offer help to provide technical input on DB and CASTOR side
- A larger rate of emergency situations like this are not sustainable for site teams
 - Nor for the CERN teams

SIR: Cooling Incident @ IN2P3

Cooling outage at CC-IN2P3

Tuesday, November 03rd 2009

Author: Marc Hausard

Description

Unexpected outage of cooling service while performing some work on the heating system.

Timeline

15:15 Circuit breaker powers off the building control unit and the water pump.

15:25 Abnormal raise of temperature is noticed.

15:30 Staff powered off WN. Actions taken to lower the room temperature by extracting warm air.

15:50 Critical services back. Workers nodes are gradually back into production.

16:24 Incident is reported to users through newsgroup.

19:00 Batch is re-opened

[....]

Follow up

Incident showed that the time delay allowed for reaction is very short in such failure.

It has been agreed to set up an automated mechanism to switch off WN based on temperature rise.

Miscellaneous Reports

- Tape migration problems under investigation at RAL
- FTS 2.2 being tested by ATLAS (main reason checksum support), using patched version @ CERN
 - Unexpected FTS upgrades to 2.2 took place at BNL, FZK, NL-T1.
- dCache upgrades at many sites - so far no major problems
- New VObox version tested by ALICE
- Interventions at PIC and BNL planned with experiments affecting part of site storage

Summary/Conclusions

- Long standing problems at ASGC (CASTOR and Condition Database) hopefully resolved now.
 - Conditions and CASTOR services reopened
- NL-T1 had difficulties with moving a consistent DB version for LFC to new DB cluster.
 - A coordinated DB recovery validation exercise will take place the 26th November: all T1 sites are encouraged to participate
 - Additional documentation for application schema migration in preparation
- Urgent Security issue triggered rapid reaction at CERN other WLCG sites
- Activity is raising – in some areas above the sustainable level for existing staffing