WLCG Service Report

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WLCG Management Board, 17th March 2009

Introduction

- This report covers the week since the last WLCG MB

- ☹ **Another significant service incident this week – CASTOR ATLAS 12 hour outage on Saturday (CERN)**
  - The CASTORATLAS instance was unavailable for ~12hrs between 01:00 and 13:00 this morning.
  - The outage was due to a database corruption.
  - More details from the database team are available here
  - A post-mortem analysis is available here.

- A series of (largely) "transparent" interventions on the CERN CASTOR DBs has been scheduled for this week: more

CASTOR ATLAS (CERN)

- ATLAS CASTOR and SRM production instances were down for approximately 12 hours:
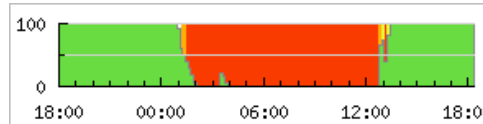
- Timeline:
  - 01:48 - operator called the SMoD following the alarm: "castor_degraded on C2atlassrv101":

Oracle have been requested to *"publish an "alert" about such a critical problem (they publish a list of critical known issues), we review this list on a regular basis and we would have included the patch several months ago"*

  - 13:25 - CASTOR ATLAS is back in production

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GGUS Summaries

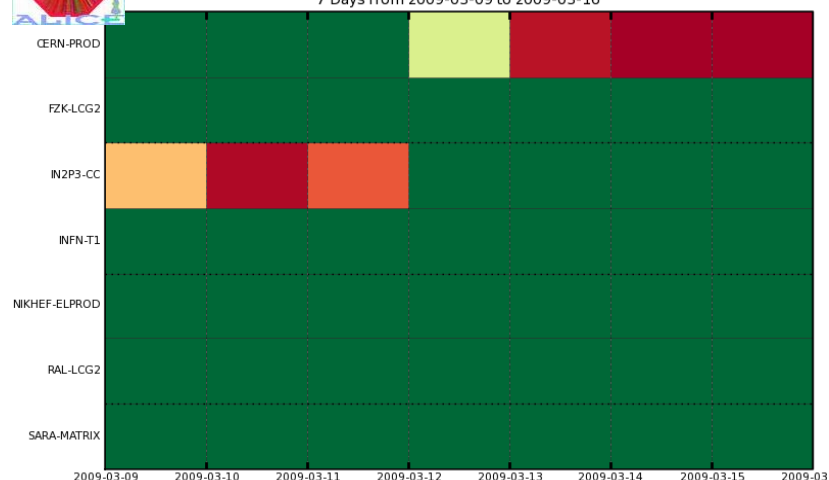| VO concerned	USER	TEAM	ALARM	TOTAL
ALICE	3	0	0	3
ATLAS	35	21	**1**	57
CMS	2	0	0	2
LHCb	7	1	8	16
Totals	47	22	9	78

- **1 left-over alarm ticket from the week-before-last's scheduled test – ATLAS to ASGC (not opened during the agreed period due to understood problems at ASGC – responded to well within targets)**

- **LHCb alarms: we also should be testing the ability of the VO's alarm team to open tickets – i.e. ALL VOs should have people able to raise alarms at any time!**

- **Reminder: we will repeat such a test the week after CHEP: the goal is to have completed the analysis prior to the following week's F2F meetings (7 – 8 April 2009)**
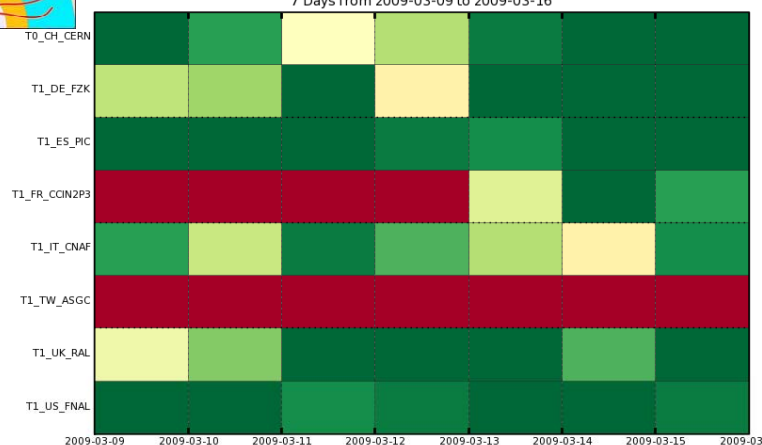
Service Summary – Experiment Tests

ilability using WLCG Availability (FCR critical
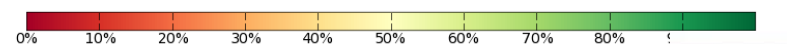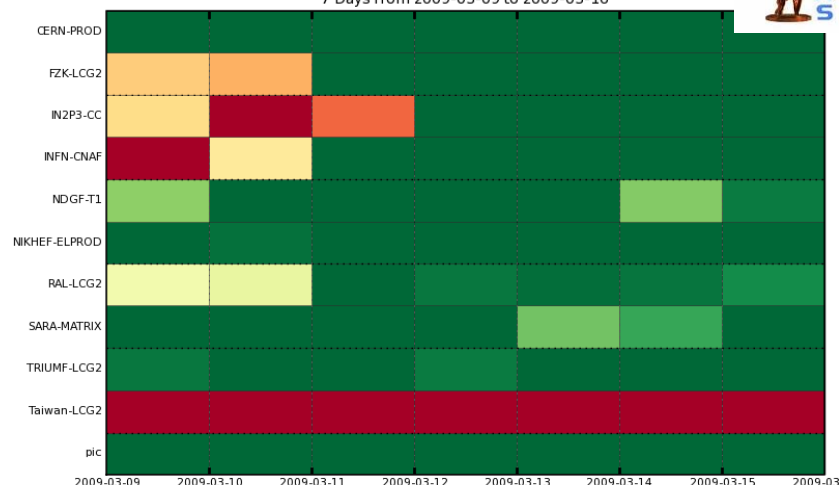7 Days from 2009-03-09 to 2009-03-16

Site Availability using WLCG_SRM2
7 Days from 2009-03-09 to 2009-03-16

Site Availability
7 Days from 2009-03-09 to 2009-03-16

Site Availability using LHCb Critical Avai
7 Days from 2009-03-09 to 2009-03-16
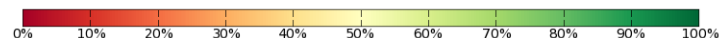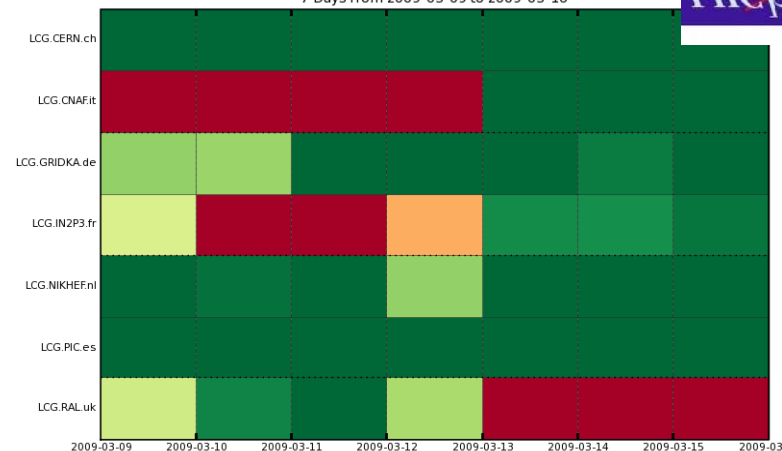
WMS Issues

- Growing concern on WMS stability issues – several sites (CERN, RAL, GRIF) that have installed the megapatch report stability problems – not always load related...

- Maarten Litmaath has done some investigations – the results of which are included on the following slides.

WMS investigations (Maarten)

1. There are at least 2 new problems besides the known bug + workaround:
   - http://cern.ch/glite/packages/R3.1/deployment/glite-WMS/glite-WMS-known-issues.asp

2. A cron job was implemented to automate the workaround, but it changed the wrong parameter in the configuration and therefore failed; this should be fixed today.

3. On wms216 (LHCb) I temporarily disabled the cron job (it is enabled now),   fixed the correct parameter and restarted the WM. It went fine until it crashed with a different segfault, details here:
   - https://savannah.cern.ch/bugs/?47040
   - I had to move one unprocessed job out of the way to allow the recovery to proceed, after which yet a different segfault occurred, this time for a cancellation request; the good news here is that a simple restart dealt with that, so we probably can live with it.

4. …

WMS investigations cont.

4. Prior to investigating the WM troubles I looked into why the WMProxy had become autistic, details here:

   - https://savannah.cern.ch/bugs/?48176

5. Whatever caused those processes to hang, at least a restart must get rid of them:

   - https://savannah.cern.ch/bugs/?48172

- Those 3 bugs are all ranked major at the moment, but we may want to bump some or all of them to critical.
- We now need to check what is happening on both WMS nodes for ATLAS and on one WMS for SAM; probably more of the same.

CERN Network Intervention – March 19

- 2 part network intervention

    1. The intervention will start with the upgrade of the routers of the General Purpose Network which will happen at **06:00 a.m**.
        - This will entail a ~15min interruption, which will affect access to AFS, NICE, MAIL and **all** Databases which are hosted in the GPN among other services.
        - Next, the switches in the General Purpose Network that have not been previously upgraded will be upgraded resulting to a ~10min interruption.
        - **All** services requiring access to services hosted in the Computer Center will see interruptions.
    2. The routers of the LCG network will be upgraded at **08:00 a.m**., mainly affecting the Batch system and CASTOR services, including Grid related services.The switches in the LCG network that have not been previously upgraded will be upgraded next.
        - This network intervention is planned to have finished by **noon** (12:00 pm) .

- After the network intervention is finished (13h00) there will be a 3h intervention affecting the **CASTOR nameserver** (all instances affected). CASTOR will be inaccessible during that intervention. More details here.

- ➢ **No doubt this and recent incidents will give us plenty of material to discuss at WLCG Collaboration workshop**

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CNAF downtime: 30/03 – 03(06?)/04

- In the period 30/03/2009 - 03/04/2009 the INFN-T1 at CNAF in Bologna will be completely down (power supply and air conditioning) due to the interconnection of the existing services to the new infrastructure system.
    - Batch queues will be closed on Friday 27/03/2009.

- The electrical down will last from 30/03/2009 to 02/04/2009.
- The reactivation of all software systems, farming and storage services will start as soon as the intervention on the new infrastructure is completed; all services are planned to be completely up and running by 06/04/2009.

- ➢ **Please note that the dates of this scheduled downtime are dependent on proper commissioning of the new infrastructure, which has to happen before the actual downtime: in case of major problems with the commissioning, this downtime will be rescheduled.**

- The only services planned to be maintained active during the downtime week (with "at risk" status) are:
    - the wide area network Point of Presence (GARR)
    - the INFN-T1 central core router
    - Basic INFN national services
    - Basic grid services (trouble ticketing, LFC)
    - LSF license servers

Agenda Overview – Day 1

What?	Who?
Introduction	Milos, Jamie
LHC Status Report	See CHEP talk from Sergio Bertolucci
WLCG Roadmap for 2009/2010	Ian
Experiment Roadmaps	Peter, Kors, Matthias, Philippe
Site Reviews	Ian
DB Service Reviews	Maria
DM Service Reviews & Outlook	Jos, Barbara, Andrea, Brian, ...
Panel discussion on DM futures (including but not limited to short term priorities): experts, site & experiment representatives etc.	
WLCG Beer Tasting Session!	

Agenda Overview – Day 2

What?	Who?
WLCG Analysis Services WG	Markus
Supporting Analysis Services	Massimo + discussion(s)
Operations procedures & tools	Nick et al
Service Incident Reports	Olof et al
Site Suspension	Graeme, Jamie, Nick, ...
Site Response	[sites, experiments]
Monitoring	Elisa, Julia, David, Rob, Brian, ...
Resource & Usage Monitoring	Steve
Downtime handing	Pablo
Support issues: team & alarm tickets etc.	Julia
"Meet the SCOD"	WLCG Service Coordination Rota

WLCG Collaboration board (closed) followed by CHEP reception!

"Summer Time"

- Starts in Europe and many other countries on Sunday 29th March – one week later in US and others
  - See http://www.timeanddate.com/time/dst2009a.html

☺ Fortunately does not coincide with WLCG workshop (and an early start due to security!)

➢ **"Spring forward, fall back"**

Summary

- In addition to continuing Service Incidents – such as CASTOR + SRM at CERN – on-going issues at many sites reported at daily meetings by the experiments

➢ **Some of these can persist for long periods of time: need to follow-up on the most important of these and understand root cause(s) and possible resolution**

☺ **We have plenty of material for the workshop this weekend!**