



WLCG Service Incident Reports

WLCG Service Coordination Team

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WLCG Collaboration Workshop, 7th July 2010

#### **Overview**

- Brief reminder of Service Incident Reports (introduced in February run of CCRC'08)...
- Summary of SIRs since LHC restart (Q2 1 day)
- Drill-down into 1 specific SIR
- Discussion



# Service Incident Reports: When?



- Degradation goes beyond some MoU target for any service classified as critical for at least one of the VOs!
- SCOD asks for it
- When it's useful for your own purpose
  - Tracking of incidents and the restoration 
    your knowledgebase for <u>when</u> it happens next time





# SIRs – Categorization

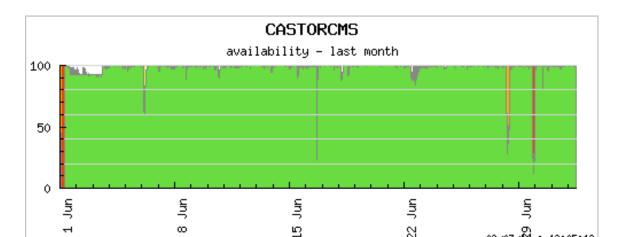
• Since the LHC restart on 30 March 2010 there have been some 20 CERN-CASTOR related SIRs, 6 (8?) DB-related and 9 others

Quickly review these by category...

| Date    | Duration  | Summary                                                              |  |  |  |  |
|---------|-----------|----------------------------------------------------------------------|--|--|--|--|
| 29 June | 4 hours   | CASTOR outage due to AFS unavailability                              |  |  |  |  |
| 28 June | 4 hours   | High volume of SRM logs and second DLF overload                      |  |  |  |  |
| 22 June | 3 hours   | LDAP Overloaded                                                      |  |  |  |  |
| 16 June | 1 hour    | CMS jobmanager daemons stuck on AFS                                  |  |  |  |  |
| 14 June | 2 mins    | LSF reconfiguration after node move affected CASTORLHCB              |  |  |  |  |
| 13 June | n/a       | two ATLAS "temp" class files lost due to diskserver crash            |  |  |  |  |
| 7 June  | 3.5 hours | default pool overloaded with disk to disk copies                     |  |  |  |  |
| 1 June  | 6 hours   | Jobmanager was not submitting new work                               |  |  |  |  |
| 31 May  | 1.5 hours | LSF recontiguration after node move affected CASTORPUBLIC            |  |  |  |  |
| 25 May  | 3 hours   | stuck rsyslog affected <u>T0Merge</u>                                |  |  |  |  |
| 20 May  | 6 hours   | CMS TOExpress caused LSF overload                                    |  |  |  |  |
| 14 May  | 2 months  | Castor data incorrectly recycled                                     |  |  |  |  |
| 13 May  | 3 hours   | CMS stress test load                                                 |  |  |  |  |
| 1 May   | 7 hours   | Castor Affected Piquet Call                                          |  |  |  |  |
| 29 Apr  | 5 hours   | GridFTP checksum errors for large files                              |  |  |  |  |
| 22 Apr  | 4 hours   | CMS alarm ticket for long write wait times                           |  |  |  |  |
| 21 Apr  | 2 hours   | lxfsrc5706 filesystem error                                          |  |  |  |  |
| 16 Apr  | 3 hours   | High error rate on SRM                                               |  |  |  |  |
| 7 Apr   | 5 hours   | Timeout recalling files from t0merge                                 |  |  |  |  |
| 6 Apr   | 3 hours   | Local SRM BDII stopped working, caused SAM test failures             |  |  |  |  |
| 1 Apr   | 7 mins    | LHCB Ihcbhistos service class overload                               |  |  |  |  |
| 30 Mar  | 2 x 1 h?  | two short periods of SRM unavailability - all frontend threads stuck |  |  |  |  |
| 30 Mar  | 1 hour    | TOATLAS disk servers rebooted                                        |  |  |  |  |
|         |           |                                                                      |  |  |  |  |

#### **CASTOR SIRs - Comments**

- More quantitative statements regarding service degradation would be useful – particularly true in incident summaries, but also in text body
- Analysis and follow-up: who ensures that this happens and to which bodies is this reported?
- How is this information shared?



### **DB SIRs**

| Site                  | Date              | Duration     | Summary                                                                                     |  |
|-----------------------|-------------------|--------------|---------------------------------------------------------------------------------------------|--|
| ASGC                  | 29 June           | ~15<br>hours | Streams LCRs not applied from central 3D DB for 15 hours                                    |  |
| CERN                  | 26 June           | 1 hour       | ATLAS offline DB (ATLR) – 9 Oracle services did not failover properly after a node eviction |  |
| CERN,<br>PIC +<br>T1s | 24, 25<br>June    | 10 hours     | LHCb streaming to PIC not working for 10 hours, to other sites not working for 40 minutes   |  |
| CERN                  | 2 June            | ?            | ATLAS and LHCb online and offline databases – access and QoS compromised                    |  |
| CERN                  | 31 May,<br>1 June | ?            | CMS online, LCGR and ATLAS offline databases – services unavailable during patching         |  |
| CERN                  | 26 May            | ?            | CMS offline database – h/w failure affecting one node                                       |  |

#### **DB SIRs – Comments**

- Two formats used 1 for Streams and 1 for others
  - A single format closer to the "standard" would be beneficial
- Several are not very conclusive in their analysis or recommendations, others still "open"
  - e.g. "Next time the problem happens detailed hang analysis/tracing will be performed"

| Site               | Service                          | Date          | Duration            | Summary                                                                       |
|--------------------|----------------------------------|---------------|---------------------|-------------------------------------------------------------------------------|
| RAL                | SE                               | 30 June       | N/A                 | 1083 CMS files lost                                                           |
| CERN               | AFS                              | 29 June       | 5 hours             | Complete FC disk array affected CASTOR and als LHC!                           |
| KIT                | CMS<br>dCache                    | 22 June       | 3 hours             | Service down                                                                  |
| CERN               | CREAM<br>CE                      | 7 June        | 3 hours             | Job submission failure                                                        |
| PIC                | Power                            | 21 May        | 19 hours            | Whole site out                                                                |
| CERN<br>to<br>ASGC | OPN                              | 12 – 15 May   | Days                | Reduced bandwidth                                                             |
| CNAF               | StoRM                            | 28 & 29 April | 9/12 hours          | SRM blockage (h/w) follower<br>by MCDISK full and StoR<br>bug                 |
| IN2P3              | AFS                              | 26 April      | 17.5 hours          | AFS crashed after serve overload. Batch also affected                         |
| IN2P3              | Batch                            | 24 April      | 17 hours            | Service location service stopped responding blockir most batch syste commands |
| IN2P3              | Grid<br>downtime<br>notification | 20 April      | 9 hours & 5<br>days | Grid downtime notification impossible after two separa incidents              |

## **Summary**

- More consistency in formats and wording, e.g. based on that in MoU
  - Service Interuption;
  - Degradation by > 20%, > 50%
- More consistency in follow-up: introduce high-level reviews at T1SCM
  - Is information considered correct and complete?
  - Has follow-up been done?
- Try to identify areas where real improvements can be made: monitor against realistic metrics