

Report sent on April 29th to:

- [renshall@mail.cern.ch](mailto:renshall@mail.cern.ch),
- [Jamie.Shiers@cern.ch](mailto:Jamie.Shiers@cern.ch) and to
- [wlcg-scod@cern.ch](mailto:wlcg-scod@cern.ch) according to <https://twiki.cern.ch/twiki/bin/view/LCG/WLCGOperationsMeetings> instructions.

## **Type of Incident: Robotic Library Outage**

**Location: IN2P3-CC**

**Duration: 7h30 hours**

**Date: April 25th 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 10% shortfall of running (non-grid) jobs during outage (jobs locked in queue).

### **Timeline of the Incident**

13:00 Incident on robotic hardware, start of emergency procedure; MSS out of production

14:15 Hardware change with spare part stored on site

15:35 Spare part turned out inadequate (micro-code wise)

16:00 Unsuccessful roll-back to the original spare part; tracking by supplier experts.

17:00 Successful electrical reboot with the original spare part

17:30 Proper hardware on site

18:10 MSS reboot

20:15 MSS commissioning

20:45 MSS in degraded mode

April 26<sup>th</sup> 07:00 MSS in full operational mode

### **Announcements to end-users**

4 news posted on to:<http://cc.in2p3.fr> between 13:00-20:30 on Saturday April 25<sup>th</sup>

### **Analysis**

The source of the problem is still unknown, but it is the same problem that was encountered on April 2<sup>nd</sup> and April 20<sup>th</sup>. The hardware change predicted in the systematic procedure established during the robotic incident on April 20<sup>th</sup> has failed, as the spare part stored was inadequate. This prevented IN2P3-CC from restarting the production within a few hours and the robotic supplier was asked to fix his systematic emergency procedure.

### **Follow-up**

The robotic supplier is to solve durably the source of the problem that resulted in three incidents in this month. To this end, traces recorded by the supplier's expert support teams in the US during this incident should be a major step. In the mean time, IN2P3-CC asked for a roll-back of the robotic controller to the previous version of the micro-code. The final outcome of this intervention scheduled for April 29<sup>th</sup> will be assessed in a few days, but at the time of writing the intervention went well.

*Suzanne POULAT/Hélène CORDIER – April 29<sup>nd</sup> 2009*