Report sent on March 25ᵗʰ to: wlcg-scod@cern.ch

Type of Incident: Hardware failure on network equipment
Location: IN2P3-CC
Duration: about 40 minutes
Date: March 14th 2011 from 20h56 to 21h35
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Description

Loss of connectivity due to hardware defect on a 4 port card of a router.

Timeline

- 20:56 Local network monitoring system detects outage, NAGIOS starts to signal problems with various services but which aren't necessarily out of order. SMS sent to network engineer. Reconfiguration of router started to bypass defective card.
- 21:35 Router reconfigured, all services back to operation.

Analysis

A 4 port card on the router to RENATER failed permanently.

Impact

Mail, web, VPN, news, jabber, primary DNS went down. No connection to national research network RENATER, other connections ok, especially the one to CERN. Centralized logging still operational. Batch operational except for starting new jobs (stay pending).

The off-site engineer on duty could not connect as this needs VPN.

Corrective actions

The major action was to reconfigure the router – without taking it down - to bypass the failing card. This was possible rapidly because the network administrator was available and alerted by SMS. The defective card was replaced on the fly the next day.

The incident showed that some machines did not use the correct DNS, the configurations were changed in the following days.

Additional redundancy for the switch is not planned at the current stage, as the incident is considered as extremely rare in spite of the fact that a similar one happened just some weeks ago in another type of network equipment. These were the only failures of this type since about 10 years.

The fact that the engineer on duty could not connect via VPN was not considered as critical in this case because the information about the failure had been communicated by other channels.