Monitoring Site Perspective

Alessandra Forti

Ops TEG

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Fabric Monitoring

- Sites use a variety of tools

  - Nagios, ganglia and lemon

  - Cfengine, puppet, cron jobs

- Not all sites have good or enough probes

  - Sharing/repository would be good

    - It was attempted in 2007 on request of Hepix and WLCG.

    - http://www.sysadmin.hep.ac.uk

    - sys admins liked the idea of having it but didn't contribute

  - DPM has also an admin contrib

    - Not sure how much that is used either

Network Monitoring

- There is currently no infrastructure
  - Atlas sonar tests were the first push to do something for many sites
- Perfsonar should be pushed at all sites
  - At the moment it seems to be an option
- But also other tools should be encouraged
  - "last mile" or even the last meter problem
  - Backbone problems
  - Many tools all of them useful for slightly different things
    - From monitoring each interface to aggregated traffic
- Avoid the ping pong effect

Middleware monitoring

- There are too many pages

- Currently done by submitting jobs to verify the functionalities

  - This tries to test the site but actually uses the whole infrastructure

  - Difficult to separate site from infrastructure

- Some errors due to middleware bugs

  - DPM misreporting space if a data server is down

    - Space is actually available but reported as negative

Middleware monitoring

- More monitoring should be done also on the machines themselves.

  - There is very little to do that

- (Error) logging is a never ending story

  - Even when there are log files it is difficult to parse them
  - Tools provided by the developers to parse their log files

    - Not only for errors but also for statistics and security.

  - DPM tools and cvmfs have nagios probes

    - Others should follow the good example
    - And site should use and give feedback

Experiment Monitoring

- There are way too many pages

- Can they really be unified?

  - Not easy, for some reason each page was developed with a slightly different technology

    - Not only between different experiments but also within the same experiment

      - Historical dashboard and DDM2 are two completely different beasts.

- Too difficult to go back for the existing

- Any future development there should be more coordinated

Experiment Monitoring

- Site error, infrastructure error, or unkown?
  - If it is not a site error it shouldn't count in its efficiency
  - Not easy I know but it is important to separate the two
    - Site problems are more visible because they have peaks but there a variety of other errors whose cumulative effect is important.
      - 57% of atlas prod errors unknown or not-site errors last year
  - There should at least be 4 categories
    - Site, Infrastructure, Cancelled, Unknown
- Currently this deficiency is covered by asking sites to do a report and remove the errors that were not theirs
  - It is a good exercise for the site admins but it requires someone's time

Conclusions

- There are too many pages (have I said that?)
  - Coordination for the future is the key
  - SSB is a good effort at having a common display
- Mandatory the content of any tool is reliable and validated
  - Problem is not only visualization
- It is important that whatever monitoring reflects site issues and not the whole infrastructure
  - Particularly if used to calculate efficiency/availability/usability of the site
- Network monitoring infrastructure becoming more urgent