Publishing ALICE data & CVMFS infrastructure monitoring

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Publishing ALICE data

- VoBox services health
  - AliEn services running status
    - CE, ClusterMonitor, CMreport
  - Proxy status and time left
    - The certificate used to start AliEn services
    - Delegated proxy, proxy server, proxy of the machine
- Storage Element test results
  - ADD and GET results

Publishing details

- dashb-test-mb.cern.ch:6162
  - Persistent SSL connection
  - client certificate authentication
- Using ActiveMQ Java library ver. 5.9.1
  - *activemq-client* and *activemq-stomp* JARs
- Running as a thread in the central MonALISA repository for ALICE
- Currently pushing 640 values every 30 minutes

Message structure

- Headers:

```
nagios_host=alimonitor.cern.ch
persistent=true
destination=/topic/sam.alice.metric
```

- Body:

```
{"mlServiceName": "CNAF",
 "hostName": "ui01-alice.cr.cnaf.infn.it",
 "serviceFlavour": "AliEn-VoBox-Test",
 "siteName": "CNAF",
 "metricStatus": "OK",
 "metricName": "Proxy of the machine",
 "summaryData": "Proxy is ok",
 "gatheredAt": "ui01-alice.cr.cnaf.infn.it",
 "timestamp": "2014-06-04T15:38:53Z",
 "voName": "alice",
 "detailsData": "Time left: 20:51"}
```

CVMFS infrastructure monitoring proposal

- Now a critical service, for not only ALICE
- Currently missing information about the performance of the Stratum 0/1 and the local site proxies
  - Some bits of information in various places, like availability of Stratum 0, awstats ...
  - Not enough to assess whether the services performance is OK
- Some sites are alerted for failures by the users (tasks failing)

To address that

- Deploy a monitoring service on each server of the infrastructure
  - Full host monitoring (CPU, memory, network IO, disk IO performance, sockets and processes in each state)
  - CVMFS and Squid-specific probes (catalogue version, request counters, size)
- Real time access to the parameters plus
  - Alarms, history of all parameters, simple display options
  - Trivial now to integrate in dashboard

Additionally

- MonALISA services also perform the network topology discovery out of the box
  - This would help with the automatic configuration of local site proxies
  - Similar algorithm as for the automatic SE selection for ALICE jobs