

Update on the activity for consistency checks between SE and FC

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Summary from last T1 Service Coordination Meeting (21.05.2011) talk on consistency checks:

- Overview of the problem of consistency between file catalogues and SEs for all VOs and report on progress recently done to eliminate some 'dark data' of LHCb.
- Common problem to almost all LHC experiments
- New development in the middleware: SEMsg, a messaging-based system to make various file catalogues and SEs talk to each other and keep them synchronized: very interesting perspective

First SEMsg version recently released, now it is the moment to evaluate it and give feedback to the developer

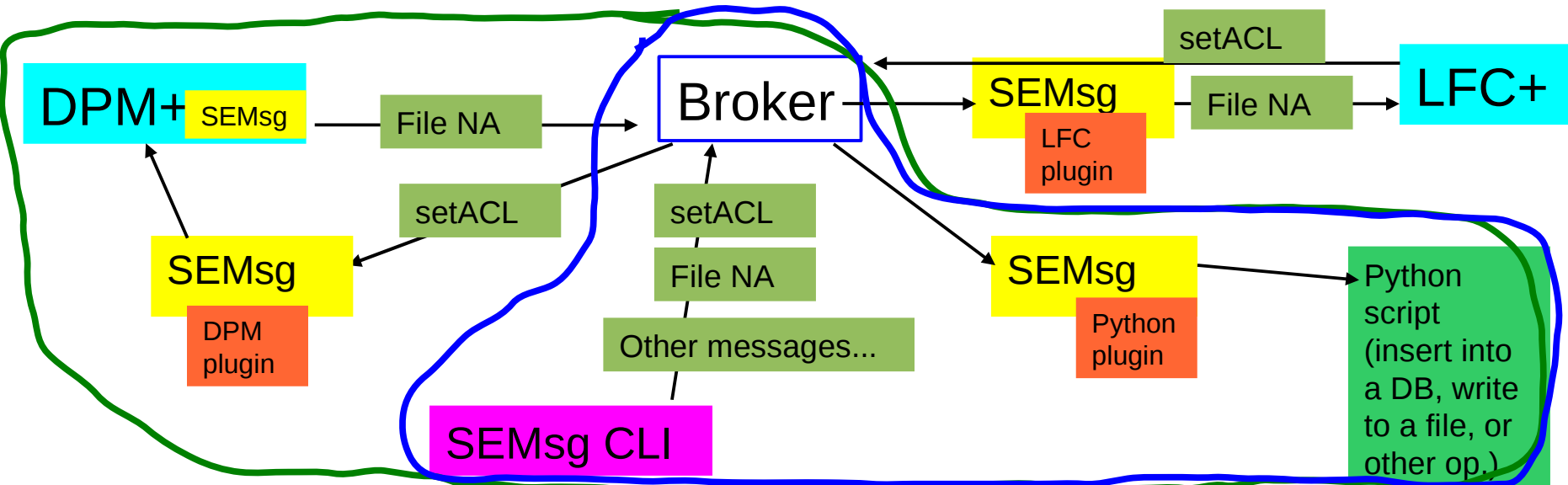
- Plan: setup up a prototype to evaluate it and on the basis of some concrete result, prepare a proposal on the use of this solution to prevent/reduce data inconsistency and present it to the experiments
- In parallel, it will still be necessary to perform full checks on the SEs content and ask sites to periodically produce a dump of their SEs: need to find a common procedure for all VOs and provide clear instructions to sites

Possible first prototype to test SEMsg

The first SEMsg version is ready to be used. A possible plan for evaluating it (first step, inside blue curve):

- Install SEMsg on a test system, and configure it to use the python plugin
- Implement in a python script the action to perform for every notification type
- Use the message broker provided by IT/GT based on ActiveMQ
- Use SEMsg client to send notifications manually (fileNotAvailable, fileAvailable)

Set up is ready, tests have just started.



Second step (inside green curve):

- Include a DPM test instance instrumented with SEMsg
- Delete some files on DPM and test the propagation of 'fileNA'

Following steps:

- Systematic tests on functionality and performance
- Definition of possible new notification types and new features

Once we have some results, define a proposal to use SEMsg to prevent/reduce data inconsistency and present it to the experiments

