Containers and Singularity in ALICE

Pre-GDB
July 11, 2017

L. Betev, M. Litmaath

v1.1

Containers

- We are testing and familiarizing ourselves
- First integration step – VO-box in container
    - Configured and installed, in pre-production
    - Requires higher OS version than SL(C)6 on the metal
    - Ultimate goal is to have a "VO-box in a box" for all sites

Singularity

- Agree that this is a simple and good isolation layer method

- In the development plan – integrated in the "Job Agent" (pilot) code by end of 2017

Concerns and open questions

- Container setup – would not want to do it ourselves for the entire Grid infrastructure
  - A centralized and simple container for jobs would be much preferable …
  - … as opposed to the current VM approach – every site is free to tune and deploy VMs as they see fit
  - Will help both the VOs and the sites
- Singularity and container distribution
  - Can we build it out of layers in CVMFS?
    - Basic OS + HEP_OSlibs + grid SW + …?