



Contribution ID: 445

Type: **Poster**

VM-based infrastructure for simulating different cluster and storage solutions used on ATLAS Tier-3 sites

Tuesday 22 May 2012 13:30 (4h 45m)

The current ATLAS Tier3 infrastructure consists of a variety of sites of different sizes and with a mix of local resource management systems (LRMS) and mass storage system (MSS) implementations. The Tier3 monitoring suite, having been developed in order to satisfy the needs of Tier3 site administrators and to aggregate Tier3 monitoring information on the global VO level, needs to be validated for various combinations of LRMS and MSS solutions along with the corresponding Ganglia and/or Nagios plugins. For this purpose the Testbed infrastructure, which allows simulation of various computational cluster and storage solutions, had been set up at JINR (Dubna). This infrastructure provides the ability to run testbeds with various LRMS and MSS implementations, and with the capability to quickly redeploy particular testbeds or their components. Performance of specific components is not a critical issue for development and validation, whereas easy management and deployment are crucial. Therefore virtual machines were chosen for implementation of the validation infrastructure which, though initially developed for Tier3 monitoring project, can be exploited for other purposes. Load generators for simulation of the computing activities at the farm were developed as a part of this task. The poster will cover concrete implementation, including deployment scenarios, hypervisor details and load simulators.

Author: KUTOUSKI, Mikalai (Joint Inst. for Nuclear Research (JINR))

Co-authors: PETROSYAN, Artem (Joint Inst. for Nuclear Research (RU)); OLEYNIK, Danila (Joint Inst. for Nuclear Research (RU)); KADOCHNIKOV, Ivan (Joint Inst. for Nuclear Research (RU)); BELOV, Sergey (Joint Inst. for Nuclear Research (JINR)); KORENKOV, Vladimir (Joint Inst. for Nuclear Research (JINR))

Presenter: KUTOUSKI, Mikalai (Joint Inst. for Nuclear Research (JINR))

Session Classification: Poster Session

Track Classification: Computer Facilities, Production Grids and Networking (track 4)