



Contribution ID: 154

Type: Oral presentation to parallel session

Deployment of a WLCG network monitoring infrastructure based on the perfSONAR-PS technology

Tuesday 15 October 2013 16:05 (20 minutes)

The WLCG infrastructure moved from a very rigid network topology, based on the MONARC model, to a more relaxed system, where data movement between regions or countries does not necessarily need to involve T1 centers. While this evolution brought obvious advantages, especially in terms of flexibility for the LHC experiment's data management systems, it also opened the question of how to monitor the increasing number of possible network paths, in order to provide a global reliable network service. The perfSONAR network monitoring system has been evaluated and agreed as a proper solution to cover the WLCG network monitoring use cases: it allows WLCG to plan and execute latency and bandwidth tests between any instrumented endpoint through a central scheduling configuration, it allows archiving of the metrics in a local database, it provides a programmatic and a web based interface exposing the tests results; it also provides a graphical interface for remote management operations. In this contribution we will present our activity to deploy a perfSONAR based network monitoring infrastructure, in the scope of the WLCG Operations Coordination initiative: we will motivate the main choices we agreed in terms of configuration and management, describe the additional tools we developed to complement the standard packages and present the status of the deployment, together with the possible future evolution.

Authors: BROWN, Aaron; FORTI, Alessandra (University of Manchester (GB)); FERNANDEZ CASANI, Alvaro (Universidad de Valencia (ES)); Mr HESNAUX, Anthony (CERN); Dr BONACORSI, Daniele (University of Bologna); DE GIROLAMO, Donato (INFN); RAND, Duncan (Imperial College); LOPEZ MUNOZ, Fernando (PIC); GABLE, Ian (University of Victoria (CA)); ZURAWSKI, Jason (Internet2); FLIX MOLINA, Jose (Centro de Investigaciones Energ. Medioambientales y Tecn. - (ES)); MOHAMMAD, Kashif (Aligarh Muslim University (IN)); Dr ZIELINSKI, Marek (University of Rochester (US)); Dr REALE, Mario (GARR); MAGINI, Nicolo (CERN); GUTSCHE, Oliver (Fermi National Accelerator Lab. (US)); MC KEE, Shawn (University of Michigan (US)); LIU, Si (Fermi National Accelerator Lab. (US)); CAMPANA, Simone (CERN); Dr ROISER, Stefan (CERN); Dr CAPONE, Vincenzo (Universita e INFN (IT))

Presenters: MC KEE, Shawn (University of Michigan (US)); CAMPANA, Simone (CERN)

Session Classification: Facilities, Infrastructures, Networking and Collaborative Tools

Track Classification: Facilities, Production Infrastructures, Networking and Collaborative Tools