

# The 6th International Conference "Distributed Computing and Grid-technologies in Science and Education"



Contribution ID: 32

Type: **plenary reports**

## The New Use of Network Element in ATLAS Workload Management System

*Tuesday, 1 July 2014 12:00 (20 minutes)*

A crucial component of distributed computing systems is network infrastructure. While networking forms the backbone of such systems, it is often the invisible partner to storage and computing resources. We propose to integrate Network Elements directly into distributed systems through the workload management layer. There are many reasons for this approach. As the complexity and demand for distributed systems grow, it is important to use existing infrastructure efficiently. For example, one could use network performance measurements in the decision making mechanisms of workload management systems. New advanced technologies allow one to programmatically define network configuration, for example SDN - Software Defined Networks. We will describe how these methods are being used within the PanDA workload management system of the ATLAS collaboration.

**Primary author:** Mr PETROSYAN, Artem (JINR)

**Co-author:** Dr DE, Kaushik (University of Texas at Arlington)

**Presenter:** Mr PETROSYAN, Artem (JINR)

**Session Classification:** Plenary

**Track Classification:** Section 8 - Optimization problems and distributed computing