WLCG/OSG Networking Update

Monday 16 October 2017 14:25 (25 minutes)

WLCG relies on the network as a critical part of its infrastructure and therefore needs to guarantee effective network usage and prompt detection and resolution of any network issues, including connection failures, congestion and traffic outing. The OSG Networking Area is a partner of the WLCG effort and is focused on being the primary source of networking information for its partners and constituents. We will report on the changes and updates that have occurred since the last HEPiX meeting.

The WLCG Throughput working group was established to ensure sites and experiments can better understand and fix networking issues. In addition, it aims to integrate and combine all network-related monitoring data collected by the OSG/WLCG infrastructure from both network and transfer systems. This has been facilitated by the already existing network of the perfSONAR instances that is being commissioned to operate in full production.

We will provide a status update on the LHCOPN/LHCONE perfSONAR infrastructure as well as cover recent changes in the higher level services that were developed to help bring perfSONAR network to its full potential. This includes a new set of dashboards based on Grafana that offer a combined view on network utilisation and network performance as measured by RENs, WLCG transfers and perfSONAR; updates and changes to the Web-based mesh configuration system and OSG network datastore (esmond), which collects, stores and provides interfaces to access all the network monitoring information from a single place.

In addition, we will provide an overview of the recent major network incidents that were investigated with the help of perfSONAR infrastructure and provide information on changes that are included in the recent release of version 4.0.1 of the perfSONAR Toolkit. We will also cover the status of our WLCG/OSG deployment and provide some information on our future plans.

Desired length

20 minutes

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