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LHC Grid Computing in Russia- present and future

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The review of the distributed grid computing infrastructure for LHC experiments in Russia is given. The emphasis is placed on the Tier-1 site construction at the National Research Centre "Kurchatov Institute" (Moscow) and the Joint Institute for Nuclear Research (Dubna).
In accordance with the protocol between CERN, Russia and the Joint Institute for Nuclear Research (JINR) on participation in LCG Project approved in 2003 and Memorandum of Understanding (MoU) on Worldwide LHC Computing Grid (WLCG) signed in October of 2007. Russia and the Joint Institute for Nuclear Research bear responsibility for nine Tier-2 centers. Here and now Russia and JINR computing Tier-2 infrastructure fully satisfies the WLCG Computing Requirements and provides proper support of the LHC experiments' Data Processing and Analysis Tasks.
In March of 2011 the proposal to create the LCG Tier1 center as an integral part of the central data handling service of the LHC Experiments in Russia was expressed in the official letter by Minister of Science and Education of Russia to CERN Director General.
In 2011 The Federal Target Programme Project: «Creation of the automated system of data processing for experiments at the Large Hadron Collider of Tier-1 level and maintenance of Grid services for distributed analysis of this data» was approved for the period 2011-2013.
The Project is aimed at the creation of a Tier-1 computer-based system in Russia and JINR for the processing of experimental data received from LHC and provisioning of Grid services for a subsequent analysis of this data at the distributed centers of the LHC computing Grid. It is shared that the National Research Centre "Kurchatov Institute" (Moscow) is responsible primarily for support of ALICE, ATLAS, and LHC-B experiments while the JINR (Dubna) provides Tier-1 services for the CMS experiment.
The master construction plan consists of two phases. The first phase is the construction of prototype in the middle of 2013 and the second one is building of full-scale fully functional Tier-1 which has to be completed in 2014.

Summary

Primary authors: Dr ILYIN, V. (National Research Centre "Kurchatov Institute", Moscow); Dr KORENKOV, V. (Joint Institute for Nuclear Research, Dubna); Dr VELIKHOV, V. (National Research Centre "Kurchatov Institute", Moscow)

Co-authors: Mr DOLBILOV, A. (Joint Institute for Nuclear Research, Dubna); Dr TIKHONENKO, E. (Joint Institute for Nuclear Research, Dubna); RYABINKIN, Eygene (National Research Centre Kurchatov Institute (RU)); Mr CHECHEROV, F. (National Research Centre "Kurchatov Institute", Moscow); Mr LYALIN, I. (National Research Centre "Kurchatov Institute", Moscow); Mr TKACHENKO, I. (National Research Centre "Kurchatov Institute", Moscow); Mr KOLCHIN, R. (National Research Centre "Kurchatov Institute", Moscow); Dr SHMATOV, S. (Joint

Institute for Nuclear Research, Dubna); Dr STRIZH, T. (Joint Institute for Nuclear Research, Dubna); Mr MITSYN, V. (Joint Institute for Nuclear Research, Dubna); Mr TROFIMOV, V. (Joint Institute for Nuclear Research, Dubna); Mr ZHILTSOV, V. (Joint Institute for Nuclear Research, Dubna); Mr LAZIN, Y. (National Research Centre "Kurchatov Institute", Moscow)

Presenter: RYABINKIN, Eygene (National Research Centre Kurchatov Institute (RU))

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