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Distributed Processing and Analysis of ALICE data at distributed Tier2-RDIG

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The readiness of Tier-2s to the processing and analysis of LHC data in present days is a subject of worry and control from LHC experiment managements. According to ALICE computing model [1], main tasks of Tier-2 activity are production of simulated data and analysis as simulated as experimental data. Russian sites combined together into distributed Tier-2 RDIG (Russian Intensive Data GRID)[2] were and are participating in the ALICE GRID activity starting from 2004 year.
The ALICE GRID activity is based at AliEn[3] with usage of LCG(EGEE) middle ware [4]via interface. The stable operation of AliEn with LCG middleware has been tested and demonstrated in few last year. For the more adequate processing of ALICE data during LHC operation there needed to test stability of processing and analysis data with application more modern services like CREAM-CE and pure xrootd
The major subject of this report is demonstration of a possibility for production simulation data necessary for the complex analysis of the forthcoming LHC data and processing this analysis itself.
There will be discussed the usage of CPU and DISK resources pledged by RDIG for the GRID activity of ALICE. The installation, test and stable operation support of new services at RDIG sites like CREAM-CE and pure xrootd have been discussed in this report. It will show the advantage of these services usage for ALICE tasks. There will be presented also the information about installation, test and support of parallel analysis facility based on PROOF[5] for the special usage of Russian ALICE community. There will be presented examples of this facility application for analysis of simulated and reconstructed ALICE data for the first LHC physics.

[1] ALICE Collaboration, Technical Design Report of Computing,CERN-LHCC-2005-018
[2] http://www.egee-rdig.ru/
[3] P. Saiz et al., Nucl. Instrum. Methods A502 (2003) 437-440; http://alien.cern.ch/;
[4]http://www.eu-egee.org/
[5]F.Rademakers et al
http://indico.cern.ch/contributionDisplay.py?contribId=307&sessionId=31&confId=3580

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