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Monitoring systems comparison for collecting metrics for cloud management and optimization.

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Cloud technologies provide new tools for improving the efficiency of IT infrastructure. To manage load and optimize cloud resource utilization, e.g. through overcommitment and automated migration, it is necessary to gather performance metrics from the whole cloud infrastructure. The OpenNebula built-in monitoring system has limited configuration possibilities and does not keep historical data for long enough. For this reason, an external monitoring system needs to be used. There are many popular tools suitable for this task. To have an objective metric to help compare these systems, a performance test scheme has been proposed. With one monitoring server and an increasing number of monitored nodes, the server load was measured over time. The results for Ganglia, Icinga2, NetXMS, NMIS and Zabbix are given in this report.

Primary authors: BARANOV, Alexandr (Engineer-Programmer (LIT,JINR)); Mr NECHAEVSKIY, Andrey (JINR); Mr PELEVANYUK, Igor (JINR); Mr KADOCHNIKOV, Ivan (JINR); Mr BALASHOV, Nikita (JINR); Dr KUTOVSKIY, Nikolay (JINR); Mr AIRIIAN, Vagram (Dubna University); Dr KORENKOV, Vladimir (JINR)

Presenter: Mr KADOCHNIKOV, Ivan (JINR)

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