

Development of Information Technologies at Kazakhstan National Data Centre (KNDC) in support of the CTBTO

Kazakhstan National Data Centre (KNDC) is upgrading the automated system of data acquisition and analysis to extend its capabilities, and support the IMS stations and local stations operation to ensure their long term sustainment. The upgrade includes adoption of several contemporary systems and technologies, such as: open source ZABBIX monitoring system, and Proxmox Virtual Environment (Proxmox VE) virtualization system. ZABBIX is a monitoring solution for services of computer network, servers and network equipment. In KNDC, ZABBIX is providing the integrated control of the processes on data acquisition, and its volume from seismic and infrasound stations of Kazakhstan network, and from IMS stations, as well as control for physical state of equipment and power systems. Adoption of Proxmox VE virtualization system allows to place on one hardware platform the tens of virtual, isolated container (servers and workstations). The reliable system allows decreasing the expenditures on creating and maintenance of the park of physical servers and workstations. This system already provides operation of several servers at KNDC, such as web-server, database server, and ZABBIX monitoring system server. Adoption of new technologies will ensure the high level and quality of KNDC products, and, enhance the reliability and stability of information infrastructure operation.

Primary author: KOMAROV, Igor (Kazakhstan National Data Centre)

Presenter: KOMAROV, Igor (Kazakhstan National Data Centre)

Track Classification: Theme 4. Performance Optimization