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Development of an interactive access system for the computing resources of the GRID cluster of the National Research Center "Kurchatov Institute" - IHEP based on WEB technologies

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As a part of organization of a simplified access to the computing resources of the central IHEP cluster based on WEB technologies, was developed a system architecture based on the free software Apache Guacamole. Apache Guacamole is a clientless remote desktop gateway supporting protocols like ssh, vnc and rdp via a web-browser. VNC and RDP support is implemented on the server side using native libraries, and only input and output information is transmitted through the browser, Guacamole provides a good performance, close to standard VNC and RDP clients. This is a good solution, because such a system does not require the installation of plugins and third-party software on the user side, like vnc client and ssh-server for Windows. In our case, this is an additional tool for working with a cluster that does not require any settings on the user side. This work is about the Guacamole system installation through docker containers, some configuration and user interaction with it as a part of working with the IHEP cluster.

Summary

Guacamole, web, cluster, docker, ssh, vnc, rdp.

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