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Containerized computing with DevOps methodology use on the central Linux cluster at NRC «Kurchatov Institute» - IHEP

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Containerization technology for Linux systems appeared many years ago with OpenVZ and LCX systems. However, wider usage came with the advent of the Docker system and the addition of new container support mechanisms to the Linux kernel itself. Originating as a system for servers, containerization technology has gradually moved into the user space as a universal mechanism for distributing and running complex software, including calculations and analyzing data on computing clusters or cloud services. Together with DevOps methodology as a clue it could be used for organizing a full circle of computation on such systems.

The paper describes the usage of containers with help of DevOps methodology for organizing calculations on the IHEP central Linux cluster.

Summary

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