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# New HybriLIT cluster module devoted to graphical applications

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The heterogeneous cluster HybriLIT [1] enables high performance computing (HPC) in JINR by means of a modular architecture involving multi-core processors, coprocessors and graphical accelerators. A lately acquired HybriLIT module –the virtual desktop infrastructure (VDI) –secures the coverage of another vital need, the resource intensive graphical applications.

The VDI implementation merges both cloud services and HPC resources within two kinds of virtual desktop solutions. The QUVE/KVM [2] based solution answers the cases when no dedicated GPU resources are requested. The XenServer [3] with Citrix Xen software [3] enables the use of high performance GPU resources as well.

The present paper provides technical details of the VDI implementation. Typical scenarios enabling remote access to the graphic applications are described. They allow the SaaS (software as a service) use of HPC resources by the end users.

References

1. Heterogeneous cluster HybriLIT of LIT JINR. URL: http://hybrilit.jinr.ru/en/
2. Hypervisor QEMU/KVM. URL: http://linux-kvm.org
3. Hypervisor XenServer. URL: http://xenserver.org, http://citrix.com

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