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## The VISPA Internet Platform for Scientific Research, Outreach and Education

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VISPA provides a graphical front-end to computing infrastructures giving its users all functionality needed for working conditions comparable to a personal computer. It is a framework that can be extended with custom applications to support individual needs, e.g. graphical interfaces for experiment-specific software. By design, VISPA serves as a multi-purpose platform for many disciplines and experiments as demonstrated in the following different use-cases. A GUI to the analysis framework OFFLINE of the Pierre Auger collaboration, submission and monitoring of computing jobs, university teaching of hundreds of students, and outreach activity, especially in CERN's open data initiative.

Serving heterogeneous user groups and applications gave us lots of experience. This helps us in maturing the system, i.e. improving the robustness and responsiveness, and the interplay of the components. Among the lessons learned are the choice of a file system, the implementation of websockets, efficient load balancing, and the fine-tuning of existing technologies like the RPC over SSH. We present in detail the improved server setup and report on the performance, the user acceptance and the realized applications of the system.

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