

Grid'5000, a scientific instrument designed to support experiment driven research

Focus on a 10000 VMs experiment

Speaker

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Abstract

The ability to conduct consistent, controlled and repeatable large-scale experiments in all areas of computer science related to parallel, large-scale or distributed computing and networking is critical to the future and development of Computer Science.

Yet conducting such experiments is still too often a challenge for researchers, students and practitioners due to unavailability of dedicated resources, inability to create controlled experimental conditions, and variability in software.

Since 2003, the Grid'5000 experimental platform have aimed at solving these concerns by providing a scientific instrument designed to support experiment-driven research in all areas of computer science related to parallel, large-scale or distributed computing.

After giving a large overview of the Grid'5000 platform and the different utilities that end-users may use to conduct their experiments, I will focus on a recent challenge aiming at analyzing the feasibility to manage up to 10000 VMs across a distributed infrastructure like traditional operating systems manage processes on a local node.

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