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ComputeOps: container for High Performance Computing

The High Performance Computing (HPC) domain aims to optimize code in order to use the last multicore and parallel technologies including specific processor instructions. In this computing framework, portability and reproducibility are key concepts. A way to handle these requirements is to use Linux containers. These "light virtual machines" allow to encapsulate applications within its environment in Linux processes. Containers has been recently rediscovered due to their abilities to provide both multi-infrastructure environnement for developers and system administrators and reproducibility due to image building file. Two container solutions are emerging: Docker for micro-services and Singularity for computing applications. We present here the status of the ComputeOps project which has the goal to study the benefit of containers for HPC applications.

Speaker release

Yes

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