

GoDocker: batch job submission using Docker containers

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GoDocker is a job scheduler like Sun Grid Engine, Slurmm, ... but makes use of Docker containers to execute the jobs, providing job isolation and using pre-built images with needed software.

Summary

It is based on a plugin architecture and is fully scalable on premise or in a cloud, based on Docker Swarm, Kubernetes or Apache Mesos. It manages job/user/project prioritization and quotas, and provide interactive access (ssh) to the containers. User can monitor his job usage (cpu/ram) in real-time and can also launch web services with port mapping or ip per container integration. At last, user can mount shared storage (home directory, shared data, ...) in the container for direct access, according to defined ACLs. Using containers, use can execute any program or script on a node, without the need to install the software on a shared infrastructure.

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