

User space containers with udocker

Wednesday, October 12, 2022 2:40 PM (10 minutes)

udocker enables the execution of docker containers in user space without requiring root privileges for installation or use. Udocker implements the pull, load, import and execution of containers by non-privileged users in Linux systems where docker is not available. It can be used in Linux batch systems and interactive clusters that are managed by other entities, such as grid infrastructures or externally managed batch or interactive systems. udocker does not require any type of privileges nor the deployment of services by system administrators. It can be downloaded and executed entirely by the end user.

udocker offers several execution modes exploiting system call interception, library call interception and namespaces. udocker integrates several tools to provide a subset of the docker capabilities aimed at container execution.

This presentation we will explain the udocker fundamental, how to use udocker to execute Linux containers and how to best exploit the several execution engines.

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Session Classification: IBERGRID Contributions

Track Classification: Design and implementation of Digital Twins