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Docker and Linux Containers

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Linux containers (LXC) is a technology that provides operating system-level virtualisation not via a virtual machines but rather by using a single kernel to run multiple instances on the same OS. Linux namespaces and control groups (cgroups) represent the foundation on which LXC are built. Containers are fast to deploy, they introduce no overhead or indirection as in the case of traditional virtual machines and also have the added design benefit of ensuring complete isolation between processes. Containers are great for running multiple instances of the same service in parallel either as part of a scaling out strategy or just for testing purposes. Docker is built around Linux containers and offers an intuitive way of managing them by abstracting and automating some of the configuration details. Besides being an open-source project, Docker has enabled the development of an entire "ecosystem" of tools and products targeting container technology.

Presenter: SINDRILARU, Elvin (CERN)
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