Docker Terminology

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Container: An instance of a Docker image. A container represents the execution of a single application, process, or service. It consists of the contents of a Docker image, an execution environment, and a standard set of instructions.

Repo

Repository (repo): A collection of related Docker images, labeled with a tag that indicates the image version. Some repos contain multiple variants of a specific image, such as an image containing SDKs (heavier), an image containing only runtimes (lighter), etc. Those variants can be marked with tags. A single repo can contain platform variants, such as a Linux image and a Windows image.

Registery

Registry: A service that provides access to repositories. The default registry for most public images is Docker Hub (owned by Docker as an organization). A registry usually contains repositories from multiple teams. Companies often have private registries to store and manage images they've created. Azure Container Registry is another example.

Registry
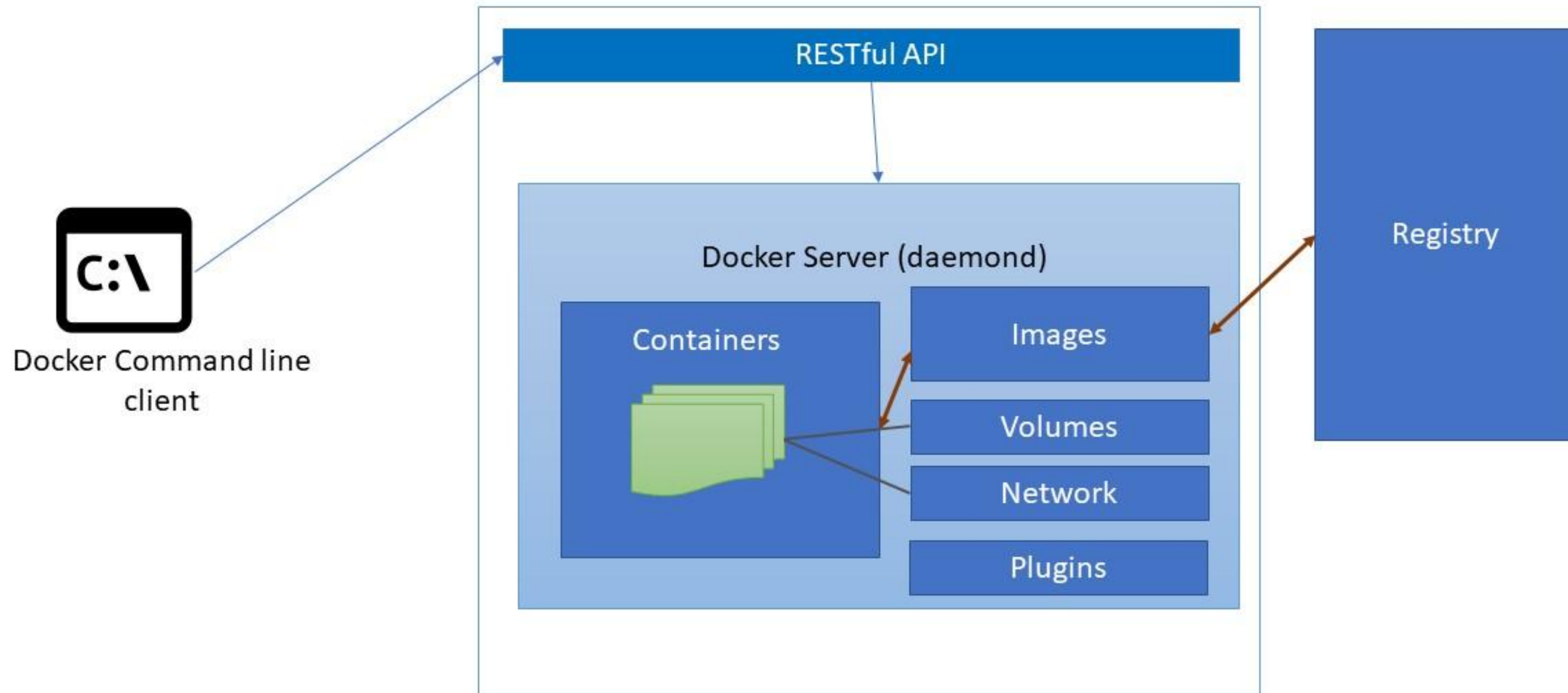
Arch
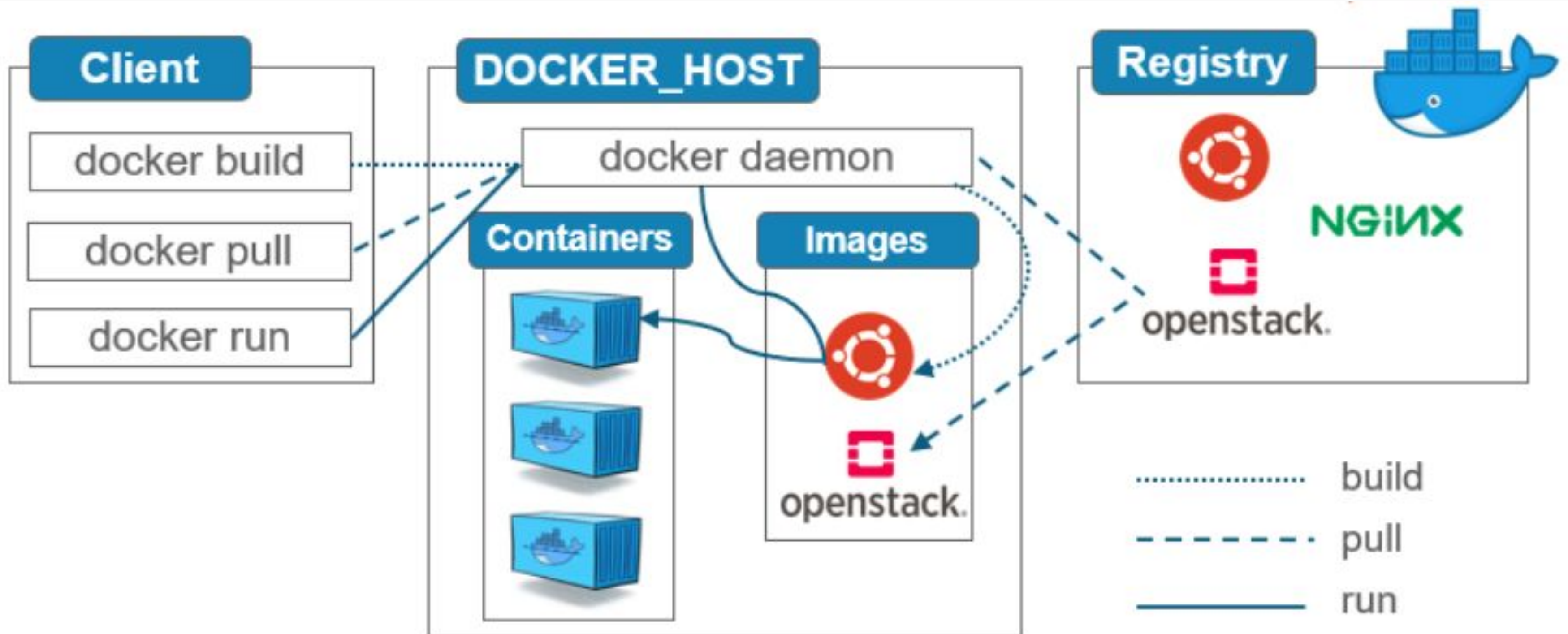
Combining the cgroups, namespace, and chroot features of the Linux kernel provides a sophisticated virtualized resource isolation framework with clear segregation of the data and resources across various processes in the system.