Introducing fog05

fog05 Discovery

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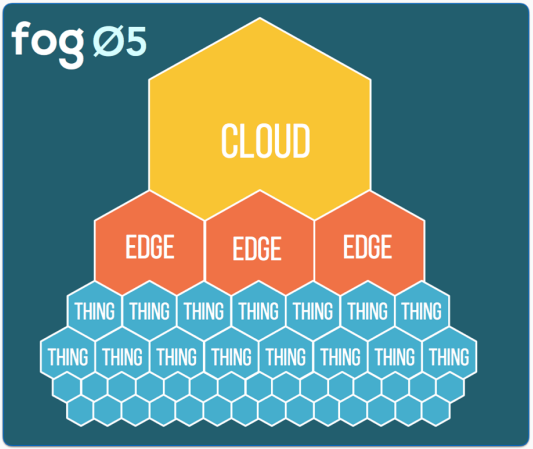
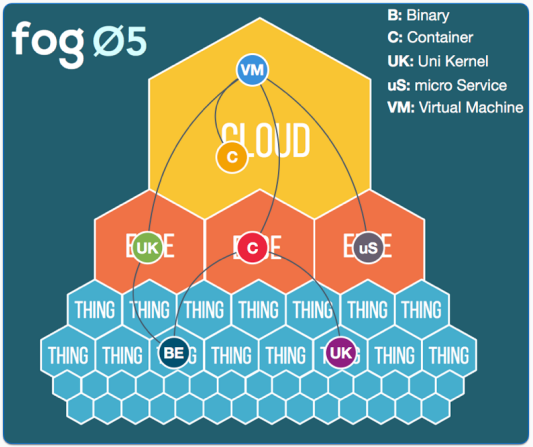
fog05 Goals

The **fog05** unifies the compute fabric that spans across things, edge and cloud infrastructure
It unifies administration, management and monitoring end-to-end

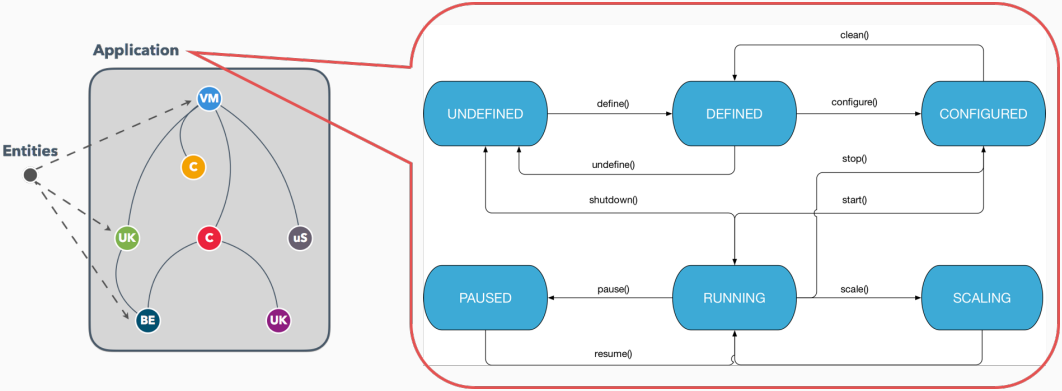


fog05 Application

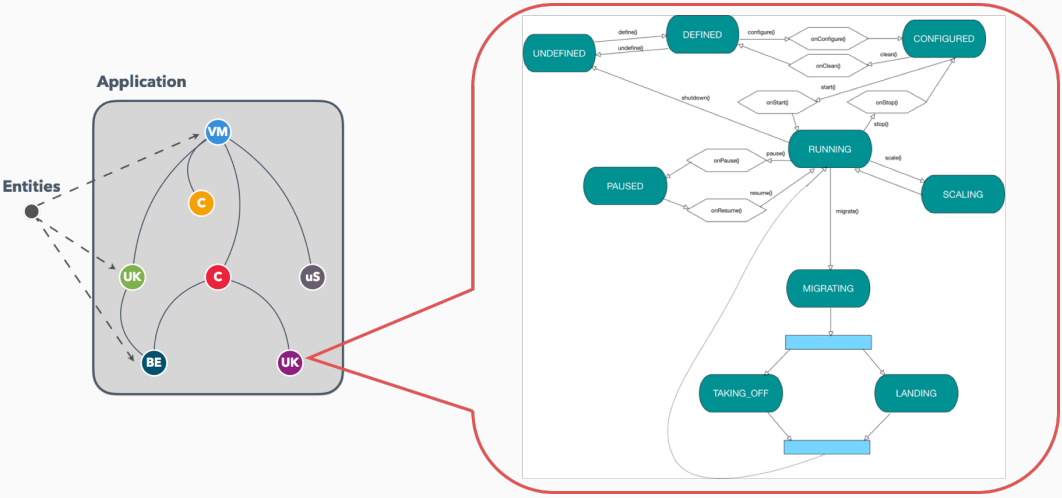
A **fog05** application is a graph of deployable entities, such as VM, Containers, UniKernels, Binaries. These entities can have deployment affinity w.r.t. to each other as well as with respect to compute, storage, I/O and accelerates resources
fog05 uses plug-in for dealing with different kinds of entities



fog05 Application Lifecycle

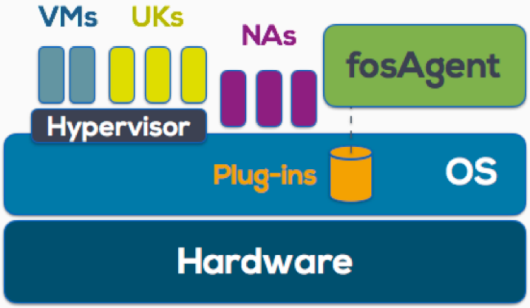


fog05 Entity Lifecycle



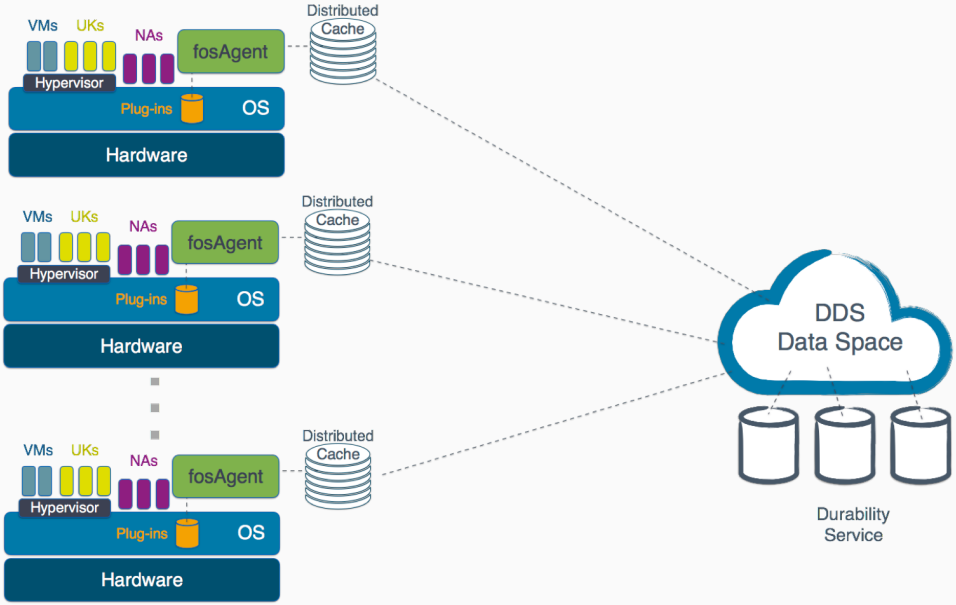
fog05 Architecture

fog05 is an infrastructure to provision, manage and monitor applications composed by different kinds of deployable bundles, ranging from a micro-service to a full VM

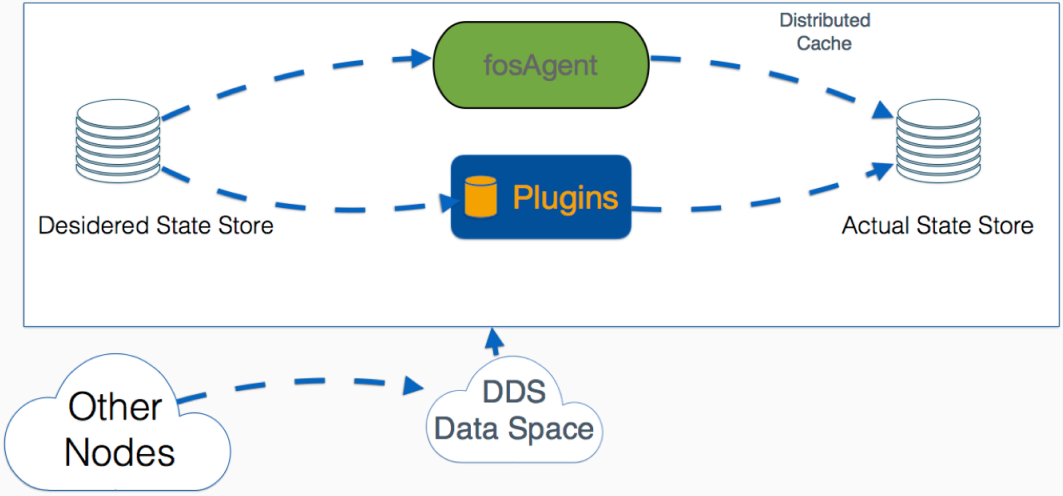


VM: Virtual Machine
NA: Native Application
UK: Uni-Kernel

fog05 Architecture



Distributed Store Architecture



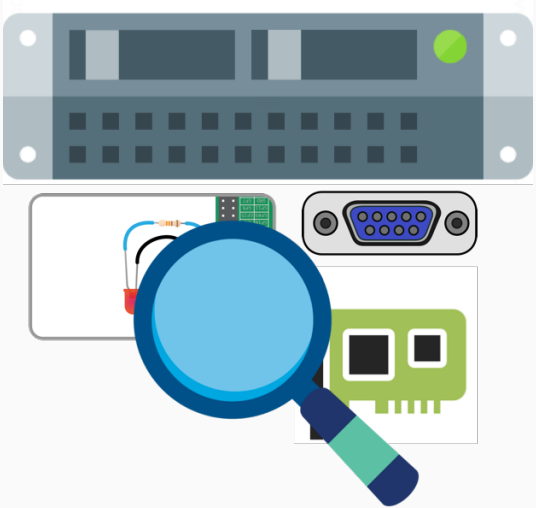
Plugins and the **fosAgent** observe the *desired store*. Their goal is to have the content, present in both stores, eventually converge.

fog05 Node Resource Discovery

Discovery of node resources is implemented by the plugin for the operating system and we use two ways for the discovery of resources:

- Using standard python packages
- Analysis of file system

- *We plan to add support for other APIs to collect these information (SGET, redfish)*



fog05 Node Resource Monitoring

Monitoring of node resources is implemented in the plugin for the operating system and we use a simple python package for the monitoring.

- *We plan to add support for other APIs to collect these information, such as, SGET, redfish.*