



# Introducing fog05

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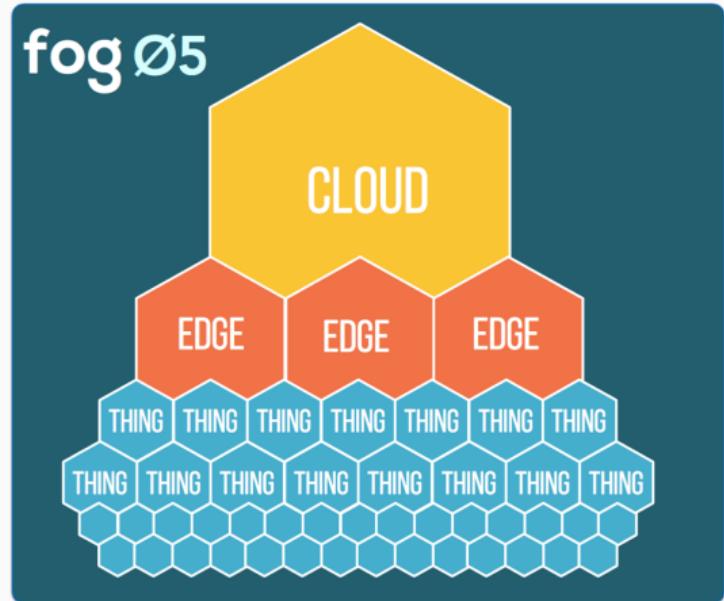
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# fog05 Goals

The **fog05** unifies the compute fabric that spans across things, edge and cloud infrastructure

It unifies administration, management and monitoring end-to-end

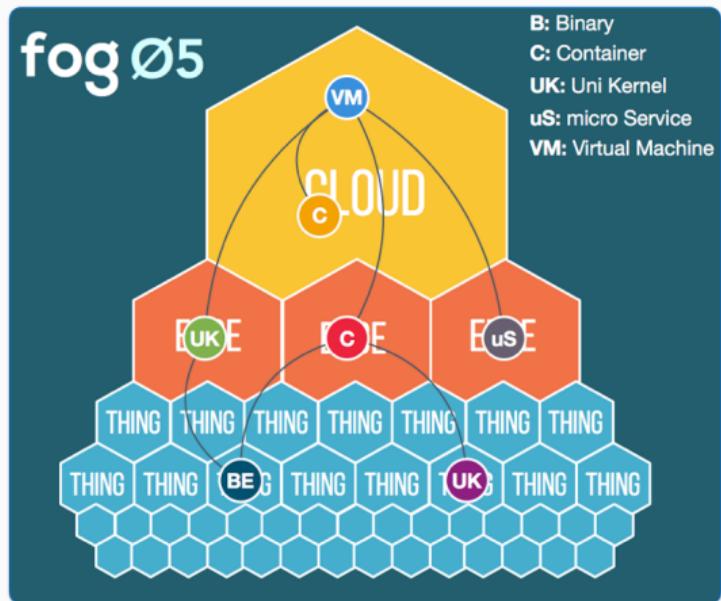


# fog05 Entity

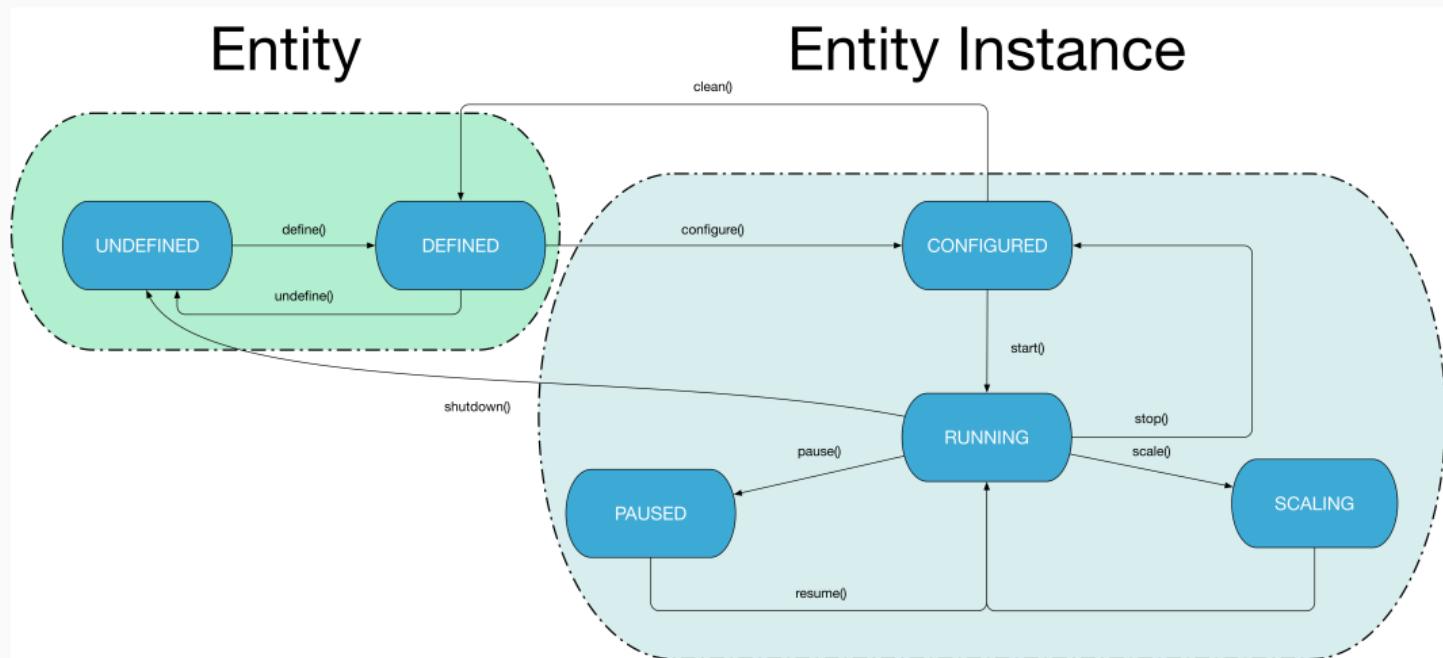
A **fog05 entity** is an *atomic entity*, such as a Virtual Machine, a container, a UniKernel, a binary executable, or a directed cyclic graph (DAG) of entities.

Entities may have deployment affinity w.r.t. to each other as well as with respect to compute, storage, I/O and accelerates resources

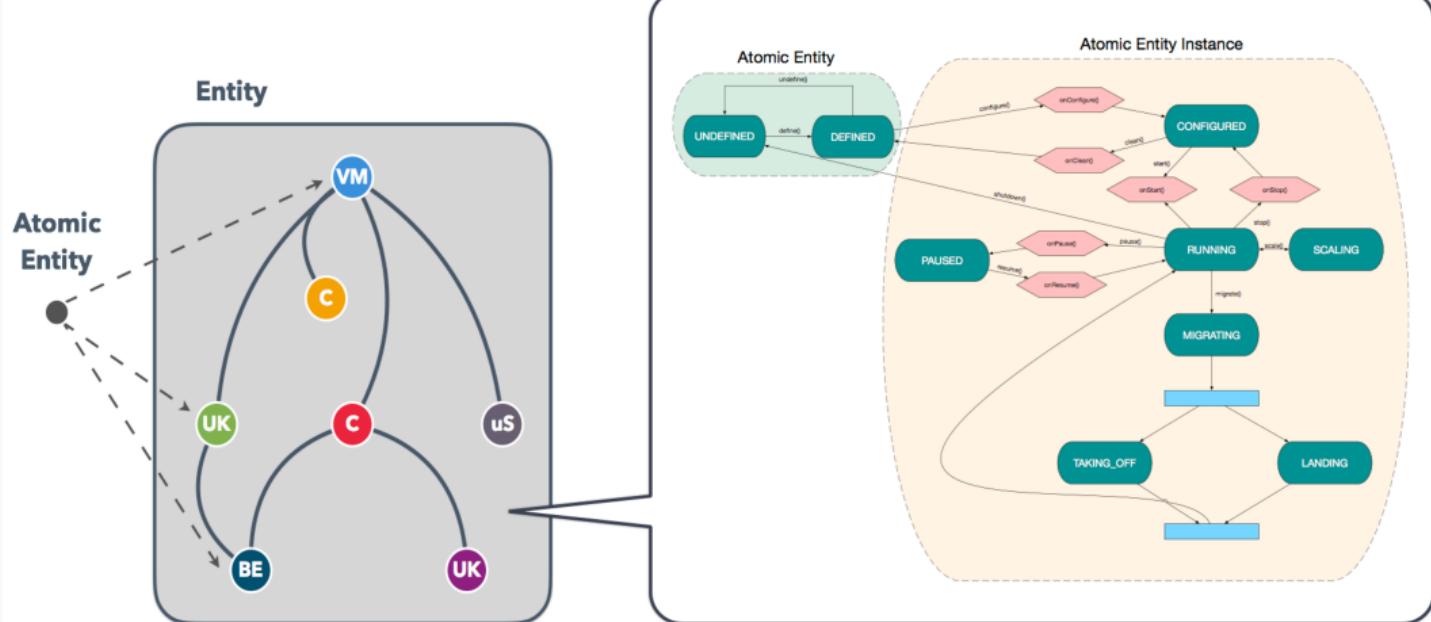
**fog05** uses plug-in for dealing with different kinds of entities



# fog05 Entity Lifecycle

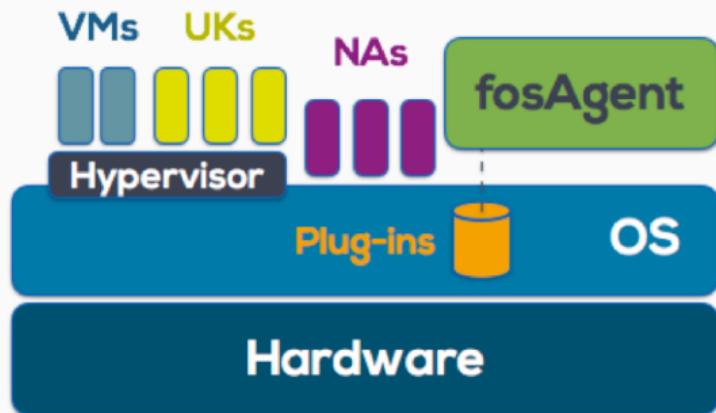


# fog05 Atomic Entity Lifecycle



# 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

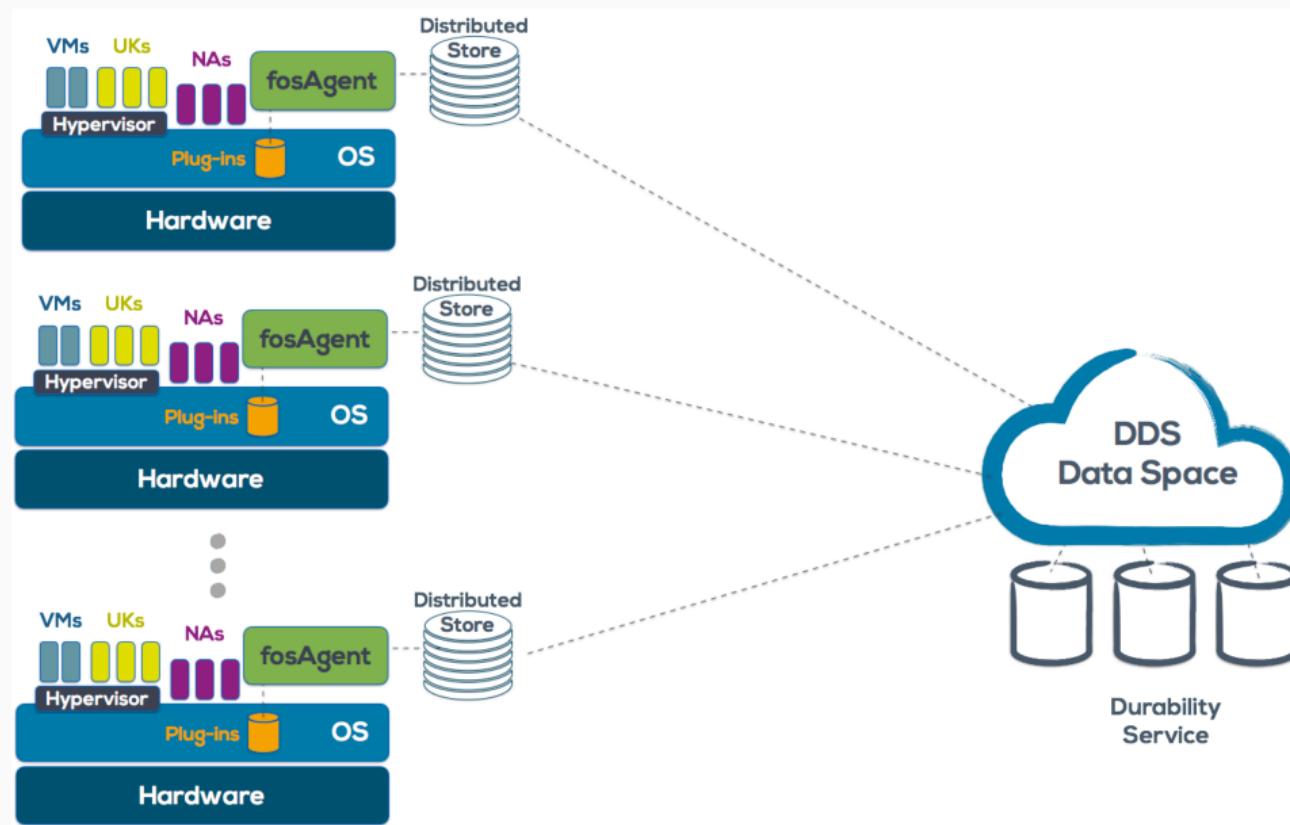


**VM:** Virtual Machine

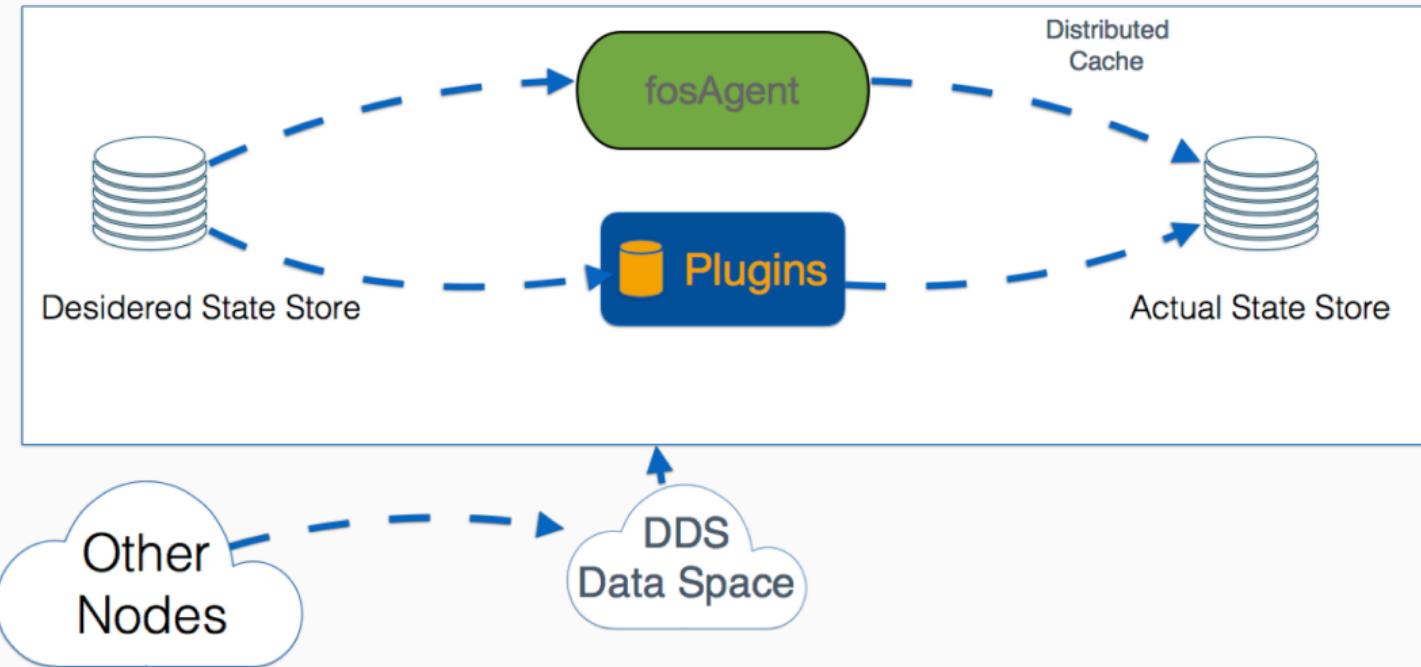
**NA:** Native Application

**UK:** Uni-Kernel

# fog05 Architecture



# Distributed Store Architecture

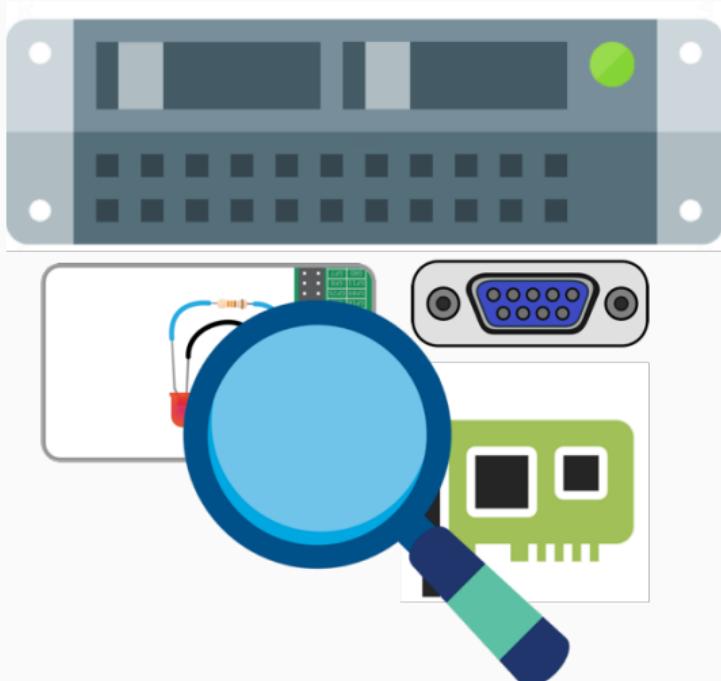


Plugins and the **fosAgent** observe the *desired store*. Their goal is to have the content, present in both stores, eventually converge.

# 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.*

