

Nikita:

Host Deployment and Management

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VMWare vSphere is a scalable virtualization platform. It can cluster hundreds of physical servers into a efficient resource pool used to run host virtual machines on.



Python is a cross-platform interpreted programming language, widely used for it's simple syntax and robust package ecosystem.



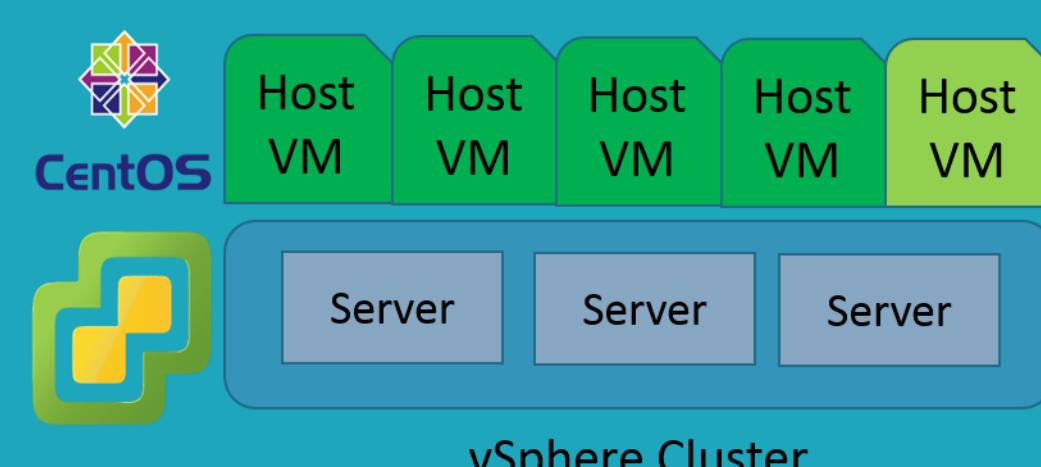
ANSIBLE

Ansible is an configuration management tool. Using Python and SSH, it can deploy, provision, configure, and mange systems and software.

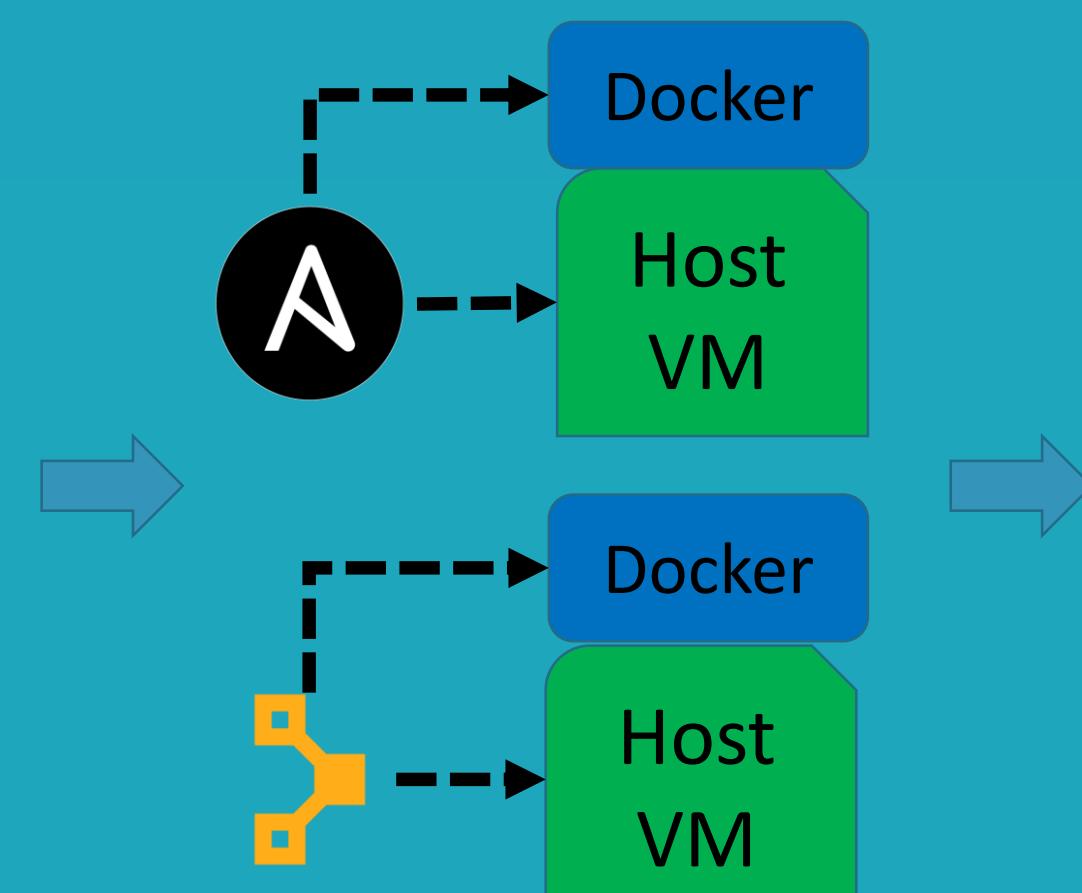


Puppet is a configuration management tool that uses an agent to perform its tasks.

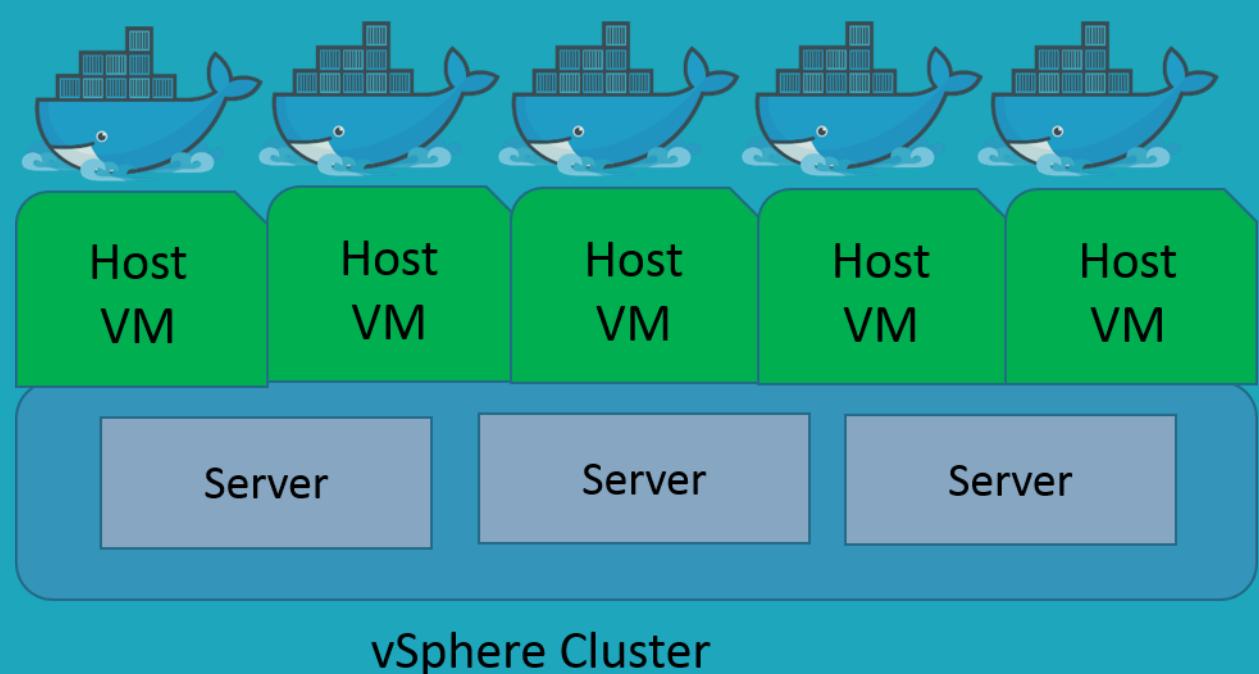
Create



Setup & Configure



Manage & Maintain



Deployment

An Admin or automated process kicks off the creation of CentOS VMs on a vSphere cluster using a Python script. Once they are created, the configuration manager prepares them for Docker, then installs and configures Docker. The configuration manager then takes over post-deployment management and maintenance of the deployed hosts.

Yum Repository

During deployment, packages for the hosts will be pulled from a local Yum repository. This improves performance and security, by using the local network and a vetted set of packages.

Docker Registry

Usually, a Docker image is pulled from the public Docker registry, the Docker Hub. For this system, the custom images and selected public images will be stored in a local Docker Registry.