



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.



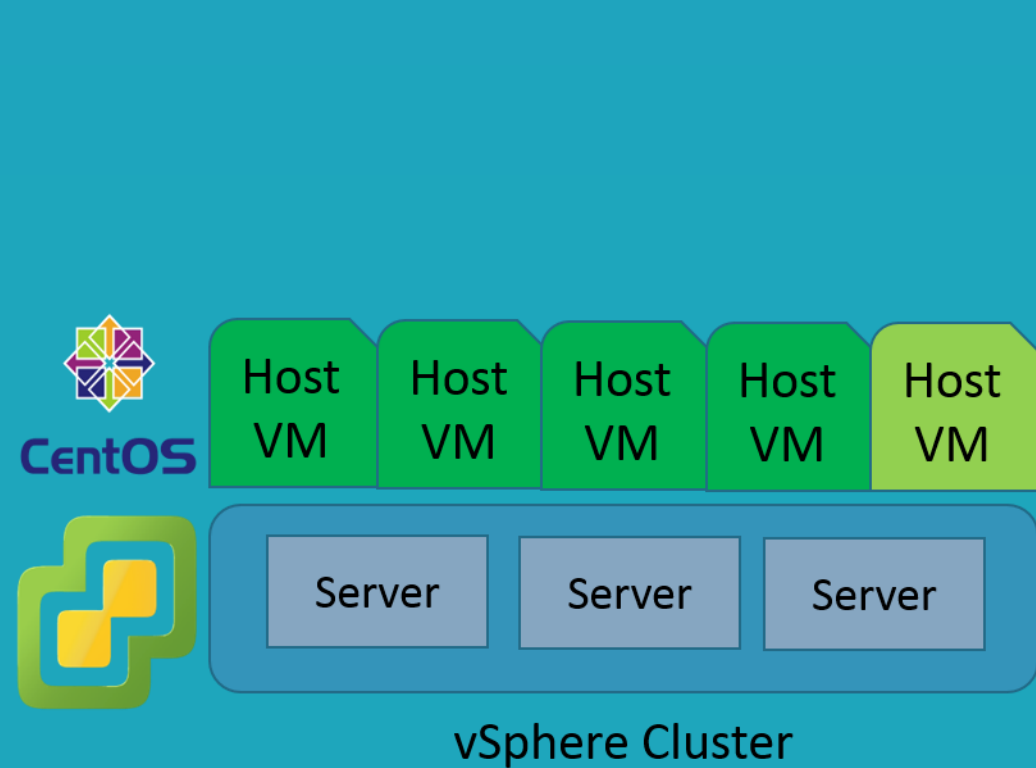
ANSIBLE

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

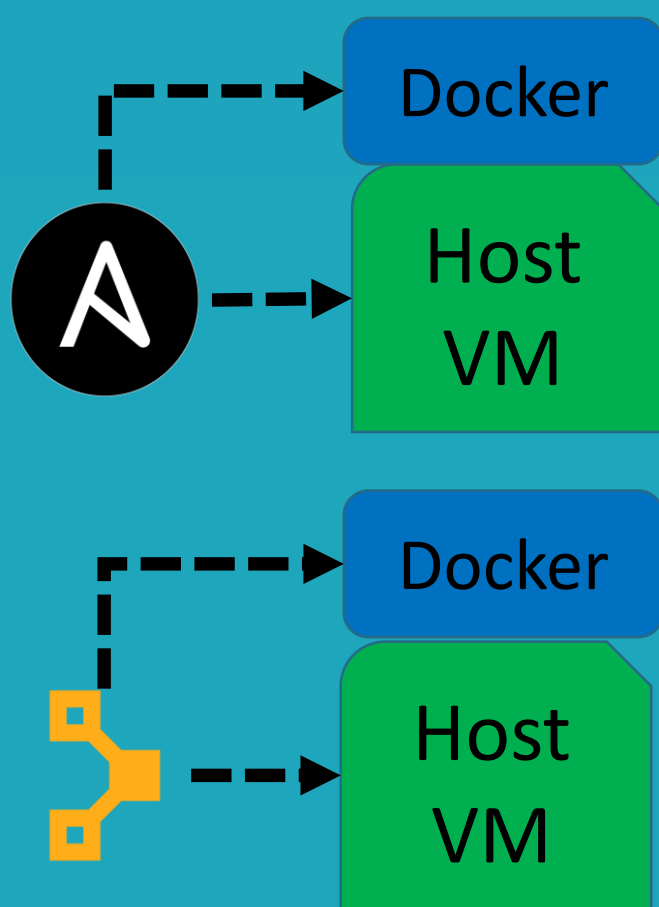


*Puppet* is a configuration management tool that uses an agent to perform its tasks.

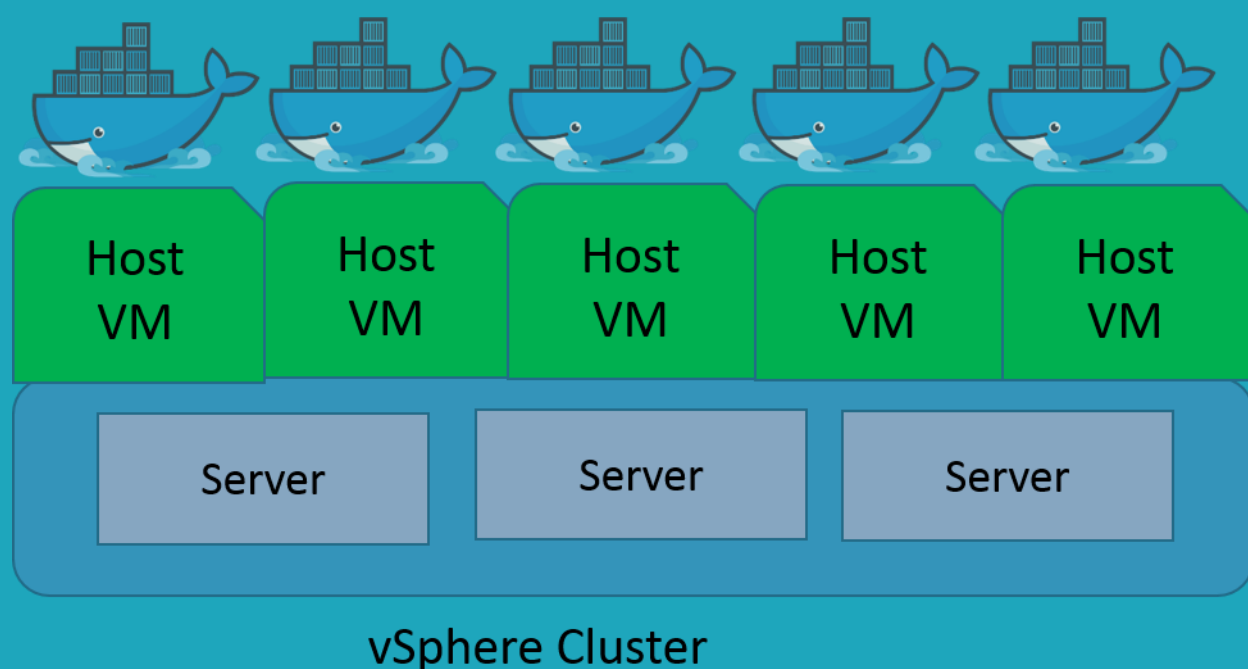
## Create



## 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.