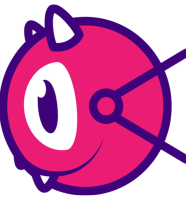


Implementing Container like DevOps
with
Lightweight, Native macOS Virtualization

What's Container enabled DevOps?

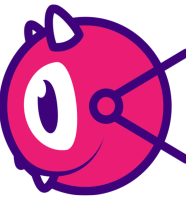


DevOps can be done without containers, however, containers make it very easy to implement Devops workflow.

Why?

- Easy solution for making development and testing environments consistent
- Isolation of application level dependencies from the host
- Simple updates

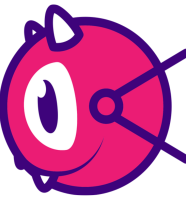
What about Containers on macOS?



No native support 

So, we used the Hypervisor.Framework introduced in Yosemite to virtualize macOS for macOS VMs and built Container Devops features on top of it.

Why Hypervisor.Framework?



Supported by Apple and will remain forward compatible for all macOS versions



Coexists with base macOS without stripping away macOS from the mac hardware

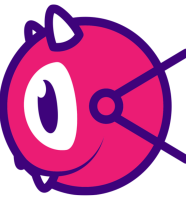


Uses macOS native resource scheduling for the VMs, which is very efficient



Enables virtualization platform to be extremely lightweight and easily manageable

Our extensions



Anka Hypervisor to create and run macOS VMs

Paravirtual network and block drivers for extreme performance in the guest VMs

CLI based interface `anka` to operate with VMs

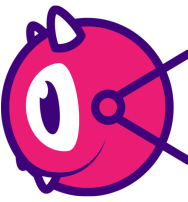
Docker run like interface `anka run` to operate inside VMs

Docker Registry like `Anka Registry` to store, version and distribute macOS VMs

Central management `Anka Controller` to manage VMs across a cluster of mac hardware

USB Pass through to macOS VMs

Solutions and Use Cases

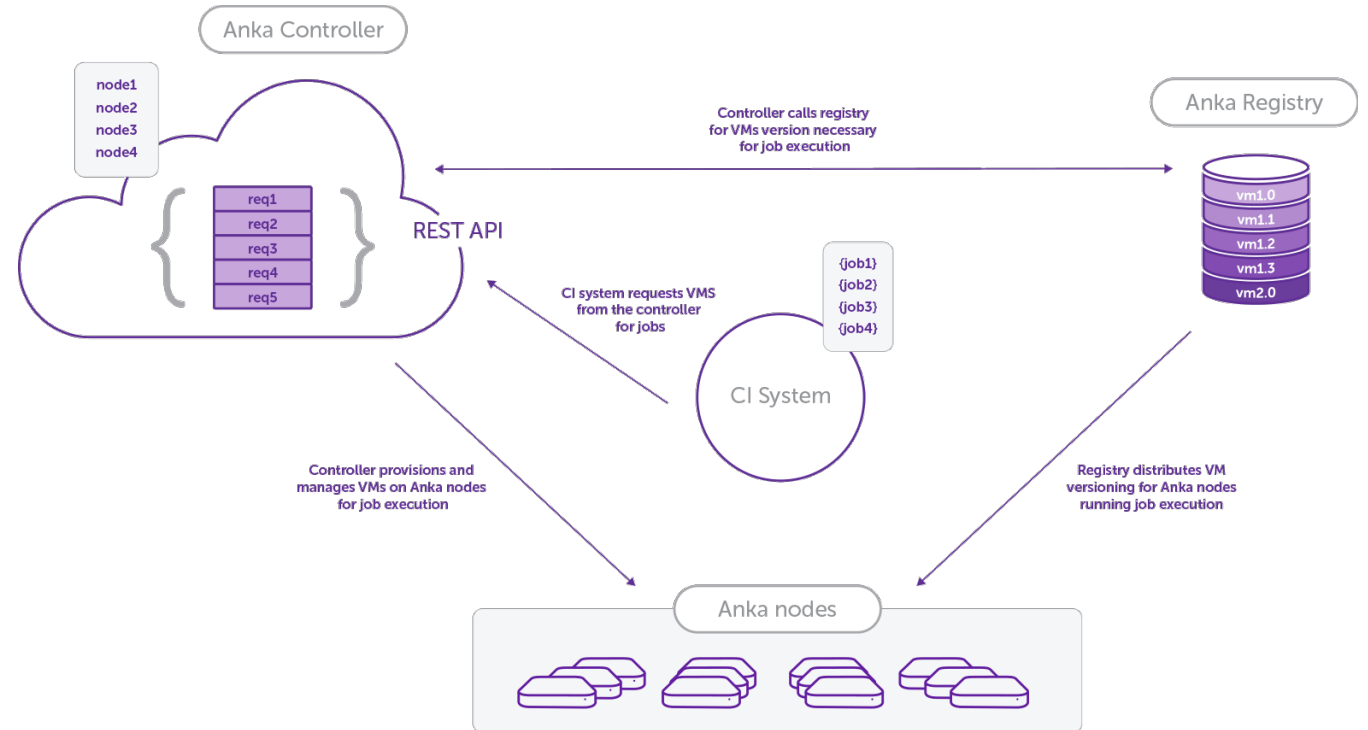


Anka Build - Build and Test Infrastructure to support development on macOS platform

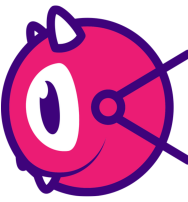
Reproducible environments

Isolated, Sterile environments

Dynamically provisioned



Solutions and Use Cases

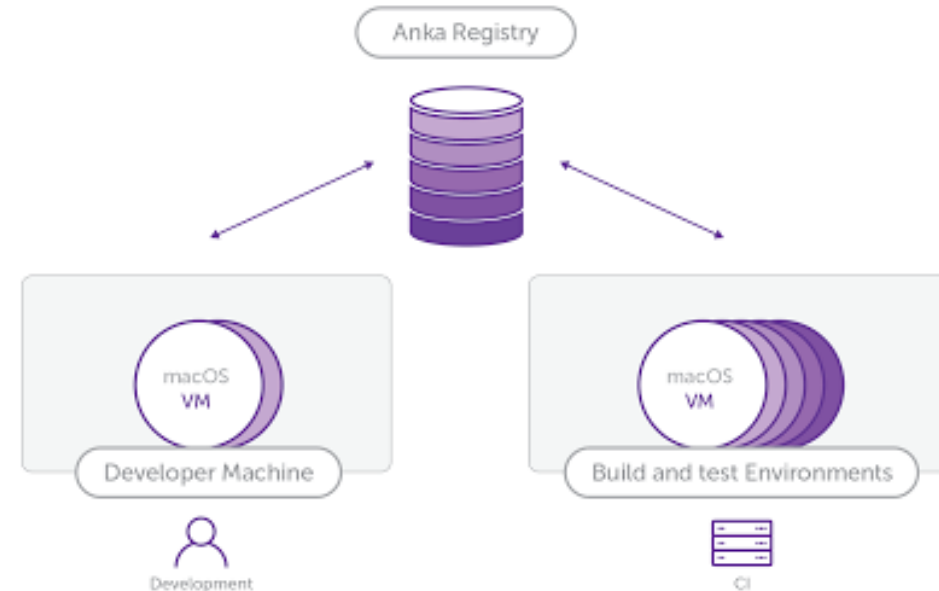


Anka Flow – Consistent environments for local development

Eliminates ‘But, it works on my machine!’ for the developers

Reduces failures upstream in CI workflow

Provides flexibility to developers with their development machines



Solutions and Use Cases



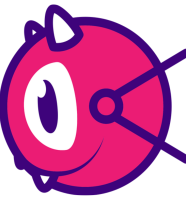
Anka Build – Test in end user like configuration prior to deploying changes

Emulate multiple end user mac setup scenarios

Build once and provision multiple times for repeated testing

Store and version manage end user configurations scenarios in the registry and use them for troubleshooting

```
anka modify <vm> set custom-variable hw.serial <serial>  
anka modify <vm> set custom-variable hw.product  
<product> anka modify <vm> set custom-variable  
hw.family <family>
```

Quick Demo

Download for 30 Day Trial

www.veertu.com

Documentation - <https://ankadoc.bitbucket.io/>

Thank You