



The OpenNebula alternative to Kubernetes for Containers-as-a-Service



About Me



Marco Mancini

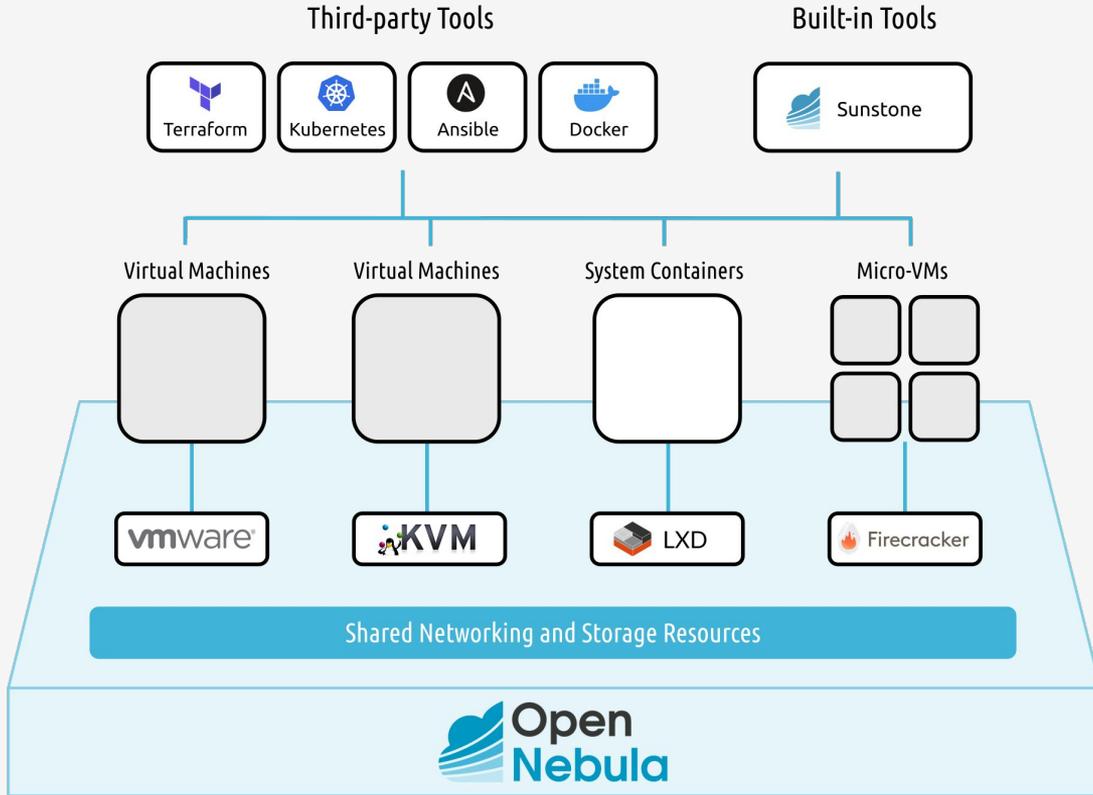
Cloud Technical Evangelist

OpenNebula

mmancini@opennebula.io

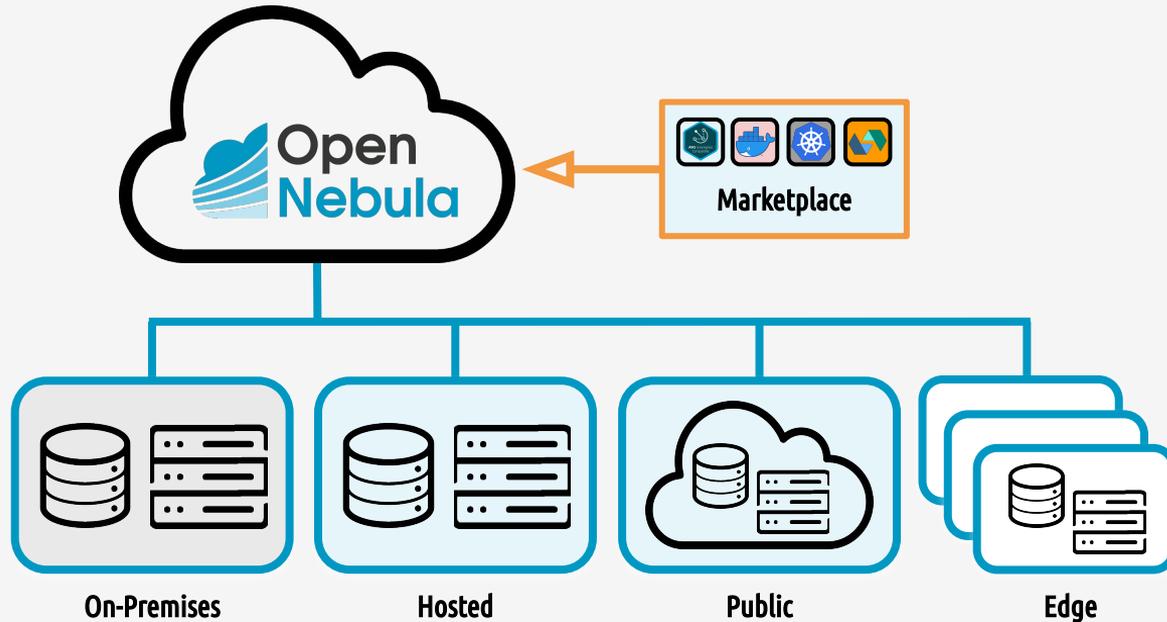
What is OpenNebula?

The open source Cloud Management Platform developed for the Enterprise 🚀



How is OpenNebula Being Used?

Say *hello* to our new True Hybrid Cloud Architecture



<https://openebula.io/true-hybrid>



ANY APPLICATION

Combine application containers from Docker Hub with traditional Virtual Machine workloads.



ANY INFRASTRUCTURE

Expand your Enterprise Cloud by unlocking the power of a true hybrid, edge and multi-cloud computing architecture.

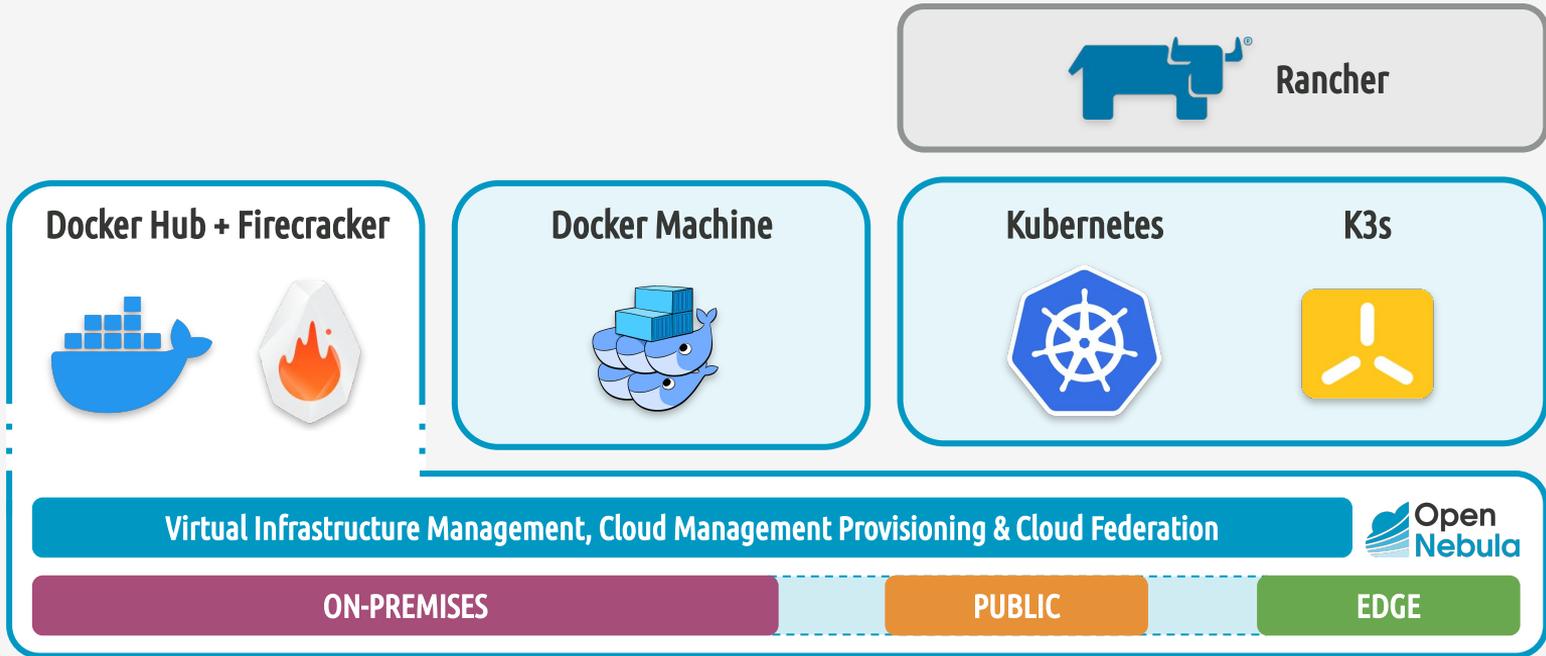


ANY TIME

Add new clusters dynamically to meet peaks in demand, or fault tolerance and latency requirements.

Mastering Containers

Container Orchestration with OpenNebula



<https://opennebula.io/mastering-containers>



Secure and Fast MicroVMs for Container Orchestration



Apps

oneadmin OpenNebula

+ ↺ ☁ ↓ 🔒 ⋮ 👤 👤 👤 🗑

<input type="checkbox"/>	ID	Name	Owner	Group	Size	State	Registration Time	Marketplace	Zone
<input type="checkbox"/>	208	jobber	oneadmin	oneadmin	2GB	READY	24/04/2020 00:00:00	DockerHub	0
<input type="checkbox"/>	207	sapmachine	oneadmin	oneadmin	2GB	READY	24/04/2020 00:00:00	DockerHub	0
<input type="checkbox"/>	206	scratch	oneadmin	oneadmin	2GB	READY	25/06/2013 00:00:00	DockerHub	0
<input type="checkbox"/>	205	alt	oneadmin	oneadmin	2GB	READY	18/04/2020 00:00:00	DockerHub	0
<input type="checkbox"/>	204	friendica	oneadmin	oneadmin	2GB	READY	07/05/2020 00:00:00	DockerHub	0
<input type="checkbox"/>	203	hipache	oneadmin	oneadmin	2GB	READY	01/06/2016 00:00:00	DockerHub	0
<input type="checkbox"/>	202	clefos	oneadmin	oneadmin	2GB	READY	11/05/2020 00:00:00	DockerHub	0
<input type="checkbox"/>	201	sl	oneadmin	oneadmin	2GB	READY	20/04/2020 00:00:00	DockerHub	0
<input type="checkbox"/>	200	euleros	oneadmin	oneadmin	2GB	READY	10/05/2019 00:00:00	DockerHub	0
<input type="checkbox"/>	199	caddy	oneadmin	oneadmin	2GB	READY	06/05/2020 00:00:00	DockerHub	0

10 Showing 1 to 10 of 233 entries

Previous 1 2 3 4 5 ... 24 Next

233 TOTAL

- Dashboard
- Instances
- Templates
- Storage
 - Datastores
 - Images
 - Files
 - MarketPlaces
- Apps**
- Network
- Infrastructure
- System
- Settings

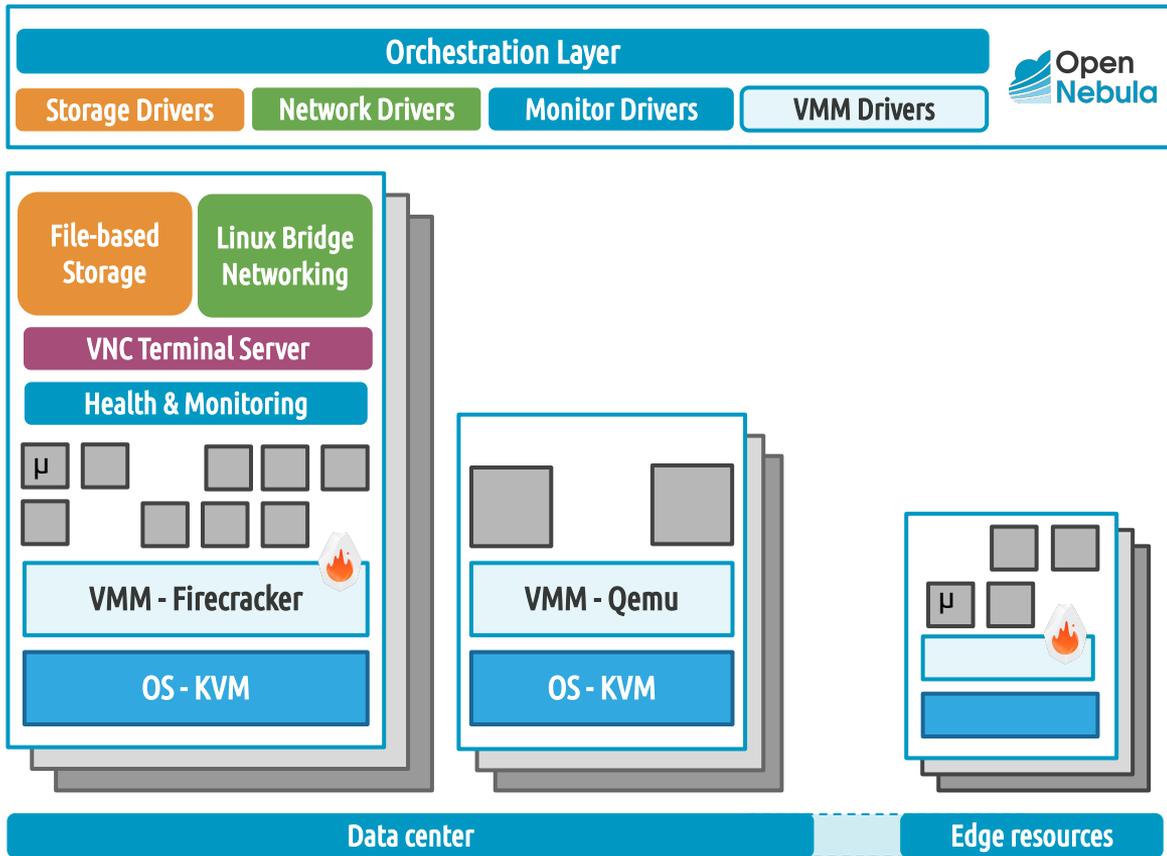
Officially supported
Not connected

[Sign in](#)



AWS Firecracker

Secure and Fast MicroVMs for Container Orchestration



Orchestrating VMs **on-premise and on hybrid/edge locations.**



Seamlessly integrate **multiple workloads.**



Seamlessly integrate your **network stack/storage.**



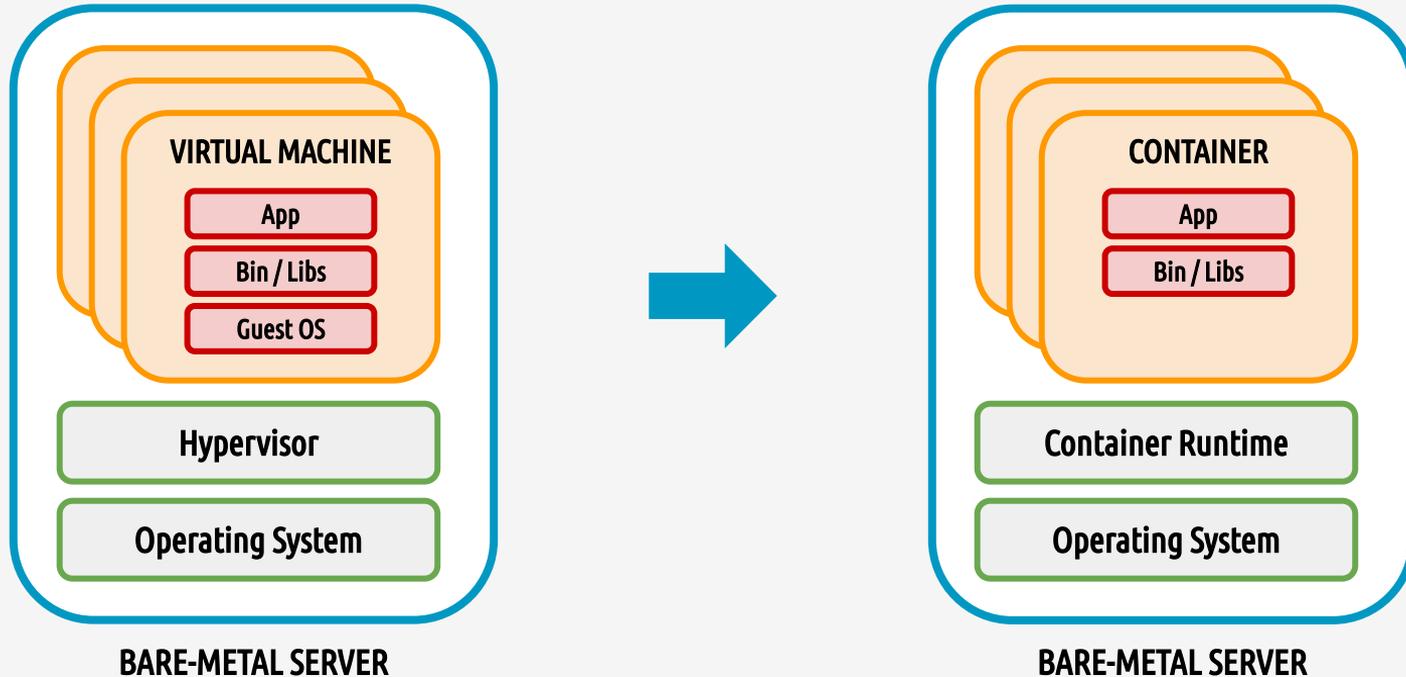
Create a **multi-tenancy environment** based on Firecracker.



Architect **multi-VM applications** with the OneFlow tool.

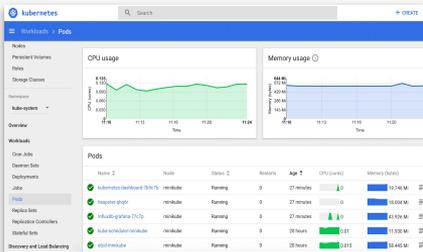
Deploying Container-based Apps

The Container Revolution



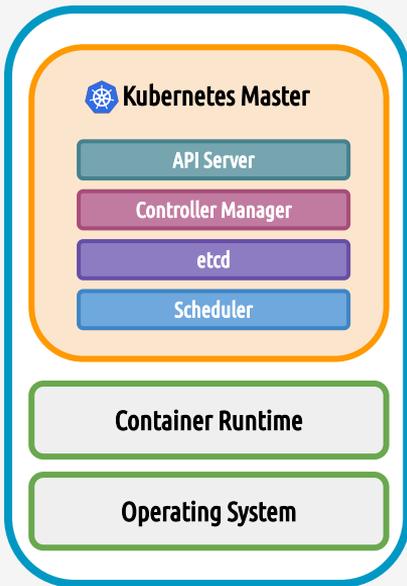
Deploying Container-based Apps

Microservice Architecture: Multi-Container Applications (Kubernetes)

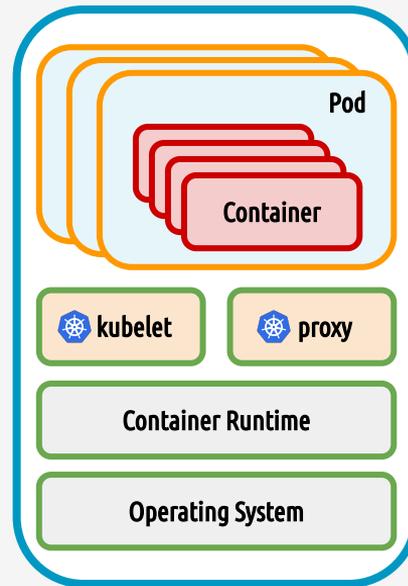


Kubernetes Dashboard UI

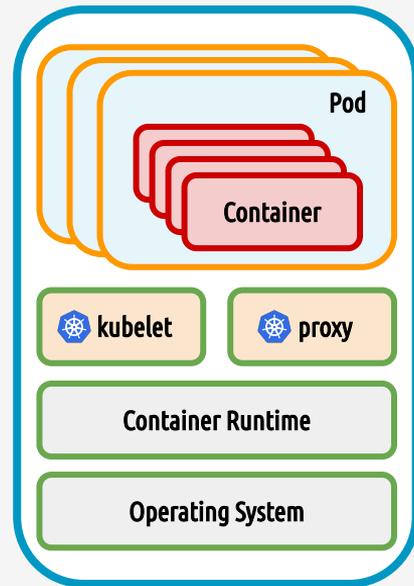
Pod Networks (Calico / Canal / Flannel / Weave Net)



BARE-METAL SERVER



BARE-METAL SERVER



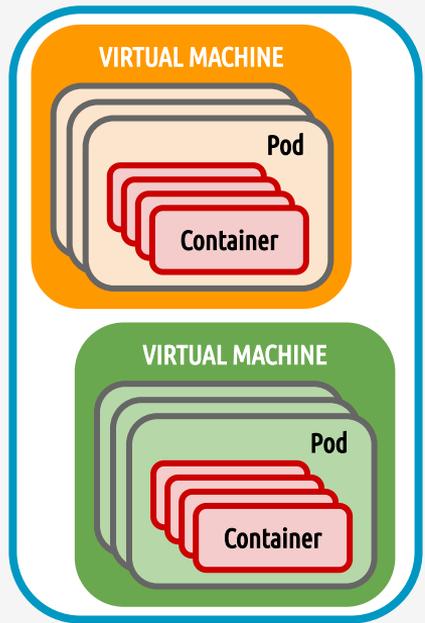
BARE-METAL SERVER

Deploying Container-based Apps

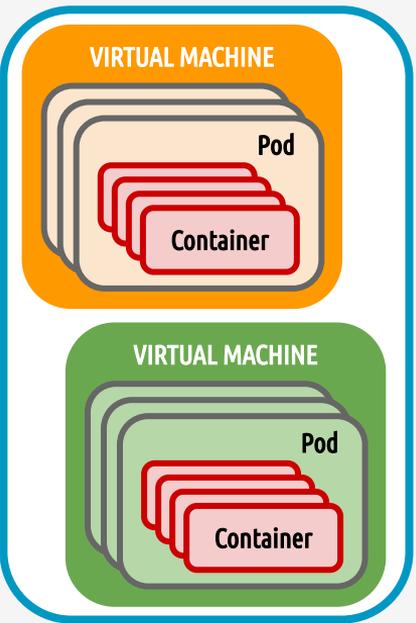
Multi-Tenancy & Security: Managed Kubernetes Clusters

VM Virtual Networks (IPv4 / IPv6 / Dual Stack)

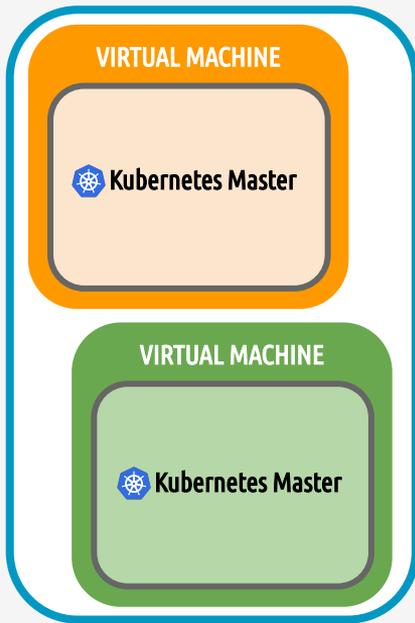
Pod Networks



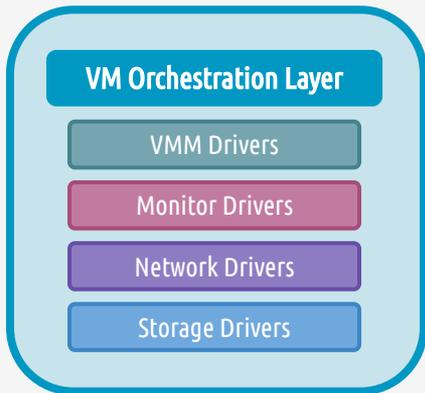
BARE-METAL SERVER



BARE-METAL SERVER



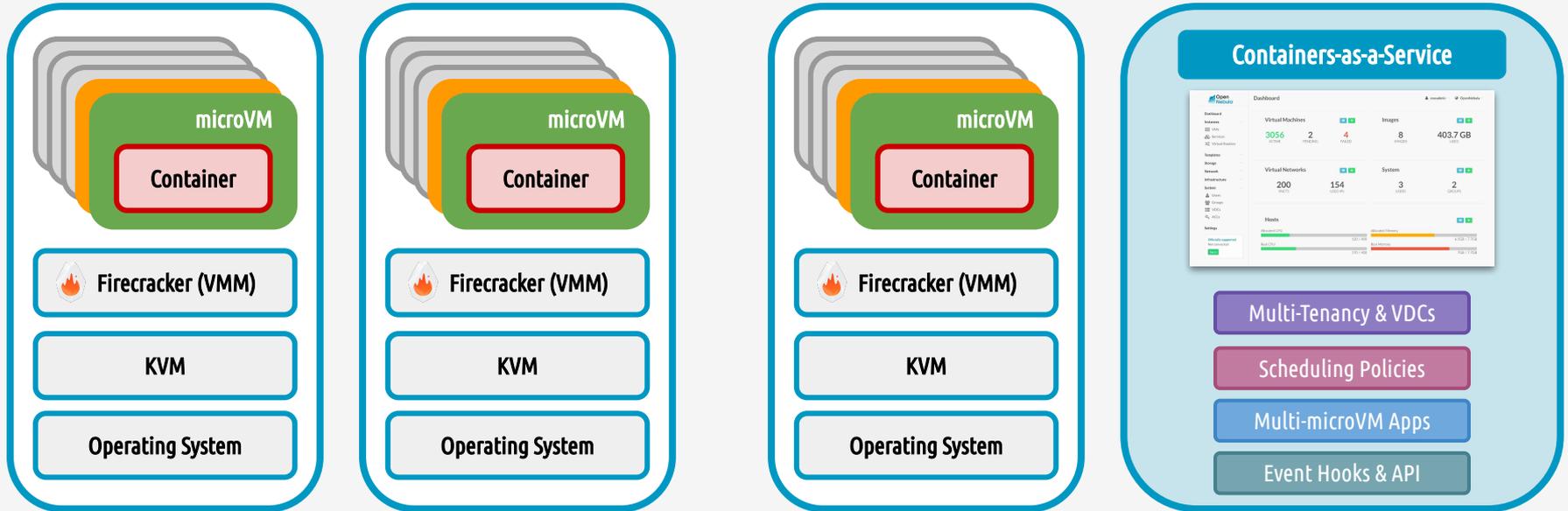
BARE-METAL SERVER



Deploying Container-based Apps

OpenNebula's Native Container Orchestration Model

microVM Virtual Networks (IPv4 / IPv6 / Dual Stack)

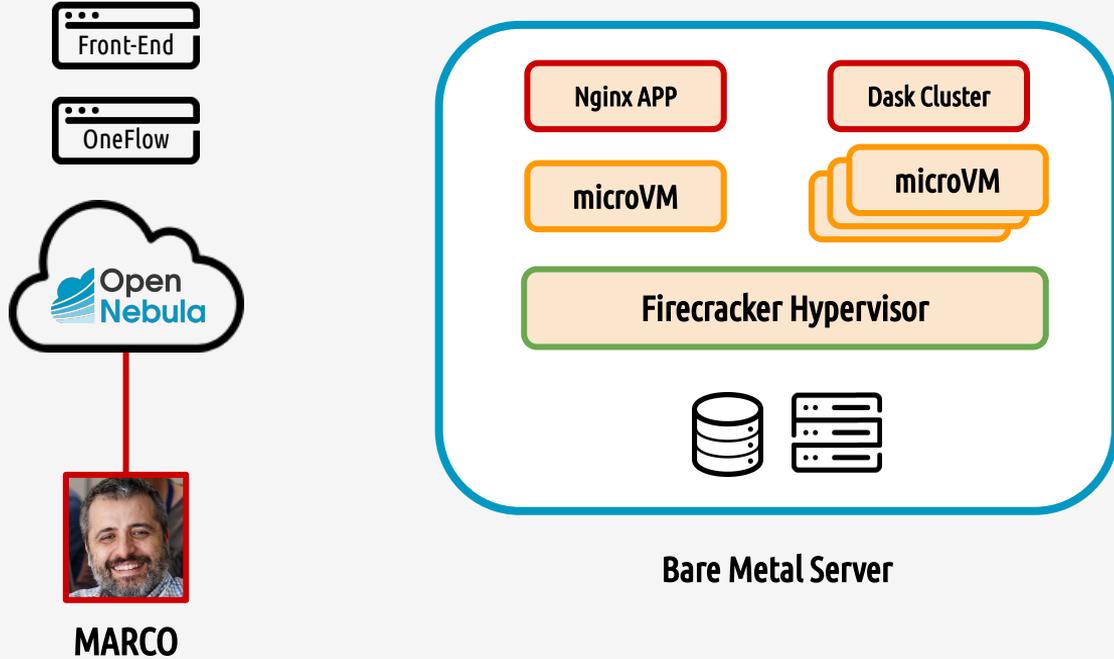


Public Cloud / Edge Resources

On-Premises / Hosted

Today's Demo

A View From the Eagle's Eye



Mastering Containers

Give it a try! 🚀



Deploying Container-Based Applications with OpenNebula

ARTICLE



OpenNebula vs Kubernetes:
Comparing Two Container Orchestration Models

ARTICLE



Mastering Containers with OpenNebula

WHITE PAPER



miniONE

Install a single-node LXD/KVM/FC Cloud

minione.opennebula.io



OpenNebula 5.12

Try “Firework”, our latest release!

opennebula.io/firework



ONEedge.io

This work has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement ONEedge 880412

Next Generation Edge Cloud Platform

Build & Manage an On-Demand Edge Cloud
Using Resources from Bare-Metal Providers





contact@opennebula.io



OpenNebula Headquarters

Paseo del Club Deportivo 1 - Edificio 13
Parque Empresarial La Finca
28223 Pozuelo de Alarcón (Madrid), Spain



OpenNebula Labs - Czech Republic

Cyrilská 7 - Impact Hub Brno
602 00 Brno, Czech Republic



OpenNebula USA Headquarters

1500 District Avenue
Burlington, MA 01803, USA



Phone

+34 91 829 8445
+1 617 453 3829



Website

OpenNebula.io
OneEdge.io