



The logo features a stylized orange and white icon resembling a flame or a lightning bolt, positioned to the left of the word "Accelerating." The word is written in a large, white, sans-serif font. A small trademark symbol (TM) is located at the top right of the letter "g".

# Managing Docker Containers with Kubernetes

Anselmo Pfeifer

# Anselmo Pfeifer

## About me:

- ✓ Desde 2007 **estudando** e trabalhando com automação de infraestrutura linux,
- ✓ De 02/2009 a 11/2015 fui sargento no Exército Brasileiro onde trabalhei como Analista de Infraestrutura e Desenvolvedor,
- ✓ De 11/2015 a 08/2017 trabalhei no time de DevOps da Tecsinapse (Home Office),
- ✓ Desde 08/2017 estou trabalhando na Daitan Group em Campinas SP, atuando como DevOps no time de CI &CD.

# KUBERNETES

[kubernetes.io](https://kubernetes.io)



# What is Kubernetes?

Kubernetes is an open-source system for automating deployment, scaling, and management of containerized applications.

**Kubernetes.io**

=

**k8s**

# What is Kubernetes?

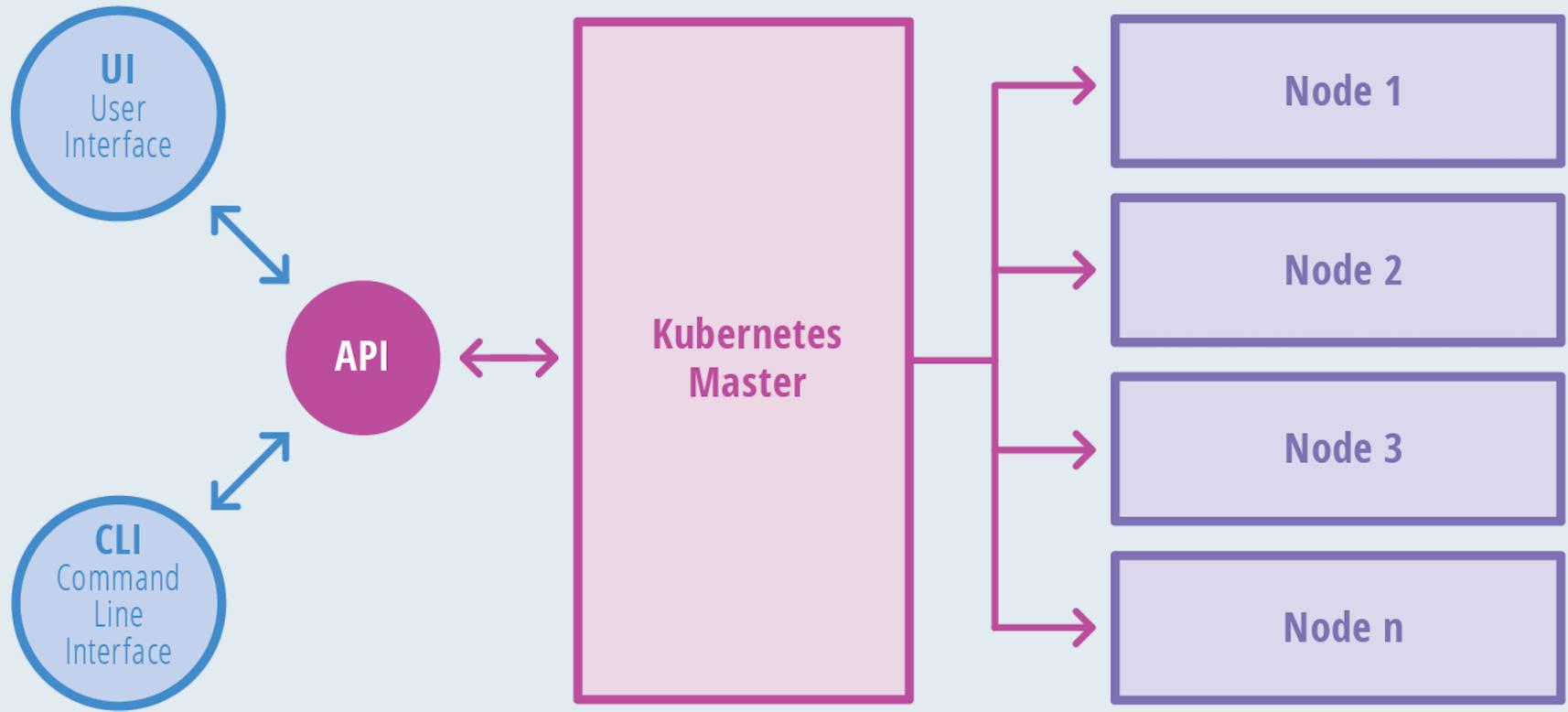
- ✓ **Portable:** public, private, hybrid, multi-cloud
- ✓ **Extensible:** modular, pluggable...
- ✓ **Self-healing:** auto-placement, auto-restart, auto-replication, auto-scaling.

# What Kubernetes is not

Kubernetes is not a traditional, all-inclusive PaaS (Platform as a Service) system. It preserves user choice where it is important.

- Does not limit the types of applications supported,
- Does not provide middleware
- Does not have a click-to-deploy service marketplace

# Architecture kubernetes



# Terms for certain functions on kubernetes

- ✓ **Nodes**
- ✓ **Roles**
- ✓ **Storage Class**
- ✓ **Namespace**
  - ✓ Deployments
  - ✓ Jobs
  - ✓ Pods
  - ✓ Replica Sets
  - ✓ Replication Controllers
  - ✓ Stateful Sets
- ✓ **Discovery and load balancing**
- ✓ **Ingresses**
- ✓ **Services**
- ✓ **Config and storage**
  - ✓ Config Maps
  - ✓ Persistent Volume Claims
  - ✓ Secrets

# Overview

 **kubernetes**

Search + CREATE

☰ Cluster > Namespaces

Namespaces				
	Name	Labels	Status	Age
<input checked="" type="checkbox"/>	<a href="#">kube-public</a>	-	Active	a month
<input checked="" type="checkbox"/>	<a href="#">default</a>	-	Active	a month
<input checked="" type="checkbox"/>	<a href="#">kube-system</a>	-	Active	a month

Cluster

- [Namespaces](#)
- Nodes
- Persistent Volumes
- Roles
- Storage Classes

Namespace

default

Workloads

- Daemon Sets
- Deployments
- Jobs
- Pods
- Replica Sets
- Replication Controllers
- Stateful Sets

Discovery and Load Balancing

- Ingresses
- Services

Config and Storage

- Config Maps
- Persistent Volume Claims
- Secrets

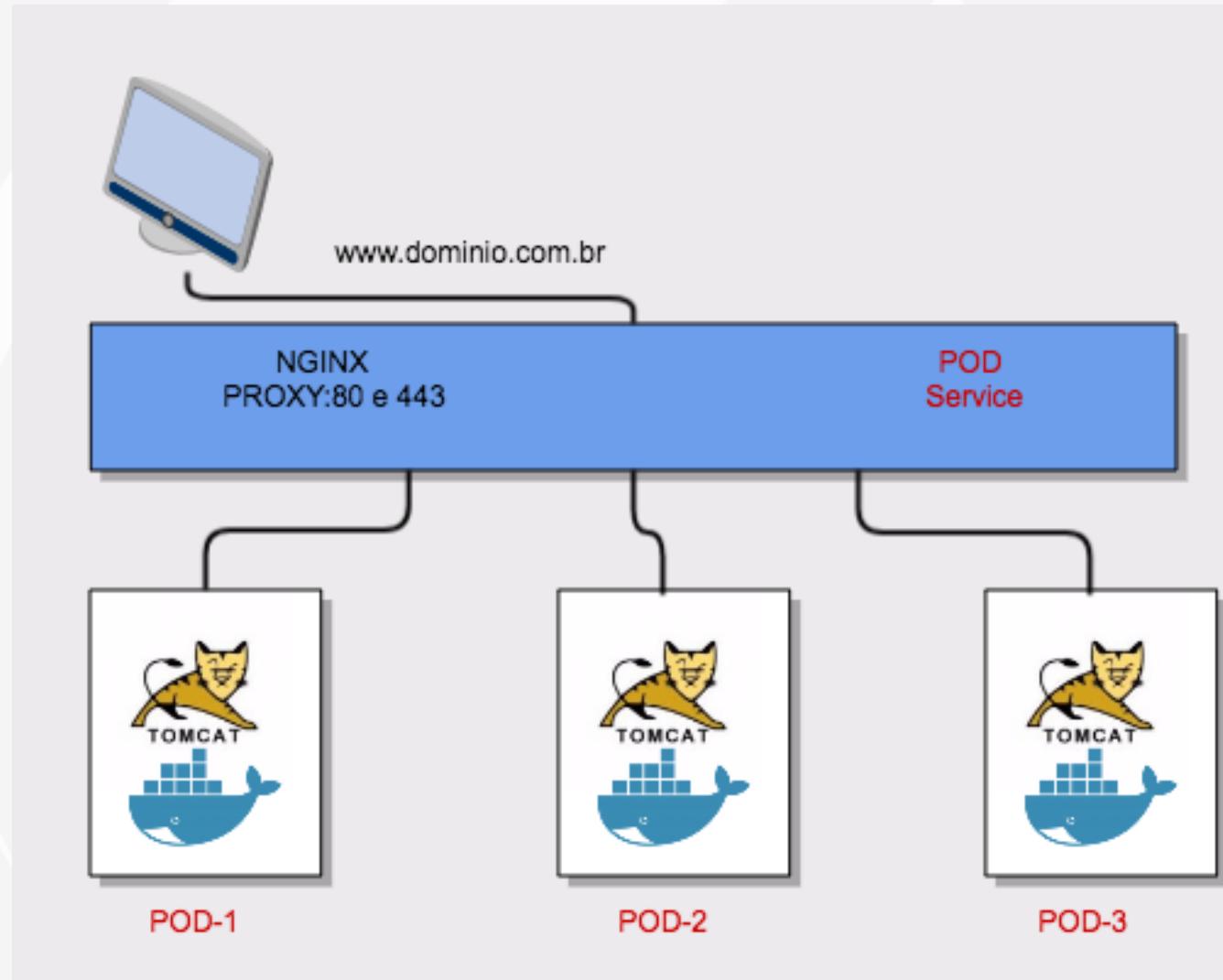
# Hands-On

Local:

- VirtualBox
- Minekube
- Kubectl

GCE:

- Gcloud
- kubectl



# Vagas disponíveis

Especialista Pleno de Redes IP

AI Software Architect at Innovation

Analista de Administração Pessoal JR

Data Engineer

DevOps

Frontend JavaScript

FullStack JavaScript (Angular/ReactJS + NodeJS)

Java BackEnd Developer

Java FullStack

Java FullStack – Analytics Solution

Java FullStack / Salesforce Developer

Java/Python Backend Developer

Oracle R12 Consultant – Temporary Job (3 months)

Python Backend Developer

Senior Backend Architect

Software Developer - Test Automation Framework

Tech Lead – Java FullStack

Estágio em Desenvolvimento de Software

Estágio em Testes Manuais

# Contact Information

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- Github
  - [AnselmoPfeifer/learning-kubernetes](https://github.com/AnselmoPfeifer/learning-kubernetes)



A background image showing a person's hands on a keyboard and a computer monitor displaying lines of code or a software interface. The entire image has a blue-toned, slightly grainy texture.

 Accelerating.<sup>TM</sup>

*The quality software development partner who  
**significantly accelerates** your time-to-market.*

Thank You!