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Containers & Kubernetes in Microsoft Azure

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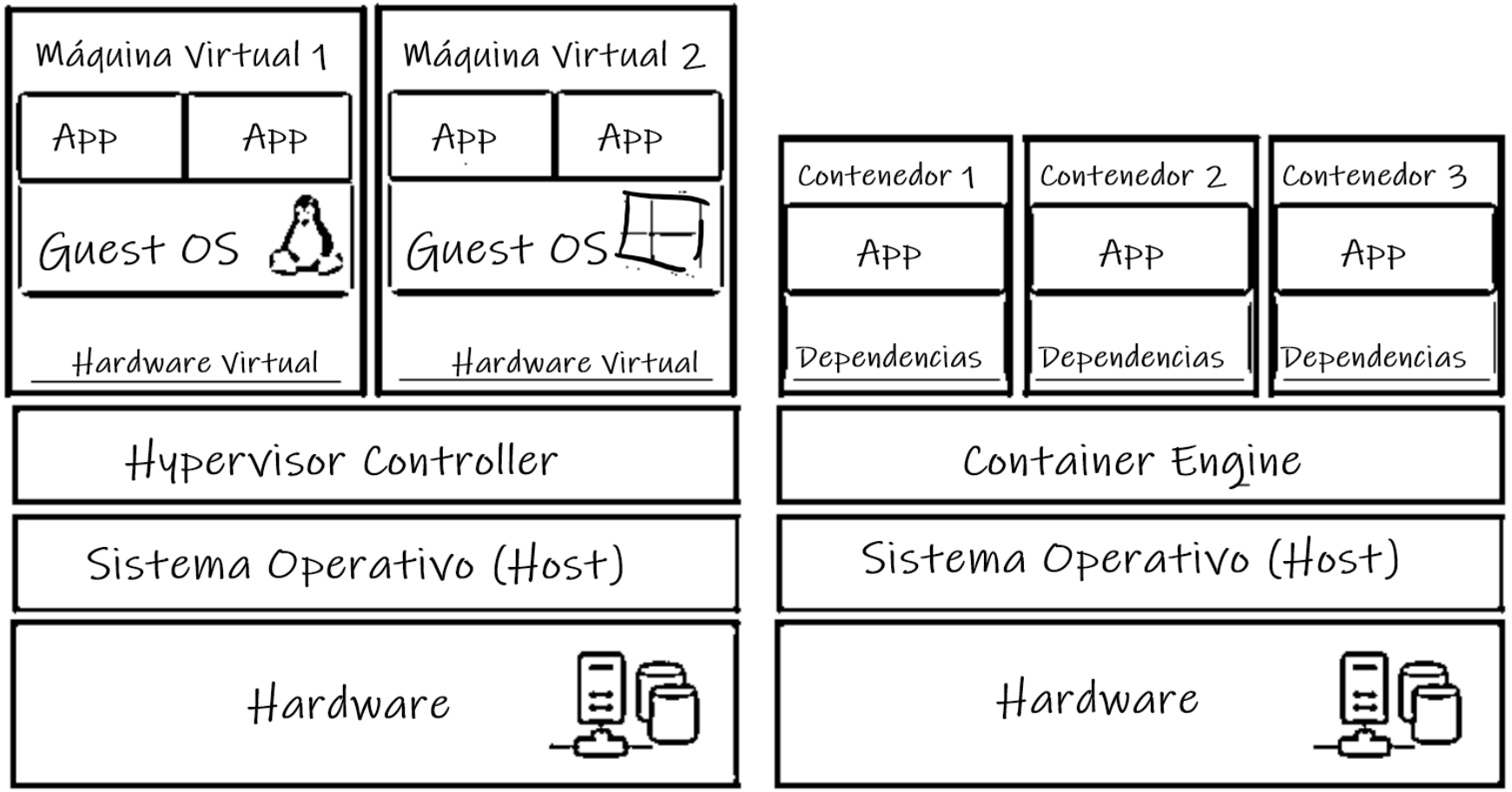
Ventajas



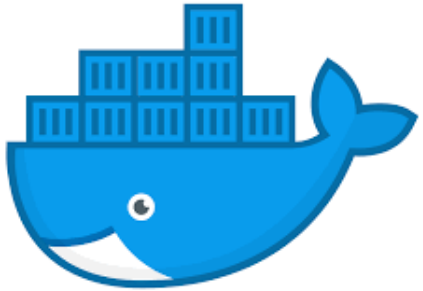
Máquinas virtuales

Virtualización de hardware

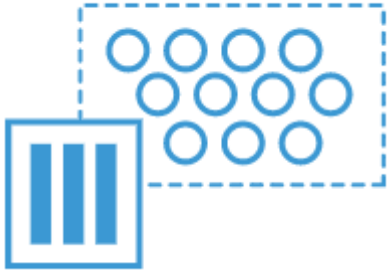
Contenedores

Virtualización del sistema operativo

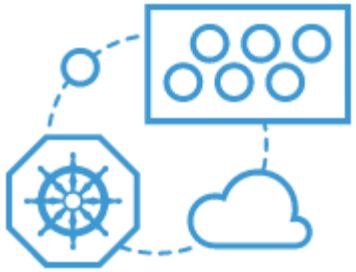
Contenedores en Azure



Docker



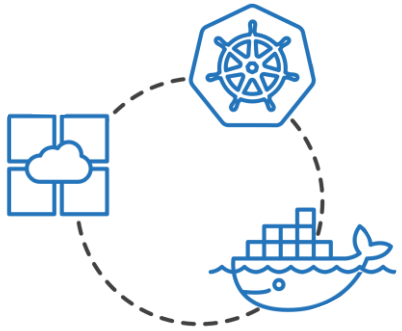
Azure Container Instances



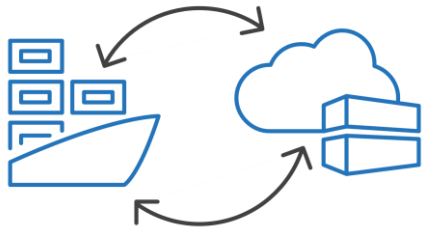
Azure Kubernetes Service

Azure Container Registry (ACR)

Manage a Docker private registry as a first-class Azure resource



Manage images for all types of containers



Use familiar, open-source Docker CLI tools

Azure Container Registry geo-replication

Demo

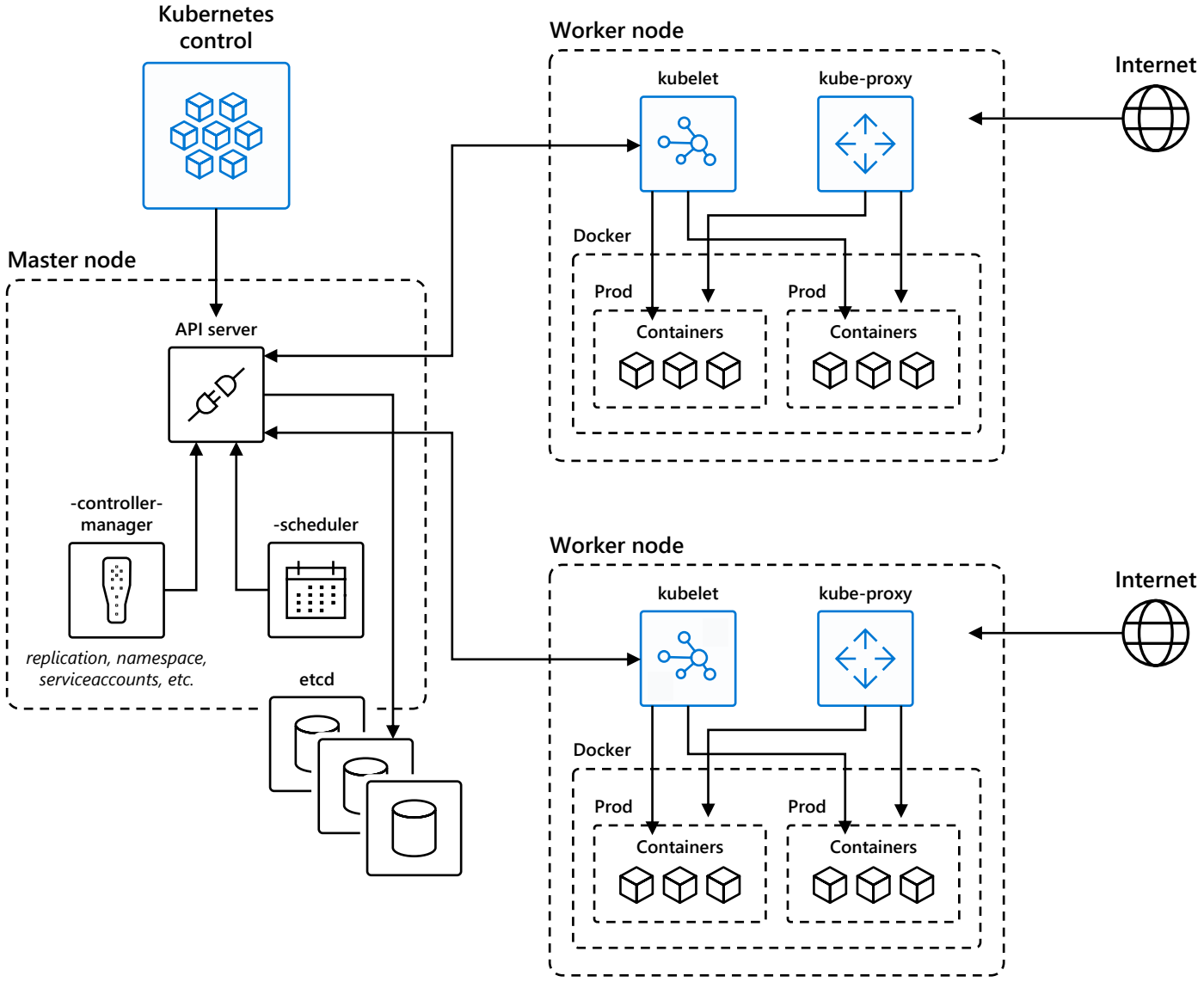
- Docker Desktop
- Pull container
- Create Azure container registry
- Push container – Azure Container Registry
- Provisionar container en Azure

Azure Container Instances

- Zero-downtime upgrades
- Batch workflows
- Service discovery
- Integrated load balancing
- Auto-scaling

How Kubernetes works

1. Kubernetes users communicate with API server and apply desired state
2. Master nodes actively enforce desired state on worker nodes
3. Worker nodes support communication between containers
4. Worker nodes support communication from the Internet



Keep learning

- **Microsoft Learn** : Containers in Azure **:** http://bit.ly/2ZvrmB1
  - Build a containerized web application with Docker
  - Build and store container images with Azure Container Registry
  - Run Docker containers with Azure Container Instances
  - Deploy and run a containerized web app with Azure App Service
  - Introduction to Azure Kubernetes Service

- **Step by step hand on labs**: https://bit.ly/3apUAGQ

Microsoft

Kubernetes Learning Path | Version 1.0

50 days from zero to hero with Kubernetes

Kubernetes is taking the app development world by storm. Already, 77% of companies with more than 1,000 developers that run Kubernetes are using it in production.[1] Kubernetes is shaping the future of app development and management—and Microsoft wants to help you get started with it today.

This guide is meant for anyone interested in learning more about Kubernetes. In just 50 days, you'll understand the basics of Kubernetes and get hands-on experience with its various components, capabilities, and solutions, including Azure Kubernetes Service. Go from zero to hero with Kubernetes to set your company up for future app development success.

Resources

http://bit.ly/2ZxxA36

[1] Heptio: State of Kubernetes 2018

Gracias!