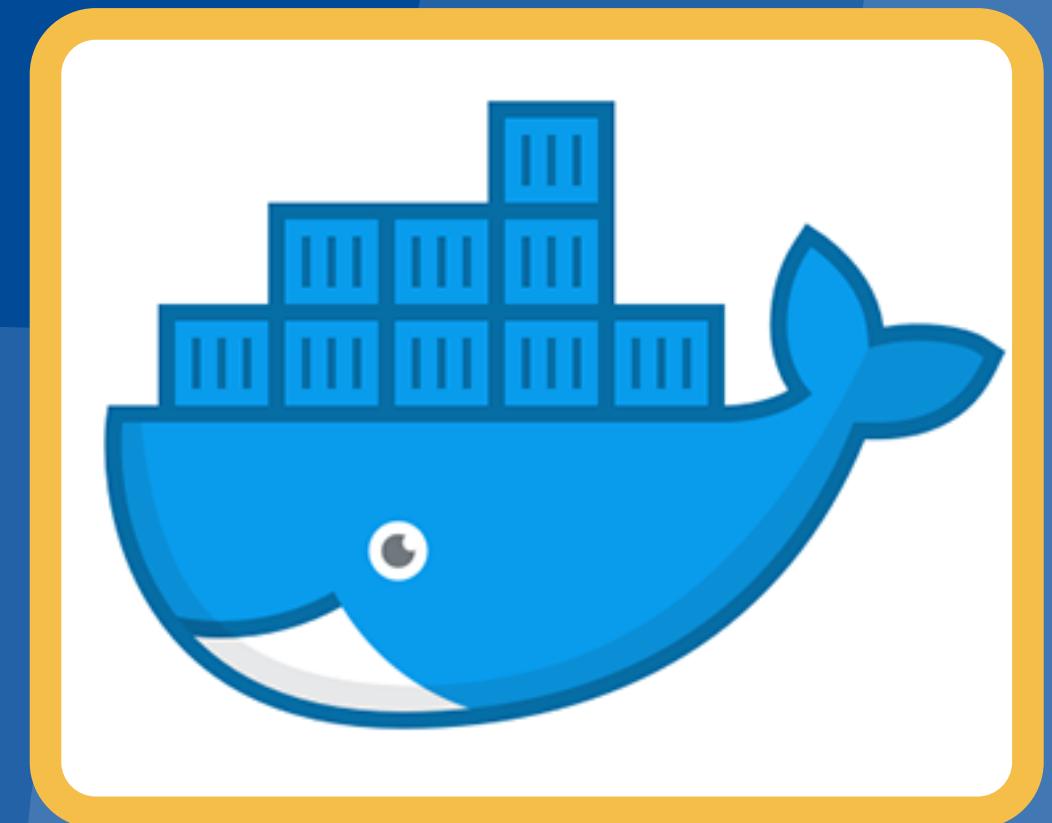




Introducción a Docker



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Programa

Qué aprenderemos hoy

01

Teoría Docker

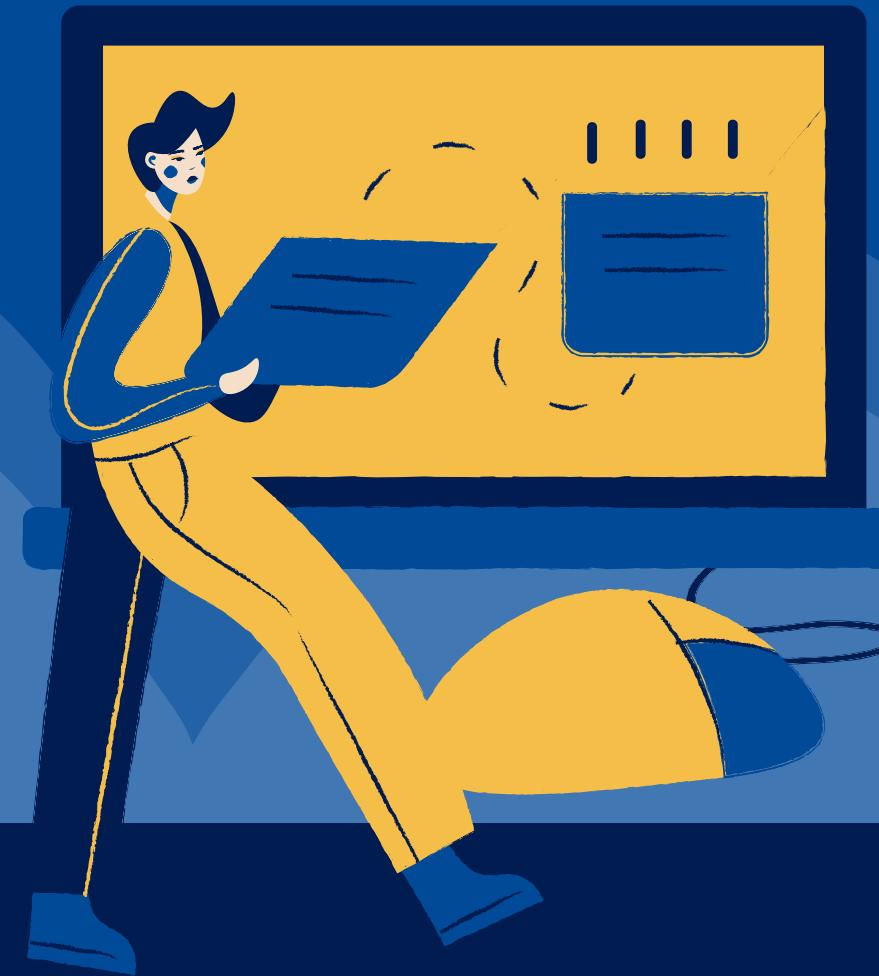
02

Comando básicos

03

Ejercicio práctico

Conceptos clave

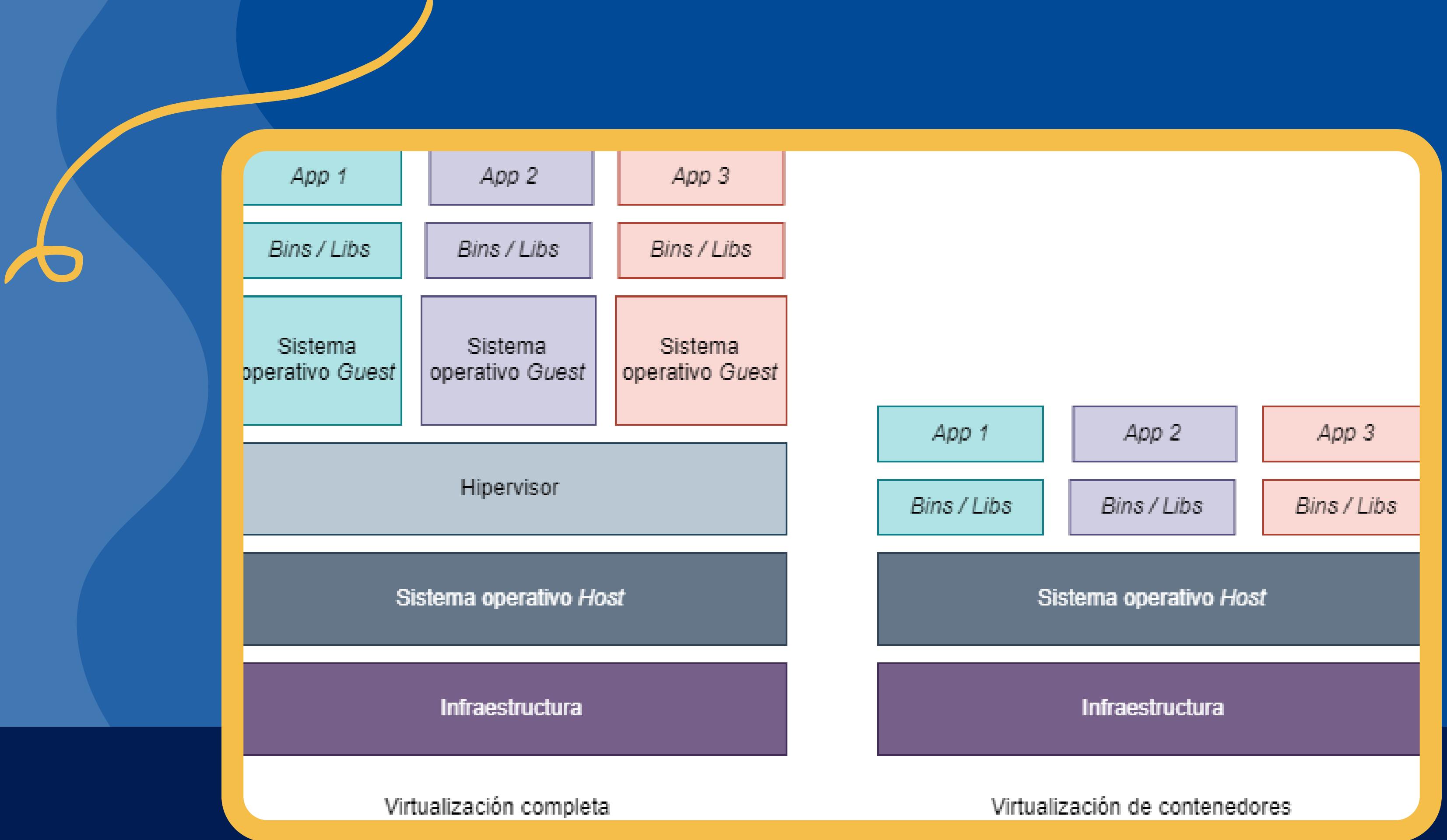


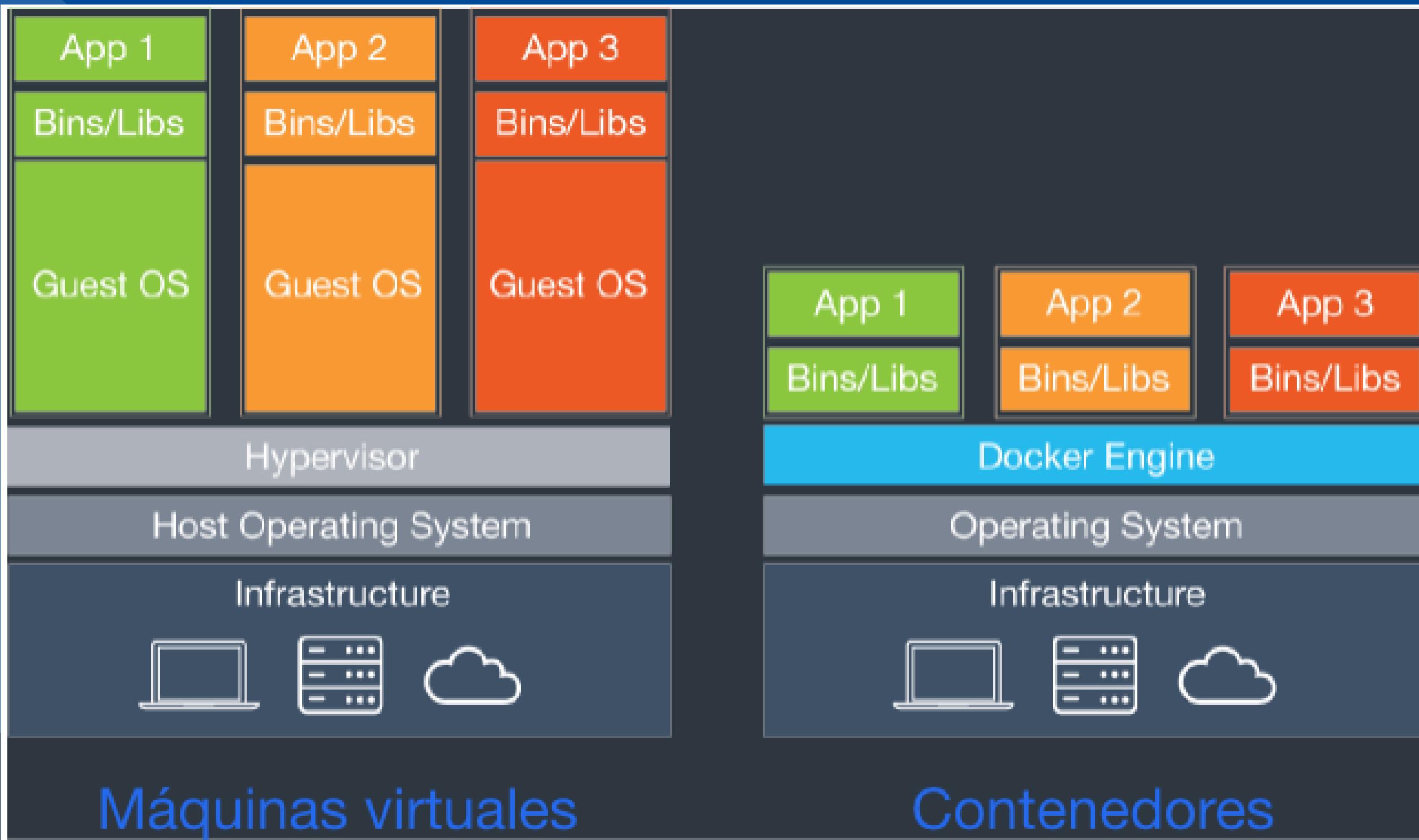
Virtualización

Crea un entorno informático simulado, o virtual, en lugar de un entorno físico. Reduce Costos.

Hipervisor

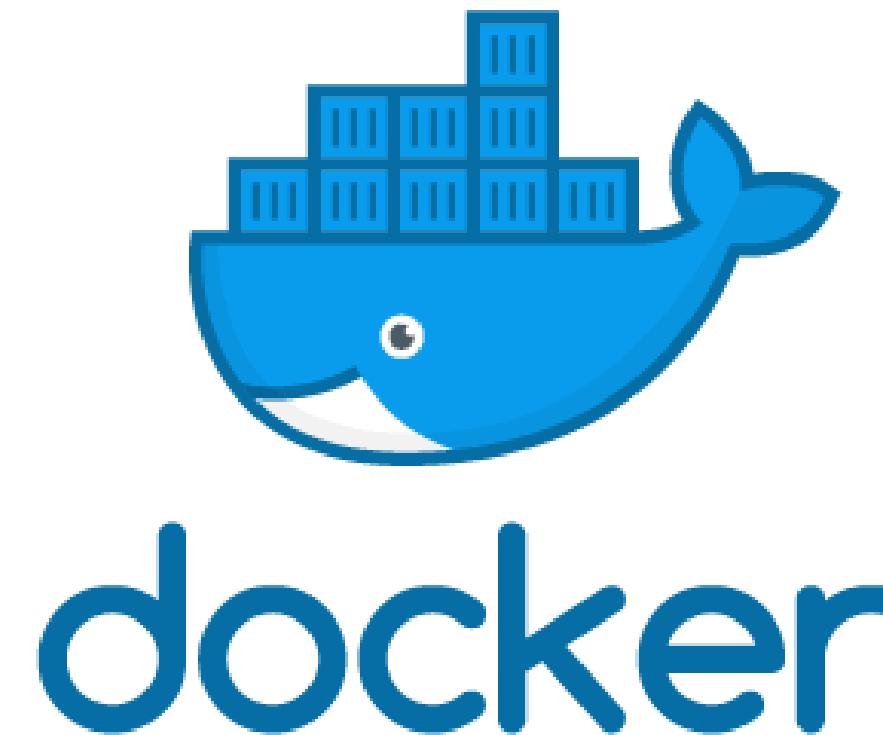
Software que crea y ejecuta máquinas virtuales (VM).





Docker

"La tecnología Docker utiliza el kernel de Linux y sus funciones, como los grupos de control y los espacios de nombre, para **dividir** los procesos y **ejecutarlos** de manera independiente. El propósito de los contenedores es ejecutar varios procesos y aplicaciones por separado para que se pueda aprovechar mejor la infraestructura y, al mismo tiempo, conservar la seguridad que se obtendría con los sistemas individuales." Red Hat



Beneficios



Portabilidad

Ligereza

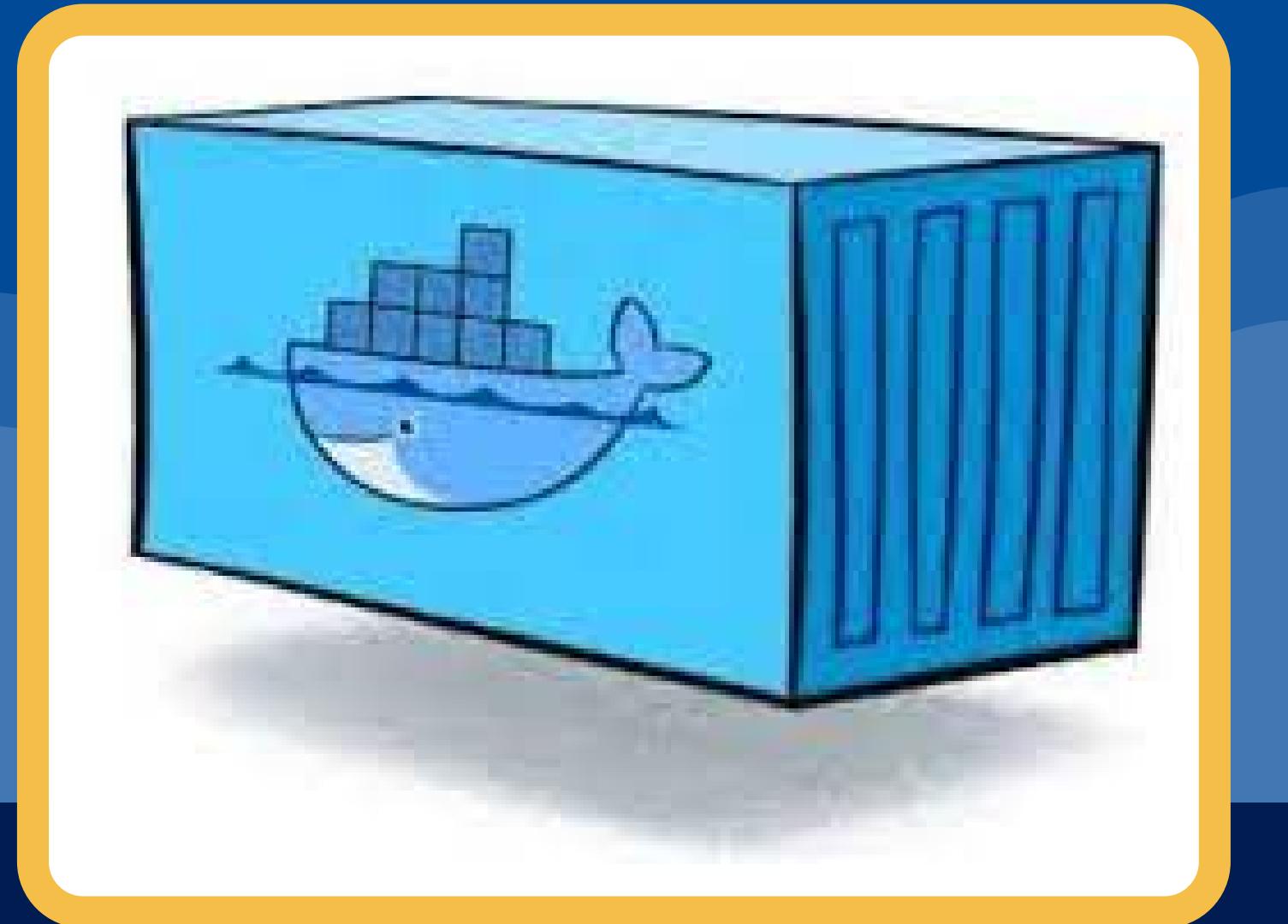
Autosuficiencia

Modularidad

Control de versiones

Contenedor

Es un ambiente aislado que cuenta con todo lo necesario para que una aplicación se ejecute.



Permite mayor portabilidad para su fácil distribución.

Permite mayor eficiencia en la forma en que se despliegan aplicaciones.

Comandos Básicos

\$ docker pull

\$ docker images

\$ docker ps

\$ docker ps -a

\$ docker rm

\$ docker rmi

\$ docker start

\$ docker stop





¡Practiquemos!

Docker Hub

Screenshot of the Docker Hub website showing the search interface and a list of popular Docker images.

The search bar at the top contains the placeholder text "Search for great content (e.g., mysql)".

The navigation bar includes links for "Explore", "Pricing", "Sign In", and "Sign Up".

The main menu has three tabs: "Docker", "Containers" (which is selected), and "Plugins".

On the left, there are "Filters" sections:

- Images**:
 - Verified Publisher
 - Official Images
- Categories**:
 - Analytics
 - Application Frameworks
 - Application Infrastructure
 - Application Services
 - Base Images
 - Databases
 - DevOps Tools
 - Featured Images
 - Messaging Services
 - Monitoring
 - Operating Systems
 - Programming Languages
 - Security
 - Storage
- Operating Systems**:
 - Linux
 - Windows

The results section shows 1 - 25 of 8,783,976 available images. A dropdown menu is set to "Suggested".

The first result is the "ubuntu" image, which is an "Official Image". It was updated 21 days ago and has over 1B+ downloads and 10K+ stars. The description states: "Ubuntu is a Debian-based Linux operating system based on free software." It is categorized under Container, Linux, ARM 64, riscv64, IBM Z, x86-64, 386, PowerPC 64 LE, ARM, Base Images, and Operating Systems.

The second result is the "alpine" image, which is also an "Official Image". It was updated 2 months ago and has over 1B+ downloads and 8.4K stars. The description states: "A minimal Docker image based on Alpine Linux with a complete package index and only 5 MB in size!" It is categorized under Container, Linux, PowerPC 64 LE, ARM 64, ARM, x86-64, IBM Z, 386, riscv64, Featured Images, Base Images, and Operating Systems.

The third result is the "nginx" image, which is an "Official Image". It was updated a day ago and has over 1B+ downloads and 10K+ stars. The description states: "Official build of Nginx." It is categorized under Container, Linux, mips64le, 386, IBM Z, PowerPC 64 LE, ARM 64, x86-64, ARM, Application Infrastructure, and Application Infrastructure.

The fourth result is the "busybox" image, which is an "Official Image". It was updated a month ago and has over 1B+ downloads and 2.5K stars. The description is not visible in the screenshot.

Bibliografía

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Redes Zone

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