# Infrastructure Types

<u>Nicolas El Khoury</u> DevOps Consultant



# Overview

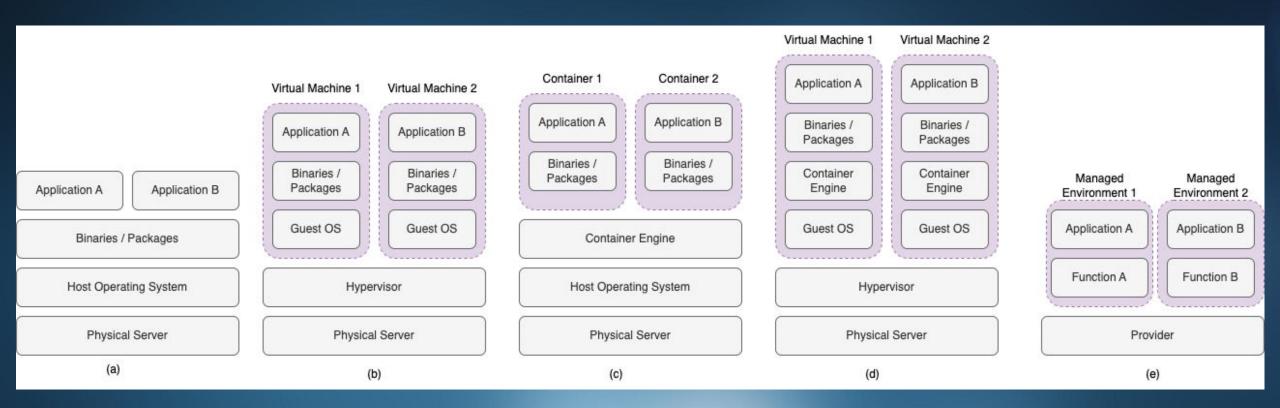
→ Physical Servers

→ Virtual Machines

→ Containers

→ Serverless

# **Infrastructure Types**

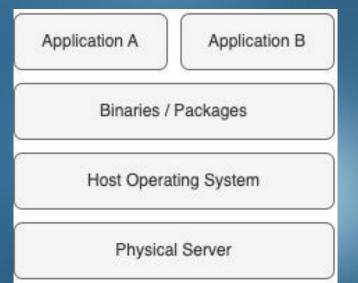


# **Physical Servers**

# <u>Advantages</u>

→ Ownership and Customization

→ Performance



#### **Disadvantages**

→ Large CAPEX and OPEX

Management Overhead

→ Lack of Scalability

Resource Mismanagement

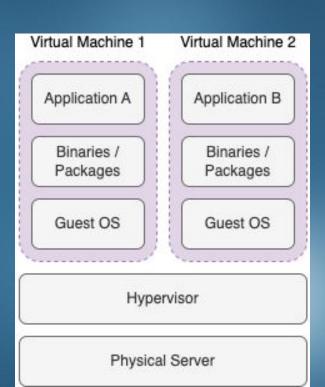
→ Improper Isolation

→ Performance Degradation over Time

#### **Virtual Machines**

# <u>Advantages</u>

- $\longrightarrow$  Low CAPEX
- → Flexibility
- → Disaster Recovery
- → Better Resource Management
- → Proper Environment Isolation



#### **Disadvantages**

- → Performance Issues
- → Security Concerns
- → Increased Resource Waste

#### **Containers**

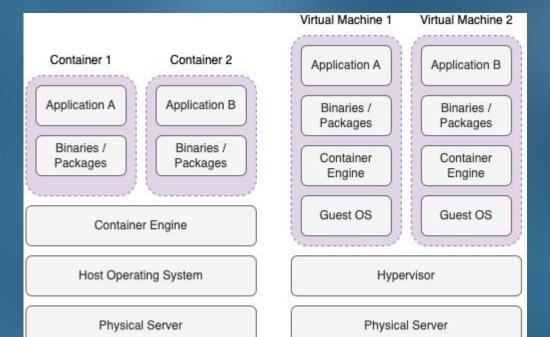
# <u>Advantages</u>

- → Decreased Overhead
- Portability
- Rapid Delivery Cycles

#### Disadvantages

→ Data Persistence

Cross-Platform Incompatibility



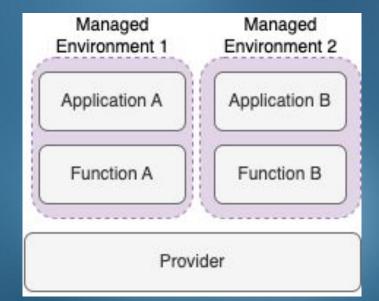
#### Serverless

### <u>Advantages</u>

- → Cost
- → Scalability
- Fast Delivery Cycles

#### **Disadvantages**

- Security and Privacy
- → Vendor Lock-in
- Complex Troubleshooting



# Thank You