

# Networking

## Cloud Concepts



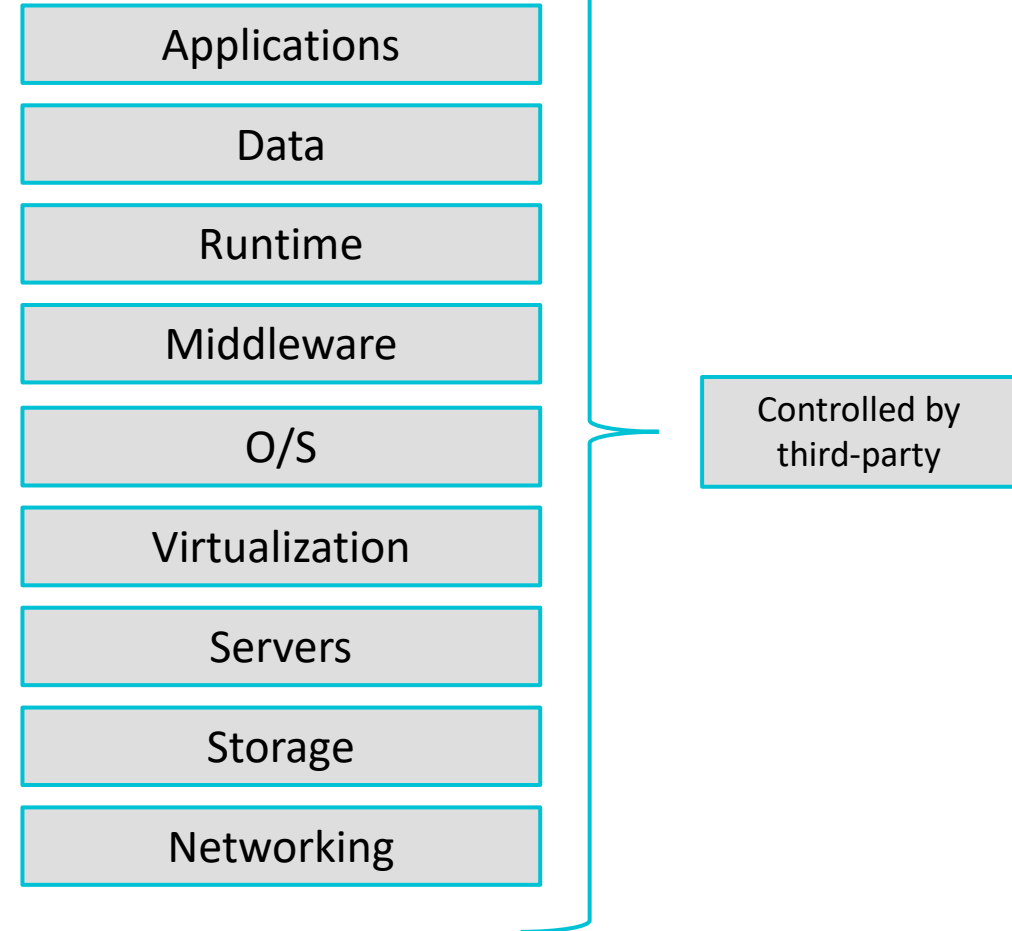
# Deployment Models

- Public Cloud – Using a service for the cloud
  - Services like AWS, Azure, etc...
- Private Cloud – Internal to an organization
  - They only have access to the cloud
- Hybrid Cloud – A mix of both public and private
- Community Cloud – Different organizations sharing a cloud
  - Typically they use similar resources



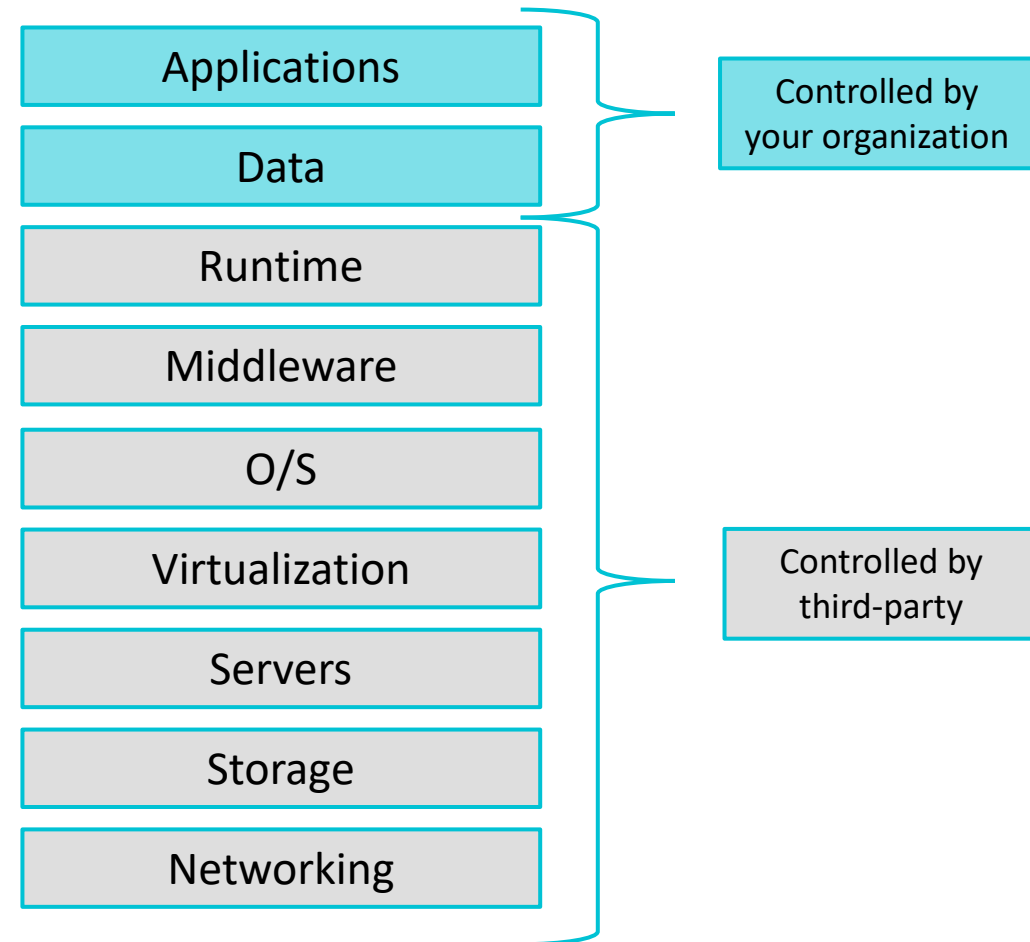
# Software as a Service (SaaS)

- Third-party provider hosts the applications
  - Makes them available to the customer
- Also known as subscribeware
- Examples:
  - Slack
  - Office365
  - Google Suite



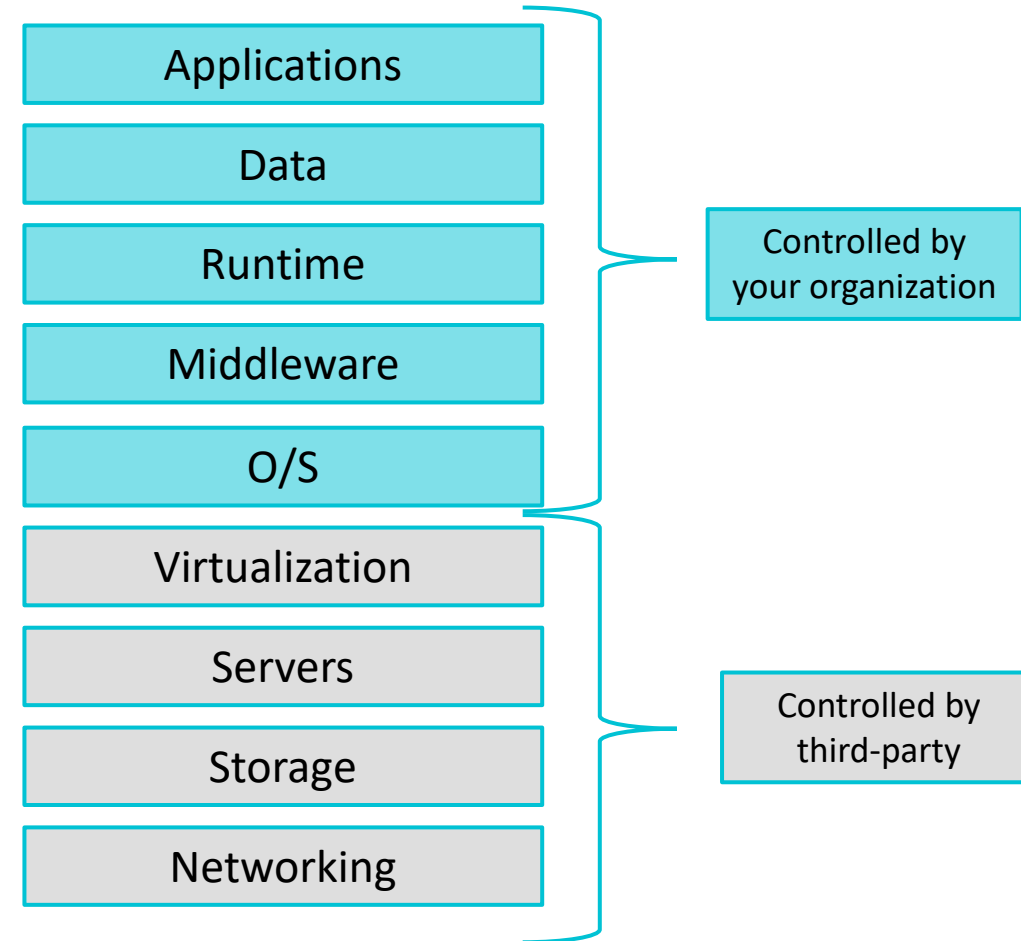
# Platform as a Service (PaaS)

- Third-party provider hosts platform
  - They also update the platforms and operating systems
- Organization still controls applications
  - They install/launch applications
- Also known as platform-based service
- Examples:
  - Azure
  - AWS
  - DynamoDB



# Infrastructure as a Service (IaaS)

- Computing infrastructure is managed by a third-party
  - Outsourcing equipment and hardware
- The third-party is not responsible for software
  - Software installation and management still is the organization's responsibility
- Also known as Hardware as a service
- Examples:
  - AWS EC2
  - Openstack



# Desktop as a Service (DaaS)

- Virtual Desktop to users
  - Created/supplied by third-party
- Persistent Desktops
  - User can customize
  - Saves the previous session
- Non-persistent
  - User cannot customize
  - Desktop resets every time
- Examples:
  - Oracle Data Cloud
  - Cloud Datastore
  - CouchDB



# Infrastructure as Code (IaC)

- No physical hardware
  - All devices created virtually
- Data centers are managed and provisioned through machine-readable files
  - Rather than hardware or interactive tools
- Automate – Automatically creating tools
- Orchestration – Automatically deploying an infrastructure

