# Introduction to Cloud Computing
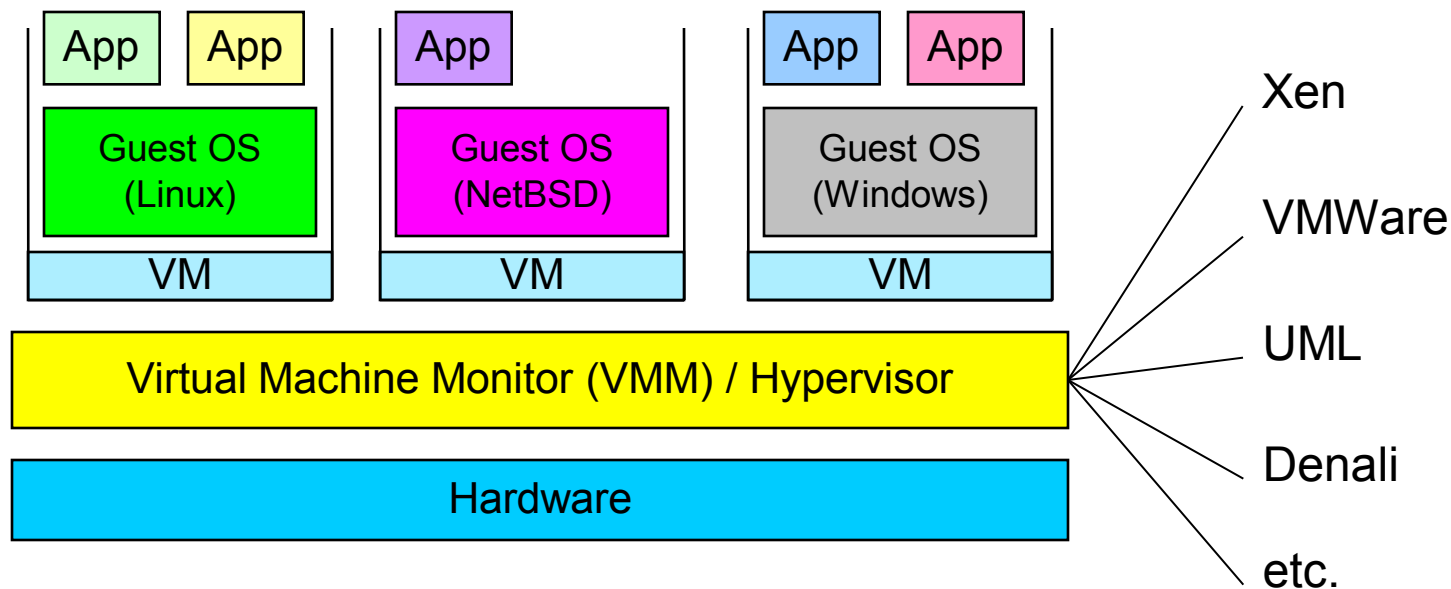
Prepared by:
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(2016-2017)

# Cloud Computing
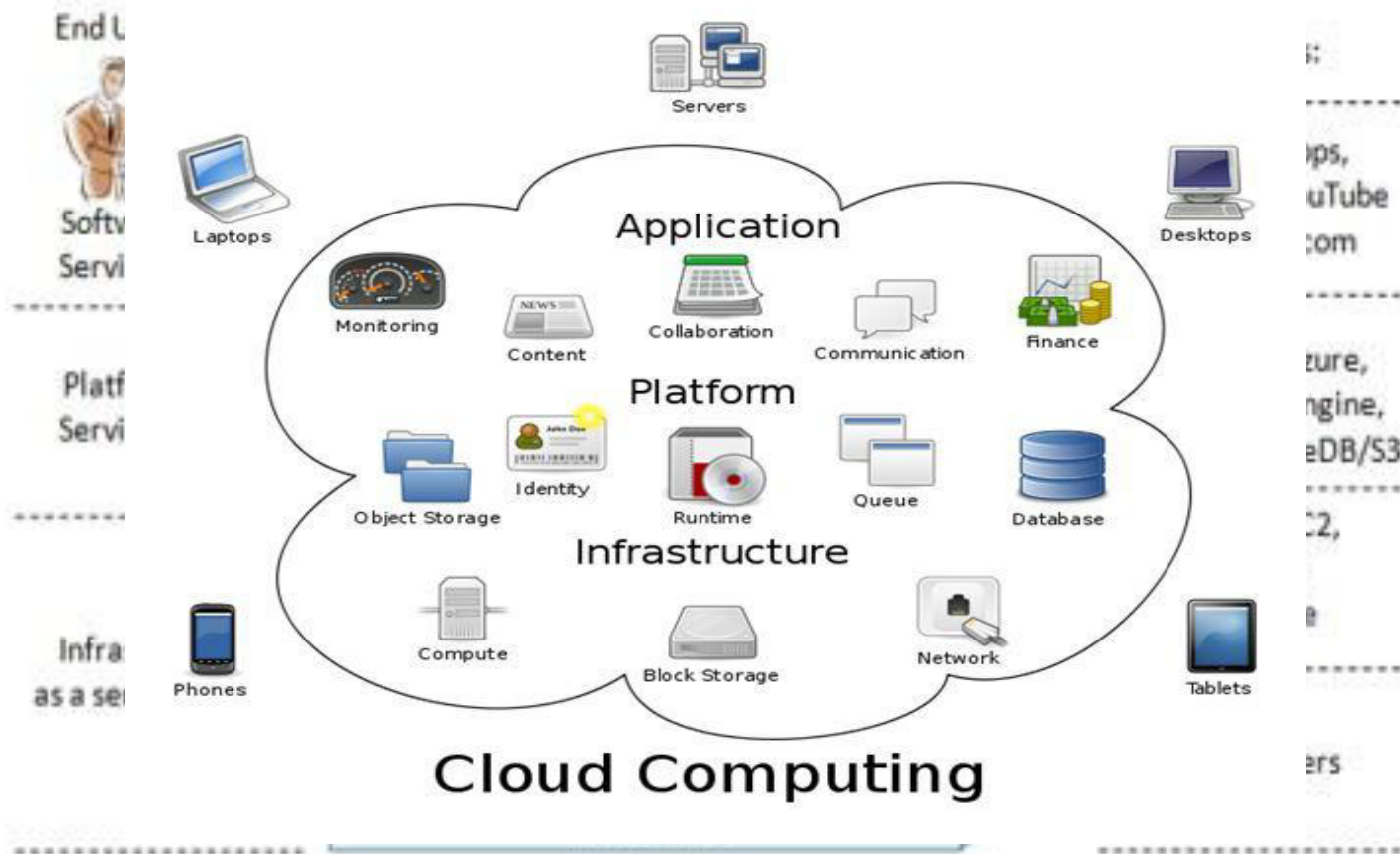
▸ Based on Virtualization technology.

| App | App | | App | | App | App |
|---|---|---|---|---|---|---|
| Guest OS (Linux) | | | Guest OS (NetBSD) | | Guest OS (Windows) | |
| VM | | | VM | | VM | |

Virtual Machine Monitor (VMM) / Hypervisor

Hardware

Xen

VMWare

UML

Denali

etc.

# Cloud Computing

- Based on Virtualization technology.
- Pool of virtualized Resources
  - VMs, Storage, CPU, Platforms.
- Provisioned by Service Provider
- Features:
  - Pay-per-use (Utility Computing)
  - Low cost
  - Scale in/out
  - Availability
  - on demand services
    - From anywhere, anytime and any place.
- Challenges:
  - No standard API (lock-in)
  - Privacy and security.

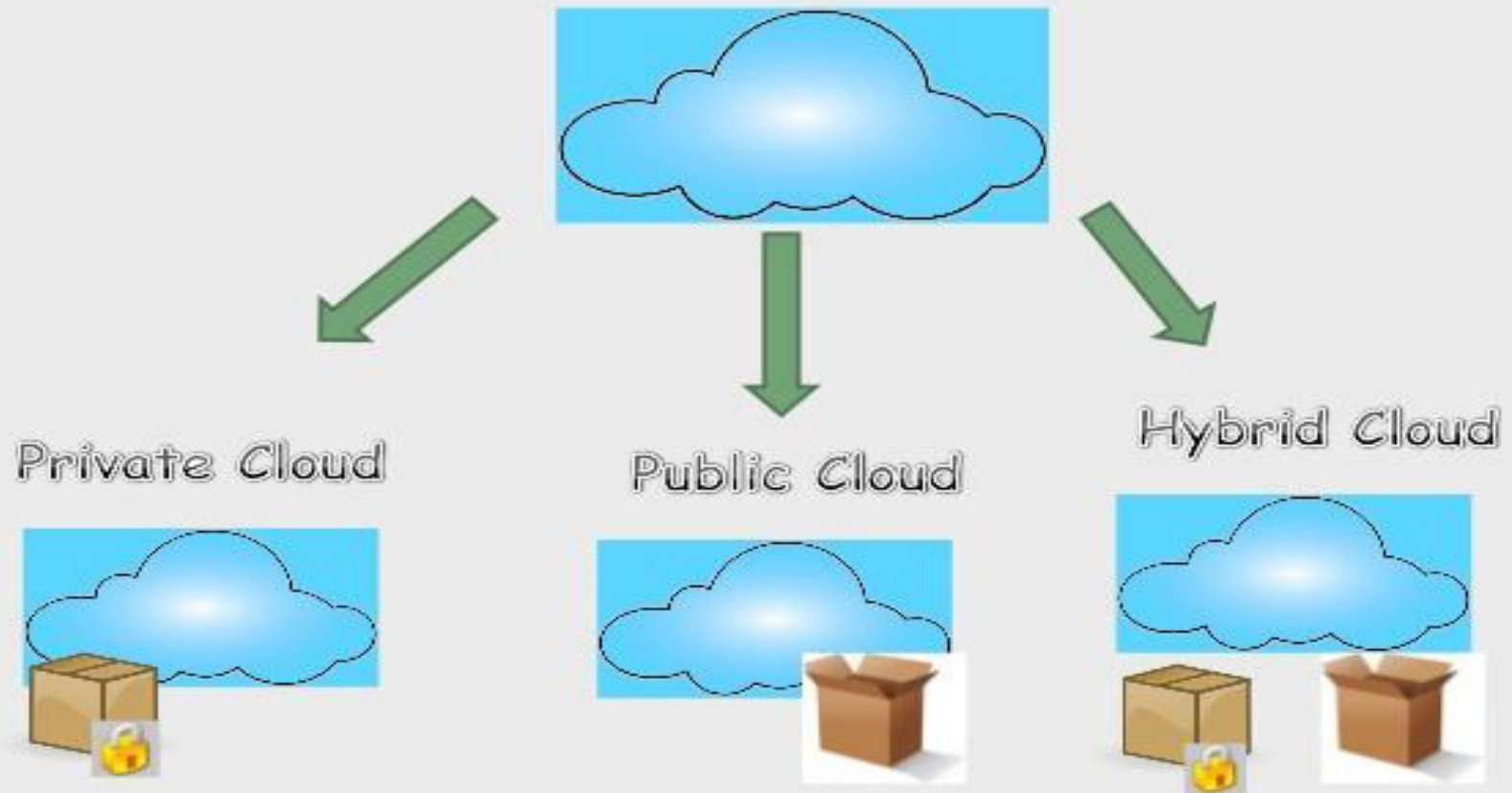# Cloud Computing Service Models

# TYPES OF CLOUD



Private Cloud

Public Cloud

Hybrid Cloud

Fig3: classification of cloud [ref 2]

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