



Cloud Service Models

Topic of Current Interest

CS Department @ University of Karachi

Infrastructure Components

Set of Information technology (IT) components that are the foundation of an IT service:

- Physical Component
 - Computer
 - Storage devices
 - Network hardware (e.g. Switch, Router, Firewall)
 - Cables and cable management (Copper, Fiber)
 - Rack / Cabinet for Computer
 - Climate Control
 - Power grid / UPS
- Software Component
 - BIOS / Firmware
 - Hypervisor
 - Operating System (with or without hypervisor)
 - Application software
 - System Management tools

On-Prem Infrastructure Build Process

- Business unit offers new service require Infra. upgrade
- Budget goes for CAPEX/OPEX, assets' depreciation, ROI
- Procurement begins for hardware, software, equipments
- 2 to 3 months from PO to items delivery
- Unpack, rack, stack and power up the hardware
- Install and configure platform for software
- Install and run the business application
- For new business requirement, we need to start all over... Ahh!!!

Cloud IaaS Instantiation

- BU needs to build a business case to offer a service
- Cloud Budget is done based on CAPEX/OPEX
- After budget approval, service on boarding begins
- Procurement of hardware, software & other equipment
- Time period from PO to items delivery
- Unpack, rack, stack and power up the hardware
- Subscribe Cloud services on demand
- Install and configure platform software
- Install and run the business application
- For new service, we may not need to start all over...
Wow!!!

Cloud Services Setup

- Internet access
- Determine a Cloud service provider
- Setup a new account for the Cloud access
- Select subscription for services
- Create login other admins on a CSP
- Walk through cloud console to enable the Infra.

On-Prem Platform Build Process

- Similar build process as infrastructure
- Starting from financials to procurement
- For example, we enable Database application
- We may need to procure new hardware (servers, cable, power etc.) in an existing infrastructure
- Unpack, rack, stack and powered new equipment
- Build a platform required for Database application
- Ready to install applications use DB

Cloud PaaS Enablement

- BU needs to build a business case to offer a service
- Financial analysis is done based on CAPEX/OPEX
- After budget approval
- Procurement of hardware, software & other equipment
- Time period from PO to items delivery
- Unpack, rack, stack and power up the hardware
- Use Cloud subscription for required platform e.g. DB As matter of hours DB platform is up and ready to build application using DB

Enabling Software/Application for On-Prem

- To setup a new application or software we may need an upgrade of existing platform or run a patch to support new software/application
- Purchase new software and license(s) that would become an asset of your company even you need for a short term
- We may need to get an approval from your NOC or Ops teams to install and integrate new software in your exiting environment
- An agreement of lifecycle support of new software we may need blessing from Ops team
- Your job is not end here is the just beginning, yeah!!!

Software as a Service

- BU needs to build a business case to offer a service
- Financial analysis is done based on CAPEX/OPEX
- Upon on approval.
- You may require to procure the license for SaaS
- Procurement of hardware, software & other equipment
- Time period from PO to items delivery
- Unpack, rack, stack and power up the hardware
- In a running IT environment, you just need new subscription for new software / application
- You login to your portal and use application as need basis
- That's it!

Q & A

Thanks.