What is Cloud

Cloud

- Cloud is an operational model

  - Subscription economy

    ‣ Pay for what you need

  - Enabling businesses to focus on their core competencies

    ‣ Automation of routine tasks

- Changing IT operations

  - Procurement

  - Management

Workloads are moving to Cloud

- Traditional compute workloads are decreasing

  - 52% today to 37% in 2 years

- Private cloud compute workloads are rapidly increasing

  - 35% now to 47% in 2 years

- Public cloud compute workloads are increasing

  - 12% today to 15% in 2 years

Source: Computer World & Triangle research study 2014

What is Cloud

- National Institute of Standard and Technology (NIST) defines cloud:

    - *"Cloud computing is a model for enabling ubiquitous, convenient, **on-demand** network access to a **shared pool** of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be **rapidly provisioned** and released with **minimal management effort** or service provider interaction."*

Essential Characteristics

- On-demand Self-service

  - User can provision computing resources without human intervention

    ‣ Server time, storage, software resources

- Broadband Network Access

  - Resources can be accessed through public network

    ‣ Workstations, Laptops, Tablets, Mobile Phones

Essential Characteristics

- Resource Pooling

  - Services are pooled to serve multiple consumers using multi-tenant model

  - Physical and virtual resources allocation are dynamic based upon demand

- Rapid Elasticity

  - Resources can be elastically provisioned and related to enable scaling

  - Consumer gets virtually unlimited resources

- Measured Services

  - Automatically optimize and control resources

  - Resource utilization can be monitored, reported and controlled

What does all this mean

- Get resources when you want (rapidly)

- Grow or shrink resources on demand

- Keep tabs on your cost

- Easily accessible

- Retail Store during Christmas

  - Scale resources with demand and return after the season

  - No need to setup permanent resources