Traditional IT Services Deployment Models

- Traditional deployment models for IT services available before Cloud:
 - On Premises solutions (CPE Customer Premises Equipment)
 - Colocation or 'Colo' services

On Premises Solutions Characteristics

- All equipment is located in your building
- All equipment is owned by you
- There are clear lines of demarcation everything in the building is your responsibility, the connections between offices are your network service provider's responsibility
- Equipment is CapEx
- New equipment will typically take over a week to deploy
- Equipment requires technology refreshes
- You need to consider redundancy

Data Center Tiers

28.8 hours

3

• 99.995% availability Annual downtime .04 hours Multi power and cooling paths • 99.982% availability Fault tolerant (N+1) Annual downtime ✓ Need 4 generators – have 5 1.6 hours Sustain 72-hour power outage One path of power and • 99.749% availability cooling Annual downtime Some redundancy in 22.0 hours power 99.671% availability Annual downtime

Colocation Facilities

- A colocation centre or "colo", is a data center location where the owner of the facility rents out space to external customers
- The facility owner provides power, cooling, and physical security for their customer's server, storage, and networking equipment

Colocation Facilities (Cont.)

- Independent colo providers such as Equinix offer customers multiple network connectivity options through a choice of network service providers
- Network service providers will also typically peer with each other in colo facilities

Colo Solutions Characteristics

- Your server infrastructure is located in the external colo building
- Your user desktops will still be in your offices
- The colo provider owns the data center facility and is responsible for providing highly available power, cooling and physical security according to the terms of the Service Level Agreement
- You own your own server, storage, and networking equipment within the colo facility
- The connections between your offices and the colo are your network service provider's responsibility

Colo Solutions Characteristics (Cont.)

- Your equipment within the colo facility is a CapEx cost
- The monthly colo hosting fees are an OpEx expense
- New equipment will typically take over a week to deploy
- Equipment requires technology refreshes
- You need to consider redundancy for the hardware you own, but power and cooling is handled by the facility