# 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

99.995% availability

Annual downtime
 .04 hours

• 99.982% availability

Annual downtime1.6 hours

- Multi power and cooling paths
- Fault tolerant (N+1)
- ✓ Need 4 generators have 5
- Sustain 72-hour power outage
- 99.749% availability
- Annual downtime
  22.0 hours
- One path of power and cooling
- Some redundancy in power
- 99.671% availability
- Annual downtime 28.8 hours



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### **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



