Virtual vs. Physical Servers
Pros & Cons

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Agenda

- What is Server Virtualization
- Types of Servers
- Pros and con’s of each type
- Conclusion
- Questions and answers
Types of Server Hosting

➤ **Dedicated Physical Server**
  • Rack-mount
  • Tower
  • Blade Server

➤ **Virtual Servers**
  • Vsphere, Hyperv, Xen/Citrix
  • Cloud Computing
  • Hosted Services
Pros Of Dedicated Server

• **Performance**
  Single application vs. multiple

• **Separation Of Services**
  Single failure avoidance
  Security from separation of applications

• **Price**
  May be cheaper to buy multiple servers
  Fairly priced pre-owned equipment available on market
Pros Of Dedicated Server

• Security Of Data
  ❖ Data is stored locally
  ❖ Have more control of your data

• Knowledge
  ❖ Years of knowledge managing
  ❖ Everything is working – if not broke don’t fix it

• Freedom
  ❖ Flexibility on how to build servers
  ❖ Less licensing to consider
  ❖ Hardware availability
Cons Of Dedicated Server

- **No Green Factor**
  - Green is big business
  - Tax breaks
  - Bad for company Image

- **Hardware Complexity**
  - More items to manage
  - Load balancing not built in
  - No built in management system

- **Servers Not Being Utilized**
  - Most servers using only 20% or resources
  - Resources not shared

- **Growth**
  - Requires more planning and configuration
  - Less flexible
# Pros and Cons of Dedicated Servers

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What is Server Virtualization

Consolidation of Physical server
Sharing of Resources
Pros of Virtualization

**Administration Time**
- Central Management
- Advanced Management Tools

**Disaster Recovery**
- Increased Server UP-Time
- Virtual Load Balancing
- Data Backup solutions

**Easier IT Growth**
- Adding Servers
- Server configuration/upgrade

**Security**
- Universal Security for all servers
- Ease of management

**Migration of Legacy Applications**
- Physical to Virtual Conversion
- Server hardware upgrade

**Green Factor**
- Less hardware and foot print in environment
- Energy efficient equipment
- Shared resources
Cons of Virtualization

• Performance
  ❖ Sharing of resources

• Cost of Licensing
  ❖ Virtualization software expensive
  ❖ Normal Licensing for each server

• Single point of Failure
  ❖ Multiple Server hosting
  ❖ Central Storage (SAN)
  ❖ Additional Hardware/redundancy

• Learning Curve
  ❖ New Technology

• Security
  ❖ Server Sharing
  ❖ Compliance
  ❖ Hosting service limitation

• Fun Factor Gone!
# Pros & Cons of Virtual Servers

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