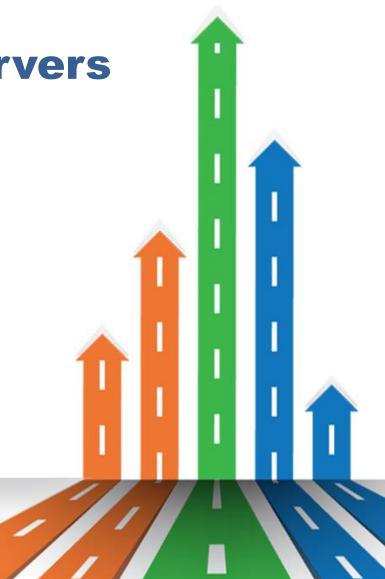


### Virtual vs. Physical Servers Pros & Cons

Presenter: Tom Arakelian Assistant: Guy Ingalls







- 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**

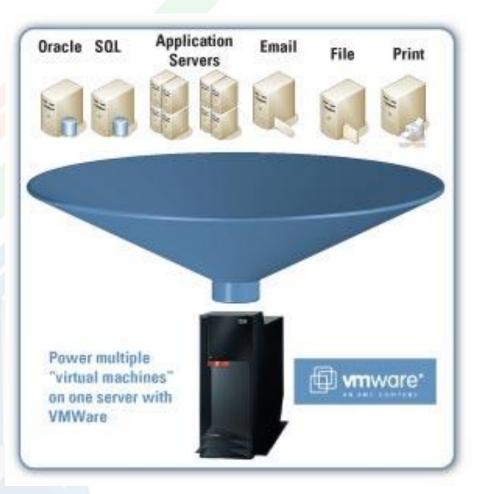
PROS	CONS
<ul> <li>Performance</li> </ul>	Data Centre Space & Cost
<ul> <li>Separation of Services</li> </ul>	No Green Factor
✤ Price	Hardware Complexity
<ul> <li>Security</li> </ul>	Servers not being Utilized
Knowledge	✤ Growth
Remote Management	Maintenance



# **What is Server Virtualization**

### Consolidation of Physical server Sharing of Resources

citra



### **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

• Learning Curve

U

- New Technology
- Security
  - Server Sharing
  - Compliance
  - Hosting service limitation
  - Fun Factor Gone!

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





### **Pros & Cons of Virtual Servers**

PROS	CONS
<ul> <li>Cost Savings</li> </ul>	<ul> <li>Performance</li> </ul>
<ul> <li>Administration Time</li> </ul>	<ul> <li>Cost of Licensing</li> </ul>
Simplified Disaster Recovery	Single Point of Failure
Easier IT Growth	Learning Curve
<ul> <li>Security</li> </ul>	✤ Security
Migration of Legacy Apps	Fun Factor Gone!







