

Server Virtualization and Management

SWU IT Best practice

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agenda

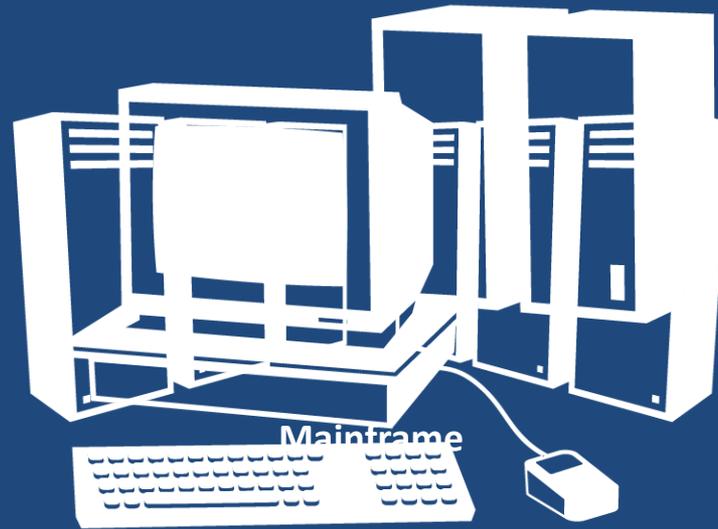
- What is Virtualization ?
- Advantages
- Disadvantages
- How to maintain Virtual Server

Industry Transformations



Mainframe

Industry Transformations

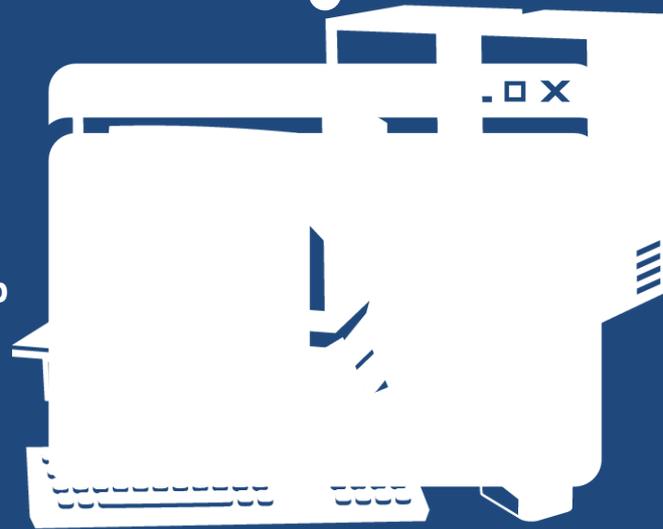


Mainframe

Client / Server

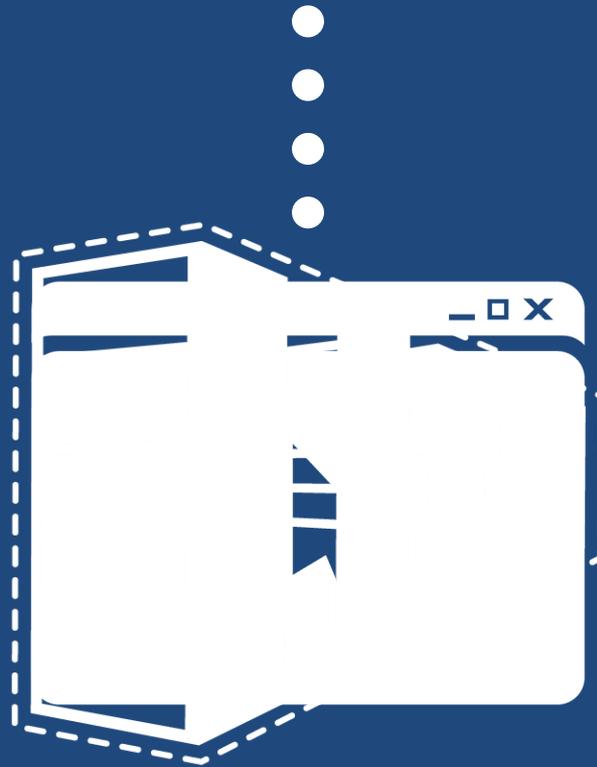
Industry Transformations

Web



Client / Server

Industry Transformations



Virtualization

Web

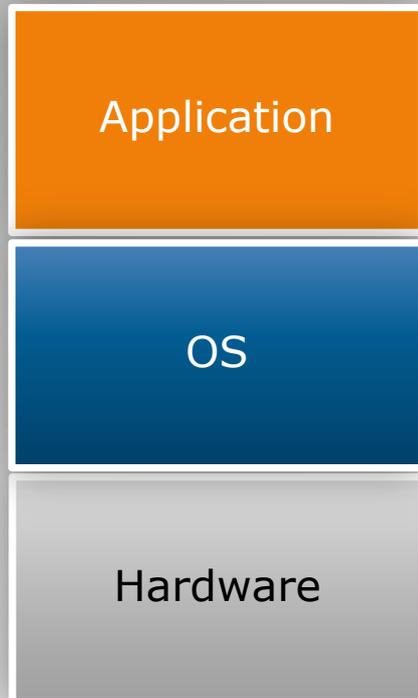


Virtualization ?

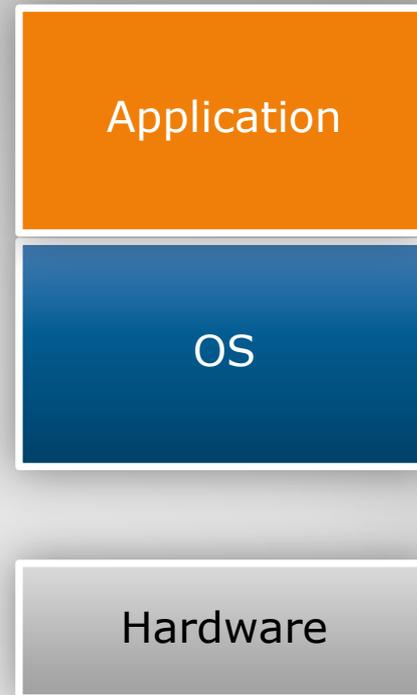
- Application virtualization
- Desktop virtualization
- Server virtualization
- Storage virtualization
- Network virtualization

Key Technology: Server Virtualization

Traditional Stack



Virtualized Stack



Key Technology: Server Virtualization

Application

OS

Hypervisor

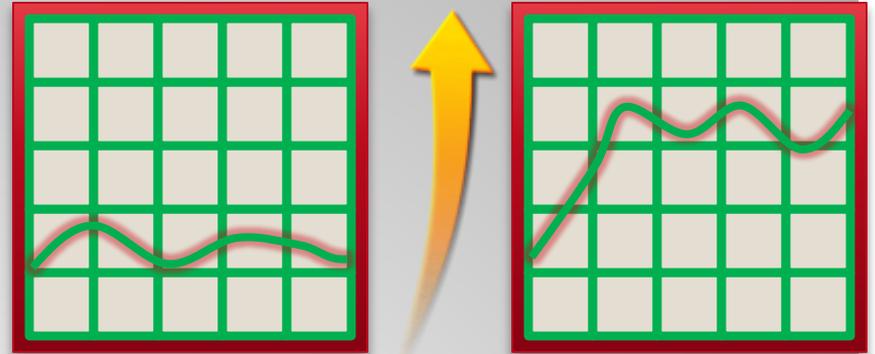
Hardware

Virtualization Benefits

Server consolidation



Utilization



Business Continuity



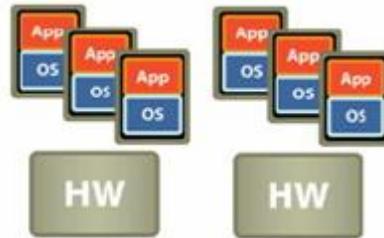
Flexibility

Pooling of Hardware for Shared Capacity Performance

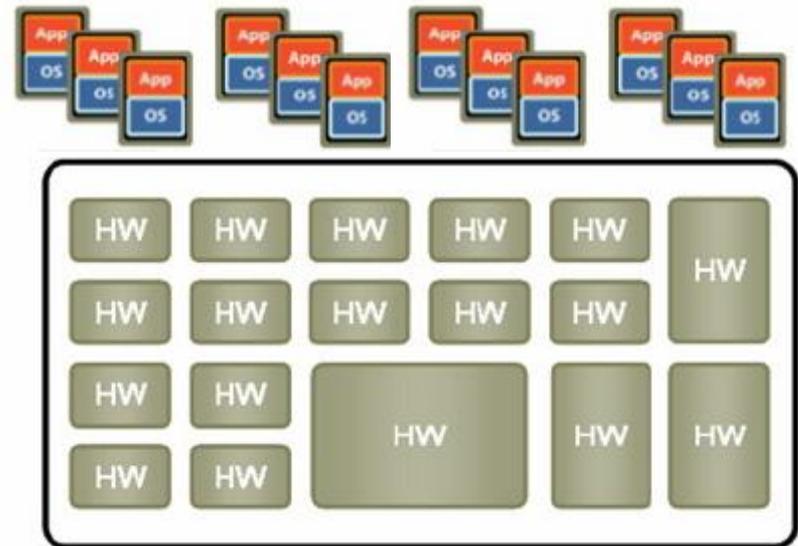
PHYSICAL



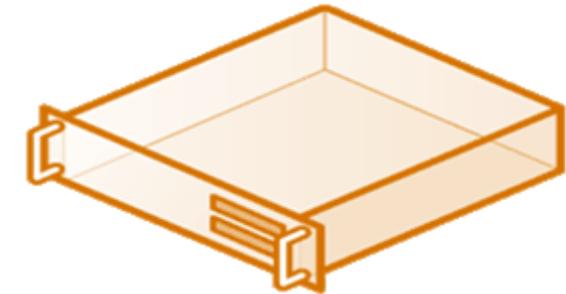
VIRTUALIZED



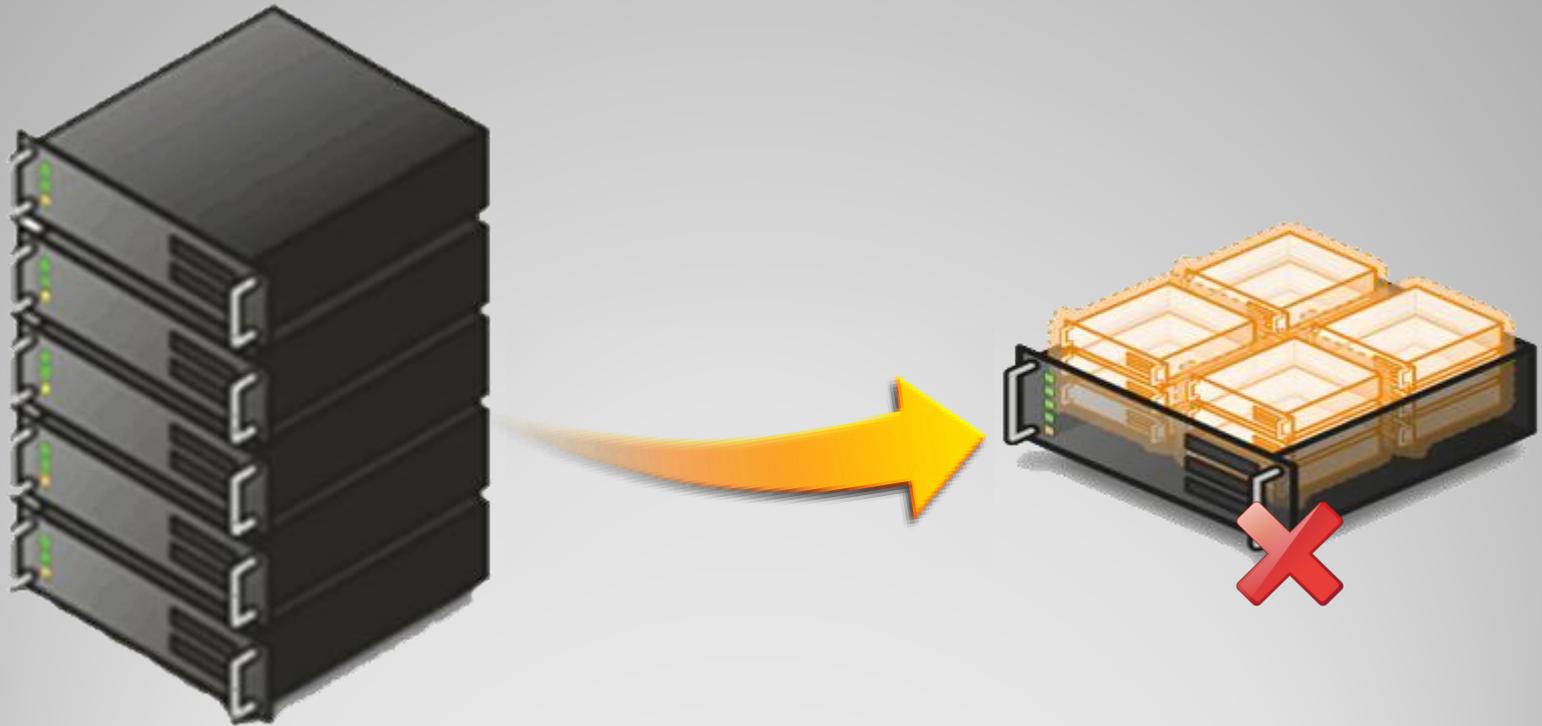
POOLED



Server Virtualization likeness



Virtualization Concern



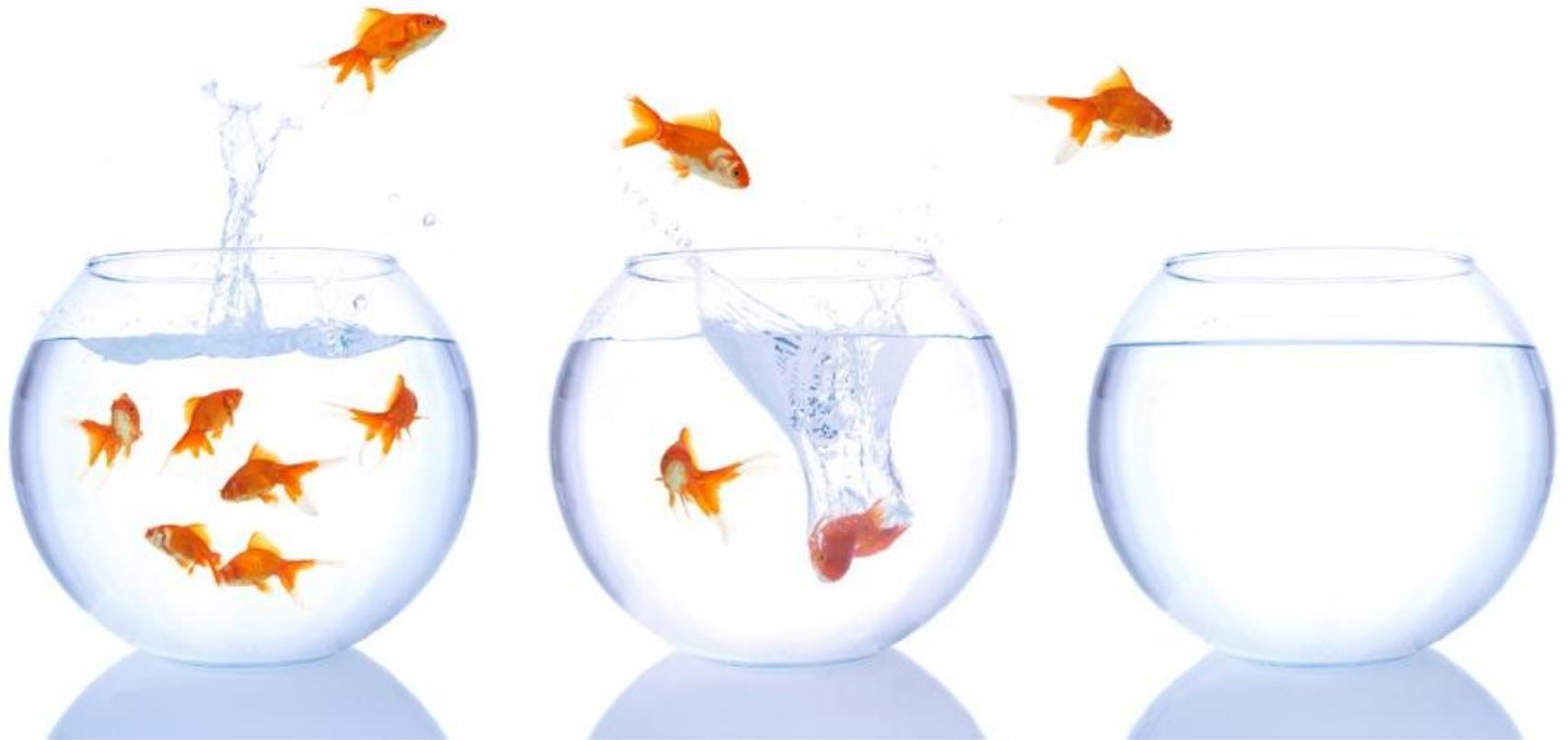
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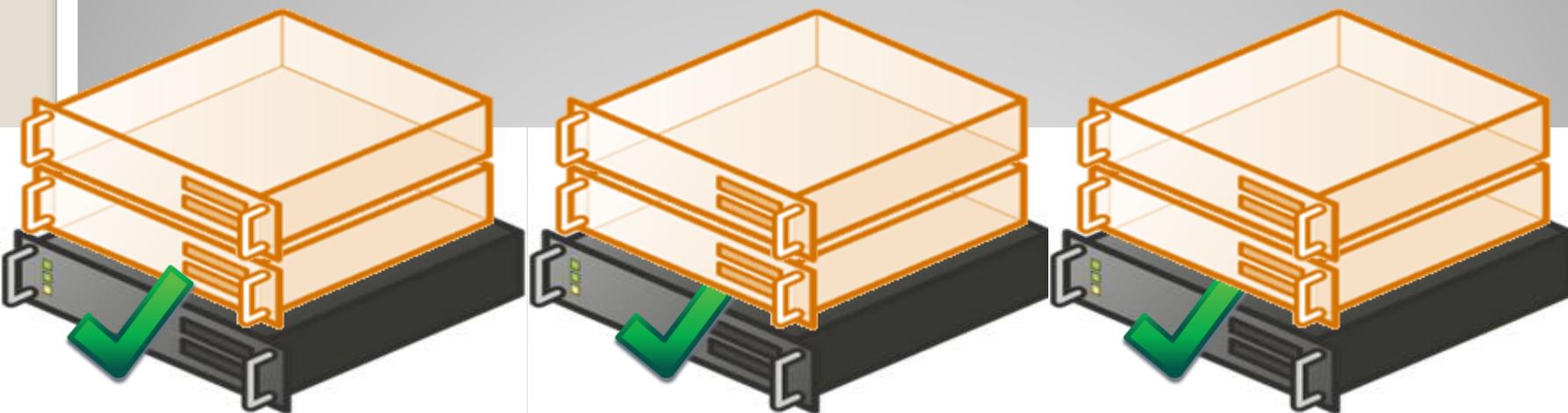






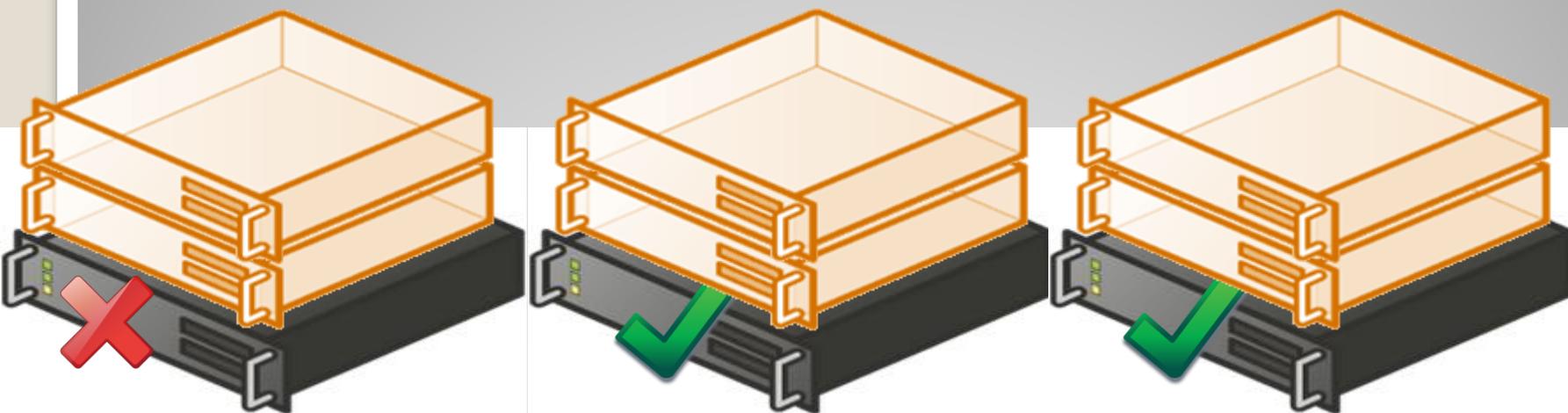
Live Migration, vMotion Concept





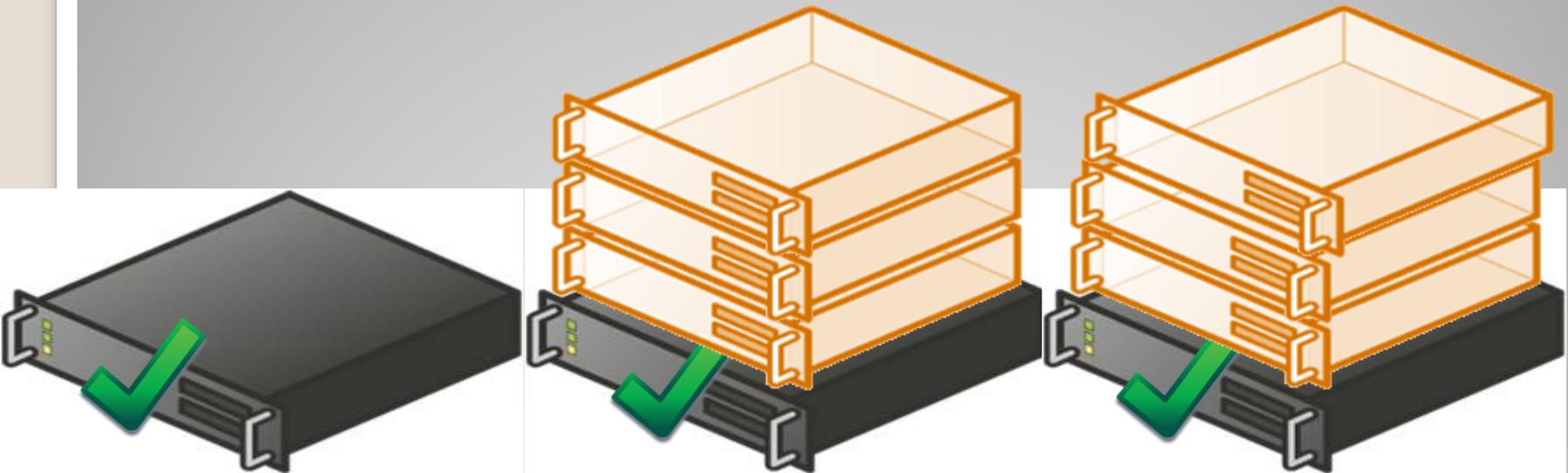
Live Migration, vMotion

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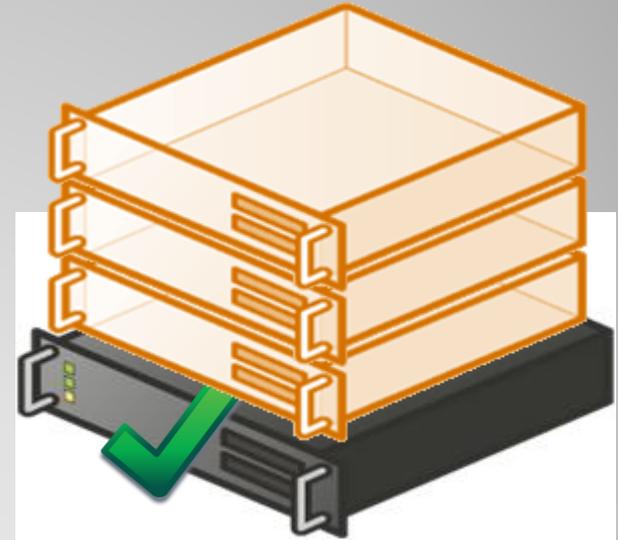
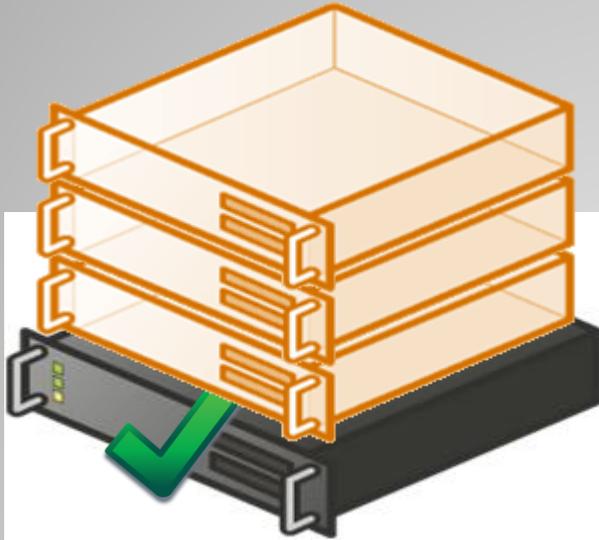
Live Migration, vMotion

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Live Migration, vMotion

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Replication

Advantages

Increase Server Utilization

Business Continuity and Disaster Recovery

Testing and Development

Reduced Cost (power and cooling)

Reduced space

Disadvantages

Technology specialist not Enough

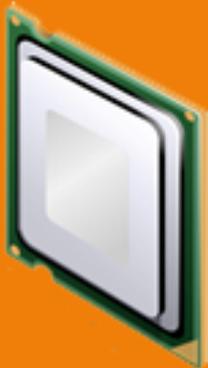
License Prices

Management

Virtual Server Resource



Virtual Server components



Processors
64



Memory
1TB



IDE disks
4



SCSI disks
256

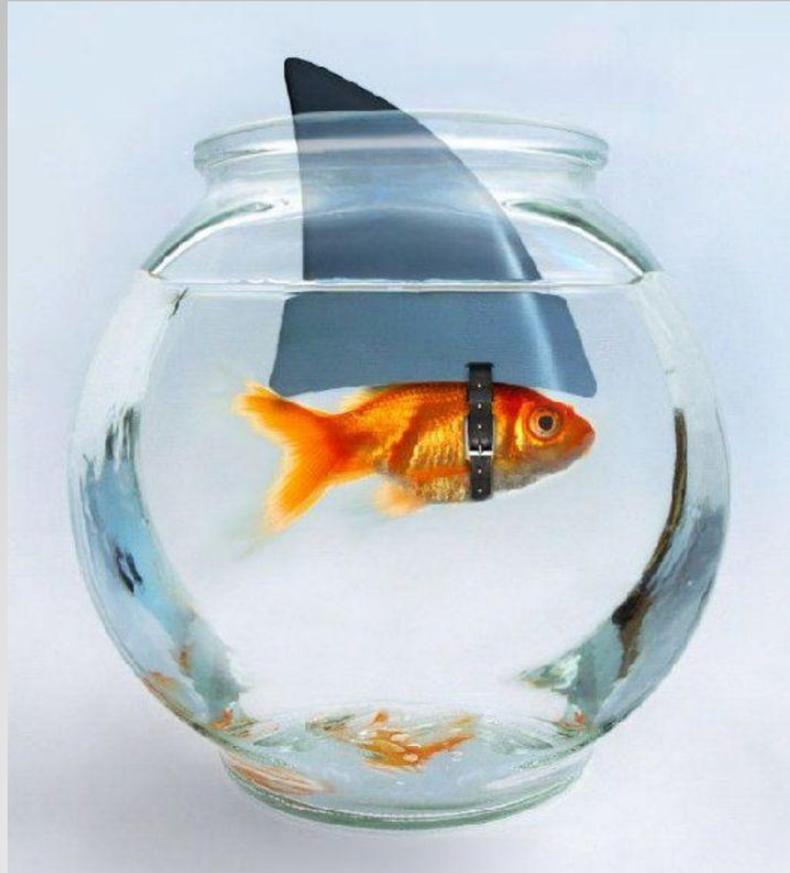


Disk
capacity
64TB



network
adapters
12

Add more resource



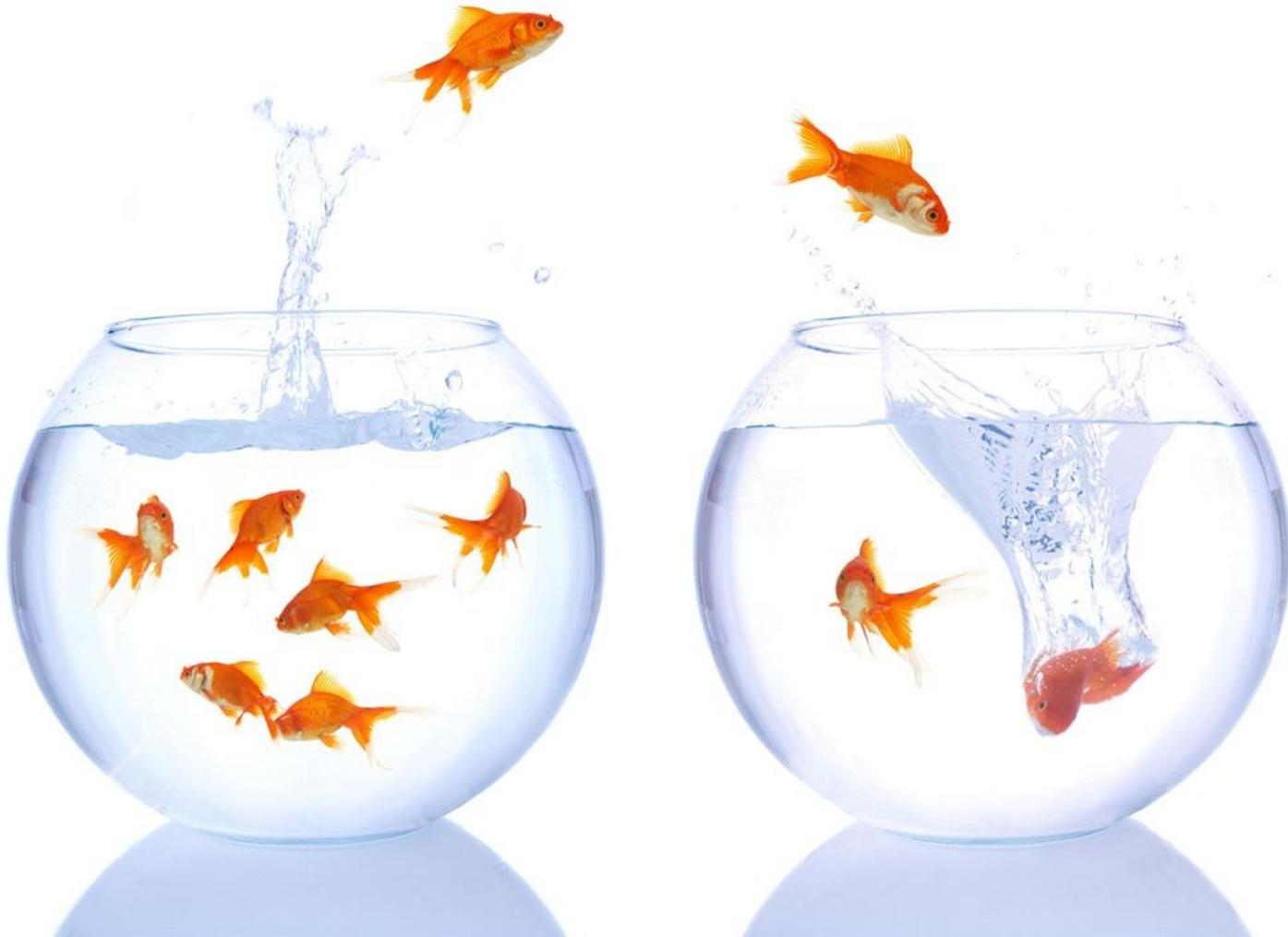
Add more resource



Add more Virtual Server



Balance Virtual Server



How to maintain Virtual Server (Best practice)



Firewall



Antivirus



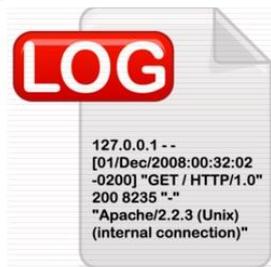
Patch



IP Address



Time Sync



Log

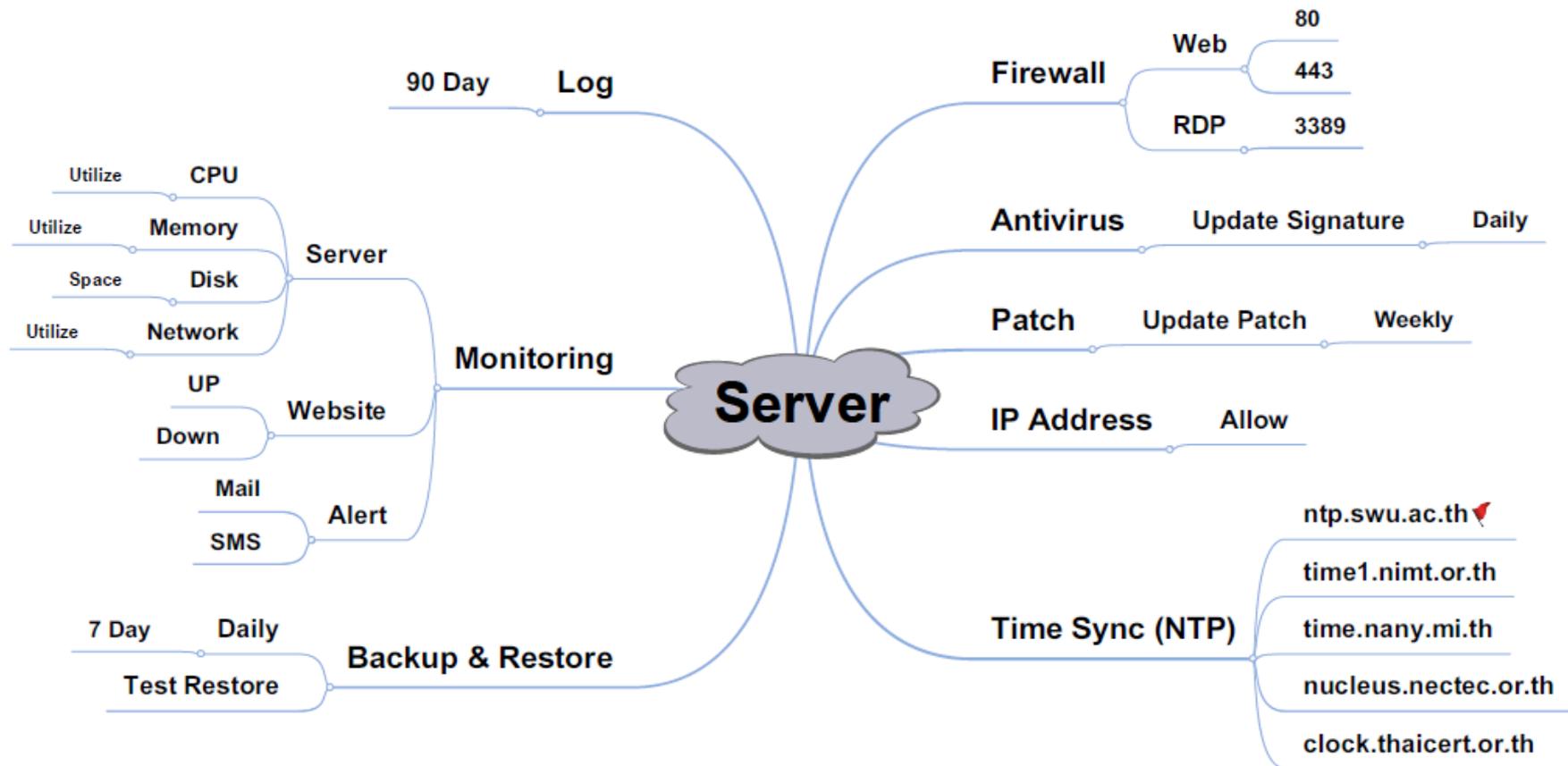


Monitoring



Backup &
Recovery

How to maintain Virtual Server (Best practice)



Q&A



Thank You

