

Virtualization as a Strategic Resource

MCCCD's experience with
Virtualization

Virtualization at MCCCCD

- 30 physical CPUs
- 100+ virtual machines
- Mixed environment
- Deployed in 3 phases
 - Non-critical systems on a single server
 - Expanded to a cluster of servers for high availability and capacity
 - Replicated solution throughout MCCCCD

Strategic Value of Virtualization

- Expense Avoidance
- Increase Agility of IT Infrastructure
- Enhanced Capabilities

Expense Avoidance

- Purchase Costs
 - Decrease from approximately \$10,000 to \$3,000
 - Energy Savings
 - 4,507w vs 40,400w
 - 15,373btu vs 189,700btu
 - Space 1/3

Flexibility

- Decrease deployment leadtime
 - days/months to hours
- Decouple hardware from applications
 - Optimize hardware performance to application requirements.
 - Simplifies relocation of applications

New Capabilities

- Inherent redundancy
- Versioning
- Capacity Management
- Building Blocks for new applications
- Enables slimmer ROI projects

Challenges

- Accelerates server sprawl
 - Support Application Costs
 - Licensing
- Increases failure impacts
- Acceptance by applications departments