

Critical Mission

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FEATURED ARTICLE

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VMware Rapid ROI *Better Living through Virtualization*

*Most IT professionals know at least a little about server virtualization in general and VMware in particular. What's often missing is an appreciation for the **rapid return on investment** that VMware solutions provide and the **additional benefits** of data protection, disaster recovery and all around high availability.*

Rapid RIO with Additional Benefits

Its common knowledge in the server rooms of companies both large and small that 1) most servers carry a load nowhere near capacity and 2) fewer servers will save money across the board, from hardware costs to electricity and cooling to labor expenses.

The core principle of saving money on server virtualization is *consolidation*: using a smaller number of powerful servers running fully utilized. The return on investment is easy to calculate with a high degree of confidence and almost always shows that consolidation pays for itself very quickly, often in less **than a single year**.

However, focusing only on consolidation hides the additional benefits that virtualization with VMware products provide:

- High Availability: keeping servers up and running without disruption
- Disaster Recovery: handling failures quickly and efficiently
- Data Protection: ensuring backup of critical information

High Availability

VMware's High Availability (HA) product provides cost effective high availability for applications running in virtual machines. In the event of physical server failure, affected virtual machines are automatically restarted on other production servers with spare capacity. Additionally if there is an OS-related failure *within* a virtual machine, the failure is detected by VMware HA and the affected virtual machine is restarted on the same physical server.

The ROI on VMware HA is straightforward: less downtime is valuable, and you eliminate the need for dedicated stand-by hardware and additional software.

Disaster Recovery

Traditional disaster recovery plans require many manual, complex steps to acquire hardware resources, perform "bare metal" recovery of server installation, perform data recovery, and validate that systems are ready for use. VMware's product infrastructure eliminates many steps and simplifies the recovery process.

Virtualization turns everything about a system—hardware configuration, firmware, operating system install, application install—into data stored in a few

files on disk. Protecting a complete system is a matter of protecting a few files using your existing backup or replication software. The files that make up a virtual machine can be recovered to *any hardware* without requiring any changes because virtual machines are hardware-independent.

The ROI on disaster recovery is also straightforward: compare what you are spending today against the greatly streamlined and simplified VMware solution. If you don't presently have a disaster recovery plan in place, calculate the cost of being "down" for days or weeks.

Data Protection

Basic data protection is one of the most critical elements of data center management. Problems like storage failure, server failure, and plain old user error cause data loss. Backup and recovery of your systems and data needs to be fast, flexible, and easy—without taking critical resources away from your systems while backup processes are running.

VMware's **Consolidated Backup** product allows you to perform virtual machine backup at any time, based on a centralized proxy server and reduces the load on production VMware hosts.

The ROI on data protection is a little trickier, assuming you already have a data backup plan up and running successfully. VMware simply makes backups easier because all services are running in a more consolidated and easier to manage environment.

Summary

Achieve a rapid return on investment with VMware-based server virtualization and consolidation and get higher availability, better data protection and superior disaster recovery benefits "for free". You can probably justify a VMware deployment based on server consolidation alone but when you consider the additional benefits there's no reason to wait.

Contact Alto if you'd like a demonstration of any of the products or techniques discussed in this article. Our next solution briefing is devoted to these concepts.