



## KEY HIGHLIGHTS

INDUSTRY: TECHNOLOGY

**CHALLENGE**

Build software that supports customers running older operating system platforms, avoid downtime due to infrastructure server failure and reduce backup times.

**SOLUTION**

Atrenta deployed VMware server virtualization to remove the cost of maintaining older servers while offering high availability, faster backup and restore and reduced energy and space consumption.

**VMWARE AT WORK**

- VMware Infrastructure 3 Enterprise including:
- ESX Server 3.0.2
- High Availability
- VMotion

**DEPLOYMENT ENVIRONMENT**

- ESX Server 3.0.2 running on 3 Dell 1950 servers with Intel quad-core processors and 16GB of RAM
- Network Appliance 3040 Storage Area Network with 2TB of storage
- Guest operating systems: Microsoft Windows Server 2003 and Red Hat Enterprise Linux
- Virtualized Production Applications: Microsoft SQL Server 2000, MySQL, GNU Compiler Collection for building software, Macrovision FLEXnet for software licensing, Microsoft Exchange 2007, Microsoft Active Directory, Elsinore Technologies' Visual Intercept, McAfee ePolicy Orchestrator

*"VMware has allowed us continue building software for older operating systems, ensuring we can develop software for customers using these superseded platforms. The new infrastructure also allows us to recover servers quickly and reduce downtime."*

Rajdeep Sengupta, Senior Manager IT  
Atrenta India

**Atrenta India**

Atrenta India is the software development arm and a wholly-owned subsidiary of US-based Atrenta Inc, a company that sells electronic design and automation (EDA) software to the chip design industry.

In mid-2007, Atrenta India faced a dilemma. The company needed to continue building software that was compatible with older operating systems and server platforms still being used by many of its customers. The problem was that all OEM hardware vendors could only supply servers that run the latest operating systems.

*"Some customers might still be using Red Hat Enterprise Linux 3 so we can't release software that only runs on newer operating systems like Red Hat Enterprise Linux 4 or Red Hat Enterprise Linux 5," said Rajdeep Sengupta, Senior Manager IT at Atrenta India. "If we do that, customers that have older systems will not be able to run our software."*

Rather than bear the cost of maintaining older servers to support these customers, Atrenta turned to VMware server virtualization.

Since October 2007, Atrenta has deployed 13 virtual machines hosted on three Dell PowerEdge 1950 servers. The remaining servers have been redeployed elsewhere or removed from service. "We need to develop software with backward compatibility and VMware allows us to support older platforms," said Sengupta.

Deploying virtualization also provided Atrenta with high availability, reduced infrastructure downtime and enabled faster backup and restore times.

**Results**

- Achieved server consolidation ratio of 13:3
- Eliminated requirement to purchase additional servers
- Reduced backup and restore times from 2 hours to 10-15 minutes for infrastructure servers
- Reduced operational costs by 6-8%
- Improved CPU utilisation from 25% to between 60% and 70%
- Cut infrastructure server downtime by more than 60%
- Reduced power costs by up to 5%