

# Aprimo, Incorporated



*“VMware makes it incredibly easy to implement a cloud environment and gives us a competitive advantage.”*

— Tim Sublette  
Vice President,  
Software Engineering  
Aprimo, Incorporated

## KEY HIGHLIGHTS

### Challenge

- Ensure availability and reliability of cloud-based service offering
- Scale with changes in service demand
- Improves competitiveness through minimized costs

### Solution

- Virtualize SaaS delivery infrastructure with VMware vSphere 4 Enterprise Edition
- Manage virtual environment with VMware vCenter Server
- Protect data with VMware Data Recovery

### Results

- Reduce server capital costs by 82%
- Reduce Collocation facility costs by 75% through reduced rack and power consumption costs
- Enabled flexibility to add capacity to SaaS infrastructure by adding virtual machines in hours instead of weeks to deploy physical hardware

### VMware at work

- VMware vSphere 4 Enterprise Plus Edition
- VMware vCenter Server
- VMware Data Recovery

## Aprimo maintains competitive edge by providing customers SaaS options.

Cloud platform enables right-sized environment to meet customer demand; flexibility offers first-to-market potential for products; delivering services to a larger customer base with relatively less substantial costs.

“Aprimo helps marketers navigate constant change – and turn it into a competitive advantage.”

That bold claim on Aprimo’s Web site echoes the company’s own situation. The Indianapolis, Indiana-based company provides software and services that enhance the productivity and performance of marketing organizations. Its customers include Bank of America, Ericsson, Genentech, Intel, Merrill-Lynch, Sprint, Wal-Mart, and WellPoint. To stay competitive, Aprimo must keep its finger on the pulse of the marketplace—and continually respond to changing requirements. The need to increase its competitiveness drove Aprimo to transform its IT infrastructure using VMware technology.

### The Challenge

Tim Sublette, Aprimo’s vice president of software engineering, outlines the challenge—offering software as a service (SaaS): “Most of our customers still install our software on their servers—the traditional model. However, some companies, particularly in the mid-market, are reluctant to make capital investments. They want a SaaS option.” Providing such an offering would help Aprimo stay competitive in its current markets and appeal to other segments, so the company decided to develop a cloud-based, on-demand offering.

### Ensure availability and reliability of cloud-based services

Because companies often have concerns about accessing critical software applications via the cloud, Aprimo needed to ensure a high level of availability and reliability. Meeting that requirement demands redundancy and visibility into the service-delivery infrastructure—capabilities that VMware is known for.

### Scale to accommodate changes in service volume and mix

Launching a new service involves uncertainty. How fast will demand grow? Which services will be most in demand? These questions cannot be reliably answered in advance, so the platform had to scale gracefully—without downtime.

### Respond rapidly to customer’s needs

“Marketers want things done really, really fast,” says Mike Oglesby, systems engineer at Aprimo. “To be competitive, we have to get new customers up and running very quickly.” Aprimo needed a platform that was flexible enough to provision customers quickly and accurately.

### Minimize capital and operating costs

An overriding mandate was to minimize the cost of service delivery and thus maximize profitability for its SaaS offering. Deploying a physical server for each new customer would be unworkable—too expensive, too labor-intensive, too slow—so the team targeted virtualization as a key technology.

## The Solution

Sublette's group didn't have to look far for a solution: For three years, their internal hosting group had been using VMware to minimize cost, achieving a 60 to 1 consolidation ratio. The hosting group's experience had been highly positive, giving VMware a leg up over other competitors. However, in the interest of due diligence, Sublette's team conducted a thorough evaluation of potential suppliers.

### Deploy fully virtualized infrastructure based on vSphere 4 Enterprise Plus Edition

At the completion of the evaluation process, the Aprimo team selected VMware vSphere 4 Enterprise Plus Edition as its virtualization platform. For its backend database, they chose Microsoft SQL Server 2008, running on a virtual machine. Cisco was picked for the networking infrastructure, and EMC as storage provider.

A key factor in the decision to use VMware was its demonstrated ability to scale. "Our environment is 100% virtualized with VMware," says Oglesby. "We have over 150 virtual machines running at the moment, and we could easily double or triple that number without any changes in the architecture."

### Implement disaster recovery based on VMware technology

Aprimo's SaaS platform uses HP DL 585 servers. Production activities are centered in Indianapolis, while development and quality assurance (QA) are run from the North Carolina datacenter, which also serves as a disaster recovery site. "With VMware, we can quickly repurpose North Carolina into a production facility and minimize downtime for our users," says Oglesby. "A recent DR test worked phenomenally."

### Manage on-demand environment using vCenter Server

VMware vCenter Server provides a high level of visibility and control to Aprimo's system engineers. "vCenter Server gives us a single pane view of what's going on at the server level," explains Oglesby. "It also allows us to monitor resource utilization—CPU, memory, storage, network—so we can respond quickly to the needs of our on-demand customers."

## Results

### Minimize capital expenses for on-demand infrastructure

In just one year, Aprimo has enrolled more than 50 on-demand customers—a figure that is steadily growing. VMware helps control the cost of providing services to those customers. Using the traditional model of one server per customer would have required 50 servers; instead, Aprimo can accommodate its current SaaS business volume with just 6 physical hosts, reducing the capital outlay for server hardware by 82 percent.

Aprimo has achieved additional capital savings with VMware Data Recovery. "Data Recovery eliminates the need for traditional backup software. A typical tape backup solution that would satisfy our data requirements would cost around 100,000 to implement. With VMware, we can utilize built in tools such as VDR and the vStorage API to satisfy our needs, saving us a significant amount of money year over year," says Oglesby. Data Recovery is fully integrated with vCenter Server, simplifying the configuration and management of backup jobs.

### Enhance labor productivity

Sublette's team is making efficient use of staff resources, thanks to VMware. "With our VMware environment, we can manage the entire infrastructure with fewer people," says Oglesby. "If we had to deploy a separate physical server for each SaaS customer, we'd need at least three times the current staff to do so."

By providing an integrated view of the virtual environment, vCenter Server cuts the time needed to gather information. Performance gathering across multiple physical servers is cumbersome and often misleading. In an environment this size gathering this type of data

could take multiple hours. Using VMware vCenter's performance graphing capabilities, the same data can be collected in less than 30 minutes.

### **Shorter time to provision new customers**

Aprimo has enhanced its competitiveness by shortening the time for provisioning new customers. "The on-demand business requires speed," says Sublette. "Thanks to VMware, we close customers faster, and get them on-board rapidly. It's allowing us to reach a different type of customer, and expand our available market. VMware helps us to react at the speed of our business."

Oglesby puts numbers to the improvement: "If we had to buy a physical server, install it, load the operating system and software, the time to provision a new customer would take at least several days if not weeks. With our VMware-based environment, we simply provision a virtual server, configure the user's account, and give them access. The whole process takes just hours."

### **Looking Ahead**

The unqualified success of Aprimo's on-demand offerings has Sublette's team evaluating upgrades to the infrastructure to support continued growth. The team is evaluating VMware Site Recovery Manager and other enterprise offerings as possible additions.

Sublette sums up Aprimo's experience with VMware: "VMware makes it incredibly easy to manage our cloud environment and keep it operating at optimum performance."

