



INDUSTRY

Computer software

LOCATION

Mountain View, CA

KEY CHALLENGES

- Transform Enterprise Customer Support services for faster, responsive service
- Get test environments up and running faster for Enterprise Support customers
- Drive down IT operational costs
- Improve scalability and agility of IT service

SOLUTION

Symantec implemented a software-defined data center architecture based on VMware vCloud® Suite to speed creation of new test environments. It is currently scaled to support more than 200,000 virtual machines, one of the world's largest software-defined data center deployments based on VMware vCloud Suite to date.

RESULTS

- Reduced time for creating test environments from 20-30 hours to minutes
- Saved over 10,000 weeks of IT work time
- Drove down CapEX and power costs through better resource consolidation

Pushing the Boundaries: Symantec's Software-Defined Data Center Powered by VMware vCloud Suite

Leads to Game-Changing IT Innovations for Symantec Customer Support and Product Development

Customer Profile

Founded in 1982 by a team of computer scientists, Symantec has evolved from an antivirus software company to a global, Fortune 500 company whose mission is to help customers of all sizes secure and manage information. The company is governed by a customer-driven philosophy that emphasizes listening, responsiveness and continuous improvement.

Today, Symantec finds itself in an industry that is defined by tough competition, as well as an ever-changing variety of sophisticated security threats directed at its customers. To compete in this dynamic environment, Symantec has embarked on a strategy to streamline and simplify the company around its customers. The transformation began with a holistic review—by new CEO Steve Bennett—of the entire company's operations, including financials, organizational structure, product portfolio and service offerings, as well as go-to-market strategy and tactics. A key aspect of the transformation also included streamlining Symantec, to deliver improved performance for partners and customers, and to drive organic growth rather than through mergers and acquisitions.

Central to its new strategy was a shift from Symantec's historically product-centric operations to a more customer-centric model. Symantec's overall goal is to enable people, businesses and countries to focus their energies and time on achieving aspirations, instead of worrying about their digital lives—the company calls it "Symantec 4.0." According to Bennett, "Our path is straightforward: offer better products and services tailor-made for customers, and make it easier for them to research, shop, buy, use, and get the support they need." The strategy includes delivering products that focus on three areas:

- **User Productivity and Protection** - making it simple to be productive and protected at home and work
- **Information Security** - keeping business safe and compliant
- **Information Management: Availability and Scalability** - keeping business information and applications up and running

Such directives naturally put the company's customer support operations in the spotlight. In parallel with the change in corporate strategy, an innovative group inside Symantec realized that the only way to move quickly to transform its customer support for enterprise clients was to implement a software-defined data center architecture powered by VMware vCloud® Suite, working in conjunction with Symantec offerings to extend capabilities for availability, security and compliance.

What began as a departmental virtualization initiative to improve response times went viral and is quickly becoming a foundation for Symantec to achieve much broader organizational efficiencies, while driving innovation in its own product development and go-to market strategies. VMware has become a strategic partner to Symantec in the transformation, which has helped Symantec achieve cost, governance and agility objectives, and to move its business forward at a rapid pace.

Symantec Lab Cloud Transforms Customer Support and Saves 6,000 Weeks of Work

Organizations around the world use a wide variety of Symantec security, backup, and availability solutions to help them protect and manage their information. Extending customer support is a major challenge for Symantec—and when enterprise customers need assistance, they turn to Symantec Enterprise Support Services. The support team resolves customer issues for thousands of Symantec’s customers around the world, across its 150 product lines—from browser and anti-spam protection for individuals and small business, to major enterprises, including technology that helps protect critical power-grid infrastructure. Enterprise Support Services is critical to Symantec, because it supports the company’s highest-profile customers and protects their mission-critical systems. Symantec has support and engineering labs in more than 40 locations around the world including the United States, the United Kingdom, India, China, Japan and Australia.

Especially in the case of the Symantec’s enterprise customers, engineers need to replicate a customer’s environment to test and troubleshoot the specific problems the customer is experiencing. And when a customer called in the old days, it meant that engineers had to cobble together a test environment by grabbing cables and systems and physically hooking them together, or going into a data center lab to start re-wiring, as well as provisioning networking and storage. The process was slow, not cost-effective, and each test environment couldn’t be easily shared or re-used after it was built. And all the while, customers waited, affecting Symantec’s response times and bottom line.

To address this challenge, the company realized that they could expand on their existing use of virtualization technology to build a system and process that would enable them to avoid building the same test environments over and over again. Global Symantec Labs wanted to create a centralized virtual infrastructure that would reduce hardware costs, save its engineers time and serve the customer better – building typical customer environments only once, and sharing these test kits with colleagues by pushing them to the cloud. After an exhaustive search, Symantec determined that the only solution that could meet their needs was a software-defined data center powered by VMware. With VMware, Symantec saw the opportunity to go beyond the benefits of virtualizing servers. Ultimately, implementation of the software-defined data center enables Symantec to drive lower costs, greater agility and enhanced governance through virtualizing their entire data center infrastructure, including storage, networking and security.

Symantec’s software-defined data center configuration is built around vCloud Suite, including VMware vSphere®, VMware vCloud Director®, and VMware vCenter and is integrated with Symantec’s enterprise grade high availability and data protection technologies. The integrated solution also leverages VMware’s Common Information Model interface to monitor managed servers as part of the overall system. Together, the new infrastructure is called the Symantec Lab Cloud, and offers the Enterprise Support

Services Group a technology solution that scales quickly and securely, with automated processes and catalog-based self-service provisioning capabilities.

With its software-defined data center, Symantec can leverage vCloud Suite to virtualize its existing infrastructure, to abstract and pool hardware, networking and storage resources, and then to deploy and manage those resources via software. vCenter adds the monitoring and management controls necessary to support Symantec’s rapid growth, and control of their data center operations is automated by software in vCloud Suite.

By getting testing environments up and running more quickly, Symantec’s team of software engineers can quickly focus on customer problems, resulting in faster response times. Environments that previously took 20-30 hours to create the old way could now be created in minutes by using templates of pre-configured vApps, or test kits, while an internal measurement application continuously tracks the time that Symantec engineers save. Post-implementation, the support groups at Symantec became more familiar with using the software-defined data center and its library of test kits, resulting in rapid adoption—engineers found that templates could be copied and deployed in just minutes, enabling them to do their jobs more efficiently and effectively. And once the community of engineers was allowed to contribute their own templates, Symantec’s library began to swell at a viral rate, having grown to more than 660 templates, reflecting the most common customer environments.

The efficiency brought about by virtualization and the software-defined data center has led to dramatically faster resolution times and higher customer satisfaction. Symantec’s engineers find themselves using the test kits every day, and appreciate the instant access to resources that help them solve customer problems. Engineers are adding dozens of new test kits every month, and according to Jason Puig, the Manager of Cloud Services for Symantec Labs, “Every time someone deploys a lab in minutes, we track the time the engineers didn’t need to spend creating it. With over 200,000 virtual machines deployed, the solution has saved over 10,000 weeks of work time. That’s pretty impressive!”

Pushing the Boundaries: Symantec’s Software-Defined Data Center Powered by VMware vCloud Suite

The Lab Cloud delivers impressive and measurable results for Symantec. In its first 15 months, the firm’s software-defined data center architecture has scaled to support more than 3,000 users, and as many as 200,000 virtual machine deployments, making it one of the world’s largest vCloud suite deployments to date. Symantec uses VMware to optimize software-defined data center performance, and the company currently maintains 35,000 virtual machines, some 13,000 of which are running at any given time.

The software-defined data center has proven itself under the strain of day-to-day support for the company, and this ongoing performance is built on the foundation of vCloud Suite Advanced.

As part of the Lab Cloud and the Symantec 4.0 strategy, the company leverages vSphere to rapidly build virtual environments to test and resolve customer issues, while vCloud Director provides a centralized, self-service catalog that allows support engineers to upload, store and access virtual environments.

What's more, VMware vCloud® Networking and Security enables Symantec to scale and move virtual workloads across the software-defined data center without physical network or security constraints. With this drag-and-drop data center environment, Symantec can proactively manage security, backup and failover, as well as its library of templates.

Symantec sees its software-defined data center strategy as a key part of moving forward with Symantec 4.0, from hardware virtualization to automation, to delivering IT as a service, all contributing to a meaningful impact on results, and the drive to delight and amaze customers. Jason Puig sums up the company's strategic view, by saying: "The Symantec Lab Cloud is a leading example of the impact organizations can achieve from a software defined data center architecture. We continue to push the boundaries of our data center to improve customer satisfaction and achieve greater engineering productivity"

Beyond Expectations: Virtualization Initiative Leads to Game-Changing Innovation in Symantec Product Development

Within a month of deploying the initial software-defined data center initiative for customer support, word quickly spread within Symantec about the accomplishments of the Lab Cloud team. The unexpected response helped to further enhance Lab Cloud productivity and collaboration, providing the unforeseen benefit of increasing organizational knowledge around how to build and deliver solutions that delight customers.

Across the organization, IT and business teams wanted to understand more about the capabilities of a software-defined data center, and what it could do for them, especially in light of Symantec's overall business transformation strategy. Because Lab Cloud is large in scale, and handles real production workloads and challenges, it has provided various Symantec product groups with a demanding in-house customer that enables them to test new products and technologies in the software-defined data center environment. The software-defined data center is used as a platform for internal alpha and beta tests, and learning and new requirements gained via the in-house software-defined data center are driven directly into development of new Symantec products for security, availability, and information management. This new era of product testing has enabled Symantec to evolve its portfolio of 150 products, moving from point solutions to integrated solutions that are fully aligned with its customers' needs—whether they be user productivity and protection, information security, or information management solutions, as encapsulated in the vision of Symantec 4.0.

"Having a highly orchestrated cloud of this scale with real production workloads and challenges provides our product groups with a highly demanding in-house customer" said Sean Doherty VP of Strategic Operations in Symantec's Products and Services group. "We are able to observe directly the new requirements that the software-defined data center creates and drive them into our security, availability and information management solutions. We then benefit from the power of the software-defined data center in being able to use it as a platform for internal alpha and beta tests. For example, the vCloud Director integration in the upcoming NetBackup 7.6 release is being stress tested in one of the largest cloud deployments in the world, thereby making it ready for our customers of any scale and size."

What started as an effort to improve customer support is now having a profound impact on the form and content of Symantec's product development and go-to-market processes. The software-defined data center is a leading-edge architecture that has enabled Symantec to better test and optimize its enterprise products for next-generation data centers, as well as to improve the quality and speed of its customer support on an ongoing basis. Symantec will be able to backup virtual machines, as well as their supporting meta-data – enabling them to transport not just the virtual machines, but also the associated configurations for virtual storage, networking and security—resulting in even faster response times for customer support.

The software-defined data center is truly a case of best practices in enterprise computing, and because the organization is fully bought in to the software-defined data center architecture, it helps the company compete more effectively through time and cost savings, while driving customer satisfaction. Ultimately, the changes brought about by the software-defined data center, when combined with the vision of Symantec 4.0, will enable the company to achieve the solution-centric, organic growth that it seeks.

Continuing the Journey: What's Ahead?

Into the future, Symantec will continue to address the evergreen pressures that face corporate IT departments—cost, agility and governance. Working with VMware, the company has already been able to achieve meaningful progress by implementing the software-defined data center to abstract, pool and automate hardware—moving provisioning time from weeks, to nearly instantaneous—benefiting both the mission-critical customer support process and the company's own product development cycle. Symantec now has greater control over its own infrastructure, and IT and customer support are fully aligned with the company's big-picture vision of unparalleled cloud integration and development of products and services that solve important unmet or underserved needs.

