

# Imagine Virtually Anything™



## Success Story

# Seven Corners Meets Travelers' Needs—Fast and Efficiently—with a Private Cloud Built on Cisco, NetApp, and VMware



SEVEN CORNERS

### KEY HIGHLIGHTS

#### Industry

Insurance

#### The Challenge

Refresh servers/storage infrastructure for availability, agility, and efficiency.

#### The Solution

Build private cloud on Cisco®, NetApp®, and VMware®.

#### Benefits

- Use 60% less storage
- Run reports 96% faster
- Achieve 8-month ROI
- Eliminate \$750K in downtime costs
- Slash 3 months, \$200K off dev/test
- Provision resources in seconds, not weeks
- Support double-digit growth with flat headcount
- Enable self-provisioned cloud services

#### CUSTOMER PROFILE

Seven Corners, Inc., is one of the most experienced international travel health insurance, trip insurance, and specialty benefit management companies in the industry. Since 1993, the privately held company has provided protection and professional-assistance services to hundreds of thousands of international travelers, including U.S. citizens traveling overseas and foreign nationals traveling to the United States. Headquartered in Carmel, Indiana, Seven Corners is a member of the U.S. Travel Insurance Association and is a certified General Services Administration contract provider. (Source: [www.sevencorners.com](http://www.sevencorners.com))

#### THE CHALLENGE

##### Refresh servers and storage for availability, agility, and efficiency

For a premier international travel insurance company, well-traveled clients are a good thing; well-traveled servers are not. In mid-2010, when Seven Corners Chief Information Officer George Reed was challenged with building a future-enabling infrastructure, existing physical-server systems with direct-attached storage were very near the end of the road. Reed says, "We were still reliably delivering 24/7 services, but with much of our technology footprint

approaching end of life, daily outage and recovery costs were approaching \$3,000. Based on hard-reboot rates, we calculated that without new technology in place by December of that year, we could be facing business-disrupting failures.

"To avoid any negative business impact," Reed goes on, "we needed to quickly design and build out a more reliable infrastructure. Additionally, to ensure the best return on our technology investment, we sought efficiencies that would allow us to reduce the time and costs of delivering new services to market, plus flexibility and scalability to support the company's eight-year plan for continued double-digit annual growth."

#### THE SOLUTION

##### Build private cloud on Cisco, NetApp, and VMware

Seven Corners considered proposals from multiple service providers, ultimately selecting a solution presented by Netech Corporation, a network technology company, leading

This solution provided by:

**netech**

“In our business, where customers are clamoring for new services, time to market determines which company gets the business—typically the first to deliver wins 60% of the revenue. The agility and flexibility we’ve gained from this infrastructure help us deliver products faster, quickly identify and reduce losses on unproductive programs, and rapidly capitalize on successes.”

**George L. Reed II**

Chief Information Officer, Seven Corners, Inc.

provider of IP-based integration services in the Midwest United States, and participant in Cisco, NetApp, and VMware partner programs. Reed explains, “Netech architected a Cisco, NetApp, and VMware solution that delivered immediate engineering value with scalability and configuration flexibility to enable all phases of our strategic plan, including implementing virtual desktop and cloud-based services. The expertise of the Netech team and their deployment of a single platform built from unified compute fabric and storage technologies also allowed them to achieve a very aggressive delivery schedule. Speed to implementation was as critical a factor as scalability.

“When the infrastructure went live mid-November, Netech helped with our initial physical-to-virtual (P2V) migrations, including a critical Web server scheduled for testing in the new environment before it was moved into production. Perhaps fortuitously, the failure we thought might happen in December occurred within just minutes of P2Ving our first Web system. When the physical server blue-screened, we were forced to forego testing and move the full production environment onto the new virtual server. It ran perfectly the first time and has worked flawlessly ever since.”

Today, a high-availability NetApp FAS3140 provides approximately 14TB of usable capacity (via FC) to 4 Cisco UCS B200 M2 Blade Servers running some 75 virtual servers in a VMware vSphere™ 4.1 environment. To manage the infrastructure, Seven Corners leverages built-in technology from Cisco, NetApp, and VMware. VMware vCenter™ provides a central framework for managing resources as virtualized data center pools. Both NetApp Virtual Storage Console and Cisco UCS Manager™ integrate with VMware vCenter to coordinate management across infrastructure components.

## **BUSINESS BENEFITS**

### **Keeping the world clock:**

#### **24-hour availability**

Clients traveling the globe expect 24/7/365 access to Seven Corners services, whether for emergency assistance or simply to enroll in new insurance plans, verify coverage, or find a local provider. At any given time, there are 70 to 120 Seven Corners Assist service professionals, claims analysts, enrollment agents, and other staff accessing IT services. More than half of the company’s external business comes in through its e-commerce Web presence of some 45 Web sites and more than 200 branded domains.

“To support these members, staff, and business processes, we require nonstop technology availability—and that’s what we’re delivering with the Cisco, NetApp, and VMware solution,” emphasizes Reed. “Since deploying the new shared IT infrastructure, we have experienced no downtime. By successfully reducing daily outages from an average of 12 across our core physical servers to 0, we’re saving at least \$750,000 in annual downtime costs.

“In the past, an outage on our major policy servicing and fulfillment application would have cost the business at least \$80,000 every day the system was down, and building a replacement server could have taken as much as six weeks. Today, that application and the databases behind it run reliably 24/7 to protect business services, transaction data, and the productivity of both customer service staff and IT database administrators. The joint Cisco, NetApp, and VMware reference architecture delivers full-environment resilience with highly reliable components, data protection, high-availability features, and recovery technologies. As a result, we’re able to deliver to the business nearly zero-chance-of-failure IT services.”

### **Service, please, and make it snappy**

Mike Ellis, technical services manager at Seven Corners, adds that the new infrastructure helps development and test teams more quickly deliver higher-quality services. Ellis says, “Because we can so quickly provision new resources—it literally takes 12 seconds to create a virtual machine in vSphere—and use technologies like NetApp FlexClone® software to create multiple dev/test environments, we have more opportunity to fine-tune applications before we move them into production. The processing power of the Cisco servers and the speed of NetApp storage have also enabled dramatic performance improvements in Web services and reporting processes. Today, for example, aggregate performance reports that used to take up to 6 hours to complete now run in less than 10 minutes.”

“In our business, where customers are clamoring for new services,” continues Reed, “time to market in many cases determines which company gets the business—typically the first to deliver a solid new product wins 60% of the revenue. The agility and flexibility we’ve gained from this infrastructure help us deliver products to the market faster, more quickly identify and reduce losses on unproductive programs, and more rapidly capitalize on successes. Our product teams used to review programs and make major decisions quarterly. Today, with aggregate claim reporting and actuarial at their fingertips, they can do it weekly.

“We’re also leveraging the same infrastructure to pilot a 40-seat VMware View virtual desktop environment. Our expectation is to deploy by early next year some 175 desktops for corporate staff and engineers at our follow-the-sun testing partner. Rather than setting up physical systems on site at our corporate data center, we’ll be able

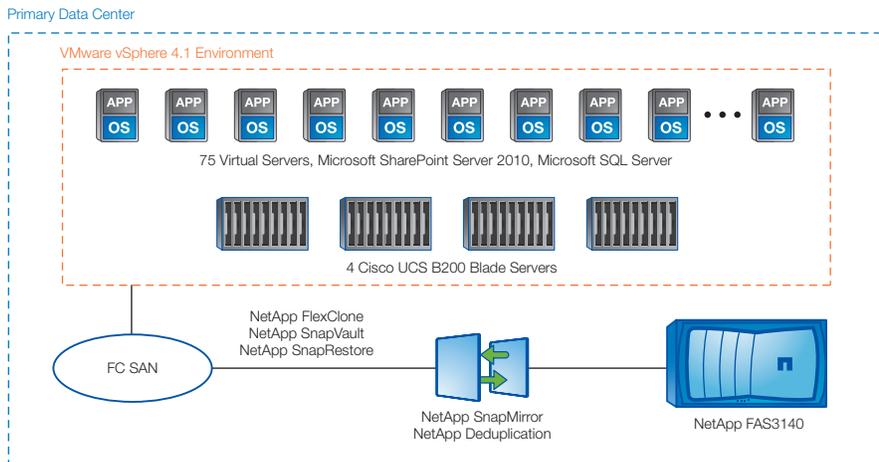
to support test engineers working around the globe and around the clock. In our test-driven software development environment that makes use of agile software development, we expect we'll save more than \$200,000 in development costs and take more than three months off delivery time. We estimate that, taken together with improved performance, faster provisioning, and cloning capabilities, these benefits will help us shrink some development cycles from up to six months to just six days or less."

**Efficiency exchange rate: 8-month ROI**

"When we started this project, we also considered traditional blade-server solutions from vendors like Dell EqualLogic," Reed discloses. "But the costs to integrate disparate technology components and to scale for succeeding project phases proved prohibitive. Alternatively, by deploying the Cisco, NetApp, and VMware reference architecture integrated technology stack, we will in just eight months return 100% of our phase-I investment. And that's a conservative estimate. In calculating return on investment [ROI], we considered only hard, direct project costs."

Ellis suggests that additional savings are considerable, citing these examples not factored into the ROI analysis:

- **Capacity savings.** "With NetApp deduplication technology, we're using 60% less storage, the equivalent of a year's worth of new capacity. In reality, we're leveraging that and the other infrastructure savings to expedite the next two phases of the project, including deploying our virtual desktop environment approximately two years earlier than planned."
- **Staff and IT resource savings.** "Last year some 80% of our IT dollars went into break-fix. In the last three months, that percentage has dropped to 16% with recovered resources being applied to new-project work. We're also doing more with less across the company. For example, leveraging this technology, analysts and sales teams are supporting double-digit business growth with no staff adds."
- **Power and space savings.** "After deploying the new infrastructure, our data center looked like someone had robbed it of equipment, just like in the commercial. Previously, our cooling system ran nonstop but could not drop the room temperature below 75°. It now cycles reasonably to maintain a consistent 69°."
- **Licensing and management savings.** "Before, we supported 58 disparate systems and spent as many as 500 hours annually on routine provisioning and capacity management tasks. Now we leverage a single pane of management and have reduced that number by an order of magnitude. I'd be surprised if it takes more than five hours now to do those same routine tasks."



**Figure 1) The Cisco, NetApp, and VMware solution enables both Seven Corners development and Seven Corners production environments, including the company's mission-critical customer relationship and insurance lifecycle system.**

The new infrastructure supports some 120 internal users and provides resources to a mission-critical proprietary Web front-end application; Microsoft® SQL Server® back-end databases; a Microsoft SharePoint Server® 2010 farm; online quote, credit-card processing, and claims adjudication systems; data marts and warehouses; and other business-process and Internet applications developed and supported using Adobe ColdFusion 9, Microsoft Team Foundation Server, and Microsoft rules engines.

“With NetApp deduplication technology, we’re using 60% less storage, the equivalent of a year’s worth of new capacity. In reality, we’re leveraging that and the other infrastructure savings to expedite the next two phases of the project, including deploying our virtual desktop environment approximately two years earlier than planned.”

**Mike Ellis**

Technical Services Manager, Seven Corners, Inc.

### Scaling to meet a world of travelers’ needs

Reed summarizes, “Upon project completion, we will store 100% of our data on NetApp and deliver all of our IT services via a private cloud built on the Cisco, NetApp, and VMware reference architecture. Utilizing VMware vCenter Configuration Manager, orchestration tools, and privileged account and access structures, we also expect to enable self-provisioned services that will allow us to dramatically scale services to our users without expanding IT staff. For example, our sales department will be able to process hundreds more RFPs each month, and analysts will have the capability to handle nearly 70 times more weekly claims. This infrastructure has delivered value now and value for the future—no other solution could deliver an equivalent combination of immediate functionality/efficiency and long-term scalability/flexibility.”

### SOLUTION COMPONENTS

#### NetApp Products

NetApp HA FAS3140  
NetApp FlexClone, SnapVault®, and SnapMirror® software  
NetApp OnCommand™ software  
NetApp deduplication and SnapRestore® technologies

#### Protocols

NAS (CIFS) and SAN (FC)

#### Partner

Netech Corporation  
[www.netechcorp.com](http://www.netechcorp.com)

#### Environment

VMware vSphere 4.1 Enterprise Plus  
Cisco UCS 6120 Fabric Interconnects  
Cisco UCS B200 M2 Blade Servers  
Cisco MDS 9148 Multilayer Fabric Switch  
Cisco Nexus 1000V Virtual Network Switch  
Cisco Catalyst 4900M Switch  
Microsoft Windows® Server 2008  
Microsoft SharePoint Server 2010  
Microsoft SQL Server 2008  
Microsoft Team Foundation Server  
Adobe ColdFusion 9

For more information visit  
[www.imaginevirtuallyanything.com](http://www.imaginevirtuallyanything.com).

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