Picture Perfect

Taking IT to the next level at Carrington Holding Company

Fix-it case studies are always the stories that get the headlines. “Was broken. Very painful. Highly inefficient. Reengineered everything. Re-architected everything.” However, CIOs who inherit a well-run IT environment often have just as interesting stories; they just don’t make as many headlines.

One such example is Brent Rasmussen, the executive vice president and CIO at Carrington Holding Company. When he joined the company in August 2011, he found a highly stable, robust IT environment. “The foundation was already in place,” he notes. “My charter was to take it to the next level and create a world-class IT organization that would help Carrington continue its rapid growth trajectory. The challenge is to ensure that the ongoing evolution of the company is supported by IT—from the technology foundation to the strategic direction of the IT department. At the same time, we need to make sure that all of the security protocols, infrastructure tools, and operational best practices that we have in place scale to support our rapid growth.”

“We aim to get as close to [the picture-perfect environment] as possible.”

– Brent Rasmussen, EVP and CIO, Carrington Holding Company

But to say the job he inherited was without challenges would be a mistake. Carrington consists of 14 different businesses with operations in all 50 states. The company doesn’t cover one niche market sector but a range of areas, including investment asset management, mortgage services, property management, and real estate. “IT is a shared services organization that must meet the needs of not only the enterprise in general but each of the 14 different businesses,” Rasmussen explains. And that requirement is not static. For example, since Rasmussen joined the company, Carrington added four new businesses.

With this in mind, business alignment is a critical factor for Rasmussen and his team. “We work very hard to partner with...
the business, not only at the enterprise level but with each individual business that we serve,” Rasmussen says. “We proactively reach out to them to create new and innovative solutions, ensuring that there’s not a gap between what we see in the market and what the business is able to take advantage of.”

Due to the nature of its business, Carrington handles highly sensitive information and maintains a number of outward-facing customer touch points. “This is why we need a rock-solid security solution, infrastructure, and support team,” Rasmussen comments. “We’ve taken the solid foundation that existed before I arrived and have built upon it and enhanced it.”

**Accelerated virtualization**

Virtualization was an initiative started before Rasmussen joined the company. But it had reached a plateau. “We were about 20 percent virtualized with VMware vSphere,” he remembers. The remaining servers were still physical. Today, this ratio has been turned on its head. “The 20:80 virtualization ratio is now 80:20,” reports Jeffrey Smith, the vice president of Infrastructure at Carrington.

Given that the virtualization change took place over a period of about six months, this was a very rapid rate of adoption. Rasmussen and Smith cite two factors that permitted this speed of transformation. The first is that virtualization technology and underlying support for it has matured. “This allows for its adoption through all of the different application layers, not just those that are VMware certified,” Rasmussen relates. “The other is the work ethic of the Carrington team,” Smith continues. “It goes back to the technology delivery model we implemented and our ability to prioritize projects based on business needs such as ROI,” Rasmussen adds. “This approach enables us to allocate resources and budgets to projects that deliver tangible business value.”

**Human aspects of data protection**

Since the company’s founding in 2007, Carrington has relied on Symantec Backup Exec for backup and recovery. “We use Backup Exec for tape backup,” Smith says. “It has been a very reliable solution and its support for VMware helped facilitate our virtualization transition.”

For disaster recovery, Carrington maintains a mirrored data center. For backup, Carrington uses a secondary data center. “The company is dedicated to producing the requested data environment in a different state. “The same virtualization and backup and recovery architectures that we implemented in our primary data center were built out there as well, providing us with full resiliency but also significant flexibility and agility,” Smith says.

In accord with best practices, regulatory requirements, and a focus on the customer, Carrington upholds short recovery time service level agreements. “From a regulatory standpoint, we need to produce the requested data rapidly,” Rasmussen explains. “But it goes much farther than that. The company is dedicated to delivering an optimal experience for our customers. As a result, if there is something in our data store that will make a difference for an individual or family, we want to provide the results quickly and accurately.”

**Prior investing: archiving**

Another solution that Rasmussen found in place upon his arrival was Symantec Enterprise Vault, which was implemented in 2007 when the company entered the mortgage servicing business. “I’ve been at other companies where email quotas, Exchange performance, and the discovery process were big pain points,” he says. “That is not the case here.”

Enterprise Vault provides the Carrington team with a number of benefits. “With Enterprise Vault, email gets archived in real time using the Microsoft Exchange Journaling option, users don’t have quotas, and we don’t have PST files all over that aren’t backed up,” Smith points out. In addition, the smaller Exchange archive reduces backup windows and improves Exchange server performance. “We also ascribe to all of the regulatory standards for any public company or company that handles sensitive information,” Rasmussen adds. “Our Exchange archiving and retention strategies align with those standards.”

**“Proactive management of security is a business requirement.”**

– Jeffrey Smith, VP, Infrastructure, Carrington Holding Company

**CARRINGTON: A FAMILY OF BUSINESSES**

**HEADQUARTERS:** Santa Ana, California  
**FOUNDED:** 2007  
**INDIVIDUAL BUSINESSES:** 14  
**EMPLOYEES:** 2,000+  
**BUSINESS FOCUS:** All aspects of the single family residential real-estate market  
**WEBSITE:** www.carringtonhc.com

symantec.com/ciodigest 33
Carrington Holding Company relies on various Symantec solutions to protect business-critical information. Get more details at go.symantec.com/carrington-video.

**Evolving endpoint security**
Carrington has a culture of security and compliance. As it grows and expands into new markets, maintaining this foundation is important. For endpoint security, the company has relied on Symantec Endpoint Protection since its founding. It is used across all of the company’s 2,000-plus desktops and laptops as well as the approximately 300 servers in the data center. “We recently upgraded to Symantec Enterprise Protection 12.1 and found the process very easy,” Smith reports. With the majority of its data center environment virtualized, the Carrington team saw immediate value. Smith explains: “The performance of our virtual servers improved substantially with the new SONAR scan engine. As an example, we can scan in real time using SONAR, which allows for better utilization of system resources for other critical processes.”

**Managing endpoints**
Endpoint management was something the Carrington IT team tackled out of the gate as well. For patch updates, provisioning, imaging and reimaging, and remote management, Rasmussen’s predecessor implemented Altiris Client Management Suite from Symantec. “We use the tools in Altiris Client Management Suite for a number of different tasks,” Smith states. “For example, software package deployments are a seamless exercise for us. We also find the reporting features quite useful, creating automated daily reports on certain applications and products.”

Remote management is another area where Smith’s team uses Altiris Client Management Suite. “For systems that are not at our headquarters, this is particularly helpful,” he says. “We actually use it for the majority of our help desk cases. It saves time and allows the help desk staff to spend time resolving problems rather than walking between offices.”

Altiris Asset Management Suite was deployed concurrently with Client Management Suite in 2007. The Carrington team leverages it to generate automated reports on asset utilization. “We've been able to get more efficient about our use of software licenses with Asset Management Suite,” Smith says. “We also use it to generate inventory and asset reports for software licensing audits.”

**Proactive security diligence**
Seeking a robust, security posture, the Carrington IT team engaged Symantec for a managed security services offering in 2008. When the contract came up for renewal at the end of 2011, the Carrington team elected to extend the agreement.
“We work very hard to partner with the business, not only at the enterprise level but with each individual business that we serve.”

– Brent Rasmussen, EVP and CIO, Carrington Holding Company

for another three years. “Proactive management of security is a business requirement,” Smith says. “With Symantec Managed Security Services, we get daily reports that help us to proactively address potential issues. This additional level of diligence provides us with a deeper, broader understanding of the overall general health—current and future—of our security posture.”

Smith, who joined Carrington in late 2011, comments on his experience working with Symantec Managed Security Services: “When we get alerts, the Symantec team works hand-in-hand with us to ensure fast and effective remediation.”

Benefits Carrington is realizing from Managed Security Services extend beyond an improved IT risk posture. “We don’t want to be in the business of building out a SOC [security operations center],” Rasmussen comments. “And I am not only talking about the time and infrastructure needed, but the ongoing training and updates to stay current. The business case for using an external SOC is not difficult to prove.”

“We have encryption for that” As a financial institution, encryption is another area of security focus for Carrington. Encryption was a mainstay when Rasmussen arrived. “Every laptop in the company has PGP Whole Disk Encryption installed on it,” he relates. “This is a standard operating procedure. Our customers and partners trust us with sensitive information, and we take our entrusted stewardship very seriously.”

Rasmussen’s team also encrypts sensitive files using PGP NetShare. “We encrypt the data while it is in flight and then when it is at rest,” he explains. “We can encrypt an entire archive if we want to do so. PGP NetShare has proven its worth for us.” For centralized management of the encryption keys, the team uses PGP Universal Server.

**Authenticating users**

Looking to add an additional layer of security for remote users, Rasmussen initiated a process to identify a two-factor authentication solution in late 2011. “Symantec Validation and ID Protection Service was a good fit,” he says. “The soft-token, cloud-based approach is simple to manage and our users find it very easy to use. It was a seamless implementation as well. We made the decision to deploy the solution on a Wednesday and had it in place on the following Monday.”

**Help desk integration**

Another area Rasmussen sought to evolve was the help desk. “We previously relied on an outsourced solution and determined to bring...
it in house,” he says. Objectives included the ability to gain greater control and improving the quality of service. Rasmussen and his team reviewed several different solution options and settled on Symantec ServiceDesk, citing the integration points with their existing Altiris Client Management Suite and Asset Management Suite installations as a factor. “The help desk staff uses the transparent views afforded by our legacy Altiris installation,” Smith explains. “This allows them to be more productive while resolving problems faster.”

In November 2011, Carrington initiated the implementation of the ServiceDesk solution; it was live by January 2012. In addition, seeking to automate various help desk and HR tasks, they also selected Symantec WorkFlow. “Our initial deployment uses standard configurations,” Smith comments. “For example, right now we’re using WorkFlow for the change management processes. But over time we plan to develop other workflows that will help automate and streamline other processes.”

“At Carrington, the systems are the engine of Auction.com. Everything was business critical and there was zero tolerance for downtime, data errors, and security issues.”

This prior experience provides Rasmussen with a lens that he’s found useful in his role at Carrington. “The systems at Auction.com and Carrington are business critical,” he observes. “Reliability and high availability are paramount. There can be no points of failure.” In addition, the culture at Auction.com was very much like a startup, and creativity was at the forefront of much of what Rasmussen’s team did.

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Patrick E. Spencer (Ph.D.) is the editor in chief and publisher for CIO Digest.