

Success Story:

Cerbo Utilizes Atlantic.Net's Private Cloud Solutions to Realize Tremendous Growth

Atlantic.Net specializes in providing security and compliance hosting solutions, most specifically in the healthcare vertical. Congress passed the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and the Health Information Technology for Economic and Clinical Health Act (HITECH) in 2009, which regulates organizations that store patient health information (PHI) electronically. These electronic medical records (EMRs) must be protected in case of, and to prevent, data breaches. In effect, any access to the EMRs must be secure and the transmission must be encrypted. There are hefty fines if these systems are breached. Find out how Atlantic.Net helped Cerbo, an electronic medical record software solution, achieve and remain HIPAA compliant all while remaining cost-effectiveness.

Cerbo: EMR innovators

Started in 2005, Cerbo, an EMR software solution, was originally conceived by Dr. Alan Dappen, MD. At the time, Dr. Dappen had gone through three different EMR providers and was not satisfied with them. He ended up figuring out a system that was basically a macro-based system inside of Microsoft Word, along with a couple of different file systems. "It didn't seem like the best setup, but watching him work, it was super-fast," says Ben Dappen, the CIO of Cerbo. Dr. Dappen's system enabled him to pull patient information and chart very quickly. As more functionality was added to this system, it became less of a plausibility to scale the solution, with the biggest obstacle being that his model required a lot of manual processing with his vendors. As doctors from Dr. Dappen's office graduated their own medical practices, they asked if they could adopt the software into their own businesses. Ben Dappen, having seen how well the system worked, decided to further enhance the software and make it more scalable: "I had some downtime and I got something up that was pretty basic that replicated what he already had. It dealt with a lot of the doctor charges better, however. And it took off from there." Beginning in 2010, they started selling their EMR software.

Migrating from the office to the data center



Cerbo's infrastructure originally was run from Dr. Dappen's office. As they began to grow, they moved their data for a short time to another company. From a compliance standpoint, they did not suffice, so they moved all their infrastructure to Rackspace. While at Rackspace, according to Ben Dappen, they began experiencing reliability issues, despite the high costs.

"We had outages periodically where [Rackspace was] doing network maintenance or a machine was down in their virtualized environment. I was also nervous because we had nightly snapshots and we noticed that sometimes those snapshots were corrupted so our backup solution was a little shaky. We were doing our own weekly backups where we would log in to all the builds and download a protected file with all the data to a local server, and it was a messy situation. It was too manual, and the cost was very high."

Cerbo knew they needed to move their company's infrastructure to a data center that provided a more robust and reliable, yet affordable solution that was personalized to their needs and with support that matched it. A lot of companies Cerbo approached were operating on cookie-cutter models. "Other HIPAA-compliant hosts are operating on the assumption that you're not virtualizing everything; that you have one core app and if there are other machines within the network, they'll be, for example, a SQL server," said Mr. Dappen. According to him, Cerbo's model was not one that these companies were able to offer in a cost-effective manner, though.

Searching for answers, finding solutions

In 2014, Mr. Dappen found out about Atlantic.Net's HIPAA-compliant hosting solution through an online search. When he contacted Atlantic.Net, he explained what his concerns were as far as where he thought Cerbo's resource bottlenecks would be. He was moving from a shared hosting model where his servers were running next to what he described as "noisy neighbors." Despite their servers having dedicated resources, like CPU and memory, they found themselves next to other servers that were constantly accessing the disk, making Cerbo's systems appear sluggish. It became clear that they would need to have their own private cloud infrastructure. Sam Guiliano, Atlantic.Net's sales representative in charge of major accounts, contacted Mr. Dappen to get further preliminary information. Mr. Dappen explained the kind of resources each server needed. From there, Atlantic.Net's sales and operations teams worked together to develop a custom solution for Cerbo. "I didn't have a lot of experience with virtualizing. I wasn't really sure what running each virtual machine would be from a resource perspective, and that's one thing I really appreciated about what Atlantic.Net did. [They] also told us how many virtual machines we could pack on to a host. That let us develop a model of what the costs were going to be," Mr. Dappen stated.

The right solution at the right time



Based on Atlantic.Net's assessment of Cerbo's needs, a custom solution for Cerbo was developed. This included several must-have's in order to be HIPAA compliant. Among these were Atlantic.Net's *Managed Private Cloud, Managed Firewall, Managed Intrusion Detection System, Virtual Private Network, and OnWatch Advanced Monitoring.*

Since it was imperative that Cerbo's servers run on their own Managed Private Cloud, Atlantic.Net suggested the Proxmox Virtualization Environment, a virtualization OS which saved a lot on licensing as compared to other enterprise solutions from the likes of VMWare or Microsoft. Since Proxmox can run in a cluster, this also meant the ability to increase uptime with failover capability, all while allowing Cerbo to scale to more servers and add them to the cluster when they were needed.

By allowing Atlantic.Net to manage access to their infrastructure, Cerbo can ensure that when they request access, be it via the Managed Firewall or adding a user to their VPN, that a team of professionals are reviewing each request to ensure proper HIPAA compliance will be maintained. This review helps make sure that public access to Cerbo's customers' data is restricted, allowing only authorized users on the VPN to access the systems.

Atlantic.Net continues to work with Cerbo to ensure that each Managed Private Cloud host is being utilized to maximize cost efficiency, all while ensuring reliability and usability are at full potential. Our Managed Intrusion Detection System also alerts the support team at Atlantic.Net as to any possible vulnerabilities so they can be reviewed. OnWatch Advanced Monitoring also notifies Atlantic.Net's support team if anything is down so it can be looked into and brought back up quickly.

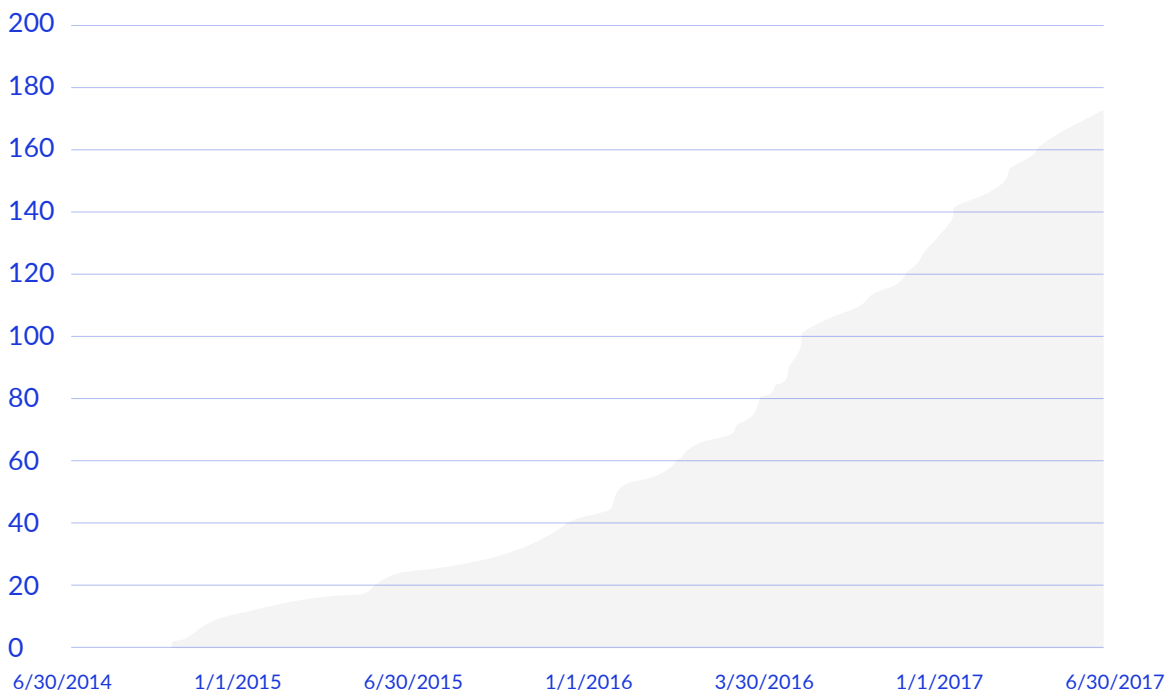
Beginning in September 2014, Cerbo began testing their EMR solution on his new Atlantic.Net Private Cloud Infrastructure. During this testing and sandboxing time, Atlantic.Net's support team worked with Cerbo to ensure everything would be running smoothly for when the new infrastructure went into production.

"I don't think I've ever had to wait more than a couple of minutes to talk to a person, and usually a person who knew what the situation was and what we needed to do. That's been super reassuring,"

- Ben Dappen, CIO, Cerbo

Backed by Atlantic.Net's infrastructure, Cerbo has been experiencing record growth. Cerbo first started with one private cloud host, which contained about 25 clinics. Today, they are at over 200 clinics, with more than 700 users. Cerbo has done this despite the growing complexity of the healthcare marketplace.

Number of Virtual Machines Over Time



The difference is more than just hardware and cost

Atlantic.Net and Cerbo are both focused on providing personalized services to their respective customers. Atlantic.Net's support team and their fast, personalized response has been one of the most important reasons Cerbo continues to partner with them. "I don't think I've ever had to wait more than a couple of minutes to talk to a person, and usually a person who knew what the situation was and what we needed to do. That's been super reassuring," said Mr. Dappen.

Having dealt with Rackspace, Mr. Dappen said that by the time they left them, despite advertising "the world's best support," he'd be talking to technicians who really didn't know what was happening. It was clear that as Rackspace scaled up their operations, their support was not following that trend.

“Downtime was the other problem we were having. What we are offering is really sort of mission-critical software. The number of patients we have is around 150,000. If we have downtime, we hear about it instantly.”

“With Atlantic.Net, [their support team] knows what the issue is, it’s always dealt with, and they know what’s happening. The support has been great. You all seem to take a lot of responsibility for the service that you’re offering. We appreciate it. The other key thing with Atlantic.Net is that the uptime has been fantastic. I don’t think we’ve had any outage that Atlantic.Net was responsible for the whole time we’ve been with you. That’s been super good.” – Ben Dappen, CIO, Cerbo

As Cerbo continues growing, Atlantic.Net will be there to maintain their ever-expanding infrastructure, all combined with round-the-clock support.

Atlantic.Net: HIPAA solutions tailor-made for your business

Regulations like HIPAA and HITECH can be a challenging task for medical practices and hospitals. Their primary focus is patient care and the people who serve them: doctors and nursing staff. This is where companies that are focused solely on protecting the EMR and PHI data, while still allowing secure access to those who need it, come in. By partnering with the right solution, healthcare providers can focus on their patients, rest assured that their data is being safely managed and protected. If your company is interested in partnering with a company known for its dependability and expertise, contact Atlantic.Net’s sales team today so we can create a custom plan tailored to you.



Find Out More?

Share your vision and goals with us and we will develop a hosting environment tailored specifically to meet your needs! Contact our consultants at **888-618-DATA (3282)**, or email us at sales@atlantic.net.