



Raleigh Neurology Associates

EXECUTIVE SUMMARY

Raleigh Neurology Associates (RNA) — one of the largest neurology practices in the southeast — operates out of three locations and treats over 159,000 patients each year.

This fast-growing practice had several aging servers that were approaching the end of their warranty. RNA also had a

back-up system that struggled to keep pace with an ever-increasing volume of patient and operational data.

Computer Service Partners helped RNA solve these IT issues by implementing an IBM BladeServer, server virtualization, and a fiber channel backup system.

With **CSP DataCenter Solutions**, RNA has been able to:

- improve backup speed
- increase volume of data backed up
- save on IT staffing costs
- save on Electronic Medical Records implementation
- save on energy costs

THE BACKGROUND

Raleigh Neurology was dealing with aging servers, a slow backup system, and increasing demands on its IT infrastructure due to explosive growth.

“We had a bunch of piecemeal servers and they were getting old,” said Sean Zorio, IT Director for Raleigh Neurology. “I try not to run a server past four years because of warranty and stability issues. We were rapidly approaching that milestone.

“Our old backup system was struggling, too,” Zorio continued. “We were backing up to tape, but it was an older style of tape. Because the practice has grown so much, and more of our records are now electronic, we have a much larger volume of data to back up.

“Our backups were literally running 24 hrs a day, 7 days a week to catch up. We needed something that was going to be faster, more efficient and more cost effective.

THE DECISION

To address these issues, Zorio and his staff decided to migrate to an IBM BladeCenter, a virtualized server environment, and a new backup technology.

“We went with the BladeCenter because it offered a much more scalable, flexible solution with built-in redundancy. In addition, it offered huge future cost savings for our migration to Electronic Medical Records (EMR).

“After we decided on a BladeCenter, we bought one blade and some storage from a big hardware vendor. It turned out that the vendor didn’t do a good job matching us with the right hardware for our needs. That’s when we decided to get outside help.



Raleigh Neurology has two locations in Raleigh and one in Durham. This busy practice treats close to 160,000 patients each year.

THE IMPLEMENTATION

“The first thing CSP did was a VMWare capacity plan.”

CSP has been certified to use the VMware® Capacity Planner which provides an integrated set of analysis, planning and decision support functions to enable faster, measurable and more accurate infrastructure assessments.

At the core of VMware Capacity Planner is an information warehouse, which contains a growing set of industry reference data. This information can be leveraged for comparative analysis and benchmarking to help guide system consolidation and capacity optimization decisions.

Zorio said “Based on the results of CSP’s analysis, we went from one blade in the chassis to four.

“CSP also helped us migrate to a new fiber channel storage solution. With those two efforts, we were able to get rid of a lot of our old gear and dramatically reduce the physical footprint of our servers.

“At the beginning of the project, we discussed the possibility of adding another tape drive to our existing library or going to

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—Sean Zorio, IT Director
Raleigh Neurology Associates

a new technology. CSP helped us work through the pros and cons of our options.

“My staff is pretty technical. We can come up with broad statements about what we want to do and why. But CSP has the specific experience and knowledge to say *‘This is exactly what you need and here’s how we’re going to help you do it.’*”

“It turns out that we retired our old servers just in time, too. We were right in the middle of our BladeCenter migration when my practice management server collapsed.

“At 10 am that morning, my server crashed and I called CSP to say *‘I need help!’* They responded immediately and sent over a team of highly skilled people. We all buckled down and got the job done under some serious pressure.

“By 9 am the next morning, we had completely migrated over to the BladeCenter environment – about a week ahead of schedule. Everything was back up and running and we were able to operate the practice normally that day.

THE OUTCOME

“The solution that CSP put into place has been a game changer.” Zorio said. “It has established a foundation that allows us to grow in a very cost-efficient way.

“For example, right now we’re in the planning stages of a full EMR migration. If we didn’t have this new environment, we’d be faced with much more complicated and costly hardware story. We would be saying things like *‘I need 10 physical servers and I’m not really sure how I need each one to be configured.’*”

“Instead, with the BladeCenter architecture and VMWare virtualization, I can buy a couple of blades and then scale and configure them on the fly as our EMR picture evolves.

“If need more memory somewhere, I just drag a little bar and click. With a physical server, I would have to power it down, get a screwdriver, tear it apart, find the right chips, and put them in. And the whole time, I’d be completely offline.”

“The bottom line is that we wouldn’t be able to migrate to EMR without this environment in place. Well, actually we could, but it would cost three times as much. And it would be much more difficult.

“When we priced out the EMR solution, we found that we could save a lot of money by bringing EMR in-house. We can

do that because we have such a scalable infrastructure in place. Without it, we were going to have to host our EMR with an outside vendor.

“Based on our research and the vendor quotes we received, after the first two years of hosting our EMR solution in-house, we will save well over \$100,000.”

“Aside from the advantages this setup offers for our EMR migration, things are just a whole lot easier to manage now,” said Jayme Richards, Systems Administrator for Raleigh Neurology.

“Recently, I completely upgraded all the software and hosts on the BladeCenter. And I did it from home. I can now move things around virtually (and remotely) without interrupting anyone in the front office. That would have been impossible before.”

“This setup also helps us save money on our IT staffing costs.” Zorio added.

“When I started here six years ago, we had 50 employees and two IT staffers. Now, we have almost 300 employees, but we’ve only added one IT staff person. This environment allows us to grow and change without adding extra human resources.

“And with our new quicker backup technology, I can backup everything overnight without it leaking into the next morning and impacting the front offices.

“Plus, with the new system, our backup data is encrypted. With our old system, if a tape had ever been lost or stolen, we would have had to send out letters to patients saying, *‘We lost your records.’* We never want to be in a position like that, and CSP has helped us put a system in place that protects against such a scenario.

“Overall, I’d say everything has been a win-win. We now have a compliance advantage, things are faster and more efficient, and we’re saving money on storage media, IT staff and our upcoming EMR migration.”



Visit www.cspinc.com
or e-mail info@cspinc.com

1310 Nowell Road
Raleigh, NC 27636

ph. 919.424.2000
fax. 919.424.2070

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