PURESTORAGE®

Smithville Communications is aggressively moving its customers into the vanguard of fiber-based communication systems, and relies on its IT infrastructure to efficiently support a state-of-the-art infrastructure. To keep pace with demands, Smithville's legacy spinning-disk storage system required costly upgrades and frequent expansion. By moving to all-flash arrays from Pure Storage, capital spending on storage has been contained, performance on key applications has improved by up to 84%, and the IT department is spending far less time managing storage.

Smithville fiber
THE GIGACITY COMPANY

BUSINESS TRANSFORMATION

The performance of critical geographic-mapping applications has improved markedly, allowing key business initiatives to move forward. The IT staff, meanwhile, spends less time managing storage and more time on supporting the company's modernization priorities.

GEO

North America

INDUSTRY

Communications

> "Everything you need to manage the system is included, and it is so simple to use."
>
> Michael Richardson, *system administrator*

SMITHVILLE COMMUNICATIONS GETS BLAZING PERFORMANCE FROM PURE STORAGE TO MATCH ITS HIGH-SPEED FIBER SERVICE

As an independent telecommunications provider in an industry dominated by huge companies, Smithville Communications had adopted a strategy that concentrates on offering leading-edge services to its customers, such as ultra-high-speed fiber connections direct to the home carrying voice, video, data and security services.

For more than four decades, Smithville has been investing in infrastructure upgrades, the latest of which is its "GigaCity" initiative that delivers symmetrical gigabit-per-second connectivity to homes, businesses, universities, governments and healthcare providers. Smithville Fiber (the name under which these services are delivered) has been honored by Broadband Communities magazine for seven consecutive years as one of the Top 100 providers in the field of fiber-to-the-premise (FTTP) service.

Even as it provides customers with state-of-the-art services, Smithville itself must ensure that its own systems incorporate the latest high-performance technologies. In the case of storage, that meant installing all-flash arrays from Pure Storage.

Smithville's IT infrastructure supports all of the company's internal processes, so any interruption or slowdown directly affects the ability of employees like customer-service reps and field-service personnel to serve customers. Smithville's database of 32TB contains not only essential information about customers, but also vital plant engineering data covering every line of cable, fiber, manholes and other physical infrastructure.

The plant engineering data is the basis of geographic ESRI mapping software used, for example, to guide construction crews when they are breaking ground, or pinpoint the source of a potential service interruption.

Quick, reliable access to the geographic mapping data is therefore essential to smooth operations, noted Michael Richardson, system administrator, who oversees Smithville's server and storage infrastructure.

About a year ago, Richardson said, the spinning-disk storage system was reaching its performance limits. In addition, the geographic mapping software was due for an update, and the next version of VMware vSphere was on the horizon. As a result of these converging factors, the purchase of more storage seemed imminent.

COMPANY:

Smithville Communications
www.smithville.com

USE CASE:

- VSI – VMware® vSphere®

CHALLENGES:

- Ongoing storage upgrades were required to support key mapping applications.
- Legacy storage system was unable to support key software upgrades.
- System backups took so much time that they were ineffective and inaccurate.

IT TRANSFORMATION:

- Backup time cut by as much as 85%.
- IOPS increased by 259%.
- Storage management greatly simplified.

"I've never experienced this high a quality of support."

Michael Richardson, *system administrator*

The problem, Richardson recalled, "was that we didn't want to pour more money into storage technology that by now was inferior. Plus, our existing storage system wasn't going to accommodate the latest version of vSphere. So, we had to do something else."

PURE POWERS IMPROVEMENT IN APPLICATION PERFORMANCE

Smithville turned to its value-added-reseller partner, SIS, which suggested Pure Storage. "SIS recommended Pure Storage, and we fell in love with it," Richardson recalled. "The technology, the company and the long-term value were all so compelling."

Having just experienced a storage system that was near its end of life after just three years, Richardson was impressed by the Pure Evergreen™ Storage program, which delivers non-disruptive controller upgrades for as long as an array is under service contract. "Evergreen Storage was a huge reason we went with Pure Storage," he said. "It's easy for our budgeting process. Every three years we will get new hardware, so we won't have to worry about outdated hardware which doesn't support VMware."

Once a FlashArray™ from Pure Storage was installed and production applications were migrated, improvements were noticeable immediately.

"We saw a real boost in IOPS," Richardson said. The Pure Storage array also led to a huge improvement in system backups at Smithville. "Our backups used to take from 24 to as much as 48 hours," Richardson noted, "which was such a long time that we would miss cycles and the backup wouldn't be accurate. But now, our backups take just six hours."

SIMPLIFIED MANAGEMENT LESSENS BURDENS ON IT

Simplicity of management is another major benefit of adopting Pure Storage, Smithville has found. "Pure is an all-in-one package," Richardson said. "Everything you need to manage the system is included, and it is so simple to use. I'm not a storage expert by any means, but I can manage Pure with no effort at all."

Richardson also found Pure Storage support to be exemplary. "I recently received an email from Pure support alerting me to an issue I didn't even know existed. We arranged a time to fix the issue, so it never turned into a problem. I've never experienced this level of proactive support from a vendor."

He also has praise for the company's Pure1® support application, which is available on the Web as well as any handheld device. "I am constantly in Pure1 looking for options on how to do things better."

PURESTORAGE®

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