Success Story

Northumberland County: Away from the River and into the Cloud

A River Runs Through It
The Susquehanna River is one of the oldest rivers in the world. It is the longest river on the U.S. east coast that drains into the Atlantic Ocean, and it’s also one of the country’s most flood-prone watersheds.

On the banks of the Susquehanna sits Northumberland County, Pennsylvania, a municipality of more than 90,000 residents. Flood management and protection are ongoing concerns, especially when it comes to the county’s data center.

The Challenge
Modernizing IT on a budget
When Stephen Bridy conducted a successful grass-roots campaign for county commissioner, improving the county’s IT services was one of his top priorities. “Our infrastructure needed attention,” he says. “Our data center was in a floodplain, it was nearing capacity, and our data protection was tape-based.”

The limitations of the county’s legacy systems were impacting workforce productivity as well as the efficiency and effectiveness of county services. Adhering to data retention and protection policies became challenging with just two IT employees, and avoiding disruptions such as e-mail outages was increasingly difficult.

Adding to the challenges were tight budgets; Bridy had already cut his own salary to demonstrate his commitment to making the best use of taxpayer dollars. A former financial advisor, Bridy understands the constraints that many families face and is adept at getting the most value from a fixed budget.

“I wasn’t convinced that revamping our data center would be the best use of taxpayer dollars,” he says. “I began looking at other options.”

The Solution
Hybrid cloud with managed services
Bridy suspected that the county could benefit from cloud computing to address inefficiencies, generate returns on investment, and lower capital expenditures.

“We could use a public cloud to access IT services as a utility,” he says. “It would enable us to always have compute power available to us, but we wouldn’t have to pay for it when we didn’t need it.”
Instead of expanding its data center, the county signed up for a fully managed hybrid cloud offering using NetApp Private Storage for Amazon Web Services (AWS). By storing data on NetApp FAS storage systems hosted in Equinix data centers with a DirectConnect connection to AWS EC2 instances, the county gets all the benefits of public cloud compute while maintaining complete control over its data.

"With NetApp Private Storage, we know exactly where our data is, as opposed to it being 'somewhere in the cloud,'” says Bridy. “That’s essential for municipalities, because we store personally identifiable information and data that’s subject to strict privacy laws under HIPAA.”

**Business Benefits**

**Better citizen services**

Northumberland County is now free to use the cloud as a foundation for enhanced citizen services without worrying about data sovereignty and compliance. As new applications are deployed and legacy systems are upgraded they will be moved to Mallard. The county has already deployed a new e-mail system using its hybrid cloud on Mallard, resulting in more reliable communications. Systems such as 911 dispatch and tax claims and assessment now leverage the hybrid cloud solution as well, providing high availability for these critical services.

With the flexibility the cloud provides, the county can pursue paperless and mobility initiatives that were not possible previously. “By allowing our behavioral health professionals and social workers to be mobile and still capture signatures and access applications from the field, we’ll increase their productivity by approximately 25%,” says Bridy. “They’ll be able to see more people in a day and drive less, because they won’t need to keep coming back to the office.”

**Saving $250,000 in hardware and facility costs**

As the county moves more applications onto its hybrid cloud—including Tyler Munis public sector ERP software—costs will begin to decrease as on-premises systems are decommissioned. The county’s goal is to repurpose its data center space within the next few years and host all of its applications on Mallard.

“Northumberland County will easily save over $1.1 million in hardware and facility costs over the next 10 years by moving to the cloud, and even more by not having to hire extra headcount to manage a growing data center,” says Bridy.

Once the county deploys Tyler Munis in the cloud and retires its antiquated collections software, the county controller’s office will benefit from faster monthly closes, more timely billing cycles, and faster revenue collection. “Moving to the cloud will benefit our staff, citizens, and the bottom line,” Bridy notes.

**Meeting security and compliance demands**

In the NetApp hybrid cloud environment, data protection and disaster recovery are also greatly improved, with NetApp Snapshot® copies replicated to Equinix data centers on both coasts at regular intervals.

“By utilizing Amazon Web Services with NetApp Private Storage, we have a much better and more secure data center than we could ever afford on our own,” says Bridy. “Even in the event of a major flood, our data will still be safe. My advice to any municipality is to take advantage of a hybrid cloud sooner rather than later to help ensure the best use of taxpayer dollars.”

**About Equinix**

Equinix, Inc. (Nasdaq: EQIX) connects the world’s leading businesses to their customers, employees, and partners inside the most interconnected data centers. In 33 markets across five continents, Equinix is where companies come together to realize new opportunities and accelerate their business, IT, and cloud strategies.

---

**SOLUTION COMPONENTS**

**NetApp Products**
- NetApp Private Storage for Amazon Web Services
- NetApp clustered Data ONTAP® operating system
- NetApp Unified Manager

**Environment**
- Applications: Microsoft® Exchange Server, Tyler Munis ERP
- Database: Microsoft SQL Server®
- Operating System: Windows Server®

**Partners**
- Amazon Web Services
- aws.amazon.com
- Equinix
- www.equinix.com

---

© 2015 NetApp, Inc. All rights reserved. No portions of this document may be reproduced without prior written consent of NetApp, Inc. Specifications are subject to change without notice. NetApp, the NetApp logo, Data ONTAP, and Snapshot are trademarks or registered trademarks of NetApp, Inc. in the United States and/or other countries. Microsoft, SQL Server, and Windows Server are registered trademarks of Microsoft Corporation. All other brands or products are trademarks or registered trademarks of their respective holders and should be treated as such. CSS-6817-1215