Case Study

PROTECTING THE PUBLIC AND ITS DATA WITH REDUXIO STORAGE

Industry: Public | **Location:** North America | **Use Cases:** Virtualization, VDI, Data Security

KEY HIGHLIGHTS

Challenges

- Mail servers constantly running out of space.
- Slow application performance.
- VDI boot times up to 3 minutes.
- High cost to upgrade existing storage.
- Slow and tedious recovery from malware attacks.

Solution

- Accelerate applications by deploying Reduxio HX550 enterprise flash storage.
- Implement protocol to instantly recover data and applications to the last second in case of a successful ransomware attack using BackDating™.

Benefits

Recover from Attacks in 5 Minutes

Revert affected data to any time in the past in one step using BackDating™.

9X Faster VDI Boot Times

Significant reduction in VDI boot times.

3 Minutes
Past

20 Seconds
Today

Average application latency consistently low

<1ms Flash-first architecture and deduped cache provides consistent low latency.

CUSTOMER PROFILE

Over 130 staff

Handling over 50,000 calls for service a year

3 police stations

The Barnstable Police Environment

The Town of Barnstable, the largest community on Cape Cod, incorporated in 1639 and once home to the Kennedy family, is now a thriving business region and a popular tourist destination in New England. It also serves as the main access to world famous islands of Martha's Vineyard and Nantucket.

The Barnstable Police Department, with its staff of over 130 lieutenants, sergeants, detectives and patrol officers, is responsible for public safety and protecting the 50,000 residents of the community, and 95,000 tourists in the summer time.

The department's IT infrastructure consists of a large server and desktop virtualization environment. Storage component of the infrastructure was a traditional iSCSI SAN array.

Protecting Against Growing Threats

With the number of malware and ransomware attacks on U.S. public institutions rising dramatically, the risk of an actual compromise is more

real than ever. BPD's IT manager Craig Hurwitz decided that it was better not to wait for a disaster to happen, and conducted a review of his security protocols and tools. He realized that in addition to defensive measures it was critical to have the ability to quickly restore service in case of a successful attack.

It turned out that in the case of a successful malware or ransomware attack, recovering the entire environment using his existing backup infrastructure would take more than 3 days and will incur significant loss of data. This was obviously an unacceptable risk for the department. In addition, he was running out of capacity on the legacy SAN array, and that led Craig to look at alternate solutions.

After an extensive review of possible solutions in the form of multiple storage and data protection products, Hurwitz selected the Reduxio HX550 storage system. Using BackDating™ capability, his entire environment could be recovered in the case of a successful attack within minutes with minimal loss of data, as opposed to hours and days with other solutions.

"We realized that Reduxio with BackDating™ was the only storage vendor today that had a real solution that addresses our security concerns."

Craig Hurwitz, IT Manager, Barnstable Police Department

To Better Protect and Serve

Barnstable Police Department deployed the Reduxio HX550 to replace their old traditional iSCSI SAN array. After the VMware cluster was connected to the system, hundreds of virtual application servers and desktops were migrated from the existing system.

The HX550 system is now used as the primary storage for the large number of services required to run the department. Various software solutions based on Actian® (formerly Pervasive) PSQL™ database are used for computer aided dispatch (CAD), mobile data, records management, field based reporting, and all other operations of the department's headquarters and its substations. Services such as bail posting, license plate lookup, surveillance, training, and detective work and standard email are running on separate virtual machines. Virtual desktops provide a consistent end-user platform for running desktop applications across the department's users. 60 in-house workers use VMware Horizon View on Windows, and more than 30 remote workers - detectives and patrol officers on foot, bike and boats connect back to the core applications using

Horizon View on phones, tablets and laptops. And as far as security is concerned, Craig Hurwitz knows that even if his defensive measures were to fail, he would be able to rely on BackDating to quickly recover his environment with minimal loss of data.

"Within minutes of migrating product data to the Reduxio HX550 we knew we made the right choice as end-user response time was improved right away."

Craig Hurwitz, IT Manager, Barnstable Police Department

SOLUTION COMPONENTS

Reduxio Products
- Reduxio HX550 storage system

Environment
- VMware® vSphere 5.5 4-node cluster
- VMware® Horizon View desktop virtualization
- Microsoft® Windows Server 2008, Windows 7
- Microsoft® SQL Server databases
- Microsoft® Exchange 2010
- Ubuntu 14
- TriTech public safety software
- Actian® (Pervasive) PSQL™
- Unidesk® CachePoint application management