Orchard Park Police Department

When the Orchard Park Police Department decided to introduce body cameras for on-duty police officers, the department needed a storage solution that could handle the large influx of data it would receive from these cameras. SUSE Enterprise Storage™ met this need via an open source, software-defined storage solution that offered optimum flexibility and scalability.

Overview

Home to the Buffalo Bills football team, Orchard Park is a town that is located in Erie County, New York, United States. At the time of the 2010 census, the town's population was 29,054. Its name derives from a description of the local landscape, across which orchards were once abundant. Orchard Park is part of the Buffalo–Niagara Falls Metropolitan Statistical Area.

The Orchard Park Police Department strives to keep town citizens safe and to serve in accordance with the values of integrity, respect, professionalism and community.

Challenge

Although Orchard Park does not have a large population, the town deals with issues that are similar to the issues larger cities face because Ralph Wilson Stadium, which hosts the Buffalo Bills football team,

> "In my mind, it was smooth as silk to get the install done."

PAUL WARRINER
Network Coordinator
Town of Orchard Park Police Department

brings many sports fans and visitors to the town. This regular increase in population increases the likelihood of incidents that require police attention. To ensure that officers serve the public to the best of their ability, the department strives to fulfill its mission statement: "The primary purpose of Town of Orchard Park Police Department is the protection of life and property, enforcement of laws, reduction of crimes, maintaining public order and the delivery of services which promote community well-being."

To fulfill his organization's mission and to get a head start on potential security regulations, Chief Mark Pacholec felt that the department's on-duty police officers should start wearing body cameras. Obtaining the cameras for officers was one thing. But supporting the massive amount of data that the cameras would generate was quite another, and it proved to be the department's main challenge. A grant from the Federal Department of Justice paid for half of the cameras, but the department had to provide the IT infrastructure to support all of them. This task would be difficult, considering that the department's then-current network would need to not only store video data but to

Town of Orchard Park Police Department at a Glance:

■ **Industry and Location**
  Government, New York, U.S.A.

■ **Products and Services**
  SUSE Enterprise Storage
  SUSE Professional Services

■ **Results**
  + *Maintains network performance of 400-500 IOPS*
  + *Supports body cameras and critical surveillance tools*
  + *Provides the ability to retain video data for legal purposes*

also retrieve it and stream it. The department also had to fulfill legal mandates that required it to retain video data for various periods of time, sometimes for as few as 30 days and sometimes permanently.

Complicating matters further, data from mounted surveillance cameras and operational data from town employees would need to reside on the same storage solution that provided video-camera storage. Handling all of this data was impossible for the network that the department had at the time, so Paul Warriner, Network Coordinator for the department, sought a storage solution that could support data from the body and surveillance cameras as well as operational data from town employees.

Solution

Warriner knew that he wanted a software-defined solution, as opposed to a traditional hardware-focused solution, because software-defined solutions are capable of scaling out as the amount of data they must support increases. To find this solution, he turned to two vendors, one of them being SUSE. The solution from the first vendor, a large software player, required hardware from that vendor, while the SUSE® solution had no proprietary requirements. Warriner wanted to avoid the vendor lock-in that the first vendor's solution imposed.

The open source, Ceph-based SUSE Enterprise Storage solution attracted Warriner because it was:

- *Non-proprietary*
- *Scalable*
- *Flexible*
- *Cost-efficient*
- *Resilient*

Warriner knew that if the department should ever need to scale out its storage to accommodate more cameras or to retain additional data for legal purposes, the limitless storage capacity that SUSE Enterprise Storage provides would enable the department to do so. Plus, Warriner was already a fan of open source software and has had a great relationship with SUSE since 2005, when he implemented a web server with SUSE Linux Enterprise to support digital record keeping. The trusted relationship with SUSE and the scalability and flexibility of SUSE Enterprise Storage sealed the deal for Warriner. The SUSE solution was exactly what the Orchard Park Police Department needed to store and retain data for its body and surveillance cameras.

DEPLOYING SUSE ENTERPRISE STORAGE

When the department selected the SUSE solution, SUSE Professional Services spent a week on-site with Warriner to help install the base configuration of SUSE Enterprise Storage. The base configuration provides 80 terabytes of storage: 20 terabytes for the body cameras, 20 terabytes for the surveillance cameras and 10 terabytes for the daily operational data that town employees generate, leaving an additional 30 terabytes for the town to scale to if necessary.

For hardware, the department uses HPE because of its cost-effectiveness: "We are predominately HPE for x86, so it reduces our administrative overhead to stay with HPE," said Warriner. "HPE has provided exceptional service for us in the x86 area." More specifically, the solution encompasses four object storage device (OSD) storage nodes on four HPE ProLiant DL380 series servers, two HPE Flex Fabric switches and three HPE ProLiant DL360 monitor servers.

"In my mind, it was smooth as silk to get the install done," explained Warriner. Even after the week on site was up, SUSE Professional Services continued to offer post-implementation support for testing and debugging the solution: "The support was fantastic for the follow up," said Warriner. "Once that week was over, I had their full attention for the next 30 days, which was extremely beneficial. Within 30 days, we were up and going with a good, solid system."

POST IMPLEMENTATION

Now that SUSE Enterprise Storage is up and running, it's supporting surveillance cameras, body cameras and operational data from 20 of the town's departments. The solution has generated no complaints and no network degradation. In fact, SUSE Enterprise Storage runs so smoothly that when asked if the solution required maintenance, Warriner replied, "The toughest part is accepting the fact that it's going to run and not looking at it every morning to make sure it is running because it sits there solid."

Results

Now that the department has implemented SUSE Enterprise Storage, it can store large amounts of data and retain video data for as long as necessary. If the department needs to adjust its storage capacity or setup in the future, SUSE Enterprise Storage will accommodate the adjustments with ease and agility.

As for how the solution is currently performing, Warriner explains that "With the exception of a minor bug in the kernel, which was quickly resolved, I've had zero issues, zero downtime."

The network is currently performing at 400–500 input/output operations per second (IOPS) daily with no complaints from town employees and no network degradation. The solution supports critical surveillance tools that help keep the town's police officers and citizens safe.

As Warriner explains, "SUSE has been a godsend to the Town of Orchard Park when it comes to Enterprise Storage," which is a statement that perfectly sums up the degree to which the department's SUSE solution has already helped.

"SUSE has been a godsend to the Town of Orchard Park when it comes to Enterprise Storage."

PAUL WARRINER
Network Coordinator
Town of Orchard Park Police Department

Contact your local SUSE Solutions Provider, or call SUSE at:

1 800 796 3700 U.S./Canada
1 801 861 4500 Worldwide

SUSE
Maxfeldstrasse 5
90409 Nuremberg
Germany

SUSE