CASE STUDY ›
LOCAL GOVERNMENT: CITY OF PORT ANGELES

CASE STUDY

Executive Summary

- **Organization**:
  City of Port Angeles
  Port Angeles, Washington,
  USA
- **Industry**: Local Government
- **Size**: 250 city employees
  serving 19,000+ residents

Business Challenges

- Implement three data backup
  appliances
- Provide data protection
  for physical and virtualized
  desktops
- Supply ample data storage
  to accommodate the city's
  growing data needs
- Comply with requirements for
  data legal hold

STORServer Solutions

- STORServer EBA802
  Enterprise Backup Appliance
- STORServer EBA1101
  Enterprise Backup Appliance
- STORServer Virtual Machine
  Backup (VMB) software

The City of Port Angeles found itself in need of an updated data storage configuration to allow for increased data growth and new storage requirements.

Its needs had evolved since STORServer initially installed its data backup appliances in 2011 and helped the city transition from tape storage to an all disk appliance solution. Port Angeles police and fire department personnel were transitioning to virtualized desktops, a data legal hold was established, and the city required a data storage solution that could easily be expanded to accommodate expected data growth. Furthermore, the city's unique requirement to have a third copy of its data in a location 100 miles away, due to the city's proximity to a fault line and volcano, would also need to be addressed in this refresh. As a result, the Port Angeles IT team worked with STORServer to determine and install the best appliances and configurations for the new needs as well as to allow flexibility for future data growth.

The Solution:

STORServer helped the City of Port Angeles implement three backup appliances:

- **Primary Site: STORServer EBA802** – This enterprise backup appliance with SSDs enabled the city to take advantage of the deduplication and node replication software features now available in IBM Spectrum Protect™, formerly IBM® Tivoli® Storage Manager (TSM). The Spectrum Protect database is now housed on SSDs in the appliance with faster processing power. In this initial configuration, a 30TB Storwize V3700 disk shelf was included as the primary backup storage target, and a 40TB Storwize V3700 expansion disk shelf was added later to accommodate the city's growing data storage needs. The primary backup data is kept on disk for quick restore and to take advantage of Spectrum Protect's deduplication feature, which reduces backup storage requirements. STORServer also attached this appliance to supplied SAN storage that was used as the archive target for legal hold data.

- **Secondary Site: STORServer EBA802** – Spectrum Protect's node replication feature is used to send data to this second appliance, which is located six miles away and serves as the first disaster recovery target for the city's Spectrum Protect data. To reduce costs associated with this appliance server refresh and to provide more flexibility to the city, this second EBA802 was able to leverage disk storage in one of the previous appliances

- **Third Site: STORServer EBA1101** – To meet the city's unique requirement of a second replication target for disaster recovery purposes, STORServer was able to reuse an existing EBA1101 backup appliance that the city originally purchased in 2011. This appliance stores a second copy of its replicated data and will be located 100 miles away at a second disaster recovery facility.

The City of Port Angeles also required additional data protection of its new VMWare virtual environment, which was at a remote location. To provide reliable, simplified data protection for the police and fire department's virtualized desktops, **STORServer's Virtual Machine Backup (VMB)** software was installed. This software allows for virtual machines (VMs) to continue to operate during backups, multiple VMs to be backed up concurrently, and automated protection through the discovery and scheduling of unprotected VMs in the environment.

When the city was previously only utilizing physical tape media, they were only able to backup a total of six physical servers daily due to tape speed limitations and time limits prior to the next tape schedule start. Any restore of files had to wait until weekends because there was no available time window.

Now, the city performs daily backups on more than 165 backup devices, consisting of physical and virtual servers and physical and virtual desktops, while also providing storage replication for disaster redundancy. In addition, the city also performs full system saves, archive copies as well as weekly, monthly and quarterly backups.

"STORServer's easy-to use graphical interface makes it very simple to manage virtual backups on physical servers," said Jim Harper, chief technology officer for the City of Port Angeles. "The company's in-person and online administrator training sessions continue to provide us with tremendous value, always delivering new ideas and best practices for our data protection needs."

"STORServer's easy-to use graphical interface makes it very simple to manage virtual backups on physical servers."

The Results

- Sixty-eight percent data reduction for a deduplication ratio of 3:1

- Reduced overall costs for data protection by removing redundant data

- Data is now moved more efficiently, allowing for best implementation of data protection business practices.

- Appliance servers and configuration allow the city to plan for future data growth.

- Reliable data protection of physical and virtualized desktops

- Automated delivery of daily reports allows for easy review and confirmation that backups have completed successfully. These reports can be individually tailored and distributed to multiple levels within the organization.

- Restorations can happen at any time and are not restricted by current backup schedules, processes or operations. It takes longer to work through the GUI to select the files to restore than the actual restoration process takes.

"[STORServer's] in-person and online administrator training sessions continue to provide us with tremendous value…"

ABOUT STORSERVER

STORServer, Inc., headquartered in Colorado Springs, CO, is a leading provider of data backup solutions. STORServer offers a complete suite of appliances, software, and services that solve today's backup, archive and disaster recovery challenges. For more information on STORServer, please visit our website.