



SUCCESS STORY  
Government



## KING COUNTY, WA | PROBLEM SOLVED

One of the fastest growing U.S. counties, King County sought to simplify operations and more efficiently serve residents by replacing tape-based backup with NetApp® AltaVault®.

# Secure, Taxpayer-Friendly Data Protection in the Cloud

For King County, a major hub of business and culture in Washington state, protecting data growing by 50% a year with on-premises purpose-built appliances (PBBAs) and tape had become challenging and costly. “We needed a modern approach,” says Aaron Barak, director of operations and infrastructure for King County Information Technology. “We wanted to simplify backup and recovery, and like many with conservative budgets and growing needs, we were interested in leveraging the efficiencies of the public cloud.”

Another NetApp  
solution delivered by:



Saves  
**\$150K**  
annually in backup/  
recovery costs

Inline deduplication and  
compression reduces  
data by  
**7:1**

[✉ NETAPP.COM/CONTACT](mailto:NETAPP.COM/CONTACT)

 **NetApp®**

“We now have an enterprise-class data protection and recovery solution that helps us to provide more affordable services to our residents and protect their data.”

Aaron Barak

Director of Operations and Infrastructure, King County Information Technology

## PROTECTING MILLIONS OF RECORDS

Imagine how much technology it takes to run a county government that spans over 2,307 square miles, provides hundreds of services to more than two million residents, and is one of the fastest growing counties in the United States. Now consider the documentation collected, processed, and digitized—everything from licenses and deeds to police, court, and health records.

## CHALLENGE

### Unsustainable tape-based backup


Rising backup demands across 17 departments required 2.5 FTEs who supported a 24/7, six-step process hindered by tape jams, robot arm calibration issues, and drive failures.

“Our data protection infrastructure was costly, unreliable, and at full capacity,” says Barak. “We could either invest in a \$1.1 million infrastructure refresh or move to a more affordable and flexible cloud-based backup solution.”

## SOLUTION

### Flexible, efficient, and secure

After King County investigated and compared other cloud-based backup offerings, NetApp AltaVault cloud-integrated storage appliances were selected as the top choice. Not only were they 34% less expensive to deploy than upgrading existing equipment, but they also supported seamless integration with AWS and the backup software the IT team was already using.

As early adopters of Riverbed SteelStor technology, King County helped solidify the performance and reliability of the NetApp newly acquired AltaVault stack. With support from NetApp partner Ednetics, two AltaVault AVA400 appliances were up and running within hours. These appliances, in conjunction with Veeam software, now enable the IT team to back up most of the county’s data infrastructure, including 700 HYPERV virtual machines. And with inline deduplication and compression, AltaVault appliances speed data transfer to the cloud while reducing the amount of data the county sends there by a ratio of 7 to 1.  Data is also protected in flight and at rest using AES 256-bit encryption and TLS, so everything

## BUSINESS BENEFITS

- Avoids more than \$1M infrastructure refresh; spent 34% less
- Backup and recovery cost savings of \$750,000 over five years
- Provides instant recovery for 98% of restoration requests

from criminal to health records remains secure.

## **BUSINESS BENEFITS**

### **Easy, enterprise-class backup and recovery**

With an AltaVault cloud-integrated storage solution, the IT team can quickly and securely back up most of the county business to the AWS cloud. This includes county files that must comply with regulations. Local key encryption management and cloud-based storage enable King County to further comply with both internal and external data protection mandates, including a 50-mile off-site storage requirement.

Because AltaVault works with existing Veeam backup software, the IT team is able to use familiar tools for protecting and restoring data, which has made the transition to cloud-based backup even easier. Since deployment, the solution has enabled the county to affordably store 2PB of backup data in the AWS cloud.

Additionally, the new solution is much simpler to manage, letting valuable staff who used to change tapes all day to work on proactive monitoring and management or deploying new applications.

### **Ready and reliable access**

Together AltaVault on-premises cache and AWS S3 cloud-based storage support redundant, scalable, 30-day backup repositories where everything—from an employee's lost file to a resident's pet licensing record to a departmental file server—can be quickly retrieved and restored if the data is lost. Says Barak, "98% of restoration requests happen within the first 30 days of the data being backed up, so we wanted that recovery to be immediate."

### **More efficiency, less expense**


Finding new ways to use the county's AltaVault appliances, the IT team recently began leveraging them for long-term cold storage. Previously, the Assessor's Office archived old files using portable hard drives that it shipped off site. These were hard to track and slow to retrieve. Today, the office simply drags and drops files to a CIFS share on an AltaVault appliance, which provides an efficient, enterprise-based archive solution that looks and acts just like a local drive.

With its AltaVault and AWS backup solution, King County is not only keeping records safe and accessible, it's also saving money. In addition to avoiding more than \$1.0 million infrastructure refresh

---

"We could either invest in a \$1.1 million infrastructure refresh or move to a more affordable and flexible cloud-based backup solution."

Aaron Barak  
Director of Operations and  
Infrastructure, King County  
Information Technology

and licensing costs, approximately \$138,000 a year in tape, transportation, and off-site storage costs is no longer necessary.  Savings are further magnified by the new solution's deduplication and compression capabilities and competitively priced AWS storage.

“We now have an enterprise-class data protection and recovery solution that helps us to provide more affordable services to our residents and protect their data,” concludes Barak.

## SOLUTION COMPONENTS

### NETAPP PRODUCTS

NetApp AltaVault cloud-integrated storage

### THIRD-PARTY PRODUCTS

Veeam Backup & Replication

### PROTOCOLS

Fibre Channel

### PARTNERS

Amazon Web Services, Inc.

Ednetics Inc.

Veeam Software

[LEARN MORE](#)

[www.netapp.com/us/products/protection-software/altavault](http://www.netapp.com/us/products/protection-software/altavault)

 [NETAPP.COM/CONTACT](mailto:NETAPP.COM/CONTACT)

+1 877 263 8277



Leading organizations worldwide count on NetApp for software, systems and services to manage and store their data. Customers value our teamwork, expertise and passion for helping them succeed now and into the future. To learn more, visit [www.netapp.com](http://www.netapp.com).

© 2017 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, and AltaVault are trademarks or registered trademarks of NetApp Inc., in the United States and/or other countries. All other brands or products are trademarks or registered trademarks of their respective holders and should be treated as such. A current list of NetApp trademarks is available on the Web at [netapp.com/TM](http://netapp.com/TM). CSS-6861-0417