CASE STUDY

Qumulo and Riverside County Sheriff's Department

Riverside County Sheriff's Department Centralizes Massive Data on Qumulo to Protect the Public and See Deputies Safely Home

RIVERSIDE COUNTY SHERIFF'S DEPARTMENT

KEY QUMULO BENEFITS

- **Real-time analytics** are used to identify trending data from the field and allow deputies to safely respond to changing circumstances.
- **Simplicity** allows IT to seamlessly grow Qumulo clusters and easily use the same file data platform to serve multiple workloads.
- **Cost savings,** driven by Qumulo's low cost per terabyte, enabled IT to deploy triple the capacity at the same budgeted price.

Qumulo makes investigation data and trends information available in real-time to help detectives and deputies accelerate investigations and improve public safety.

Riverside County covers over 7,300 square miles, which makes it the fourth largest county in California. The Riverside County Sheriff's Department has a staff of nearly 4,000 law enforcement professionals and support personnel dedicated to protecting public safety throughout Riverside County. The RCSD is the second largest sheriff's department and third largest police agency in California.

The RCSD's internal IT team manages the law enforcement technology that helps keep all 4,000 employees safe.

"When our deputies stay safe, they can keep the public safe. Our technology helps to ensure their safety and makes a hard job easier."

David Emery,
Sup. Sys. Admin, Riverside County Sheriff's Dept

That technology includes protecting and enabling massive amounts of data from multiple departments, locations, and functions. But with its legacy SAN and NAS systems hitting capacity thresholds, IT needed a new technology to carry out that mission.

The Challenge

IT needed a solution that would also provide a centralized data location for multiple workloads to support day-to-day operations. The workloads included field and 911 dispatch systems, records management, the jail management system, and data from body-worn cameras, investigations, and video security systems. RCSD's existing backup storage solution had gone end-of-life, and its all-flash environment was too expensive to consolidate both production and backup data onto it.

The Investigation

The IT team looked at several replacement options, including Cohesity and SAN solutions, but these couldn't meet the single data platform requirements for production GIS and video surveillance data along with archive and VM backup storage. Data analytics was also an important consideration.

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"We met with Qumulo and a number of other vendors. Data analytics was important to us, and we were surprised that the other solutions didn't provide the depth of Qumulo's analytics. We didn't even know that some of these tools existed. Once we saw the powerful scope of Qumulo's analytics, we wanted those features."

David Emery

When IT got to the general pricing stage, they were even more surprised. Qumulo offered its advanced feature set at a significantly lower price than the other vendors -- and significantly lower than what IT had budgeted for.

Real-Time Analytics

When the RCSD started its search for a more modern data platform, it needed real-time analytics to help provide decision-making insights. For example, the IT team keeps yearly crime trending statistics so the RCSD knows where to apply its resources.

"Accurate and real-time trending information improves decisions, which saves lives."

David Emery

Analytics also enables the IT team to optimize the Qumulo system for the best performance and visibility.

"Moving from no analytics on the legacy systems to rich analytics on Qumulo has been a game-changer. All the events, file copies, moves, and creates were hard-to-impossible to see before. Now that we have that kind of information available to us, we are able to improve our day-to-day operations and better plan for the future."

David Emery

Radical Simplicity and Extreme Scalability

Investigative data contains large, rich media files that do not compress well. As recording resolutions grow, these files get larger and larger. Having the ability to use SSD cache for performance, coupled with lower cost disk for long-term retention, was a requirement for RCSD. Qumulo's software-driven system intelligence and seamless cluster architecture sweeps all this complexity under the covers, delivering the benefit of each storage technology but with simple and automated system management.

Although the RCSD is not yet in the cloud, the cloud will likely be a future option or requirement. Since Qumulo also runs natively in the cloud and can provide the data management between locations, it gives the IT team the flexibility to move workloads securely and efficiently when the time comes.

"Flexibility is key for us. Qumulo gives us the flexibility to grow quickly with little or no impact to the users. This is something we never had with our legacy systems, and it's going to be a huge benefit moving forward."

David Emery

Cost-Effective Performance and Data Management

The RCSD's original SAN replacement plan was to buy another costly SAN. But purchase prices were premium, and future growth was expensive. The IT team had to forecast capacity and growth in yearly increments to create a workable budget.
Qumulo allowed the IT team to shrink its forecasted budgets because of Qumulo's easy scalability and low costs.

Into the Future

Over the next few months, IT will migrate the remaining data from each of its 40 physical locations to the centralized Qumulo file data platform. And in 2021, three major application upgrades that will go live and create even more data. The new dispatch applications used by deputies and 911 dispatchers, records management systems that store data from the field and county jails, and the county jail management system will all leverage Qumulo. The IT team will be able to efficiently send this massive amount of data to the centralized Qumulo without capacity or performance worries.

"Deploying Qumulo was a no-brainer. It solved every issue we had at a lower cost than we expected and delivered features that no one else could provide. Needless to say, it was an easy decision."

David Emery

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