



# LA County Fire Department and Sheriff's Department CASE STUDY



## LA COUNTY FIRE DEPARTMENT AND SHERIFF'S DEPARTMENT

A brilliant example of a collaborative technology project that delivers on all fronts – increased security, performance, reliability, resilience and doing a lot more with less.

The Los Angeles County Fire Department (LACoFD) is one of the largest fire departments in the country, with 4,000 dedicated personnel responsible for fire suppression, emergency medical services, lifeguard operations, airlift rescues and additional operations. At the heart of their massive coordination efforts is the Fire Command and Control Facility (FCCF) Dispatch Center.

Less than 20 minutes up North Eastern Avenue is the Los Angeles County Sheriff's Department (LACoSD), which also serves Los Angeles County, California and its 4,084 square miles and over nine (9) million people. It is the second largest law enforcement agency in the United States and the largest Sheriff's Department in the world, with over 18,000 employees.

### The Problem

The LACoFD and LACoSD were embarking on a technology refresh for their dispatch centers and wrestling with the budget mandate to do more with less capital investment. Fortunately, both happened to be in discovery with ClearCube at this same time too. However, they shared some common goals like increased efficiency, interoperability and planning for future growth, but each had their own specific issues.

ClearCube Technology was able to take the collective requirements and serve each organization's needs. Both organizations standardized on a single Radio over IP solution. Each built-in extra dispatch stations at their physical site to accommodate overflow and redundancy for the other agency. Essentially, each site became a disaster recovery site for the other.

### The Solution Single Solution for Two Problems

The solutions were comprised of ClearCube Quad-monitor A-Series Blade PCs and Quad-monitor Zero Clients. This configuration provided the greatest number of application hosts and amount of display real estate with the smallest footprint possible. Furthermore, in the spirit of doing more with less, the platform selected made easy work of consolidating several systems onto a single blade per dispatch station.

But the most unique part of the solution involves ClearCube Sentral Connection Broker and Element Manager Software. Even though LACoFD and LACoSD shared a common application for radio dispatch, the way they authenticated to their respective networks and operated their dispatch stations were completely different. It just so happens, Sentral is the industry's ONLY connection broker that could solve this problem.



### ClearCube Technology Solution

- 196 A-series Blade PCs
- 149 Quad Zero Clients
- 24 A3100 Chassis

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## User-Based Mapping

On the LACoSD side, each user had specific functionality built into his user profile so that wherever they sat and logged-in to the systems a direct map was established with their own dedicated particular Blade PC and user profile. This is known as “user-based mapping.”

## Device-based mapping

In contrast, the LACoFD had specific stations set up for each type of dispatcher job and/or supervisor level, so they needed a way to segregate functionality depending on the location of the zero client endpoint. ClearCube's Sentral Connection Broker is the only Connection Broker available on the market today that can manage both types of connection brokering requirements, user-based and device-based, simultaneously. Since this shared backbone had to be able to host either agency in case of the need for spillover or a Disaster Recovery situation, the capability this component could uniquely provide was critical to the overall solution's implementation. In addition, this solution offered superb benefits of 99.999% uptime, active over-flow capacity, redundant resource pools, resiliency, hardened failover location in existing locations, enhanced security, and provided a meaningful savings multiplier for taxpayers.

## Saving for Taxpayers

In typical cases, a Disaster Recovery/Business Continuity facility means a live back-up copy of the operational facility with all the duplicate costs involved. In this case, 2 organizations with backup copies would have meant all costs multiplied by four. Rent, equipment, heating/cooling, redundant power, redundant connectivity in, redundant connectivity between, security systems, back-up UPS, backup generators, permits, etc. all times four.

## The Results

### Performance and New Capabilities

In order to respond to new demands and requirements from an ever changing set of customer needs like these, ClearCube designs every solution based on customer requirements. We thrive by addressing the critical needs of the most sophisticated customer base; letting them drive us; keeping us on the edge of delivering capabilities that satisfy not only today's immediate need but the next need and the next and so on.

In this case story, our customers now enjoy real performance boosts:

- Real-time, always on situational awareness
- The latest generation Intel processors that provide the fastest response times
- 99.999% uptime
- Worst case time to recovery (TTR) measured in seconds
- Quieter, less crowded and more worker-friendly workstations increase productivity and job performance

In highly visible work environments where poor performance may result in harm to constituents, an outage is likely far more than an inconvenience. Therefore, we architect reliability, resiliency, redundancy and an infrastructure built for maintaining a constant wellness state with predictive and self-healing active monitors backed by dependable failover mechanisms and fail safes. We are proud to have been part of helping Los Angeles County be prepared for almost anything.

