



# Riverside Unified School District

## Large School District Implements One-to-One Tablet Computer Program

### Requirements

- This large, sprawling school district needs to expand its rapidly growing mobile-device program for students.
- A solution that is easy to manage and doesn't require technical staff to be present at classroom locations for trouble-shooting and Wi-Fi issues.
- A WLAN that is resilient, centrally administered, easy to manage, secure, cost-effective and provides ubiquitous wireless coverage on campuses.

### Results

- The school district gets better resource allocation from the Aerohive APs because of their controller-less architecture and the distributed intelligence and functionality in their APs
- After testing other wireless systems, the school district standardized on Aerohive APs last year and plans to double the number of APs.
- RUSD is able to reduce operational time and money by using HiveManager to provide centralized configuration and monitoring.

The Riverside Unified School District (RUSD) is the 15th largest district in California. It enrolls approximately 44,000 K-12 students in 47 schools and employs about 5,000 people.

A city of more than 300,000 people, Riverside is located 60 miles east of Los Angeles. The District's 47 schools include 30 elementary schools, one special education preschool, six middle schools, five comprehensive high schools, two continuation high schools, two alternative schools and the Riverside Virtual School.

### The Challenge

Like any massive school district, RUSD faces a mobile-device onslaught, especially because the district is implementing a one-to-one program using tablet computers. This tablet program drove the need for a high-performance, scalable, reliable WLAN at the schools.

"We were most swayed by the dynamic airtime scheduling, high-powered radios, mesh and band steering. We get better resource allocation from the Aerohive access points because of the mesh architecture and band steering."

—Jesse Stayton

Assistant Superintendent of Technology Services, RUSD

Unlike many school districts, RUSD is definitely not an all-Apple shop.

"We have everything," said Jesse Stayton, Assistant Superintendent of Technology Services for the district. "We have Android, iOS, Mac OS, and Windows of all flavors — which can be a headache."

At some schools, each student gets a \$199 Lenovo Tablet with a version of the Android OS. Students are able to load electronic textbooks on them and take them home. Asked if the students have issues with losing or breaking the devices (as teenagers have been known to do), or using them for games, Stayton said that hasn't been an issue.

"The kids are taking ownership of the devices," he said. "They're allowed to put their music on there, as well as their personal electronic information. So it becomes a personal device for them, and they tend to take care of them."

Stayton was tasked by his district superintendent to create schools that had ubiquitous wireless, and thus he started his research.

### Considering the Alternatives

When it came time to refresh the wireless, the school district knew it was a large enough project that it would require some research and an RFP. Since they also intended to apply for e-rate funding, they expected a response from most all manufacturers. In the end

they received responses from everyone and considered bids from Aerohive and two competitors.

Stayton said he gained a lot of confidence in Aerohive when he researched the company by reading reports from the most respected analyst firm in the field.

"In looking at the Gartner report, one of the key decision-making factors was the intelligent technology that exists on the APs," Stayton said. "Gartner has Aerohive listed as one of the leaders in that technology. That gave me a lot of confidence that the technology was good and that it would be further developed and that Aerohive is a leader in that area."

Since he first researched Aerohive, Gartner has continued to praise the company, recently positioning it in the "Visionaries" quadrant of the 2012 Magic Quadrant for Wired and Wireless LAN Access Infrastructure.

### Deployment

The school district has around 1,000 Aerohive APs at the moment — the largest purchase so far has been 835 APs, spread through 19 schools.

There were several key reasons Aerohive impressed the district so much. First, the sales team conducted an introductory meeting with RUSD via webinar, establishing scalability and cost of ownership as key criteria. The webinar was followed up with a proof of concept, included installing several evaluation units in Central Middle School.

The Aerohive solution performed incredibly well compared to the other vendors, and it was simpler to deploy and manage. Aerohive's success in the trials, plus the great price point, led the district to select the cutting-edge WLAN company.

"We standardized on Aerohive last year," Stayton said.

Stayton says he hopes going forward to replace all the remaining non-Aerohive APs with Aerohive, although he's not in a position to upgrade the whole district at the moment. "All new purchases are going in Aerohive's direction," he said.

For a reseller, the district is using Aerohive-partner Accuvant.

### Benefits

In addition to Aerohive's easy-to-manage features, reliability, scalability, and price point, "We were most swayed by the dynamic airtime scheduling, high-powered radios, mesh and band steering,"

Stayton said. "We get better resource allocation from the Aerohive access points because of the mesh architecture and band steering."

He added that Aerohive's APs provide greater coverage range due to their high-powered radios.

In addition to ubiquitous wireless on campuses, the district is able to reduce operational time and money by using HiveManager Virtual appliance to provide centralized configuration and monitoring.

The school district will also start using Aerohive's new, patent-pending Bonjour Gateway features (which weren't available when Aerohive was initially deployed). The school district is rolling out a program where students use Apple iPod Touches and iPads in class. Students want to print and do other things with those devices. That's where Bonjour Gateway comes in.

Bonjour Gateway enables management and control of Apple's "Zero-Configuration Networking" technology, called Bonjour, to make services such as AirPrint, AirPlay, and remote display with Apple TV usable across large, multi-subnet networks regardless of the underlying topology. Bonjour Gateway will be delivered as a software upgrade for existing customers and as an out-of-band device compatible with customers' legacy wireless and wired networks.

The Bonjour Gateway leverages the distributed intelligence and service-aware capabilities of Aerohive's Cooperative Control architecture. This approach — and the awareness of the Bonjour protocol — allow Aerohive to control Bonjour on any network, limit unnecessary service updates, and filter unwanted devices from being advertised across subnets.

### Plans for the Future

The district's deployment of roughly 1,000 Aerohive APs is just the beginning. The network will grow and many more schools will get enterprise-class wireless, because RUSD realizes the advantages of an Aerohive implementation.

"If we're fully deployed — the time horizon is the key — I could see that we would double our AP count probably in the next year or two," Stayton said. That would push the number of Aerohive APs in the district to about 2,000, he added.

As to whether he would recommend Aerohive to others, Stayton said: "Yes, and I have actually. I've committed to be a reference, because it's such a good product and we've had such a good relationship with the company. I got a call recently from someone on the East Coast asking me about the product and I had nothing but good things to say."



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