

## CASE STUDY



### OVERVIEW

Alma School District is located in Alma, Arkansas. Serving 3,300 students and 400 in faculty and staff, ASD supports four different campuses K-12 over 101 square miles.

### REQUIREMENTS

- Ubiquitous Wi-Fi coverage and strong signal strength to deliver high data rates to thousands of current clients
- Higher capacity client support per AP
- Ease of use management

### SOLUTION

- Deployed 185 dual-band Ruckus ZoneFlex 710 802.11ac access points
- Deployed ZoneDirector 3000 for ease of management through a single pane of glass
- Increased Wi-Fi coverage, tripled client throughput and improved signal strength and wireless reliability

## ALMA SCHOOL DISTRICT IMPROVES THEIR WIRELESS GPA

Despite increasingly widespread adoption of technologies in virtually every aspect of K-12 education, significant challenges are preventing widespread effective implementation. Wi-Fi is vital to the modernization of school curriculums and long-term success of educators. The next generation classroom of wireless devices allows everyone to thrive and creates a richer learning experience. Students and teachers today are using 2-3 devices and need a network that can support these devices throughout the school day. With Ruckus being the first to market with 802.11ac Wave 2 Wi-Fi, schools are on their way to future-proofing their network.

### CHALLENGE

Located in Alma, Arkansas, Alma School District serves 3,300 students and 400 in faculty and staff. Covering over 101 square miles, ASD supports four different campuses with K-12 schools. Like many school districts, ASD was struggling with their legacy network. With the rapid increase in mobile devices and integrated online learning, their existing network was not performing well. The density and connection just wasn't there and the frustration was mounting. The IT team had to constantly restart the controllers to get them working again making the management process exhausting. Further driving the district to a network upgrade was the challenge of state wide testing online. They needed reliable Wi-Fi that wouldn't interrupt learning.

"We did not have a robust enough connectivity nor in the right places. We survived last year with what we had, but knew we had to do better moving forward," states David Woolly, Superintendent at Alma School District.

As day to day online instruction increases, ASD was struggling with their legacy network and needed an upgrade. ASD was seeking to find a solution that was ease of use, fast, reliable, manageable, future-proof and low cost. With E-Rate playing a critical role in their purchasing decision, they turned to their trusted local reseller Windstream to help guide them in making the right decision.



“We chose Ruckus because we were impressed by the way it works. The ease of use, performance, and the coverage is terrific.”

### DAVID WOOLLY

Superintendent, Alma School District

### SOLUTION

Placing Ruckus against Aerohive and Meraki, Ruckus' superior products outperformed them all. With funding from E-Rate, ASD made the decision to move to Wave 2 802.11ac to future proof their network. ASD deployed 185 Ruckus ZoneFlex 710 802.11ac Wave 2 access points. Moving to gigabit Wi-Fi services delivers much more wireless capacity to support the critical demand for wireless bandwidth needed to access online digital curriculum. The dual-band R710 access point delivers up to 5dB of signal gain offering huge increases in Wi-Fi performance and range. The ZoneFlex R710 maintains 4x4:4 802.11ac functionality with standard 802.3af Power over Ethernet (PoE) and provides concurrent support for multi-user MIMO, adaptive antenna switching, and transmit beamforming to create unique directional antenna patterns per radio. With this deployment, ASD is able to connect 120 devices per access point.

The wireless network is managed by the ZoneDirector 3000 providing a centralized management through a single pane of glass. Thus, having an easy-to-use platform.

The Full deployment across the school district only took one month to accomplish making it ready to use at the beginning of the school year.

“The partnership between Windstream and Ruckus, from our perspective as the customer, was seamless and a flawless process,” states Woolly.

Since the deployment, the IT team has not heard one complaint. Concurrent client use across the network now routinely exceeds 2,000 connected devices. The teachers are able to integrate a media-rich curriculum where over 1500 Chromebooks are being used by students.

“If we are not hearing complaints from our teachers, that's a good sign,” says Woolly.

Since deploying Wave 2, ASD has eliminated the Wi-Fi coverage holes, tripled their bandwidth, increased concurrent client capacities per AP, and manage the network through a single pane of glass.

We chose Ruckus because we were impressed by the way it works. The ease of use, performance, and the coverage is terrific,” concludes Woolly.

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