



CASE STUDY

## **AIRSPAN NETWORKS, INC.**

A LEADING VENDOR OF WIRELESS  
DEVICES TRUSTS VERISIGN TO  
RELIABLY SECURE ITS INNOVATIVE  
WIMAX-BASED PRODUCTS





## CASE STUDY

Since its founding in 1992, Airspan Networks, Inc. has been a leading global vendor of fixed and mobile broadband wireless systems and solutions that deliver voice, high-speed data and multimedia services. Publicly traded on the NASDAQ exchange, Boca Roton, Florida-based Airspan first began manufacturing WiMAX™ equipment in 2004: WiMAX—Worldwide Interoperability for Microwave Access—is a telecommunications technology that provides wireless transmission of data using a variety of modes, from point-to-multipoint links to portable and fully mobile internet access.

Today, the company provides a wide range of WiMAX base stations and customer premise devices, and has more than 500 customers in 100 countries around the world. Airspan recently won the WiMAX World “Best of Show” Award for its mobile WiMAX device; a miniature WiMAX receiver covering all major licensed and unlicensed WiMAX spectrums.

### DEVICE SECURITY AND AUTHENTICATION

Airspan has continually been at the forefront of developing new wireless standards: by building its own in-house expertise with WiMAX, Wi-Fi, and VoIP the company is able to exploit synergies to create innovative products and solutions that closely integrate these technologies in the most beneficial ways for its customers.

Andy Hobbs, director of product management for Airspan, elaborated, “Airspan has always been a leader in bringing real-world solutions to WiMAX networks. A good example of this is the seamless integration of WiMAX and Wi-Fi technologies. We provide a range of wireless broadband products both for direct sale and also for use in the business-to-business setup of infrastructures for other companies.”

An inherent design prerequisite for all wireless transmissions is the need for robust data integrity and security. Hobbs described Airspan’s approach, “We use WiMAX-based technologies and as part of that environment there’s a mandated requirement for the wireless link between the computer and the base station to perform specific security and authentication checks prior to establishing the connection. To achieve this we embed public key infrastructure (PKI) certificates in our user devices, with the corresponding checking components in our authentication servers and base stations.”

Specifications for the WiMAX PKI have been defined by the WiMAX Forum® and collectively constitute the X.509 standard for policies and profiles relating to certificates and their associated keys to identify and authenticate the identity of devices and servers within a WiMAX network.

The fundamental importance of robust data security dictated that the roll-out of PKI components had to be highly reliable and scalable. Hobbs explained, “The procurement of tens of thousands of certificates to be embedded in our products was definitely a concern—each unit has a unique certificate that’s linked to the specific device’s MAC (Media Access Control) address. These certificates must be exactly correct because they are loaded during the manufacturing process, and it is very time consuming and expensive to correct errors afterwards. We knew we needed a highly reliable provider for our WiMAX PKI certificates and one that could scale to meet our anticipated volumes.”

He added, “We also needed a vendor with a proven track record that we could trust because any delays in implementing certificates would postpone the introduction of our products into the already highly competitive and dynamic WiMAX device market.”

### SOLUTION SUMMARY:

Airspan Networks, Inc. complies with standard requirements for security by using VeriSign® WiMAX™ PKI Service to reliably embed hardware-matched certificates into its industry-leading portfolio of WiMAX devices.

#### Industry

- Technology

#### Challenges

- Airspan needed a supplier of WiMAX PKI X.509 certificates to be:
  - A highly reliable provider that could scale to meet its production volume; and
  - A vendor that could meet its need for accuracy in delivering certificates linked to each specific device’s MAC address.

#### Solution

- VeriSign® WiMAX™ PKI Service

#### Results

- VeriSign delivers against its service level agreement (SLA): Airspan receives the certificates it needs, as it requires them, at the right price.
- Accurate information within the certificates enables Airspan to run an uninterrupted production line.





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### RELIABILITY AND SCALABILITY ARE CRITICAL

“Having been in this industry for such a long time and being very experienced in the use of different types of product-embedded PKI certificates, we are very aware of the importance of partnering with highly reliable vendors like VeriSign,” recalled Hobbs. “We’ve worked with VeriSign since 2004 for the provision of other types of PKI certificates and all our interactions have gone smoothly and, actually have been a delight.”

VeriSign’s combination of experience, reliability and scale helped the WiMAX Forum to select it to provide PKI certificates to WiMAX device manufacturers, in addition to being the sole provider for WiMAX Server PKI for service providers. Utilization of the VeriSign® WiMAX PKI Service facilitates a fast, reliable, and efficient means to embed PKI-based digital certificates into any type of WiMAX-compliant subscriber base station or device.

“We know that the VeriSign WiMAX PKI Service is capable of supporting millions of end-user PKI-based WiMAX digital certificates on a global scale; it’s very reassuring to work with VeriSign knowing its proven track record for accurately and reliably delivering certificates whenever needed,” Hobbs stated.

Leveraging industry-leading functionality from VeriSign® Device Certificate Service, which currently supports over 80 million devices worldwide that depend on it to deliver secure access to services, this new service offers a robust security solution for the WiMAX Device PKI. VeriSign WiMAX PKI Service for device manufacturers is a hosted solution that is managed by VeriSign. “We did briefly consider going with a sub-Certification Authority (CA) to deal with some of the processing of certificates in-house, but we decided not to take on the additional administration and overhead; it’s far easier to have VeriSign handle it for us,” commented Hobbs.

### FLAWLESS CERTIFICATE DELIVERY

VeriSign offers the largest and most comprehensive PKI solutions portfolio available in the market today, and has been doing so since 1995. “With VeriSign having consistently demonstrated mastery of delivering PKI certificates to tens of millions of devices worldwide, we were not surprised to find the company had been selected by the WiMAX Forum to be one of the select few providers of WiMAX-based certificates,” reflected Hobbs.

He concluded, “We know from experience that VeriSign will deliver against its service level agreement (SLA) and we’ll get the certificates we need, when we need them, for a reasonable price. We’re also very confident that VeriSign will consistently deliver the right information within the certificates; which is mission-critical to us in order to keep our production line flowing and maintain our position of leadership in the marketplace.”

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Andy Hobbs,  
director of product management,  
Airspar Networks, Inc.

Visit us at [www.Verisign.com](http://www.Verisign.com) for more information.

Opinions expressed here are those of the original speakers, and not necessarily of VeriSign.

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