

Enabling Secure Communication Across Disparate Radio Networks using Consumer Devices

The Blue Cedar-secured app protects local data and ensures secure access to remote enterprise resources without device agents

Challenge

Lockheed Martin wanted to enable those on the front lines of any crisis, combat situation or natural disaster to securely communicate from anywhere via military and government compliant networks such as SIPRNet or NIIPRnet. Before Lockheed Martin started securing apps with Blue Cedar, a key requirement for using these networks was a government-issued device with specific security software. This was a significant hurdle in emergency situations when secure communication environments had to be spun up for use by multiple teams, not all of which would have government-issued devices.

“Blue Cedar supports our goal in providing our customers with an expanded communications capability to enhance interoperability and mission needs.”

The Solution

Lockheed Martin created the Universal Communications Platform[™] (UCP[™]), a flexible and affordable communications solution to keep teams connected. The UCP integrates all types of fixed and mobile radio and data-related systems, transforming any radio system into a fully IP-based network. Blue Cedar was selected because its technology provided Lockheed Martin with key components for the UCP and enabled rapid iteration of the UCP Communicator app, which is used to secure transmit data, audio and video.

Blue Cedar's in-app data at rest security provides Lockheed Martin with FIPS-compliant, NSA Suite B cryptography to secure data in the UCP Communicator app that is stored locally (“data at rest”) on the device as well as controls over that data, such as remote wipe. Blue Cedar's data in transit security enables in-app secure microtunnels from the UCP Communicator app. The microtunnels connect through Blue Cedar's VPN gateway to enroll the app to the UCP without requiring a device agent. “Blue Cedar supports our goal in providing our customers with an expanded



Lockheed Martin is a global security and aerospace company that employs approximately 105,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services.

Industry: Aerospace & Defense

Situation: The company wanted to rapidly enable military intelligence, first responders and commercial personnel working in remote locations to use consumer mobile devices to securely communicate via government and military compliant networks without requiring installation of government-specified software on the devices.

Solution: The Blue Cedar Platform and the Blue Cedar in-app security accelerators

Results:

- Users anywhere can download the Blue Cedar-secured UCP Communicator app from consumer app stores to rapidly join in end-to-end encryptable push-to-talk (PTT) systems
- Blue Cedar in-app secure microtunnels allows app users to authenticate to the Universal Communication Platform[™] without special device software or security codes
- Users can experience PTT radio communications using consumer iOS and Android devices

communications capability to enhance interoperability and mission needs," said Jim Quinn, Business Development Manager at Lockheed Martin. "The app will provide critical security and encryption capabilities to UCP Communicator customers, giving them the latest mobile security and encryption technology available."

Integrating security tech into mobile apps isn't straightforward and introduces delays in the rapid release process of mobile app development. The Blue Cedar app integration platform takes the delay out of the equation by replacing the error-prone process of manually coding in the security libraries for data at rest and data in transit with a reliable automated process. All that a developer needs to do is upload the unsigned UCP Communicator app to the Blue Cedar platform and then, with a single click, security tech is integrated into the app.

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The Benefits

Authenticate Easily. The Blue Cedar-secured UCP Communicator app makes it easy for any user to authenticate into the Universal Communication Platform, which is a requirement for communicating over government and military compliant networks. An authorized user downloads the app from one of the public app stores, registers using the app and is automatically authenticated into the communication platform through in-app secure microtunnels. No security codes or devices agents are needed to complete the authentication.

Contain Expenses. The UCP Communicator app allows teams to expand their secure PTT communications networks without having to purchase additional specialized equipment, such as government-issued mobile devices. This provides teams greater flexibility to grow communications networks as required to meet emerging conditions, such as large area disasters, temporary community safety, or occasions such as large sporting events.

Broaden User Participation. It is now easier for new users such as military intelligence in remote locations, first responders to a disaster site and others including commercial personnel to rapidly join in as ad hoc networks are spun up since government-issued mobile devices are no longer a requirement. The UCP Communicator app, which is published to the Apple and Google public app stores, can be downloaded from anywhere and used on any consumer device.