



Coordinated Multi-organization Communications

The lifeline for Humanitarian and Disaster Relief & Restoration Missions



HADR Missions present unique challenges

Every Humanitarian and Disaster Relief & Restoration (HADR²) mission presents a unique mix of challenges. Establishing secure coordinated multi-organization communications is one of the most urgent and daunting. When disaster strikes, individuals, groups, and nations mobilize to minimize casualties, damages, and suffering, all while providing the assistance needed to enable the affected population to recover. The unpredictability of disaster locale, scope and impact complicates the coordination between local and non-local governmental, nongovernmental, and international organizations and drives the need for rapid and effective synchronization, coordination, and integration of activities in a unique configuration.

The destruction or disabling of communications infrastructure and introduction of disparate systems delay establishment of a unified and coordinated command structure. These impediments and resultant delays put lives and property at increasing risk and extend the timeframe for recovery. Further, the civilian population may be completely cutoff from all normal communications and have a dire need to inform emergency personnel of their location and situation. A rapidly deployable and secure inter-organization communications solution is needed.

Versatility, Compatibility, and Security

Redwall and Tribalco have partnered to deliver a rapidly deployable secure coordinated HADR communication solution. This solution incorporates Tribalco's Signal Fusion Platform (SFP) and Redwall Technologies' Secure Persona®-enabled rugged first responder smartphone.

The SFP provides complete communications support under austere conditions. SFP was designed for continuity of military operations after loss or disruption of all other secure command, control, and communications infrastructure. The portable, scalable SFP system is ready-made for HADR operations. SFP units are compatible with current and legacy radio technologies and can be rapidly deployed to immediately establish local emergency communications services and backhaul lines of communication to/from the affected area.

The Redwall Mobile® (RwM) protected and Secure Persona-enabled *first responder smartphones allow secure, role-based communication between organizations*, while establishing and maintaining separation where needed. This separation includes the *ability to independently operate on unclassified and classified networks*, without compromise. No other smartphones provide this level of security and role separation, making it ideal for HADR missions.

Redwall Mobile® Resilient and Secure Persona®



The Ultimate in End-Use Device Security

Redwall Mobile's® patented N-Persona Technology effectively turns one smartphone or tablet into as many device modes as desired, each with its own apps, data, settings, and security posture. Redwall Mobile® consists of modifications to the Linux kernel and Android operating system plus additional functionality. Redwall Mobile® is compatible with a wide variety of devices and technologies, which sets it apart from other software application-based solutions. Redwall Mobile provides features that even combinations of all competing device security technologies cannot match.

Temporal Isolation in Addition to Cryptographic and Other Methods

Cryptographic and temporal isolation ensure there is no possibility of contamination across modes. It is as if the user is carrying separate devices within a single device. Contrary to containerization where sandboxing or virtualization is employed, these methods cannot provide the level of isolation available in Redwall Mobile®. Those containerized solutions still leave sensitive data in memory, making them highly vulnerable. Dedicated devices like the Blackphone are not the answer, requiring users to carry multiple devices for different roles or different levels of security. Redwall Mobile® consolidates all the features of a military-grade locked-down device with multiple personas in a single device. Our off-the-shelf devices are suitable for BYOD, reducing cost and complexity, all in a single device.

Redwall Mobile® Technology:

- Has been commercially deployed domestically and internationally for more than five years
- Has blocked 100% of all zero-day attacks and malware for five years running
- Is completely configurable, from the number of modes to the availability of device resources
- Has also been deployed on IoT devices and is applicable to most connected devices
- Is delivered on the Motorola Solutions LEX L11 rugged first responder smartphone

For more information contact Redwall Technologies:

John Rosenstengel, CEO – john.rosenstengel@redwall.us, +1.937.477.0424

Kevin Woods, COO – kevin.woods@redwall.us, +1.937.684.0529



Redwall Mobile® consumes minimal system resources and users do not know the device is hardened with military-grade protection.