Oceus Networks
ONmission™ with SensorNET

END-TO-END MOBILE NETWORK PERFORMANCE MANAGEMENT

MOBILE NETWORK MANAGEMENT CONTROL FOR BATTLEFIELD, CRITICAL INFRASTRUCTURE AND EMERGENCY RESPONSE SITUATIONS.

Optimal situational awareness is essential to understanding how information, events and actions will impact mission-critical goals and objectives. Providing secure tactical communications can be difficult on the battlefield, in remote locations and in emergency response situations where infrastructure is sparse or damaged. In these environments, reliable management of both the network infrastructure and end user devices is mandatory.

ONmission™ is a Situational Awareness (SA), Network Management, and Device Management System for mobile and fixed networks that provides Sensor IoT, RF SA, and traditional Network Management controls, plus customizable modules for specific customer requirements.

ONmission was developed to easily integrate with all types of networks including cellular wireless, MANET, SATCOM, WiFi, and wired networks.

The ONmission user interface was developed from the ground up to provide a superior user experience and leverages the latest web technologies.
Key Benefits

Ease of Use: ONmission is designed from the ground up with the user experience in mind. The solution collects, processes and reports network and subscriber metrics for on-the-move mobile networks. ONmission easily integrates with any type of IP network including cellular wireless, MANET, SATCOM, Wi-Fi and wired networks.

SensorNET: Intuitive UI for quick analysis of the network, provides SA that quickly identifies events. Provides a SA Map View with RF propagation and location, actual device signal strengths, battery metrics and other key sensors for device SA.

Network Management: ONmission’s Network Management Platform provides traditional network monitoring of traffic using node grouping, node status and node monitoring (SNMP or PING), alarms, traffic, and multiple network views to ensure a secure and reliable network environment.

Tactical Device Management Platform (TDMP): ONmission’s tactical device management platform remotely reboots, locks, wipes, and pushes files to User Equipment (UE). TDMP is effective for locating, tracking, and transmits sensor information from the UE without interfering with the operation of the UE. UE metrics and data are cached for analysis, extending the operators view to the network edge.

RF Planning: Designing an RF coverage prediction map is a difficult task, even for an experienced RF specialist. ONmission provides a user friendly and intuitive web-based RF Planning component that simplifies the task by enabling customers to generate predictive coverage for individual or multiple cells in minutes with a minimal input.

Flexible Performance Monitoring: ONmission is a flexible E2E system that monitors a mobile networks service performance with an easy to use self-service dashboard for display of alarms, subscribers, statistics, and system health.

Xiphos Management: ONmission easily manages a wide range of Xiphos deployments and provides a unified interface for Xiphos configurations.

ONMISSION R4 FEATURES

SensorNET
- Device Location on Maps /Tracks
- Intuitive UI for quick analysis of the network and SA
- SA Map View with projected RF propagation and location, actual device signal strength, battery levels and other key sensors for device SA
- Artificial Intelligent (AI) algorithms to quickly identify events
- Ingests statistics from all network elements via various protocols for complete network SA
- Inter-link statistics for backhaul SA

Network of Xiphos (NOX) Platform
- Concurrently manage multiple Xiphos solutions
- Interference and jamming detection
- Simplified NOX integration and configuration
- Multiple live map views
- Multiple users’ data display
- Multiple systems data display
- Device statistics
- System information display
- Access to all Xiphos node sub-interfaces
- System location display

Network Manager Platform
- Supports SNMP v1, 2c, 3 nodes
- SNMP Monitoring
- MIB Handling (individual or bulk)
- Node grouping: Hierarchical multi-level node display
- Alarm Manager: Configuration and control of alarm handling and display
- Alarm page with notes per alarm
- Consolidated alarm view of multiple nodes
- Real-time alarm view and filter capability
- Alarm event history
- System location display
- System health display
- Event logging
- Report generation tool
- Report SSO

RF Planning
- RF coverage plotting and analysis
- Web Map Service (WMS) server support
- Map Scale
- Maps Keyhole Markup Language (KML) support

Tactical Device Management Platform
- Over-the-Air (OTA) programming
- Android™ device management
- Add, remove, change, wipe, lock and/or block device(s)
- List device data
- Push files, applications and certificates
- Mobile device provisioning
- Mobile device location query
- MDM "Light" (Reboot, Lock, Set PW, Wipe)
- Sensor collection from devices
- Cursor-on-Target (CoT) support

SNMP based graphing tool
- In-browser network troubleshooting (traceroute and ping)