Automating Communications and Network Management Raises System Performance While Eliminating Manpower

**PRODUCT DESCRIPTION**

Symphony automates communication systems and network functions for unmanned radio room operation. A remote operator uses a familiar, user-friendly browser GUI to activate a communications plan. Symphony takes over and sets up the switch/router connections for voice/data terminals, cryptography, radios, baseband routing, and RF distribution. Equipment modes and frequencies are set. Symphony can be integrated with an Integrated Electronics Management System to report equipment faults or status to a technician’s PDA or computer after automatically placing the backup equipment in service. This achieves unprecedented levels of communications system availability and platform mission performance with fewer personnel. Symphony is operational at-sea on Naval and Coast Guard platforms worldwide.

**APPLICATIONS**

- Shipboard/land-based automated comm systems and networks
- Shore-based comm stations

Successful application depends upon systems integration based upon detailed understanding of the operations, mission, protocols, organization, and technical details of the system.

**FEATURES**

- Modern secure, open-architecture, Windows-based
- XML Messaging scalable from one to hundreds of managed devices
- Graphical circuit view for operators and separate equipment-oriented view for maintainers
- Distributed and redundant architecture for survivability and availability
- Compatible with secure boundary devices for integration with classified systems
- Operation possible from any authorized workstation

**SERVICES AND FUNCTIONS**

- Remote control of communications and network equipment and circuits
- Manages the configuration of communication circuits to execute mission-specific communication plans
- Automatic and rapid fault detection, isolation, and reporting
- Enables robust dependable Emission Control approaches
- Detailed logging and auditing functions

**BENEFITS**

- Elimination of operator errors inherent in manual circuit switching/patching and control
- Nearly instant changes in circuits using pre-defined communication plans to support missions/evolutions
- No need for personnel to understand details of communication circuit setup
- Expandable for offboard communications control with addition of an orderwire
- Significant reduction in platform manpower, training, and experience requirements with dramatically lower costs

As a part of a MarCom Integrated Communications System, Symphony transforms the effectiveness of the entire platform.
Improving Accuracy and Response Times While Saving Manpower

ARCHITECTURAL COMPONENTS

- Communications Service Package (CSP) - software runs on a high-availability COTS server providing mission planning and execution
- Device Control Package (DCP) - software runs on a high-availability COTS server interfacing with equipment under control of Symphony
- Client LAN - Network interfaces with operators and maintainers
- Device Control LAN - Network interfaces with equipment under control of Symphony
- Client access is via Firefox web browser
- Depending on platform and system size servers and LANS may be discrete or combined

SECURITY

- Built in password/authentication using standard Windows password management
- Selective network access uses router configurations, VPNs and access control lists
- Secure boundary devices used for integration of classified networks
- Optional multifactor/biometric authentication using Windows compatible MFA products
- Configurable user role privileges to restrict access to certain functionality
- Information Assurance hardened and methodically assessed

OPERATIONS

- Mission Planning
  - Circuit Management
  - COMPLAN Management
- Operations
  - Circuit Activation
  - Circuit Reconfiguration
  - COMPLAN Activation
  - Validation
  - User Accounts
  - Export and Import
  - System Maintenance
  - EMCON

L-3 Communication Systems-East
1 Federal Street
Camden, NJ 08103 USA
Tel: +1-856-338-6135
Email: iCom@L-3com.com
(Include “Symphony” in the subject line)
www.L-3com.com/iCom

Cleared by DoD/OSR for public release under 12-S-3211 on October 23, 2012.
Data, including specifications, contained within this document are summary in nature and subject to change at any time without notice at L-3 Communications’ discretion.