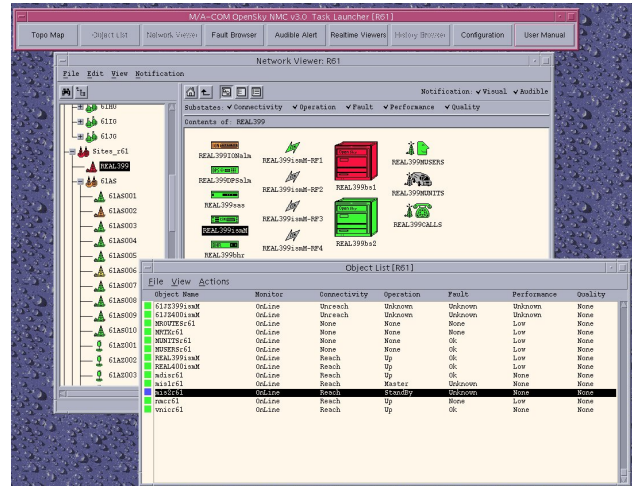


The Regional Network Manager (RNM) is the consolidated point for viewing and monitoring the performance of a land mobile radio regional network defined by a single Network Switching Server. The RNM provides a suite of powerful tools that enable comprehensive reporting and management of network status, fault, performance, and configuration management. A graphical user interface provides ease of use for network operators. Customizable security schemes allow administrators to define operating privileges for each user.



Product Overview

The Regional Network Manager provides users with powerful tools that facilitate effective management of an OpenSky, NetworkFirst, and/or P25^{IP} (Project 25) digital packet-switched network. OpenSky managed objects continuously monitor their performance grade of service. Through active polling of the objects and receipt of autonomous trap information, the RNM keeps the network operators up-to-date with the latest status of the network.

Aided with tools such as the Network Viewer, Object List, Fault Browser, History Browser, and Real-Time Viewer, an RNM user will find the task of network management much more efficient.

Network Viewer

The Network Viewer provides the operator with a graphical, hierarchical view of the managed network. Each object in the network is represented by a color-coded icon in the view: the color changes when the state of the object changes. Different display modes enable the operator to visually scan the list of the managed objects, quickly determine which objects have problems, and identify the types of problems being experienced.

The Network Viewer visually and audibly alerts the operator of performance

degradation, traffic congestion, or bottlenecks in the system. This allows the operator to proactively react to degradation trends by initiating corrective actions.

Object List

The most powerful feature of the Object List is the ability to apply many different filtering and masking criteria to the managed objects so that user attention can be quickly focused on the objects of interest. For example, the operator can easily identify those base stations that are reachable but suffer from a major fault, or radio sites that are experiencing busy call traffic.

Fault Browser

The Fault Browser displays fault and status information sent by the managed objects in time-sorted format. The number of faults displayed can be adjusted by applying filters based on object class, object name, arrival time, or substate severity. The Fault Browser also comes with recommendations for service restoration and fault recovery to assist the operator in handling the incoming alarms.

History Browser

The History Browser provides a historic view of a managed object's operating status in hourly, daily, or weekly format. It allows

the user to identify system bottlenecks and hidden defects, derive trend analysis information on certain specific operating characteristics, cross-compare objects to study network load distribution, and determine an object's mean time between failure.

Real-Time Viewer

The Real-Time Viewer provides a live view of the voice and data system operation of the network being managed, including subscriber equipment. Detailed performance measurements and the operational status of those managed objects are accessible in real time on an as-needed basis.

Managing Multiple Regions

For larger radio networks that incorporate multiple switching regions and thus multiple RNMs, a Centralized Network Manager (CNM) is used to view management data from each region.

For More Information

For more information about this or any other M/A-COM Wireless Systems product, call toll free in the U.S. 1-800-368-3277. From outside the U.S. call 1-434-455-9223 (Asia Pacific), 1-434-455-9229 (Latin America and Middle East), and 1-434-455-9219 (Europe).

OpenSky

M/A-COM's OpenSky Wireless Private Network is a fully interoperable digital trunked communications network for public safety, utility, federal, transit, and industrial markets. OpenSky is a complete end-to-end Voice over Internet Protocol (VoIP) solution and employs packet technology to provide integrated voice and data. The OpenSky radio network is the only private land mobile radio communications system that provides clean integration of data messaging with trunked digital voice on the same RF channel. Integrated voice and data over Time Division Multiple Access (TDMA) allows users to perform multiple communication functions at the same time on one radio. The use of TDMA doubles call capacity by allowing two simultaneous voice calls per 25 kHz channel.

NetworkFirst

Public safety communications in today's world faces unprecedented challenges. More than ever, Homeland Security and Situation Readiness depend heavily on effective communication among federal, state, county, and local agencies. M/A-COM's NetworkFirst answers the call for an emergency communications network that provides local, regional, state, and even nationwide connectivity. NetworkFirst uses cost-effective Internet Protocol (IP) packet switched technologies to provide a fast, cost-effective means of achieving multi-agency interoperability, regardless of radio type, frequency, or mode. NetworkFirst creates the most technologically advanced permanent communications network available in the industry today, providing a technology backbone that is extremely flexible, allowing communications requirements to expand – without a wholesale system changeout.

P25^{IP}

M/A-COM's P25^{IP} (P25 to the power of IP) is the first completely Internet Protocol (IP)-based mobile radio communications system developed for users requiring the secure digital voice and data capabilities of Project 25 (P25). P25^{IP} is part of a portfolio of solutions that M/A-COM offers for wide-area communication systems – each of which is capable of meeting the communications requirements of public safety, public service and first responders. Within the M/A-COM portfolio, the P25^{IP} network provides an excellent fit for those agencies which have lower user densities (few users covering larger geographic areas) but still require feature-rich secure voice and data communications. P25^{IP} is also particularly appropriate for users operating with non-exclusive VHF and UHF frequencies. For federal users, P25^{IP} meets the Congressional and NTIA mandates for the narrowband (12.5 kHz) migration.

General Specifications

Dimensions (H x W x D):

4.6 x 18.0 x 17.6 in.

11.7 x 45.7 x 44.6 cm

Weight (approximate):

34.2 lb (15.5 kg)

Hardware (Minimum Configuration)

System:

Sun Blade™ 150 workstation

650 MHz UltraSPARC® Iii processor

512 KB L2 on-die cache

Two 10/100BaseT Self-Sensing Ethernet Ports

PGX64 Graphics Accelerator card

Memory:

512 MB RAM

Available Disk:

40 GB 7200 rpm EIDE disk drive

Peripherals:

48X CD-ROM drive

Floppy disk drive

Software

System Software:

Sun Solaris™ 8 Operating System, Sun Solstice™ Site Manager™, or SunNet Manager (dependent on domain size)

Environmental

AC Power:

90-132 VAC or 180-264 VAC

47-63 Hz, 5.0 Amps (rms) maximum

DC Output:

250 Watts maximum

Operating Environment:

+41 to +95°F (+5 to +35°C), 40 to 80% relative humidity at +95°F (+35°C), noncondensing

Nonoperating Environment:

-4 to +140°F (-20 to +60°C), 30 to 90% relative humidity at +140°F (+60°C), noncondensing

Acoustic Noise:

4.5 bels/5.0 bels (idling/operating)

Regulatory Data

Meets or exceeds the following specifications:

Safety:

UL/CSA-60950, EN60950, IEC950, CB Scheme with all country deviations, IEC825-1, 2 and CFR21 part 1040

Ergonomics:

EK1-ITB-2000

RFI/EMC:

EN55022/CISPR22 Class B, FCC CFR47 Part 15 Class B, EN61000-3-2, EN61000-3-3

Immunity:

EN55024

X-ray:

DHHS 21 Subchapter J, PTB German X-ray Decree

Regulatory Markings:

CE, FCC, ICES-003, C-tick, VCCI, GOST-R, BSMI, EK, UL/cUL, TUV-GS, E-star

Power Management:

Energy Star compliant

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ECR-7052B

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07/06 Printed in U.S.A.