

# RADview-EMS

Carrier-Class Element Management System

Severity	Time	Type	Source	Instance	Description	Cleared	Acked	Notes
Major	2011-02-07 13:51:01	CHANNELOT-101	172.17.203.135	Cmmmb Modulator	CMMMB Modulator is unlocked_EXCEPTION_ON	CLR		
Minor	2011-02-07 13:51:06	CHANNELOT-101	172.17.203.135	Synchronization	ToD signal is not present_EXCEPTION_ON	CLR		
Normal	2011-02-07 13:51:07	CHANNELOT-101	172.17.203.135	Synchronization	GPS signal unlocked_exception_OFF			
Normal	2011-02-07 13:51:09	CHANNELOT-101	172.17.203.135	Synchronization	ToD signal not present_exception_OFF			
Normal	2011-02-07 13:51:10	CHANNELOT-101	172.17.203.135	Synchronization	SFN unlocked_exception_OFF			
Normal	2011-02-07 13:51:10	CHANNELOT-101	172.17.203.135	Data Inputs	Input stream unlocked_exception_OFF			
Normal	2011-02-07 13:51:10	CHANNELOT-101	172.17.203.135	Cmmmb Modulator	CMMMB Modulator unlocked_exception_OFF			
Normal	2011-02-07 13:51:37	CHANNELOT-101	172.17.203.135	Rf Output	Output muted_exception_OFF			
Critical	2011-02-07 13:52:53	CHANNELOT-101	172.17.203.116	System	Node Disconnected			
Warning	2011-02-07 13:53:58	CHANNELOT-101	172.17.203.136	System	Cold Start			

Multi-platform  
carrier-class element  
management system



- Integrated and consistent management of Channelot, RAD, RADWIN and other RAD Group companies' products
- Highly scalable for growing networks, with smart configuration and provisioning tools for easy network expansion
- Advanced FCAPS functionality
- Interoperable with leading OSS programs, and integrates with third-party NMS and umbrella system
- Client/server architecture for flexible management deployment

## CHANNELOT



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# RADview-EMS

## Carrier-Class Element Management System

### OVERVIEW

RADview-EMS is an Element Management System (EMS) for all Channelot, RAD, RADWIN and other RAD Group company products. By providing out-of-the-box, integrated and consistent management of the entire solution from the RAD Group, it greatly eases integration and provisioning of the complete end-to-end network.

RADview-EMS is a Java-based, carrier-class element management system for deployment in Windows environments, featuring an embedded Oracle/Informix database.

RADview-EMS conforms to the ITU-T Telecommunication Management Network (TMN) model and provides end-to-end visibility and standards-based interoperability. The system is scalable, providing solutions for small installations as well as large-scale networks.

### DISTRIBUTED SYSTEM ARCHITECTURE

RADview-EMS is based on a distributed client-server architecture, which optimizes the use of network resources (see *Figure 1*). Load-sharing among master and slave servers maximizes use of infrastructure and enables flexible distribution of management tasks, transparent to the user.

### OSS INTEGRATION

As a modular management system, RADview-EMS is equipped with a number of standard northbound interfaces for easy integration with OSS and umbrella systems. In addition to featuring a plug-in for connecting to IBM Tivoli's Netcool®/OMNIbus™ fault management program, the system allows seamless communication with network-wide platforms for tasks such as fault and performance management.

### BUSINESS CONTINUITY

RADview-EMS provides the following scalable solutions for disaster recovery to assure high system availability:

- Cold standby – This solution is the most simple and cost-effective. Data is periodically backed up by the master NMS station via the RADview-EMS Backup/Restore function, and transferred to the slave NMS station without affecting service.
- Hot standby local clustering – This solution provides single-site RADview-EMS recovery. An active and standby RADview-EMS servers are each connected to two storage devices.
- Hot standby wide-area clustering – The highest protection level through two clusters at two separate locations support data replication via VERITAS Volume Replicator™. If there is an outage at the primary site, all services are automatically moved to the backup site.

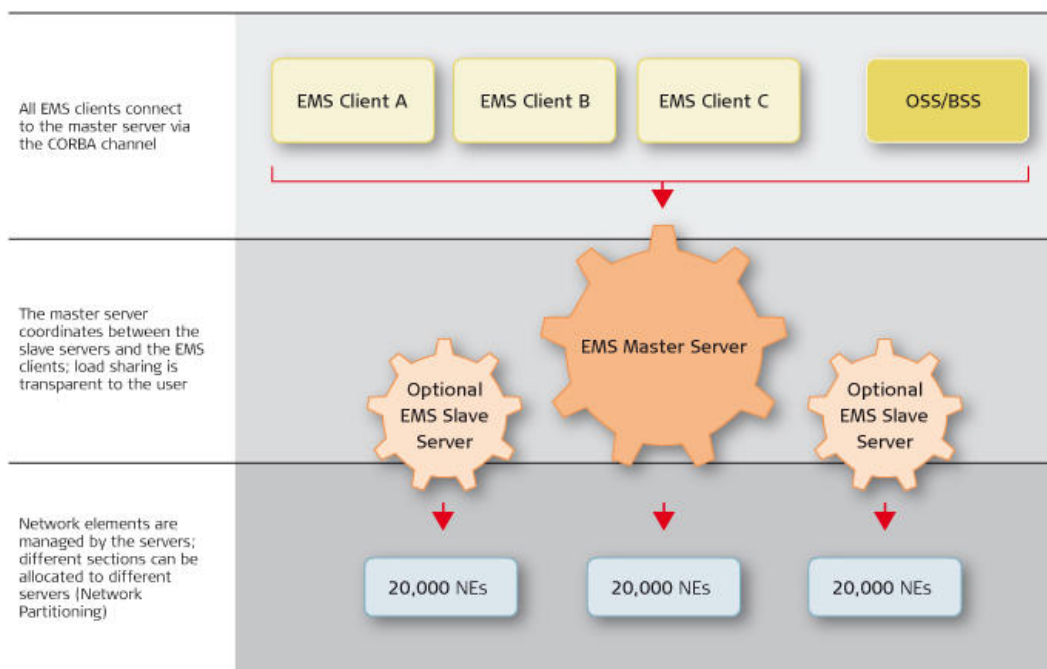


Figure 1. Distributed System Architecture

**FAULT MANAGEMENT**

RADview-EMS supports advanced fault detection, displaying a clear analysis of the probable causes of faults and suggested corrective measures. It also allows the distribution of alarm messages to other managers in the network.

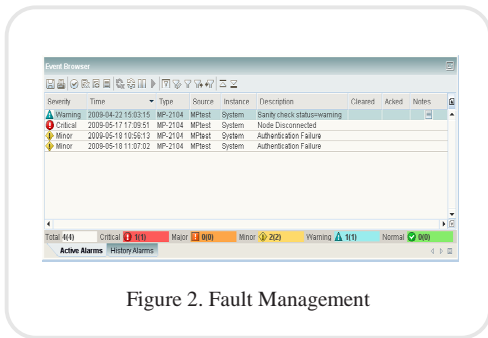


Figure 2. Fault Management

**CONFIGURATION MANAGEMENT**

New software and configurations can be distributed to devices across the network. The system tracks version changes and keeps a software configuration history for backup and recovery. Easy management and provisioning is provided by a user-friendly point-and-click web-browser based GUI.

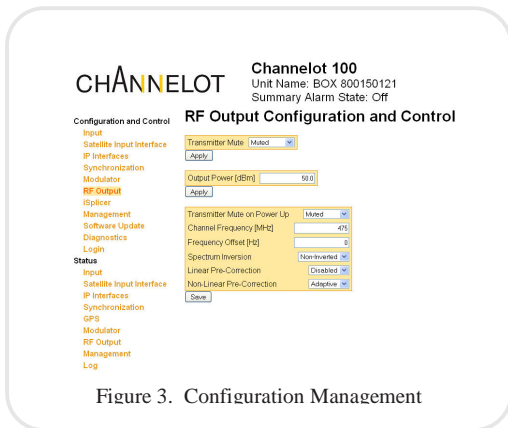


Figure 3. Configuration Management

**ADMINISTRATION**

The system manages individual and group user accounts and passwords, generating network usage reports to monitor user activities.

**PERFORMANCE MANAGEMENT**

Key performance metrics are collected by each network element and can be efficiently retrieved across the network. They can then be exported in file format to OSS or third-party management systems.

**SECURITY MANAGEMENT**

An unlimited number of security profiles and groups can be created with the security management console. Its advanced functions include tracking of user activities in the network and designating tailored security access rights.

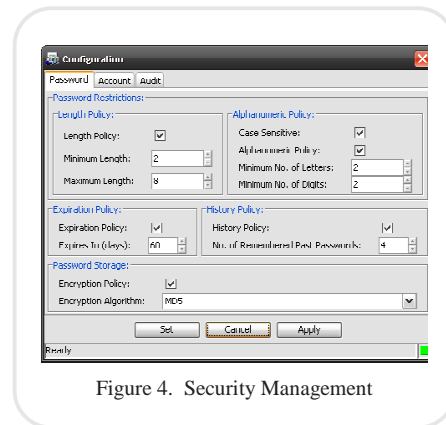


Figure 4. Security Management

Table 1: Supported RAD Products

Supported Products
Channelot 100, Channelot 101, Channelot 105
ACE-52, ACE-201, ACE-3100, ACE-3105, ACE-3200, ACE-3205, ACE-3220, ACE-3400, ACE-3402, ACE-3600,
Airmux, APD Family, APS Family,
ASMi-52, ASMi-52L, ASMi-54,
DXC-4, DXC-8R, DXC-10A, DXC-30, DXC-100,
Egate-20, Egate-100,
ETX-102, ETX-201, ETX-201A, ETX-202, ETX-202A,
FCD-155, FCD-155E, FCD-E1/T1L, FCD-E1/T1LC, FCD-E1A,
FCD-E1E, FCD-IP, FCD-IPD, FCD-IPM,
FOMi-E3/T3, FPS Family, IMXi-4, IPmux-2L, KM-2100/4,
LA-110, LA-210, LRS-102, LRS-16, LRS-24,
MP-104, MP-2100, MP-2104, MP-4100,
OP-25, OP-34, OP-45, OP-106/108, OP-1551, OP-1553,
RIC-155, RIC-155GE, RIC-622GE,
RICi-E1/T1, RICi-E3/T3, RICi-4E1/4T1, RICi-8E1/8T1, RICi-8E1L,
RICi-16, RICi-155GE, RICi-622GE, RICi-SE,
SPH, SPS Family,
Vmux-405, Vmux-425

# RADview-EMS

## Carrier-Class Element Management System

### Specifications

#### PC-BASED CLIENT OR SERVER

##### Minimum Hardware Requirements

IBM-PC compatible computer based on Pentium-4

3.0GHz or higher

2 GB RAM or more

Hard drive with at least 6 GB of free disk space

NTFS-formatted partition

DVD drive

17-inch color monitor, supporting a resolution of  
1024 × 768 or higher

*Note: The above requirements apply to single-user installations managing up to 200 network elements. For larger networks, please consult Channelot.*

##### Minimum Software Requirements

Microsoft Windows XP SP2 or later, or Windows 2003 SP2 or later, with Terminal services not enabled

Windows default input language set to English

Windows display font size set to normal (96 dpi)

Services: SNMP, SNMP Trap

### Ordering Information

#### RADview-EMS /&/?

##### Legend

& Operating system:

PC PC-based system

? Platform

PACK1 RADview-EMS standalone

##### RVP

RADview Points voucher, for use at the RAD Value Point website for activating licenses, managing licenses, or ordering more licenses.

*Note: For licensing, each RAD device is assigned an Equivalent Node Weight (ENW) according to its complexity. Use the RADview License Calculator to determine the number of license points required for your installation.*



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# CHANNELOT

RAD  
24 Raoul Wallenberg Street  
Tel Aviv 69719, Israel  
Tel. 972-3-6458181  
Fax 972-3-6498250, 6474436  
E-mail [market@rad.com](mailto:market@rad.com)  
[www.rad.com](http://www.rad.com)

Channelot Ltd.  
24 Raoul Wallenberg Street  
Tel Aviv 69719, Israel  
Tel. 972-3-7698508  
Fax 972-3-7698510  
E-mail [sales@channelot.com](mailto:sales@channelot.com)  
[www.channelot.com](http://www.channelot.com)