



DRAGONVIEW

NETWORK AND ELEMENT MANAGEMENT SYSTEM

INTELLIGENT NETWORK AND ELEMENT MANAGEMENT FOR SIMPLE OPERATION, ADMINISTRATION, MAINTENANCE, PROVISIONING (OAM&P) AND RAPID DEPLOYMENT OF DRAGONWAVE MICROWAVE SOLUTIONS

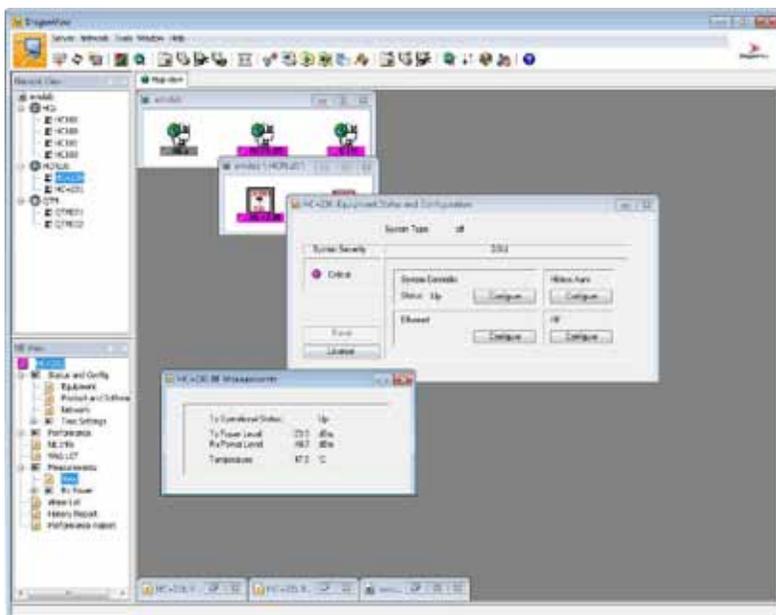
DragonView provides a comprehensive carrier-class management solution for both the Network and the Element System levels (NMS/EMS). Deployed in the service provider's Network Operation Center, DragonView offers a broad set of tools that simplify the OAM&P of DragonWave's solutions, in addition to providing extensive fault management, performance monitoring, and security management capabilities.

The DragonView software management suite has been developed according to the layered architecture specified in the Telecommunications Management Network (TMN) framework for monitoring and controlling communications networks. Its advanced architecture is based on an innovative and scalable application server, supported by a user-friendly, Java-based Graphical User Interface (GUI) that furnishes a real-time representation of the network's topology, connectivity, and operational status. Integration into any 3rd party OSS is made simple with standard real-time and batch northbound interfaces.

This highly flexible, scalable, standards based solution enables operators to respond quickly to change requirements, thereby reducing time-to-service, and delivering significant operational cost savings.

SOLUTION HIGHLIGHTS

- Intuitive point-and-click Graphical User Interface
- Comprehensive fault, configuration, administration, performance and security management
- Full set of FCAPS functionality for managed elements
- Connectivity to Network Elements, supervision of connection and working status
- Fault Error Reporting functionality, trap loss recovery, summarization of alarm state
- Performance monitoring, collection, measurement and graphical reporting capability
- Inventory data collection and reporting
- Web access, via HTTP server
- Comprehensive reporting and logging functionality
- Advanced user/sub-domain management
- Standard real time and batch northbound interfaces available for integration into any 3rd party OSS system
- Highly scalable architecture
- E2E Ethernet services provisioning and monitoring management



FAULT MANAGEMENT

- Alarms and events collection with graphical representation and audio notification
- Logging and advanced filtering capabilities
- Alarm handling - Logging of network operator comments and alarm assignment
- Cause analysis and fault correlation functionality
- Color-based alarm severity visual identification
- Scheduled monitoring of hot standby radios
- Every alarm presents the following information:
 - Colour-coded alarm severity
 - NE name
 - Severity
 - Probable cause
 - Alarm type
 - Specific problem
 - Acknowledged by
 - Acknowledgement date
 - Acknowledgement note
 - Time stamp

SERVICE PROVISIONING MANAGEMENT

- End-to-end connections by means of a single point-and-click operation
- Interactive configuration templates to reduce overall provisioning time and time to service
- Performance management compliant to the ITU-T G.821/G.826 and to the ETSI EN 301 129 standard specifications
- Per-port statistics and summary information
- Real-time performance monitoring and statistics
- Historical performance monitoring data maintained in persistent storage
- User defined performance graphing and poll cycles

SECURITY MANAGEMENT

- Standard access login security (user name and password)
- User classes and groups
- User-definable privileges
- Domain management
- External users management with Active Directory
- Customer identity management with Active Directory
- Operator log

SUPPORTED NETWORK DEVICES

SUPPORTED DRAGONWAVE NETWORK ELEMENTS

- Horizon Compact, Horizon Compact+, Horizon Quantum,
- Harmony Radio, Harmony Hub 800, Harmony First Mile 200

NETWORK INTERFACES

NORTHBOUND INTERFACES

- SNMP Agent
- TMF CORBA Agent
- XML file export
- Flat files export (ex. ASCII)

SOUTHBOUND INTERFACES

- TNMP Manager
- OSI Manager
- SNMP Manager
- TL1 Manager

E2E MWR ETHERNET MANAGEMENT

- Connection provisioning
- QoS Monitoring and SLA
- Connection monitoring

DragonView Server (Minimum Hardware Requirements)	
Operating System	Windows 2008 Server (64 Bit)
Processor	2 x CPU Xeon 2.66GHz (E55xx family)
Memory (RAM)	4 GB RAM (DDR2/3)
Hard Disk	300 GB
Network Interface	1 Gbps
Miscellaneous	CD/DVD drive

DragonView Client (Minimum Hardware Requirements)	
Operating System	Microsoft Windows XP/Vista
Processor	Core 2 Duo 1.86 GHz
Memory (RAM)	2 GB RAM (DDR2)
Hard Disk	40 GB free disk space (minimum)
Network Interface	1 Gigabit Per Second (Gbps)
Minimum Screen Resolution	1280x1024
Miscellaneous	CD/DVD Drive

Other Technical Data	
Architecture	Client/Server
Server Configuration	Single or Multi
Client/Server Type	x86 platform
Max # of clients in single server	20
Max # of clients in multi server	30
Max # of NE in single server	2000
Max # of NE in multi server	10000
Database	MS SQL Server 2008 SE