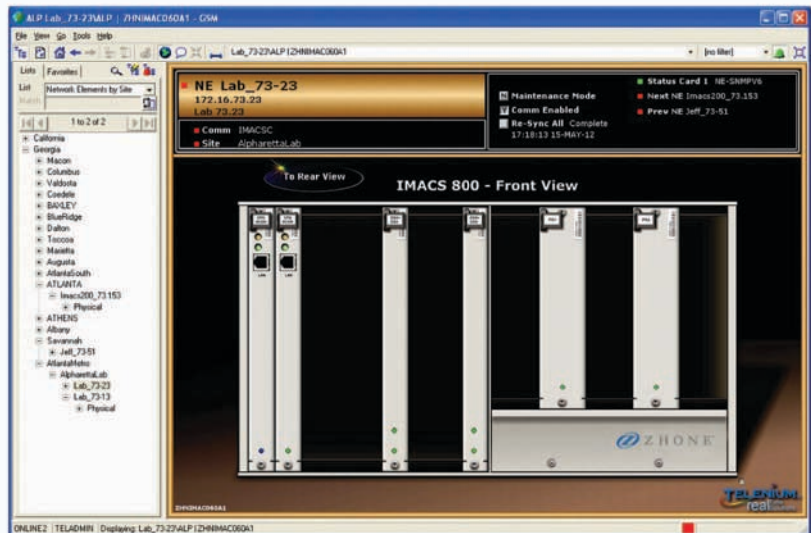


Telenium Network Manager System for Zhone's IMACS products.

- ✓ *Alarm monitoring and Alarm Chrono*
- ✓ *Fault management*
- ✓ *Point and click provisioning*
- ✓ *Graphical connections display*
- ✓ *Remote software downloads and database backups*
- ✓ *Alternate mapping table management and network restoration*
- ✓ *Circuit level testing and maintenance commands*



Zhone has partnered with MegaSys™ Computer Technologies to bring our customers the Telenium™ Network Management System for the IMACS family of products. Telenium™ element management system (EMS) for Zhone's IMACS family of products is an advanced network management software package designed to provide IMACS customers with the tools needed to keep IMACS networks performing at optimal levels.

Telenium provides IMACS users with a fast and feature rich network management software. Telenium allows an IMACS network to reach its full potential by providing unsurpassed processing power, central network management capabilities, scalability and database growth opportunities.

IMACS products continues to remain the most flexible, robust, and scalable integrated access solution in the telecommunications market today. The addition of Telenium further demonstrates Zhone's commitment to deliver on a promise - to provide the most robust set of voice and data access services and applications on one manageable platform - IMACS.

Fault Management

Alarm Chrono - Real-time, active and color-coded display of current alarms and events across all sites and nodes with support for individual event acknowledgment and comments. Alarm History - Searchable history of alarms across all sites and nodes. Alarm Counter - Graphical presentation of alarm history with charts. Alarm Processing - Popup display with real-time alarm events including full details such as node name, slot, card event, operator, and event acknowledgments/status info.

Configuration Management

Bulk Import/Export - Import & Export from the Telenium database to a spreadsheet for backup and bulk modification of data. Reach-Thru - Diagnostic tool to trace communications faults to remote nodes. Simple System Turn-Up - Create and use node models to quickly configure a collection of similarly equipped remote sites. Email/Escalation Manager - Create an escalation procedure for each alarm events a per node and per event basis.

Accounting Management

Generate reports to obtain the network information that you need with applications such as Automated Reporting and Real-Time Inventory Reports.

Performance Monitoring

Analyze and interpret network performance data with features such as Real Time Graphical Trends, Network Element Performance Charting, Quality of Service Monitoring, Circuit Traversal, Graphical Screen Manager, Graphical Editor and Port Traffic Layout.

Security Management

Control access to your IMACS systems and database information with Multiple Levels of Access, Logon Attempt Recorder and Local LDAP Authentication.

Service Management

Utilize a real-time accurate view of the circuit path through your network allowing you to optimize network routing to reduce costs.

Technical Specifications

Interfaces

- Client Platform:
 - Windows XP with SP2 or SP3
 - Windows 7 (32 and 64 bit supported)
 - Microsoft .NET Framework 3.5 SP1
 - Internet Explorer 9
 - JRE 1.7
- Optional Components
 - Geographical Mapping Functionality
 - Video 1280x1024 65,536 Colors
 - Microsoft MapPoint
 - ESRI
 - Microsoft Access 2007 (or later) for Automated Reporting
 - Microsoft Excel 2007 (or later) for bulk import/export

Management

- Basic package:
 - Read only monitoring, no node configuration or node backup. Includes real-time alarm events, history and acknowledgement. Real-time logging and circuit status. SSH/Telnet pass-thru login via client GUI.
- Silver package
 - All features of the "Basic" package.
 - Basic provisioning including circuit naming support, configuration backups, node firmware upload. Syslog logging support builtin
- Gold Package
 - All features of the "Silver" package.
 - Point and click provisioning, Alternate Map Table support, Graphical circuit status and display, Circuit testing and maintenance

Operating Requirements

- Server Platform Software Requirements:
 - CentOS/Red Hat Enterprise Linux 6.3 64-bit (kernel 2.6.x)
- Server Platform Hardware Requirements:
 - Recommended (For very large deployments)
 - 2 x 2.66GHz AMD Opteron 4180 processors (6 CPU)
 - 32GB DDR3 1333MHz ECC memory (8 x 4GB)
 - 8 x 1TB SATA II 7200RPM hard drives (RAID 5 with 1 hot spare)
- Minimum Hardware Requirements
 - Dual Core 64-bit CPU
 - 4GB Ram
 - 200GB HD Space

Ordering Information

PRM-700B IMACS, TELENium BASIC
 PRM-700S IMACS, TELENium SILVER
 PRM-700G IMACS, TELENium GOLD
 PRM-700B2S IMACS, TELENium BASIC TO SILVER
 PRM-700B2G IMACS, TELENium BASIC TO GOLD
 PRM-700S2G IMACS, TELENium SILVER TO GOLD



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