The Ribbon Communications Insight Element Management System (Insight EMS) provides a centralized, cloud-optimized solution for the efficient management of every Ribbon element in a customer’s network. Insight EMS provides a complete FCAPS (Fault, Configuration, Accounting, Performance, and Security) solution with a robust portfolio of management and provisioning tools that, in conjunction with Ribbon DataStream Integrator (DSI), allow service providers and enterprises to easily perform FCAPS management of their network. Insight EMS leverages OpenStack as an opensource software platform to offer an agile and scalable cloud network solution.

Deployed in the world’s largest networks for more than a decade, Insight EMS offers a mature, feature-rich management system providing a simple-to-use, graphical user interface and accelerated provisioning and management for the Ribbon portfolio.

**Key Benefits**
- Delivers efficient centralized management of the Ribbon portfolio
- Intuitive and secure navigation via element grouping and role-based access control with audit trails
- Centralized fault and performance monitoring and diagnostics for rapid identification and resolution of network and service outages
- High-scale, flexible deployment options, including high availability (HA) and geo-redundant configurations
- Open standard interfaces enable integration with existing management processes and systems with full OpenStack integration for cloud deployments

**System Capabilities**
- Single EMS to provision, monitor, and manage the Ribbon portfolio with full network inventory
- Highly scalable and flexible client-server architecture supporting thousands of network elements
- Customizable dashboards
- Cloud-optimized deployment using common orchestration to easily service chain session management and policy control
- Granular user privilege levels with audit trails
- Seamless integration with device-specific management tools and support of flow-through provisioning
- Network Wide Licensing (NWL) support

**Fault Management**
- Utilizes IBM® Tivoli® Netcool®/OMNibus event management engine
- Reliable alarm retrieval
- Customizable real-time summary graphs and event lists
- Alarm rules and filtering, alarm forwarding
- Historical logs
- Call history and call trace for deep diagnostics
- Alarm re-synchronization

**Configuration Management**
- Intuitive navigation to managed elements, with flexible grouping for ease of access
- Automated discovery and update of element configurations
- Search and filter functions for rapid access to elements
- Element and network configuration using graphical client or Application Program Interfaces (APIs)
- Online help
- Session Border Control (SBC) and Policy Server (PSX) microservices and cluster management
Virtualization
• Deployable in any virtualized, cloud, or hardware platform using industry-standard server
• Standard-based, advanced features and functionality regardless of platform
• By using common management and code base, Ribbon has provided a low-cost migration path for existing customers as they evolve their networks to virtualization and cloud architectures

Performance Management
• Reliable and scalable data collection from Ribbon elements
• Real-time and historical reporting
• Report export: HTML, CSV
• User-defined collection profiles
• User-defined threshold alarms

Security
• Client access control via onboard or RADIUS authentication
• User profiles provide flexible role-based access control
• Hierarchical groups enable flexible user segmentation
• System and user activity monitoring
• Secure EMS to client communication using HTTPS
• Secure EMS to device communication using HTTPS, SSL, and SSH
• Supports a Security Assertion Markup Language (SAML) interface to a customer’s Identity provider(IdP) for Multi-Factor Authentication/Single Sign-On

Open Interfaces
• Northbound SOAP interface
• Northbound and Southbound SNMPv3 Support
• SNMP trap forwarding for seamless integration with standard network fault management applications
• Performance data exportable to capacity planning and reporting applications
• SOAP/XML interface for provisioning integration
• Command line interface
• SOAP/XML interface to enable Lawful Intercept

Ribbon Elements Supported
• Session Border Controller Software Edition (SBC SWe)
• Session Border Controller 5100 Series
• Session Border Controller 5200 Series
• Session Border Controller 7000
• Session Border Controller SWe Lite
• Session Border Controller 1000
• Session Border Controller 2000
• SIP Load Balancer
• Centralized Policy and Routing Server (PSX), and PSX Software Edition (PSX SWe)
• DataStream Integrator (DSI)
• SGX 4000 Universal Signaling Gateway
• GSX 9000 High Density Media Gateway

System Requirements
• Diameter Signaling Controller Software Edition (DSC SWe)
• Diameter Signaling Controller 8000
• Multimedia Resource Function Processor

Deployment Options
• Direct software download for rapid deployment
• Standalone system available
• High availability provides maximum system uptime
• Geo-redundant location of systems for site disaster recovery

Minimum Resource Requirements
• EMS Standalone for RHV / KVM / VMware
  • vCPU - 16
  • vMemory - 64GB
  • vHDD – 2x450GB
  • vNIC - 2
• EMS Standalone for Cloud
  • vCPU - 16
  • vMemory - 64GB
  • Cinder Volume - 450GB
  • vNIC - 2

Note: Please refer to Ribbon product documentation for resource requirements for specific configurations.

Operating System
• Red Hat Enterprise Linux Version 7.8 (Guest OS)
• OpenStack Train support

Client Requirements
• Intel Dual Core CPU @ 2.4GHz or higher
• 2GB RAM or higher
• Windows, Windows XP, Vista
• Microsoft Internet Explorer
• Mozilla Firefox
• Google Chrome
About Ribbon
Ribbon Communications (Nasdaq: RBBN) delivers communications software, IP and optical networking solutions to service providers, enterprises and critical infrastructure sectors globally. We engage deeply with our customers, helping them modernize their networks for improved competitive positioning and business outcomes in today’s smart, always-on and data-hungry world. Our innovative, end-to-end solutions portfolio delivers unparalleled scale, performance, and agility, including core to edge software-centric solutions, cloud-native offers, leading-edge security and analytics tools, along with IP and optical networking solutions for 5G. We maintain a keen focus on our commitments to Environmental, Social and Governance (ESG) matters, offering an annual Sustainability Report to our stakeholders. To learn more about Ribbon, please visit rbbn.com.

Contact Us
We are here to help. Let us know if you are interested in a quote or if you have any questions.