The Ribbon Communications Insight Element Management System



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 supports Ribbon Licensing Server for network wide licensing support. 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
- Integrated data feed of VNF key performance indicators (KPIs) for analytics and service orchestration
- 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
- Data agent function for tracking and forwarding of VNF KPIs for integrated analytics
- 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
- Cloud-optimized data warehouse access for centralized storage of logs, CDRs, and analytics
- Networking 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

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
- Access to the Ribbon cloud-based centralized data warehouse for logs and Call Detail Records (CDRs)

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

Open Interfaces

- Northbound SOAP interface
- 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
- Series Session Border Controller 5200 Series
- Session Border Controller 7000
- Session Border Controller 1000
- Session Border Controller 2000

- 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
- Telephony Application Server (ASX)
- Access Directory Server (ADS)
- WebRTC Services Solution
- Diameter Signaling Controller Software Edition (DSC SWe)
- Diameter Signaling Controller 8000

System Requirements

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

Hardware Specifications

- EMS Standalone
- vCPU 6
- vMemory 32GB
- vHDD 4x450GB
- vHBA 4xGBE
- EMS High Availability
 - vCPU 6
 - vMemory 32GB
 - vHDD 4x450GB
 - vHBA 4xGBE
 - Fiber Channel

Note: Please contact your sales or channel contact to get the exact specifications.

External Storage System

• SAN with a shared LUN for HA configuration

Operating System

- Red Hat Enterprise Linux
- OpenStack Mitaka and Newton support

Client Requirements

- Intel Dual Core CPU @ 2.4GHz or higher
- 2GB RAM or higher
- Windows, Window XP, Vista
- Microsoft Internet Explorer
- Mozilla Firefox



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 <u>rbbn.com</u>.

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



Voice Unified Communications Business Productivity Solutions Midmarket Solution Provider

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