Ribbon Application Management Platform (RAMP) provides a centralized, cloud-native solution for the efficient management of Ribbon products in a customer's network. RAMP provides a complete Fault, Configuration, Accounting, Performance, and Security solution with a robust portfolio of management and provisioning tools. With RAMP service providers and enterprises can quickly configure systems, identify and remediate issues, deliver improved customer experience, and do so at reduced operational costs.

RAMP manages Ribbon network elements regardless of the deployment environment for a specific product. RAMP itself is designed using cloud native principles and can be deployed in multiple data center or cloud environments in standalone or geographic redundant configurations.

**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
- Scaleable, flexible deployment options, including geographic redundant configurations
- Open standard interfaces enable integration with existing management processes and systems
- Deployable in multiple private or public clouds using virtual or container environments
- Manage Ribbon portfolio across multiple physical, virtual, and cloud native deployments

**System Capabilities**

- Single solution 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
- Common orchestration for instantiation of session management and policy control network functions
- Granular user privilege levels with audit trails
- Seamless integration with device-specific management tools and support of flow-through provisioning
- Support for Network Wide Domain Locked (NWDL), Multiyear Domain Locked (MDL), and True Forward Subscription licensing models

**Fault Management**

- Reliable alarm retrieval
- Customizable real-time summary graphs and event lists
- Alarm rules & filtering and alarm forwarding
- Log management
- 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 user interface or Application Programming Interfaces (APIs)
- Online help
- Session Border Control (SBC) and Policy Server (PSX) cluster management

**Data Center or Cloud Deployments**

- Deployable in multiple virtualized or cloud-native (container) environments
Performance Management
• Reliable and scalable data collection from Ribbon elements
• Real-time and historical reporting
• Report export in HTML or CSV format
• User-defined collection profiles and threshold alarms

Security
• Client access control via onboard and LDAP authentication
• User profiles for flexible role-based access control
• Hierarchical groups enable flexible user segmentation
• System and user activity monitoring
• Secure RAMP to client communication using HTTPS and REST API
• Secure RAMP to device communication using HTTPS, SSL, SFTP, SSH and REST API
• Support for Security Assertion Markup Language (SAML) interface(s) to a customer’s Identity provider(IdP) for Multi-Factor Authentication/Single Sign-On
• System is FIPS140-3 compliant

Open Interfaces
• Northbound REST API 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
• REST API interface for provisioning integration
• Command line interface

Ribbon Network Elements Supported
• Session Border Controller Cloud Native Edition (SBC CNe)
• Session Border Controller Software Edition (SBC SWe)
• Session Border Controller 5110, 5210 and 5400
• Session Border Controller 7000
• Session Border Controller Software Edition Edge (SBC SWe Edge)
• Session Border Controller 1000
• Session Border Controller 2000
• Edge 8000
• SIP Load Balancer
• Centralized Policy and Routing Server Software Edition (PSX SWe)
• Centralized Policy and Routing Cloud Native Edition (PSX CNe)
• Multimedia Resource Function Processor (MRFP)
• GSX 9000 gateway
• Virtual SGX 4000 signaling gateway
• DataStream Integrator (DSI)
• Diameter Signaling Controller (DSC) Software Edition (SWe) and DSC 8000

Ribbon Network Elements Supported (cont.)
• C20 Call Session Controller
• C3 Call Controller
• General Media Server (GMS)
• Dell servers purchased through Ribbon for Ribbon applications
• G6 Universal Gateway
• G9 Media Gateway
• G5 Line Access Gateway

System Requirements

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

Minimum Resource Requirements
• For each instance in a KVM / VMware / Container deployment
  • vCPU - 16
  • vMemory - 64GB
  • vHDD – 300GB
  • vNIC – 1
• For each instance in cloud deployment
  • vCPU - 16
  • vMemory - 64GB
  • vHDD – 130GB
  • Cinder Volume - 450GB
  • vNIC - 1

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

Operating System
• Red Hat Enterprise Linux Server (Guest OS)

Client Requirements
• Windows 10 Systems
• Supported browsers:
  • Microsoft Edge 97.0 or higher
  • Chrome version 97.0 or higher
  • Mozilla® Firefox® version 93.0 or higher

Contact Us
Contact us to learn more about Ribbon solutions.

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