

Intelligent Session Control for the Enterprise



Secure Real-Time Communications Today's enterprises strive to maintain and improve customer service while enabling more efficient employee collaboration. They can achieve this by optimizing the use of network resources and simplifying network operations with intelligent session and routing control solutions using the Ribbon Policy and Routing Server (PSX).

The Ribbon PSX is an intelligent session and routing control solution that applies specific rules to IPbased communications such as VoIP calls, video conferences, unified communications (UC) sessions, third-party applications and messaging systems. With intelligent session and routing control, enterprises can control multimedia communications to customers and employees with unprecedented flexibility and ease. For example, enterprises can centrally manage communications coming into contact centers based on specific business rules in



the form of policies, such as routing the top-priority calls to a particular center of expertise. Or enterprises could prioritize the delivery of bandwidth-intensive video applications based on different business rules.

Ribbon's intelligent session control solution can also help enterprises to significantly simplify dial plan management and network administration, facilitate service continuity when migrating from legacy PBXs to cloud-based unified communications (UC) and contact center services, optimize bandwidth utilization and reduce international toll charges, —saving as much as 55-75% in recurring communications costs. Intelligent session and routing controls are key elements of the Ribbon PSX. They provide a view of policies applied across your network and enable the consolidation and centralization needed to integrate multiple vendors into a single communications system.

Ribbon intelligent session and routing control solutions improve enterprise communications by applying various types of policies:

- 1 Network Policies manage actions of network elements such as PBXs, session managers, call servers and session border controllers (SBCs). Examples of network policies include routing based on destination; time of day (TOD) or time of week routing; session blocking based on pre-defined criteria (e.g., authorized/ unauthorized access); and level of quality of service (QoS) to ensure high-quality voice and video sessions.
- 2 Unified communications policies determine when and how types of communications flow across the network. Examples of a UC policy could include assigning a lower priority to video applications or routing of high definition calls through high definition network paths.



A Centralized View of Your Network

At the heart of Ribbon's enterprise intelligent session and routing solution, the PSX works in conjunction with Ribbon or 3rd party gateways and session border controllers to provide cost-effective, simple-to-use and easy-to-implement policies.

The Ribbon PSX is designed to meet the requirements of large enterprises, and addresses broader requirements such as redundancy and reliability, scalability, geographic distribution or advanced features such as E.164 number mapping (ENUM), and quality of experience based routing (QoE).



Centralized policy and routing for the entire network

Figure 1 – The PSX provides comprehensive intelligent session and routing control

With Ribbon intelligent session and routing control, enterprises can:

- Intelligently manage communications sessions—routing paths, priority, admission control, etc.—based on a variety of policies including media type, source/destination and time of day/week
- Facilitate service continuity when migrating from legacy PBXs to cloud-based unified communication (UC) and contact center services
- Bring together multivendor environments to create centralized dial plans, centralized call routing and more
- Reduce costs through operational efficiencies, simplified network management and fewer provisioning errors, while improving network response and utilization
- Avoid and reduce international toll fees



The Benefit to Enterprises

Ribbon's intelligent session and routing control solution enable enterprises to substantially reduce both their communications CAPEX and OPEX, while still improving the richness and quality of their communications services. These capabilities include:

Reduce PBX Management and Maintenance Costs

Two-thirds of enterprises have PBXs from more than a single vendor. Large enterprise networks may contain a dozen or more PBXs spread out around the world at various office locations, with each PBX requiring a specialized engineer to provision and update the routing and subscriber information for that office. With Ribbon's PSX, enterprises can now consolidate and centralize all of that routing and subscriber information in a single master server, dramatically reducing both the OPEX and the management complexity associated with PBX-based information management while allowing for an easier and more efficient dial plan to manage.



Figure 2 – Provides mixed corporate dial plans with benefits of centralized routing

Increase Employee Productivity

Centralized SIP policy management is the key to truly unified communications. With Ribbon's PSX, enterprises can effectively consolidate messaging systems and unify business applications so employees can get more done, more quickly. On average, employees can save 1.21 hours per day by using unified communications to communicate and collaborate. The larger, distributed PSX is well suited for those enterprises with at least two UC vendors to consolidate.



Reduce International Toll Costs

The Ribbon PSX solution allows enterprises to leverage their own IP-based enterprise network for Voice over IP (VoIP) calls, eliminating national and international long-distance toll charges between employees anywhere in the world. In the case of one multinational enterprise, the Ribbon policy solutions have reduced recurring long distance phone charges by 55-75%.



Figure 3 – Reduce international toll charges by leveraging existing IP-based enterprise network using the Ribbon PSX

Sweat Your Existing Assets

With Ribbon PSX, enterprises need not spend money upgrading PBXs and other legacy systems to stay compatible with the latest SIP stacks and applications. The robust signaling interworking of the Ribbon policy engine takes care of the compatibility for you by providing a single routing and policy system for both legacy (e.g., TDM, H.323) and new SIP systems.

Routing with Microsoft Active Directory

In enterprise deployments, the Ribbon PSX can retrieve user information from Microsoft Active Directory (AD) database and use this information for call routing and policy decisions. The Ribbon PSX relieves the Microsoft AD server from high volume traffic as well as reduces the administrative overhead of provisioning and managing user information in two places.

Migration to Cloud-Based Services

When you are ready, Ribbon's PSX makes it possible to seamlessly migrate employees from legacy PBXs onto cloudbased unified communication or contact center services. It eanbles this by knowing the state of the dialed party and which service (new or old) they are using to route an incoming call to the proper termination.



Figure 4 – Ribbon PSX supports Microsoft Active Directory (AD) lookups for policy and routing



Make Your Network More Reliable

The Ribbon PSX can act as a SIP proxy and redirect server, allowing enterprises to re-route traffic automatically over their IP-based wide area network (WAN) in the event of a single SIP trunk failure at an office or call center location. This feature prevents a single office or call center from going 'down' because of a cut line or a hardware failure, allowing enterprises to offer communications services with 99.999% reliability.

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, alwayson 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 visit rbbn.com.

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