The dramatic rise in the complexity and sophistication of communications services is creating repercussions at network interconnect points. Service providers are now challenged to manage the exchange of multimedia traffic across network borders controlled by a mix of TDM and IP technologies. Service providers must explore solutions that solve these challenges and bring a high-quality, smart multimedia experience to their customers.

Overview
Service providers in all domains – fixed, mobile, cable – are riding an “ALL IP” wave and aggressively transforming their core network from TDM to IP. While cost efficiencies and regulatory requirements are two of the underlying drivers for this change, the desire to innovate, compete with Over The Top (OTT) providers and bring differentiated multimedia services to end users are primarily fueling this transformation.

This rapid migration to IP networks and adoption of IMS and LTE has made global interconnectivity over IP critically important. To provide an optimum rich multimedia communications experience, service providers require all-IP connections between their networks and their users’ and peering partners’ networks.

However, the world is not ALL IP yet. There are still some lingering vestiges of the TDM world that service providers must deal with. Until the network is all IP, network operators will be challenged to manage voice and multimedia traffic that flows across a mix of IP and TDM technologies. Strategies for interconnecting IP islands with existing TDM networks have been ad hoc to date, resulting in solutions that are fragmented and hard to scale and sustain.

Compounding this issue is the evolving nature of communications services. Information exchanges are becoming increasingly feature-rich and wrapped inside a wide variety of applications. These innovations are adding new complexity and driving the need for new peering relationships amongst service providers, OTTs and application providers.

Service providers now require interconnect solutions that go beyond overseeing the physical hand over of traffic, as was the case in a predominantly TDM-based voice realm. Interconnect solutions optimized for today’s traffic mix must be aware of the types of services that are being exchanged between networks, administer the proper policies and rules to assure security and quality for multimedia traffic, interwork amongst multiple technologies and network islands, and possess the intelligence to make routing decisions based on new service parameters such as quality, performance and type of service.

Ribbon Multimedia IP Peering Solution
The Ribbon Multimedia IP Peering solution creates an important opportunity for service providers. It enables the seamless end-to-end transmission of voice and multimedia services across both intra-carrier and inter-carrier connections and creates substantial opportunities to monetize assets and grow revenue via new service offerings. Recognizing that a mix of legacy and IP-enabled networks will be commonplace for several more years, the Ribbon Multimedia IP Peering solution provides secure connectivity across multiple network islands, including TDM, legacy mobile, SIP-based NGN and IMS, LTE and Web-based OTT networks. The Ribbon solution supports the peering of voice and multimedia traffic, including VoIP, HD voice, video, IM, presence and RCS/RCS-e. It also oversees the exchange of Diameter signaling across network borders.

Key IP Interconnect Challenges
- Managing Security
- Overcoming Interworking and Deployment Complexities
- Assuring Quality
- Ensuring Route Efficiencies
- Reducing Cost
The Ribbon Multimedia IP Peering solution enables Secure, Simple, and Scalable IP voice and multimedia services and offers multiple advantages over competitive solutions:

- Monetizes network assets and enables revenue growth from new services
- Modular architecture for IP-IP, IP-TDM and TDM-TDM network peering
- Interworks across multiple emerging IP and legacy technologies - IP (H.323, SIP, SIP-I, SIP-T), Web RTC, Legacy Mobile IP (BICC), and TDM
- Enables peering with OTT applications and delivers a smart communication experience to end users
- Provides granular controls and intelligence to centrally manage network-wide security, interworking, quality, and performance of IP sessions as well as at each interconnection point in the network
- Assures interoperability across multi-vendor, multi-network and multi-protocol environments
- Enforces smart routing policies based on quality, performance, and cost of interconnects
- Provides rich reports and analytics to simplify operations, improve responsiveness, and accelerate troubleshooting
- Delivers industry-leading scalability while assuring lowest cost of ownership to scale the network and add new services
- Provides unique network-wide licensing flexibility that can reduce CAPEX by up to 50%

Contact us to learn more about Ribbon solutions.