Service Providers are facing tough challenges with meeting consumer demand for faster and flexible next-generation services with business effectiveness. They have an immediate need to lower network costs, improve service agility, reliability and competitive positioning - by retaining existing customers and attracting new customers.

Ribbon Communications’ Virtualized C20 Call Session Controller software leads the global market in transforming networks, providing core services and switching infrastructure platform for fixed, mobile, and cable MSO operators. It leverages the Commercial-Off The Shelf (COTS) hardware’s, enabling service providers and enterprises to significantly modernize their aging legacy networks through consolidation, and through software and virtualization.

C20 software provides essential switching and subscriber services for many of Ribbon’s network transformation solutions like IMS, SIP Trunking, and Intra-Network Interconnect. In conjunction with the Ribbon Application Server, it enables SIP and IMS-centric services like multimedia Unified Communications. In order to support such a broad set of solutions, it has intelligent capabilities handing both legacy and IP voice and multimedia services across many geographies and international standards.

It also has widely-proven interoperability with the largest number of end user devices, access platforms, and core elements.C20 software on MA-RMS, is at the core of many service providers network and key call session control element providing switching, media gateway control, signaling and protocol interworking, emergency services, lawful intercept, media server, customer data store, billing, and end user voice and multimedia services support.
Benefits

Market Flexibility
- Accelerate application time to market
- Widespread applicability and services integration across TDM and IP networks
- Extensive set of subscriber services for business and residential markets
- Network-proven, global interoperability with a wide array of devices, access equipment, and core elements
- Protect investment: as the customer networks evolve, so does the application mix running on RMS

Solution Support
- Supports both Next Generation Networks and IMS
- Concurrently supports and integrates legacy services – POTS, Centrex, Regulatory, Lawful Intercept, PBX
- Network Transformation and switch replacement including Class 5 and Class 4, IP Tandem, Tandem, Long Distance, and IP Trunking
- Interconnect services including SIP Trunking, and Intra-Network Interconnect
- Access services including Hosted VoIP, Hosted PBX, IP Centrex, and Unified Communications

Cost Efficiency
- Boost quality of service through industry-leading performance and robustness
- Reduce OPEX through simplified operations
- Can sustain legacy networks and customer groups for extended years, enabling gradual migration to end state architecture as CapEx allows
- Very low power and real estate footprint vs. comparable TDM alternatives
- Highly-scalable density and capacity for optimal cost per subscriber
- Multiple IP interconnect options to reduce transmission costs (SIGTRAN, SIP-T, SIP-I, SS7)
- The Ribbon Management platform for optimized, simplified management

Revenue Generation
- Provides a host with the new VoIP and multimedia applications and features of Ribbon Application Server, Enhances the user experience and engenders loyalty and "customer stickiness"
- Integration of legacy services and networks with IMS evolution to ensure revenue continuity and mitigate customer attrition

Carrier Grade Reliability and Fault Tolerance
The C20 is network-proven as a fully redundant Call Session Controller designed with five nines (99.999%) availability, best-in-class fault-handling, and layers of redundancy throughout.

Platform
C20 Software is available on a RMS platform, supporting an array of virtualized Ribbon solutions including applications server for SIP and unified communication services, and incorporating our Ribbon Management Platform to simplify operations. The C20 on RMS platform enables service providers to easily scale IP voice and multimedia services from a small market introduction, while supporting a growing end user base.

Hardware Characteristics (RMS)
- 2U Rack Mount Server
- Intel Based - 14 Core, 2.3 GHz processors
- 2x Copper GbE on Motherboard (10/100/1000Base-T), plus 2x Quad Port
- SFP NICs supporting GbE either copper or fiber
- 128 GB DDR4 2.133 GHz
- 900GB SAS Drives, 12GB/s
- Server supports redundant AC or DC options

Management
The management solution provides full fault, configuration, accounting, performance and security (FCAPS) functionality for the C20. The EMS is compatible with multiple legacy OSS systems. This enables smooth transformations that leverage current back office investments and minimize retraining costs.

- Enables the smooth integration of functions into an operator’s existing OSS / NMS
- One system for operations, administration, maintenance (OAM) and element management applications
- Back office compatibility with many existing OSS platforms to ease integration and training
- Graphical User Interface (GUI) with a common desktop look and feel, best-in-class fault rollup, and single sign-on
- One user experience across Ribbon network elements
- One northbound interface for solution management of multiple Ribbon products