

C3 Call Session Controller

Intelligent multi-application call controller and media gateway/software control platform.

Product Description

Ribbon's C3 Call Session Controller, is an intelligent multi-application call server and media gateway control platform for IMS & Non-IMS deployments that enables a new level of reliability, flexibility, efficiency and scalability for operators. Deployed globally at the core of many operator networks, the C3 media gateway controller provides service convergence and feature transparency across a wide range of wireless, wireline, TDM, and IP networks. Solutions supported by the C3 include IPX, Peering, Intra-Network Interconnect, MGCF, MRFC, Gateway MSC, and IP Transcoding and Media Adaptation.

The highly-scalable C3 media gateway controller operates in small, large, and geo-redundant configurations to millions of Busy Hour Call Attempts. Operators can cap-and-grow capacity as needed by simply adding pairs of C3 nodes to a deployed system or replace their legacy infrastructure and provide scalable VoIP in greenfield applications.

C3 Call Controller's Features

- **Wireless/Wireline Network Convergence**
 - Armed with an extensive array of protocol and signaling interworking capabilities, the C3 is a versatile platform that provides service convergence and feature transparency across a wide range of wireless and wireline, TDM and IP, and core and access networks. Solutions supported by the C3 include IPX, Peering, MGCF, MRFC, Gateway MSC, Intra-Network Interconnect, and IP Transcoding and Media Adaptation.
- **Transcoding/Media Resource Processing**
 - Working in conjunction with G9 Converged Gateway, the C3 is a media resource controller/IMS MRFC that enables direct IP to IP transcoding between networks. Its extensive wireless and wireline codec support and SIP interfaces enable the C3 to be a centralized transcoding control platform for all networks, physically separating or decoupling media

resource control from the media processing elements. This centralization allows transcoding resources to be efficiently sized and scaled according to network needs.

- **Integrated Capabilities**

- The C3 integrates media gateway and media server control, service logic, billing, regulatory, signaling, service creation, and element management within a common, scalable software and hardware environment, reducing the need to deploy costly additional platforms. Its protocol-independent signaling and media control functions manage the interworking between IP to IP, IP to TDM, and TDM to TDM protocols, independent of incoming and outgoing facilities and signaling types. The C3 also provides a flexible service creation environment that can be used by operators for advanced service development. The platform uses open interfaces to support application servers and SCP systems via both AIN and SIP to enable other revenue-generating network services. An easy-to-use, integrated CDR and IPDR collector is provided by the C3, allowing call detail records to be generated in both standard and user-definable formats.

- **Performance and Chassis Characteristics**

- Intel based – 14 Core, 2.3 GHz processors.
- Up to 1.5M BHCA per server pair.
- Up to 24M BHCA per system.
- Up to 16 server pairs per system.
- 2U-Rack Mount Server (RMS).
- 48Vdc, 100-127/200-240 V 50/60 Hz.
- Power Consumption - 155 watts per C3 server.

- **Other Features**

- Enhanced load distribution system that allows operators to expand capacity incrementally as the network grows.
- Advanced transit and routing services enabling replacement or augmentation of legacy TDM Class 4 infrastructures.
- International gateway and VoIP termination support.
- Proven, carrier-grade reliability on a fully redundant architecture with no single point of failure.
- Geographic redundancy.
- Service development and management available via on-board service creation environment, INAP and AIN triggers and SIP.
- Trunking and signaling protocols include SIP, SIP-T, SIP-I, H.248, MEGACO, BICC, PRI,

H.323, GR-317, GR-394, GR-444, CAS/R2, T.140.

- Supports multiple SS7 protocols including ANSI, ITU, ETSI and multiple national C7 protocols, for ISUP and TCAP.

- Extensive performance monitoring and network diagnostics.
- Supports variable CDR for any-to-any billing format conversion as well as AMA-BAF.
- Green Technology providing significant space, cooling and power cost reductions.

- **Management**

- OSMINE Certified.
- Full FCAPS functionality.
- User-friendly GUI and CLI, SSHV2.
- Multi-node management.
- Northbound interface: SNMP, CLI, TCP/IP, Telnet, FTP.
- Supports any configuration – TDM, ATM or IP (IPDR, SDR).
- Highly Scalable – support of up to 100 clients.
- Client is platform-agnostic.
- No standalone server platform required.