

## C20 CONVERGED IP SOFTSWITCH

There are reasons why the GENBAND C20 is the number one softswitch in the world: It delivers world-class IP capabilities; reduces power and real estate costs; and creates robust opportunities for new revenue and higher profit. With the industry's most complete set of softswitch features and technologies, it's no wonder the GENBAND C20 sits at the heart of today's most successful next-generation IP networks and network transformation initiatives.

The C20 can be deployed to manage communications, perform calls, control IP phones and Voice over IP (VoIP) gateways, deliver SIP-based multimedia service, and to function as the centerpiece of an open, standards-based network. The C20 on GENiUS is a third-generation IP multimedia softswitch providing full PSTN replacement, International Gateway and advanced IP voice and multimedia communications. It provides advanced voice and multimedia services for business and residential markets in a single platform that meets IMS and IP standards.

### CONVERGED AND MULTIMEDIA APPLICATIONS

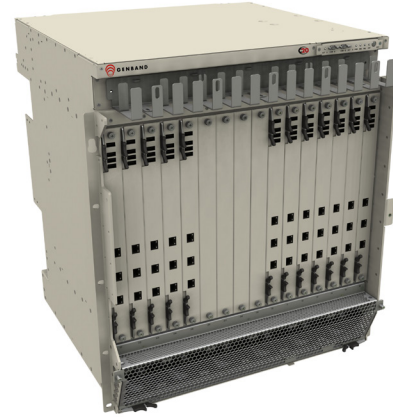
GENBAND has created a platform for convergence success. The C20 is part of a family of IP Multimedia Softswitches that deliver groundbreaking converged and multimedia applications to the global marketplace. The C20 Softswitch from GENBAND delivers a full suite of network configurations including International Gateway, National long Distance, Class 5 residential and business features, Class 5 Cable (NCS), SIP Class 5 and Multimedia capabilities – all on a single platform. The C20 also supports multiple access types including Wireline, Cable, Broadband Access and Wireless Broadband.

Carriers can deploy this carrier-grade IP Multimedia Softswitch to deliver a full suite of voice and multimedia services to business and residential customers as part of a converged services offering.

### COMPREHENSIVE BUSINESS AND CONSUMER CAPABILITIES

The versatile C20 family allows enterprise IT groups to deliver a comprehensive set of field-proven VoIP services to their users around

### DRIVING THE NETWORK EVOLUTION



the world. This market-leading communications server delivers a robust suite of applications and mobility options, including Unified Communications and IP Business Voice and Multimedia.

GENBAND Unified Communications offers a single, seamless user interface to enterprise communications while simplifying voice, voicemail, e-mail, instant messaging and collaboration applications. GENBAND's C20 SIP services are also fully integrated into Microsoft and IBM UC solutions.

Workers can access 300+ IP business services through existing Centrex, Voice over IP or through their mobile phone. Services include hosted business lines, SIP Business trunking, advanced multimedia business tools, FMC and Call Center applications.

Consumer whether at home or on the move benefits from multiple C20 enabled services simplifying their lives and enriching their communication experience. These consumer services encompass voice/video telephony, unified messaging, softphone for PC, tablet and smartphone, call notification and disposition on TV, family conferencing,...

### FLEXIBLE MARKET OPTIONS

The C20 enables carriers and enterprise IT groups to introduce SIP voice and multimedia features to geographically dispersed locations. It provides the scalability needed to grow an end user base in a flexible, targeted way – including small-pocket service areas – while minimizing backhaul costs. The system accommodates existing OSS infrastructures, and offers a comprehensive set of country variants.

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## ADVANCED TECHNOLOGIES AND STANDARDS

The GENBAND C20 works with open, standards-based protocols and delivers a flexible set of access and trunk media gateway options and a combined Session Border Controller and IP-IP Media Gateway. This flexible approach allows carriers and enterprise IT groups to grow easily, to take full advantage of new innovations, and to accelerate new applications launch.

## SOFTSWITCH INTELLIGENCE

High-availability call agent processors provide least cost routing, emergency call handling, Local Number Portability, translations, centralized service delivery and telephony applications.

## OPEN STANDARDS

The C20 provides media gateway control through open, industry-standard VoIP protocols. Interworking, standards-based protocols support cost-effective customer premises devices delivering traditional and next-generation IMS communications services.

## SIGNALING INTERFACE

The C20 can be provisioned with processors providing an SS7 signaling interface for seamless interworking between circuit-switched and packet-based networks and to support advanced telephony and intelligent networking services.

## PACKETIZED AUDIO

An integrated Media Server provides comprehensive packet-based audio features, including announcements, lawful intercepts and end-user recording and customization.

## TRUNK GATEWAY SUPPORT

Open, standards-based protocols provide interfaces to the public telephone network, allowing the C20 to be seamlessly integrated with trunk gateways for all user base densities.

## INTEGRATED COMMUNICATIONS APPLICATION SERVER

The C20 configuration can include Application Server function enabling SIP voice lines, video conferencing and the personal agent, a web portal for end-user customization and other capabilities.

## CARRIER-GRADE OPERATION

The C20 platforms are available in a Geographical Survivability configuration, providing Softswitch and SIP Application Server node diversity for enhanced reliability.

## BENEFITS OF THE C20

### Market Flexibility

- Ability to mix legacy circuit based subscribers and IP users within the same business group making the new service deployment for enterprises simpler and cheaper.
- Mix IP Lines and IP PBX trunks to address the needs of big businesses that may have a mix of business IP line and IP PBX based sites
- Full PSTN transparency allows a seamless migration of end users

### Cost Efficiency

- IP based interconnect options to reduce transmission costs (SIGTRAN, SIP-T, SIP-I, among others)
- High Subscriber density for a better cost per subscriber
- Comprehensive GENView based OAM feature set for an optimized management and reduced OPEX

### Revenue Generation and Customer Satisfaction

- Multimedia applications and features allows carriers to address the requirements of their business and consumer users
- Open APIs enable carriers and enterprises to communication enable their applications
- 99.999% reliability and high availability ensure a trouble free operation and satisfied customers

### IMS Capabilities for a Protected Investment

#### FEATURES

- IMS functions for C20 IMS architecture fit: MGCF, AGCF, TAS
- Easy IMS migration: ability to handle simultaneously softswitch function, MGCF and AGCF roles
- Redundant provisioning of all components for quick fault recovery
- Five nines (99.999 percent) availability
- Best-in-class fault handling software
- Redundant disk storage that protects billing, system images and

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other vital data

- Fewer network elements, reducing maintenance tasks and avoiding single points of failure.

## CAPACITY

- Up to 5M Busy Hour Call Attempt (BHCA) depending on configuration
- Up to 500,000 lines plus 80,000 trunks (end office configuration)
- Up to 250,00 trunks (tandem configuration)

## STANDARDS-BASED PROTOCOL SUPPORT

- H.248, H.323, MGCP, TGCP, NCS, SIP, SIP-T, SIP-I
- PCMM policy and IMS MGCF interfaces
- ENUM and LDAP
- ParlayX and WSRP
- SS7, PRI, BRI, V5.2

## GENVIEW MANAGEMENT (OAM & P)

GENView integrated management solution provides full fault, configuration, accounting, performance and security (FCAPS) functionality and more.

Using standards-based interfaces, GENView enables the smooth integration of functions into an operator's existing operational support systems (OSS) and network management systems by providing:

- One system for operations, administration, maintenance (OAM) and element management applications
- One Graphical User Interface (GUI) to host GENBAND OAM applications with a common desktop and look and feel, best-in-class fault rollup and single sign-on
- One user experience for the management of all the GENBAND network elements
- One northbound interface for direct network element or solution management of multiple GENBAND products by service assurance OSS's

## TURNKEY APPLICATIONS SUPPORT

The IP-based C20 family is access agnostic, supporting traditional copper access, integrated access, xDSL, cable media optical, and wireless broadband applications, as well as packet trunking solutions.

The C20 family supports:

- Hosted business and consumer lines. The family enables convergence of voice and data services over a single IP WAN link via Ethernet, WiFi, 3G, WiMax and LTE and other access options. Carriers can offer converged communication services serving Smartphones, Tablets, PC, TV, deskphone and pure web interfaces.
- Enterprise connectivity and trunking. Delivering a comprehensive feature set on a packetized network, the C20 family enables carriers to offer inter-office trunking services and SIP PBX trunk connectivity.

## PLATFORM

The C20 is built on GENBAND GENiUS™ platform, the industry's leading unified IP Switching and networking platform supporting multipurpose IP solutions. The GENiUS IP Unified Services Platform provides robust, flexible and cost-effective ATCA hardware, leverages GENWare, a robust fault-resistant middleware and incorporates the industry-leading GENView OAM to simplify operations. The C20 enables carriers to easily scale IP voice and multimedia service from market introduction to a large-scale offering, while supporting a growing end user base. The C20 features a small footprint and lower power consumption.

[www.genband.com](http://www.genband.com) 1-866-GENBAND

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