



Homeland Security & Critical Infrastructures

CSP-VOCM ENTERPRISE VOICE CALL MANAGER

PERSEUS CSP is a telecommunication solutions designed to provide professional users with integrated network and services across heterogeneous technologies and to bring in professional broadband environment the same level of functionalities, services and reliability supplied by narrowband technologies.

The proposed VoIP solution offers companies a complete, reliable and scalable platform to easily take advantage of economic, functional and organizational benefits arising from the convergence of voice and data over a single Enterprise IP network infrastructure.

The CSP VoIP solution is designed to enable the evolution of traditional PSTN telephony systems towards network solutions that route data packets containing the voice information, encoded in digital form. In such a way you can benefit from the advantages of VoIP solutions and IP telephony and greatly simplify the operational and maintenance

activities, improving collaboration among users at all levels.

The solution has been designed to meet the specific requirements of Public Administration (PA), Small and Medium Enterprises (SME). It is also part of a professional network infrastructure for providing mission-critical communications for emergency services, public safety and utilities.

The **Enterprise Voice Call Manager (CSP-VoCM)** is a software application that performs the IP PBX features for managing telephone calls and providing advanced communication services such as conference, mailbox, interactive responder, etc.

Combining Voice Call Manager with analogue or digital gateways enables the creation of a single telecommunication infrastructure.

The CSP-VoCM is a PERSEUS CSP element using Linux OS and a powerful Intel server HW platform. The Voice Call Manager is configurable via HTTP(s).

The CSP-VoCM can manage communication sessions through SIP, H.323 and IAX2 protocols. It has a graphical user interface, called "Attendant Console" that provides advanced functionalities dedicated to phone operators. This application supports GSM and G.711 encoding and communicates with Voice Call Manager via IAX2 protocol.

Besides, Voice Call Manager can be supplied with Fax Server software appliance that performs Fax over IP functionality and allows the storage of received and transmitted fax in a database via SQL channel and the possibility of database query for research and statistics purposes.

MAIN FEATURES

The main elements that constitute the proposed CSP VoIP solution are:

- CSP Enterprise Voice Call Manager: software product that performs the function of IP PBX systems on both CSP and on standard server platform;
- Voice Gateways: for interconnection between VoIP and Public Telephone Network;
- IP phones: High quality SIP communication devices.

CSP Enterprise Voice Call Manager

The main features and services supported by the Voice Call Manager are:

- Coding: G.711 (A-Law & Q-Law) / G722 / G.723.1 / G.726 / G.729a / GSM
- Authentication procedure via MD5 cryptographic algorithm
- TLS and SRTP
- User automatic generation for simplifying configuration and provisioning operations
- Customizable registration and user profile management
- Policy handling for outgoing and forwarded call
- Automatic reply and music on Hold via with mp3 file;
- Call-back-on-busy; call redirect (manual or automatic); call parking; click-to-call
- Unconditional redirect on busy, on unattended call or unreachable user
- Voice mail; conference call; fax server support
- Call Detail Record (CDR); Call Admission Control (CAC)
- Network congestion tone generation

- Trunking to connect a Voice Call Manager to another Voice Call Manager or IP PBX via IAX or SIP protocols
- E.164 numbering
- Interactive Voice Response (IVR)
- SNMP
- Message Waiting Indicator (MWI) for notifying waiting voice mail messages
- NAT support
- Voice Call Manager redundancy via VRRP protocol and heartbeat cluster
- Extension mobility to login to different IP devices while keeping the same extension and profile
- Boss secretary functionality
- Centralized personal agenda; Agenda on LDAP server
- Advanced call number handling
- Time services customization
- Basic inbound call center functionality.

Voice Gateway

The company offers a highly efficient and fully integrated platform combining Voice Gateway to interconnect IP networks and legacy telephone networks ISDN (PRI, BRI) and analog (FXS, FXO).

IP Phones

The IP Phones offer a full range of devices designed to interoperate with leading IP platforms including SIP devices, which support XML programming and high-quality SIP communications.

The IP Phones support LCD screen, expansions module and a wide range of codecs, with security standards such as TLS, SRTP, HTTPS, Power over Ethernet (PoE), management via LCD, web and autoprovisioning mode.

BENEFITS

The CSP VoIP solution can enjoy the following benefits:

- Ease of use for both the administrator and the user
- Platform customization according to the specific needs of customers with complete control over each element of the solution
- Possibility to implement highly reliable architectures through redundancy of elements (Voice Call Manager and router/gateway)
- Additional and innovative features respect to traditional telephony
- Fully Integration with Mission Critical CSP (Communication Service Platform) infrastructure.