

VocalTec Ensemble Architecture™

VEA Components

Servers

VocalTec Gatekeeper™ – The intelligent IP telephony service and control server, VGK provides centralized addressing, security, and accounting for networks designed with VEA components.

VocalTec Surf&Call Center™ Server – A data collaboration server provides the interface between an incoming customer call, VocalTec Telephony Gateway terminals, and call center equipment.

VocalTec Conference Server™ – A software-only multi-conferencing unit for Internet and Intranet-based conferencing.

Gateways

VocalTec Telephony Gateway™ Series 120 – SS7 capable gateway efficiently connects IP networks and the Public Switched Telephone Network (PSTN) by dynamically converting traditional PSTN signals into streams of data communication packets, transporting voice and data anywhere in the world. DSP-based gateway is able to support a quad span-E1/T1 per chassis.

VocalTec Telephony Gateway Series 2000 – Based on ECI™ Telecom's multi-service platform, the SS7 capable carrier-class embedded gateway can process up to 1440/1152 calls per E1/T1 rack.

End-user Clients

VocalTec Internet Phone® 5 – Award-winning VocalTec Internet telephony client for the consumer market supporting PC-to-PC audio, video and data communications, as well as PC-to-phone calls.

VocalTec Internet Phone® Lite™ – An innovative software client designed for making calls between a telephone and a PC. Developed specifically for branding and redistribution by Internet telephony service providers to their customers.

VocalTec Communication Client™ – Desktop client transforms calls into multiparty feature-rich meetings using video, Internet access, and document sharing.

Surf&Call™ – A plug-in enabling Web-to-phone call center applications and multi-point audio conferencing through a standard Web page.

Network Management Tools

VocalTec Network Manager™ – An Operations, Administration, Management and Provisioning (OAM&P) tool for server elements of VEA.

SNMP Management – Provides support for third-party platforms such as HP OpenView®.

* *Upcoming Feature*

info@vocaltec.com



www.vocaltec.com

VocalTec Ensemble Architecture™

A Standards-based Platform for IP Telephony Solutions

VocalTec Ensemble Architecture™ (VEA) empowers service providers and enterprises to take advantage of the flexibility and cost efficiency of IP networks.

Overview

Internet Protocol (IP) networks are gaining momentum as an efficient and powerful way to converge voice, data, and video over a single network. IP networks facilitate versatile and cost-efficient communication, including long-distance calling, multimedia collaborative computing, and e-commerce.

A true multi-service platform, VocalTec Ensemble Architecture (VEA) represents the next step in the evolution of IP communications. It serves as the foundation for a host of consumer and corporate services that can be offered over an IP network. Scalable, open and standards-compliant, VEA combines all the software and hardware elements necessary to build and maintain global IP telephony networks.

Service Providers can attract new subscribers and provide new services to existing subscribers:

- Discount phone-to-phone and fax-to-fax services for residential and business subscribers.
- Value-added PC-to-phone and phone-to-PC (Internet Call Waiting) service for Internet users.
- Virtual Private Network services, including remote collaboration, teleconferencing, and video conferencing.
- New discount services, such as global toll-free calling from a Web site, to supplement traditional offerings.

Call Center operators can take advantage of VocalTec Surf&Call Center™ multimedia applications to provide customers with new options:

- Live voice connectivity from a Web site promotes e-commerce.
- Integration with existing call center infrastructure allows a seamless transition to multimedia services.

Global Enterprises can cut expenses and improve productivity:

- Increase telecommunications efficiency by routing voice and fax traffic over an existing intranet.
- Promote multimedia electronic collaboration for telecommuters and remote employees.
- Give customers and employees immediate access to products and services through a Web-enabled call center.

Supported Services

VocalTec Ensemble Architecture supports voice, video and data transfer over IP networks:

- Phone-to-phone calling
- PC-to-phone calling
- Phone-to-PC (Internet Call Waiting)
- Web-to-phone calling
- Real-time and store-and-forward* fax-to-fax
- Video*
- Distributed conferencing*



* *Upcoming Feature*

VocalTec Ensemble Architecture is a true multi-service platform. It serves as the foundation for a host of consumer and corporate services that can be offered over an IP network.

Features

Scalability

VEA can serve millions of subscribers making thousands of simultaneous calls from an unlimited number of endpoints. Network administrators can meet the demands of a rapidly growing subscriber base with provisioning and access tools.

Open Interfaces

VEA is an open architecture. It offers a number of Application Programming Interfaces (APIs) for complementary systems from third parties in the following areas:

- Authorization and Authentication
- Accounting
- Provisioning
- Quality of Service Management*

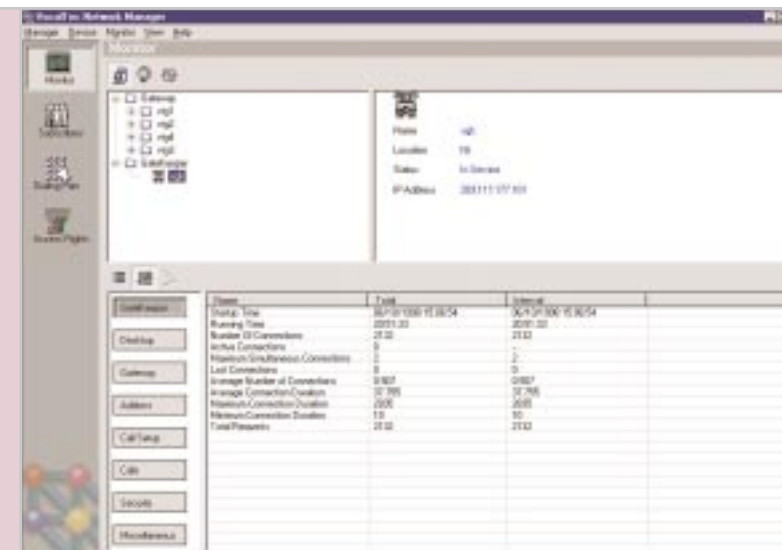
An Authorization, Authentication, and Accounting (AAA) Software Development Kit (SDK) is available for VocalTec billing partners and customers.

Several companies have developed solid and flexible billing and customer care solutions that complement VocalTec Ensemble Architecture, including Portal Software®, a leading solution provider for Internet Service Providers, and Amdocs™, a leading solution developer for telecommunications providers. Telephony Experts™ and MindCTI™ also offer billing solutions for international deployment.

A series of call center SDKs, including SDKs for a call center server, AAA, Web design, and telephony servers, allow VEA to be integrated into existing call center equipment.

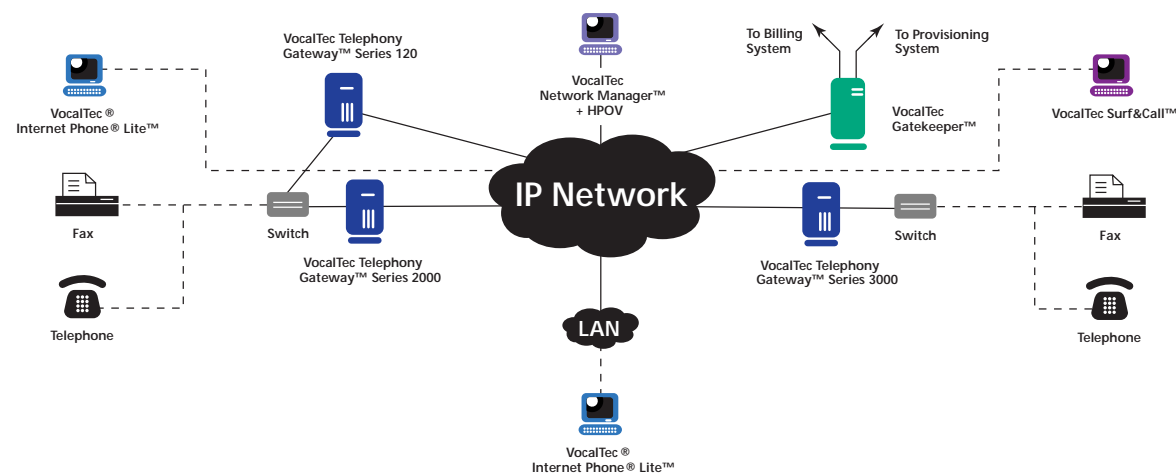
Interoperability

VocalTec encourages vendors of IP telephony endpoints, including clients and gateways, to make their systems compatible with VEA. All H.323 v2 endpoints will be able to interoperate with VEA components on a basic level.



- **VocalTec Network Manager**
An Operations, Administration, Management and Provisioning tool for server elements of VEA.

IP Network Designed with VocalTec Ensemble Architecture



* Upcoming Feature

Standards Compliance

VEA is compatible with the latest industry standards, including ITU H.323 RASv2 and ITU-T H.235. It also conforms to the VoIP Implementation Agreement 1.0 and the emerging ETSI TIPPHON specifications. It provides H.323 support for audio calls to other H.323 clients, gateways and conference servers.

Interdomain Capability

VocalTec Gatekeeper terminals act as transparent mediators between foreign domains, allowing clearinghouse providers to share IP telephony infrastructure.

Centralized and Remote Management

All network elements may be centrally or remotely managed. A Simple Network Management Protocol (SNMP) Support Kit for third-party SNMP management platforms such as HP OpenView® is included. Centralized Call Detail Records (CDR), statistics, and event logs are generated to simplify network management. A user authorization policy can be created based on global rules and user groups with varying profiles.

Prepaid Debit Card and Credit Billing Support allow timed calls with an enhanced configurable Interactive Voice Response (IVR) front-end.

Reliability

A fail-over mechanism, alternate routing, database replication process, and load balancing provide the most reliable service with no single point of failure.

Security

System protection is provided by secured server management and control, firewall support and authentication and authorization functions. Onboard password protection is provided for administration functionality with authenticated connection between VEA elements (token-based call setup).

Supported Protocols

- ISDN PRI, CAS-MFC-R2, E&M
- SS7 (Signaling System 7)
- Analog: Loop Start

* Upcoming Feature