3com

Key Benefits

Delivering the clear advantages of five 9s reliability, SIP technology, and open architecture

3Com® VCX™ V7000 IP Telephony Solution

End-to-End IP Telephony Solution
The 3Com® VCX™ V7000 IP Telephony Solution, based on the Session Initiation Protocol (SIP) standard, helps increase productivity and reduce costs for large and midsize enterprises. The system includes the V7100 media gateways, the V7200 IP Call Controller with its servers, accounting, and management software, and the V7300 IP Telephony Applications Suite. Supported by 3Com IP phones (see details, page 3), the V7000 solution offers a secure, end-to-end IP telephony system that is ideal for distributed network architectures where multisite deployments are required by business structures, organizational changes, or increases in workforce.

Carrier-Class Performance
The VCX 7000 solution can support up to 50,000 end devices per server, with redundancy and failover mechanisms that have delivered 99.999% reliability. Based on an architecture originally designed for major telecom carriers, the V7000 solution gives enterprises the same level of scalability and reliability that carriers demand from their equipment. This widely deployed modular call control engine has transported over 20 billion minutes of billable IP telephony traffic.

SIP-Based Interoperability
The V7000 system fully supports SIP, a standard that promotes exceptionally flexible universal communications by defining a common way for disparate devices to exchange information.

Standards-Based, Future-Proof Solution
Standards-based VCX architecture enhances interoperability, improving communications with partners,

customers, and vendors. VCX systems can lower the total cost of ownership (TCO), increase the longevity of purchased equipment, and maximize an organization's return on investment (ROI) by reducing installation and usage costs and by enabling the enterprise to select solutions from the vendor that best meets business needs.

Incremental Upgrade Path
Enterprises are able to add sites cost-effectively by interconnecting them via the IP network. Software licenses make it easy to increase capacity and implement new applications. A single, enterprise-wide licensing server tracks usage licenses, letting managers extend user and feature licenses across multiple sites to save on fees. Administrators can add users by simply making changes at the central site, and users can establish a connection just as easily by plugging their IP phones into any network port.

Advanced Features and Applications
A full suite of VCX V7000 basic and advanced features and services helps users do their jobs more efficiently from office and remote locations. Capabilities include enterprise voice mail, find-me/follow-me, interactive voice response (IVR), and sophisticated automatic call distribution (ACD) that can enhance communications within an organization and with customers.

The optional V7300 IP Telephony Applications Suite (see details, page 3) offers powerful tools for boosting the productivity and increasing the mobility of enterprise employees. Applications are compliant with IMAP4, SIP, POP3, and SMTP standards.
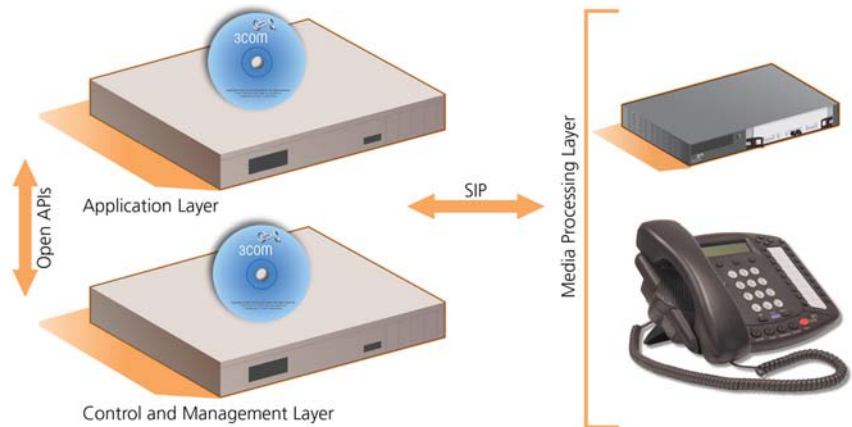
The three-layer, standards-based architecture of the 3Com VCX V7000 IP Telephony Solution delivers interoperatibility, flexibility, scalability, and carrier-class reliability. The Control and Management Layer includes VCX V7200 IP Telephony Call Controller software, and the Application Layer contains the VCX V7300 IP Telephony Applications Suite. V7100 media gateways and IP phones such as the 3Com 3102 Business Phone provide SIP-based connectivity.

Powerful call processing and management with VCX V7200 Call Controller software

With the VCX V7000 solution's V7200 IP Call Controller, organizations gain the benefits of powerful, high-availability call processing with exceptional scalability and performance. Because of its open-standards design, the call controller can interoperate easily with other standards-based systems as it connects, disconnects, and transfers calls, and controls access devices such as phones and gateways.

The system also allows enterprises to provision and control their telecommunications from a central location, saving the expense of visits to remote offices. And optional accounting, management, and call detail recording software helps organizations optimize their communications infrastructure.

VCX V7210 IP Call Processor
Integrated into the VCX V7200 IP Call Controller, the V7210 processor routes calls and translates a telephone number into the IP address of the media gate-

way that serves a specific calling area. For potentially dramatic cost savings, it mediates traffic between IP telephony networks so disparate systems can communicate with each other. Using the processor's web interfaces, administrators can easily provision the system and users can customize the features on their own phones.

VCX V7220 Accounting Suite
Accounting software in the V7220 suite analyzes network performance and operation, pinpoints customer calling patterns, and reveals inappropriate system use.

VCX V7230 Enterprise Management Suite
Administrators using V7230 management software can access up-to-the-minute details about the network and its voice applications. They can monitor stress levels, set thresholds and alerts, view events, generate customized reports, and launch device configuration tools.

Call Processors and Servers

As shown in the following chart, 3Com offers server and call processor packages featuring Sun Fire servers designed to support various numbers of users:

Call Processor Based on...	Number of Users Supported
Sun Fire V100	1,500
Sun Fire V240	10,000
Sun Fire V880	50,000

VCX V7300 IP Telephony Applications Suite

The 3Com IP telephony suite of applications offers modules to enhance productivity and customer service. The following table indicates their key features:

Application	Key Features
VCX V7310 Voicemail System	Lets users send and receive voice messages using a variety of client devices and applications: phones, PCs, wireless handsets, Palm PDAs, e-mail clients, and web browsers. Users can take full advantage of the VCX provisioning capability to determine how and when they retrieve messages, making their business communications more flexible and their jobs easier. And the VCX Voicemail System can also function as a centralized message repository. Extended functions include: • Flexible call routing by name, phone number, or department; caller can leave a message or return to operator • Multiple mailboxes so users can organize messages • Up to nine greetings or outgoing announcements that may be scheduled according to the user's activities
VCX V7315 Fax Mail System	Lets users employ the same phone number for voice and fax communications, and gives them the ability to divert faxes to a nearby fax machine. Bonus "auto print" feature automatically prints a fax on any specified network printer by means of a "smart mailbox"
VCX V7320 E-Mail/ Text To Speech System	Lets users listen to their e-mail messages using advanced text-to-speech software, and respond using either voice mail or e-mail. Users can access mail through a mobile phone or wired phone, and can reply to e-mail with a voice message that is delivered back to the originator's e-mail address. Users can also access all e-mail messages in all mailboxes—compatible with Lotus Notes, Microsoft Outlook, and Microsoft Exchange
VCX V7355 Find Me/ Follow Me System	Lets users determine who can reach them, and where and when they can be reached. Based on the caller's phone number, the "smart mailbox" can screen the call, direct it to voice mail, or redirect it to a mobile phone or alternative phone

VCX V7100 Access Devices, Phones, and Adapters

VCX access devices include the family of VCX V7100 media gateways used to support analog connections, digital trunking, and connection to existing PBX systems. Varieties of port options let organizations make connectivity selections that conveniently match business needs.

With 3Com phones, VCX V7000 IP solutions offer users both traditional telephony features and a full range of advanced services via convenient button arrays and optimized LCD panels. With a simple touch of a button, users can view from the phone display incoming and outgoing call logs and internal name directory listings.

The newest member of the family of 3Com phones, the 3Com 3102 Business Phone, features enhanced acoustic design that leverages the emerging wideband audio standard, significantly enhancing speech transmission. A typical conventional public switched telephone network (PSTN) phone line reproduces speech at 8 kHz, while the 3102 phone can relay IP conversations at a frequency of up to 16 kHz.

3Com phones also give enterprises the flexibility to choose the access devices that best meet their business needs, plus the option of reusing existing equipment. As a SIP-compliant device, the 3102 phone is backward-compatible with older SIP-based devices and inter-operates with multivendor equipment, including SIP-based phones from vendors such as Mediatrix and Pingtel.

For additional cost-saving convenience, 3Com phones offer plug-and-play installation, support for IEEE 802.af Power over Ethernet, a built-in handset jack that supports headsets without amplifiers, and a selection of faceplates for localized use.

3Com analog terminal adapters provide a cost-effective solution in areas where an IP phone is not practical, such as in a factory or manufacturing facility. They enable easy connection of analog phones, cordless phones, speakerphone extensions, and other industry standard tip/ring (2500 set) analog devices, including Group 3 fax machines.

Key features of 3Com VCX V7000 access devices are described in the table below:

Device	Key Features
Analog Media Gateway	Supports analog phones, fax machines, modems, and analog trunks to the public switched telephone network (PSTN); available in 2-, 4-, 8-, and 24-port options
Digital Media Gateway	Supports T1/E1/PRI connections to a PBX or to the PSTN; available for 1, 2, 4, 8, and 16 span options
PBX Media Gateway	Supports station line connection to legacy PBXs and provides Voice over IP integration; 8-port device
3Com 3102 Business Phone	Full-duplex speakerphone, a two-line pixel-based LCD display providing caller ID information, internal name directory access, 18 programmable and 10 preprogrammed feature buttons, faceplate including five commonly used features, two 10/100 Ethernet ports; phone can be localized in English, French, German, Italian, or Spanish
3Com 2101-IR Business Phone	Infrared enabled, full-duplex speakerphone, two-line by 24-character display, three soft keys, 18 programmable buttons, quick access to frequently used features, switched 10/100 Ethernet connectivity
3Com 2102 Business Phone	Same capabilities as the 3Com 2101-IR Phone, without the infrared port
3Com 2101 Basic Phone	Two-line by 24-character display, three soft keys, three programmable buttons, push-button access to voice mail, switched 10/100 Ethernet connectivity
Audiocode Analog Terminal Adapter	Provides 2 to 24 analog ports for connections to analog phones, cordless phones, speakerphone extensions, and other 2500-type analog devices; also supports Group 3 fax machines.

3Com 3102 Business Phone

Easy Phone Deployment with 3Com IntelliJack® Switches

3Com IntelliJack® switches are unique "in the wall" devices that quickly convert single-port LAN wall outlets into four switched ports. They work in almost any network environment— including enterprise and government offices, dormitories, hospitals, classrooms, laboratories, public kiosks, conference rooms, and shared office spaces. Unlike freestanding hubs or switches, these intelligent network jacks are not easily damaged or disconnected. They are affixed to the wall for added physical security.

Some IntelliJack models include advanced switching and management features particularly suited for converged voice and data environments. They can also deliver the flexibility of optional pass-through connectivity and Power over Ethernet forwarding capabilities.

3Com IntelliJack Switch NJ220,
shown in cream and black

400846-001 04/04

3COM