3com

Highly scalable, resilient IP communications with full-featured telephony services and SIP-based multimedia capabilities

OVERVIEW

The 3Com® VCX™ IP Telephony Module delivers to large and midsize enterprises a next-generation, multimedia IP communications system that uses the Session Initiation Protocol (SIP) standard. It supports a rich set of productivity-enhancing applications while providing many of the traditional phone features of a PBX. As a component of the 3Com Convergence Applications Suite, the IP Telephony Module supports incremental migration to an open, IP-based communications system designed to advance an organization's business objectives. It can run on a range of 3Com scalable servers for deployment in offices of any size. Centralized administration, configuration and management can lower installation and operating costs and optimize IT staff as the system is implemented throughout an organization. In addition, the module supports business continuity with a distributed, replicated architecture that ensures full-function telephony at any site even during a wide area network (WAN) failure.

KEY BENEFITS

ECONOMICALLY EXPAND SERVICES TO MULTIPLE SITES

With its industry-standard Linux operating system, the 3Com VCX IP Telephony Module offers a distributed multisite architecture that can meet the needs of organizations from a few hundred to over 50,000 users. It can be deployed on large centralized servers for campus sites or distributed on small servers located in the branches of a multisite organization. With a cost-effective 3Com V6000 Integrated Branch Communications series server installed locally, users at remote branch offices can enjoy the same telephony capabilities as users at headquarters. For additional cost savings, the VCX module can run concurrently with other 3Com Convergence Applications Suite components on the same branch office server.

ENSURE BUSINESS CONTINUITY

Regardless of where users are located, their profiles are replicated to a secondary server for maximum system resilience. In the event of a local failure, service continues automatically from the backup server, which may be installed at the same site or at a separate location. Distributed architecture ensures that remote sites do not lose telephony services even if the WAN fails and the site becomes isolated.

INTEGRATE COMPATIBLE, SIP-BASED APPLICATIONS

The module enables 3Com Convergence Applications Suite services that deliver messaging, mobility, conferencing, presence and contact center functions throughout the network. These SIP-based applications are compatible with SIP software and equipment from a range of vendors. 3Com regularly conducts third-party interoperability tests and performs rigorous testing of selected devices and applications as part of its Voice Solutions Partner Program. Read more about interoperability testing at **www.3com.com/voip/interoperability**.

CENTRALIZE MANAGEMENT TO LOWER COSTS

All the communications servers running the module can be managed centrally to lower expenses and staffing requirements. Servers at branch sites can be deployed or replaced without the need for highly-skilled

KEY BENEFITS
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onsite technicians. 3Com VCX architecture makes it possible for the servers to autoconfigure themselves from central databases as soon as they are connected to the network. Since user profiles and dial plans can be preconfigured at the central servers, administrators can implement a virtually hands-free rollout of a telephony installation.

MIGRATE WITH EASE TO IP COMMUNICATIONS

The module may be deployed as an overlay to legacy PBXs by using 3Com Voice over IP (VoIP) gateways for interconnections. This implementation lets enterprises integrate advanced SIP-based applications with existing telephony infrastructure. As PBXs need replacing or the organization expands to new facilities, it can then deploy IP telephony at business sites and extensions. In addition to digital gateways, 3Com offers analog gateways to support legacy devices such as fax machines and analog phones.

BE ASSURED OF A SECURE ENVIRONMENT

To protect applications as part of an enterprise-wide security strategy, each instance of the module runs on a security-hardened version of the Linux operating system and is safeguarded by integrated firewalls.

System Feature Highlights

Supports traditional voice and multimedia communications

Enables multisite deployments with carrier-class distributed architecture

May be implemented on centralized communications servers using a resilient IP network, or on distributed servers to provide highly available IP communications resilient to WAN outages

Allows cost-effective centralized management and configuration for all remote sites and servers

Lets users roam across all sites with a single login while ensuring that emergency calls route to the correct PSTN gateway

Scales from a few hundred to over 50,000 users

Supports SIP-based endpoints and applications that include voice, video, instant messaging, conferencing, telecommuter mobility and presence

Provides a comprehensive set of legacy PBX features to SIP phones and analog phones

Runs concurrently on the same server with other modules of the 3Com Convergence Applications Suite

Tested with many third-party SIP devices and applications for interoperability

Works with single-line and multiline phones

Permits smooth, incremental migration to IP communications using digital and analog gateways

Allows multiple phone appearances to an extension

Supports hard and soft operator consoles

Provides Quality of Service statistics in MIBs and enables the 3Com Enterprise Management Suite (EMS) to report computed Mean Opinion Scores (MOS)

Monitors UPS and gracefully shuts down in the event of an extended power failure before the UPS battery expires

Enables simple addition, deletion and amendment of users via user-creation scripts

Allows division of system responsibilities by offering multiple system login levels—the administrators handling user adminstration maybe different than those managing dial plans and routing

SAMPLE TELEPHONY FEATURES

Automatic 3Com Phone Software Upgrades

Blacklist/Whitelist

Block Caller ID

Bridged Call Appearance

Bridged Call Appearance (shared hold)

Call Blocking

Call Conferencing (six-way)

Call Coverage (network-based)

Call Detail Records

Call Forward

Call Hold

Call Park/Retrieve

Call Return

Call Screening

Call Transfer Attended

Call Transfer Unattended

Called ID

Calling History—Answered/Missed/Placed (3Com IP phones and web interface)

Camp On

Class of Service

Complementary Attendant Console

Conference Drop

Delayed Ringing

Direct Transfer to Voice Mail

Directed Call Pickup

Distinctive Ringing

Do Not Disturb

Feature Access Codes

Group Call Pickup

Group Paging

Hands-Free Installation of 3Com Phones

Hot Ring Down Circuits (hotline)

Hunt Groups and Calling Groups (multisite)

Hunt Group Queue Thresholds (time and callers)

Malicious Call Trace

Mobility (Across any site with local emergency calling—hoteling)

Multiple Registrations per Extension

Music on Hold

Music on Hold per Customer Group

Online Help (web interface)

Paging

Personal Speed Dialing

Phone DTMF Security

Priority Ringing

Remote Call Pickup

Send Beep

Serial Calling

Server Access Security

Silent Monitor/Barge In

Silent Ring (light flash only)

Single Button Logout

Source-Based Routing

Speed Dial BLF

System Speed Dialing

Third-Party Call Forward

Toll Screening

User Directory (3Com IP phones and web interface)

Warm Ring-Down Circuits (warmline)

Web-Based Feature Configuration (user)

SPECIFICATIONS

PLATFORM
3Com VCX IP Telephony Module comes preloaded on 3Com V6000 Integrated Branch Communications series servers and V7000 platform servers

3Com Convergence Applications Suite software runs on Linux

CAPACITY
Over 50,000 users (number of users depends on number and configuration of server platforms)

Typical platform configurations will support up to 100 users (V6000/V6100), 5,000 users (V7005) and up to 10,000 users (V7205)

PHONES SUPPORTED
3Com 2101, 2102 (Model B or PE)

3Com 3101, 3101SP, 3102, 3103

3Com 3105 console

3Com Convergence Client (soft client with presence, instant messaging, desktop sharing, voice and video)

Analog phones through 3Com VoIP gateways

PHONE LCD LANGUAGE SUPPORT
Chinese, English (US and UK), French (Parisian and Canadian), Italian, Portuguese, Spanish (Castilian and LAT)

ORDERING INFORMATION

The 3Com VCX IP telephony application is shipped pre-loaded on hard drives of 3Com V7000 and V6000 server platforms. Customers must purchase right-to-use server licenses for the specific server configurations deployed, as well as phone licenses for the handsets. Bundles of phone licenses are available in quantities of 50, 250 and 1,000.

3Com IP Telephony Elite Partners have specialized experience in VCX IP telephony implementations and will be able to help develop solutions to meet specific business needs. These 3Com authorized partners have access to design tools and voice-specific services which will deliver an optimal solution to meet any enterprise communications requirements.

The web-based 3Com Voice Solution Finder tool at **www.3com.com/voipfinder** can provide a preliminary quote using a simplified set of user-defined requirements.

For additional information on 3Com convergence solutions, please visit
www.3com.com/voip

Visit www.3com.com for more information about 3Com secure converged network solutions.

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