Cost-effective solution for delivering advanced IP communications by enabling interoperability between a converged network and legacy equipment

OVERVIEW

3Com® VoIP gateways help enterprises migrate to IP communications using an economical overlay strategy that aligns financial considerations with performance needs and lays the foundation for a successful deployment of Session Initiation Protocol (SIP)-based applications. The gateways enable interoperability between legacy equipment and applications—including PBXs, the public switched telephone network (PSTN), analog phones and fax machines—and a converged IP network. 3Com digital gateways provide all necessary functions and protocol support for handling voice calls between traditional circuit-switched phone networks and an IP network. 3Com analog gateways, including both FXS and FXO models, let analog phones and other legacy analog devices use 3Com SIP-based IP telephony features.

KEY BENEFITS

MAINTAIN UNIVERSAL CONNECTIVITY

With 3Com VoIP gateways, organizations can retain PBXs and analog devices for operational or budgetary reasons while they implement IP telephony in a phased overlay. Employees can continue to use familiar equipment and interfaces, including dialing plans, email systems, fax machines and modems. The SIP-compliant gateways may be positioned between the IP network and any brand of PBX to deliver calls or applications such as the SIP-based conferencing and call center capabilities of the 3Com Convergence Applications Suite.

IMPLEMENT REMOTE SITE SURVIVABILITY

In environments where remote branch sites are dependent on a single wide-area IP network connection to the 3Com IP Telephony Module, a local analog gateway enables incoming and outgoing calls to the PSTN. This capability provides telephony survivability and business continuity for the remote site even if its IP connection has been compromised.

REDUCE TELEPHONY COSTS

As part of a converged communications solution, the gateways let enterprises reduce PSTN costs by implementing least-cost routing features delivered by the 3Com IP telephony platform. To minimize long distance calling charges, calls can be routed to the most cost-effective gateway. Plus, remote sites can retain PSTN connections for supporting local Direct Inward Dialing (DID or DDI) numbers, and for receiving the lowest local call tariffs from their communications service provider.

The 3Com VoIP analog gateways (FXS and FXO devices shown on the left) and digital gateway (shown on the right) help enterprises economically and easily migrate to advanced IP-based platforms and applications.

FEATURE HIGHLIGHTS

Enable voice and fax calls from legacy PBX systems and PSTN services to be connected to SIP-based phones and applications

Support consolidation of PSTN connections and optimize use of toll-bypass

Use SIP signaling, allowing communications with 3Com VoIP applications

Dynamically support the latest compression algorithms to optimize bandwidth management

Implement echo control and a dynamic programmable jitter buffer for high voice quality

Allow analog phones or fax machines to connect to 3Com VoIP systems (FXS analog gateways)

Allow calls from the 3Com VoIP systems to analog PBXs or PSTN lines (FXO analog gateways)

Scale to handle up to 480 simultaneous voice calls in a single gateway; modular and fixed digital gateway models support from one to 16 T1/E1 lines and are able to use a variety of PRI and CAS protocols

Easily expand traffic capacity via modular digital gateway

SPECIFICATIONS

ENCLOSURES

Analog Gateways
Desktop or half-width 19-inch rack-mount unit for 4-port and 8-port gateways, full-width 19-inch rack-mount unit for 24-port gateways; all 1U high

Digital Gateways
19-inch rack-mount unit; 1U high

INTERFACES

FXS Analog Gateways
Support for 4, 8 or 24 analog phone loop-start FXS ports; 4- and 8-port gateways use RJ11 connectors, 24-port gateways use single Telco connector (50-pin); Life Line connected to the unused pins on port 4 with relay to an analog line, even if the gateway is powered off

FXO Analog Gateways
Support for 4 or 8 analog FXO ports using RJ11 connectors

Modular Digital Gateways
Support for 1/2/4 T1/E1 digital span

modules; to enable support of 3Com VoIP applications, upgradeable with CPU module

Fixed Configuration Digital Gateways
Support for 4/8/16 T1/E1 digital spans; for LAN redundancy, 2 10/100BASE-T connections to the IP network

SIP FUNCTIONALITY
SIP (RFC 3261) support by performing a SIP User Agent (UA) role

VOICE ENCODING
G.711, G.723.1, G.726, G.727 and G.729A codecs

FAX SUPPORT
T.38 with round-trip delay up to 9 seconds

SIGNALING PROTOCOLS (DIGITAL GATEWAYS)
PRI or CAS including MFC/R2, E&M immediate start, E&M delay dial/start, loop start, ground start

ORDERING INFORMATION

PRODUCT DESCRIPTION	3COM SKU
Analog Gateways	
V7111 Analog Media Gateway (FXS) 2 Channels	3CRVG71115-07
V7111 Analog Media Gateway (FXS) 4 Channels	3CRVG71110-07
V7111 Analog Media Gateway (FXS) 8 Channels	3CRVG71111-07
V7111 Analog Media Gateway (FXS) 24 Channels	3CRVG71112-07
V7111 Analog Media Gateway (FXO) 4 Channels	3CRVG71113-07
V7111 Analog Media Gateway (FXO) 8 Channels	3CRVG71114-07
V7111 Analog (2 FXS, 2 FXO) Media Gateways	3CRVG71116-07
V7111 Analog (4 FXS, 4 FXO) Media Gateways	3CRVG71117-07
Digital Gateways and Power Module	
V6100 Digital Gateway Chassis (maximum four spans)*	3CRVG71225-07
V6100 Digital Single-Span Module	3CRVG71226-07
V6100 Digital Two-Span Module	3CRVG71227-07
V6100 Digital Four-Span Module	3CRVG71228-07
V6100 Redundant Power Supply Module (optional)	3C0VG60005-06
VoIP Gateway - Single Span	3CRVG71220-07
VoIP Gateway - Two Span	3CRVG71221-07
VoIP Gateway - Four Span	3CRVG71222-07
VoIP Gateway - Eight Span	3CRVG71223-07
VoIP Gateway - Sixteen Span	3CRVG71224-07

*Upgradeable to the V6100 Integrated Branch Communications Platform.

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

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