- Fifth-generation IP telephony system with proven high-fidelity audio and system reliability

- Secure, converged solution eliminates cost and administrative overhead of separate voice and data networks

- IP phone portfolio meets a range of performance and budget requirements

- Redundancy options include disk mirroring, dual power supplies and dual ethernet uplinks

- Advanced built-in applications include automated attendant, voice mail, automatic call distribution, and graphical call detail recording

- Easily integrated, productivity-enhancing application options include IP Messaging, eXchange Call Center, ExecutiveAssistant, and Education Module

Key Benefits

Increased Productivity

With the 3Com® NBX® V3000 IP Telephony Solution, small to medium size organizations can increase efficiency, enhance collaboration and improve customer interactions. Advanced applications and intuitive, browser-based management can optimize services and minimize the need for additional personnel.

The NBX platform offers built-in, productivity enhancing tools such as voice mail, automatic call distribution (ACD), computer telephony integration (CTI) via TAPI, visual voicemail/e-mail clients (IMAP4), desktop administration, and call detail reporting (CDR) applications.

R5.0 enhancements include:

- Four new IP phones
- Built-in ACD
- Forced and verified account codes
- Personal operator service
- Silent monitor/whisper/barge-in functionality

Easy Deployment

Standards-based design, including support for switched IEEE 802.3af Power over Ethernet (PoE), facilitates seamless integration with existing network infrastructure and provides the investment assurance of cost-effective system evolution. Open Applications Protocol Interface (API) architecture provides access to best-in-class third-party applications.

Practical Scalability

Organizations can boost capacity and enhance applications via software upgrades, without the need for expensive hardware acquisitions. Cost-saving incremental licensing provides scalability up to 1,500 devices (lines/stations; maximum 720 PSTN lines) and up to 48 NBX IP Virtual Tie Lines (VTLs).

Reduced Operation Costs

A single voice and data network gives organizations the advantages of a converged infrastructure. Streamlined deployment and management optimize existing IT resources. Easy moves-adds-changes can significantly lower total cost of ownership.

Reduced Communications Costs

VoIP telephony enables dramatic cost reduction of long distance calling expenses—unified multisite dialing plans and hop-on/hop-off toll-bypass across wide area networks (WANs) can deliver immediate savings. Multisite message exchange options between 3Com and third-party Voice Profile for Internet Mail (VPIM)-compliant voicemail systems offer multisite organizations the economy of interoperable systems.

Budget-Matching IP Phone Choices

IP phones with robust feature-sets let organizations optimize their investments in communications infrastructure. Choices include 10/100/1000 Mbps Ethernet/IP phones, softphones, and receptionist consoles that support SIP or NBX call control and PoE for deployment flexibility.

Broad Range of Advanced Applications

For improving business activities, 3Com NBX systems support numerous standards-based applications, including advanced ACD capabilities with 3Com eXchange Call Center software, enhanced desktop productivity with 3Com ExecutiveAssistant call recording and find me/follow me services, and reuse of Nortel handsets with the 3Com Legacy Link solution. Additionally, the 3Com Voice Solution Providers Program delivers third-party offerings tested for compatibility and integration with 3Com voice solutions.

Specifications

Package Contents
NBX V3000 IP Telephony Solution

System Requirements
100BASE-TX or switched Ethernet LAN
3Com NBX V3000 IP Telephony Solution
Min. two 3Com IP phones

System Capacity
Supports up to 1,500 devices (lines/stations),
including up to 720 PSTN Central Office lines and
48 Virtual Tie Lines

PSTN Gateway Options
Loop-start analog, T1/PRI, E1/PRI, ISDN BRI-ST,
Q.SIG/PRI

Port Connections
WAN: via external router with IP-ToS support
LAN: 1 10/100 uplink port
Diagnostic: Serial port

Analog Devices
Supports 2500 series-compatible analog devices,
including cordless phones, fax machines, night bells,
and door ringers

Network, Prioritization, and Audio Compression Standards
H.323, G.711, G.729a/b, ADPCM, 802.1d, 802.1p,
802.1q, 802.2, 802.3, 802.3af, 802.11, IP, IP-ToS,
DiffServ, TCP/IP, UDP/IP, DHCP, DNS

Application Standards
TAPI 2.1, TAPI/WAV, IMAP4, HTTP, H.323,
SMTP/MIME, VPIM

Management
Built-in 3Com NBX NetSet™ utility; 3Com Network
Supervisor support

NBX Voicemail Languages/Dialects
Chinese (Cantonese), Chinese (Mandarin), English
(Australian), English (UK), English (US), French
(Parisian), German, Hebrew, Italian, Spanish
(Castilian), Spanish (Mexican), Russian

Power Requirements
NBX V3000: 100-120 VAC, 50-60 Hz, 1 A
220-240 VAC, 50-60 Hz, 0.5 A

Power Dissipation
NBX V3000: 50 W
Phone: 5 W (maximum)

Chassis/Call Processor Dimensions and Weight
Height: 4.445 cm (1.75 in)

Width: 37.465 cm (14.75 in)
Depth: 43.815 cm (17.25 in)
Weight: chassis—5.68805 kg (11.54 lb)

Environmental Ranges
Operating temperature: 0° to 40°C (32° to 104°F)
Storage temperature: -40° to +70°C (- 40° to +158°F)
Humidity: 5% to 85% noncondensing

Network Access Standards
National Requirements FCC Part 68, Canada CS03
CTR4/A1 (Commission Decision 98/520/EC)

Safety
UL/CUL 1950 3rd Edition
IEC 60950: 1991 + A1, A2, A3, A4; National deviations for Europe and Australia

Emissions
FCC Part 15 Class A and B
EN 55022:1994/A1, 1995/A2, 1997 Class A
VCCI Class A
AS/NZS 3548:1995 Class A

Immunity
EN 55024:1998

Ordering Information

PRODUCT DESCRIPTION	3COM SKU
NBX V3000 IP Telephony Solution Supports 250 NBX devices (expandable up to 1,500 devices) and 12 NBX voicemail languages; includes NBX voicemail with four ports/400 hours AA/VM (expandable to 72 ports AA/VM), one IP On-the-Fly License, one 10/100 uplink port, four analog FXO ports, one analog FXS port, 15 phone licences (in base package), one system hard disk, one autosensing 110/220 V 50/60 Hz AC power supply, one eight-foot power cord (order must specify country type), and 19-inch rack-mounting ears.	3C10600A-XX
NBX V3000 512MB Memory Upgrade Kit Required to install with system capacity upgrade licenses beyond 250 devices (3C10317, 3C10287, 3C10325); one memory upgrade allows system to operate up to a maximum of 1,500 devices.	3C10240
NBX V5000 Chassis Provides four universal slots, two resilient 10/100 uplink ports with failover support, one 10 Mbps shared Ethernet uplink port, SSII Advanced Redundant Power Supply (RPS) uplink port, one autosensing 110/220 V 50/60 Hz AC power supply, one eight-foot power cord (order must specify country type), and 19-inch rack-mounting ears. Compatible with NBX 100, NBX V3000, and NBX V5000 systems.	3C10200-XX
NBX Device License Upgrades Unit-based licenses enable an incremental number (up to 1,500) of devices in addition to the 512 MB Memory Upgrade Kit (3C10240). Requires R4.4 or higher system software.	
Single-Device Call Processor Upgrade	3C10317
125-Device Call Processor Upgrade	3C10287
250-Device Call Processor Upgrade	3C10325
NBX V3000 Hard Drive Field Replacement Unit (FRU) Replacement hard disk FRU enabling a customer to replace a faulty NBX V3000 system disk, eliminating costly downtime and wait for a service technician to replace the drive and restore system operation.	3C10118A
NBX V3000 Chassis FRU Replacement chassis FRU enabling a customer to replace a faulty NBX V3000 chassis without returning hard disk assembly, eliminating costly downtime and wait for a service technician to replace the drive and restore system operation.	3C10241
NBX Uplink Card Includes eight RJ-45 uplink ports (10 Mbps shared Ethernet) to add an NBX chassis or to support other NBX devices.	3C10370
NBX Analog Line Card (FXO) Terminates up to four Loop-start PSTN telephone lines to the NBX system via four RJ-11 interfaces; includes built-in caller ID support (service must be purchased from a telco/PTT) and built-in power failure transfer jack. Requires R4.4 or higher system software.	3C10114C
NBX Analog Terminal Card (FXS) Terminates up to four tip/ring analog devices such as an analog phone, cordless phone, Group 3 fax machine, speakerphone adjunct, etc. Does not support modems. Requires R4.4 or higher system software.	3C10117C
NBX Analog Adapter (FXS) Standalone device converts an Ethernet connection into an analog station port (FXS) for industry standard analog phones or similar devices; provides a switched 10/100 Ethernet port for another device such as a PC; supports IEEE 802.3af Power over Ethernet (PoE); does not support modems; local power supply included. Requires NBX R4.4 or higher system software.	3C10400-XX
NBX T1/PRI Card Terminates a voice T1, T1/PRI, or Q.Sig slave circuit into the NBX system; for optimized network loading includes a 10/100 MB MDI uplink port to connect to a LAN switch port, plus a built-in CSU. Requires R4.4 or higher system software.	3C10116D
NBX BRI-ST Card Terminates up to eight ISDN BRI-ST lines into the NBX system. Requires R4.4 or higher system software.	3C10164C-ST
NBX E1/PRI Card Terminates a voice E1/PRI or PRI/Q.Sig slave circuit into the NBX system; for optimized network loading includes a 10/100 MB MDI uplink port to connect to a LAN switch port, plus a built-in CSU. Requires R4.4 or higher system software.	3C10165D

Ordering Information *(continued)*

PRODUCT DESCRIPTION	3COM SKU
NBX Voicemail System Upgrade Licenses	
One-port license	3C10288
Eight-port license	3C10326
20-port license	3C10327
3Com 3100 Entry Phone	
Provides a single-line IP entry phone for basic telephone services via analog feature code access and one 10/100 Ethernet port (no PC port); supports 802.3af PoE standard; includes preprogrammed services for volume up/down, buttons for FWD Mail and Mail Retrieve, large LED for messages waiting; local power supply sold separately (see 3C10224-XX or 3C10444-XX). Requires NBX R5.0 system software and an NBX Group 0 device license (3C10410), sold separately.	3C10399A
3Com 3101 Basic Phone	
Provides listen-only speaker, a two-line pixel display with three softkeys, a four-way cursor controller, four programmable buttons, and two 10/100 switched Ethernet ports; supports 802.3af PoE standard; local power supply sold separately (see 3C10224-XX or 3C10444-XX). Requires NBX R4.4 or higher system software and an NBX Group 1 device license (3C10411), sold separately.	3C10401A
3Com 3101SP Basic Phone with Speaker	
Provides half-duplex speakerphone, a two-line pixel display with three softkeys, a four-way cursor controller, four programmable buttons, and two 10/100 switched Ethernet ports; supports 802.3af PoE standard; local power supply sold separately (see 3C10224-XX or 3C10444-XX). Requires NBX R4.4 or higher system software and an NBX Group 1 device license (3C10411), sold separately.	3C10401SPKRA
3Com 3102 Business Phone	
Provides full-duplex speakerphone, a two-line pixel display with three softkeys, a four-way cursor controller, 18 programmable buttons with lights, 10 fixed-feature buttons, removable language-specific faceplate for additional communications flexibility, and two 10/100 switched Ethernet ports; supports 802.3af PoE standard; local power supply sold separately (see 3C10224-XX or 3C10444-XX). Requires NBX R4.4 or higher system software and an NBX Group 2 device license (3C10412), sold separately. .	3C10402A
3Com 3103 Manager Phone	
Provides a full-featured IP manager phone with large user-friendly menu-driven UI, high-quality full-duplex speakerphone, large pixel display with 12 system appearances and 10 display softkeys, a four-way cursor controller, 10 fixed-feature buttons, eight feature buttons w/ LEDs, and two 10/100/1000 switched Ethernet ports; supports 802.3af PoE standard; local power supply sold separately (see 3C10224-XX or 3C10444-XX). Requires NBX R5.0 system software and an NBX Group 2 device license (3C10412), sold separately	3C10403A
3Com 3105 Attendant Console	
Provides up to 100 programmable functions via 50 buttons with high/low shift position, four pre-programmed buttons, and one 10/100 Ethernet port; supports 802.3af PoE standard; local power supply sold separately (see 3C10224-XX or 3C10444-XX). Requires NBX R4.4 or higher system software and an NBX Group 2 device license (3C10412), sold separately.	3C10405A
3Com 3106C Cordless Phone	
Provides a 900 MHz IP cordless phone for in-building mobility with roaming up to 1,000 feet from the base station under supported operating guidelines, six hours talk time, four days standby, a two-line pixel display, four programmable buttons, and eight preprogrammed buttons; up to ten 3106C devices can operate in a domain radius; base station requires local power (power supply included). Requires NBX R5.0 system software and an NBX Group 1 device license (3C10411), sold separately.	3C10406A
3Com 3107C Cordless Phone	
Provides a 900 MHz IP cordless phone for in-building mobility with roaming up to 1,000 feet from the base station under supported operating guidelines, six hours talk time, four days standby, a two-line pixel display, four programmable buttons, nine preprogrammed buttons; up to three 3107C devices can operate in a domain radius; base station requires local power (power supply included). Requires NBX R5.0 system software and an NBX Group 1 device license (3C10411), sold separately.	3C10407A
NBX Group 0 Phone License	
Permits connection of a 3Com 3100 phone to an NBX system; one license per phone required for operation; may be ordered in any quantity; not required for NBX 1100 and 2100 series phones. Requires R5.0 system software. One-port license (unit-based).	3C10410
NBX Group 1 Phone License	
Permits connection of a 3Com 3101, 3101SP, 3106C, or 3107C phone to an NBX system; one license per phone required for operation; may be ordered in any quantity; not required for NBX 1100 and 2100 series phones. Requires R4.4 or higher greater system software. One-port license (unit-based).	3C10411
NBX Group 2 Phone License	
Permits connection of a 3Com 3103 Manager Phone, 3102 Business Phone, or 3105 Attendant Console to an NBX system; one license per phone required for operation; may be ordered in any quantity; not required for NBX 1100 and 2100 series phones. Requires R4.4 or higher system software. One-port license (unit-based).	3C10412
NBX IP On-the-Fly Site License	
Allows local and remote NBX devices to operate as IP phones at Layer 3 on a per-call basis with each LAN-based device returning its IP address to the "pool" on the NCP after call completion; License included with NBX 100/NBX V3000/NBX V5000 purchases after 26Jan04.	3C10132
NBX IP Serve Site License	
Allows local and remote supported NBX devices to operate as IP phones at Layer 3 via static or DHCP IP addressing; one IP address needed per MAC address (each device and CO port) in the system. Requires R4.4 or higher system software.	3C10131
NBX ConneXtions Gateway License	
Software-based H.323 gateway license supports one concurrent VoIP H.323 session added to existing installed session; uses a dedicated Windows NT/2000 workstation or server (PC HW and OS license not included). Requires R4.4 or higher system software. One-port license (unit-based).	3C10315
NBX IP Virtual Tie Line License	
Enables NBX system-to-NBX system VoIP calling between sites; includes 60-day trial NBX IP On-the-Fly License. Requires R4.4 or higher system software.	
One-port 60-day trial license	3C10270
Two-port license (unit-based)	3C10328
NBX VPIM Multisite Messaging Exchange License	
Lets NBX solutions exchange voice mails with third-party VPIM-enabled voicemail systems. Requires NBX R4.4 or higher system software.	
60-day trial license	3C10276
Site license	3C10277

Ordering Information *(continued)*

PRODUCT DESCRIPTION	3COM SKU
NBX 3rd-Party Messaging License	
Can connect NBX and 3rd-party voicemail systems. Requires NBX R4.0 or higher system software and NBX WAV application ports.	
60-day trial license	3C10278
Site license	3C10279
NBX Media Driver License	
Supports seamless connections for TAPI/WAV applications to NBX solutions; eliminates need for T1/PRI card or analog connections between third-party application server and NBX. Requires NBX R4.1 or higher system software.	
60-day trial license (four-port license)	3C10318
One-port license (unit-based)	3C10319
Site License	3C10329
NBX pcXset™ License	
Puts the equivalent of an NBX business phone ("softphone") on the screen of a laptop or PC running Windows 98/NT/2000/XP; USB handset or headset not included; incremental or site licenses available. Requires R4.1 or higher system software.	
One-user license (unit-based)	3C10316
Site license	3C10154
Polycom Device License	
Allows a Polycom Soundstation IP 3000 to connect to an NBX solution; one license needed per Polycom unit. Requires R4.1 or higher system software. One-port license (unit-based).	3C10282
3Com Legacy Link for Norstar	
16-port gateway allows Nortel Norstar phones to connect to the NBX solution. Requires NBX R4.1 or higher system software.	
60-day trial license	3C10321
One-board (unit based)	3C10390
One-board license (unit based)	3C10283
3Com Legacy Link for Meridian	
16-port gateway allows Nortel Meridian phones to connect to the NBX solution. Requires NBX R4.1 or higher system software.	
60-day trial license	3C10321
One-board (unit based)	3C10391
One-board license (unit based)	3C10283
3Com Legacy Link—Analog	
16-port gateway allows analog phones to connect to the NBX solution. Requires NBX R4.2 or higher system software.	
One-board (unit based)	3C10392
One-board license (unit based)	3C10361
3Com NBX V3000 PoE Bundle	
Small-to-medium business market-priced and feature-optimized, includes one 3Com NBX V3000 IP Telephony Solution and one 24-port 3Com Baseline Switch 2226-PWR Plus: NBX V3000—four analog FXO ports, one analog FXS port, four ports/ 400 hours of NBX Voice Mail, 15 Business Phone licenses, and 250 devices (expandable to 1,500 devices); Baseline Switch 2226-PWR Plus—PoE, 24 x 10/100 copper ports, two x dual-purpose Gigabit SFP slots for either 1000Base-SX (3CSFP-91) or 1000Base-LX (3CSFP-92) modules.	3CV3000PWR-XX
NBX Call Record and Monitor Licenses	
Enables third-party call recording and monitoring systems to connect to NBX solutions. Requires R4.1 or higher system software.	
Site license	3C10286
NBX ACD Licenses	
Increases capacity from built-in two ACD agents; must install 3C10440 before proceeding to N+1 agent pricing key code (3C10441). Requires R5.0 system software.	
Three-agent base upgrade package (for a total of five agents)	3C10440
One-agent license (for increasing from 6 to a maximum of199 agents)	3C10441
3Com ExecutiveAssistant Base Package	
Base package includes one Advanced Client License for speech recognition auto attendant and speech recognition company directory. Requires purchase of separate Windows-based server and NBX Media Driver port license.	3C10450
3Com eXchange Call Center Base Package	
Comprehensive voice routing and management system controls, monitors, and reports call center interactions, distribution, and handling activities; includes 10 inbound Voice Agents and one eXchange Visor-Supervisor. Requires purchase of separate Windows-based server and NBX Media Driver port licenses.	3C10380
3Com Education Module	
Software package specifically designed to assist K-12 schools includes auto dialer for absentee reporting, enhanced IVR for homework hotline, and 911 emergency call event notification with record-on-demand.	
Base package (supports an initial 500 students)	3C10510
Additional 250 students (beyond base package)	3C10511

Notes—When ordering, replace XX with the applicable suffix: AA = Australia, New Zealand; ME = Europe; SA = South Africa; UK = United Kingdom; US = Canada, Latin America, United States.
See 3Com Voice Solution Global Price list for complete summary of SKU's and detailed compatibility matrix.

3com
Exercise Choice™

CELEBRATING
25 years of
NETWORKING