NETSERVER AND NETSERVER PRI CARD SETS

TOTAL CONTROL™

The NETServer and NETServer PRI Card Sets for the Total Control Enterprise Network Hub are designed to perform in data center environments where network downtime must be minimized and performance maximized for all remote users. The NETServer Cards can support up to 48 modems in a single chassis. NETServer PRI Cards can support up to 230 simultaneous ISDN connections.

NETServer is tightly integrated with U.S. Robotics award-winning V.Everything™/V.34 modem technology for connections at the highest possible speed, widest range of connection types, and highest reliability. NETServer is available with either an Ethernet or Token Ring interface. NETServer also supports Frame Relay with two independent high-speed synchronous ports. NETServer PRI Cards process both ISDN and analog calls.

NETServer communicates through high-speed circuit and packet-switched buses, to minimize processing time between cards in the Enterprise Network Hub and to allow the distribution of link protocols, such as PPP and Multilink PPP, across cards in the system for greater throughput. NETServer supports remote node access, terminal services and dial-up LAN-to-LAN routing capabilities with advanced management, security, and call accounting capabilities.

APPLICATIONS

Remote user access. Telecommuters and traveling users can dial into a NETServer connected to their corporate network utilizing either analog or ISDN to access e-mail, download files from the corporate network, and interact with a corporate host system as a terminal or as a client to a host server, such as Lotus Notes. An advanced Call Accounting and Security system ensures dependable access for authorized users to appropriate network resources.

Internet access. Internet service providers (ISPs) worldwide utilize NETServer and NETServer PRI to provide their subscribers with dial-up analog or ISDN access to the Internet. Call Accounting and Security capabilities provide these large networks with the information they need to manage network access, track subscriber usage, and provide billing information.

LAN-to-LAN routing. NETServer provides bandwidth-on-demand routing across multiple dial-up lines providing an ideal branch office routing solution, back-up links for larger routers or for automated data duplication. Any port can be used for dial-in access or LAN-to-LAN routing. NETServer works dynamically to provide remote access or additional bandwidth when needed.

U.S. Robotics®
The Intelligent Choice in Information Access

Software Downloadable Flash ROM preserves a NETServer investment. The newest performance and capability features may be downloaded from U.S. Robotics.

Award-Winning V.Everything™ Technology incorporates the true ITU-T V.34 standard (28.8 Kbps and optional speeds of 33.2 and 31.2 Kbps), proprietary V.FC (28.8 Kbps), and proprietary V.32 *terbo* (19.2 Kbps), as well as V.32 *bis,* V.32, and all other ITU-T standards down to 300 bps. Only U.S. Robotics provides a feature set in the market today that includes all three high speed data transmission protocols, providing the fastest possible connections or throughput to other modem devices.

Distributed Security Services allows dial-in user authentication across multiple NETServers utilizing the industry standard RADIUS (Remote Access Dial-In User Service) protocol and provides password encryption, dial-back, and other security measures to protect network services.

Per-User Firewalls provide additional security once a user is granted access to a network. NETServer allows system administrators to filter packet, protocol, and transport layers and Novell SAP broadcasts. Filtering on the NETServer can be applied on any port dynamically on a call-by-call basis and independently in either direction.

Call Accounting tracks usage for billing and network access resource utilization. From modem connect speed and compression type to user name and duration of call, the available data allows administrators to determine what is important.

Dynamic IP Addressing means NETServer can assign any user any IP address at the time they are authorized for access across multiple NETServers. This allows traveling users to dial into any location to gain access to their home network.

Stampede™ Remote Office™ Gold Client Software, bundled with NETServer or NETServer PRI offers telecommuters, satellite offices, and home offices connections to the main office LAN with the same functionality as locally connected LAN users. Remote Office Gold offers support for third party PPP routers and communications servers, concurrent IP/IPX and TCP/IP access, and dial-on-demand and remote control capabilities. With additional security features (CHAP, PAP, and Dial Back) and included utilities, users will experience cost savings and more efficient communications.

Common Management can be accomplished from any location. With NETServer Manager, any NETServer product on the network can be managed out-of-band via the console interface port or dial-up Telnet connection; or in-band via the LAN connection using a command-line Telnet session or NETServer Manager.

THE TOTAL CONTROL
NETSERVER CARD SOLUTION
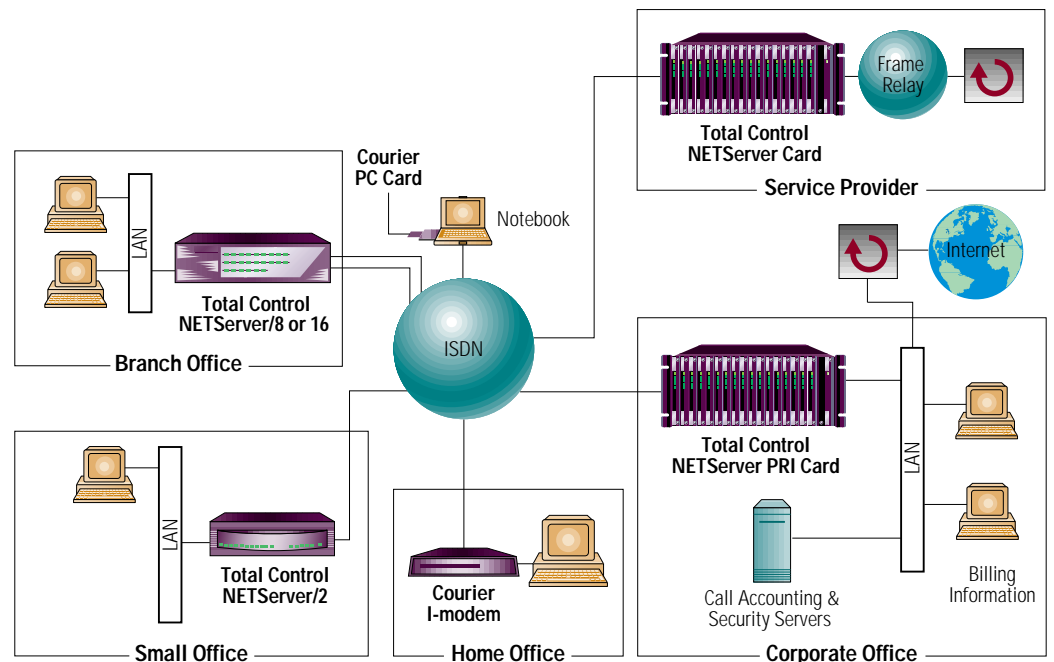
Ethernet Interface (up to 10 Mbps)

DB-15 AUI Ethernet connector

RJ45 10 BaseT Ethernet connector

BNC Thin Wire Ethernet connector

Token Ring (up to 16 Mbps)

DB-15 Type 1 Token Ring connector

BNC Type 3 Token Ring connector

System Requirements

Remote Client requires MS-DOS 5.0 or greater, and MS Windows 3.1 or greater for the Windows dialer.

Regulatory/Agency Approvals

FCC Approved (Part 15)

IC (formerly DOC) Approved

UL Listed

CSA Approved

NETServer Model Numbers/Part Numbers

SKU#	Description
000622-0	**Total Control NETServer 48-Port Ethernet Card Set** *48-ports of Ethernet LAN access in the Total Control Enterprise Network Hub.*
000624-0	**Total Control NETServer 48-Port Token Ring Card Set** *48-ports of Token Ring LAN access in the Total Control Enterprise Network Hub.*
000976-0	**Total Control NETServer PRI Card Set** *Provides support for 46 ISDN connections from the Dual PRI Card.*
001123-0	**Total Control NETServer 48-Port Frame Relay Card Set** *48-ports of Frame Relay access in the Total Control Enterprise Network Hub. Supports up to two T1's for Frame Relay links.*

*above SKUs do not include chassis or modems.

Warranty

Two-year limited warranty; factory repair or replacement.

Services

U.S. Robotics' customers are backed by a full-range of customized technical support services including toll-free technical service phone support, product specification assistance, installation services, educational training programs; electronic information services, plus a variety of repair and service options. For more information on any U.S. Robotics' Total Control service programs, call 1-800-550-7800.

Client Dial-Up Support

-PPP with automatic PPP detection

-SLIP, CSLIP

-Telnet and RTelnet

-Dynamic address assignment per call

-RLogin

Routing Support

-Transparent on-demand routing

-IP and IPX protocol routing

-Inverse multiplexing with programmable load balancing

-Host, subnet, and network routers supported

-Selective default routing

-Continuous connection (automatically retries after connection loss)

Administration

-Local Flash ROM for booting and configuration storage

-Support for Domain Name Service (DNS)

-Call activity logging

-SNMP management - MIB II

-Microsoft Windows management software

-Telnet command line interface

-Packet logging and tracing

-Ping and traceroute utilities

-Network and port monitoring

-Dial-in management access with password security

-RADIUS accounting

Filtering and Security

-IP, IPX, and SAP protocol filtering

-Set inbound and outbound packet filtering independently

-Management security option

-Compatible with RADIUS authentication servers

-IP address assignment per router or per port

PPP Specific Features

-Address and control field compression

-Protocol field compression

-PAP and CHAP authentication protocols

-Magic number loopback detection

-Maximum receive unit negotiation

-Async control character map negotiation

-IP address negotiation and assignment

-Van Jacobson compression TCP/IP headers

Physical Interfaces

(1) RJ-45 RS-232 connector

(1) RJ-45 10 -base T ethernet connector up to10 Mbps

(2) V.35 Frame Relay connectors up to 1.024 Mbps each (NETServer PRI Ethernet only)

Industry Standards Support

-TCP (Transmission Control Protocol)

-IP (Internet Protocol)

-RIP (Routing Information Protocol)

-SLIP (Serial Line Internet Protocol)

-CSLIP (Compressed SLIP)

-ICMP (Internet Control Message Protocol)

-UDP (User Datagram Protocol)

-ARP (Address Resolution Protocol)

-Telnet

-PPP (Point to Point Protocol)

-RFC 1331, 1332, and 1334 for PPP

-Backward compatible with RFC 1171, 1172

Card Hardware Specifications

-100 Mhz 486 DX4 CPU

-4 Mbytes dynamic RAM

-2 Mbytes non-volatile Flash ROM

-Power: 5 watts per card set

-Heat: 17 BTUs per card set

Operating Environment

Temperature: 30°-104° F (0°- 40° C)

Humidity: 0-95%, non-condensing

Manufactured in the U.S.A.

US Robotics ®

The Intelligent Choice in Information Access