Software Announcement
July 21, 1998

IBM eNetwork Communications Server for Windows NT, Version 6.0 Provides More Cost-Effective Network Computing Solutions

Overview

The eNetwork™ Communications Server for Windows NT® Version 6.0 provides a powerful multifunction, multiprotocol gateway for connecting diverse applications and network environments. eNetwork Communications Server enables workstations to communicate with other workstations and host computers, regardless of platforms and network configurations. This gives you the freedom to choose applications based on your business needs and not your network protocol.

With Internet and intranet solutions that allow your company to implement the latest network computing advances, Version 6 has the following enhancements:

- Host Publisher integrates existing enterprise applications and mission-critical data with the Web. You can now publish data sources from ActiveX servers and controls, Java™ classes, ODBC databases and more, within industry standard web pages.
- Clients can connect to and get access to AS/400® data without additional configuration or code installation on the client machine. The TN5250 server function enables TCP/IP users to access applications on an AS/400 in an SNA network. Any industry-standard TN5250 client workstation can connect to the TN5250 server for access to SNA networks.
  - The TN3270E and the TN5250 servers supports Secure Sockets Layer (SSL) authentication and encryption, providing secure access across the TCP/IP network. Load balancing for client connections of TN3270E and TN5250 servers that connect to the same host resource is also supported.
- New Branch Extender technology realizes substantial savings on network costs for enterprises with hundreds to thousands of branch sites, with SNA applications in the data center and SNA clients in the branches.
- New Enterprise Extender technology enables intranets by extending the reach of SNA applications over an IP network with similar levels of reliability and scalability enjoyed by SNA users, and with better scalability than DLSw-based router networks.

Intended Customers

For customers who:

- Require a full range of secure and robust communications and connectivity offerings on the Windows NT platform
- Have multiprotocol networks (SNA and TCP/IP) and want to use applications written for one protocol in a network using the other protocol
- Require access to AS/400 data and applications
- Want to extend sales channels, improve productivity, or extend the reach of their business by publishing host applications and data to the web

Key Prerequisites

- Microsoft™ Windows NT Server Version 4.0, with service pack 3 or later
- All Intel-based systems supported by Windows NT Server, Version 4.0 or later

At a Glance

eNetwork Communications Server for Windows NT Version 6.0 offers a broad range of communication, connectivity, and networking options allowing application decisions to be based on business needs, not networking protocols.

New enhancements:

- Host Publisher provides a Web-to-host solution specifically designed to address the unique characteristics of the Internet
- Enhanced AS/400 integration with TN5250 Server and Shared Folder Server support
- Support for Branch Extender, Enterprise Extender, and Data Compression/Encryption
- Improved availability with Load Balancing for all client types and Hot Standby
- Enhanced security support at the session and conversational levels
- Simplified configuration and management through new easy-to-use tree-view graphical user interface

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Planned Availability Date

July 31, 1998

This announcement is provided for your information only. For additional information, contact your IBM representative, call 800-IBM-4YOU, or visit the IBM home page at: http://www.ibm.com.

Description

Host Publisher

Host Publisher, included with the eNetwork Communications Server for Windows NT, is an integration server that provides a scalable and reliable environment for integrating existing enterprise applications and data with the Web. Customers can now publish data sources from a variety of sources within industry standard web pages.

Host Publisher includes a powerful and easy to use integration module, called Integrator, that simplifies the integration of your application with the Web. In addition, Integrator is compatible with most popular HTML editors and authoring tools so you can simply drag and drop your HTML pages into Integrator when you are ready to integrate your applications and databases.

One of the key features of Host Publisher is its clustering technology that is implemented in separate deployment modules known as Dispatcher and PageServer. These modules are based on distributed and multithreaded architecture designed to maximize performance, throughput, and availability, which are so important to business-critical applications.

Several pre-built System Integration Modules (SIMS) are available for accessing common data sources such as ActiveX servers and controls, Java classes, and ODBC databases. A SIM Developer′s Kit (SDK) is included which provides a COM-based framework to facilitate access to any other data source.

The Integration Module, *Integrator*

- Creates library of Web integration templates
- Defines application and database access properties
- Previews Web integration templates prior to deployment

The Deployment Module, *Dispatcher*

- Load balances Web page requests for maximum throughput
- Supports hot spare for increased availability
- Communicates with Adaptor, a small module that integrates with the Web server

The Deployment Module, *PageServer*

- Retrieves data from applications and databases and generates appropriate HTML code for Web deployment
- Supports page caching and connection caching for maximum performance

The System Integration Modules integrate:

- Client/server applications using ActiveX servers
- Third-party or custom ActiveX Controls
- Java classes
- ODBC relational databases

The Host Publisher function enables new uses for existing applications and data. With Host Publisher you can combine existing information sources into composite applications for new users, without any changes to the existing applications and data. The business benefits associated with Host Publisher are substantial. You can extend the reach of your business by enabling inter-company projects or contacting new customers. You can also establish a competitive advantage by extending sales channels, providing new services and real-time product information. You can improve productivity by enhancing aging applications with new front ends or extending real-time access to a mobile workforce.

AS/400 Integration

The eNetwork Communications Server for Windows NT provides access to data on AS/400s through the following functions:

- TN5250 Server
- AS/400 OLE DB provider
- AS/400 Shared Folder Server

The TN5250 server provides connectivity from TN5250 clients on IP networks to AS/400s on SNA networks. The server implements the protocols outlined in RFC1205. The TN5250 server also supports IP and hostname filtering that allows central administration of Client Access™ to the server, as well as directing clients to specific AS/400s. You can specify which clients can connect to the TN5250 server and which resources they can have access to, based on either the client′s IP address or hostname. The eNetwork Communications Server supports load balancing and hot standby support for client connections of TN5250 servers that connect to the same AS/400.

The OLE DB support allows application developers to establish record-level access to AS/400 databases.

The AS/400 Shared Folder support provides access to AS/400 data without additional configuration or code installation on the client machine. The shared folders can be used to:

- Use AS/400 security to limit access to workstation files
- Share data with multiple users at the same time
- Backup workstation files to an AS/400 folder

Enterprise-class Networking

Branch extender is an APPN® border node subset that is designed to interconnect a remote branch office to an APPN WAN backbone network. Branch extender optimizes the peer-to-peer communication environment for administrators who want to connect LAN-based branches to one large WAN. The branch extender enables customers to interconnect a branch office with LANs, end nodes and low entry networking nodes with dependent and independent LUs, and PUs such as teller machines to one or several WANs. Specifically, branch extender:

- Can reduce the number of network nodes in large APPN networks, enabling you to add additional branch networks
- Provides for substantial savings in network costs

The Enterprise Extender data link control allows the eNetwork Communications Server for Windows NT to provide HPR connections on IP networks, using UDP/IP packets. To the HPR network, the IP backbone appears to be a logical link. To the IP network, the SNA traffic appears to be UDP datagrams. These datagrams are routed without changes to the IP backbone. Because there is no protocol transformation and because packaging takes place at the routing layer without the overhead of additional transport layers, this results in efficient use of the intranet infrastructure for IP clients that access SNA-based data (TN3270 clients or Web browsers using IBM Host On-Demand, for example), as well as for SNA clients.

Data compression at the session level increases throughput for large amounts of data across communication links, resulting in enhanced throughput across slow-speed lines and faster response times. The eNetwork Communications Server for Windows NT now supports Run Length Encoding (RLE), and Lempel-Ziv (LZ9 and LZ10).

The eNetwork Communications Server for Windows NT now supports load balancing for all client types. This enables you to distribute TN based and SNA API Client based LU 0, 1, 2, 3 and LU 6.2 sessions across eNetwork Communications Server and NetWare for SAA® servers. The server analyzes and makes available various load factors to determine the least loaded server to select.

Hot standby enables you to ensure that configured connections to a host can continue to function by triggering activation of alternative connections on a backup server when a critical server goes down.

The new Multi-Path Channel (MPC) support provides high-capacity, high-availability fiber connections to one or more S/390® hosts over the ESCON® channel adapter. MPC connections provide high data transmission rates with transparent backup when physical connections break or become temporarily unavailable. This channel-to-channel connection enables you to provide LAN clients ready access to S/390 resources and services.

The adapter support for the eNetwork Communications Server for Windows™ NT has also been extended to include shallow (nonprogrammable) adapters for MicroChannel and ISA-bus machines using an open data link control. Support for deep (programmable) adapters was already available.

Enhanced Security

The eNetwork Communications Server now supports SNA session-level encryption (SLE). SLE enables you to encrypt either all of the data or selected data that is transferred between the workstation and the host. If you want to protect any workstation data by using encryption, the host or session partner must also be configured to use encryption. The support includes dependent LU and LU6.2 connections.

The data encryption support provides an easy way for all SNA API clients to have secure communications between the client and the Communications Server. The data encryption support includes connections for LUA and LU6.2.

In addition, you can specify that security is used on connections between Telnet clients and the TN3270E or TN5250 server. This security uses Secure Sockets Layer (SSL) Version 3 to provide data encryption and server authentication using signed certificates.

Easy-to-Use System Management/Configuration

The eNetwork Communications Server for Windows NT can be managed with the following facilities:

- SNA Node Operations
- Command line utilities
- Web based administration
- Tivoli Management Environment™ (TME) Plus Module

The Node Operations offers a new unique feature that provides a tree-view diagram of your configuration which enables you to select and modify resources in a hierarchical graphical interface. Defaults are provided so you can configure your system easily using a minimum number of parameters. When completed, an automatic verification step takes place to examine the configuration files.

The eNetwork Communications Server allows you to perform server administration over an intranet or the Internet using a Web browser. The enhanced interface enables a system administrator to query node status, obtain information about resources, modify resources, and display configuration files and message logs from either a remote or local workstation.

The Tivoli Management Environment (TME) Plus Module integrates the management of eNetwork Communications Server into TME. This allows you to distribute, install and uninstall the Communications Server, start, stop, and query the server, display and modify server resources, list configuration files, and route error messages from the Communications Server to a Tivoli Enterprise Console and establish monitors and thresholds for key server attributes.

Host On-Demand

The eNetwork Communications Server for Windows NT, Version 6.0 includes a limited use license of the eNetwork Host On-Demand Version 2. Host On-Demand uses the power of Java to open the doors of your enterprise data whenever you need it, wherever you need it, straight from your browser. TN3270, TN5250, and VT 52/100/200 emulation is included in a single package.

The Host On-Demand component of eNetwork Communications Server for Windows NT, Version 6.0 includes a license for one user.

Host Integration

The eNetwork Communications Server for Windows NT, Version 6.0 will be included in the recently announced IBM eNetwork Host Integration Solution. The Host Integration Solution is the most complete answer to host access and network integration in the industry. Regardless of platform or network environment, it provides every user with secure access to mission-critical business systems. Highlights include:

- Software components include both IBM eNetwork Communications Servers and eNetwork Software Client products
- Single pricing structure with one price per each registered user
- Pricing is independent of the total number of clients and servers
- Available for the VPO and CO offerings associated with Passport Advantage

Refer to Software Announcement 298-195, dated June 16, 1998, for additional information about the Host Integration Solution.

Family of Products

For additional, up-to-the-minute, information about the entire IBM eNetwork family of products refer to the Communications Server home page:

http://www.software.ibm.com/enetwork/commserver

This page includes information and links to headline information, specification sheets, frequently asked questions and answers, maintenance and support information, and more.

Year 2000

This product does not have date dependencies and is, therefore, Year 2000 ready.

This product is Year 2000 ready. When used in accordance with its associated documentation, it is capable of correctly processing, providing, and/or receiving date data within and between the 20th and 21st centuries, provided all other products (for example, software, hardware, and firmware) used with the product properly exchange accurate date data with it.

The maintenance end date for this Year 2000 ready product is January 31, 2001.

Product Positioning

IBM′s eNetwork Communications Server for Window NT takes advantage of IBM′s experience with SNA, TCP/IP, and communications servers to provide a high-performance, high-quality communications solution for the Windows NT environment.

The eNetwork Communications Server provides an essential foundation for networked computing by supporting the most widely used networking technologies, enabling customers and business partners to build client/server applications independent of networking protocol or hardware.

The full implementation of APPN (end node and network node), HPR, and DLUR, along with the integrated SNA gateway capabilities, positions the Communications Server as a participant in either a host (hierarchical) or peer-to-peer distributed network environment.

With the integrated AnyNet® (access node and gateway), TN3270E and TN5250 Servers the Communications Server is well positioned for customers with multiprotocol networking environments.

eNetwork Communications Server for Windows NT is the solution for companies in the Windows NT environment that:

- Run multiprotocol or multiple networks
- Want to consolidate or change their backbone networks
- Have existing SNA applications they want to extend over TCP/IP networks
- Have existing sockets applications they want to extend over SNA networks
- Want to provide SNA 3270 host access to TCP/IP users via TN3270E
- Want to provide SNA host access to any Java-enabled Web browser
- Want to improve network availability
- Want to access data from anywhere using familiar interfaces and protocols
- Want to publish host data and applications from multiple sources to the web
- Want to provide 5250 access to IP users via TN5250
- Integrate the management of the eNetwork Communications Server into Tivoli
- Want to use Branch Extender or Enterprise Extender advanced networking technologies to implement more cost-effective and robust networks
- Want to improve data security over the Internet/intranet
- Need to support users in a variety of locations, in the office, at home or traveling

Trademarks

IBM US Announcement Supplemental Information

July 21, 1998

Publications

One copy of *IBM eNetwork™ Communications Server Version 6.0 for Windows NT®: Quick Beginnings* is shipped with the program package.

The following Communications Server publications can be ordered separately from IBM after planned availability. To order, contact your IBM representative or phone 800-879-2755.

Title	Order Number
Quick Beginnings	GC31-8424
Network Administration Guide	SC31-8656
Configuration File Reference	SC31-8655
Client/Server Communications Programming Reference	SC31-8479
System Management Programming Reference	SC31-8480

Displayable Softcopy Publications: IBM eNetwork Communications Server for Windows NT publications are offered in displayable softcopy form. All unlicensed manuals are included.

The publications are provided as Adobe Acrobat.PDF files and HTML files and are included with the program package on the same CD-ROM.

Technical Information

Specified Operating Environment

Hardware Requirements: IBM eNetwork Communications Server for Windows NT Server, Version 6.0 can be used on all Intel-based systems supported by Windows NT Server Version 4.0 or later. An Intel Pentium™ machine, 100 MHz CPU with 32 MB of RAM, is the minimum recommended server hardware. Depending on the network environment, a faster processor and larger memory may be necessary.

Disk space of 10 MB is required on a startup drive for temporary use and 75 MB on any hard drive for permanent use.

The Communications Server for Windows NT SNA API clients will run on any hardware required by Windows 3.1, Windows 95, OS/2®, and Windows NT (Intel only).

The Communications Server for Windows NT Remote Administration clients will run on any hardware required by Windows 95, and Windows NT Version 4.0 (Intel only).

Communications Adapters: One or more network communication adapters (and appropriate cable) may be required.

Communications Server for Windows NT, Version 6.0 is compatible with the following adapters:

- IBM ISA/EISA WAN Adapters
  - Multiprotocol Communications Adapter for SDLC over leased and switched connections
  - Wide Area Connector for SDLC, X.25 over leased and switched connections
  - Serial/Parallel Adapters (synchronous port) for SDLC
- IBM Micro-Channel WAN Adapters
  - Multiprotocol Communications Adapter for SDLC over leased and switched connections
  - Wide Area Connector for SDLC, X.25 over leased and switched connections
  - Serial/Parallel Adapters (asynchronous port) over asynchronous connections
- IBM PCI and PCMCIA WAN Adapters
  - Serial/Parallel Adapters (asynchronous port) over asynchronous connections
- Non-IBM ISA/EISA WAN Adapters
  - BusTech, Inc, (Bus&Tag and ESCON® adapters) over SNA channel connections
  - Eicon Technology for Frame Relay over leased and switched connections
  - Barr Systems (Bus&Tag and ESCON) supporting CDLC Channel
  - CIREL FPX Series supporting X.25 (LLC)
  - Polaris ESCON supporting CDLC Channel
  - RD6 Adapter supporting SDLC and X.25
  - Microgate Adapter supporting SDLC and X.25

Note: The Communications Server for Windows NT also is compatible with a wide variety of LAN adapters including many adapters with NDIS drivers supported by Microsoft™ Windows NT.

For current and complete information relative to hardware and software compatibility for LAN and WAN adapters refer to the Communications Server Web pages at this URL:

http://www.software.ibm.com/enetwork/commserver

Software Requirements: eNetwork Communications Server for Windows NT requires either Windows™ NT Server Version 4.0, with service pack 3, or later. Additionally:

- TCP/IP is required for TN3270E and TN5250 servers
- TCP/IP, IPX/SPX, or both, is required for communication with the SNA API clients.

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- For IPX, the following software must be enabled on the server:
  - Gateway Service for Netware
  - SAP agent
  - NWLink IPX/SPX or a compatible transport

Remote Administration Clients require Windows 95 or Windows NT Workstation or Server Versions 4.0 or later. TCP/IP, Netbios, or both, is required for communications with Communications Server for Windows NT.

SNA API Clients requires either:

- OS/2 Warp Version 3.0, or later
- Windows 3.1.1, or later
- Windows 95, with service pack 1 or OSR2
- Windows NT Workstation or Server 3.51 with service pack 4 or higher
- Windows NT Workstation or Server Version 4.0
- TCP/IP or IPX/SX is required for communications with Communications Server for Windows NT

The AS/400® Shared Folder supports LAN clients on the following platforms:

- Windows 95
- Windows NT Version 4.0
- Windows 98
- OS/2 Version 4
- Windows 3.11

Host On-Demand requires any Web server capable of serving Java™ applets to be installed on the same machine as Communications Server for Windows NT.

Web administration requires a Web server running on the Communications Server for Windows NT system and a Web browser running on any system on the intranet. Communications between the systems must use Sockets over SNA or TCP/IP. Supported Web servers include:

- IBM Internet Connection Server for Windows NT
- Lotus® Domino™
- Lotus Go
- Microsoft Internet Information Server for Windows NT
- Other Web servers can be used, but are not supported and may have limitations.

Supported Web browsers include:

- Netscape Navigator 4.04, or later, plus Netscape JDK patch
- Microsoft Internet Explorer 4.0 or later
- Other Web browsers that support Java 1.1.4 or later, JavaScript, frames and cookies can be used, although they are not supported.

Many other functions and features of eNetwork Communications Server for Windows NT require a Web browser. Any Web browser used must support HTML 3.0 documents.

Host Publisher will operate with any Web browser and with most Web servers running on the following operating systems, or later:

- Microsoft Windows 95 or Windows NT Version 4.0
- Digital Unix Version 3.2
- Hewlett-Packard HP-UX Version 10.x
- Sun Solaris Version 2.X
- IBM AIX® Version 4.2

Compiler Requirements: Compilers for applications under Communications Server for Windows and SNA API clients for Windows 95 and Windows NT Versions 3.51 and 4.0:

- IBM VisualAge® for C++ for Windows, Version 3.5
- Microsoft Visual C++ Version 4.1 or 5.0

Compiler for applications under SNA API clients for OS/2 is IBM VisualAge for C++ for OS/2, Version 3.

Compiler for applications under SNA API clients for Windows 3.1 is Microsoft Visual C++ Version 1.51 or 1.52.

Limitations: eNetwork Communications Server for Windows NT, Version 6.0:

- Runs only on the Windows NT operating system in the Intel environment
- Will not install successfully on a machine that has Microsoft SNA Server installed
- Does not provide the link control protocol (LCP) required to support a Point-to-Point Protocol (PPP) connection between the server and a modem for ISDN connections. If the modem provides the LCL independently from the application support, the connection will work properly.

Performance Considerations: Performance can be affected by:

- Type of connection and network characteristics
- Number of users and concurrent sessions
- Type of tasks
- Available installed memory
- System management, RAS, and/or trace activity

Planning Information

License Management: Communications Server for Windows NT includes tools for license management. This license is included in the program package on the CD-ROM and is installed along with the product. During installation you are prompted to enter the number of concurrent licenses purchased. This applies to both base concurrent users and the Host Publisher concurrent users.

If the number of concurrent users (base and/or Host Publisher) exceeds the number of concurrent licenses purchased, then an error message is logged. No product function is disabled even in the case of the licenses being exceeded. Further connections are still allowed with an error message being logged for each connection as long as the license count is exceeded. You are expected to monitor the log and purchase additional licenses if you consistently exceed your initial license quantity.

Registration: eNetwork Communications Server for Windows NT includes a tool, Axtive Registration Tool, that can be used for registering the product. You are given the opportunity to register when you install and the first time you start the product. If you decline to register, then once every eight days you will again be prompted to register.

The benefit of registering the server with IBM is that you can be notified of future service updates and of future releases of the product.

Packaging: The eNetwork Communications Server for Windows NT, Version 6.0 package includes:

- One CD-ROM for the Communications Server
- Hardcopy publication: Quick Beginnings
- IBM International Program License Agreement Booklet
- License Information Booklet
- Additional Product CD-ROMs
  - DB2 Connect® Enterprise Edition
  - DB2® Client Application Enabler
  - CICS® Clients
  - MQSeries® Clients

Security, Auditability, and Control

The eNetwork Communications Server for Windows NT uses the security and auditability features of the Windows NT operating system Version 4.0.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Ordering Information

eNetwork Communications Server for Windows NT, Version 6.0 is a client/server type product which has three charge units: server install and two types of concurrent users. The server install is available in a fixed order quantity of 1. The concurrent users are available in fixed order quantities of 1, 5, 10, and 50. There is only one program package supplied with this product.

Ordering Notes: Charges for eNetwork Communications Server for Windows NT, Version 6.0 are based on concurrent users (not sessions). A concurrent user is defined as an active upstream or downstream connection established to the eNetwork Communications Server for Windows NT. An active connection includes TN3270, TN5250, SNA API (split stack), SNA (APPN®, DLUR, full stack), shared folders and AnyNet® clients. In an APPN environment a connection is an active link to an adjacent nodes. If a multiplexing program or application server (for example, Transaction Server, DB2) connects to the eNetwork Communications Server for Windows NT providing access on behalf of multiple concurrent users, then one user license is required for each of these multiple concurrent users.

The Host Publisher component of eNetwork Communications Server for Windows NT includes a license for one concurrent user. A Host Publisher concurrent user is defined as an active, queued, or scoped to client user. This Host Publisher user license also includes all the entitlements of a base eNetwork Communications Server user license.

Upgrade Notes: Upgrades to eNetwork Communications Server for Windows NT, Version 6.0 are available from any IBM or non-IBM (competitive offering) SNA gateway or communications server product. The following upgrade information applies:

- The eNetwork Communications Server for Windows NT, Version 6.0 includes authorization for 1 concurrent user and 1 concurrent Host Publisher user.
- When upgrading from a usage-based product, for example, Communications Server for Windows NT, Version 5, you are authorized to acquire the equivalent number of users at a reduced price by specifying the concurrent user upgrade feature. This also applies when upgrading from a concurrent user to a concurrent Host Publisher user.
- When upgrading from concurrent users on eNetwork Communications Server for Windows NT, Version 6.0 to Host Publisher concurrent users on eNetwork Communications Server for Windows NT, Version 6.0 specify the Host Publisher upgrade feature.
- When upgrading from a product that is priced based on sessions, such as Communications Server for AIX Version 4.X the customer is eligible for a number of concurrent user upgrades equal to the actual number of concurrent users being supported on the prior product. For example, if the customer has licensed 50 sessions on a previous product, and actually supports 25 concurrent users, each running 2 sessions, they would purchase 25 concurrent user upgrades with Communications Server for Windows NT, Version 6.0.
- New and additional users must be acquired at the full price using the applicable concurrent user features for 1, 5, 10, and 50.
- When upgrading from a non usage-based product, you are not entitled to any concurrent users for upgrade. All users are considered as new users and must be acquired at the full price.

Program Name/ Description	Order Type Number	Feature Number	Part Number
eNetwork Communications Server for Windows NT, Version 6.0 Program Package — English CD-ROM	5801-AAR	3270	30L9022
eNetwork Communications Server for Windows NT, Version 6.0 1 Server Install	5802-AAR	2584	04L9932
eNetwork Communications Server for Windows NT, Version 6.0 1 Concurrent User	5807-AAR	8757	30L9209
eNetwork Communications Server for Windows NT, Version 6.0 5 Concurrent Users	5807-AAR	8758	30L9210
eNetwork Communications Server for Windows NT, Version 6.0 10 Concurrent Users	5807-AAR	8759	30L9211
eNetwork Communications Server for Windows NT, Version 6.0 50 Concurrent Users	5807-AAR	8760	30L9212

Program Name/ Description	Order Type Number	Feature Number	Part Number
eNetwork Communications Server for Windows NT, Version 6.0 1 Concurrent Host Publisher User	5807-AAR	8781	31L1339
eNetwork Communications Server for Windows NT, Version 6.0 5 Concurrent Host Publisher Users	5807-AAR	0994	31L1340
eNetwork Communications Server for Windows NT, Version 6.0 10 Concurrent Host Publisher Users	5807-AAR	0995	31L1341
eNetwork Communications Server for Windows NT, Version 6.0 50 Concurrent Host Publisher Users	5807-AAR	0996	31L1342
Upgrades			
eNetwork Communications Server for Windows NT, Version 6.0 English Program Package Upgrade from Communications Server for Windows NT, Version 5.0 or from any IBM or non-IBM gateway or communications server CD-ROM	5803-AAR	1363	30L9023
eNetwork Communications Server for Windows NT, Version 6.0 1 Server Install Upgrade from Communications Server for Windows NT, Version 5.0 or from any IBM or non-IBM gateway or communications server	5804-AAR	0951	30L9208
eNetwork Communications Server for Windows NT, Version 6.0 1 Concurrent User Upgrade from Communications Server for Windows NT, Version 5.0 or from any IBM or non-IBM gateway or communications server	5808-AAR	0432	30L9213
eNetwork Communications Server for Windows NT, Version 6.0 1 Host Publisher User Upgrade from a User on Communications Server for Windows NT, Version 5.0 or from any IBM or non-IBM gateway or communications server	5808-AAR	0443	31L1343
eNetwork Communications Server for Windows NT, Version 6.0 1 Host Publisher User Upgrade from a Concurrent User on Communications Server for Windows NT, Version 6.0	5808-AAR	0484	31L0853

Upgrade Protection (Entitled Customers): Customers who have previously acquired Software Advantage Upgrade Protection, and have not migrated to the Passport Advantage Offering as shown in the table below, will automatically receive their program package shortly after general availability.

Software Advantage Upgrade Protection Entitlement

Program Name/ Description	Current Part Number	New Program Package Part Number
Software Advantage Upgrade Entitlement eNetwork Communications Server for Windows NT, Version 6.0	4231760	30L9022

Terms and Conditions

Licensing: IBM International Program License Agreement. Proofs of Entitlement (PoE) are required for all authorized use.

Limited Warranty

Limited Warranty Applies: Yes

Program Services: Available until January 31, 2001

Money-Back Guarantee: 30-day, money-back guarantee for program packages

Copy and Use on Home/Portable Computer: No

Usage Restriction: Yes

The license for the eNetwork Communications Server for Windows NT, Version 6.0 includes:

- The eNetwork Communications Server for Windows NT, Version 6.0 which includes the authorization for one concurrent user. A concurrent user is defined as an active upstream or downstream connection established to the eNetwork Communications Server for Windows NT. An active connection includes TN3270, TN5250, SNA API (split stack), SNA (APPN, DLUR, full stack), shared folders and AnyNet clients. In an APPN environment a connection is an active link to an adjacent nodes. If a multiplexing program or application server (for example, Transaction Server, DB2) connects to the eNetwork Communications Server for Windows NT providing access on behalf of multiple concurrent users, then one user license is required for each of these multiple concurrent users.
- The Host Publisher component of eNetwork Communications Server for Windows NT includes a license for one concurrent user. A Host Publisher concurrent user is defined as an active, queued, or scoped to client user. This Host Publisher user license also includes all the entitlements of a base eNetwork Communications Server user license. Each PageServer component of Host Publisher requires a license for the eNetwork Communications Server for Windows NT. A license of eNetwork Communications Server for Windows NT also entitles you to deploy an unlimited number of the Host Publisher components Dispatcher, Adaptor, and Integrator on any supported platform.
- An Entry-level version of the Personal Communications 3270 and 5250 emulator. You are allowed to install and use, on the same machine as eNetwork Communications Server, the entry-level version of the Personal Communications 3270 and 5250 emulator product for administrative purposes. It is not licensed to be used on the clients.
- eNetwork Host On-Demand Version 2.0. The Host On-Demand component of eNetwork Communications Server for Windows NT includes a license for one user.
- The MDAC 1.5 files, required by the AS/400 OLE DB Provider, are provided under license from Microsoft Corporation. A copy of the Microsoft End User License Agreement is included as the eulamdac.doc file in the csnt directory on the eNetwork Communications Server for Windows NT CD. The Microsoft license, and not this Agreement, governs your use of this code.
- The Program Package includes components that are provided under license separate from the license for eNetwork Communications Server for Windows NT, Version 6.0
  - IBM DB2 Connect Enterprise Edition, DB2 Client Application Enabler, MQSeries Clients, and CICS Clients are provided with the Program. However, the authorization conditions governing the use of these products in conjunction with their respective servers, is provided under the license agreement for the respective server and not the Agreement for eNetwork Communications Server for Windows NT.
  - All the Terms and Conditions (for example Program Services, Support Line charges and procedures) for these products are in effect. They are not changed, in any way, by the eNetwork Communications Server for Windows NT.

Support Line: Personal Systems

Upgrades: Customers may acquire upgrades up to the currently authorized level of use of the qualifying programs.

Volume Orders: Yes, contact your IBM representative

Passport Advantage Applies: Yes

AIX/UNIX® Upgrade Protection Applies: No

Entitled Upgrade for Current AIX/UNIX Upgrade Protection Licensees: No

Variable Charges Apply: No

Charges

Program Name/Description	Part Number	One-Time Charge
eNetwork Communications Server for Windows NT, Version 6.0 Program Package — English CD-ROM	30L9022	$995
eNetwork Communications Server for Windows NT, Version 6.0 1 Server Install	04L9932	965
eNetwork Communications Server for Windows NT, Version 6.0 1 Concurrent User	30L9209	69
eNetwork Communications Server for Windows NT, Version 6.0 5 Concurrent Users	30L9210	328
eNetwork Communications Server for Windows NT, Version 6.0 10 Concurrent Users	30L9211	642

Program Name/Description	Part Number	One-Time Charge
eNetwork Communications Server for Windows NT, Version 6.0 50 Concurrent Users	30L9212	$3,174
eNetwork Communications Server for Windows NT, Version 6.0 1 Concurrent Host Publisher User	31L1339	119
eNetwork Communications Server for Windows NT, Version 6.0 5 Concurrent Host Publisher Users	31L1340	570
eNetwork Communications Server for Windows NT, Version 6.0 10 Concurrent Host Publisher Users	31L1341	1,116
eNetwork Communications Server for Windows NT, Version 6.0 50 Concurrent Host Publisher Users	31L1342	5,520
Upgrades		
eNetwork Communications Server for Windows NT, Version 6.0 English Program Package Upgrade from Communications Server for Windows NT, Version 5.0 or from any IBM or non-IBM gateway or communications server CD-ROM	30L9023	595
eNetwork Communications Server for Windows NT, Version 6.0 1 Server Install Upgrade from Communications Server for Windows NT, Version 5.0 or from any IBM or non-IBM gateway or communications server	30L9208	565
eNetwork Communications Server for Windows NT, Version 6.0 1 Concurrent User Upgrade from Communications Server for Windows NT, Version 5.0 or from any IBM or non-IBM gateway or communications server	30L9213	41
eNetwork Communications Server for Windows NT, Version 6.0 1 Host Publisher User Upgrade from a User on Communications Server for Windows NT, Version 5.0 or from any IBM or non-IBM gateway or communications server	31L1343	$91
eNetwork Communications Server for Windows NT, Version 6.0 1 Host Publisher User Upgrade from a Concurrent User on Communications Server for Windows NT, Version 6.0	31L0853	50

Monthly Optional PS Support Line Charge: $234

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