



# Tech Info Library

## Macintosh-To-Novell NetWare With AppleTalk (Part 1 Of 3)

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Security: Everyone

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This is the first of three parts.

Many users have asked about connecting Macintosh to a Novell network, and for up-to-date information on the status of Macintosh NetWare.

The ability of AppleTalk to communicate over broadband networks is done by using:

1. A FastPath (AppleTalk-to-Ethernet converter).
2. A broadband multiplexer (like those sold by Allen-Bradley: VistaMap 10MBps).
3. Another broadband multiplexer to convert the signal back on to Ethernet.
4. A receiving FastPath to convert back onto AppleTalk.

Complete information about NetWare can be obtained by connecting to the Novell demo BBS. The number is (800) 444-4472

Compatibility settings are: 8 bits, parity=none, stops=1, 1200-baud; the access code is NVSOF4.

Here is a brief overview of the Novell information:

With 32 Original Equipment Manufacturers (OEMs) reselling NetWare and with an installed base of over 145,000 file server-based networks, NetWare has become an unofficial standard in the LAN industry.

### Netware-Supported Configurations

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The following is a list of NetWare-supported networks.

BASEBAND NETWORKS

Linear Bus Networks

Asher-G	AST PCnet II	AST-RSN
AST Starport	AST Turbostar	AT&T StarLAN
Codenoll Ethernet	Cordata InterNet Link	Cordata InterNet Link 286
Corvus Omninet	Gateway G-Net	IBM PC Cluster
IBM PC Network Baseband	MICOM-Interlan Ethernet	NEC Omninet
Network vLAN	Network Elan	North Star Dimension
Novell NetWare Ethernet	Novell NetWare G-Net	Orchid PCnet
Racal-Milgo PLANET	Racore LAN Pac	Santa Clara PCnet/Ethernet
Texas Instruments Ethernet	Torus Ethernet	3Com EtherLink
3Com EtherLink Plus	Ungermann-Bass Net/ One Ethernet	Unisys Usernet-86
Univation StarLAN		Western Digital StarLAN

TOKEN-PASSING NETWORKS

Asher-P	Star Networks:
Comterm ARCNET	TeleVideo Personal Mini
Davong Multilink	Novell S-Net
IBM Token-Ring	
Kaypro ARCNET	
Nestar PLAN 2000	
Novell NetWare RX-Net	
Proteon ProNET-4	
Proteon ProNET-10	
Pure Data ARCNET	
Standard Microsystems ARCnet	
Torus Token-Ring	

BROADBAND NETWORKS

Linear Bus Networks

IBM PC Network  
Sytek System 6000  
Allen-Bradley Vista

IBM Personal System/2

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Advanced NetWare and System Fault Tolerant NetWare provide workstation and file server support for IBM's Personal System/2 series of microcomputer products. Novell also offers a software bridge to link the IBM PC network, the new Token-Ring Network, and other NetWare-supported networks.

Netware Operating System Software

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Just as DOS was designed specifically for standalone workstations, NetWare was designed specifically for networking. The NetWare operating system runs

in the file server, which manages shared resources. DOS runs in the workstations, allowing for local processing.

A software component called the NetWare "shell" lets the file server communicate with DOS and application software in the workstations. The shell sends DOS functions to the workstation, but sends NetWare functions to the file server to be handled by the LAN operating system. NetWare remains unchanged, regardless of what software is running in the workstations, which is why NetWare can support many hardware types, and can support multiple versions of DOS on the network simultaneously.

NetWare operating system software offers several powerful features, including DOS 3.x compatibility. DOS compatibility allows multiuser software applications that are developed for DOS to run unmodified on NetWare. Another feature, internal bridging, permits as many as four networks to bridge through the file server.

NetWare is fully compatible with NetBIOS, an industry standard that controls the way software interfaces with IBM and IBM-compatible networks. NetWare's NetBIOS compatibility means that NetWare supports all software and hardware designed around NetBIOS, including software and hardware developed for the IBM PC and Token-Ring networks.

This article is continued in "Macintosh-To-Novell Netware With AppleTalk, Part 2 of 3."

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