

## ▶ NETWORK / UNIX CONNECTIVITY

# NetCon Eases the Tension Between NetWare and Unix

BY PADRAIC BOYLE

Until recently, sharing resources between NetWare and Unix environments required purchasing several software packages and loading special drivers and protocols on servers and workstations. Most of the time, this is a hassle for network administrators. NetCon Business Systems may have a solution. Its Unix software allows Unix hosts to appear to NetWare as file servers, providing a fast, easy way for PC workstations to communicate with both Novell and Unix printing and file services.

Available for Santa Cruz Operations (SCO) and Sun Unix environments, NetCon, Version 5.1, is cheaper than most NetWare-to-Unix packages, ranging from

\$995 for three users to \$6,995 for 255. NetCon offers DOS workstations the ability to utilize file and printer services as well as a multiscreen terminal emulator within a mixed Novell and Unix environment simultaneously.

The file sharing provided by NetCon is similar to Novell's Network File System (NFS), and the multiscreen terminal emulator is somewhat similar to SCO's server console, allowing for multiple virtual sessions and hotkey switching between each terminal. You may have up to 18 or more screens running at the same time under Windows, depending on the amount of memory installed at the workstation. NetCon also offers peer-to-peer capabilities among other Unix hosts on the same network.

By utilizing NetCon's own version of Novell's Internet Packet Exchange/

Sequenced Packet Exchange (IPX/SPX) and the NetWare Core Protocol (NCP), NetCon, Version 5.1, enables PC workstations on NetWare networks to gain access to Unix services without requiring that each of them load TCP/IP or NFS. In fact, because of the NCP calls, the Unix host running NetCon appears as a NetWare server under Novell's Slist utility. The NetCon software loads only onto the Unix host (or hosts) and is linked to an Ethernet or Token-Ring card that supports SCO link-layer interface (LLI) drivers or Sun native Ethernet. NetCon supports IEEE standards Ethernet 802.3, Ethernet II, and Token-Ring frame types, allowing the network administrator the flexibility to choose a single common frame type among all systems.

One drawback to NetCon is that it allows connection to Unix hosts only and requires that users have the same name and password on both the NetWare and Unix servers. In some network environments there are connections to other,

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non-Unix host devices that use TCP/IP, such as Digital Equipment Corp. VAX or Hewlett-Packard minicomputers and other systems that are only accessible via the Internet. These systems would not be accessible without the TCP/IP protocol. Some packages, such as Novell's LAN Workplace for DOS, allow connectivity to non-Unix hosts, but they are typically much more expensive and require additional software on each workstation to access Unix hosts.

Currently, NetCon does not read the user passwords out of the NetWare bindery. So NetCon must rely on the administrator to manually add users onto both systems with the same name and password. This is required for NetCon to establish the link between the two systems.

The installation requires knowledge of the Unix operating system and some NetWare experience. The procedure is simple to follow and offers a menu utility to add servers and users. We did run into a snag, however, while installing NetCon

on a Unix host on the same network with multiple NetWare servers. During installation, NetCon queries all of the NetWare servers on the network and reads the user names from the binderies into the Unix

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host's memory. In a large network, this could mean reading thousands of names and placing a tremendous memory burden on the host. This was easily prevented by a call to NetCon technical support: We had to change a line in a configuration file and delete two data files. NetCon then requires you to add the servers and users that need access manually. Another way would be to isolate the Novell servers and

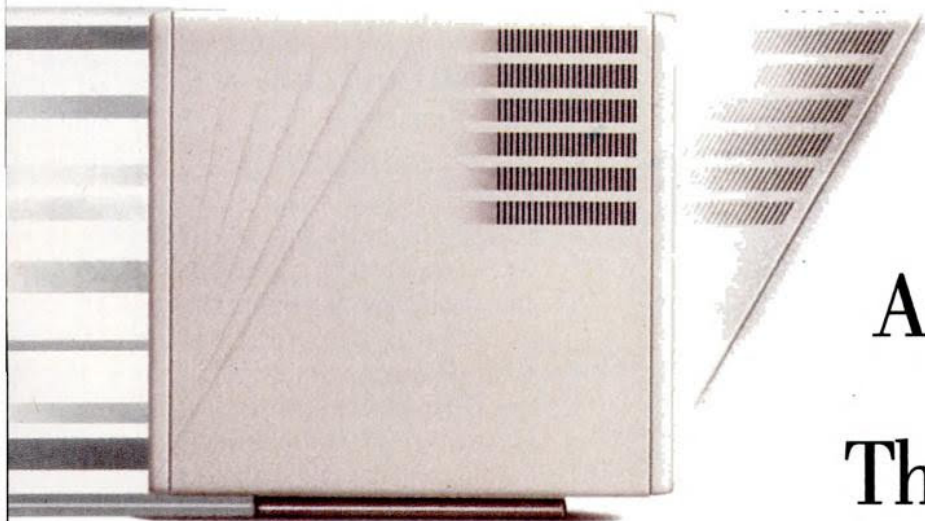
the Unix host onto the same network and allow NetCon to perform its automatic setup procedure.

NetCon requires SCO ODT/Unix 3.2.4 or 3.2.2 with streams, LLI 3.10g and the netconfig utility; Sun SunOS 4.1.1, 4.1.2, 4.1.3 with OpenWindows 3.0 and a minimum of 16MB (32MB is suggested) on the Unix hosts. Workstations require DOS 5.0 and Novell's ODI drivers, Version 1.20 or later. NetCon is also supported under Microsoft Windows 3.1 and Windows for Workgroups 3.1.

Even with NetCon's limitations, its ease of use, price, and—above all—its ability to communicate transparently within a mixed Unix/NetWare environment make it an attractive product for any network administrator who is thinking about combining the two operating systems.

• List price: *NetCon, Version 5.1*, \$995 to \$6,995. *NetCon Business Systems*, Five Progress St., Edison, NJ 08820; 908-756-3200; fax, 908-756-9220.

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