

Which Version of NetWare Should You Use?

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Deciding to upgrade or install NetWare on your company's network is only the first step. You must then determine which version of NetWare best meets your company's needs. This article reviews the main features of NetWare 5, NetWare 4.2, Novell Small Business Suite 5, and NetWare 3.2. This article also lists some questions that you should ask when you are trying to decide which version of NetWare to use.

You should understand the difference between each version of NetWare before you choose the version that is right for your company. You should do as much research as possible to find out which version of NetWare has the features your company needs. For example, you can contact your local Novell authorized reseller, and you can visit Novell's web site (<http://www.novell.com>).

To get started, you can review the main features that each version of NetWare offers. You should keep in mind that this article only summarizes the main features of each version. You will need to do more research to gather in-depth information.

NetWare 5

NetWare 5 offers key features that are not included in other versions of NetWare. For example, NetWare 5 is the first version of NetWare to fully support TCP/IP, using native IP to transport NetWare Core Protocol (NCP) commands between clients and servers. As a result, you can run NetWare 5 in a TCP/IP environment, an IPX environment, or a mixed environment. (See the related article on p. 6.) This feature makes NetWare 5 the best choice for companies that use both NetWare and other TCP/IP-based operating systems, such as UNIX or Windows NT. This feature also makes NetWare 5 the best choice for companies that have multiple locations connected via WAN links. Using a single protocol can minimize the number of packets traveling across WAN links, thus improving WAN performance.

In addition, NetWare 5 extends Novell Directory Services (NDS) by allowing you to manage Domain Naming System (DNS) and Dynamic Host Configuration Protocol (DHCP) servers via NDS. NetWare 5 also offers the following features:

- Novell Storage Services (NSS), a more efficient way of storing and retrieving files
- Network Address Translation (NAT), which conserves IP addresses and provides additional security for the network
- Symmetrical multiprocessing (SMP), which supports multiple processors
 - Netscape Enterprise Server for NetWare

NetWare 4.2

Like NetWare 5, NetWare 4.2 features NDS, which provides a global, hierarchical view of your company's network. NetWare 4.2 also features a variety of server-based applications, such as an IPX-to-IP gateway, DNS and DHCP services, FTP services, and Netscape FastTrack Server for NetWare.

NetWare 4.2, which can support more than 250 users per server, allows you to add user licenses to a running server. NetWare 4.2 also allows you to manage the file system by using scheduled online file compression and live data migration capabilities. The file system features subblock allocation technology, which supports block sizes as small as 512 bytes. This technology con-

serves hard drive space and improves overall performance. To further improve overall performance, NetWare 4.2 supports SMP. (To learn more about the differences between NetWare 5 and NetWare 4.2, visit <http://www.nwconnection.com>.)

Novell Small Business Suite 5

Novell Small Business Suite (NSBS) 5 supports up to 50 users and features a single-site version of NDS. Based on the NetWare 5 operating system, NSBS 5 features all of the protocol options that are available with NetWare 5, including the option to use native TCP/IP.

In addition, NSBS 5 includes GroupWise 5.5, which provides messaging and scheduling capabilities, and Tobit Software's FaxWare, which provides network fax capabilities. NSBS 5 also includes the GroupWise Internet Agent, which allows users to exchange e-mail with Internet users, and the Post Office Protocol (POP) Forwarding Agent, which enables your company to exchange Internet e-mail messages over a nondedicated, dial-up connection. To support remote users, NSBS 5 includes



GroupWise WebAccess, which allows remote users to access their e-mail account through a standard web browser.

But that's not all: NSBS 5 features NAT, Novell Internet Connection Expert (NICE), and BorderManager FastCache Services 3. These components help you configure and speed up your company's Internet connection. To simplify the process of managing all of the components, NSBS 5 includes the Novell Easy Administration Tool (NEAT), which combines management functions—such as user management, printer management, and e-mail management—into one GUI.

NetWare 3.2

NetWare 3.2 is a server-centric operating system. Instead of storing information about users and network resources in a global directory, NetWare 3.2 stores this information in a bindery. Each server maintains its own bindery, which stores information only about the users and network resources that are associated with that particular server.

As a result, you must manage users and network resources on a server-by-server basis. To simplify the management process, NetWare 3.2 includes Windows-based management utilities, which are a significant improvement over the DOS-based management utilities offered by previous versions of NetWare 3.

Due to the limitations inherent in a bindery system, you should use NetWare 3.2 only if your company has one location with few servers. In addition, you should use NetWare 3.2 only if your company already has a NetWare 3 network and does not plan to upgrade to NetWare 4.2 or NetWare 5. Novell has announced that it will no longer release enhancements for NetWare 3. Instead, Novell will restrict its support to maintenance updates.

10 QUESTIONS TO PICK A WINNER

If you know the features offered by each version of NetWare, you can evaluate your company's needs by asking yourself the following questions:

- Does your company have one office location and fewer than 50 employees? If your company is not projecting huge growth, you should definitely use NSBS 5, which provides more for your money by including both GroupWise 5.5, NAT, and BorderManager FastCache Services 3. NSBS 5 also simplifies the

management process by including NEAT. If your company does grow beyond 50 users, Novell provides an upgrade path to NetWare 5.

- Does NetWare 5 include features that would significantly benefit your company? If so, you should upgrade to NetWare 5. For example, if your company's network contains DNS or DHCP servers, you can manage these servers via NDS with NetWare 5. And if you run Java-based applications on your company's network, you can take advantage of the advanced Java capabilities that NetWare 5 provides.
- Would you prefer to run your company's network over TCP/IP? If so, you should upgrade to NetWare 5, which supports native TCP/IP. You might want to migrate to TCP/IP if your company's network includes TCP/IP-based operating systems or if your company has multiple locations connected via WAN links.
- Do you want to use Java-based management tools? If so, you should use NetWare 5, which includes Java-based management tools. For example, Novell's ConsoleOne provides a Java-based GUI that you can access from a workstation or from the server console.
- Does your company's network need to support extremely large files and volumes? If so, you should use NetWare 5, which offers the advanced disk management capabilities of NSS. Not only does NSS accommodate larger files and volumes, but NSS also mounts volumes faster. In addition, NSS dynamically assigns unused volume space as needed. NSS even creates a single virtual volume (the NSS volume) that can store and retrieve files from any mounted disk and partition types, including CD-ROM drives and DOS partitions.
- Is your company using up-to-date server hardware? If so, you can probably use NetWare 5 without having to upgrade server hardware. NetWare 5's minimum requirements include a Pentium processor, a 1-GB hard drive, and 64 MB of RAM. NetWare 3.2 and NetWare 4.2, on the other hand, allow you to use older server hardware. NetWare 3.2 can run on a 386 processor, and NetWare 4.2 can run on a 486 processor. (The minimum requirements for NSBS 5 vary, depending on which services you load.)
- Does your company offer internal support services? If so, you can use either

NetWare 5, NetWare 4.2, or NetWare 3.2. If your company has limited personnel and no dedicated network administrator, you might want to consider using NSBS 5, which is easier to install, configure, and manage. (NSBS 5 includes the NetWare Management Agent [NMA], enabling you or a reseller to manage your company's network from a remote location via ManageWise.)

- Which client operating systems and applications does your company use? If your company is using 16-bit DOS or Windows 3.x applications, you may want to use NetWare 3.2, NetWare 4.2, or NetWare for Small Business 4.2. Sixteen-bit DOS or Windows 3.x applications may not be compatible with the NetWare 5 client software. If your company's network includes Macintosh workstations, on the other hand, you should use NetWare 4.2 or NetWare 5.
- Are you running NetWare 3 but plan to upgrade to NetWare 5 or NetWare 4? If you are not yet ready to perform a major upgrade, you may want to upgrade to NetWare 3.2 for the time being. However, you should be aware that each workstation can connect to only eight NetWare 3.2 servers concurrently. If workstations need to connect to more than eight servers, you should make the move to NetWare 5 or NetWare 4 now.
- Are you running NetWare 4 but plan to upgrade to NetWare 5? If you have not yet tested NetWare 5 in your company's environment or if you have not evaluated all the implications of upgrading to NetWare 5, you may want to upgrade to NetWare 4.2 for now.

CONCLUSION

You must carefully evaluate your company's needs before you decide which version of NetWare to use. The evaluation process ensures that you make the best decision for your company's network, choosing the version of NetWare that will provide years of maximum service while requiring minimum support. (For more information about all versions of NetWare, visit Novell's web site at <http://www.novell.com>.)

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