

## Novell NetWare 5

NetWare 5, the recent server operating system Novell, provides superior management and control of heterogeneous networks, including applications and the Internet. Moab is Novell's code name for NetWare 5.

NetWare 5 is the Novell's first operating system to offer pure IP--pure in the sense that it doesn't require an IPX - based encapsulation (or, in the case of Windows NT\* Server, a NetBIOS encapsulation). Also, NetWare 5 will continue to support IPX just as it has in previous versions.

However, the choice of which protocol to use is up to the user. It will also include an easy and seamless migration from IPX to IP (for those who choose IP) and continuous support for mixed-protocol environments.

### Multi-Processing Kernel:

The new operating system kernel in NetWare 5 combines the outstanding performance of the uniprocessor with the superior scalability of a multiprocessor kernel. It includes a new application preemption function that enables customers to prioritize applications running on the server. And it offers several new enhancements such as memory protection for added fault tolerance, virtual memory for increase performance and an integrated debugger.

In addition, NetWare 5 will include these important new features to name a few:

- ✍ Novell Directory Services for Netware 5
- ✍ DNS/DHCP utility integrated with Novell Directory Services (NDS)
- ✍ Z.E.N.works, the Zero Effort Networking tool suite
- ✍ Console One
- ✍ Novell Storage Services NSS
- ✍ Novell Distributed Print Services NDPS
- ✍ Netscape FastTrack\* Server - Web server

**Enhanced Novell Directory Services (NDS)** is the world's leading global directory service for the entire network. NDS provides a multiple-platform, distributed network directory service with seamless, global access to resources of any kind whether they reside on corporate networks, intranets or the Internet.

NDS in NetWare 5 incorporates WAN Traffic Manager, Catalog Services and support for LDAP v3. WAN Traffic Manager acts as an intelligent supervisor of data going out onto WAN links. Catalog services offers users the ability to do a "contextless" login, and allows you to create a catalog of information stored in NDS. LDAP services for NDS is a server-based interface between NDS and applications that comply with Lightweight Directory Access Protocol. Novell is the first to adopt LDAP as a protocol for accessing the power and information of NDS.

### DNS & DHCP integrated with NDS:

NetWare 5 is the first to offer DNS/DHCP services integrated with a directory which ties network resources together (applications, users and devices) into a single, trusted system. DNS/DHCP Services also supports Dynamic DNS (DDNS), allowing for dynamic updates of host names based on changing IP addresses.

It includes a Java\*-based management application that allows you to monitor, configure and manage the DNS and DHCP services in NDS. And it easily imports existing DNS and DHCP data into NDS.

**Z.E.N.works** is Novell's desktop management tool suite that provides functionality for application distribution and management, workstation management, and workstation administration. This new desktop management tool uses the power of NDS to liberate networked PC users from software-related hassles. (NetWare 5 will ship with the Z.E.N.works Starter Pack which includes software distribution and workstation management. Additional purchase required for full Z.E.N.works functionality.)

Novell **ConsoleOne**, Code-named "Houston" during development, brings 100% Java-based GUI

management to the NetWare server console. By leveraging Novell Directory Services (NDS), ConsoleOne provides administrators with flexible, role-based administration. This common framework is Internet-standards based (Java, IP, LDAP, SSL) and integrates Java applets and snap-ins allowing developers to build network management solutions with a common look and feel. It will support features like applet launching, local volume browsing and file copying, basic management and administration, graphical server monitoring and other GUI based management tools as well as server based remote console functions.

**Netscape FastTrack** Server is included in NetWare 5, is one of the easy-to-use software for creating, publishing and serving Web documents. It enables individuals and workgroups to establish a

Web presence and deploy intranet solutions quickly. FastTrack Server's rich cross-platform environment supports building or deploying a variety of Web or database applications.

#### **Additional Features:**

Available for NetWare 5\*, **NDS for NT** enables Windows NT\* domains to use NDS, thereby upgrading domains to a true directory service. NDS for NT enables you to manage NT domains and Microsoft BackOffice\* through NDS. It provides single login, single point of administration and full NT application support for mixed NetWare and NT networks. (\*Additional purchase required)

**Novell Storage Services (NSS)** is the next generation storage/access system developed by Novell. NSS is a 64-bit indexed storage system that

shatters the current file limitations and remount times. It allows for billions of volumes and directories, up to 8 terabyte file size and 64-bit addressing while maintaining a very small memory footprint. It also allows for fast volume remounting (measured in seconds for any size volume, even up to several terabytes).

**Novell Distributed Print Services (NDPS)** raises the standard for network printing. It provides intelligent bi-directional communication between users, printers and administrators. NDPS features automatic driver download for plug-and-print installation of new devices, as well as single point of administration of all network printers thanks to tight integration with NDS and NWAdmin. NDPS lets users easily locate network printers and provides information such as printer capabilities,

printer status and job status. For administrators it offers automatic printer discovery and configuration. And it includes advanced management and configuration of printing resources, reduces job polling time and reduces SAP traffic.

**Hot Plug PCI** gives you the ability to replace, upgrade and add network interface cards while the NetWare server is up and running.

**Support for I 2 O:** I 2 O is an industry standard that allows the server to offload the I/O traffic from the host processor to additional I/O processor. This allows the server to deliver standards-based I/O scalability and provides balanced capacity to meet increasing user demands on networked servers. It reduces host processor CPU utilization and hence allows it to support more applications without degrading performance.

NetWare 5 takes security to one level up by providing the next generation of authentication services named **Secure Authentication Services (SAS)**. SAS is designed to provide support for new and evolving industry authentication mechanisms. The SAS design also includes a framework for distinguishing between authentication mechanisms of various qualities, as well as support for the introduction of third-party authentication services. SAS also provides server-based user applications with controlled access to files and NDS objects based on the user's SAS authentication. NetWare 5's SAS will support Secure Socket Layer\* (SSL\*) and use the SAS API set to establish encrypted SSL connections.

NetWare 5 supports **Clustering** and it is the ideal platform for a clustering solution. The advanced capabilities of the NetWare 5 file system (NSS), the integrated directory service and the fact that NetWare 5 maintains the NetWare heritage of being designed as a networking platform, all

make it the ideal platform upon which to implement a clustering solution.

NetWare 5's **New back-up utility** is protocol-independent and adds multiple and repetitive scheduling, supports Windows 95\*- based GUI utility and autoloader. It also takes advantage of NDS by allowing central management of back-up jobs across the network.

Novell Netware 5 eliminates the need to scramble for a DOS boot disk and CD-ROM drives for server installation if your server supports the E1 Torito bootable CD-ROM standard. The license disk is not bootable and includes just enough of Caldera's DR-DOS to get rolling.