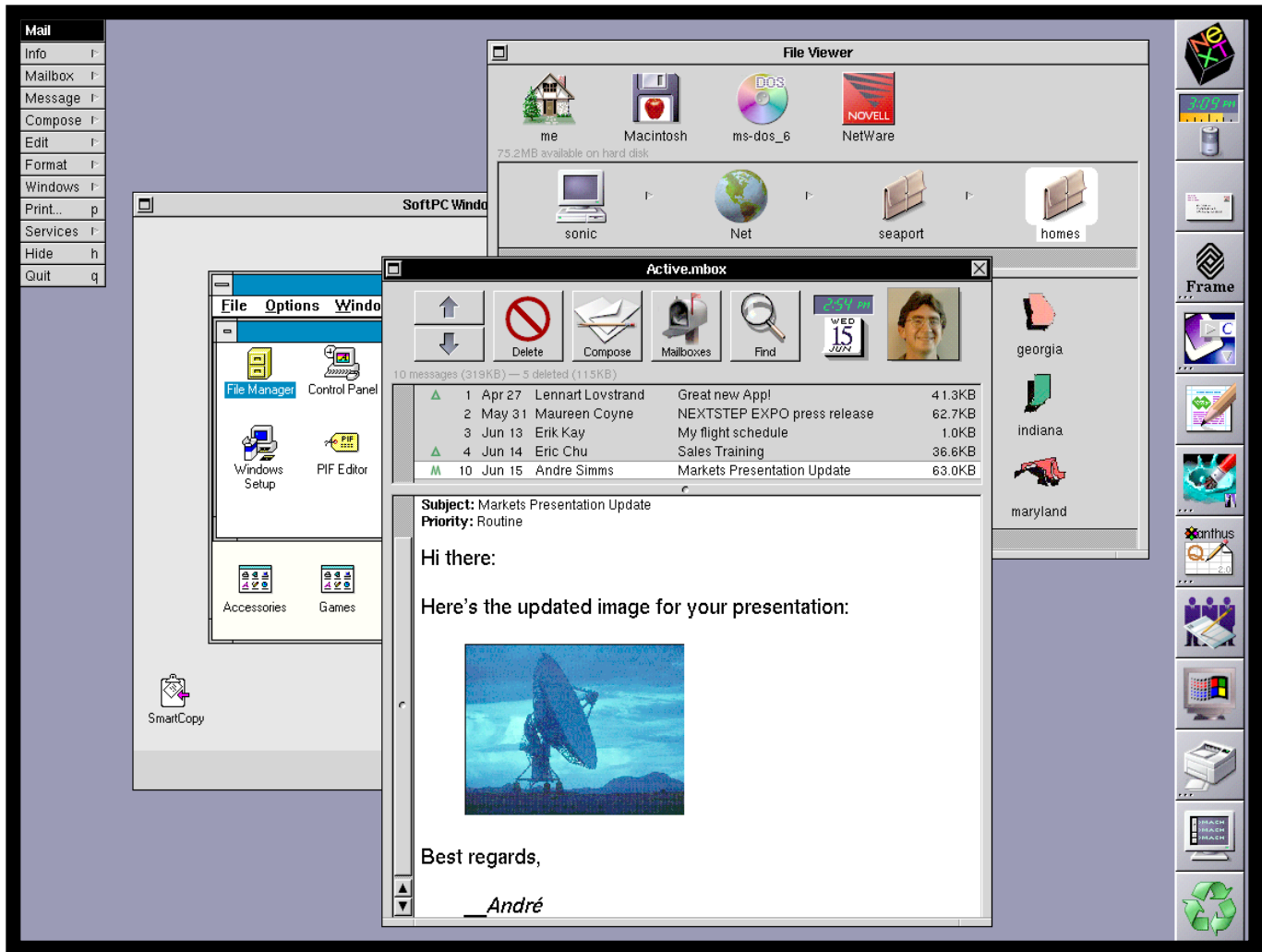




# NEXTSTEP™ RELEASE 3.3 UPGRADE



***NEXTSTEP Release 3.3 combines the robustness of mainframe operating systems with the flexibility of PCs, making it the best environment for enterprise-wide deployment of object-oriented custom applications.***

NEXTSTEP™ is the first and only UNIX-based operating environment to integrate object-oriented technology, industry standard networking and architecture with a graphical user interface. With the addition of, NEXTSTEP developers can develop client/server custom applications that can be seamlessly integrated with shared to create comprehensive business solutions.

NEXTSTEP Release 3.3 incorporates enhancements based on feedback from customers of large-scale NEXTSTEP environments. Release 3.3 addresses many critical dependencies, including scalability, robustness, interoperability and ease of use. By incorporating core technologies from Mach 3.0 and BSD 4.4 networking, Release 3.3 operates more efficiently and scales better to networks with tens of thousands of users.

NeXTmail™ has been significantly improved in Release 3.3 to give users greater control over how electronic mail is accessed, managed, and stored. In addition, MIME support allows users to send and receive multimedia messages with users of other popular email systems through the same intuitive NeXTmail interface.

To make NEXTSTEP run on a wider selection of PC configurations, Release 3.3 includes support for PCMCIA, PCI and ISA Plug-and-play, Advanced Power Management, 8-bit and many new peripherals.

# HIGHLIGHTS

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## The NEXTSTEP User Experience

NEXTSTEP is the only object-oriented operating system today. NEXTSTEP delivers a consistent graphical user interface across wide-area networks such as LANs, S, and AppleLink. NEXTSTEP unifies the desktop by providing interoperable custom solutions developed for NEXTSTEP and applications for the MS-Windows, X/Motif, and mainframe environments.

## ROBUSTNESS

The smooth operation of a company depends on the finding, sorting, and addressing in NeXTmail, adding or deleting service of its mission-critical applications. If a large number of users in User Manager upgrade in Upgrader company cannot make trades for fifteen minutes due and on-the-fly NetInfo backup & restore in NetInfoManager down-time, it could lose hundreds of thousands in NEXTSTEP Release 3.3 provide tools that enable users to work NEXTSTEP Release 3.3 is designed to service these by working smarter applications 24 hours every day a week.

Hundreds of carefully chosen focused enhancements improvements have been added throughout the system the overall robustness of the operating system which backward compatibility. This strategy enables NeXT to introduce new technologies to the NEXTSTEP community while a seamless and painless upgrade path.

## SCALABILITY

Today's enterprise-wide deployment means tens of thousands of users on the same network across multiple routers. NEXTSTEP Release 3.3 includes critical technologies for large-scale networks and reduce support costs by an enterprise-wide deployment with a much lower ratio of administrators to users. For example, with the new system administrators can now install and maintain thousands of network user accounts with the enhancements in NetInfo. NEXTSTEP can now support tens of thousands of network nodes.

With NEXTSTEP Release 3.3, companies can grow their exponentially with ease without the need to increase administration resources at the same pace as the system. An administration tools allows new system administrators to become productive with minimum training, and empowers experienced system administrators to maintain a large enterprise with greater ease.

## PERFORMANCE

In a large-scale deployment with tens of thousands of users productivity gains from overall increased system responsiveness and better tools means thousands of dollars in savings. By advantage of BSD 4.4 networking, NEXTSTEP Release 3.3 delivers better wide-area-network performance while technologies from 3.0 enables NEXTSTEP to task switch more efficiently streamlining and accelerating frequently performed tasks such as finding, sorting, and addressing in NeXTmail, adding or deleting a large number of users in User Manager upgrade in Upgrader and on-the-fly NetInfo backup & restore in NetInfoManager. NEXTSTEP Release 3.3 provide tools that enable users to work by working smarter.

## OPEN STANDARDS

With Release 3.3, NeXT continues its commitment and willingness to adopt industry standard technologies to ensure interoperability and a high degree of collaboration between technologies from different vendors. MIME support enables NEXTSTEP users to easily exchange files and images with widely used PC and UNIX applications. The support of PCI and ISA Plug & Play greatly reduces the complexity of PC hardware configuration. PCMCIA, 8 bit color Advanced Power Management enables users to operate NEXTSTEP on standard PC notebooks.

## EASE OF USE

Just as performance gains translate into productivity gains that enable new users to learn an operating environment quickly, ease of use is equally important. In addition, support costs can be significantly reduced if users are equipped to help themselves in times of trouble. NEXTSTEP 3.3 includes a new Quick Start Guide that enables new users to learn all the basics in 30 minutes; this tool greatly accelerates the learning curve of NEXTSTEP. Once these users are familiar with the basics of NEXTSTEP, they can rely on the new Documentation Roadmap to provide pointers to all the documentation including complete on-line help for most of the major applications that are built with NEXTSTEP. These tools empower those who are already familiar with the system, a new Powerful provides many tips and shortcuts. These tools keep support and training costs low as the number of users and network nodes increases.

# NEW FEATURES AND BENEFITS

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## Mail

### MIME Support

As a widely supported standard, MIME support enables NEXTSTEP users to exchange multimedia e-mail with other non-NeXT MIME users.

Through the same intuitive NeXTmail interface, users can transparently read and send messages containing file attachments, rich text, images and sound objects.

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### Mail Size Management

Information such as the number of read and deleted messages, of each message, and the number of new messages is now easily accessible. Users can also quickly locate large e-mail messages through the feature "sorting by size". These features greatly ease the task of overall mailbox size management.

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### Selective & Summary Printing

Users can now print out the summary of an entire mailbox or of selected messages. This feature enables users to manage their e-mail messages off-line when necessary.

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### Enhanced Searching

In addition to searching by subject and sender, users can now locate mail by searching through the "Message Bodies" feature. This feature makes it more efficient to navigate and view only the messages. After several iterations of "Find" and "Focus," users can quickly filter all non-relevant messages.

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### Save & Restore Drafts

Similar to a word processing document, partially composed messages can be saved and brought back with the subject and address fields intact.

Users can now begin composing multiple messages and use this feature to preserve work-in-progress from accidental loss—or conveniently come back to it at a later time.

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### Outgoing Message Archive

In addition to automatic archival of all outgoing messages, users who are concerned with disk space can selectively archive specific messages.

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### In-line Address Completion

By typing the first few letters of an address and then pressing the **Esc** key, NeXTmail will automatically scroll through the list of possible options from the list of public and private users and groups. This feature reduces the number of keystrokes and the frequency of access to the Address panel.

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### Hierarchical Mailboxes

Mailboxes in Release 3.3 can now be organized into a tree-like hierarchy. Messages stored in a meaningful structure of mailboxes can gain relevance through their implicit association with folders. Retrieval of messages can also be faster by simply navigating through the hierarchy.

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### User Defined Fields

Custom fields can now be added to a message header to label outgoing messages. For instance, a user can label a message with a field called "priority" and set it to "high" or "low". This allows recipients to quickly identify important messages.

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### New Productivity tools

The mail icon now displays the number of unread messages in the Active mailbox. In addition, users can manage their incoming message workload by individually marking messages in any mailbox as read or unread.

# NEW FEATURES AND BENEFITS

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## Networking

### NetInfo

The only proven enterprise-wide network administration database, NetInfo now supports 10,000+ nodes across wide-area networks which enables corporations to grow their NEXTSTEP networks globally without sacrificing data integrity or network performance. Other new features include integrated DNS support and improved diagnostic messages.

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### UserManager

The tool for managing user accounts and user groups has been updated to support large corporate networks. With the new bulk add-and-delete feature, system administrators can manage thousands of user accounts using custom templates and domain-based settings. Support for international user accounts is also provided through templates.

In addition, UserManager can be customized to perform specific tasks through APIs. This feature allows system administrators to override default functionalities to tailor UserManager to their sites.

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### NetInfoManager

The graphical tool for accessing and manipulating NetInfo data has been dramatically improved. Administrative tasks are simplified, allowing the system-administrator to dynamically restart NetInfo services, save and restore NetInfo databases, or join NetInfo hierarchies. The user interface has been improved to ensure ease-of-use throughout the application.

Searching in NetInfo data is more efficient with Multi-domain regular-expression search. Remote Server Management allows the system-administrator to comprehensively manage resources from any part of the network.

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### SimpleNetworkStarter

The simple but powerful tool for setting up small networks of NEXTSTEP computers has been extended to include NetInfo Configuration across subnets and SNMP configurations. All transactions are fully logged. The undo feature allows dynamic configuration changes.

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### Networking Commands

NetInfo data can be accessed and manipulated via a variety of new and extended set of UNIX utilities:

niutil new options provide a full set of data-management features including resync, rename, and statistics options.

nigrep, nifind, and nireport complement the existing NetInfo utilities to provide full search and report capabilities in a multi-domain environment.

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### BSD 4.4 Networking

New gateway congestion and header prediction algorithms improve overall network performance, especially in large networks through bridges and routers.

In addition, IP Multi-Cast support has been added to provide a framework for multimedia networking.

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## OS

### MACH 3.0

Core components of MACH 3.0 have been integrated into Release 3.0 to improve the robustness and performance of the operating system, especially under heavy load.

# NEW FEATURES AND BENEFITS

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## Intel Enablement

### PCMCIA

NEXTSTEP users can now take advantage of PCMCIA modems, SCSI adaptors, LAN cards, and wireless networking cards both for portable and desktop systems.

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### ISA Plug & Play

On a system with the ISA Plug & Play BIOS, NEXTSTEP automatically configures ISA Plug & Play cards bypassing the need to deal with jumpers, switches, and configuration utilities.

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### PCI Plug & Play

Similar to ISA Plug & Play, NEXTSTEP automatically configures PCI cards.

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### Advance Power Management

By taking advantage of power saving features on systems that support the APM BIOS, NEXTSTEP now operates efficiently on portable systems for an extended amount of time.

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### 720K Floppy

In addition to 1.44 megabyte floppy support, NEXTSTEP Release 3.3 also supports 720k.

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### More Drivers

NEXTSTEP Release 3.3 comes bundled with over 50 drivers to support a wide variety of peripheral cards and systems.

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## Installations & Upgrades

### Network Install

User can now install NEXTSTEP through a network NFS server without requiring a CD-ROM drive. System Administrators can also preconfigure a template server so that all systems built from the template inherit the same configurations. This greatly reduces the overhead of installing NEXTSTEP at large sites.

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### Network Bulk Upgrade

The Upgrader application now enables system administrators to pre-configure "template servers" and propagate upgrades from these servers to designated NEXTSTEP systems. In effect, this allows system administrators to "push" upgrades automatically to systems on the network without the need for any user intervention.

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## Learning Tools

### NEXTSTEP Quick Start

By stepping through this small manual, users can quickly learn the basics of NEXTSTEP and be productive within 30 minutes.

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### Power Tips & Documentation Roadmap

The power user's guide contains a comprehensive list of short cuts and tips for the desktop and bundled applications.

A new on-line & hardcopy roadmap helps novice users to easily find and quickly navigate through existing documentation.

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## Internationalization

### Global Software

NEXTSTEP can be customized at setup or installation time to provide global settings for keyboards, paper sizes, time zones, etc. This allows users to tailor their environment to specific local requirements. Key globalization features include updates to Preferences.app and Configure.app.

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### International Installation

Users can now select which language needs to be installed at the "package" level. Instead of installing a specific language for NEXTSTEP, users have a choice of installing specific languages for each Installer package similar to support of the different platforms. Users with limited disk space now have greater flexibility in the installation of packages.

This feature applies to Upgrade installation (e.g., BuildDisk), as well as the Installer.



# ORDERING INFORMATION

## NEXTSTEP

The entire NEXTSTEP user environment system software, the end-user oriented applications, runtime portions of the object-oriented kits, system administration applications, and assorted other software.

Installation of NEXTSTEP requires a minimum of 120 MB of available hard disk space.

NEXTSTEP includes English, French, German, Spanish, Swedish, and Italian user interfaces. To order specify one of the following products:

End-user documentation is available in English, French, and German.

NEXTSTEP for Intel Processors  
NEXTSTEP for NeXT Computers

For additional information, call 1-800-TR  
NeXT Computer Inc.

U.S. Headquarters  
900 Chesapeake Drive  
Redwood City, CA 94063

Y-NeXT

European Headquarters  
Oskar Messter Strasse 24  
W 8045 Ismaning  
Munich  
Germany  
+49 (89) 99 65 31-0

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