interfaces (APIs), and multimedia APIs. Due to differences in product cycles, the technologies noted may appear on one product before the other, but these will eventually even out.

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Windows 95 and Windows NT Workstation 3.51 are designed to deliver a common set of capabilities that we need—great application support, ease of use, connectivity, and manageability. Most importantly, both products provide a platform for a new generation of Win32®-based applications that provide new features and greater performance and reliability than today's Win16-based applications.

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Just when you thought the issue was settled, the debate over which 32-bit Windows operating system (OS) is best for the NASD has risen again. With Windows 95 so vastly improved over Windows 3.1, and with so many software developers rushing to release Windows 95 applications, it seems logical that Windows 95 is the next best OS for the NASD. However, one competitor for that position has begun to gain momentum—Microsoft Windows NT Workstation.

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good performance on mainstream systems and compatibility with our current Windows and MS-DOS®-based applications and devices. The new capabilities delivered by Windows 95 will enable the NASD to reduce its PC support burden, provide greater control over the desktop, and increase productivity.

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Today, Windows 95 and Windows NT Workstation share technologies in object linking and embedding (OLE) and networking. In the future, we expect they will share even more capabilities, including the new user interface, Plug and Play capabilities, OpenGL 3-D application programming interfaces (APIs), and multimedia APIs. Due to differences in product cycles, the technologies noted may appear on one product before the other, but these will eventually even out.

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The Neutral Corner

Nasdaq Launches Major New Initiative

The Nasdaq Stock Market℠ has recently undertaken a comprehensive review and analysis of the current trading environment to help it better understand and address the needs of those investing and trading in Nasdaq securities.

Part of this review involves analyzing the needs of traders and understanding why they choose to trade where they do.

Fast-Paced Team

Nasdaq has formed a cross-functional team to perform this analysis and recommend action. The team will include representatives of Finance, the General Counsel's Office, Market Operations, Market Services, Product Development, Production Services, Quality Control, Regulation, Systems Engineering, and Strategic Planning. The team will report to a steering committee that will provide policy guidance. "With the wide variety of alternative trading systems now available, it is important that we fully appreciate the business needs driving those investing in Nasdaq securities," says Steve Hickman, Vice President, Trading and Market Services, and project sponsor. "Our goal is to understand those needs and develop competitive solutions that will enhance the best execution opportunities for investors and secure the continued growth of The Nasdaq Stock Market. Because of the increase in the use of these systems, the urgency of this effort cannot be overstated."

The team is visiting Nasdaq investors and traders. Every team member will participate in the initiative from the beginning; close to 20 people across the various disciplines working in teams will make on-site visits. "We want all of these groups to have the same understanding of what the customers' needs are when we are developing solutions. "By observing and listening, we will better understand how they work and why they work the way they do," says Hickman.

After the research is completed, the groups will develop business options and present them to the steering committee. A decision on which approach the team will take is expected by January 1996.

This year, as part of a corporate initiative, Kevin Holt, Supervisor, Acquisitions and Asset Management, successfully managed the activity-based costing process for Production Services (PS). This exercise more fairly and equitably distributes our costs back to our customers. Arthur Andersen, a consulting group working with the NASD to complete these studies, says activity-based costing is "an information system that identifies activities that are performed in a given organization. It traces costs

The Newsletter for NASD Arbitrators and Other Neutrals

and revenues to those activities, and then uses various methods, called cost drivers, to trace the cost of activities to products, services, and customers. These cost drivers reflect the consumption of activity resources by products, services, and customers of the organization." More simply put, it's a process for defining the services you offer and how much it costs to provide those services.

The Steps

Although the concept is quite simple, it's critical to get the first step right.

Let's take a PC HELP Desk service, for example. The service provided is PC support for several departments in an organization. The resources and activities required include people, facilities, staff training and tools, and more. The consumption or cost driver of this service can be based on the number of calls the HELP Desk receives, the number of employees in a department using the service, or the number of employees with a PC in a department.

PS Services

After many interviews, Kevin and the management team in each department identified these services provided by PS.

PC Support—This is a fully loaded cost, which represents a networked PC, with file and print-sharing services, and access to the corporate host environment. The cost includes direct equipment costs—hardware and software maintenance for the PC and file server, depreciation of the network and infrastructure hardware, communications costs—and the cost of the staff supporting the PC environment—from research and evaluation, to acquisition and installation, to ongoing management and support. Cost driver: Number of PCs in each department.

Tandem or Sequent Application Support—This service includes all of the operating costs associated with supporting an application in the Tandem or Sequent host environments, including hardware maintenance and depreciation, software tools and maintenance, microfiche or optical services, printing services, and more. It too includes the costs associat-

ed with staff to support the environment including computer operators, systems analysts, database admini- strators, management, facilities staff, and others. Cost driver: Individual applications in each environment, weighted by processor requirements and disk requirements.

What Does This Mean?

Each business line is charged the same rate for the same services, and the information is presented in a more user-friendly format. Box 1 shows a sample of the traditional accounting view versus a service view for a typical department in the NASD.

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Actions Related To The Rudman Committee!

To encourage staff to move to electronic internal communications, the NASD is putting most of its communications with employees about the Rudman Committee findings and subsequent NASD Board actions on OASIS. Simply open up "Netscape" on your computer screen and click on the NewsFlash button.

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If you need help, call Microsystems Support or the Technology Services Learning Center at 800-237-3211.

CRD Redesign: A Team Success

This fall, Phase 1 of the Central Registration Depository (CRD) Redesign Project will be well underway, and a significant milestone will be reached. All new information submitted by member firms on Forms U-4, U-5, BD, and BDW will be entered into the new system. The success of the CRD Redesign Project is due to the total team effort of many departments—Technology Services, Membership, Administrative Services, Training, our different business lines, and more. When the project is complete, it will improve drastically how all users access information.

The CRD Redesign Project encompasses hardware changes—moving the CRD from one hardware platform to another—and software changes—going from a non-Windows-based system to a more user-friendly, Windows-based client/server architecture. Those who use the CRD—NASD employees, member firms, the SEC, and other SROs—have driven the project requirements. For more than two years, the CRD Redesign Project team has worked with all CRD users to set realistic expectations, which so far have been met.

CRD Uses

The CRD contains information on over 5,500 member firms, more than 480,000 active individuals, and a few million individuals and firms that aren't active currently! Its many uses include:

- District Office examiners reviewing broker/dealer information when they are examining a firm.
- Market Surveillance using the information for investigations.
- Administrative Services downloading information for publication mailing lists.
- DMIS linking to the CRD to find CRD numbers for tracking purposes.
- The SEC downloading BD data to keep their own database up to date.
- States using it to perform all of their licensing and registration functions.

Conversion

Most NASD employees will experience directly the CRD Redesign new look and feel late next year, but they will receive its benefits earlier. With member firms entering new information directly into the new system and current information remaining on the Legacy system, the two systems will be bridged and information processed and shared on both systems. Although employees won't have online access to the new information right away, some detailed reports from the new system will be available through Membership.

When the new system is implemented, most of the information will have been transferred to the new system automatically. However, the disciplinary information is being transferred to the new system

manually, due to the nature of disclosure data on the Legacy system. After conversion, search and retrieval of the data will be more user friendly and less time consuming.

What's Next

To make sure the system works, the next few immediate steps include integration and quality assurance testing. Early next year, about 10 member firms will pilot the redesigned CRD. Total member firm rollout is expected next spring.

Part of the total member firm rollout includes many self-contained training options:
*   Extensive user-friendly, multi-level online help;
*   Computer-based training that encompasses a front-end introduction to CRD and takes you to a simulator where scenarios teach you how to use the system outside of the live database;

*   Online user guide that can be printed; and
*   Train-the-trainer program for large member firms.

During Phase 2, all employees will have online access to the information. Other regulators—SEC, other SROs, and states—will be brought in to do their online reviews and approvals. By mid-1997, CRD will be running on the new system and the Legacy system will be quietly taken to the lake and shot.

Kudos To Everyone

The success of this total CRD Redesign Project team effort not only means success for NASD and benefits for NASD employees but success for all of the securities industry.

Modem Security

"Stumbled into an interesting system last night...I didn't spend too much time poking around, so I don't know all the commands, but it shouldn't be too hard to figure out. Have fun, and let me know what you find! By the way, it looks like a UNIX system, but I haven't found a way to get to the shell yet..." —Anonymous hacker

The paragraph above was part of a message posted to a hacker discussion group on the Internet. This person used a program called a "wardialer" to dial a large set of phone numbers in the hope of finding a modem tone. Obviously, the person found one and is now trying to find some additional information on it.

Hackers regularly scan phone numbers to find new computer systems to break into. The wardialer makes the process automated and therefore easier for the hacker to search entire telephone exchanges or even area codes. Some wardialers will not only log the numbers that return a modem tone, but they will try to guess what type of system it is and per-

form an initial set of break-in attempts. Any modem is a potential target of these hackers, including those used at the NASD.

Unfortunately, leaving a modem turned on is not the only way to allow a hacker to enter NASD systems. Many employees use services such as Compuserv, America OnLine, or Prodigy. These services, as well as systems that allow the use of point-to-point protocol (PPP) or serial line IP (SLIP), provide you with special software that makes your computer a remote node on their network. This creates a potential problem if your computer is also a node on an NASD network. In some cases, your computer can act as a router and allow traffic onto NASD networks.

Hackers do not represent the only danger to NASD networks and systems. There is also a danger from computer viruses and malicious programs. If you need to download a file, perform a virus check before you run it. This simple step will keep the majority of problems from destroying data on your computer or infecting NASD systems. If you download a file and you don't know what it does, don't

run it. Ask for assistance from your Microsystems and Network Operations (MNO) representative.

To help employees secure their modems and computers, here's a list of do's and don'ts.

Do

- Use terminal emulation software, such as Procomm Plus, when connecting to outside services.
- Change your passwords often.
- Turn you modem off when not in use.
- Use a virus checker before downloading a file.
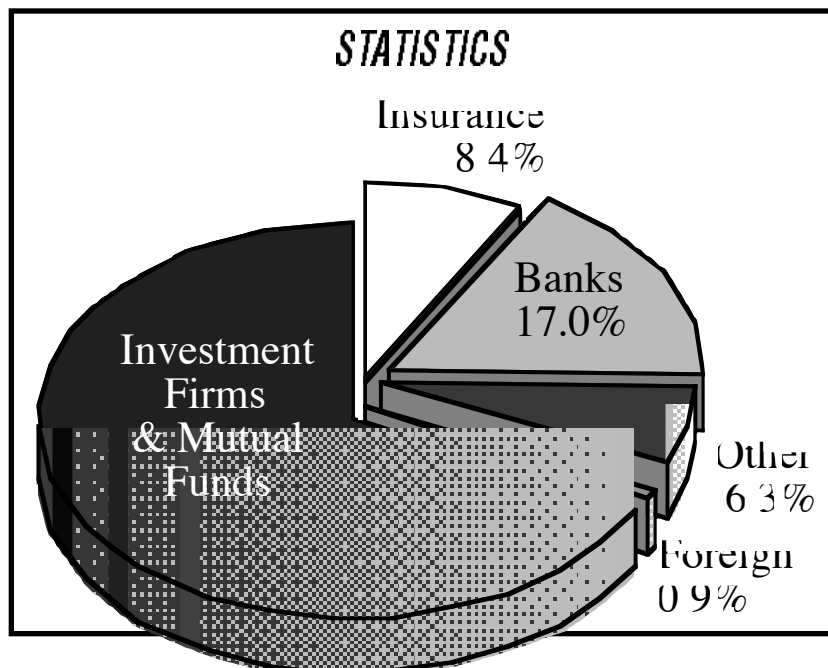- Contact your MNO representative whenever you suspect a virus has infected your PC.

Don't

- Use PPP or SLIP when your system is connected to an NASD local area network (LAN).
- Use communications software provided by a vendor (such as America OnLine, Compuserv, or Prodigy) when your system is connected to an NASD LAN.
- Establish a PPP or SLIP connection to an outside network when using a UNIX workstation.
- Execute files without validating the source and performing a virus scan.
- Send NASD proprietary information to an outside system.

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STATISTICS

Insurance 8 4%

Banks 17.0%

Investment Firms & Mutual Funds

Other 6 3%

Foreign 0 9%

Letters To The Editor

To: **Phil Rizzutto**
Senior Arbitrator
NASD NY Office

How do I become and Arbitrator/Mediator and why should I, as a graphic artist in the K Street office?
Susan Lynch, Graphic Artist, K Street, Wash., DC

Susan: Lotus Notes is a client-server platform for developing and deploying groupware applications. Groupware applications allow many people to work on the same data. Lotus Notes allows people to access, track, share, and organize information in a variety of ways.

To: **Marylin Monroe**
Mediator
NASD NY Office

How do I began a career as a Customer Service Representative in the Mediation department?
Ken Barbie, Administrative Assistant, Rockville

Ken: The Overland Park Center has moved once since Pat started working for the Center. Help oversee the entire move from beginning to end. Pat's job duties include scheduling appointments for candidates and tracking invalid problems and pending appointments. She proctors the exam delivery process, and reports any evidence of dishonesty occurring during testing. She instructs

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Please fax your letters and inquiries to: Tom Wynn, Esq., Assistant Director, Arbitration at: 212-789-1234 or mail to NASD Financial Center, 33 Whitehall Street, New York, NY 10004.

Spotlight On Customer Service Coordinator

Pat Howard is a Customer Service Representative for the Overland Park PROCTOR® Certification Testing Center. The center has nine exam workstations, three administrative terminals, and one full-time and one part-time Customer Service Representative. The Center is usually bustling with activity.

Pat began her career on April 11, 1994, as a Customer Service Representative. The Overland Park Center has moved once since Pat started working for the Center; she helped oversee the entire move from beginning to end. Pat's job duties include scheduling appointments for candidates and tracking invalid problems and pending appointments. She proctors the exam delivery process, and reports any evidence of dishonesty occurring during testing. She instructs each candidate on testing procedures and answers their questions. On occasion,

she is called on to trouble shoot hardware and software problems at the Center. Pat's favorite part of the job is meeting and talking with the candidates.

In Pat's spare time she enjoys reading and watching sporting events. Above all, she likes to shop a lot. She has two children—her daughter, Anasha, is 15 years old and a gymnast, and her son, Marcus, is 12 years old and plays baseball and basketball. (I hear he is very good!) Pat says she is a "Mom Taxi" when she goes home and takes the kids to all of their sporting events. She also likes to ride her bicycle, when she can.

Ever since the Overland Park Center moved, the Center really has not had to call Remote Site Operations (RSO). With Pat Howard, and her co-worker, Pat Melton, at the helm, we here at RSO don't worry about a thing.

Windows 95 vs. Windows NT

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