The GUN ftp server

by Tim Reed

Gotham Users of NeXT, the New York City NeXT users' group, maintains an Internet archive of flyers, announcements, newsletters, programs and other demo and utility code submitted by our presenters and membership. Users may access the GUN anonymous FTP server with either FTP or Touch, using the login 'anonymous' and a password of user@your.dom.ain, replacing 'user' with your actual login name, and your.dom.ain with your actual Internet host and domain. Our server name is bmt.gun.com, and public files are kept in pub/GUN.

A more complete range of archives in a separate set of folders are available to GUN's membership.

As usual with GUN, we are the first user group in time eternal to put their own server on the Internet and make their publications and demo applications of presenters available to the worldwide NeXT community. We encourage other NeXT user groups to join in: ask us how.

NeXT Licenses NetInfo Source Code

System Administration Software Has Already Been Ported to Sun, Other UNIX Systems

Redwood City, Calif., May 11, 1992 - NeXT Computer, Inc. today announced that it has begun licensing source code for its NetInfo network administration software. NetInfo lets system administrators manage users, machines, file systems and other network resources on UNIX networks, and can be ported to any UNIX-based computer.

Based on a distributed, extensible database, NetInfo gives system administrators a much more flexible and manageable access control scheme than with other UNIX network administration tools. In addition, NetInfo allows network databases to be updated incrementally, rather than updating the entire database for each change and lets administrators distribute management authority across the network. NetInfo is available for licensing by developers, resellers and qualified corporate and commercial customers.

"NetInfo offers significant enhancements over other network administration systems, and by licensing NetInfo source code NeXT is making these enhancements available in heterogeneous environments," said Kevin Wells, NeXT's operating system product manager. "This product represents another important effort - and NeXT's first licensing venture - to make our superior technology even more widely available, both within and beyond the NeXTSTEP environment."

Already, NeXT has licensed NetInfo to a number of third-party developers, value-added resellers and large customers, some of whom have ported it to non-NeXTSTEP platforms. For example, Codex Corporation, of Albert Park, Victoria, Australia, has announced a complete NetInfo product for Sun workstations and servers. Called NetInfo for Sun, it will allow easier, more reliable and more efficient administration of networks of Sun workstations, including the ability to manage mixed networks of Sun and NeXT workstations from a single workstation.

"We needed a distributed network configuration management system, and with its efficiency, flexibility and extensibility, NetInfo presented a unique and elegant solution. Having successfully migrated the product to the Sun platform, we believe NetInfo will establish itself as a de facto standard for network information systems," said J. Matthew Pryor, director of software technology at Codex.

NeXT is providing both the server and client functions in its NetInfo source code product, and developers can port either or both to any UNIX system (e.g., Sun, Auspex, Data General, Pyramid). With NetInfo, network administrators can administer heterogeneous networks from any NeXT workstation using NeXTSTEP graphical applications such as HostManager and NFS Manager, which are included in the NeXTSTEP system software.

Because NetInfo is extensible, NeXTSTEP customers can use NetInfo's flexible network database in their development of mission-critical custom applications for distributed systems in heterogeneous computing environments. Other customers will be able to purchase "shrink-wrapped" versions of NetInfo from developers who license the source code and create platform-specific ports of the software.

Availability

NetInfo source code is available now, directly from NeXT, to developers, VARs and qualified customers.

NeXT Computer, Inc. designs, manufactures and markets professional workstations based on the revolutionary NeXTSTEP object-oriented system software. NeXT computers are used by medium and large organizations to develop and deploy mission-critical custom applications, which run alongside a robust suite of advanced productivity applications and share the same user

interface. NeXT is headquartered at 900 Chesapeake Drive, Redwood City, California, 94063.

NeXT IN THE NEWS

by Eric Rosenthal

Wingz to NeXTstep 2.0 (item in Port Report), *Workstation News*, March 1992, p. 13. Informix Software Inc.'s Wingz.

Clinton Wilder, San Diego's Vislab: Heaven on earth, *Computerworld*, February 24, 1992, p. 31. Profile of the Advanced Scientific Visualization Laboratory at the San Diego Supercomputer Center lists Next among systems used.

Cate Corcoran and Tom Quinlan, Next readies its first RISC workstation, *InfoWorld*, February 24, 1992, pp. 1, 107. Next is expected to announce the Nextbrick, a workstation containing two 50-MHz Motorola 88010 processors, in September. The Nextbrick would have an effective performance of 150 MIPs and would not require the Nextdimension board. Analysts suggest the decision to use the Motorola chips could change before the announcement.

Mitzi Waltz, Even sneakernet goes cross-platform, *MacWEEK*, February 24, 1992, p. 20. Discussion of methods for reading Macintosh disks on incompatible systems mentions Digital Instrumentation Technology Inc.'s FloppyWorks.

Christopher Stetson, NetRenderMan Conjures Brilliant Graphics, *PC Week*, February 24, 1992, p. 23. Pixar's NetRenderMan can use several brands of servers, including NeXT.

Gary A. Bolles, Rules for the NeXT World: Paint It Black, *Network Computing*, March 1992, p. 12. "While we rarely report activity at trade shows, the recent NeXTWORLD Expo in San Francisco merits brief mention, if for nothing more than anthropological reasons. After strolling among the show's several dozen booths, we feel we've uncovered several axioms of NeXT culture. "

Jim Johnson, Focus On Object Orientation, *UniForum Monthly*, March 1992, p. 44. "When Steve Jobs was designing his OOP-friendly Next workstations, UNIX turned out to be his OS of choice." Although C++ has emerged as the most popular [object-oriented language], it has been described as 'an OOP language only a C programmer could love.' Next bundles Objective C with their workstations, along with a library of 100 objects.

NeXT to introduce two RISC-based computers (item in Business Briefs), *MacWEEK*, March 2, 1992, p. 92. NeXT Computer Inc. is expected to introduce two 88010-based RISC systems this fall. The high-end $20,000 system will use two processors to attain 150-200 MIPS, and the $10,000 system will have a single processor at 75-100 MIPS. NeXT had 1991 sales of $127.5 million in the $8.8 billion workstation market.

Christopher Stetson, Unix's Complexity And Size Keep It Out of Mainstream, *PC Week*, March 2, 1992, p. 73. "A fully functional and more intuitive user environment such as NextStep, which does an excellent job of hiding Unix from the user, would allow the Unix-based computer to move out of the engineering lab and onto the general business desktop. X Windows offers some functionality as a user environment by providing a basic win-

dowsing system, but no major Unix vendor has committed to converting its systems into completely graphical workstations. Only NeXT Inc., with a relatively small segment of the market, has made a firm commitment to making its systems fully graphical for users. "

Banzai (item in Short Takes), *PC Week*, March 2, 1992, p. 122. Canon Inc. expects to triple its sales to 9000 NeXT machines this year as the exclusive distributor in Japan.

Will the Next Generation Choose 88110?, *UniNews*, March 2, 1992, p. 2. Next is expected to announce 88110-based workstations in 1992.

Untitled item in Pipeline, *InfoWorld*, March 9, 1992, p. 15. Lotus to offer volume discount on orders of 24 or more copies of Improv.

Untitled item in Pipeline, *InfoWorld*, March 9, 1992, p. 29. Product announcement for Chromagrafx Imaging Systems Inc.'s GammaScan 2.0, which allows the use of the Optronics Colorgetter and Colorgetter Plus scanners.

Today's users key to tomorrow's technology (editorial), *MacWEEK*, March 9, 1992, p. 26. NeXT included in list of companies hoping to profit from new technologies.

Jean-Louis Gass›e, What we need is executive-proof E-mail, *MacWEEK*, March 9, 1992, p. 26. Apple should document System 7 Finder internals so third-party electronic mail vendors can offer full drag and drop of enclosure files as in NeXT's mail product.

Jordan Rosenberg, Planning ahead (letter), *PC Week*, March 9, 1992, p. 94. An 80486 system running NextStep will be more expensive but not as good as a NeXT system.

Untitled item in Pipeline, *InfoWorld*, March 16, 1992, p. 30. Next will offer its CD-ROM drive and software upgrade for $695 through July 31, compared to the usual drive price of $895 and upgrade price of $295.

Lee Mantelman, Obscure objects of industry desire, *InfoWorld*, March 16, 1992, pp. 48-49. NextStep called a "highly regarded development environment."

Jordan Rosenberg, The NextStep charade (letter), *InfoWorld*, March 16, 1992, p. 60. NextStep 486 is a "charade because it requires special hardware for performance, but it is a public relations boost for Intel" and a "great commercial for Next hardware."

Bruce Schneier, Computer security: Key management issue, *MacWEEK*, March 16, 1992, pp. 36, 38. Mentions that NeXT is one of several companies researching security.

Jean-Louis Gass›e, Emulation, Pink and the successor to the Mac, *MacWEEK*, March 16,1992, p. 43. "In fact, the latest system software position could lead one to believe that Pink is no longer the future of desktop operating systems, but now appears to be targeted at the custom programming of large networked corporate applications". This sounds, almost word for word, like a clone of Steve Job's latest positioning strategy for NeXTstep. Perhaps, just as NeXT Computer Inc. found it impossible to displace the Mac, Apple is acknowledging that Pink, after all, is not a successor to its current breadwinner.

32-Bit Operating Systems To Debut On Intel 386/486, *UniNews*, March 16, 1992, p. 1. Nextstep 486 is just one of several new

32-bit operating systems being prepared for Intel processors. Others are the Advanced Computing Environment's Open Desktop, SunSoft's Solaris 2.0, Microsoft's Windows NT, IBM's OS/2, UNIX System Laboratory's Destiny, and Uniel's SVR4.

Short Takes, *Computerworld*, March 23, 1992, p. 16. Next Computer, Inc. names Peter van Cuylenburg president and chief operating officer.

Nell Margolis, Computer firms' IPOs predicted to rocket, *Computerworld*, March 23, 1992, p. 125. Next on list of firms likely to go public in 1992.

Getting jobbed! (item in Inside Lines), *Computerworld*, March 23, 1992, p. 126. Sun memo instructing salespeople how to sell against Next may confirm Next's claim that it is winning sales against Sun.

Cate Corcoran, U.K. executive appointed Next president, COO, *InfoWorld*, March 23, 1992, p. 6. Jobs had been spending 40% of his time with North American clients and another 40% on general management, but now he can devote his time to other things.

Connie Guglielmo, Object-oriented programming likely new norm for in-house development, *MacWEEK*, March 23, 1992, pp. 33, 36. Mentions that NeXT Computer Inc. is among companies which have announced or shipped object-oriented operating systems.

Christopher Stetson, NeXT TurboColor Sets Standard For Workstations, *PC Week*, March 23, 1992, p. 20. The TurboColor "raises the bar for high-powered workstations. " NeXTstep makes it "easier to use than other workstations and more powerful than competing PCs."

Mark L. Van Name and Bill Catchings, Our Modest Proposal: Port Windows to Unix, *PC Week*, March 23, 1992, p. 86. "We'll wish we could buy a Sun or a DG AViiON or a DECstation or a NeXT or whatever the newest hot box is, and be greeted by the Windows interface when we booted the system".

Steven Burke, New NeXT Executive To Take Some Weight Off Jobs' Shoulders, *PC Week*, March 23, 1992, p. 136. Peter Van Cuylenberg named president and chief operating officer of NeXT and will share management tasks with Jobs, who will be freed to spend more time on product development and promotion of NextStep. Jobs said that Van Cuylenberg pioneered object-oriented technology and mission-critical applications while at Texas Instruments.

Steve Jobs Will Share the Job, *Business Week*, March 30, 1992, p. 35. Peter van Cuylenburg of Cable & Wireless to become NeXT chief operating officer.

Lawrence M. Fisher, Next Finds a President In Telephone Industry, *The New York Times*, March 19, 1992, p. D4. Next Inc. names Peter van Cuylenburg, currently group director of Cable and Wireless P.L.C., chief operating officer.

Barry Simon, Mathematica for Windows: Reshaping Math Software With Graphics and Sound, *PC Magazine*, March 31, 1992, pp. 37, 44. Review of Wolfram Research's Mathematica, Version 2.0 for Windows mentions the notebook front end previously available in the Macintosh and NeXT versions.

Choice Products!, *BMUG Newsletter*, Spring 1992, pp. 1-49. "[123 for the Macintosh 1.0] may not be as good as Lotus Im-

prov on NeXT, but it's better than the Windows version (or any other) of 123".

Gregory H. Dow, To Our Members: BMUG in 1992, *BMUG Newsletter*, Spring 1992, pp. 51-54. BMUG expanded its annual GUI Fest to include NeXT and other non Macintosh platforms.

Dan Barrett, Flames Great, Less Filling, *BMUG Newsletter*, Spring 1992, pp. 437-440. The example chosen for Usenet flaming is Mac vs. NeXT.

Larry O'Brien, And the Winner Is ..., *Computer Language*, April 1992, pp. 36-42, 44, 46. BKS Software Corp.'s Poet object-oriented database for NeXT and other platforms one of many winners of *Computer Language* Productivity and Jolt Product Excellence awards.

Reference work on PostScript, *Computer Language*, April 1992, p. 95. Product announcement for Adobe Systems Inc. and Addison-Wesley Publishing Co. Inc.'s *Programming the Display PostScript System with NeXTstep*.

Sydney S. Weinstein, *The C Users Journal*, April 1992, pp. 99-102, 104. This installment of a column about postings to USENET source newsgroups mentions Victor Abell's lsof (LiSt Open Files) supporting NeXTStep, Quinn Jenson's DSP56001 assembler "for those not lucky enough to have a NeXT, and Douglas Scott's mixview sound editor supporting NeXT."

Guy Kawasaki, If You Want to Program, *MacUser*, April 1992, pp. 29-30. Translation of advice in Brenda Ueland's *If You Want to Write* for programmers includes "Program Anything You Want" Ignore the forecast about market size in the year 2000 and the competitive analysis of the viability of various platforms. Tackle anything that fascinates you: a product for a NeXT computer, an Excel killer–even a Macintosh database program.

Novell aims at objects (item in Executive Brief), *Object Magazine*, April 1992, p. 8. One reason for Novell's licensing its IPX/SPX packet exchange technology to NeXT is to make NetWare users more aware of objects.

ArchiTech/Eiffel, *Object Magazine*, April 1992, p. 83. Product announcement for Interactive Software Engineering, Inc.'s ArchiTech mentions its Eiffel object-oriented language for NeXT and other platforms.

Untitled item in Product Watch, *Publish*, April 1992, pp. 26, 28. "The very first Nextworld Expo, held in San Francisco in January, was part trade show, part revival meeting. The true believers were out in force, brimming over with the confidence of those who've seen the light, sprinkling their conversations with affectionate references to founder 'Steve,' and happy to demonstrate to potential converts products that could follow through on the Next's considerable promise as a publishing workstation." Products mentioned are RightBrain Software's PasteUp, RightBrain Rulers, and Portfolio; Lighthouse Design's Concurrence; Information Presentation Technologies's Ushare; Baccus's Pixel Magician; and Appsoft's Appsoft Draw and Appsoft Image.

Dinah McNutt, Administering Multiple-UNIX Sites, *UNIX Review*, April 1992, pp. 49-50, 52. The author explains how her strategy, presented in the March issue, for system administration by system cloning and automation would work with a network of Sun, IBM, and NeXT systems.

David Hamaker and Richard Morin, UNIX System V on Intel 386/486, *UNIX Review*, April 1992, pp. 67, 69-70, 72, 75-76.

Survey of System V for Intel-based PCs mentions that NeXT has demonstrated NeXTstep 486 scheduled for fall delivery.

Nextstep on Intel: Is SPARC, MIPS, or PA-RISC next? (item in Industry News), *UNIX World*, April 1992, p. 14. Four years of internal discussions at Next preceded the announcement of Nextstep for Intel processors. Steven P. Jobs had opposed porting Nextstep at the risk of "giving up the company's technology." Now some users are requesting ports to RISC platforms. The president of IBM's advanced workstation division, William Filip, says negotiations about licensing Nextstep have failed.

Parabase Found, *UNIX World*, April 1992, p. 125. Product announcement for IP Design Inc.'s Parabase relational database.

Untitled item in New Products, *UNIX World*, April 1992, p. 132. Listing for Adobe Systems's Display Postscript software development system.

Untitled item in New Products, *UNIX World*, April 1992, p. 132. Listing for Benatong's Serial Solutions tool for using low-level serial drivers from Objective-C.

Untitled item in New Products, *UNIX World*, April 1992, p. 132. Listings for Altsys Corp.'s Virtuouso drawing software and Ariel Corp.'s Ircam signal processing workstation.

NeXTstep–486: Competitor to Windows?, *Windows Magazine*, April 1992, p. 18. NeXT Computer Inc. demonstrated NeXTstep-486 at NeXTWORLD expo. Steven Jobs said the port was requested by customers and suggested by industry pundits. Some experts consider the UNIX-based system more open than NT, but its hardware requirements will probably be greater.

Christopher Barr, Operating Systems by Committee, *PC Magazine*, April 14, 1992, p. 32. Competition from operating systems like NeXTStep and Solaris is mentioned as one reason why Microsoft and IBM have invited independent software vendors to participate in the design of Windows NT and OS/2.

Jim Seymour, Toward Better PC Illusions ,*PC Magazine*, April 14, 1992, pp. 99-100. The author's belief in the conventional wisdom that PCs finally have enough power to spare some cycles for ease of use was shaken by Bud Tribble, NeXT's vice president of software engineering and "the force behind NextStep, NeXT's brilliant development environment cum operating system". Seymour was first intrigued by a published quote from Tribble, "On the desktop today, 80 precent of computing power is going toward ease of use, such as menus, windows, and pop-ups. Only 20 percent is actually going towards doing the job, such as calculating your spreadsheet". Tribble later said "The only thing worth devoting computer power to *is* the interface". But there's a paradox: The simpler the interface, the more CPU cycles you use up. A significant amount of power goes into creating intuitive representations for computer users, and truly intuitive representations are what good interfaces are all about. By incorporating representations and manipulative tools for the programmer, "NextStep succeeds brilliantly at ' programmer productivity'. The increased quality of these interface illusions will require CPU power and become a new test of the quality of computing platforms".

Jerry Borrell, Opening Pandora's Box, *Macworld*, May 1992, pp. 21-22. Article about licensing Macintosh technology mentions Quorum's demonstration of Macintosh emulation on platforms including Next.

Gary Walker, Why the Choice Must Be C++, C++ Journal, 1992, no. 1, pp. 52-61, 63-65. One company chose C++ as its object-oriented programming language because its status as a de facto standard will bring better development environments, tools, training, and support. Six other languages with commercial support were also evaluated. Objective-C was criticized because weak static type checking makes many errors hard to find, performance may not be adequate for real-time applications, and few vendors support it. However, it was called "fairly successful" for applications involving a graphical user interface.

Inside Lines, Computerworld, March 30, 1992, p. 114. After hearing a voice-mail message from H. Ross Perot during a NextStep demo, Steve Jobs told an audience "He'd be a really awesome president."

InterActive Author for Next workstations (item in Pipeline), InfoWorld, March 30, 1992, p. 18. Imagine Multimedia Inc.'s multimedia authoring software.

NeXT names president, COO (item in Business Briefs), MacWEEK, March 30, 1992, p. 24. NeXT Computer Inc. names Peter van Cuylenburg president, chief operating officer, and board member.

Jean-Louis Gassée, Open systems that are open for business, MacWEEK, March 30, 1992, p. 27. Microsoft says MS-DOS and Windows are more open than Unix, and when Windows NT is POSIX-compliant it will be compatible with Unix. "NeXT Computer Inc. calls NT a 'Unix wannabe' and says it delivers the kind of NT goods today. But, while Chairman Steve Jobs can fight it off with Chairman Bill on rhetoric, there is the nagging installed-base question."

Cara A. Cunningham, Unix Standards Ease ISVs' Burden, PC Week, March 30, 1992, pp. 61, 73. Lists NeXT Inc. among companies planning new versions of system software in 1992.

Christopher Stetson, Still Complex, Unix Puts on a Prettier Face, PC Week, March 30, 1992, p. 105. NeXT Computer Inc. is the only major UNIX workstation vendor not using an interface based on X Windows. When Jobs decided to combine the ease of use of the Macintosh with the power of Unix, X Windows was still a research project.

Unix Graphical Workstations, PC Week, March 30, 1992, pp. 108, 110. Product directory includes NeXT.

Workstation Warriors Square Off, UniNews, March 30, 1992, p. 3. Next and Sun Microsystems are targeting each other. Next compared the two development environments in its videotape Next vs. Sun: A World of Difference and in the Booz-Allen & Hamilton survey it commissioned. A Sun presentation attacking Next's financing and Jobs triggered a detailed rebuttal from Next.

Robert Pool, Software for solving equations, Science, April 3, 1992, p. 55. NeXT's chief scientist, Richard Crandall, believes symbolic mathematical software can give more than number-crunching programs.

OnDuty provides productivity tools for Next computers (item in Pipeline), InfoWorld, April 6, 1992, p. 24. Digital Instrumentation Technology Inc.'s OnDuty 1.0 is shipping.

Gary M. Bradfield, If it acts like a NeXT, then it must be a NeXT (letter), MacWEEK, April 6, 1992, p. 44. The descriptions of future Taligent and Microsoft products sound like NeXTstep, which is already available. "If poeple want an operating system like a NeXT, an imaging system like a NeXT and a development

system like a NeXT, maybe they should be aware that there is a NeXT."

Mac the Knife, That'll work (item in Phone-in-the-Mac potential), MacWEEK, April 6, 1992, p. 118. Apple is developing a new Macintosh help system with NeXT-like windows.

Robert X. Cringely, Stick to PCs, Mikey (item in Notes From the Field), InfoWorld, April 13, 1992, p. 110. Dell's NeXT PC will ship this summer when NextStep 3.0 is available.

Solaris goes after volume sales with Intel version, InfoWorld, April 20, 1992, p. 102. SunSoft president Ed Zander calls NextStep inadequate because it is tied to the hardware and predicts it will not run as well on Intel hardware.

Matt Kramer, PCShare's Plans To Boost PC Clients with Unix Need Work, PC Week, April 20, 1992, pp. 49, 56. Review of Helios USA's PCShare describes linking a Dell 333D PC to a NeXTstation Turbo Color, allowing the PC to log on to the NeXT, mount Unix volumes as DOS devices, and redirect DOS output to the NeXT PostScript printer.

Briefly Noted (item in Late News), PC Week, April 20, 1992, p. 138. Frame Technology and BOSS Logic will jointly market and distribute a Windows version of BOSS's Document Manager, now available for NeXT.

William F. Zachmann, 32-Bit GUI Alternatives: No Contest, PC Magazine, April 28, 1992, p. 192. Discussion of 32-bit GUI operating systems for Intel chips includes NeXTstep 486.

LuAnn Vitalis, New in the Resource Center, BCS Update, May 1992, p. 19. The Resource Center now has Illustrator 3.0 from Adobe and Ragnarok: Twilight of the Gods from David S. Joerg Productions.

Albert Willis, Apple Introduces QuickTime (item in The View from the BCS), BCS Update, May 1992, p. 21. Apple's QuickTime Movie Exchange Toolkit will support many platforms. "I think it's interesting that there isn't support for NeXT."

FORTRAN Math and Statistical Programming, BYTE, May 1992, p. 84. Product announcement for Absoft Corp.'s IMSL FORTRAN Libraries fror the Next.

Bruce Schneier, Untangling Public-Key Cryptography, Dr. Dobb's Journal, May 1992, pp. 16-18, 20, 22, 24, 26, 28. Sidebar "Public-Key Cryptography Meets the Real World" describes recent implementations. Next Inc.'s Fast Elliptic Encryption (FEE) algorithm may be more secure than RSA, although some researchers believe it is vulnerable to mathematical advances. Next plans to use the algorithm for security and authentication, pending NSA approval, to patent its speedups (although other patent applications could present complications), and to license the algorithm without royalties.

Create 1.1, New Media, May 1992, pp. 44-45. Product announcement for Stone Design's Create 1.1, listing new features of upgrade.

TypeView 1.0, New Media, May 1992, p. 47. Product announcement for Vivid Publishing's TypeView 1.0

Jeff Duntemann, Application Frameworks and Tools, PC Techniques, April/May 1992, pp. 43-44. Review of The Stepstone Corporation's APIpac V1.0, "a set of Objective C classes that, taken togeher, comprise an application framework.… Low-level system access is encapsulated in an object called a context, so

that different platforms can be supported simply by linking in the appropriate context.… Objective C has an elegance about it that makes C++ look random and frazzled by comparison, and APIpac shares in that elegance. Give it an objective look."

Joe Hutsko, Susan Kare: The Face Behind the Interface, Publish, May 1992, p. 108. Interview with Susan Kare, the artist who was Next's creative director in 1986-88.

C. James Galley III, Inside, PC Magazine, May 12, 1992, p. 4. Strategies for testing Apple, NeXT, and Sun workstations for the issue's cover story.

Michael J. Miller, A Long Way from VisiCalc, PC Magazine, May 12, 1992, pp. 81-82. Discussion of advances in spreadsheets mentions Lotus Improv and Computer Associates' CA-Compete for NeXT (but soon for Windows) as supporting multiple views of a single model.

Jim Seymour, Platforms: How the PC Stacks Up, PC Magazine, May 12, 1992, pp. 113-117, 120, 122, 125. Introduction to cover story comparing PC, Mac, Sun, and NeXT. "Templation abounds. You want the power of a Sun workstation, the ease of a Macintosh, the cool elegance of a NeXTstation. But when it comes to getting your work done, you come back to the PC."

Jon Zilber, The Macintosh: The Choice for Graphics, PC Magazine, May 12, 1992, pp. 127-128, 141. Analysis of Macintosh for the issue's comparison of platforms mentions that the configuration tested was comparable in cost to a NeXTstation Turbo Color.

M. Keith Thompson, The NeXT Generation, PC Magazine, May 12, 1992, pp. 153, 161, 165. Analysis of NeXT for the issue's comparison of platforms. "NeXT combines Unix's power with the Macintosh's ease of use in an elegant, well-designed system. Here is one solution for companies that need custom applications, vertical-market solutions, and multimedia presentation tools running alongside standard productivity applications."

Julie Cohen, PCs: A Matter of Choice, PC Magazine, May 12, 1992, pp. 167, 170-171. Conclusion of this issues comparison of computing platforms. "Don't worry: You have chosen the right computer. No other platform has the widespread acceptance, the vast library of software, or the affordability of the Intel-based PC."

Executive Interview with Steve Jobs, Oracle Magazine, Spring 1992, pp. 10-14. Mission-critical custom applications interoperating with shrinkwrapped productivity applications and interpersonal computing will be added to the paradigm of the '80s. Object-oriented programming is a way to encapsulate complexity with clean interfaces, which provides greater code reuse, speed, and flexibility during development. Interpersonal computing is a new form of organization independent of geographic location and management hierarchy. A complete object-oriented development environment, which is not just a language but also includes a rich set of objects, allows the management of greater complexity. NeXT's Database Kit, which was developed in response to customers' request for objects to make database programming even easier, includes tools to work with several databases. Corporate data centers will move applications from mainframes to reduce costs and improve the user interface, and shift their emphasis from data management to application development because the bottleneck with data is the lack of applications. The computer industry is technology-driven: Apple was driven by the technology which made the PC possible and later by graphical user interfaces, IBM by Winchester drives, Sun by workstation and UNIX technology, and Oracle by database tech-

nology. "The most recent amd most profound technology shift I have seen since the Macintosh is object-oriented system software, which goes far beyond C++ and the simple things that people think it is." The business risk of adopting NeXT is exceeded by the technology risk of adopting technology that will not support desired applications. NeXT's customers are focusing on rapid custom application development. NeXT supports many standards, and as the shipper of a majority of object-oriented computers it is the de facto standard for object-oriented computers. NeXT's automated factory demonstrates that world-class domestic manufacturing is possible.

PAGES ANNOUNCES DEAL WITH FORMER USSR

by Bruce Webster, BIX NeXT moderator

April 1, 1992 – Pages Software Inc. announced a sweeping deal with the CIS (Commonwealth of Independent States) today. In a deal that is believed to be the first of its kind, Pages will acquire two Russian ballistic missile submarines.

While officials at Pages refused to comment, according to a source inside the company that wished to remain anonymous, the subs will be purchased for $42.5 million, 150,000 shares of Pages stock and a seat on the Pages board of directors.

The two submarines are believed to be of the "Typhoon" class, similar to the submarines portrayed by the movie "Hunt For Red October". Each sub carries a crew of 85 officers and sailors, as well as 16 medium range nuclear missiles.

While this move has taken most of the computer industry by surprise, one industry analyst calls the move "predictable", due to the lack of cash in the former Soviet Union, and the increasingly competitive nature of the software industry. "It's a logical move...Pages wishes to become a leader in the software industry as well as a nuclear superpower."

There are also reports that "ultimatums" have been delivered to major software vendors, including Microsoft, Aldus and Quark, but officials at these companies have been unwilling to comment so far.

From: uunet!carrara.bos.marble.com!gsk
Date: Wed, 1 Apr 92 14:57:46 EST
To: gun-members@dinkins.gun.com, nextfanatics@mit.edu, Conrad_Geiger@next.com
Subject: Pages paid too much
Cc: bwebster@pages.com, staff@carrara.bos.marble.com

Pages paid too much. Sergei Morozov told us that Soviet tanks are being left behind in Poland, and can be picked up for $30 apiece. (If you are very, very strong, that is.)

Geoffrey

SHIPPING PRODUCTS AS OF 5/13/92

Business Productivity

Adamation, Inc.
LiveWire—Allows multiple users to simultaniously edit a document over the network. Who's Calling? 2.0—Telephone tracking system with multiuser access, plus voice response; allows you to track calls, schedule meetings, keep yourself organized. 415-452-5252

Appsoft, Inc.
WriteNow—easy to use word processor, includes mail merge capability. 800-428-APPS

Digital Instrumentation Technology, Inc.
OnDuty—Group contact manager, scheduler, note taker. 505-662-1459

HSD Microcomputers, Inc.
OCR Servant-Limited Edition—Optical Character Recognition software available to users only through the Services menu. Simon Says—Voice control over application launching, key stroke equivalent commands, etc. 415-964-1400

Informix
Wingz—Spreadsheet with 3D graphics and powerful Hyperscript language. 415-926-6651 or 913-599-7330.

Insight Software
ElectroFile—Manages scanned-in document images, esp. including litigation docs. 503-222-2425

Lighthouse Design
Concurrence—State of the art outlining and presentation tool. Diagram!—A drawing package that makes creating org charts, labled diagrams, etc. easy and which supports links to other NextStep apps. 1-800-366-2279 or 301-907-4621

Lotus DevelopmentCorporation
Lotus Improv—Next generation spreadsheet offering English formulas, multiple views on the data, linked tables, and presentation graphics. 617-577-8500

Stone Design Corp.
DataPhile—Full featured flat-file database which handles images and sounds as well as text. 505-345-4800

Visual Understanding Systems (VISUS)
PaperSight Lite 1.2—A personal digital file cabinet. PaperSight 1.2—A complete image management system which handles document scanning, viewing, organizing, searching, and archiving. Pittsburgh Project Manager—basic project management software. 412-488-3600

WordPerfect, Inc.

WordPerfect for NeXT—The first true WYSIWYG version of ths powerful, full-featured wordprocessor which dominates the PC word processing market. 801-225-5000

Connectivity, Communications and Emulation

Abacus R&D, Inc

Executor-MSW—Runs the Mac version of Microsoft Word in a NeXTstep window. 505-766-9115

Active Ingredients, Inc.

Communicae 2.0—A communication package that includes both DEC VT220 and Tektronix 4010/4014 terminal emulation, and standard file transfer protocols. 617-576-2000.

Avatar Corporation

InSession 3270—IBM 3270 connectivity for NeXT computers; Programmer's Toolkit is available for custom applications development. 508-435-3000

Cub'x Systèmes

Cub'X-Window—X11R4 server for 4 and 16 bit NeXT computers. 33)-1-46-93-29-25, for North American distribution, call Interactive Technology, Inc. at 503-644-0111

Cayman Systems, Inc.

GatorBox—Intelligent LocalTalk (TM)-to-Ethernet gateway; connects NeXT and Mac networks..Also, GatorShare, software for file sharing between Macintosh and NeXT Computers, GatorMail-Q, for linking Macintosh QuickMail users with NeXT e-mail system, and XGator, which allows an ethernet-connected Macintosh to be displayed and controlled via an X window. 617-494-1999

Conextions, Inc.

3270Vision 3.0 and 3270Vision Coax—3270 emulation via TCP/IP over ethernet or via coax. 508-475-5411

Digital Instrumentation Technology, Inc.

FloppyWorks—Software that enables floppy drivesfor NeXT to read and write 1.44 MB Macintosh disks and to translate data between the Mac and NeXT machines. 505-662-1459

DataViz Inc.

MacLinkPlus/PC—File transfer and translation between the NeXT and Macintosh environments. 203-268-0030

Financial Data Systems, Inc. (FDSI)

Kerberos—Technology for enhancing security in network communications. 818-287-9789

FD Consulting

Real-time MIPS—distributed workstation architecture for high-speed data retrieval. 212-766-1420

Federico Heinz

Dots—Printer support for HP LaserJet III, Epson, and other printers. (+49 30) 784 98 64 in Germany

FTP Software, Inc

PC/TCP Plus for DOS—TCP/IP connectivity for DOS. 617-246-0900

Hayes

ISDN System Adapter—supports ISDN data transfer via the serial port. 415-974-5544

HELIOS Software GmbH

PCShare—Fast MS-DOS file, print and terminal server software based on standard TCP/IP. -511-368 10 93 in Germany

Insignia Solutions, Inc.

SoftPC—DOS emulation at roughly the speed of a 10 Mhz AT. Supports CGA and EGA. (415) 694-7600

Information Presentation Technologies, Inc.

uShare—supports Appleshare and bi-directional Mac/NeXT printing. 805-541-3000

Marble Associates

TeleConnect—support for networking via serial lines (SLIP) 408-436-7299

Morning Star Technologies

Morning Star PPP—Point to Point Protocols for remote access to network or LAN bridges. Serial Port X.25/Daemon-S—provides flexible X.25 connectivity via the serial port. SnapLink—provides multiple ports and X.25 support via the SCSI port. 614 451 1883

Novell, Inc.

LAN-WorkPlace for DOS v4.0—Fast concurrent access to NetWare servers and TCP/IP network resources; NetWare NFS v1.1—integrates NeXT with NetWare 3.11 environment. 801-429-7000

Pencom Software

Co-Xist—Full X11r4 client and server support within NeXTstep. 1-800-PENCOM-4 or 512 343 1111

Soft•Switch, Inc.

Soft•Switch SMTP Gateway—multivendor/multiprotocol email connectivity. 215-640-9600

Suite Software

SuiteTalk—Transparent communications runtime environment for VAX/VMS and various UNIX platforms running TCP/IP or DECnet. 619-698-7550

Touch Communications, Inc.

WorldTalk/400—Provides aceess to other mail systems (e.g. IBM Profs, DecTalk) via X.400 gateway support. 408-374-1680

Transarc Corporation

AFS 3.0—A distributed file system for large, multi-location networks; their are no local or user dependencies in the system. 412-338-4400

Uninet

SLAT-1—Provides a "Centronics" style parallel interface and up to eight high-speed serial ports, connecting to the NeXT computer via SCSI. Contact Paul Hammond, Uninet, 714-263-4222

White Pine, Inc.

eXodus—Full featured X-Window System display server. 603-886-9050

The Wollongong Group, Inc

Pathway Access for DOS, Pathway Cient for DOS, Pathway Access for Macintosh, Pathway Client for Macintosh —TCP/IP connectivity for DOS/Windows 3.0 and Macintosh. 415-962-7100

Database and Information Management

(see also SAS under Mathematics and Statistics)

BDMS

Boss Document Manager—document tracking and control. Contact—client/people tracking   515-472-7740

BKS-Software Entwicklungs GmbH

POET—Object-oriented database system written in C++. +49 30 342 30 66-67

Comnetix Computer Systems

Map System—collection and storage of map coordinates to display, zoom, pan and analyze geographic locations. Mug Shots—data capture, compression and storage of an individual image, retrieval based on coded attributes. Document Management—scan, store, distribute, retrieve and purge or archive document images. 416/274-4060

Datrix

Datrix5 Accounting—an accounting package built on Sybase. A/R shipping, A/P, Payroll, GL, Sales Order, Purchase Order are due in May . (602)545-7421

Dazzl, Inc

Mail Inspector—multilevel finder for the NeXT mail system

Radiology Fileroom—Sybase-based radiology image storage, manipulation and retrivial system. 309-674-9317

Fusion Systems Group, Ltd.

DataLink for Oracle—Query the databases, put the result in Wingz. 212-285-8001

Imagine, Inc.

MediaStation 1.5—Archival, retrieving and processing of multimedia information. 313-487-7117

Information Technology Solutions

SpeedDex—Simple, unstructured flatfile personal information manager. 312-951-7462

Informix Software, Inc.

INFORMIX-SE Release 4.1—Informix's relational database management system. Includes INFORMIX-Net, C-ISAM, INFORMIX-4GL and INFORMIX-SQL. 415 926 6300

IP Design, Inc.

Parabase—Powerful, easy to use database tool set; requires Sybase or Oracle. 310-394-1820

Oracle Corporation

RDBMS 6.0.30—Oracle's relational database management system. Oracle Financials 8.3—an Oracle-based finance/accounting system. Oracle Government Financials 4.3—like Oracle Financials 8.3, tuned for government needs. 415-506-5072

PFCS Corporation

UNIX MUMPS Version 3.1—Standard database and programming language for the interactive manipulation and storage of large volumes of medical and business data. (314)230-8847

Reuters Information Services Services, Inc.

Triarch 2000—nformation distribution architecture based on standard LAN technology designed for distribution of real-time financial information. 212-912-7372

Sybase, Inc.

SYBASE SQL Server—Sybase, Inc.'s relational database management system. 1-800-8SYBASE or 415-596-3500

Teledia, Inc

FileMaster—free form data management tool (412) 321-5850

Transgraphics Systems, Inc.

TransManager 1.0—transportation terminal inventory management system. (510) 376-3522

Virginia Tech Library System, Inc.

VTLS InfoStation 2.0—A hypermedia information access and authoring system for electronic libraries. 1-800-HOT-VTLS or 703-231-3605

Visual Understanding Systems, Inc

IDB—high-performance database which supports multiple inheritance, polymorphism, dynamic binding, long & nested

transactions, versioning, dynamic linking, and heterogeneous networks. (412) 488-3600

Mathematics, Statistics, Scientific Computing

(see also Lotus Improv and Informix Wingz under Business Productivity)

Analytical Graphics

Satellite Tool Kit—for planning, analyzing and evaluating satellite missions. .215 337 3055

DSP Development Corporation

DADiSP 3.0b Worksheet—graphical data analysis for scientists and engineers. 617-577-1133

Graphisoft

VISA—Translates DXF files to PostScript and/or editable Adobe Illustrator format. 415-737-8665

Halchin and Fleming

Orbit—Tool for exploring the dynamical system of periodic orbits. Rubik Algebra—Uses Rubik's cube as a tool for exploring elementary group theory. Spring—Animates motion of a spring with an attached mass; for exploring differential equations. Taylor—simple and attractive interface to Mathematica for investigating Taylor polynomials. Groups—Description of mathematical objects known as groups. 217-348-0917

Leading Market Technologies

EXPO Market Worksheet—spreadsheet power and flexibility for financial time series users.   (617)494-4747

SAS Institute Inc.

SAS Application System—Integrated applications for data access, management, statistical analysis and presentation (919) 677-8000

SHAZAM

SHAZAM—a command line oriented statistical analysis package. 604 822 5062

Triakis, Inc.

DAN-The Data Analyzer—Interactive data analysis system with 2D plotting support. Math++—C-language numerical analysis source code math library. 505-672-3180

Waterloo Maple Software

Maple V—Powerful interactive system for algebraic manipulation and related 2 and 3D color graphics. 519-747-2273 dsraimondo@Maplesoft.on.ca

Wolfram Research, Inc.

Mathematica 2.0—A comprehensive software application for mathematical computation, symbolic manipulation, graphing, and high level programming. 1-800-441-MATH or 217-348-0917

Publishing and Graphics

(see also Lighthouse Design and WordPerfect under Business Productivity)

Appsoft, Inc.

Appsoft Draw—full featured structured drawing program w/ multiple page support. 800-428-APPSz

Adobe Systems Inc.

Adobe Illustrator 3.0—Adobe's market-leading design/illustration application; includes the Adobe Separator application. Adobe TouchType—A power tool designed expressly for typesetting at large sizes. Adobe Type Sets 1,2 and 3 and the Adobe Plus Pack—sets of popular Adobe typefaces 800-833-6687

Bacchus, Inc.

Pixel Magician—Translates between eps and tiff and many other graphic formats. 310-820-9145

Epitome, Inc.

Redmark—On-screen review and "redlining" for all types of documents. 615-675-0910

Frame Technology Corp.

FrameMaker 3.0—Technical publishing software, including word processing, graphics, page layout, equation editing and book-building tools. 408-433-3311

MicroMaps Software

MapArt—A presentation quality set of EPS maps—world, continents and regions, and 22 country maps. 609-397-1611

RightBrain Software

Adobe Type Library—authorized distributor for the complete library of Adobe Type Faces. TypeView—a utility available via services for quick access to font information.. 415-326-2974

Stone Design Corp.

Create—Easy, intuitive access to Postscript effects on all drawn objects. TextArt—Easy, intuitive access to the full range of text effects Display Postscript makes possible. 505-345-4800

T/Maker Company

Click Art—Nearly 400 illustrations of Encapsulated PostScript EPS artwork. 415-962-0195

Totem Graphics

Clip Art—more clip art. 206 352 1851

Sound and Music

Metaresearch, Inc.

SoundWorks 2.0—A powerful,.easy to use sound recording and editing program..503-238-5728

MIDIapolis Systems

SoundBursts—Percussion and Effects digital sound collections. SoundHouse—inexpensive sound recorder. 612-822-1604

Quest, Inc.

MidiLink—serial-to-midi convertor. MidiLink+—all features of MidiLink plus midi merge. 604-253-5797

Tools and Languages

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Album—A scrapbook for text, graphics, sound and Unix scripts.011 49 40 38 19 24

Absoft Corp.

Absoft FORTRAN 77—Object Oriented FORTRAN compiler; fully compatible w/ NeXT's Interface Builder toolkit, allows programmers to add a graphical i/f to any FORTRAN program. Fx— a screen oriented source level debugger designed by and for FORTRAN programmers. IMSL FORTRAN Libraries 313-853-0050

ACUCOBOL

ACUCOBOL-85–a complete COBOL environment. (Currently VT100 version, NeXTStep version TBA) 619 689-7220.

Adobe Systems Inc.

DisplayTalk, a development environment for Display PostScript programming. 800-344-8335

Applied Logic Systems, Inc

ALS Prolog 315-471-3900

BenaTong

Serial Solutions—Unix serial drivers wrapped in an object. 614 276 7859

CACI Products

MODSIM II—object-oriented language for programming and simulation 619-457-9681

Cadence Research Systems

Chez Scheme—high performance implementation of Scheme. 812/333-9269

Codex

the XEvents Software Development Kit—protocols for cross platform interapp communication. International telephone 61 3 696 2490 (Australia)

Elan Computer Group, Inc.

Elan License Manager—Controls multi-user access to software applications in a network or multi-user environment. 415 964 2200

EVB Software Engineering, Inc.

GRACE—276 reusble software components organized in 23 distinct families of abstractions that total more than 5200 lines of Ada source code. HERAGRAPH—a complete set of 20 and 30 graphics tools written entirely in Ada. 301 695 6960

Franz Inc.

Allegro Common Lisp–A full featured Lisp environment which interfaces to Objective C and Interface Builder. 415 548-3600.

Highland Software, Inc

Flexible License Manager—A package that allows a software application to be licensed on a concurrent usage basis rather than a per-computer basis. 415-493-8567

Impact Software

Gdb 2.1—a GNU Debugger Font End, SpinDoctor 1.1—for visualizing 3d experimental data; PhaseScope 2.0—ui and graphical display program for qualitatively analyzing the stability characteristics of dynamical systems. 607-277-8623 infokit@impact.shaman.com

Jefferson Software Corporation

Modula-2—Programming language. (602)869-0316

Marble Associates

Decision Builder—Development kit for apps supporting real time decsion making. 408-436-7299

Meridian Software

OpenAda Compiler—certified Ada compiler. (714) 727-0700

Motorola, Inc.

DSP56000 Family C Compiler, Macro Cross Assembler (ASM96000), Simulator Programs (9SIM56000 and SIM96000)—Tools for DSP programmers. 512-891-2030.

Numerical Algorithms Group (NAG)

FORTRAN 90 for NeXT—Modern Fortram ully compliant with ISO/IEC 1539:1991 and ANSI X3.198-1991 standards.

OASYS

OASYS Native Compilers, OASYS Optimizing 680x0 Cross Compliers, OASYS Optimizing 88000 Cross Compilers (C, C++, Fortran, Pascal available for each)—Highly optimized Fortran, Pascal., C and C++ compilers and cross compilers. 617-862-2002.

Objective Technologies, Inc.

[OT Palettes:2.0]—Custom palettes for IB. Smartfields, Chooser, MathPalette, and GraphPalette are currently available. 212-227-6767

Ohio Supercomputer Center

apE—Scientific visualization software. (apE stands for "animation production Environment.") 614-292-3274. email address: michelle@cinema.osgp.osc.edu

ONyX Systems, Inc.

BugByte 2.1—graphical debugging tool 817 432-9107, email info@onyx.com

Persistent Data Systems

IDB Object Database—high performance, distributed object database. 412 963 1843

Pixar

PhotoRealistic RenderMan—a language for describing 3D scenes. 800-937-3179

Professional Software, Inc.

Objective DB Toolkit—object library for use with SYBASE in the form of two IB palettes. 617-246-2425

RDR, Inc.

Power Palettes—IB Palettes for using graphics and sound in the interface. 703 591 8713

Rock Solid Software

Eiffel—an implementation of the Eiffel language compatible with Interface Builder. 1-512-328-6406; also available from Interactive Software Engineering, Inc. 805-685-6869

Scheiber Consulting

HexEditor—view, edit, and create binary files (312)363-6420

Torque Systems

Linda—Programming language. (415) 321-1200

Transgraphics Systems, Inc.

TransLibrary 1.0—transportation object library allows rapid creation of transportation/distribution operational inventory management applications (510) 376-3522

University of Virginia

uvapc/next—Pascal; inexpensive site license for educational institutions. email uvapc@virginia.edu 804-982-2200

Visual Understanding Systems, Inc

PaperSight Developers' Toolkit—More than 70 code and data modules for image management. SpeechKit—speech recognition tool for application developers; supports speaker independence, continuous speech, moderate-sized vocabularies and grammars. 412-488-3600

Young Minds, Inc.

Makedisc—CC-ROM formatting software for creating a CD-ROM disc image. 714-335-1350

Utilities

Agog, Inc.

Squash 1.0—a file compression and floppy backup utility. 517-627-2186.

Athena Design, Inc

LabelMaster—lets you print text or EPS images on a Seiko Smart Label Printer or a CoStar Label Printer. 617-782-3550

Atherton Software Works

Engage!—a general work management utility that complements the DocK and File Viewer. 415-321-3720

Aurora Software

Quickstart—dock extender. Tarre—graphical interface on Unix tar and compress commands. (608) 231-3679

Cube Technologies

Stylist—Services-based app grabs and applys styles from/to text. (713) 778-1400 info@cubetech.com

The CuillaMartin Company

CuillaMartin Calculator Set—Basic, scientific and conversion calculators. 708 223 5164 vpnet.chi.il.us!cuilla!chris

d'ART Software GmbH

BarCode—reads and writes a variety of bar code formats. Object kit available. (++49) 40 - 380 23 0

Impact Software Publishing, Inc

enTar—backup utility. MacinDisk ToshBrowser—read 1.4 Mb Mac disks 607 277-8623

Metrosoft

MetroTools—Font, compression and screen saver utilities. 619-597-7518.

Paget Press, Inc.

Labels—a sorting service especially useful for automating the production of mailing labels. Swoop'n—services for printing envelopes and selections, compressing files and sorting and summing selections. 206-448-0845

RightBrain Software

LauchPad—dock extender that lets you autolaunch documents as well as apps. Lockscreen—a screen saver which provides no-logout password protection. Portfolio—place for art files that lets you see their contents and drag them into apps. Rulers—horizontal and vertical rulers that float above everything. 415-326-2974

Salt Springs Technical

MindOverMail—Utility for handling mailing labels, envelopes. 503 839 6552

Taranis Design

WYSIcalc—7 in 1 Calculator. 415 585 9582

Teledia, Inc

PhrasePlayer—voice-controlled digital dictation machine. BackupMaster—incremental backup software. (412) 321-5850

Triakis, Inc

T-Calc—reverse-Polish notation scientific calculator 505-672-3180

Entertainment

Athena Design, Inc

CultureShock 91—a solitaire game for tile matchers and 60's aficianados. 617-782-3550

DavidJoergProductions

Ragnarok:Twilight of the Gods—animated strategy game. 617 493-3418, 708 879-626

Lighthouse Design

VOID—strategy/arcade game for solo or network play. 1-800-366-2279 or 301-907-4621

Shapiro & Gilmore Studios

Curvature—generate beautiful color patterns based on a specified number of symmetrical rotations and reflections of Bezier curves   617-783-2889

Data Acquisition and Sound

Ariel Corp

DM-N Digital Microphone—High-fidelity stereo microphone with lab-quality data acquisition capabilities. ISPW (Ircam Signal Processing Workstation)—a board with two Intel i860's (160 MFLOPs, 80 MIPS). QuintProcessor—5 27MHz DSP5001 's on a single board for the cube. ProPort Model 656—Analog I/0 interface with 2 channels of 16 bit analog in and 20 bit analog out with programmable sample rates. 908-249-2900

Dazzl, Inc.

Model 16/12/200 Analog to Digital Converter—16 channel 12 bit 200,000 sample per converterz. Model 16/16/500 Analog to Digital Converter—16 channel 16 bit 500,000 sample per second converter. DataDisplay—realtime display software for use with Dazzl A to D products. Photon—NeXTcube-based Digital I/O port for Photometric CCD camera systems. Zydeco I—board providing commercial grade digital recording studio for the NeXT. Zydeco II—all the features of Zydeco I plus - 4 56000 Motorola DSP's programable for on the fly parametric equalization, filtering, and effect processing. 309-674-9317

IOtech, Inc.

SCSI1488/N—A SCSI-based IEEE interface plus software that lests a NeXT Computer control up to 14 IEEE instruments. The following require the SCSI 488/N: Serial488/4—A 4 channel IEEE to serial converter. Digital488/80—An 80 bit IEEE to digital I/O interface. DAC488—A digital to analog convertor in either 2 or 4 channel versions. ADC488 A/D

Convertors—Supports 16 single ended or or 8 differential analog channels. 216-439-4091

Metaresearch, Inc.

Digital Ears—Audio input device and control software for entering and recording compact-disc quality sounds. 503-238-5728

Singular Solutions

A/D64x—Hardware and software for high-quality sound recording and capture. 818-792-9567

Stealth Technologies, Inc.

ADA1800 Digital Audio Interface—8-bit digital audio I/O board capable of A/D and D/A functions at 32, 44.1, and 48 kHz, (AES/EBU interface Holstein-I—two-track digital audio recording, processing and editing software. (618)692-2769

Fax and Data Modems

Dove Computer Corportation

DoveFax—9600 baud fax modem and 2400 baud data modem. 1-800-622-7627 or 919-763-7918

HSD Microcomputer, Inc.

FaxMaxter 24/96 X—2400 baud data and 9600 baud fax modem bundled with OCR Servant. 415-964-1400

Neuron, Inc.

Neuron Fax 1414—9600 baud Fax, v.32bis data (up to 38,400 bps) mode; autoswitching between fax and data. Neuron Fax 1414+—also supports 4 wire leased line systems and front panel programming.   609 243 7538.

Visual Understanding Systems, Inc

Fax Modem VS-24—9600 baud fax modem that can vector call to a fax machine if busy. 412-488-3600

Image Capture, Display, and Printing

Abaton (Everex)

Scan 300 G/S—An 8-bit scanner that scans halftones, line art, and grayscale images.1-800-444-5321 or 415-683-2226

AGFA Compugraphics Division

Imagesetters—a full line of NeXT-compatible imagesetters.. (508) 658-5600

. Canon U.S.A., Inc.

IX-30F Image Scanner—An 8-bit flatbed scanner with a maximum scan resolution of 300 dpi. 1-800-848-4123

Extron Electronics/RGB Systems, Inc.

RGB 111, RGB 112 and RGB 63/31 Scan Board—Respectively a NeXT video interface, a NeXT video interface for our color

machines, and a NeXT video to "normal scan rate" converter. 800 633 9876 or 213 802 8804.

Graphic Enterprises
PageScan 3—broadsheet laser printer 714 960 6268

HSD Microcomputer, Inc.
Scan-X Professional—An 8-bit grayscale, desktop flatbed scanner that supports resolutions of up to 1500 dpi. Scan-X Color—24 bit true color scanner supporting up to 300 dpi for grayscale 24 bit color images and up to 2400 dpi for line art. Scan-X DP-20—20-page-per-minute scanner. 415-964-1400

Linotype-Hell
Imagesetters—a full line of NeXT-compatible imagesetters.. (516) 434-2000

Metaresearch, Inc.
Color Digital Eye—Video input device and control software for capturing still and moving NTSC video images.503-238-5728

Oce Graphics
OceColor—An Adobe PostScript, color printer that uses the latest thermal transfer technology, and supports the full range of PANTONE colors. 1-800-545-5445 or 415-964-7900

Prism Technologies, Inc
DyCam Model 1 Digital Still Camera—will grab images and dump them into the NeXT via one of the serial ports at a resolution of 376 · 240 · 8 bits deep (monochrome). 705.523.5528

RGB Spectrum
RGB/Vidoelink 1450 AX—High quality high-res RGB to NTSC/ PAl conversion and overlays. 510-848-0180

Second Glance
ScanTastic—a scanner control application customized to exploit the full capabilities of the particular hardware it supports. 714 855-2331

Talus Imaging
Rio Film Recorder—35mm camera back, Polaroid instant film back, NeXT computer interface kit, Imager software. (713) 556-6007

Tektronix
Phasor IIPX—A 300dpi thermal color printer that uses a Postscript compatible language. It supports auto switching between SCSI, Serial, AppleTalk and parallel ports.

Visus, Inc.
Personal Page Scanner—up to 3 legal pages per minute scanner. Departmental Scanner— up to 11" by 17" at up to 12 pages per minute. Large Format Scanner—up to 24 by 60 inches, up to 400 dpi. Industrial Scanner—up to 2000 dpi resoluiion, acurrate to .oo2 of an inch over 24 inches. 412-488-3600

Storage

Box Hill Systems
Various storage products—a variety of SCSI storage devices 212-989-4455

CORE International, Inc.
Various storage products—multiple Hot Plug drives, controllers and power supplies wrapped into an Intelligent Array Subsystems for network backup. 407 997 6044

the Cube Route, Inc.
Cube Route Hard Drives—Seagate Wren Hard Drives. 330MB, 660MB, 1 GB. (617) 876-8554

Dayna Communications, Inc.
DaynaFile—External disk drive that lets NeXT Computers read and write to MS-DOS and NeXT-formatted floppy disks. 801-531-0600

Digital Instrumentation Technology, Inc.
Cube Floppy Plus—External floppy that lest NeXT users read and write MS-DOS (720KB and 1.44 MB) disks, Mac (400K, 800K and 1.44MB) disks and UNIX disks. Cube Floppy 2.9 External floppy that lest NeXT users read and write MS-DOS (720KB and 1.44 MB) disks, Mac (1.44MB) disks and (1.44 MB and 2.88MB) UNIX disks. 505-662-1459

EMAC
Metro CD—CD-ROM drive that also plays audio CD's. Metro DAT—1.3 GB digital audio tape backup system. Metro Series Hard Drives—in 170MB, 335MB and 670MB capacities. 1-800-821-0806, ext 2155 oe 415-683-2155.

Epoch Systems, Incorporated
Epoch-1 InfiniteStorage Server—platform independent network server designed to handle the need for quick access times to large off-line storage. 508-836-4711

ETC Peripherals
Various storage products—full line of storage devices 813 884 2863

Liberty Systems
Portable mass storage—SyQuest, DAT tape, magneto-optical. 408-983-1127

Maynard Electronics (Division of Archive Company)
ST2000E—a SCSI based DAT drive which will hold up to 2GBytes of data on one 4mm tape. ST250E—a SCSI based cart tape drive that holds up to 250Meg on a DC6250 1/4" tape.
ST525E—a SCSI based cart tape drive that holds up to 525Meg on a DC6250 1/4" tape. 800.821.8782

MicroNet

Various storage products—up to 1.35 Gb, up to 10.7 ms access time. 714-837-6033

Microtech International, Inc.

Eclipse 1.2T—1 GB digital audio tape backup system. Eclipse 50R—Removable hard drive. Eclipse CD—CD-ROM drive with dual SCSI ports and a universal input power supply. Eclipse Serives Hard Disk Drives—ranging from 200MB to 1GB. 203-468-6223

Park Systems Technology Ltd. (Canada)

Various hard disks—both fixed and removable media. 403-424-0530

Personal Computer Peripherals Corporation

JETSTREAM Computer Peripherals Corporation—A tape backup system capable of archiving up to 2.3 gigabytes of data per tape at speeds up to 14.4 megabytes/minute. 813 884 3092

Peripheral Land, Inc

PLI SuperFloppy 2.8—External floppy that lest NeXT users read and write MS-DOS (720KB and 1.44 MB) disks and UNIX (1.44MB and 2.88MB) disks. PLI CD-ROM—380 ms access time with Sony's newest mechanism. PLI Infinity 40 Turbo—Removable cartridges store up to 42 MB. PLI turbo Drives—Very fast 300MB and 600MB hard drives.1-800-288-8754

TECOR

Disk drive enclosures—(1/2 height and full height), provided with or without new and refurbished hard disk drives from 400MByte up to 1.2GByte. 408.458.3197

Ten X Technology, Inc.

Various storage products—line of storage devicesindluding WORM drives 512-346-8360

Other Peripherals

Digital Instrumentation Technology, Inc.

CubeDigital I/O NeXTbus Development Board—Plugs into the NeXTbus Developer Kit circuit board to simplify breadboarding for NeXTbus development. 505-662-1459

Quest Inc.

Call Link—Automated phone answering system. 604-253-5797.

Software Engineering Solutions

At the Beep 1.2—Phone answering hardware and software. (512)343-2828

ABOUT GUN...

Board

Paul Murphy, president	Paul_Murphy@gun.com
Robb Allan, founder	Robb_Allan@gun.com
Tim Reed, founder	Timothy_Reed@gun.com
David Bressler	David_Bressler@gun.com
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The BULLETin

The GUN BULLETin is produced monthly (more or less) using *FrameMaker* 3.0 on a Color NeXTstation, with headlines created by Adobe *TouchType*. Article text is written directly in *FrameMaker*, with *WordPerfect*, or imported from other platforms (ugh!).

If you are interested in working with the newsletter crew, contact Robb Allan or Jim Cornacchia at the email addresses above.

Pulled From The Net

Pulled From The Net is a service designed to provide a synthesis of important NeXT-related Usenet information to those without network access and to those too busy to keep up with Usenet. Usenet, or Net News, is a bulletin board service available free of charge to anyone with Internet access. It includes hundreds of special-interest posting areas (groups), read by hundreds of thousands of people across the planet.

All GUN members receive *Pulled From The Net* with their membership. It is emailed to those capable of reading Next Mail as soon as it is available; ASCII copies are sent to those capable of reading only ASCII mail; paper copies are sent to everyone else, along with the newsletter.

Pulled From The Net tracks the following groups:

comp.sys.next.misc
Miscellaneous NeXT related information
comp.sys.next.announce
NeXT related announcements
comp.sys.next.admin
NeXT administrative information
comp.sys.next.programmer
NeXT programming information

Discounts

Many vendors are willing to give user group members discounts on their hardware and software. GUN does everything possible to ensure that its members have access to these savings. Every month, GUN compiles a list of currently available discounts. If you are interested in an unlisted item, write to discounts@gun.com or call GUN at 718-260-9848 and ask for the person in charge of group discounts. If possible, we will add the item to the list. Vendors are encouraged to contact GUN to participate in this program.

Membership & Sponsorship

Individual Dues

- $25 per year (tax deductible)
- newsletter
- email alias and inclusion in group email list
- eligible for group discounts (contact Ed Wright)
- eligible for individual UUCP services
- eligible for individual Internet connectivity
- NeXTWORLD disount

Corporate Sponsorship

- $100 per year (tax deductible)
- newsletter
- email alias and inclusion in group email list
- employees are eligible for group discounts
- eligible for corporate UUCP services
- eligible for corporate Internet connectivity
- employee NeXTWORLD disount
- sponsorship is recognized in every issue of the newsletter

GUN Sponsors

Corporate Benefactors

Organizations who have contributed materiel or equipment to GUN:

BoxHill Systems Corp.
760 Mb Hard Disk Storage System for GUN Archive Server
Frame Technology Corp.
FrameMaker 3.0 Page Composition Software
Lighthouse Design
Diagram! design software, Concurrence presentation software
Marble Associates, Inc.
Consulting Services, Marble Teleconnect communication software, Designer Labels labeling software
Stone Design
DataPhile database software
Telebit Corporation
T3000 Modems, NetBlazer Router
Uninet Peripherals, Inc.
SLAT Adapter

Corporate Sponsors

Organizations who have contributed $100 or more this year:

American General Information Services, Inc.
CS First Boston (Japan) Limited
Marble Associates, Inc.
NorthStar Technologies, Inc.
Nova Works Computer Systems, Inc.
Objective Technologies, Inc.
Custom Word Processing, Inc.
Light Printing Co., Inc.

Communications

GUN maintains a list of all members who can be reached via email. All mail sent to gun-members@gun.com is redistributed to everyone on the list. In addition, GUN assigns an alias to every member of the list making it possible for that person to be reached by sending mail to Firstname_Lastname@gun.com.

Individual E-Mail

GUN maintains a list of all members who can be reached via e-mail. All mail sent to gun-members@gun.com is redistributed to everyone on the list. In addition, GUN assigns an alias to every member of the list making it possible for that person to be reached by sending mail to Firstname_Lastname@gun.com.

Eligibility
All "due-paying" members.
Cost
Included in membership.
Timetable
Available immediately.

Individual UUCP

GUN maintains a server connected to the Internet. UUCP service allows members' machines to transparently connect to this host in order to send and receive email. Mail from the outside world can be addressed to user@gun.com. Mail you send appears to originate from the gun.com domain. It can be addressed as if you were directly on the Internet (i.e., user@next.com). Mail volume is not limited. A GUN volunteer will help you set up and maintain the UUCP connection.

Accounts will be given on a first-come, first-served basis. Once our current maximum capacity is reached, we will need to purchase additional lines and modems. This could cause a slight delay in obtaining service.

Eligibility
All "due-paying" members.
Cost
$10/month.
Timetable
2,400 - 57,600 bps (v.22, v.32, v.32bis – v.42 & v.42bis) -- Available immediately.

Individual Internet Connectivity

The gun.com domain is a wide are network (WAN). Machines are connected via the Serial Line IP protocol (SLIP). Any machine on the network can connect to any other as if it lived on the local ethernet. Machines on the network can share resources, mount each other's file systems, etc. Best of all, becoming a member of the GUN WAN gives you complete, unrestricted access to all Internet resources. This includes access to Internet mail services, News (which includes thousands of special interest groups), hundreds of archive servers, Archie (a database of software/documents stored on the archives), hundreds of library card catalogues, the Internet White Pages (X-Windows based email directory service), and a fast growing numbers of value added services (providing things like AP news feeds, stock mar-

ket data, databases of vertical market information, etc.). Finally, GUN will maintain a local archive that will mirror the most important NeXT related sites in the world.

Eligibility
All "due-paying" members.
Cost
$10/month.
Timetable
2,400 - 57,600 bps (v.22, v.32, v.32bis – v.42 & v.42bis) -- Available immediately.

Corporate Email

Corporations can request either a corporate alias or ten individual aliases. The corporate alias allows an unlimited distribution of GUN mail within the organization. The ten individual aliases allow the individuals to be reached by sending mail to Firstname_Lastname@gun.com. All corporate sponsors with email access are eligible for this service.

Eligibility
All corporate sponsors with e-mail access are eligible for this service.
Cost
Included in sponsorship.
Timetable
Available immediately.

Corporate UUCP

Identical to Individual UUCP. Limited to ten employees. All corporate sponsors are eligible for this service.

Eligibility
All corporate sponsors with e-mail access are eligible for this service.
Cost
$15/month.
Timetable
2,400 - 57,600 bps (v.22, v.32, v.32bis – v.42 & v.42bis) -- Available immediately.

Accounts will be given on a first-come, first-served basis. Once our current maximum capacity is reached, we will need to purchase additional lines and modems. This could cause a slight delay in obtaining service.

Corporate Internet Connectivity

Identical to Individual Internet Connectivity. All corporate sponsors are eligible for this service.

Eligibility
All corporate sponsors with e-mail access are eligible for this service.
Cost
$80/month. $500 sign-up fee.
Timetable
2,400 - 57,600 bps (v.22, v.32, v.32bis – v.42 & v.42bis) -- Available immediately.