



ExpNews

VOLUME 4, NUMBER 12, December 1997

Happy Birthday Post 369!

Calendar of Events:

December 31 National Young American Award deadline
 January 6 Mr. Corder Teaches UNIX
 December 31 Happy Bday R. Maurer
 January 12 EOA Meeting, COSI
 January 13 Mr. Corder Teaches UNIX, Munchie Night
 January 17/18 Ski Trip
 January 20 Mr. Corder Teaches UNIX
 Officer Nominations
 Committee Meeting
 January 21 Jon Schlegel
 1/22/80 ExpNews Deadline
 January 24 UNIX TEST, Pizza Party
 January 27 Officer Elections
 February 3 Mr. Corder Teaches UNIX
 February 7 Court-of-Honor & Sleep Over
 February 8 Scout Sunday
 February 10 Mr. Corder Teaches UNIX, Munchie Night
 February 17 Mr. Corder Teaches UNIX
 February 21 ExpNews Deadline
 February 24 Mr. Corder Teaches UNIX, Pizza Party
 March 3 Mr. Corder Teaches UNIX
 March 10 Mr. Corder Teaches UNIX, Munchie Night
 3/13/80 Bill Schwanitz
 March 16 EOA Meeting, Riverside
 March 17 Mr. Corder Teaches UNIX
 March 24 Happy Birthday Mr. Drake
 Mr. Corder Teaches UNIX, Pizza Party
 Mr. Potter Teaches Perl
 April 1 Mr. Potter Teaches Perl
 April 8 Mr. Potter Teaches Perl
 April 15 Mr. Potter Teaches Perl
 April 18 Explorer's Repelling Adventure
 April 22 Mr. Potter Teaches Perl
 April 25 ExpNews Deadline
 April 29 Mr. Potter Teaches Perl, Pizza Party
 May 7 Explorer Recognition Dinner
 May 18 EOA Meeting, Galyan's
 May 24 ExpNews Deadline
 6/6/83 David Halves
 June 28/July 4 Summer Camp
 July Java Classes Start
 July 14-18 National Explorer Leadership Conference
 7/28/78 DJ GregorHappy Birthday DJ Gregor
 8/17/81 Douglas E. Joseph
 9/11/79 Jon Lehman
 9/26/78 Angelos Frezoulis
 11/10/81 Joe Prinz
 11/11/82 Josh Corcoran
 12/11/78 Joe Harvey
 12/14/75 Gus Frezoulis
 December 22 Christmas Pizza Party
 12/30/75 Loc Do
 December 31 National Young American Award Deadline

Post 369 is another year older!

James D. Corder

Explorers Post 369 is now 4 years old:-)
 They said the Post just couldn't make it.
 They said we would never get any equipment.
 They said no youth would come.
 The best revenge is success:-)

We now have over \$300,000.00 of equipment (at new prices).
 The post tripled in size last year. Our web page won an award!
 One of our members became a UNIX System Administrator for Lucent.
 One received a position in Russia. Two Corder Kids wrote a book...

We gained three new Associate Advisors. We have four new classes:
 Basic UNIX For Programmers, PERL, JAVA, & WEB Enabling SQL.

I am extremely proud of Explorers Post 369 and its members. Therefore, Happy Birthday!



Web Status, For December

TABLE 1.

Items	Pages	Title
1094	239	exploring
8505	1768	ExpNews
4307	439	links
18326	2230	post
553	191	1997.calendar
8569	780	members
5025	411	Adults
715	195	Toadies
1285	221	Youth
1725	313	program
136	101	project
1627	351	scouting
2710	805	bible

The Explorers Code

As an Explorer-

I believe that American's Strength lies in her trust in God and in the courage and strength of her people

I will, therefore, be faithful in my religious duties and will maintain a personal sense of honor in my own life.

I will treasure my American heritage and will do all I can to preserve and enrich it.

I will recognize the dignity and worth of my fellowmen and will use fair play and goodwill in dealing with them.

I will acquire the exploring attitude that seeks the truth in all things and adventure on the frontiers of our changing world.

Buying a "Good" UNIX Workstation

Karl Matthias

Many people want to know where they can get a good UNIX workstation for a good price. It really depends on what you are looking for, so the following article will explain some of the best bargains and why they are such good deals.

Probably the best bargain in home UNIX hardware at this point is the NeXTstation TurboColor. This is my favorite UNIX workstation, but it also happens to be a tremendous deal. A typical configuration sold on the net for about \$400 includes:

- NeXTstation TurboColor (m68040 @ 33Mhz. 16 MB RAM 400MB HD)
- NeXT 17" MegaPixel Display (Trinitron or FIMI--buy the Trinitron, it's worth it)
- Apple Desktop Bus keyboard and mouse (very ergonomic)

The display and color depth available on this box are phenomenal for the price, and after you've added some RAM, it's about as snappy as you can expect from a home workstation (thanks, in no small part to the speed of the OS). It's also fully capable of running the latest OS revision.

Some may complain because NeXTstep does not support X, but you can get a freeware package called XNeXT which allows you to run both X and Display Postscript and to use a simple three finger key combination to switch between them. Once you have this installed, the machine makes a great X station, if nothing else. This machine is also really fantastic in that it will run all freeware UNIX stuff, as well as having a fair range of commercial software available. The NeXT platform has one of the greatest deals in software, too, which is available from Lighthouse Design, Inc. (A division of Sun Microsystems). Students can purchase an educational bundle for \$99.00 which includes 9 software packages (word processor, multiple spreadsheets, a drawing program, web browser,

etc.) Most of the packages are decent enough to make them worth using but are by no means incredible.

Another good deal, with performance at a similar level, is the Sun SPARCstation-2 family (2 & IPX). These machines run an enterprise level UNIX (Solaris), are fantastically reliable, and are easily under \$1000. You can typically get a machine with 16-32 MB RAM, a 17" Sony Trinitron, 400 MB HD, and a 40Mhz SPARC processor in this price range. This is a great deal for several reasons. Sun's Solaris has the largest installed base of any UNIX or UNIX-like OS (even Linux); once you can administer this machine, you can use the same knowledge on servers with up to 64 processors; and it is extremely useful in finding a system administration job. The negatives are that it costs more than the NeXT hardware, is difficult to get commercial software for (although lots is available, the price is prohibitive), and performs more slowly on similar hardware because the OS is so much larger. But, there is no machine more reliable than a Sun, and the parts and RAM are easy to get ahold of (as with the NeXTstation).

Used SGI and HP equipment are also available on the net, but the prices are significantly higher for similar performance. See SGI's web page for remanufactured equipment if you are interested. Lately there have been decent deals in the newsgroups on Indy hardware, but the prices are typically in the \$1500-\$1900 range without a monitor.

If you want to take a little gamble, you can get ahold of a very fast machine with a big disk, a good bit of RAM, and industry standard parts, in the form of a Motorola StarMax 5000 Mac clone. This machine, while not technically a workstation, sits just on the edge of being one. In Q1 1998 Apple will release their new OS based on NeXTstep, which will be true UNIX for the home desktop. They have not announced official support for the Motorola machines, but many developers report that they have it running. The reason I suggest this machine is

because of the bang for the buck. Here's what you get for \$995:

5 Year Warranty (the machines are new!)

- 240Mhz. PowerPC 603e
- 32 MB RAM
- 4.3Gig HD
- 16x CD-ROM
- 2 MB Vid. RAM
- Mouse keyboard, etc.

The good thing is that there will be commercial support for Apple's new OS, at home computer prices. The bad news is that these machines are going fast, since Motorola is selling off their inventory. The question is will the machine run the new OS (Rhapsody)? Probably. It's worth a look, in any case.

If you just have a PC and don't want to buy real hardware, take a look at educational discounts on SunSoft's Solaris x86 (available for under \$100). If you just want a free UNIX, check out OpenBSD. It's more secure than just about any commercial OS, but doesn't have commercial support. It's a fantastic thing to get for free, however. I hope this helps a little bit in getting you toward a UNIX workstation. You might want to check out the following newsgroups:

- misc.forsale.computers.workstations
- comp.sys.next.marketplace
- comp.sys.sun.wanted
- comp.sys.sgi.wanted



Digital caves under Intel's Pressure

James D. Corder

Digital & Intel come to an agreement. (Quoted from the December issue of Digital's *inform*)

- Intel will purchase DIGITAL semiconductor manufacturing operations, including state-of-the-art facilities in Hudson, Massachusetts, as well as development operations in Jerusalem, Israel, and Austin, Texas, for US\$700 million.
- DIGITAL will continue to own and invest in Alpha microprocessor design.
- Intel will manufacture DIGITAL-designed Alpha microprocessors and Alpha-related parts (chip sets, gate arrays) to DIGITAL specifications for multiple generations of Alpha under a long term supply contract.
- DIGITAL and Intel will enter into a 10-year patent cross-license agreement.
- Intel will provide Intel products and comprehensive technical support to DIGITAL consistent with practices for other major Intel OEMs.
- Digital will develop a full line of DIGITAL UNIX and Windows NT systems based on Intel's IA-64 processor family.
- Intel will obtain rights to manufacture and sell other non-Alpha DIGITAL semiconductor products.

What it sounds like to me is that DEC lost and is going to produce IA-64 Intel machines. I bet that more and more of their products will be shipped with the IA-64 chip set and soon DEC UNIX and Open VMS will be moved to their architecture.

Even though I am a strong advocate of the DEC Memory Channels on their Parallel 8x00 series systems I could no longer recommend their purchase.



To recap:

Positive for DEC:

- Dec receives \$700 Million.
- DEC's has a "Long-Term" supply of Alpha chips.

Positive for Intel:

- No more competition from DEC Semiconductor.
- Can control the Alpha Chip set manufacturing process.
- Has a new IA-64 Customer.
- Control's DEC under the OEMs agreement.
- Can sell other DEC non-Alpha semiconductor products.

Negative for DEC:

- See Positive for Intel.

Negative for Intel:

- Nothing

It is my opinion that DEC is just another Wintell company now!

Activator

Wednesday December 10, 1997

Sun Microsystems Inc. said Wednesday it will offer software called "Activator" that it says will compensate for any incompatibilities between Microsoft Corp's Internet Explorer Web browser and programs written for its Java language standards. Jon Kannegaard, vice president of products for Sun's JavaSoft business unit, said the software enables programmers to overcome any incompatibilities between its "100 percent pure" Java standard and Microsoft's implementation. "What this means for an application developer is that he no longer worries about (differences in) Microsoft Explorer," Kannegaard said in an interview. "Developers can write the application to the most up-to-date (version of) Java."

In October, Sun sued Microsoft, alleging that the Redmond, Wash., company is trying to disrupt the development of Java by failing to keep its implementations of Java compatible with Sun's specifications. Sun Microsystems, based in Palo Alto, Calif., said the activator program scans a user's computer for the virtual machine it needs. If it does not find it will download the software from Sun's Web site.

Up-an-Coming Post Expenses

12/01/98 Post Charter	\$30.00
12/01/98 Post Insurance	\$85.00
Monthly ExpNews	\$75.00

Up-an-Coming Member Expenses

Registration 11/01/98	\$15.00
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Post Finances

Explorer Post 369 has	-\$1,318.00
December's ExpNews	\$75.00
Gift in Kind	(\$250.00)
New Total	-\$1,143.00

Registration	\$570.00
Extension Cords	-9.97
UNIX Books	-177.82
Membership Books	-156.55
Unit Registration	-153.00
Quality Unit Award	-17.50
Post Insurance	-53.75
New Total	\$1.41

Floor Fund Need	\$1,200.00
Floor Fund In Hand	\$830.00
Pledges Outstanding FF,	\$0.00

Room Fund Needed	\$3,800.00
Room Fund	\$0.00

Computer Fund Needed	\$0.00
Computer Fund	\$0.00

Our Principals:

- 1) Honor before all else.
- 2) The difference between a winner and a loser is that the winner tried one more time.
- 3) K.I.S.M.I.F.

Our Creed:

Exploring: Enthusiasm, Energy, & Excellence.

Explorer Post 369:

Explorer Post 369 was chartered on December 31, 1994 to the Reformation Luthern Church.

Explorer Post 369 specializes in UNIX for Programmers while emphasizing a deep theme of Engineering Computer Information & Science

Membership in Explorer Post 369 is open to young men and women between the ages of 14 [and in high school] and not yet 20. Annual Membership fees are \$15.00.

Our Web Page:

<http://post369.columbus.oh.us>

The views in this NewsLetter are strictly those of Explorer Post 369 and they do not necessarily represent the views or opinions of the Reformation Luthern Church or the Boy Scouts of America and/or the Simon Kenton Council.

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BOY SCOUTS OF AMERICA

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We are looking for a new sponsor for the ExpNews, Can you help?

Sun Microsystems Seeks To Bar Microsoft From Unauthorized Use Of "Java Compatible" Logo

www.sun.com

Independent Testing Consultants Confirm Microsoft Fails Compatibility Tests

Sun Microsystems Inc. formally asked a United States District Court to bar Microsoft Corporation from using Sun's Java™ Compatible Logo to promote and distribute its Internet Explorer 4.0 and related products because the Java technology has been improperly modified by Microsoft and fails to pass Sun's compatibility tests.

We take very seriously our stewardship of this remarkable technology, which includes keeping the promise of cross-platform compatibility that our logo stands for," said Michael H. Morris, Sun's Vice President/General Counsel. "Today's filing signals that we will act to protect both that technology and the trademark."

"With this motion today we are making a simple demand: because these Microsoft products do not pass Sun's compatibility tests and are not compatible with Sun's published standards for the Java technology -- Microsoft must be stopped from using the Java Compatible Logo to deceive the marketplace," Morris said.

Sun's filing, made in the San Jose Division of the U.S. District Court's Northern California District, was part of its response to counterclaims Microsoft made to Sun's legal action on October 7. Sun's suit claims that Microsoft, in deliberate violation of a licensing agreement, is attempting to break the cross platform compatibility made possible by the Java technology and deliver a version of the technology that works only with Microsoft's products.



Faster Web Access

Introducing the Netra™ Proxy Cache server-high-performance Web caching for fast content delivery.

Turn The Net Into Net Profit

Sun's e-commerce solutions provide a secure foundation for doing business on the Internet.



The Java Compatible Logo appears in various locations in and on Microsoft's consumer packaging and promotional materials. Until recently, it also appeared at various times on Microsoft's Website. It has since been removed from the Website.

"It's like buying a can of Coca-Cola and finding ginger ale inside," Morris said. "The customer trusted the brand and was deceived."

"A significant part of the value of the Java technology depends on the acceptance by the public of the promise that Sun will stand behind that technology and do everything possible to enable the products with the Java Compatible Logo to be capable of delivering 'Write Once, Run Anywhere™' performance," Morris said. "Independent experts have now confirmed that Microsoft's products fail Sun's compatibility tests and thus do not satisfy the conditions for the use of our logo."

Two independent technical experts, Dr. L. Peter Deutsch and Alan Hankinson, today confirmed that Microsoft's IE 4.0 failed to pass the Sun Java compatibility test suite. The independent testing directed by Dr. Deutsch and performed by KeyLabs of Provo, Utah, and then again repeated by Dr. Deutsch, resulted in equivalent outcomes. These outcomes

mirror those achieved by Sun in its early October testing that led up to the original filing. More information on the independent testing can be found in the Declarations filed today by Sun in U.S. District Court in San Jose.

"Nowhere is the sanctity of a trademark more important than in the field of computer software," Morris said. "Our customers rely on the reputation and the goodwill of that trademark to make informed, efficient decisions about the technology they are using."

In its filing, Sun details modifications Microsoft made to the Java technology in Internet Explorer 4.0 and its software development kit, modifications that render Microsoft's products incompatible with every other product that conforms to Sun's standards.

Also in its filing Sun quoted from an article by Microsoft Chairman Bill Gates in the November 10, 1997, edition of The Wall Street Journal.

Mr. Gates wrote, "Without a uniform Windows installation, end users could not be sure of the performance of the integrated operating system, and Microsoft could not stand behind its product. Furthermore, Windows would become Balkanized, like the many incompatible versions of UNIX®. This

would eventually drive prices for PC products higher as software developers and hardware manufacturers would have to develop and test their products for all the different versions of Windows. And innovation would slow because developers would be reluctant to write new programs if they couldn't be sure that new features would work on all Windows PCs."

"We couldn't have said it better -- except that we're talking about the Java platform," said Morris. "By tampering with Sun's Java technology, Microsoft wants to put Sun in the very same predicament it wants to avoid for Windows. Microsoft is seeking to neutralize the very real competitive threat Sun's Java technology poses to Windows."

NT Fails for Banc One

James D. Corder

Rumor control has it that once Banc One merges their credit card division with a newly acquired company that they will migrate from NT back to the obsolete and no longer supported OS2 OS. Once there they will attempt to bring both companies back on line under NT. When will large companies learn that NT is not "New Technology" but simply "Not There"...

Go UNIX!

The foundation for an anti-trust law suit against Micro\$oft is being laid. The Government forced the breakup of AT&T for being a trust. The future will hold the same for Micro\$oft. If Micro\$oft was forced to separate their OS, Windowing, Office, and Web groups into separate but equal companies it is my opinion that all would fail but Office. Financially office supports the rest.

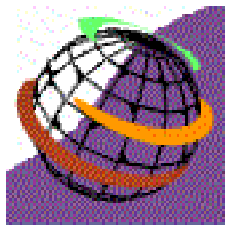


Quote of the Month

- Winners visualize the rewards of successes
- Losers visualize the penalties of failure

Netra on the Ultra30

Sun Microsystems



Netra

The Netra Proxy Cache is a high performance network caching server with built-in load balancing and failover features. The distributed caching allows increased availability of the service in the event of a server failures. Netra Proxy Cache distributes the load intelligently across the multiple cache servers. It provides "on-the-fly" scalability to

network administrators, enabling the addition and dynamic configuration of cache servers as required without interrupting or halting service. Due to the inherent nature of the architecture, automatic failover is built into the product which ensures uninterrupted service to the users in the event of server exit failure.

HIGHLIGHTS

- Delivers faster Web access and increases network bandwidth by reducing redundant requests.
- Delivers uncompromising reliability and availability.
- Reduces cost of ownership by optimizing usage of network resources.
- Reduces network congestion and lowers connectivity costs.
- Intelligent load-balancing eliminates bottlenecks.
- Automatic failover ensures uninterrupted service.
- On-the-fly scalability means you can add cache servers as your needs grow -- without downtime.

Hardware:

- Processor Architecture-Superscalar SPARC TM Version 9, UltraSPARC-II 250 MHz
- Memory Management-MMU with 64 I-TLB entries and 64 D-TLB entries, 8192 hardware supported contexts
- System/Cache-Primary: 16-KB data and 16-KB instruction on-chip Secondary: 1- or 2-MB external
- Memory Installed-128 MB Max Memory 2GB (with 128-MB SIMs, in pairs)
- Network-Ethernet/Fast Ethernet: Twisted-pair standard (10-BaseT and 100-BaseT) or MII for external transceiver Additional PCI SunFastEthernet TM card (100-BaseT) pre- installed in Netra Proxy Cache Array 30
- I/O-40MB/sec UltraSCSI (SCSI-3) synchronous)
- Expansion Bus-Four full-size PCI slots compliant with PCI specification version 2.1; three slots operating at 33 MHz, 32- or 64-bit data bus width, 5 volt; one slot operating at 33 or 66 MHz, 32- or 64-bit data bus width, 3.3 volt
- Internal Disk-2 x 4.2GB, 7200RPM
- Internal media-644-MB SunCD TM 12X-speed, 3.5-in floppy drive (1.44 MB)
- Disk options-9.2 GB SPARCstorage TM UniPack TM, 8.4- to 54.6GB SPARCstorage TM Multi PackTM

I ask you, why would you buy a Wintel Box when you can have all of this:-?