ExpNews

The Post has been meeting for a year!

Calendar of Events:

September 10	Court-of-Honor
October 31	Halloween Party
November 7	Elections
December 18	Christmas Party
December 21,22,23	Food Drive
December 25	No Meeting
January 1	No Meeting
January 23	Advancement Tests
January 30	Post Elections
February 3	Court-of-Honor
February 4	Scout Sunday

Happy Birthday

David Wolfe	8/30/78
Mr. Niedzielski	9/1/52

Donations
James D. Corder

The Members of Boy Scouts of America, Explorer Post 369 would like to thank Columbus Parts Supply, Inc. for their generous donation of nine Wyse terminals. This gift will truly aide our educational program of Engineering Computer Information & Science in UNIX$^{(TM)}$ for programmers.

Again, Thank you!

A Thank you from Down Under
Trent Morphett

Dear Explorer Post 369, I am a Venturer in the Ocean Grove Venturer Unit which is about an hour away from Melbourne, Australia. For about 3 months I've been receiving your newsletter. I just thought I'd write to say that it is great to read and is very informative. Keep up the good work. Yours in Scouting:

Explorer Post 369 is almost one year old!
Mike C. Turner, Historian

Okay, the Post wasn't actually founded until late December of last year, but the planning for this event was initiated back in August of that year. In that one short year, we have grown from nothing to a thriving group of over fifteen. We started out frantically searching for donations for machines and terminals; now we have at least five machines and more terminals than we know what to do with. We have a working network (with no Internet connection--yet) and are currently putting the finishing touches on our World Wide Web (WWW) home page. We have at least twelve members--not bad for a young Post--and have established the Post Toadies (see the July issue of the ExpNews for more details) to replace members as they reach the maximum eligibility age. And, of course, we have this newsletter, which is sent monthly to at least four different countries worldwide. All of this adds up to a great accomplishment for a Post without a large corporate sponsor like AT&T (a long-distance phone company, for those of you on other continents) or Nationwide Insurance. Thank you, all our readers, for your support.

Quote of the Month
Winners find a way, while losers find excuses.

The Explorer 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.

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Operating Systems
James D. Corder

Lately I have been asked so many times to explain the differences between Disk Operating Systems:-)

Therefore, I would like to draw an analogy between Computers and Delivery Vehicles.

Let us assume that we sale Anti-Freeze, and that we must deliver it to our customers. The delivery vehicle is the computer and the Anti-Freeze is the information and/or program. Just as there are different size trucks for different needs & people. The same holds true with computers. Therefore, none are better than the other, they simply fullfill different usages.

Assume we own a moeped, a Ugo, a Chevy S10, a 1 ton pickup, a semi-truck, and a freight train.

Now assume that you must deliver one gallon of antifreeze. Every vehicle except for the train can deliver the gallon. The train can only go from point a to point b. However, it can inexpensively deliver large amounts of freight between those two points more effectively than anything else. It has limited usages but is extremely powerful for those things it can do, something like a main frame.

Now if you had to deliver two gallons of anti freeze you could do it on every vehicle except the moeped and the train. Well, you could do it on the moeped but you would have to take two trips. Ok, a case. The moeped would still do the work but you would have to take six trips.

Now let us deliver 50 cases. The moeped would have to take 300 trips, the Ugo 10, the S10 one trip, the 1 ton one trip. However, you still are spending two much money to use the semi and/or the train.

Now let us assume that we need to deliver 50 palet loads. The semi truck is the best bet.

Have you ever noticed that trains tend to deliver semi trucks on their back? In short you purchase a truck to fulfill your needs. The same thing is true about computers. Like trucks, you run into problems you attempt to utilize them for things they are not made for. With all the types of computers: Macs, Personal Computers, Sun Work Stations, Sun Servers, and Main Frames... I am amazed how many people want to usethe wrong computer for their needs.

I challenge you to stop saying PC and start calling them what they truly are, Personal Computers.

Adventures with Riley - or How I Bought a Workstation Part IV
Andy Drake, Secretary/Treasurer, Explorer Post 369

I thought at this point that if I had received nothing but empty boxes, either the air had gotten a lot denser or he had shipped concrete blocks, rather than merely bricks across the continental United States. It was heavy! But, I broke the world's land speed record leaving, and listening to Wagner's "Flight of the Valkyries" on the way home gave me inspiration and hope that it was finally going to work out.

Back out the house, everything was joyful. I found the machine to be extremely well taken care of, and everything from the registration cards and the keyboard standoffs were in their exact places. Grand total of boxes: 4 factory NeXT boxes and 2 plain cardboard boxes. I opened each one nervously but my anxiety faded after all of them proved to be exactly as he promised. Everything was in it's proper place, and he had even included some extra manuals (great, more reading!) and software to get me started off right.

In the end, I really didn't have as much to worry about as I thought I did. Like when I bought Cedric from a person at the University of Mississippi, it was more a matter of doing my homework and investigating not only the seller, but the

machine itself to determine if I was getting a decent deal. That's not to say I will never get burned, but by taking all reasonable precautions, you can minimize that sort of thing. The NeXTstation, now named Riley, is at home and will soon be etherneted to Cedric, the Amiga I am writing this on here at school. Lack of desk space and final exams in two weeks are preventing me from spending more time with Riley, but this summer I have many things in store for Cedric and Riley both.

Coming soon to an Explorer Post newsletter near you, the next installment of

"Adventures with Riley", this time dealing with Riley, Cedric, routing problems and - CSLIP connections!

Getting SCSI to Work
DJ Gregor

Two years ago I thought that my 340MB IDE hard drive would last me until I got out of college--no such luck. Less than six months after I got the drive, I had installed Linux, and I quickly noticed that this drive was going to be filled up before too long. I had to get some more hard drive space.

Around the end of July, an acquaintance of mine posted to cmh.forsale that he had some computer hardware for sale. He was also looking for a scanner, and I just received an old HP ScanJet from my father. So, I called the guy and worked out a trade. My scanner for a 1.3GB SCSI hard drive and a case. We traded later that week.

I was able to find enough money in my wallet (it was right after my birthday:-) to buy an Adaptec SCSI controller, and the nice people down at the local PC shop gave me a healthy Student Discount. I was ready to roll.

When I got home, the first of my problems arose. My SCSI controller has a Centronics connector on it, and my case (aka "shoebox") had an old SCSI-I 3-row connector. After calling a number of

SunView '78

Friends Don't let Friends DOS

PC shops, I was unable to find the proper cable. I then decided to throw the SCSI hard drive (which is full-height by the way) into the only available bays in my computer.

Once the drive was installed (which required me to do way too much fiddling with the PC case) I turned off my computer and installed the SCSI card. When I brought it back up, the SCSI controller's BIOS popped up and it found my 1.3Gig hard drive! I thought I was almost done--I was actually far from being done.

When Linux started to boot up, the kernel was probing for hardware. When it was done, it started init. I searched for any messages regarding my SCSI card or disk drives, but I found nothing. When my system was into multi-user mode, I logged in, and checked dmesg to see if there were any messages about SCSI--nothing. I then found out why. I had to recompile my kernel to include SCSI support and a driver for my SCSI controller!

I had to wait an hour for my kernel to recompile--it seemed like I waited for five hours, sitting there staring at the console screen watching each message crawl by. When it was done compiling, I hurriedly installed the new kernel, ran lilo to prepare it for booting, and reboot my system.

I was now sure that it would work this time--why would it not work? I watched it boot. The SCSI controller's BIOS again recognized my drive, and then Linux started to boot. After a few seconds I saw it detect my SCSI controller. "Great!", I thought, "I'm almost there!" It then went to probe for SCSI devices. Five seconds later about ten lines of debugging information scrolled by saying that the command had timed out. It tried to probe all seven SCSI devices, but every time I had the same timed-out messages.

I was awake until 3:00am the next morning trying different things to get things working, but I was unsuccessful. Over the next week I became ever more desperate as I repeatedly tried recompiling my kernel, checking the DIP switches on the SCSI controller, and messing around with cabling. I was starting to run out of things to try.

(continued next month)

Book Review - UNIX in a Nutshell
DJ Gregor

UNIX in a Nutshell, written by Daniel Gilly and the staff of O'Reilly & Associates, Inc., and published by O'Reilly is one of the best

references to UNIX commands and shells.

This was one of the first UNIX books that I purchased, and I soon realized its worth. UNIX in a Nutshell contains a thorough reference to System V user and programmer commands. Commands are listed in alphabetical order, and they contain a description of the command, the command's options with descriptions, and sample usage and output.

It also contains information on common shells - the Bourne Shell (sh), Korn Shell, (ksh), and the C Shell (csh). The shells section begins with an introductions to shells, and a comparison between the different shells. There is a chapter for the Bourne and Korn Shells and another for the C Shell. These two chapters give information on the features of the shell, its built-in commands, variables, and syntax.

There are also sections on the emacs, vi, and ex editors. I can only speak for the vi section, because it is the only editor chapter that I have read. The vi chapter is an excellent reference, but it is not for learning vi. A person who has not use vi will be overwhelmed when they go to read this chapter and find that there are well over one-hundred commands, many which do slightly different things. The only bad thing that I can say about this chapter is that it does not contain a reference on the ed editor. ed must sometimes be used when vi is not available, and since ed is not used that often, the user's mind is often fuzzy on how things work.

Although there is not a chapter on ed, there is one on sed, and another program similar to sed called awk. With a little knowledge of ed it is possible for a user to use the sed reference with ed, which I have done a number of times. The awk section not only covers awk, but the new awk (nawk) and GNU awk (gawk). Just like the editor chapters, the sed and awk chapters are good references, but they are not good for learning. Dale Dougherty's book named sed & awk, which is also published by O'Reilly, is much better for a beginner with these two tools.

Also contained in UNIX in a Nutshell are references to the *off text formatters, their mm, ms, and me macro packages, the tbl, eqn, and pic pre-processors. The reference on these tools is very comprehensive and detailed. I have used these references to update man pages, and eventually I was able to write man pages on my own. Also, these chapters are a little easier to figure out than the editor sections if you have some source to look at while you are reading the book.

Lastly, there is a reference on the SCCS and RCS source code control packages.

These sections have helped me out a few times when I had to update other people's code. I have even used SCCS on one of my programs with the information in this book. These chapters list all of the features of the two systems, and because of the ease of using these programs, one can pick up on how to start using SCCS or RCS on their own source code.

This Nutshell book was one of my first UNIX books purchased, and it usually does not stay unused for any period of time. This book is an excellent reference on many of the standard UNIX shells, programs, and utilities, and I would highly suggest that every person that is learning or using UNIX should get this book.

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

Our Creed:
Exploring: Enthusiasm, Energy, & Excellence.

Post Finances
Explorer Post 369 has   -$130.00.

Up-an-Coming Post Expenses
12/01/95 Post Charter $30.00
12/01/95 Post Insurance $85.00

Up-an-Coming Member Expenses
Registration 11/01/95 $15.00

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.

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Remember to add [.columbus.oh.us] to the end of the freenet accounts!!!

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