Explorer Post 369

ExpNews

http://post369.columbus.oh.us

Calendar of Events:

September 8	Court-of-Honor
September 16	EOA Meeting
October 26	Exploring Fall Event
October 29	Halloween Party
November 5	Election Reporting
December 17	Christmas Party
December 24	No Meeting
December 31	No Meeting
January 3-12, 97	10MegaVenture
July 28-Aug5 1997	BSA Jamboree

HomePage
James D. Corder

Explorer Post 369 is proud to announce the creation of its HomePage:

http://post369.columbus.oh.us

Smoke Detectors
James D. Corder

Though I truly believe that every home should have at least one Smoke Detector on each floor: Hoever, did you ever notice that the batter only dies at 5:00 in the morning. That wonderful battery die-ing chirping sound that they make must be preprogrammed to sound only after you fall asleep.

Next Stations

Explorer Post 369 is the proud recipents of 6 Next Stations and a Next Server.Though the doner has asked to be anonamus, we would still like to thank them for this grand gift. These systems will truly make a difference in our Exploring Program for 1996 and the future.

Exploring Fall Event
The Scouter

The committee is already starting to make plans for an exciting fall event. Plan to bring all your new post friends and meet other post members. Details to follow, so watch for more inforamation in furture issues.

Eagle Award
James D. Cor '

Congradulati   iregor for passing your Eagle Board of Review

The OpenBSD Story
Karl Matthias

Most people have heard of Linux, but fewer have heard of FreeBSD or Net-BSD, other free UNIX-like OSes avail-able on the net. These less well-known, yet still quite popular OSes are derived from 4.4BSD, the final distribution from UC Berkeley's UNIX group. FreeBSD and NetBSD have been available on the net for several years, and have recently been joined by a third family member. The reason that I take the time to explain this here, is that myself and others had noted quite a bit of bitterness directed

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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.

towards the OpenBSD camp, and I decided to find out why,

Andy Drake, Associate Advisor here at Post 369, pointed me toward an archive on theos.com called "coremail." This mail archive documents the founding of OpenBSD, and its creator's break with NetBSD core. I have read the entire archive, a massive reading, and mailed back-and-forth with Theo de Raadt, the creator and author of OpenBSD.

Theo de Raadt was one of the founding members of NetBSD core, the group that controlled access to and distribution of NetBSD kernel sources. This group was the organizational force behind NetBSD, and was saddled with the tasks of writing kernel additions themselves, and coordinating those efforts embarked upon by others. There were, however, significant tensions between members of the group. For much of the time before spring of 1995, the group was able to overcome their differences and cooperate well enough to produce a usable and well-written OS.

In early spring of 1995, a rift split open when Theo's access to NetBSD sources, and his proprietorship of the SPARC port were stripped away. The members of core were extremely hesitant to even speak with Theo after this point, and refused by default to tell him why his access was removed. Over the course of several months, he was able to learn that the other members of core had planned to remove him from the group because of "unprofessional conduct" towards at least one developer. His access and control of the SPARC port were removed because they feared he might sabotage the sources after finding himself cut from the group.

From his responses to them in mail messages, it appears unlikely that he would have resorted to such tactics, especially since much of the SPARC port was his own work. During the period following his removal from core, Theo continued to write additions to the SPARC port. Many people in the port-sparc mailing list demanded that core allow Theo access to the sources so that he could apply his diffs to the source code. Core responded by saying that Theo should send them to Paul Kranenburg, the new SPARC port maintainer, who would apply the changes for him. Theo said this was unacceptable because it would require far more work, and besides he didn't even understand why his access was revoked.

Theo and core went around and around and around about what needed to be done before he could return to work on the official sources. Only two members of core ever responded directly to him, those being Paul Kranenburg, and Chris Demetriou. Core used Chris as the middle man, despite his constant pleas that someone else become involved in the discussion. They were apparently using him as a screen and a scapegoat in case anything should go wrong. When Theo directly asked core (core@netbsd.org) to respond to him, he received only the reply that Chris spoke for the group, which Chris himself did not claim.

After receiving such pathetic response after months of negotiating, Theo was told by Paul that he should submit an apology for "incidents" between himself and at least one other developer. The event in question was considered by Theo to be a "private matter" since it took place via the medium of private e-mail, and was thus not related to his position as a spokesman for core. He also claimed that he was personally insulted by the developer and was only defending himself. Core never made any statement to him about any other cases of his misconduct, issuing only vague responses about "other times."

Eventually the pressure of being squashed between Theo and core was too much for Chris, who, along with Theo, had sought to avoid the politics of the group in the first place, and he resigned. At this point, it became clear to Theo, almost nine months later, that core was not going to make any attempt to reconcile itself with him. During this whole time, Theo had been working on his own improvements to the OS, and had an almost unreconciliably different source tree from that of the NetBSD core. He decided to abandon core and create his own distribution, thus leading to the founding of OpenBSD.

In writing OpenBSD, Theo has applied his own improvements and modifications, many in the area of security, as well as constantly incorporating all improvements made to the NetBSD source tree. Thus OpenBSD is everything that NetBSD is, plus more.

The further split in the BSD world that OpenBSD has caused, has generated quite a bit of bitterness, as evidenced on many newsgroups. Unfortunately for Theo, much of the blame has been laid on his shoulders, rather than at the feet of core. Many people question the divisiveness of the BSD camp as opposed to Linux. The simple answer to this is that Linux has Linus Torvalds, and his copyrights on the kernel do not allow for someone else to start their own distribution without submitting all their changes back to him for incorporation. Whether or not this is better is in some question, but it has allowed for the most rapid development of any of the free OSes. Hopefully OpenBSD can lend some stability to the BSD world. We shall see.

Sources:
http://www.theos.com/~deraadt/coremail
http://www.openbsd.org/
news:comp.amiga.unix
news:comp.os.freebsd.*
news:comp.unix.bsd.*

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Of Pet Rocks and Bell Bottoms:
Andy P. Drake

Restoration of a Pet Computer

What do you think of when you remember the decade of the 1970's? Bell bottom jeans? The Plymouth Volarie or Ford Pinto? Harvest gold or avacado green kitchen appliances? Pet rocks? In my case, besides being born in this wonderful era, I look back to a Pet of a different nature, or more importantly, the Commodore Pet microcomputer. As with almost any antique, mine came as a diamond in the rough.

Introduced in 1977, the Pet was the first real machine that launched Commodore down the computing road on a trip that wouldn't end until more than 15 years later. I say "real" in this case because Commodore had been a relatively large, diverse conglomerate of companies that made more than electronics goods, including office furnature as well as heating and ventalation controls, not to mention a very successful line of electronic calculators, that despite intense market competition, allowed the company to survive the tumultuous mid '70s calculator wars. Commodore's first machine technically wasn't even built by Commodore themselves and came as a result of its purchase of MOS, a semiconductor firm that made RAM chips, and pioneered, among other things, the 6502 microprocessor designed by Chuck Peddle, an inhouse engineer that moved to Commodore as a result of the purchase.

MOS manufactured its own machine, the KIM-1, as a kit product to sell 6502's and RAM, not really as a machine for the masses. Simple and consisting of but one board, a hex keypad, several LEDs for a display, the KIM was was cheap and could be expanded to a limited extent with its onboard expansion connector. After the first real personal computer, the MITS Altair, debuted in 1975 and energized the market for personal computers, Peddle took his experience at MOS and with the KIM-1 and began to build the PET as a logical successor to the KIM, based on essentially the same CPU and supporting chips. When Apple Computer's Apple II arrived in 1976, based on the 6502 as well, it became clear to Commodore that the computer market was for real.

The machine released by Commodore in spring 1977 was an interesting beast, designed to leapfrog machines like the Apple II and the Ohio Scientific Challenge I, not to mention the hoards of S100 machines like the Altair and IMSAI. Sporting a built in cassette drive, BASIC interpreter, IEEE488 bus, and monitor, the Pet arrived with 4k or 8k of RAM and cost a measly $750.

Ironicly, Commodore's management wasn't convinced about the usefulness of the machine and insisted that Peddle and the design engineers add the IEEE interface as a hedge; IEEE, or HPIB, was a system well known to most laboratories as a way to interface various pieces of laboratory equipment together, mainly for real time monitoring. Easy to set up, the IEEE bus was designed to simply plug together using cables that only went one direction, thus eliminating user error. Whats more, the system could accomodate 15 or so devices, ranging from meters, printers, oscilliscopes, hard and floppy drives, just about anything daisy chainable up to a limit of 75 feet of cable. Completely jumperless, the Pet's ability to interact with an IEEE setup and existing peripherals made it an instant hit with the very people who had buying Commodore's calculators -- professional people who needed quality and flexibility.

From a technical standpoint, the machine came with two main flaws. First, the keyboard was too cramped for serious data entry, a direct result of Commodore's decision to utilize a keyboard from one of its calculator keyboard suppliers. The second problem was that of color, and the lack thereof. Most other machines were begining to phase color displays in as at least an option, if not a standard. As it shipped, the Pet utilized a built in balck and white 11" monitor, and lacked the video controller that full color displays required. At least initially, the demand for Commodore machines wasn't lessened a bit by these two problems, as the overwhelming value of the machine was pretty clear. Interestingly enough, the Pet's successor, the Vic-20, was a direct result of the color dilema. VIC technically is an acronym for (V)ideo (I)nterface (C)hip, a special first generation video coprocessor built by MOS (later called Commodore Semiconductor Group, or CSG) as a suppliment to to the PET architecture.

Eventually superceded by the Pet 4004, 4008, 4016 and CBM 8000 series office machines, the Pet would be eclipsed in sales only by the Vic-20 at first, and later by the Commodore 64.

My Pet came to me by way of the internet, a method I usually use to aquire machines. In early spring, I responded to a post asking if anyone would be interested in either a CBM 8032 or "some kind of CBM with a funky keyboard." Knowing immediately that this was probably a Pet, I replied saying I was interested in the box,, mainly to save it from being crushed by the scrap man. The seller, a Commodore enthusiast, had found them some years before at a local thrift shop where they had cost him an overwhelming $5 (total, not apiece) to take home. He determined early on that the "funky one" wasn't working, and mainly had used the 8032, with only compassion separating the Pet from the junk heap. Eventually, seeking to clear out space, the seller posted the machines for sale at shipping cost, and luckily as his wife worked for DHL shippers in a cargo tracker capacity, he was able to significantly reduce the shipping cost to under $10. Thus after 10 years of looking for one at garage sales and flea markets, one arrived from Scottsdale, Arizona..

Aquiring the machine was one thing, but getting it running had been an ongoing proposition. When it first arrived I was amazed at how crude the machine actually is. Its metal fabricated case is pretty hefty, no doubt from Commodore's expertise at making metal office products. No chance of radio emissions here! My machine was a pretty early one, as the motherboard and serial number reflect that it was somehwere in the neighborhood of the 2, 400th machine made.The case is a clamshell affair which opens in the back and stays open with the help of a metal rod on the inside, much like working on the engine of a car. The tapedrive is quite literally a Commodore external unit held in place with a metal bracket and with a hacksawed hole in the side to clear the monsterous, unshielded power supply. The supply itself contains several large, very intimidating capacitors and an exteremely sizable transformer. Continuing on with the unfinished, crude consumer product theme, the tape drive doesn't plug into an internal socket on the motherboard, rather it plugs into the normal, external connector and the plug protrudes from

the case about 1/4" where seemingly it could be broken off simply by walking by it..

In the end, I'm slowly getting the restoration of my Pet done with the help of several very dedicated people on the internet. With luck, new ROMS will arrive shortly from Colorado, where a fellow enthusiast is making a large batch of PetBASIC EEPROMS. The worst part will be finding a new front "PET 2001" sticker, as the one that was on the machine somehow fell off and is now missing. Still, I can't wait to fire the ald beast up and play a game of Energy Hangman!

Post Finances
Explorer Post 369 has   -$480.00.

Quote of the Month
It is not a matter of what you achieved It is a matter of what you are achieving?

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.

Up-an-Coming Post Expenses
12/01/96 Post Charter $30.00
12/01/96 Post Insurance $85.00

Up-an-Coming Member Expenses
Registration 11/01/96 $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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