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USENIX NEWS

USENIX & SAGE

The Advanced Computing Systems Association &
The System Administrators Guild

USENIX news

USENIX MEMBER BENEFITS

As a member of the USENIX Association, you receive the following benefits:

FREE SUBSCRIPTION TO *login*:, the Association's magazine, published seven times a year, featuring technical articles, system administration articles, tips and techniques, practical columns on security, Tcl, Perl, Java, and operating systems, book and software reviews, summaries of sessions at USENIX conferences, and reports on various standards activities.

ACCESS TO *login*: online from October 1997 to last month www.usenix.org/publications/login/login.html.

ACCESS TO PAPERS from the USENIX Conferences online starting with 1993 www.usenix.org/publications/library/index.html.

THE RIGHT TO VOTE on matters affecting the Association, its bylaws, election of its directors and officers.

OPTIONAL MEMBERSHIP in SAGE, the System Administrators Guild.

DISCOUNTS on registration fees for all USENIX conferences.

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And So It Goes

by Daniel Geer

President, USENIX
Board of Directors



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A little like writing your own obituary, this is my last column as President of USENIX. We have term limits here and, all in all, that is a good thing. I may still find something to do around here, but I welcome the new Board and President Kirk McKusick and wish them well.

Over the time I've been associated with USENIX an awful lot of changes have transpired. In that regard, USENIX mirrors changes going on in society in general due in large part to technical change – our communications are overwhelmingly electronic when they are not face to face, distance is measured in either network latency or the dollar cost of airline tickets, security is no longer a geek-only issue (which is arguably a fearsome development), it is much cheaper to retain electronic data in full than to selectively cull it, and it is the capital markets rather than tenure committees that ultimately sort technologies into winners and losers.

Running an organization like the USENIX Association is getting harder at least insofar as our core mission is concerned. We exist to accelerate the advance of knowledge in our field, what Mike O'Dell famously called “moving information from where it is to where it is not.” The reason running USENIX well is getting harder is that our success to date does nothing so much as raise

the standard to which we now have to perform.

In the meantime, the latency between invention and exploitation is shrinking – which fundamentally is a good thing in the bigger scheme of things. The human dynamics of scheduling new workshops around emerging topics and disciplines (which is exactly where we can do the most good) are such that USENIX pretty much cannot get anything effective done in under 9-12 months despite the fact that, just as in business, there is a really substantial and growing first mover advantage to that professional society that best calls trends right, that has the first meeting on a new topic at exactly the right time in exactly the right venue.

Knowing when to strike, what to strike, and who needs to be involved are at the critical core of the risk-reward tradeoff that USENIX as a business lives within. But let me be clear about something: For those of you who have something to say and who want to create vehicles for knowledge transfer, USENIX is absolutely remarkable. No other professional society relieves you of as much logistical detail. No other professional society comes close to the price-performance value that USENIX delivers. No other professional society has meetings where the signal-to-noise ratio is more favorable.

Sure, I am a true believer, but I invite you to try to get something together under the umbrella of any other group and compare it to what you can get done here. Measure your experiment in how much time you have to put in versus how much intellectual value you get out. Measure it by looking at the quality of our Proceedings and don't take my word for it, use CiteSeer (<http://www.citeseer.org>) to confirm that when measured by citation frequency USENIX meetings are tops. Yeah, USENIX is cliquish but at no other society can you expect to talk to

the actual authors of the tools you can't live without.

Want to call the USENIX regulars elitist? No problem as far as I am concerned since every bit of elitism in these here parts is earned. USENIX is about getting things built and recognizing those who get it done. Just as the IETF is the dominant standards organization because of its simple creed, "Rough consensus and working code," so, too, our simple idea is that USENIX is where you go for that working code; it's where you go if you want to know what actually works rather than what might be theoretically interesting.

Were it not such a low bar, I'd point out that we have an awful lot better taste in what is "novel, non-obvious and reducible to practice" than the US Patent & Trademark Office does, not to mention that we are becoming more selective in our selection process in the face of a rising volume of submissions.

As I have said here several times before, I'd like to urge those of you with ambition to remember that it is never too early to choose whether you are going to lead, follow or get out of the way. I'd ask all USENIX members to recognize that if you want something to happen the surest way to get it to happen is to realize that you have more leverage here than you are going to get anywhere else. Samuel Johnson observed that knowledge is of two sorts, where you know a thing yourself and where you know where to find out about it.

Let me tell you a secret of career success: That secret is simple – You can either (on your own) go out and scour the countryside for knowledge, or you can (by serving on USENIX program committees) get the countryside to bring its best work to you. I recommend the program committee approach; you will find that it concentrates the interesting traffic like nothing else, and all you have to pay

is your time while all you have to risk is your reputation. Expensive and scary? Sure, but consider the alternative.

I've asked each of the current USENIX officers to do something that has not been part of the USENIX managerial tradition heretofore and that is to write a report on their term of office, what got done and what didn't. This is not an easy thing to do – USENIX is a lot more complex than it seems or, to put it differently, that it looks simple from the outside is a triumph rather than just something that you can buy at the store like milk.

As such, it is actually hard to write in one document something that is readable by the mildly curious, meaningful for the serious student, reassuring for the well-wisher, and a counterweight to the heckler. That it is hard to be at once universal and concrete is precisely why it is a good thing to try, even when the real role of an individual Board member is much more like an adverb than a noun, i.e., we modify more than we pre-empt. I'll finish my report when my term is actually over, which will be about when you read this. Read it if you care but don't if you don't.

In the meantime, I want to thank you all for the opportunity to lead over the past decade and a half, and just as it is the duty of a teacher to be surpassed by his students, it is now your job to prove that you're better than I was.

Godspeed.

2002 USENIX Board of Directors Elections Results

The results of the elections for Board of Directors of the USENIX Association for the 2002-2004 term are as follows. Names in bold are the elected officials.

Newly elected directors will take office at the conclusion of the next regularly scheduled board meeting which will be held June 14, 2002 in Monterey, California.

Ballots Received:	1295
Invalid Ballots:	17
Participating Ballots:	1278

PRESIDENT:

Marshall Kirk McKusick	1100
Abstain	159
No Selection	19
TOTAL	1278

VICE PRESIDENT:

Michael B. Jones	679
Trey Harris	543
No Selection	56
TOTAL	1278

SECRETARY:

Peter Honeyman	758
Steve Simmons	479
No Selection	41
TOTAL	1278

TREASURER:

Lois Bennett	1117
Abstain	126
No Selection	56
TOTAL	1278

DIRECTORS:

Jon "maddog" Hall	829
Tina Darmohray	688
John Gilmore	662
Avi Rubin	656
Ted Ts'o	530
Aleen Frisch	401
Peg Schafer	357
Darrell Long	282
Adam Moskowitz	206
Clem Cole	192
James Yaple	117

Summary of the USENIX Board of Directors Actions

by **Ellie Young**

Executive Director

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The following is a summary of some of the actions taken by the USENIX Board of Directors between mid-November 2001 and April, 2002.

Conferences

BSDCon: It was decided to sponsor another BSDCon in approx. 18 months (Fall of 2003), with a goal to improve the quality and attendance, while keeping costs low. Gregory Neil Shapiro will serve as program chair.

FAST: After a successful inaugural conference in January, it was decided that another conference will be held in 2003 with Jeff Chase as program chair.

Linux Kernel Summit II: It was agreed that USENIX will co-sponsor another summit with OSDN in June 2002.

Mobisys: An agreement between ACM SIGMOBILE and USENIX to co-sponsor a conference on mobile systems, applications and services was signed.

Good Works

Open AFS Project: It was agreed that USENIX will commit \$35,000 to this effort contingent upon the receipt of matching funds from at least two other donors. USENIX will oversee the distribution of funds to the Open AFS council of elders (currently CMU, U/Michigan and MIT), and also publicize the donors' support of the OpenAFS development.

It was agreed to fund once again the Status of Women in Computing's mentoring program of the Computing Research

Association's Committee on Women (<http://www.cra.org/craw/>) for \$10,000. USENIX will also be a sponsor for the CRA's Snowbird Conference in July 2002.

It was agreed to fund \$10,000 for student stipends for the Internet Measure Workshop 2002 which is being co-sponsored by ACM SIGCOMM, SIGMETRICS, and USENIX.

SAGE

The following statement was approved and posted on the USENIX and SAGE web sites for a 2 weeks period in December '01: "The USENIX board wishes to apologize to Barb Dijker and Peg Schafer for dismissing them from the SAGE Executive Committee without appropriate due process."

A hiring committee to hire a SAGE Executive Director was formed (Dan Geer, David Parter, and Ellie Young.) A SAGE/USENIX relationship oversight committee composed of respective liaisons (Parter and Hume), Young, and others to be announced was formed.

Finances

Sponsorship and exhibit packages recommended for 2002 were approved.

The recommendation that an outside accounting firm (Burr, Pilger and Mayer) conduct the audit of the Association's 2001 finances was approved.

The 2002 budget was discussed and approved.

News from NUUG

by **Jon Petter Bjerke**

Jon Petter Bjerke is a NUUG board member and NUUG's primary contact with USENIX.

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NUUG is the Norwegian UNIX User Group, established in 1984 as the Norwegian arm of the EUUG (later to become European). In the last several years European has existed only as a loosely joined group of European "UNIX" groups.



The NUUG membership of about 300 has been receiving ;login: on a subscription basis for a number of years, and in the annual meeting of June 2001, NUUG decided to join the USENIX Association as affiliate members. As of Jan-

uary 2002, our members joined USENIX, and a few also signed up for SAGE.

NUUG organizes a monthly technical evening, each on a different subject of interest. We have also held full-day tutorials and national conferences, often with invited speakers from the USENIX side of the Atlantic. We are participating in the yearly NordU conferences as well.

Apart from NUUG, Norway has several special interest computer groups, many of which focus on Linux and open source developments. Some of these groups share space on the NUUG Web server, and events are announced in a common calendar. We are also looking for other ways to cooperate with and support local or special interest groups.

As a result of taking part in the EUnet initiative of EUUG since the mid-1980s and establishing it as a commercial company in the early 1990s, NUUG received considerable money when EUnet was sold in 1998. NUUG decided to put these assets into a separate entity, and the NUUG Foundation was established in 2000. The foundation is actively looking for projects to support, both nationally and internationally. We recently selected the first such project: the “Skolelinux” (Linux for Schools) project, an effort to provide schools with a reliable and easy-to-handle Linux distribution, with all relevant programs supported in the two variants of the Norwegian language (Bokmål and Nynorsk) as well as the northern Sami language. Participation from the other Nordic countries may lead to Danish and Swedish versions of the project.

References and further reading (mostly in Norwegian):

NUUG: <http://www.nuug.no/>
 The NUUG Foundation:
<http://foundation.nuug.no/>
 Linux for Schools:
<http://www.linuxiskolen.no/>

Twenty-Five Years Ago in USENIX

by Peter H. Salus

USENIX Historian
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The June 1977 meeting of the UNIX User’s Group (not yet USENIX), was held at the University of Illinois at Urbana-Champaign. Knowing that Mike O’Brien (the amanuensis of Mr. Protocol) had been there, I asked him for his recollections. Here they are. (My addenda are in [].)

At the time of the 1977 UNIX User’s Group combined East-West meeting in

Shampoo-Banana, I was an eager UNIX booster. UNIX Version 5 (and, later, Version 6) was at the same time so interesting and so hard that I couldn’t imagine anyone in computing not being as enthralled as I was . . . unless, of course, they worked for IBM, the then-current Evil Empire.

The conference was organized by Steve Holmgren and Greg Chesson, who knew Ken Thompson from Berkeley days or some such. Steve and Greg were responsible for having imported UNIX to the U of I campus downstate, where it replaced the home-grown software on ANTS, the ARPANET Terminal System, which ran on a PDP-11. ANTS’ sole winning feature was that it had ants stenciled all along the top panels of the cabinet. It ran like it was full of ants, too. UNIX was a big step up. On the Chicago campus, I had just hired on as a research assistant to a gigantic project (\$3 million) to build a medical information system, based on what is probably the worst grant proposal I have ever read. It was funded out of desperation by government officials who had a record amount of money to spend in a hurry due to the Supreme Court decision that told Dick Nixon what part of the purse-strings he did not control.

I was the lone man on the Chicago campus running UNIX, and I dimly remember pestering the daylighters out of both Steve and Greg as I came up to speed. I seem to remember that I had founded and was running the UNIX User’s Group Software Distribution Center by the time of this conference, so, hopefully, I was less of a pest by the time it rolled around.

Ken and Dennis Ritchie were both scheduled to be in attendance. I think I’d met them before, either at one of Mel [Ferentz]’s get-togethers in New York or one of Lew Law’s get-togethers at Harvard. I seem to recall both of those occurring before the big national meet-

ing. I decided to commemorate the occasion. I don’t remember much at all about the technical content of the meetings, but I remember this.

I lived in Chicago at the time, and so did a man named Phil Foglio. Phil was a comic artist, later to become rather famous. [Foglio is very active as an artist. Among his credits is *Girl Genius*.] He was in school at the time. I knew him slightly, through Chicago science fiction fandom, in which I was active. One day Phil called me up. His apartment was apparently equipped with a wall safe. His roommate, the only one of the two of them who knew the combination, had locked a prop Star Trek phaser in the safe and blown town. Phil knew that I was, at that time, a bonded locksmith, and wanted me to open the safe.

I knew how to open garden-variety pin-tumbler locks, but I’d never tackled a safe before. I knew that there was an elementary manipulation algorithm that worked on the cheaper sort of combination padlocks, but I figured a safe would be proof against that. Still, I was willing to give it a try. So expectant of failure was I that I brought along another locksmith, a friend of mine, for moral support.

I am amazed to this day that it worked. I opened the safe in under fifteen minutes. I should have written down the name of the manufacturer, to make certain that I never purchased a safe from them.

I had agreed with Phil to take payment in trade. In return for my success in returning his phaser to him, he prepared full-color artwork to my specifications, a now rather famous picture of a PDP-11 cabinet in a maze of pipes, complete with pitchfork-carrying demons running along the pipes. There was a rain barrel with “/dev/null” written on it, but no front panel, due to contradictory specs on my part as to exactly which panel held all the buttons and lights.

At that time, T-shirt “art-to-order” printing houses were few and far between. I found a ma-and-pa operation in suburban Chicago, quite a drive from my place as I recall, who used a 3M color copier to make T-shirts. They were very helpful in turning Phil’s artwork into the first UNIX T-shirts ever produced. Because the printing process reversed the artwork, they whited out Phil’s trademark signature and carefully forged it in reverse, so that he would get proper credit.

The first four shirts produced were intended for Ken, Dennis, me, and my wife. Only these four shirts were produced with red piping on the sleeves and collars – all shirts made after this had white collars and sleeves. I still have mine and my wife’s. As I recall, only Ken made this meeting. I gave him his shirt, and one for him to take back to Dennis. I recently asked Dennis about that, and he could not recall ever having received his shirt. I suspect that the embarrassment at being caught out in this after all these years is responsible for Ken’s recent retirement.

The ma-and-pa operation produced several hundred shirts with this artwork in the years that followed. They retained the artwork in their files to fulfill future orders. They told me that their largest single order came from Bell Labs, where about 40 shirts were ordered for a picnic.

Years later, Armando Stettner of DEC asked me about that artwork. He wanted to obtain the rights to it, in order to use it in a marketing campaign for Ultrix. I dug out the phone number of Ma and Pa in suburban Chicago (I lived in Los Angeles by this time) and found out that they had ceased operation years before and were on the point of throwing everything out. They returned the artwork to me, and I sent it on to Armando stating that as far as I knew, I owned the rights, and he (and DEC) could have ‘em. The artwork was used in an Ultrix

poster showing how much better Ultrix was than that stovepipe clattery amateur UNIX stuff, and the original artwork passed into oblivion, along with the entire Digital Equipment Corporation.

At some point the USENIX board of directors gave Phil Foglio some money to compensate him for the unexpected success of his artwork. [It was in 1986, when I was Executive Director of USENIX. — PHS] He never complained to me personally, but had been heard to gripe that he never saw a dime from the art. I’m glad they did this. I’d never expected the art to go beyond the first four shirts, frankly.

It remains an open question as to the degree of influence that all this had on the BSD Daemon. Kirk McKusick says that John Lassiter created the original BSD Daemon artwork without reference to Phil’s work, and I believe him. It’s an obvious visual pun. However, I still regard the BSD Daemon as a cultural child of the first four shirts I produced at the Urbana meeting, even if there is no direct connection.

Henry Spencer wore a shirt produced with that artwork for many years, and was by many years the last survivor to do so, until the shirt reached the stage where he was in danger of being picked up for vagrancy. My own are in better shape, partly because I long ago ceased to fit into either mine or my wife’s.

The only other clear memory I have of the Urbana meeting is of standing around Steve Holmgren’s driveway, at one of the few keggers of any sort I’ve ever attended. Considering who all was there, it has to rank right up there in terms of “semi-famous people connected with UNIX all in one place doing something non-technical.” I recall being as nerdy as possible and also trying desperately to think of something semi-intelligent to talk to Ken about. It was many more years before I became socialized, I’m afraid.

Of course, it was also at that meeting that I was recruited to come work for The Rand Corporation, which turned out to be the making of my career. Yes, in that respect I have mighty fond memories of the Urbana meeting.

[I’m afraid that it would be absurd for me to add to this. Mike, many thanks.]