Editor’s Column
(Susan Small)

As usual, I am grateful to those who have contributed to this edition: notably Stephen Walli for his article on the difficulties of producing standards; Paul Kentish for news of SU2SG; and Charles Atkinson for an article and other suggestions [see below]; thanks also go to other regular LUG and SIG contributors.

Turn to page 14 for UniForum 1993’s big news — the announcement of the Common Open Software Environment (COSE, or "cozy").

A recent suggestion from Charles Atkinson is to include a letters page in news@uk or, better still, a problems page — "Dear Marje, I am worried about my parent process. I think it’s a zombie." Marje: "The trouble lies with your grandparent who terminated without waiting for your parent’s death. I blame it all on the programmer. Don’t worry, it won’t affect your life". If you think this could be a useful addition to the newsletter, send me your problem queries and I will do my best to ensure their publication, with a suitable answer.

You will notice that the "Regulars" are missing from this issue. Unfortunately Bill Barrett was admitted to hospital just before the AGM, but I am glad to report that he is now back at home and we look forward to having him back at Owles Hall very soon and contributing to future newsletters.

The other "Regular" that is missing is the Puzzle Corner. Mick Farmer has other preoccupations at the moment (see articles below) and no-one has come forward yet to take over the mantle. If you would like to do so, or indeed contribute in any other way — by letters, articles, reviews — let me know by e-mail, post, telephone or fax.

If none of this appeals, but you fancy entering into electronic dialogue with the President of the USA, see page 17.

Contact addresses for people or organisations mentioned can be found, as usual, on the back page.

Advertisements consisting of 2-3 column inches will be accepted from members at no cost. However, if you wish to insert an A4 flier for dispatch with the Newsletter this will cost £100. Full details of this service can be obtained from the UKUUG.
Secretariat. Deadlines for copy for future issues appear below, but you don’t have to wait until the deadline if you have news of a forthcoming event - let me know now!

Deadline: 19 May
Publication: June

Deadline: 19 July
Publication: August

Deadline: 19 September
Publication: October

Deadline: 19 November
Publication: December

UKUUG News

Report from the Chair
(Mick Farmer)

In spite of what it says above, this piece is the work of the whole Council, being our report presented at our recent AGM in London. Thank you to everyone who found the time to attend (perhaps because Lindsay’s talk for the LUUG meeting that followed was especially tempting :-).

Despite the worsening economic climate, in financial terms the UKUUG has had a modestly successful year. The reserves have grown from £96,099 to £109,380, an increase of £13,281. This is against income reducing from £120,475 to £95,905. The fees were not increased last year, and they are once again being kept unchanged this year.

The reduction in income is due to two main reasons. One is the exceptionally large income from events in 1991, the other is more worrying. In 1991, we received £94,763 in subscriptions, while in 1992 this reduced to £81,430. The recession is hitting our members as hard as elsewhere.

Plans for 1993:

In 1993, we are planning to continue to improve the service to our members in a number of ways. The obvious one is keeping the fees down for another year. More constructive will be an increased range of services and benefits. At the same time, the structure of EurOpen has been rethought, hopefully leading to reduced costs.

- **Newsletter:** You will all be familiar with the Newsletter. The first year of its existence has taught us how to produce a Newsletter that is at once inexpensive, and hopefully useful and informative to our members. We would like to encourage all of you to send us articles, letters, views and opinions. Please do send us your submissions, either direct to Sue Small, or to Owles Hall.

- **Events:** Many of you will have attended the successful joint meeting in Oxford with the Sun User Group. We are thinking of organising other joint events, and your opinions are invited. We are also planning another LISA meeting, for which you will have received a call for papers. We are considering other events which are still in the early stages of planning.
Usenix: Usenix, our (larger) sister organisation in the US, produces an excellent academic journal, Computer Systems. We have made arrangements that allow our members to receive it as part of their UKUUG subscription. Your first issue accompanies this newsletter.

Proceedings: All the event proceedings are now mailed to all the members.

LUGs: There are now four Local groups, London, Midlands, Oxford, and Cambridge. This is very encouraging. We will continue to support LUGs. Anyone wishing to start a LUG should get in touch with Owles Hall. Maybe there are even some members further north than the Midlands who would like a local group of their own.

SIGs: Special interest groups are being started for Systems Administrators and for PC users. We will actively support other SIGs. Again, please get in touch with Owles Hall.

Archive & tape service: The archive and tape service provided through Imperial College continues to thrive. Some investment will need to be made to increase disk capacity this year. Files can be downloaded, or for a nominal fee, tapes can be ordered.

FaceSaver: We plan to continue and improve the FaceSaver. Once your face has been saved, you can download it from the archive.

Video Tapes: Last but not least, we will continue our practice of video taping events so that people can buy edited recordings. We have videos available of all the main events of the last few years and they can be ordered through Owles Hall.

Conclusion:

In short, the UKUUG, thanks to your support, has had another good year. This will allow us to invest in improving the services further. Complacency is the enemy, and we invite your comment, feedback, and input, so we can make the group serve your needs better than ever.

Cambridge LUG (Jane Shute)

Tadpole will be hosting the next meeting of the Cambridge SUKUG and will give a presentation of their equipment. The meeting will be held on 29 April 1993 at 17:30hrs in Tadpole's offices on the Science Park in Cambridge. I would be grateful if all members who wish to attend could e-mail me (Tadpole are having to hire in chairs for the event and we wouldn't want you to have to stand for the evening!). I would also like to hear from other members of UKUUG who are interested in attending these meetings, so that their names can be added to our mailing list. [Editor's Note: Bags and suspiciously lumpy overcoats will be searched on the way out from this meeting]
At the time of going to press, there were no firm details about the next London LUG meeting. However, the usual date would be Thursday 29 April 1993 and the venue could be University College London, followed by informal discussions in the Fitzroy Tavern, Charlotte Street. Watch out for further details from Andrew Findlay.

Although the LISA workshop is still some time away the call for papers has gone out already. The PC-SIG actively tried to make sure that interested PC UNIX parties (users, developers, sellers) got a copy. All being well some will present papers and the PC angle will be covered at the workshop. Thanks to SCO and SunSoft for helping with the distribution list. [Editor's Note: The LISA Workshop has had to be postponed due to circumstances beyond our control]

After typing the last PC-SIG column it suddenly dawned on me that AIX on a PS/2 should have been included in the list of PC Unices. Aware of my deep ignorance in this area I phoned IBM, who put me onto a different bit of IBM who had never heard of AIX but suggested another number... loop for three days... exit, confused. I think AIX and PS/2 come under different parts of IBM marketing, maybe. But I know for sure that the letter box is now host to IBM press releases on mainframe database products, DOS, Windows and PC hardware. You've got to be serious to achieve the biggest corporate loss in history, it's not a job for amateurs. But seriously, I would like to know why anyone would choose AIX-PS/2 in preference to other systems.

Apologies to BSDI for some inaccuracies in the last column. For the record:

- BSD is Berkeley Software Distribution - as in 4.4BSD
- UCB is the University of California, Berkeley
- BSD/386 is the name of the product sold by BSDI
386BSD is the name of the public domain system created by Jolitz
BSDI is Berkeley Software Design, INC (the US company)
BSDI is also Berkeley Software Design International (Europe) Ltd

Back in January, BSDI had voluntarily delayed shipping the production release of BSD/386 in response to legal manoeuvres in the dark by USL who had asked that BSDI be ordered to stop all shipping. This, of course, left BSDI free to distribute the Gamma test version. Apparently there would be no functional changes between Gamma and the production system - just bug fixes and general tidying. And anyone who bought a Gamma would get a free upgrade to the production release.

In early March USL's request that BSDI be ordered to stop all shipping was turned down. Presumably BSDI will now start shipping the production release, although they may wait until the remaining copyright action is determined. Read BSDI's adverts or phone 'em up for the latest news.

Several members without access to the net have asked how to get going with 386BSD. Sadly I haven't been able to point them in the right direction and will not be able to do much better until someone who has boldly gone does boldly return with trekkers tales. Or until someone tells me how it can be done, to be less SciFi cryptic.

Meanwhile, from the net, there is a couple distributing 386BSD on floppies...

J.T. Conklin & Patty Ngai
61 Crestwood Drive #18
Daly City, CA 94015, USA

Sadly, no phone number and no reports on using them or how they can accept payment from the UK. But it is better than nothing. If anyone does explore using them, please let me know and I'll pass the info on.

User reports on both 386BSD and BSD/386 all seem to be very positive, although it must be said that most are keen techies rather than people looking for a cost-effective business solution. It's back to the old phenomenon of the important issue being availability of applications and that having more to do with market share than technical issues.

Which reminds me — I haven't been rude about SCO yet. Oh well, next news@uk will do! Happy PC UNIXing until then.

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SU2SG - The Small UNIX Systems Services Group
(Paul Kentish, Chair)

The SU2SG is a group which caters for those involved in providing UNIX system-based services mainly in higher education in the London area and with a small (say one to six) staff team. In most cases this would be the systems support staff from a "small" University of London college or a medical school, but we also have representatives from departmental UNIX systems support (e.g. at City University). New members are welcome.

We meet once per term at one of the colleges and try to get a guest speaker. We also discuss our own systems' set-ups
and there is much useful information and mutual help exchanged. We have a mailing list - su2sg@lon.ac.uk. To join contact the secretary of the group, Nigel Mitchem.

The next meeting is scheduled for Tuesday 15 June at 14:30 at the Royal Free Hospital School of Medicine, Pond Street, London, NW3. A speaker is being sought. There will be a lunchtime rendezvous in a suitable local hostelry. More details will be sent out to the mailing list and should also appear in the next issue of news@uk.

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**DTI Open Systems Programme**  
**Bill Barrett**

At the last meeting I attended, it was finally agreed to give this programme an exciting name - Open-Exchange. The questions this Programme will ask are:

- Does your company have an open IT strategy, or would you if only the business benefits were clearer?

- Are you finding it difficult to choose between the open systems products on offer, or to identify the best applications software for your needs?

- Do you have specific problems in implementing your open systems strategy?

- Or have you crossed these hurdles and are you now in a position to pass on the benefit of your experience to others?

If the answer to any of these questions is "Yes", then you will be interested in this scheme which the UKUUG is actively helping to develop.

We are frequently asked by members for advice or information that is not readily available to us. Budget constraints often prevent us from researching issues and providing solutions. Occasionally we are able to pass on a request to another member who we happen to know may be able to help. But this is not always possible.

The new scheme, initiated by the DTI and now called Open-Exchange, aims to promote direct contact between users for information exchange, solving problems and sharing experience. The idea is to focus particularly on open systems issues, but of course there is no limit on the scope of subsequent co-operation. Open-Exchange was devised after a survey showed users were unhappy with current sources of information. They felt too dependent on their suppliers - whose advice is not always perceived as impartial - and expressed a preference for some form of peer-to-peer exchange.

This is how the scheme will work:

1. If you have a request, enquiry or problem you send a fax to the UKUUG Secretariat giving your own contact details, a brief profile of the sort of organisation you would like to contact and a summary of the issue you wish to raise. (If you would prefer to complete a simple enquiry form and fax that to UKUUG, we shall be happy to send you one.)

2. First we shall check to see if there is a member who could help. If so, we shall pass on your enquiry and then give
you details of who to contact.

3. If not, we shall pass your request to a contact in one or more other user associations involved in Open-Exchange who, according to the profile we hold of their memberships, look likely to be able to find a match. When a willing respondent is found, details will be passed on to you so that direct contact can be made.

4. Finally, we shall ask both parties to make a brief report of the outcome.

These reports will show us how many contacts are being made and what proportion are considered successful and valuable. Remember, this is a new service for the benefit of you, the members. We need feedback in order to make whatever improvements you feel would be beneficial.

This initiative is the result of users’ preference for independent advice and practical help from others with relevant experience and no axe to grind. If you would like assistance, or would simply welcome a second opinion, please send us your enquiry today, or ring me for further details. And why not tell your colleagues about Open-Exchange?

Around Europe

EurOpen Update
(Mick Farmer, EurOpen Executive)

As I stated in my last report, the original EurOpen Newsletter is currently not being produced (in order to save money). It has been replaced with a simple News Sheet containing details (hopefully) received from the national groups. As only one copy is sent to each national group, I intend to use this column to keep you up-to-date with events (however, if you’d like to see a copy of the whole News Sheet, please contact our secretariat at Owles Hall for a copy).

The changes in policy agreed at the Governing Board meeting in Utrecht has meant that the Spring ’93 Conference, originally planned for Sevilla, has been cancelled. However, the Governing Board meeting will go ahead on 8-9 May at the Ambassador Hotel, near Heathrow Airport. Saturday is devoted to a series of parallel workshops, each discussing (and coming up with recommendations on) different aspects of EurOpen’s work. The current topics are:

- Organisation and Fee Structure
- Finance
- Strategic aspects of UniForum/USENIX liaison
- Potential Objects for Special Financial projects
- EurOpen under Belgian law

If you have any views on the UKUUG’s position with respect to these topics please contact me initially. I will ensure that our collective position is known to the appropriate meetings.

EurOpen intends to go ahead with an Autumn ’93 event, and is currently working towards a joint meeting with GUUG at Wiesbaden in September. Further details as they become available.

Worries about the financial viability of EurOpen appear to be unfounded, according to the interim treasurer, Marten van Gelderen:

In the Autumn ’92 Governing Board meeting in Utrecht the words "insolvent"
and even "bankruptcy" were used frequently in connection with the current and future financial position of EurOpen. It is a pleasure to be able to announce here that both assessments were made without the proper backing of figures. EurOpen is not insolvent and most certainly not bankrupt.

However, EurOpen realises that it can't be complacent. Comfortable reserves allowed them to engage an Executive Director, and to participate in OpenForum '92. Some national groups still haven't paid their 1992 subscriptions. I continue with Marten's closing sentence:

*In summary, the financial position of EurOpen must be handled carefully in the near future, but it is certainly not in jeopardy.*

**Relations with USENIX**

Representing EurOpen, I attended the USENIX Governing Board meeting in San Diego, held on the Sunday before their Conference. Their Governing Board is smaller in size than EurOpen's, which enables them to conclude virtually all their business in one day. Apart from the fact that USENIX is a much larger organisation than EurOpen (in terms of members and employees), I found that they have similar problems to those currently being encountered by EurOpen. Some examples are:

- 50% of the attendees at a Conference are there for the first time
- Emphasis is moving away from the technical edge towards the marketing edge
- Other Conferences are attracting more people
- Specialist Conferences, such as LISA and SAGE, are attracting more people than their traditional, bi-annual, Conferences

USENIX is looking at new ways of attracting members. They are considering unbundling their services, developing closer ties with UniForum, and developing stronger local groups.

USENIX would like to establish stronger links in Europe, and they would like to see EurOpen acting as the mediator between themselves and the National Groups.

**Relations with UniForum**

Once again representing EurOpen, I met twice with Richard Jaross, the new Executive Director of UniForum. UniForum is worried about its membership falling, and its reliance on one large trade show per year to provide revenue (as with USENIX, UniForum is seeing the emergence of other strong exhibitions, such as InterOp).

UniForum has contacted a number of European vendors, and the general feeling is that they would like to organise another pan-European event in the future. UniForum is looking to EurOpen for support, probably in the form of Tutorials and a technical Conference track.

There is a general agreement that UniForum and EurOpen can work closer together in developing events of mutual benefit.
Concluding Remarks

As you can probably gather from my last two reports, EurOpen has changed direction somewhat (and that's probably an understatement). As a member of the interim executive, I'll keep you informed of events as they occur. However, if you have anything to contribute concerning EurOpen, I look forward to hearing from you.

Corwin's Razor
(Stephen R. Walli)

In December, I wrote at length about a couple of fundamental problems with the structure and process of defining the POSIX family of standards. POSIX will collapse under its own structure if not rescued soon was the premise.

It was motivated by the concern that we will lose the existing valuable model for portable applications programming, if POSIX continues along its current path. These concerns settled around test methods requirements placed on the working groups, and language independent specifications (LIS).

It provoked some people to do the net equivalent of "writing to their congressman," and the email addresses at the end of the article received some mail. It also provoked some discussion on the net, which is good, because this stuff is important to you if you care about writing C, Ada, and Fortran programs that are as portable as possible across the widest possible set of architectures. Your viewpoint is important! Ultimately, it was a source of a lot of debate and discussion at the IEEE POSIX meetings in January, which is responsible for developing these source code portability standards.

One of the driving arguments in these discussions was who is the customer for this work. This sentiment is best embodied by something said by Bill Corwin, the chair of POSIX.4 (Real-time extensions), which became:

"Corwin's Razor: If they're not willing to put their money where their mouth is, they're not a customer."

Let's see where it got us.

Test Method Madness — Part II

I expressed a lot of concern with the creation of test methods standards. These are standards containing test assertions, based on the test methodologies outlined in POSIX.3, which could act as the basis for a test suite. I was concerned about the setting up of a directly competing body of text, used to create test suites to measure conformance of implementations of base standards, before the base standard had even received widespread implementation.

After the last editorial hit the net, I discovered something which only fueled my concerns. The test methods which were balloted as part of the XOM (Object Management) API, and X.400 API (P1224 and P1224.1) received no comment in ballot. Changes made to the test methods were done by the technical editor during ballot to keep them synchronized as best as possible with changes made to the base API text. The POSIX.17 (X.500 Directory Services) test methods received very few
comments in ballot, in relation to the volume of comments on the base API.

All three of these test methods standards are about to go to the IEEE Standards Board in March for final approval. One might think that their test methods weren't read very carefully by the balloting group, which was concentrating on balloting the base API that it cared about. Would you want NIST to choose these standards as the specification of a conformance test suite?

All three of these documents had their test methods written for them by a couple of contractors in the employ of X/Open. X/Open wants these base specifications to get through the standardization process. The process demands there be test methods for the base documents to exit ballot. There are now test methods. At least X/Open was willing to put its money where its mouth is. POSIX.10 (Supercomputing Profile) has just completed its first ballot cycle, and no, they received no ballot comments on their test methods section either.

There is an example, however, of a test methods standard that is, IMHO, a well-constructed standard. POSIX.3.1 (IEEE Std 2003.1-1992) is the test methods standard for the POSIX.1 base functionality. What's different about it:

- It lags the original standard by four years, since POSIX.1 was originally approved in 1988 (IEEE Std 1003.1-1988).

- At least four implementations of real test suites fed its creation. (The NIST PCTS, Perennial's POSIX.1 test suite, X/Open's VSX, built by Unisof, and Mindcraft's CTS.)

- People that wanted to have a standard for test methods to measure conformance to POSIX.1 got together (i.e., found the time and money) and did the hard work of defining, drafting, and balloting a document.

- The document was balloted separately and seriously by a group of people that seriously cared about the outcome of the standard (i.e., the implementors of the base POSIX.1 standard), as well as the people that cared about having a standard test suite.

Many working groups that have written test methods for their base functional definitions, even just partially, feel that their base specifications are stronger for the effort. They aren't sure whether or not they've written good test methods. They don't care. Their base specification is better. That's what they came together to do.

You can't legislate a standard. Especially from a group of volunteers. Just because one group of people want a standard "test suite," does not mean that the group that originally got together to define and draft and ballot a standard for some base functionality wants to do the extra work of defining, drafting, and balloting a test methods standard.

So what happened?

Most of the Steering Committee on Conformance Testing's (SCCT's) discussions agreed that the market will speak. If and when it cares about standards for test methods, people will find the money and energy.
A motion was made in the Sponsor Executive Committee (SEC) to remove the testing requirement from balloting base documents. It was modified to "suspend" the requirement. It passed. The SCCT will consider if there are alternatives to the current process, but until such time as they report back to the SEC, the requirements placed on the wrong group of people have been lifted.

It does not mean POSIX considers test methods standards to be bad things. POSIX.3.1 stands as an example of a well developed test methods standard. It also does not mean POSIX doesn't care about building good documents. Quite the contrary. A tool exists, called "writing test methods," that working groups can use, when and where appropriate, to improve the clarity and preciseness of their base specification. It does mean that the POSIX standards working groups feel that people that want test methods standards should go to the effort of building them.

LIS — Again!

The scope of POSIX.1 says that it is a standard operating system interface to support applications portability at the source code level. It is to be used by systems implementors and application developers. This would tend to indicate it should be a readable document. It is the official "contract" with which an applications developer can call up their systems vendor and say "this is supposed to behave this way," or vice versa. Just like the ANSI C standard. Together, these two documents define an environment in which to design more portable applications, written in C. (The Ada based POSIX.5 has similar statements in its scope.)

I raised concerns over the structure and format of the programming language-independent specifications method of defining POSIX standards. It takes what I believe is a useful single-book, single-context format, as used in the current C-based POSIX.1 and Ada-based POSIX.5, and makes it hard to read and harder to use by creating a two-book, two-context standard.

The LIS debate is far more political and emotional. ISO is involved. The ISO working group responsible for bringing IEEE POSIX documents forward as international standards, WG15, requires that they be brought forward as thick, semantic LI specifications with attendant thin, syntactic language bindings.

This requirement was agreed to by the U.S. member body to WG15, which passed it on to the IEEE working groups back in 1988, which also agreed to do it. Some argue that the United States is not fulfilling its obligations if they don't follow the LIS approach.

This is just plain wrong. The IEEE is the POSIX standards development organization. The IEEE is a "trans-national" organization, open to all. While the IEEE POSIX working groups are predominantly attended by people living in the United States, a fair number of people hail from other locations, and the IEEE POSIX working groups have never not entertained a person's point of view. They really don't care where you live. The "U.S. member body" to WG15 is merely the administrative point between the IEEE and ISO WG15.

The IEEE then spent a lot of time and effort, first defining a methodology, then applying that methodology where they could. As with the test-methods tool,
working groups discovered holes and errors in their base text as they reviewed it critically, asking the question, "How would I express this concept such that I could write the Ada equivalent of it?" Or Fortran. They discovered they can more clearly express some of the meaning in their base documents.

The people most able to do this work in the IEEE POSIX working group's experience were the people in POSIX.5 (Ada) and POSIX.9 (Fortran). They did the painful exercise of critically reading the text of C-based POSIX.1, and recasting it into the words and programming semantics/syntax of their own language.

The funny thing is, they did this without the benefit of a language-independent specification of POSIX.1. The only way that the POSIX.1/LIS could be created was for the IEEE Technical Committee on Operating Systems to open the purse strings and pay a contractor to write the first drafts of an LIS of POSIX.1 and its attendant C binding.

And these other language groups, which pay money to come to IEEE POSIX meetings to do the work of building POSIX standards in their own language (which they understand well), are concerned with the current POSIX LIS methodology being used and the format of the documents it produces. I think I hear Corwin's Razor being sharpened.

The POSIX.5 Ada working group built their version of POSIX.1 without the POSIX.1/LIS. They feel it would have been easier to build their document if one had existed, but they don’t know what that LIS would have looked like. They don’t particularly like the one that has been produced.

They further chose to ignore the ISO requirement of "thin" syntactic bindings, which don’t reproduce the semantic description of the "thick" base LIS document. They wanted their standard to be self-contained and readable, such that programmers would only require the one book on their desk. Their gamble failed! ISO WG15 refused to accept their standard for international standardization.

But wait! ISO WG9, the ISO Ada language group wants to fast track the IEEE POSIX.5 standard. They feel it is a good standard. So maybe their gamble didn’t fail.

So who actually benefits by presenting the standard as an LIS? Language-bindings writers certainly. But the people who already care enough to participate seem to be doing so. It doesn’t take a huge number of people to set up a working group. There were only about twelve in the Fortran group (POSIX.9).

So what happened at the SEC? A motion came forward to remove the requirement for the current LIS method of defining POSIX standards. It was massaged into something considerably more diplomatic, which passed, creating an ad hoc committee to go investigate the problem in detail, and without particular restrictions, and report back at the April 1993 meetings.

This is a good thing. To change the direction of POSIX at this point is not a trivial task to be taken lightly, nor decided too quickly. There will be ramifications no matter what the outcome of the report from the ad hoc.

I chair the ad hoc. If I was going to stir up all this fuss, then I was going to be
made accountable for it :-) I am interested in your thoughts or concerns, so by all means e-mail me.

There was another wonderful quote that came out at the January meetings, that essentially said:

"Standards organizations that choose to make themselves irrelevant deserve what they get."

This was actually made in reference to a completely different problem, but I believe it is very appropriate here. If we make these standards unusable, they won’t be used. We will lose the "contract" for a portable programming model between applications developers and systems implementors.

I believe it is still important that you make your concerns known to the people that can actually make the decision about this.

1 comp.std.unix, Volume 29, Number 86, and ;login: January/February 1993

European C++ User Group Conference
(Mike Banahan, Chairman ECUG)

The ECUG 1993 technical conference will be held in Munich, Germany on 8 and 9 July 1993, immediately preceding the ANSI/ISO Standards Committee meeting in the same town. The intention is to ease attendance at both the Conference and the Standards meeting for those who wish to visit both.

The technical conference is intended for users of C++ who wish to learn more about specific technical subjects related to the use of the language, and for anyone who is interested to find out about future developments. Papers will be refereed by a panel of experienced C++ developers and are required to be of a high standard of technical content. Marketing presentations will be rejected (but take note that outside the technical conference there is a track specifically intended for product presentations). Specific topics of interest include, but are not necessarily limited to:

- Standardisation of C++
- Future developments
- Compiler implementation
- Experience of use of C++
- Project management
- Performance measurement
- Introduction of C++ to programming teams
- Object Oriented development with C++

Abstracts of papers are invited from potential speakers, consisting of 300-900 words. Abstracts may be submitted by e-mail to mikeb@hoskyns.co.uk (ASCII only please) or in written form to: ECUG Conference, KBSL, 1 Campus Road, Listerhills Science Park, Bradford, BD7 1HD, West Yorkshire, United Kingdom

Abstracts are due by March 20th 1993. Successful submitters will be notified by 12 April 1993. Completed papers of approximately 3000 words are required by 28 May 1993. Submitters are encouraged to view these as hard deadlines and asked (with little hope) to consider submitting before the deadlines.

Out of pocket expenses will be found for speakers but the ECUG tries to keep attendance fees reasonable and is not a wealthy organisation (being run on a not-for-profit basis).
Tutorials will be held on the day preceding the conference proper; 7 July. The tutorials will be presented by professional educators and cover a range of topics from beginning to advanced. Details of the conference programme will be available nearer the date of the conference.

Run in parallel with the technical conference will be an exhibition of tools, software and services of interest to the C++ community. There will also be vendors' marketing presentations run in a separate auditorium where product announcements and descriptions are welcomed. Attendance at the exhibition and marketing presentations will be subject to only a minimal fee to cover costs and lunches. If you are interested in exhibiting please contact the organisers as soon as possible - we are interested more in quality than quantity and space is relatively limited.

We hope also to arrange suitable social events for the evenings. Munich in July is a particularly pleasant location and the chance to catch up on technical matters (or simply to renew contacts) in a congenial atmosphere is not to be missed. Since conferences are specifically intended to allow attendees to confer, we want to provide the opportunity for discussion as well as entertainment - don't expect much in the way of loud music - but the Bavarian beer is not to be missed.

We look forward to seeing you there.

From the Net

UniForum 93
(Evan Leibovitch)

UniForum 1993's big news — the REALLY big news, that dominated conversations throughout the show and will likely have a significant effect on the future of UNIX — is the announcement of the Common Open Software Environment (COSE, which everyone pronounced "cozy").

COSE, which was apparently spearheaded by HP, was developed and jointly announced on Wednesday 17 March 1993 at UniForum by:

* Hewlett Packard
* IBM
* SCO
* SunSoft
* Univel
* UNIX Software Laboratories

Just about everyone in the UNIX industry have been falling over themselves to endorse the COSE effort, and it appears that X/Open is awaiting detailed specification from the group and is ready to "fast-track" the proposals into a formal standard.

What is COSE?

It's an attempt to define a number of significant issues which have been sources of fragmentation in the UNIX industry, and impediments to its more-widespread acceptance. It is intended to deal specifically with six areas of UNIX functionality — while details have not been ironed out, and even the initial specs are quite lengthy, here is a summary of what has been announced:

A Common Desktop Environment

The intent is to come up with a standard look-and-feel, and a standard set of programming interfaces common to all vendors. It will include:
HP's Visual User Environment
IBM's Common User Access model and Workplace Shell
OSF's Motif toolkit, window manager, and "look & feel"
SunSoft's OPEN LOOK and DeskSet productivity tools
SunSoft's ToolTalk interapplication communications facilities
USL's SVR4.2 Desktop Manager

Networking

All vendors involved in the announcement will sell, deliver and support the following networking facilities:

- Novell's NetWare (client level)
- OSF's Distributed Computing Environment (DCE)
- SunSoft's Open Networking Environment (ONC+)

Graphics

The companies plan to provide a consistent graphics application environment through common API, supporting the X Consortium in general and the following services specifically:

- Xlib/X for basix 2D pixel graphics
- PEXlib/PEX for 2D/3D geometry graphics
- X11lib/XIE for advanced imaging

Multimedia

The companies are in the process of jointly defining an infrastructure, to determine a distributed media infrastructure to be used by all.

Object Technology

The companies are working together to accelerate the development and delivery of standardized object-based technology, supporting the efforts of the Object Management Group.

Systems Management

Through a working group, the companies are determining a systems management framework and associated tools to support improved interoperability and management of distributed systems. Initial efforts will key on the following areas:

- User & group management and security
- Software installation and distributed management
- Software licence management
- Storage (backup) management
- Print spooling and management
- Distributed file system management

The working group will provide more detail in the third quarter of 1993.

Analysis and issues (in random order):

Well, first off, Open Look and MoOLIT are as good as dead. While a vague Open Look to Motif migration path was included, Sun's direct endorsement of Motif was probably the single most specific part of the announcement. It appears that significant parts of existing products and technology will be dropped. Not just OL, but also significant pieces like the X.Desktop component of ODT.

Notice that the "Desktop environment" is all graphics. What exists in a standard manner for all those people who have (and will continue to buy) character terminals? How will it affect the AlphaWindows vendors, who for the first time at UniForum '93 looked to be showing a good selection of compliant product?
That this group was able to include both SCO and Univel, both HP and Sun, is incredibly significant. First, it means that all of them were sufficiently scared by the approach of Windows NT to believe that this level of co-operation is in their selfish best interests. Second, it means that these guys may actually one day be competing based on added value, as the religious issues are being pushed aside (generally speaking, for now at least).

Also, what does this say about those companies who weren't asked to dance? Are Digital, SGI, NCR and the others going to be seen at a competitive disadvantage because they were seen to be outsiders in this process, and perhaps "less open" than its instigators? Comments are invited.

USENIX Online Index

What Is It?

The USENIX online index is an electronically available list of papers published by the USENIX Association and related groups. The index is kept as a simple ASCII file, in refer/bib format, sorted by author, and contains information about papers published in USENIX conference and workshop proceedings, newsletters, journals, and the like. The index is updated approximately monthly.

How to Get the Index

The index is available online from UUNET, either via a mail server or anonymous ftp. The index is about 200K, and available only in its entirety.

To get it as mail, send mail to library@uunet.uu.net with send bibliography as the contents of your message. To get it via ftp from ftp.uu.net, login as anonymous with your e-mail address as the password. Then:

ftp> cd library
250 CWD command successful.
ftp> get bibliography

This help file can be retrieved with send help or as the ftp file help.bibliography. (There is no person associated with the library address and it will never be read by human eyes.)

How to Access Information

To build the indices so you can easily access information, run indxbib on the bibliography:

indxbib bibliography

You can then pull information from the file by running lookbib. You can either build refer files or run lookbib interactively. For example, the following command would put all entries which refer to Smith into a file called stuff:

echo smith | lookbib bibliography > stuff

Or you could interact with the index by saying: lookbib bibliography. It will ask you if you want instructions when it starts, answer yes. Then at the prompt, for example:

>smith

will list references to smith (upper/lower case doesn't matter).

To Get an Online Paper

As of this date, we have not yet set up the online papers. When this capability is
provided, we will announce it on the net and these instructions will be updated with retrieval information.

Publications Indexed

- USENIX: Conference proceedings, workshop and symposia proceedings, Computing Systems journal, newsletter

Other sources are being continually evaluated and will be included as deemed suitable.

Fields Used in the Index

The standard bib/refer formats are used. These include:

A Author (may be multiple entries)
T Title of article
P Page number(s)
W Primary author's institution
I Issuer/publisher
B Conference proceedings or book title
J Name of newsletter or journal
D Date of publication or conference
C Location of conference
V Volume number
N Number within volume
O Other comments (e.g., "Abstract only")

These fields may be extended to include other information such as identifier for retrieval, key-words, online format of paper (PostScript, troff, etc.), language (if other than English), etc.

More Information

For additional information about the online index and library, and/or instructions for donating papers, contact: index@usenix.org Or write to: USENIX Association, 2560 Ninth St., Suite 215, Berkeley CA, 94710, USA

Access to the White House

The White House, for the first time in history, is connected to the public through electronic mail. According to Jock Gill, the person responsible for electronic publishing for the White House, "We welcome your comments and suggestions for ways to improve your public access e-mail program."

"As soon as practicable, e-mail will be sent to the appropriate office for consideration. You should receive a written reply in due course. Unfortunately, we are not yet ready to respond substantively via electronic mail. We appreciate your patience as we implement our new electronic systems." Gill indicated that the inclusion of your postal mail address will increase the chance of receiving a reply to your e-mail. The White House may be contacted at the following addresses:

75300.3115@Compuserve.com
CLINTON PZ on America Online
Small Ads

BSDI is now shipping Release 0.9.4 of BSD/386, derived from the Berkeley NETII release for your 386 or 486 machine. It's a complete system: X11, networking, NFS, compilers, text processing - and more. It comes with full source, is available on CD, and is supported by experts. Sounds good?

Berkeley Software Design International (Europe) Ltd can tell you more:

Tel: +44 227 781675
Fax: +44 227 762554
Net: bsd@hillside.co.uk

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Calendar of Events

1993

19-23 Apr, International Free Software Conference (Development and Deployment), Moscow, Russia


29 Apr, Cambridge SUKUG, Tadpole Computers, Cambridge, UK

8-9 May, EurOpen Governing Board Meetings, London, UK

19-21 May, UNIX Convention, Milan, Italy (i2u)

15 Jun, SU2SG, Royal Free HSM, London, UK

21-25 Jun, USENIX, Cincinnati, Ohio, USA

8-9 Jul, European C++ User Group Conference, Munich, Germany

23-27 Aug, INTEROP - San Fransisco, CA, USA

13-15, Sep, HUNIX '93, Budapest, Hungary (HUUG)

14-16 Sep, JANET User Support Workshop, Manchester Metropolitan University, UK

7-8 Oct, Workshop "OSF Distributed Computing Environment" Karlsruhe, Germany

1-5 Nov, LISA VII, Monterey, California, USA

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