

User Groups, Conferences, and Workshops

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User groups go back to the beginning of “mass”-produced computers in 1953–54. In this column, I sketch that history, starting with mainframe groups that shared code and tips, up to the founding (and naming) of USENIX and its conferences and workshops.

The first commercial computer, the IBM 701, wasn’t completed until late in 1952. The first production machine was shipped from Poughkeepsie to IBM headquarters in Manhattan that December.

Prior to the 701, all computers—Aiken’s, Wilkes’, ENIAC, etc.—had been one-offs; each was *sui generis*. The 701 was a genuine breakthrough, and IBM built 18 of them! (By way of comparison, Apple announced that it had sold a total of 19 million Macs over fiscal 2014.) On May 7, 1954, the redesigned 701 was announced as the IBM 704.

It was more than merely a redesign.

The 704 was incompatible with the 701. It had 4096 words of magnetic-core memory. It had three index registers. It employed the full, 36-bit word (as opposed to the 701’s 18-bit words). It had floating-point arithmetic. It could perform 40,000 instructions per second. While deliveries began in late 1955, the operators (today we would think of them as system administrators) of the eighteen 701s were already fretful months earlier.

IBM itself had no solution to the problem. Although it had hosted a “training class” for customers of the 701 in August 1952, there were no courses, no textbooks, no user manuals. But several of the participants in the training class decided to continue to meet informally and discuss mutual problems.

The participants agreed to hold a second meeting after their own 701s had been installed. That second meeting was hosted by Douglas Aircraft in Santa Monica in August 1953. There were other informal meetings and then, following an IBM Symposium, the RAND Corporation hosted a meeting in Los Angeles in August 1955 of representatives from all 17 organizations that had ordered 704s. It was at this meeting that the world’s first computer user group was formed. It was called SHARE.

IBM encouraged the operators to meet, to discuss their problems, and to share their solutions to those problems. IBM funded the meetings as well as making a library of 300 computer programs available to members. SHARE, over 60 years later, is still the place where IBM customers gain information. (A number of the earliest contributed programs are still available.)

The importance of SHARE can be seen in the fact that in December 1955, early purchasers of Remington Rand’s ERA-1103A formed an organization called USE (Univac Scientific Exchange). In 1956, user groups for Burroughs and Bendix computers were formed, as well as IBM’s GUIDE, for users of their business computers. DECUS (DEC Users’ Society) was founded in 1961.

Why should you care? Because today user groups are a vital part of computing’s fabric, and it’s hard for me to imagine the industry developing without them. But note one thing: each group was hardware-centered and each was funded by a manufacturer.



UNIX Users

When Ken Thompson and Dennis Ritchie gave the first paper on the UNIX operating system in October 1973 at the ACM Symposium on Operating Systems Principles, there was no hardware manufacturer involved. In fact, it was only because an AT&T corporate lawyer interpreted the “consent decree’s” requirement that patents be revealed to include the experimental OS that Ken and Dennis were allowed to drive up the Hudson Valley to IBM’s new research lab at Yorktown Heights and speak to the nearly 200 attendees.

The immediate result was a (small) flurry of requests for the system.

Back to the lawyers.

It was decided that requests from academic institutions were OK. Within six months, Ken had cut and shipped two dozen DEC RK-05s. The RK-05 disk drive was a removable hard drive with a total capacity of 1.6 million 12-bit words. The drive was priced at \$5,100; “disk cartridges” cost about \$99 each. The software went out with the proviso: “As is, no support!” Or:

“no advertising
no support
no bug fixes”

Later,

“payment in advance”

was added. Shipped meant mail or UPS. In 1974 there were under 50 hosts on the ARPANET. Only in 1976 did that number reach 63.

Lou Katz, then at Columbia University, was one of the first to request the system. Lou didn’t have an RK-05 drive, so Ken cut a nine-track tape for him. Lou was also the one who realized that if AT&T wasn’t going to support the system, the only answer was for the users to band together. Ken Thompson, complicitously, provided Lou with the list of those who had requested disks. Lou and Mel Ferentz (then at Brooklyn College) sent out invitations, and about 20 people from a dozen institutions turned up for a meeting on May 15, 1974. Thompson was the sole scheduled speaker. DEC problems and tips and UNIX problems and tips were the rest of the agenda.

Twice as many folks attended the meeting of June 18, 1975. It was held at the City University of New York with Ira Fuchs making the arrangements. In October of that year, there were two meetings: on Monday the 27th at CUNY and on Friday the 31st at the Naval Postgraduate School (NPG) in Monterey, CA. Six months later, Bob Fabry organized a two-day meeting at UC Berkeley (February 27–28, 1976)—UNIX user meetings had gone bicoastal.

Lew Law of the Harvard Science Center ran the next two meetings in April and October. The October 1–3, 1976 sessions were the first to top 100 attendees. Five years later, the January 21–23, 1981 meeting organized by Tom Ferrin at UC San Francisco was the first to top 1000 participants.

UNIX News

The June 1975 meeting also gave rise to a purple-dittoed publication, *UNIX NEWS*, the first issue appearing on “June 30, 1975; circulation 37.” It was 11 pages long and contained an institutional mailing list of 33 sites, which revealed how far UNIX had spread in the 18 months since the first presentation: Herriott-Watt University (Scotland), Hebrew University of Jerusalem, Universite Catholique de Louvain (Belgium), and the Universities of Alberta, Saskatchewan, Toronto, and Waterloo (all Canada) were the non-US institutions.

UNIX NEWS Number 2 (October 8, 1975; circulation 60) announced the meeting at the NPG. Number 3 (February 10, 1976) announced meetings at Harvard and UC Berkeley; and Number 4 (March 19, 1976) carried a letter concerning the installation at the University of New South Wales from Dr. John Lions and a new mailing list, with 80 entries.

By September 1976 there were 138. Thirteen were in Canada; ten in the UK; four in Australia; three each in Israel and the Netherlands; and one each in Austria, Belgium, Germany, and Venezuela. The other 101 were in the US.

Unfortunately, the May/June 1977 issue of *UNIX NEWS* was its last. Beginning in July 1977, the publication was called *login*. Mel Ferentz had been phoned by an AT&T lawyer and been told that the group (it still had no name) could not use the term UNIX, as they lacked permission from Western Electric. The next meeting on the East Coast was May 24–28, 1978, at Columbia.

At that time, the 350 attendees (!) voted to set up a committee “with the purpose of proposing a set of bylaws for users of UNIX * installations. [* UNIX is a trademark of Bell Laboratories, Inc.]” There were five elected to the committee (Ferentz, Katz, Law, Mars Gralia from Johns Hopkins, and Peter Weiner, founder of Interactive Systems). “Law was elected chairman...the name of the committee shall be the USENIX ** Committee [** USENIX is not a trademark of Bell Laboratories, Inc].”

The users were already snarky.

Summer and Winter USENIX Conferences

The bicoastal nature of the organization and the academic calendar were the major determinants for the meetings: from 1979 to 2001, conferences were held in January in the West (Santa Monica, 1979; Boulder,



HISTORY

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1980; San Francisco, 1981; Santa Monica, 1982) and in June in the East (Toronto, 1979; Newark, DE, 1980). But there was Austin, TX, in June 1981.

USENIX had become increasingly research and academically inclined. As a counterweight, in 1980 a commercial body was formed: /usr/group. In 1983, there was a joint USENIX-/usr/group meeting in San Diego (January 26–28). Over 1800 attended. The next joint meeting was scheduled January 16–20, 1984, in Washington, D.C. Counting government employees, there were 8000 conference goers. And there was a major snowstorm. The result was chaos. (The June 1984 USENIX Conference was held in Salt Lake City, where a more reasonable 1500 attended.)

From 1987–1992, USENIX and /usr/group conferences were held in the same areas but different venues with buses shuttling between them. But this was hampered when January 1987 saw a second Washington, D.C. snowstorm. In August 1989, /usr/group changed its name to UniForum.

Workshops, Too

As installations and users increased, so did interests. In the early 1980s, graphics were a hot topic. In December 1984, USENIX held a “UNIX and Computer Graphics Workshop” in Monterey, CA. The papers were reprinted in the October/November 1985 issue of *login*. The same issue carried an announcement/program for a “Second Workshop on Computer Graphics,” to be held December 12–13, 1985.

In spring 1986, when I was interviewed for the post of Executive Director of USENIX, the two things the Board focused on were increasing the number of workshops and increasing publications. The first issue of *login*: (July/August 1986) under my reign of terror included a CFP for the Third Graphics Workshop. The Proceedings of the Second Workshop appeared later that summer.

In January 1987, USENIX issued a CFP for a Fourth Graphics Workshop and one for a “System Administration Workshop.” That workshop, chaired by Rob Kolstad and attended by about 50 members, is what grew into LISA. Also in 1987, there was a limited-attendance POSIX workshop, co-chaired by Kirk McKusick and John Quarterman.

USENIX was a hive of activity. It began with a small group at AT&T, but it proliferated through and was implemented by the academic and research user community, a group made up of and run by the users, not a manufacturer.





Publish and Present Your Work at USENIX Conferences

The program committees of the following conferences are seeking submissions. CiteSeer ranks the USENIX Conference Proceedings among the top ten highest-impact publication venues for computer science.

Get more details about these Calls at www.usenix.org/cfp.

URES '15: 2015 USENIX Release Engineering Summit November 13, 2015, Washington, D.C.

Submissions due: September 4, 2015

At the third USENIX Release Engineering Summit (URES '15), members of the release engineering community will come together to advance the state of release engineering, discuss its problems and solutions, and provide a forum for communication for members of this quickly growing field. We are excited that this year LISA attendees will be able to drop in on talks so we expect a large audience.

URES '15 is looking for relevant and engaging speakers for our event on November 13, 2015, in Washington, D.C. URES brings together people from all areas of release engineering—release engineers, developers, managers, site reliability engineers and others—to identify and help propose solutions for the most difficult problems in release engineering today.

NSDI '16: 13th USENIX Symposium on Networked Systems Design and Implementation

March 16-18, 2016, Santa Clara, CA

Paper titles and abstracts due: September 17, 2015

NSDI focuses on the design principles, implementation, and practical evaluation of networked and distributed systems. Our goal is to bring together researchers from across the networking and systems community to foster a broad approach to addressing overlapping research challenges.

NSDI provides a high quality, single-track forum for presenting results and discussing ideas that further the knowledge and understanding of the networked systems community as a whole, continue a significant research dialog, or push the architectural boundaries of network services.

FAST '16: 14th USENIX Conference on File and Storage Technologies

February 22-25, 2016, Santa Clara, CA

Submissions due: September 21, 2015

The 14th USENIX Conference on File and Storage Technologies (FAST '16) brings together storage-system researchers and practitioners to explore new directions in the design, implementation, evaluation, and deployment of storage systems. The program committee will interpret “storage systems” broadly; everything from low-level storage devices to information management is of interest. The conference will consist of technical presentations including refereed papers, Work-in-Progress (WiP) reports, poster sessions, and tutorials.

FAST accepts both full-length and short papers. Both types of submissions are reviewed to the same standards and differ primarily in the scope of the ideas expressed. Short papers are limited to half the space of full-length papers. The program committee will not accept a full paper on the condition that it is cut down to fit in the short paper page limit, nor will it invite short papers to be extended to full length. Submissions will be considered only in the category in which they are submitted.

www.usenix.org/cfp