

New Unix consortium unites and divides

New York City—It seemed that the multiple worlds of Unix had all started to move toward a single version of the popular operating system. But a newly announced group to adopt and set standards for computer operating environments threatens to throw Unix users back into confusion and conflict.

The Open Systems Foundation (OSF), announced May 17, is an international consortium of seven major computer makers. Its goal is to develop and release to its members a software environment based on a new version of Unix. The software is to be completely open: details of its inner workings will not be proprietary. Other makers will be urged to adopt the new system, to make it easier for users to link computers and software from multiple sources.

The founders are: Apollo Computer Inc., France's Groupe Bull, Digital Equipment Corp., Hewlett-Packard Co., IBM Corp., and West Germany's Nixdorf Computer AG and Siemens AG. The seven have committed \$90 million to fund the foundation's first three years; so far no permanent location has been chosen.

The OSF is a response to the increasingly close ties between AT&T Co. and Sun Microsystems Inc.,

Mountain View, Calif. AT&T said in January that it would buy up to 20 percent of Sun for some \$300 million. The two companies are jointly developing the next version of Unix, System V Release 4.0.

Up to now, Unix has been an open system that any company may license from AT&T. While it was developed in the early 1970s primarily for scientific and technical use, Unix has recently been promoted for general-purpose computing.

Needs and principles

At the introductory press conference, executives of the founding companies identified three user needs they said are not adequately addressed by current operating systems: portability (using the same software on computers from different companies), interoperability (making computer equipment from many companies work together), and scalability (running the same software on anything from personal workstations to supercomputers).

The OSF has seven principles to guide its mission. They include basing its software on "relevant industry standards" and making it independent of the hardware on which it runs; keeping its development process open to inputs and technol-

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Seven corporations front \$90 million for new Unix

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ogy from all sources—both within and outside OSF—without favoring any vendor; and promoting innovation through participation in research at universities and elsewhere.

To further this last goal, the OSF has established a research institute that is to “build relations and interfaces” with research organizations around the world and fund research in line with the OSF charter. Few details on the institute’s size or location have been settled, however.

IEEE group supported

The OSF said that it would incorporate three existing products into its software. The development base will be core technology from a future version of IBM’s AIX operating system—that company’s version of Unix. The structure of the new AIX is said to be modular, allowing extensions to be added for such special applications as real-time systems.

Secondly, OSF will support Posix (IEEE standard P1003.1), which defines the functions that must be provided by a Unix operating system interface and environment. The U.S. National Bureau of Standards is considering Posix for formal adoption, which would make it a requirement for many U.S. government computer systems. Last year, more than 50 companies endorsed Posix.

In addition, OSF intends to implement the standards formulated by the X/Open group for a common applications environment. The standards provide an interface between the operating system and applications software, allowing developers to write to the interface without concern about any unique features of computers on which their programs are to run.

Proprietary systems live

For all the talk about open systems, some OSF members made it clear at the press conference that they have no intention of reducing work on proprietary operating systems as well. IBM chairman John F. Akers said that while IBM has a “major commitment” to open systems, and while the company is “totally committed” to AIX and to OSF, it will invest heavily in proprietary systems.

“In no way,” Akers said, does OSF “diminish our commitment to proprietary environments,” including its upcoming Systems Applica-

tion Architecture, an applications software interface that is to allow programs to run under various IBM operating systems.

DEC president Kenneth H. Olsen said his company would follow essentially the same course with its own proprietary systems, adding that it will be “a long time” before open systems offer the advantages of proprietary systems. “Unix was never designed to be a commercial system,” Olsen said. Market analysts said, however, that the dual-pronged strategy may confuse users and dilute the appeal of an open-systems approach.

AT&T: cool but concerned

Following the OSF announcement, AT&T issued a statement that questioned the ability of OSF members to develop open systems given their ongoing support for proprietary systems. Robert Kavner, the new president of AT&T’s data systems group in Summit, N.J., called the OSF an “untested consortium composed of members with inherently conflicting motives.”

Kavner later said AT&T might spin off Unix into a separate development and licensing company, to allay fears that Unix was becoming less open. He said Unix needed “a couple more years of market acceptance” to support an independent company, but that he would consider steps along that path.

In the end, the OSF must prove that its members will contribute their foremost technology and research. It will have to issue software quickly while expanding its ranks. Most important, because it will take at least 18 months before any software is released to members, OSF will have to overcome the momentum that the forthcoming Unix System V release 4.0 is likely to gather.

Whether the OSF can do all that is debatable, analysts said. But they agreed that the establishment of OSF and its stated goals mark the emergence of Unix from its science-and-technology niche into the world of mainstream computing. It shows, they said, that Unix is now important enough to be fought over.

But OSF may also mark an increase in confusion and doubt among users. Despite lofty claims and ambitious goals, analysts say, the short-term effect of the Open Software Foundation may be to muddy the waters of compatibility still further.

—John Voelcker