A/UX 3.0 and UNIX Standards (9/94)

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TOPIC ---

Does A/UX 3.0 meet current UNIX standards?

DISCUSSION --

The discussion of standards can be confusing. Here are some key points to
remember in order to navigate through the market noise.

Many of the standards bodies are hoping to settle on a single UNIX system that
will have all the necessary components for "standard" UNIX. Unfortunately, the
industry is not there yet. AT&T is focusing in V.4.x, OSF is looking to OSF/1,
etc.

When discussing standards, focus on two questions:

- What features customers need

- What standards are really important to the customer, rather than
  discussing the philosophy of standards or "standards futures."

A/UX 3.0 contains the UNIX standards that customers are buying today.

A/UX is based on AT&T V.2.2 with Berkeley 4.3 enhancements. A/UX 3.0 is
compliant with all the major U.S. standards. It follows AT&T's System V
Interface Definition and passes the associated System V Verification Suite (SVVS
for SVID Issue 2, Volumes 1-2). It is also compliant with IEEE's POSIX
1003.1-1990, ISO 9945-1, and the U.S. Federal Government's FIPS 151-1.

	A/UX	V.3	V.4
SVID compliance	X	X	X
POSIX compliance	X		X
FIPS compliance	X		X

A/UX 3.0 also includes defacto standards, like TCP/IP and Berkeley Networking
Services, NFS and NIS (formerly called "Yellow Pages") from Sun Microsystems,

and Transcript utilities from Adobe as part of the A/UX 3.0 package. Apple also offers X Window System as an add-on product for A/UX 3.0.

A/UX 3.0 is standard UNIX. A/UX is based on AT&T V.2.2 with BSD 4.3 extensions.
 Later versions of AT&T UNIX, like V.3 or the emerging V.4, include very few additional features. For example, one of the key benefits of AT&T V.4 is the merger of the three most popular versions of UNIX on the market today: AT&T, BSD, and Xenix. A/UX has included BSD 4.3 extensions since its inception.

	A/UX	V.3	V.4
BSD compatibility	X		X
sockets	X		X
signals	X		X
job control	X		X
TCP/IP	X		X
Remote login	X		X
Remote execution	X		X
Telnet	X		X
FTP	X		X
SMTP	X		X
Mail	X	X	X
BSD Fast file system	X		X
vi	X	X	X
termcap/terminfo	X	X	X
C shell	X		X
Xenix compatibility		X	X

AT&T V.3 and V.4 are incremental releases. When asked, customers rarely require the few additional features which have been added with these releases.

	A/UX	V.3	V.4
AT&T features			
AT&T V.2.2 features	X	X	X
Bourne shell	X	X	X
Korn shell	X		X
Streams	X	X	X
TLI interface		X	X
AT&T file system	X	X	X
SCCS	X	X	X
Internationalization			
8 bit clean kernel	X	X	X
8 bit clean commands		*	*
16 bit char support			
Shared libraries	X	X	X
Preemptive multitasking	X	X	X
Demand paging	X	X	X
Mandatory record locking	X	X	X
COFF object file format	X	X	X
ELF object file format			X

In addition, A/UX includes many customers demanded standards, which have become popular on UNIX systems.

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                              A/UX     V.3 V.4
     Networking
         TCP/IP                 X        X    X
         NFS                    X             X
           RPC                  X             X
           XDR                  X             X
         RFS                             X    X
         NIS (Yellow Pages)     X
         SL/IP                  X
         AppleTalk              X
         OSI                   3rd
     C compiler                 X        X    X
     Fortran compiler           X        X
     X Window System            X             X
     Motif                     3rd
     XView                     3rd            X
     OPEN LOOK                 3rd
     MS-DOS                    3rd
     Macintosh                  X
     Security (C2, B1, CMW)    3rd
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While others are fighting the user-interface wars, Apple has remained objective,
providing access to all the major windowing options -- at the same time, and in
a consistent manner -- within Macintosh windows on the desktop.

Key for Tables:
   X   Full support
   *   Partial support
   3rd   Provided by 3rd parties

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