A/UX: Technical Questions & Answers (9/94)

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TOPIC ---

I need some additional information about A/UX support for X/Open XPG3 features
like Message Queues msgctl(), Semaphores, shared memory, and so on. I need
details in these areas:

 1 - dbx (source level debugger).

 2 - X.25 connection supported by "XTI" and libraries sockets. (What is
     "XTI"?)

 3 - Support of s-bit for owner and group.

 4 - System/library calls for disk "quota".

 5 - Support for GF_PATH, PF_PATH, and IN_PATH. (What are they in A/UX?)

 6 - Are there public domain programs, like emacs, plot, and shar,
     available?

 7 - What's the official name for the full screen standard editor in A/UX?

 8 - Is printer spooling oriented on System V or BSD UNIX?

 9 - Is there Multilevel security (DoD or Bell-La Padula with B-class
     certificate)?

10 - PHIGS and CGM under A/UX.

11 - Future support of System V version 4.

12 - What is the status of Oracle?

DISCUSSION ---

First, thanks to Richard Kefs (KEFS1), Apple Technical Partner Program Manager,
for some of the answers that are included in this document. Here is the
information you requested:

We should be fairly close to X/Open XPG3 compliance. The generic AT&T UNIX
System V Inter-Process Communication facilities, which include Message
Operations, Semaphores, and Shared Memory, are supported by A/UX.

 1 - dbx is not supported. CDB, the popular, powerful, source level C
     debugger from Third Eye Software, was available for A/UX from APDA.
     It may no longer be available. We suggest contacting Third Eye
     Software for more information.

 2 - We have several X.25 solutions under A/UX (Symicron, Mark Powell, (44)
     1-857-55-77), but I do not know what "XTI" is.

 3 - The set UID and GID bits are supported under A/UX.

 4 - It seems that the disk quota control for each individual user account
     is not enforced in A/UX, but the BSD file system does maintain the
     "low-water mark" of about 5% of free file system. In other words,
     users may not allocate disk space if there is less than 5% of the BSD
     file system space remaining.

 5 - We are unsure what the GF_PATH, PF_PATH, and IN_PATH constants or
     environment variables referred to.

 6 - emacs is available in the public domain.

 7 - Both the UNIX ("vi") and the Macintosh ("Cut-and-Paste") style of
     editors are supported. The Macintosh cut-and-paste text editor is
     called "TextEditor". A/UX supports TEXT cut-and-paste between
     different environments (UNIX, X Window System, and Macintosh
     applications), and GRAPHICS cut-and-paste between Macintosh
     applications.

 8 - Both System V and BSD UNIX printer spoolers are supported under A/UX
     3.0.

 9 - Regarding the secured A/UX system, AFSG (Apple Federal Systems Group)
     had an unreleased version of A/UX that complied with Federal
     Government requirements for a Class B1 level of trust on A/UX. This
     version was available to government customers only. You will need to
     contact a Federal Systems Group sales rep for further information.

     According to NCSC (National Computer Security Center), the evaluation
     criteria define seven levels of trust called"Classes". In increasing
     order of trustedness, they are: D, C1, C2, B1, B2, B3, and A1. D
     systems are not trusted. A1 systems are extremely resistant to
     compromise. C1 has "Discretionary Access Control", such as AppleShare.
     C2 adds Security Auditing and Control Object Reuse. B1 adds Security
     Labels and Mandatory Access Control. B2 adds Trusted Path, Convert
     Channel Control, and Modularity. B3 adds Trusted Recovery and Strict
     Isolation of Domains.

10 - If you are really looking for PHIGS and/or PEX (3D PHIGS/PHIGS+
     Extension for X) type of features, a third-party called Prior Data

Sciences in Canada may have the solution for A/UX.

        Prior Data Sciences
        240 Michael Cowpland Drive
        Kanata, Ontario, Canada K2M 1P6
        613-591-7235
        Telex: 053-3356
        Fax: 613-591-0343

11 - There are currently no plans to support System V.4.

12 - ORACLE7 Server for A/UX is available for use with A/UX.

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20 Sep 12994 - Updated and reviewed. Reformatted questions and answers.

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