A/UX 2.0: Slot Manager and Device Drivers (6/93)

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TOPIC ---

I want to use a NuBus accelerator card (MacDSP) with A/UX 2.0. I got it to
work under the Macintosh OS. However, when I try to get it to work under
A/UX, the software says that it cannot find the device driver for the DSP
NuBus card. What needs to be done to get A/UX to recognize this? Do I need
to write a custom device driver for A/UX? Why does Apple map serial
applications like MacTerminal correctly through the /dev/tty driver and not
map SCSI devices and/or NuBus boards (Slot Manager)?

DISCUSSION --

Yes, a NuBus card used under A/UX must have a device driver written for it,
or it will not be recognized as a valid device, and it will not function.
Actually, this is similar to what we have in the Macintosh OS. For example,
a .ENET driver is installed in the System file when you use the Macintosh
II EtherTalk NB card, and the Apple TokenTalk NB card requires A/ROSE to
function.

Therefore, although the Slot Manager provides the basic functionality of
recognizing and communicating with NuBus cards at system startup, it is
actually the manufacturers' software that initializes the cards and lets
the system use them. This software uses the Slot Manager to integrate the
cards into the Macintosh OS.

Although it provides excellent Macintosh OS compatibility, A/UX 2.0 cannot
provide this low-level hardware communication in the same fashion as the
Macintosh OS and remain UNIX. UNIX uses device drivers of a particular
format to communicate with hardware, and just as we have had to do with the
NuBus cards we support, manufacturers wishing their cards to work with A/UX
must either support Apple's drivers (as in third-party video cards) or
write their own.

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