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

Revised: 8/12/93  
Security: Everyone

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Article Created: 7 September 1990  
Article Reviewed/Updated: 17 June 1993

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.

Article Change History:

17 Jun 1993 - Retitled to show A/UX 2.0 in title.

07 Sep 1993 - Reviewed for technical accuracy.

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Tech Info Library Article Number:6091