Apple II
Technical Notes

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Apple IIGS
#201: Identifying Emulators

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This Note describes how to identify whether or not a program is running on an Apple IIGS emulator, and if so, which one. At this point, only the *Bernie][the Rescue* and *Sweet16* emulators are documented here. If you have information on identifying other Apple IIGS emulators, please contact a2pro@syndicomm.com.

Identifying *Bernie][the Rescue* or *Sweet16*

Bernie][the Rescue and *Sweet16* not only let you determine whether or not your code is running on an Apple IIgs emulated by one of these programs, but also the version number of the emulator; this lets applications determine whether or not certain special features are available.

To identify Bernie or Sweet16, write once to $00/C04F. Then read from $00/C04F. If the resulting byte is $FE (short for F.E. Systems, the publishers of *Bernie][the Rescue*), your program is running on a Bernie-emulated system; if the resulting byte is $16, the emulator is *Sweet16*. Read a second time from $00/C04F to obtain a byte containing the emulator's version number.

Sample Code

```
        sep $30
        sta >$00/C04F  ;Activate the Bernie/Sweet16 test
        lda >$00/C04F  ;Get the ID byte
        cmp #$FE        ;Is it Bernie?
        bne notBern    ;-> no
        lda >$00/C04F  ;Get Bernie version number
        cmp #$20        ;Is it at least version 2.0?
        blt notBern    ;-> no

* It's Bernie 2.0 or greater

        ... do extra stuff ...

notBern rep $30
```

The "extra stuff" can be any Bernie-specific functionality.

Note: Because of how the Monitor works, this method doesn't work reliably if you just access the registers using Monitor commands. Fortunately, if you're in the Monitor, you already know whether or not you're using an emulator.