

NAME

vm86old, vm86 – enter virtual 8086 mode

LIBRARY

Standard C library (*libc*, *-lc*)

SYNOPSIS

```
#include <sys/vm86.h>
```

```
int vm86old(struct vm86_struct *info);
```

```
int vm86(unsigned long fn, struct vm86plus_struct *v86);
```

DESCRIPTION

The system call **vm86()** was introduced in Linux 0.97p2. In Linux 2.1.15 and 2.0.28, it was renamed to **vm86old()**, and a new **vm86()** was introduced. The definition of *struct vm86_struct* was changed in 1.1.8 and 1.1.9.

These calls cause the process to enter VM86 mode (virtual-8086 in Intel literature), and are used by **dosemu**.

VM86 mode is an emulation of real mode within a protected mode task.

RETURN VALUE

On success, zero is returned. On error, *-1* is returned, and *errno* is set to indicate the error.

ERRORS**EFAULT**

This return value is specific to i386 and indicates a problem with getting user-space data.

ENOSYS

This return value indicates the call is not implemented on the present architecture.

EPERM

Saved kernel stack exists. (This is a kernel sanity check; the saved stack should exist only within vm86 mode itself.)

STANDARDS

This call is specific to Linux on 32-bit Intel processors, and should not be used in programs intended to be portable.