

**NAME**

mem, kmem, port – system memory, kernel memory and system ports

**DESCRIPTION**

**mem** is a character device file that is an image of the main memory of the computer. It may be used, for example, to examine (and even patch) the system.

Byte addresses in **mem** are interpreted as physical memory addresses. References to nonexistent locations cause errors to be returned.

Examining and patching is likely to lead to unexpected results when read-only or write-only bits are present.

It is typically created by:

```
mknod -m 660 /dev/mem c 1 1
chown root:kmem /dev/mem
```

The file **kmem** is the same as **mem**, except that the kernel virtual memory rather than physical memory is accessed.

It is typically created by:

```
mknod -m 640 /dev/kmem c 1 2
chown root:kmem /dev/kmem
```

**port** is similar to **mem**, but the I/O ports are accessed.

It is typically created by:

```
mknod -m 660 /dev/port c 1 4
chown root:mem /dev/port
```

**FILES**

*/dev/mem*  
*/dev/kmem*  
*/dev/port*

**SEE ALSO**

**chown**(1), **mknod**(1), **ioperm**(2)

**COLOPHON**

This page is part of release 3.22 of the Linux *man-pages* project. A description of the project, and information about reporting bugs, can be found at <http://www.kernel.org/doc/man-pages/>.