

```
open ("/mnt/tmp/test", O_RDONLY)
```

User Mode Program

```
syscall3 (__NR_open, "/mnt/tmp/test", O_RDONLY)
```

Library, making System Call

Transition from User Mode to Kernel Mode

```
syscall_open (struct regs*)
```

System Call Handler

```
u_open ("/mnt/tmp/test", O_RDONLY)
```

```
get_dev_and_path ("/mnt/tmp/test", &dev, &fs,  
                  &localpath)
```

VFS Layer. dev and fs decide  
what filesystem and what  
device driver to use

```
mx_open ("/tmp/test", DEV_FD1, O_RDONLY)
```

Minix Subsystem, facing the  
VFS Layer

```
mx_pathname_to_ino (DEV_FD1, ...)  
mx_read_dir_entry (DEV_FD1, ...)  
read_inode (DEV_FD1, ...)
```

Minix Subsystem,  
Implementation

```
readblock (DEV_FD1, blockno, &block)
```

Generic Media Access

```
readblock_fd (1, blockno, &block)
```

Floppy Driver, facing  
Generic Media Access Layer

```
fdc_read_sector (1, blockno*2, &block)  
fdc_read_sector (1, blockno*2 +1, &block +512)
```

Floppy Driver,  
Implementation