Linux Programmer's Guide Contents Page

Home Operating Systems Linux

Linux Signals

1. Introduction

| System | Signals | | | | |
|----------------------------------|--------------------|-------|---|--|--|
| Information 2. Inter-Process | Linux Signals are: | | | | |
| Communication 3. Signals | Signal Name | Numbe | r Description | | |
| Programming in Various | SIGHUP | 1 | Hangup (POSIX) | | |
| | SIGINT | 2 | Terminal interrupt (ANSI) | | |
| Environments | SIGQUIT | 3 | Terminal quit (POSIX) | | |
| | SIGILL | 4 | Illegal instruction (ANSI) | | |
| 4. Script Programming | SIGTRAP | 5 | Trace trap (POSIX) | | |
| 1. <u>Script</u> Variables | SIGIOT | 6 | IOT Trap (4.2 BSD) | | |
| 2. Test | SIGBUS | 7 | BUS error (4.2 BSD) | | |
| Conditions | SIGFPE | 8 | Floating point exception (ANSI) | | |
| 3. Control and | SIGKILL | 9 | Kill(can't be caught or ignored) (POSIX) | | |
| Iteration | SIGUSR1 | 10 | User defined signal 1 (POSIX) | | |
| 4. <u>Commonly</u> used | SIGSEGV | 11 | Invalid memory segment access (ANSI) | | |
| <u>useu</u> <u>Programs</u> | SIGUSR2 | 12 | User defined signal 2 (POSIX) | | |
| 5. Shell Capabilities | SIGPIPE | 13 | Write on a pipe with no reader, Broken pipe (POSIX) | | |
| 6. <u>Example</u> <u>looping</u> | SIGALRM | 14 | Alarm clock (POSIX) | | |

| | script 7. Example | SIGTERM | 15 | Termination (ANSI) |
|-------------------|------------------------------|----------------|----------|--|
| | using | SIGSTKFLT | 16 | Stack fault |
| | Variables 8. Example | SIGCHLD | 17 | Child process has stopped or exited, changed (POSIX) |
| | working | SIGCONT | 18 | Continue executing, if stopped (POSIX) |
| | with files 9. Example | SIGSTOP | 19 | Stop executing(can't be caught or ignored) (POSIX) |
| | <u>install</u> | SIGTSTP | 20 | Terminal stop signal (POSIX) |
| 5. <u>C and C</u> | | SIGTTIN | 21 | Background process trying to read, from TTY (POSIX) |
| <u>Progran</u> | 1. <u>POSIX</u> System | SIGTTOU | 22 | Background process trying to write, to TTY (POSIX) |
| | <u>Capabilities</u> | SIGURG | 23 | Urgent condition on socket (4.2 BSD) |
| | 2. More | SIGXCPU | 24 | CPU limit exceeded (4.2 BSD) |
| | POSIX | SIGXFSZ | 25 | File size limit exceeded (4.2 BSD) |
| | 3. <u>Threads</u> | SIGVTALRM | 26 | Virtual alarm clock (4.2 BSD) |
| | 4. <u>Mutexes</u> | SIGPROF | 27 | Profiling alarm clock (4.2 BSD) |
| | 5. <u>An example</u> viewmod | SIGWINCH | 28 | Window size change (4.3 BSD, Sun) |
| | program | SIGIO | 29 | I/O now possible (4.2 BSD) |
| | 6. An example | SIGPWR | 30 | Power failure restart (System V) |
| | <u>serial</u> | | | |
| CVD | <u>program</u> | | | |
| 6 X Progra | amming | Ac noted above | TO Droce | sees can ignore block or catch all signals ever |

6. X Programming

7. Debugging

8. Credits

<u>Linux</u> <u>Operating Systems</u> As noted above, processes can ignore, block, or catch all signals except SIGSTOP and SIGKILL. If a process catches a signal, it means that it includes code that will take appropriate action when the signal is received. If the signal is not caught by the process, the kernel will take default action for the signal.

<u>Home</u>

FIFOs

FIFOs are permanent objects and can be created using the mkfifo(1) or mknod(1) command. Inside the program, the FIFO can be created using the mknod command, then opened and read from or written to just like a normal file. The FIFO is normally in blocking mode when attempting to perform read operations.

Linux Programmer's Guide Contents Page