

Operating Systems

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1. SIGHUP- HUP stands for Hangup and in modern systems the emphasis on this signal usually indicates that virtual terminal connection has closed
2. SIGINT- signals for interrupts from the user such as CTRL-C or Delete this signal is sent to the process controlling execution
3. SIGQUIT- sends process to an appropriate control terminal for users request the process perform a core dump
4. SIGILL- illegal instruction, process is sent to a process when it attempts to execute a malformed, or privileged instruction.
5. SIGTRAP- Trace Trap for signals, used when the signal is being sent to a debugger and is traced from that debugger
6. SIGIOT IOT stands for input/output this is usually sent from the process itself to abort the process
7. SIGBUS- This is sent to a process when there is a BUS error. Reasons for this error include incorrect memory addressing with non-physical addresses
8. SIGFPE- This signal is triggered from Floating point exceptions, mainly errors such as division by zero and other incorrect arithmetic operations
9. SIGKILL - Signals the OS to forcefully terminate a process, before taking any other tasks
10. SIGUSR1- Used for defining signals for custom handling

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11. SIGSEGV- Sent to a process when it makes an invalid memory reference, such as a segmentation fault or any segmentation violations
 12. SIGUSR2- User-Defined Secondary Signal. This is the second user signal which can be designated for user defined error handling and catching.
 13. SIGPIPE- This signal is given when there is an unsuccessful connection to another process with the pipe method.
 14. SIGALRM- ALRM signal is given when the process has failed to correctly process the alarm() method of a process in a timely manner
 15. SIGTERM- TERM is a signal sent to a process to request its termination. But unlike SIGKILL it can be ignored by the process, it allows to save state of the application if needed.
 16. SIGCHLD- When a CHLD process terminates, or is interrupted or resumes after being interrupted. It is often used to instruct the operating system to clean processes and reduce resource utilization without an explicit call to the wait system.
 17. SIGCONT- Signals Processes to continue executing after the is Set to the SIGSTOP state
 18. SIGSTOP- Signals the OS to stop the process for later resuming, it should be noted that it is almost like pausing the processes.
 19. SIGTSTP- Temporarily Stops a process commonly thrown by CTRL-Z, unlike SIGSTOP this can be ignored by the process if programmed to do so.
 20. SIGTTIN- Sent to a process when it attempts to read from the tty. Daemons cannot receive this signal and should never handle this signal
 21. SIGTTOU- This is sent to a process when it attempts to write from the tty while the process is running in the background
 22. SIGURG- This is sent to a process when a socket has urgent data needed to be available to be read
 23. SIGXCPU-this is sent to the process when the process's CPU has used up the CPU for a duration that exceeds the user-predetermined value. When the

process receives this signal the process is given a chance to exit gracefully and maintain state properties

24. SIGXFSZ- XFSZ is sent to a process when it exceeds the maximum growth of a file on the allowed size

25. SIGVTALRM- This is sent to a process to execute the processes alarm() function which by default on most signals should kill the signal process when the virtual alarm clock is called on it.

26. SIGPROF- Sent to a signal and terminates the process in the case of process specific handling. This Signal indicates expiration of a timer that measures CPU used by the current process.

27. SIGWINCH- Sent to a process when the terminal window size is changed.

28. SIGIO- Signal that is sent to the process signaling that IO is possible from the process and the connection

29. SIGPWR- Signal sent to the process to indicate power failure. Siglost is another form of POWER FAILURE signal for a process