

trap Man Page - Linux

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Execute a command when the shell receives a signal.

Syntax

```
trap [-lp] [[arg] sigspec ...]
```

Key

- p Display signal commands (or trap commands for *sigspec*)
- l Print a list of signal names and their corresponding numbers.
- arg The command to be executed when the shell receives signal(s) *sigspec*.

If *arg* is absent (and there is a single *sigspec*) or -, each specified signal is reset to its original disposition (the value it had upon entrance to the shell).

If *arg* is the null string the signal specified by each *sigspec* is ignored by the shell and by the commands it invokes.

If *arg* is not present and -p has been supplied, then the trap commands associated with each *sigspec* are displayed. If no arguments are supplied or if only -p is given, trap prints the list of commands associated with each signal.

Each *sigspec* is either a signal name, or a signal number. Signal names are case insensitive and the SIG prefix is optional.

| Number | SIG | Meaning |
|--------|---------|------------------------------|
| 0 | 0 | On exit from shell |
| 1 | SIGHUP | Clean tidyup |
| 2 | SIGINT | Interrupt (CTRL-C) |
| 3 | SIGQUIT | Quit |
| 6 | SIGABRT | Cancel |
| 9 | SIGKILL | Die Now (cannot be trap'ped) |
| 14 | SIGALRM | Alarm Clock |
| 15 | SIGTERM | Terminate |

If a *sigspec* is EXIT (0) the command *arg* is executed on exit from the shell.

If a *sigspec* is DEBUG, the command *arg* is executed before every simple command, for command, case command, select command, every arithmetic for command, and before the first command executes in a shell function (see SHELL GRAMMAR). Refer to the description of the extdebug option to the shopt builtin for details of its effect on the DEBUG trap.

If a *sigspec* is ERR, the command *arg* is executed whenever a simple command has a non-zero exit status, subject to the following conditions. The ERR trap is not executed if the failed command is part of the command list immediately following a [while](#) or until keyword, part of the test in an if statement, part of a && or || list, or if the command's return value is being inverted via !.

These are the same conditions obeyed by the errexit option.

If a *sigspec* is RETURN, the command *arg* is executed each time a shell function or a script executed with the . or source builtins finishes executing.

Signals ignored upon entry to the shell cannot be trapped or reset.

Trapped signals that are not being ignored are reset to their original values in a child process when it is created.

When Bash receives a signal for which a trap has been set while waiting for a command to complete, the trap will not be executed until the command completes. When Bash is waiting for an asynchronous command via the [wait](#) built-in, the reception of a signal for which a trap has been set will cause the wait built-in to return immediately with an exit status greater than 128, immediately after which the trap is executed.

The return status is False if any *sigspec* is invalid; otherwise trap returns True.

This is a BASH shell builtin, to display your local syntax from the bash prompt type: help trap

Examples

```
#!/bin/bash

$ SCRATCH=$(mktemp -t tmp.XXXXXXXXXX)

trap cleanup 1 2 3 6

cleanup()
{
  echo "Cleaning up temp files:"
  rm -rf "$SCRATCH"
  exit 1
}

### continue main script below
```

“When elephant steps on a trap, no more trap” ~ African Proverb

Related Linux commands

[exec](#) - Execute a command.

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Source: <https://ss64.com/bash/trap.html>