NAME

trap, onintr – shell built-in functions to respond to (hardware) signals

SYNOPSIS

sh

trap [*argument* *n* [*n2* . . .]]

csh

onintr [–| *label*]

ksh

† **trap** [*arg sig* [*sig2* . . .]]

DESCRIPTION

sh

The **trap** command *argument* is to be read and executed when the shell receives numeric or symbolic signal(s) (*n*). (Note: *argument* is scanned once when the trap is set and once when the trap is taken.) Trap commands are executed in order of signal number or corresponding symbolic names. Any attempt to set a trap on a signal that was ignored on entry to the current shell is ineffective. An attempt to trap on signal 11 (memory fault) produces an error. If *argument* is absent all trap(s) *n* are reset to their original values. If *argument* is the null string this signal is ignored by the shell and by the commands it invokes. If *n* is **0** the command *argument* is executed on exit from the shell. The **trap** command with no arguments prints a list of commands associated with each signal number.

csh

onintr controls the action of the shell on interrupts. With no arguments, **onintr** restores the default action of the shell on interrupts. (The shell terminates shell scripts and returns to the terminal command input level). With the – argument, the shell ignores all interrupts. With a *label* argument, the shell executes a **goto** *label* when an interrupt is received or a child process terminates because it was interrupted.

ksh

trap uses *arg* as a command to be read and executed when the shell receives signal(s) *sig*. (Note that *arg* is scanned once when the trap is set and once when the trap is taken.) Each *sig* can be given as a number or as the name of the signal. **trap** commands are executed in order of signal number. Any attempt to set a trap on a signal that was ignored on entry to the current shell is ineffective. If *arg* is omitted or is –, then the trap(s) for each *sig* are reset to their original values. If *arg* is the null (the empty string, e.g., "") string then this signal is ignored by the shell and by the commands it invokes. If *sig* is **ERR** then *arg* will be executed whenever a command has a non-zero exit status. If *sig* is **DEBUG** then *arg* will be executed after each command. If *sig* is **0** or **EXIT** and the **trap** statement is executed inside the body of a function, then the command *arg* is executed after the function completes. If *sig* is **0** or **EXIT** for a **trap** set outside any function then the command *arg* is executed on exit from the shell. The **trap** command with no arguments prints a list of commands associated with each signal number.

On this man page, **ksh**(1) commands that are preceded by one or two † (daggers) are treated specially in the following ways:

1. Variable assignment lists preceding the command remain in effect when the command completes.
2. I/O redirections are processed after variable assignments.
3. Errors cause a script that contains them to abort.
4. Words, following a command preceded by †† that are in the format of a variable assignment, are expanded with the same rules as a variable assignment. This means that tilde substitution is performed after the **=** sign and word splitting and file name generation are not performed.

SEE ALSO

csh(1), **exit**(1), **ksh**(1), **sh**(1)