http://www.manpagez.com/man/1/ksh/

[[*expression* **]]**
: Evaluates *expression* and returns a zero exit status when *expression* is true. See *Conditional Expressions* below, for a description of *expression*.

Conditional Expressions.

A *conditional expression* is used with the **[[** compound command to test attributes of files and to compare strings. Field splitting and file name generation are not performed on the words between **[[** and **]]**. Each expression can be constructed from one or more of the following unary or binary expressions:

string True, if *string* is not null.

-a *file*
    Same as **-e** below. This is obsolete.

-b *file*
    True, if *file* exists and is a block special file.

-c *file*
    True, if *file* exists and is a character special file.

-d *file*
    True, if *file* exists and is a directory.

-e *file*
    True, if *file* exists.

-f *file*
    True, if *file* exists and is an ordinary file.

-g *file*
    True, if *file* exists and it has its setgid bit set.

-k *file*
    True, if *file* exists and it has its sticky bit set.

-n *string*
    True, if length of *string* is non-zero.

-o ?*option*
    True, if option named *option* is a valid option name.

-o *option*
    True, if option named *option* is on.

-p *file*
    True, if *file* exists and is a fifo special file or a pipe.

-r *file*
: True, if *file* exists and is readable by current process.

-s *file*
: True, if *file* exists and has size greater than zero.

-t *fildes*
: True, if file descriptor number *fildes* is open and associated with a terminal device.

-u *file*
: True, if *file* exists and it has its setuid bit set.

-v *name*
: True, if variable *name* is a valid variable name and is set.

-w *file*
: True, if *file* exists and is writable by current process.

-x *file*
: True, if *file* exists and is executable by current process. If *file* exists and is a directory, then true if the current process has permission to search in the directory.

-z *string*
: True, if length of *string* is zero.

-L *file*
: True, if *file* exists and is a symbolic link.

-h *file*
: True, if *file* exists and is a symbolic link.

-N *file*
: True, if *file* exists and the modification time is greater than the last access time.

-O *file*
: True, if *file* exists and is owned by the effective user id of this process.

-G *file*
: True, if *file* exists and its group matches the effective group id of this process.

-R *name*
: True if variable *name* is a name reference.

-S *file*
: True, if *file* exists and is a socket.

file1 **-nt** *file2*
: True, if *file1* exists and *file2* does not, or *file1* is newer than

file2.

file1 **-ot** *file2*
: True, if *file2* exists and *file1* does not, or *file1* is older than *file2*.

file1 **-ef** *file2*
: True, if *file1* and *file2* exist and refer to the same file.

string **==** *pattern*
: True, if *string* matches *pattern*. Any part of *pattern* can be quoted to cause it to be matched as a string. With a successful match to a pattern, the **.sh.match** array variable will contain the match and sub-pattern matches.

string **=** *pattern*
: Same as **==** above, but is obsolete.

string **!=** *pattern*
: True, if *string* does not match *pattern*. When the *string* matches the *pattern* the **.sh.match** array variable will contain the match and sub-pattern matches.

string **=~** *ere*
: True if *string* matches the pattern **~(E)***ere* where *ere* is an extended regular expression.

string1 **<** *string2*
: True, if *string1* comes before *string2* based on ASCII value of their characters.

string1 **>** *string2*
: True, if *string1* comes after *string2* based on ASCII value of their characters.

The following obsolete arithmetic comparisons are also permitted:

exp1 **-eq** *exp2*
: True, if *exp1* is equal to *exp2*.

exp1 **-ne** *exp2*
: True, if *exp1* is not equal to *exp2*.

exp1 **-lt** *exp2*
: True, if *exp1* is less than *exp2*.

exp1 **-gt** *exp2*
: True, if *exp1* is greater than *exp2*.

exp1 **-le** *exp2*
: True, if *exp1* is less than or equal to *exp2*.

exp1 **-ge** *exp2*

True, if *exp1* is greater than or equal to *exp2*.

In each of the above expressions, if *file* is of the form **/dev/fd/***n*, where *n* is an integer, then the test is applied to the open file whose descriptor number is *n*.

A compound expression can be constructed from these primitives by using any of the following, listed in decreasing order of precedence.

(*expression***)**
True, if *expression* is true. Used to group expressions.

! *expression*
True if *expression* is false.

expression1 **&&** *expression2*
True, if *expression1* and *expression2* are both true.

expression1 **||** *expression2*
True, if either *expression1* or *expression2* is true.