

NAME

atf-check - executes a command and analyzes its results

SYNOPSIS

atf-check [-s *qual:value*] [-o *action:arg ...*] [-e *action:arg ...*] [-x] *command*

DESCRIPTION

atf-check executes a given command and analyzes its results, including exit code, stdout and stderr.

Test cases must use atf-sh(3)'s atf_check builtin function instead of calling this utility directly.

In the first synopsis form, **atf-check** will execute the provided command and apply checks specified by arguments. By default it will act as if it was run with **-s exit:0 -o empty -e empty**. Multiple checks for the same output channel are allowed and, if specified, their results will be combined as a logical and (meaning that the output must match all the provided checks).

In the second synopsis form, **atf-check** will print information about all supported options and their purpose.

The following options are available:

-s *qual:value* Analyzes termination status. Must be one of:

- exit:<value>* checks that the program exited cleanly and that its exit status is equal to *value*. The exit code can be omitted altogether, in which case any clean exit is accepted.
- ignore* ignores the exit check.
- signal:<value>* checks that the program exited due to a signal and that the signal that terminated it is *value*. The signal can be specified both as a number or as a name, or it can also be omitted altogether, in which case any signal is accepted.

Most of these checkers can be prefixed by the 'not-' string, which effectively reverses the check.

-o *action:arg* Analyzes standard output. Must be one of:

- empty* checks that stdout is empty
- ignore* ignores stdout
- file:<path>* compares stdout with given file
- inline:<value>* compares stdout with inline value
- match:<regexp>*

looks for a regular expression in stdout
save: <path> saves stdout to given file

Most of these checkers can be prefixed by the ‘not-’ string, which effectively reverses the check.

- e** *action:arg* Analyzes standard error (syntax identical to above)
- x** Executes *command* as a shell command line, executing it with the system shell defined by *ATF_SHELL*. You should avoid using this flag if at all possible to prevent shell quoting issues.
- r** *timeout[:interval]* Repeats failed checks until the *timeout* (in seconds) expires. If unspecified, the default *interval* (in milliseconds) is 50 ms. This can be used to wait for an expected update to the contents of a file.

ENVIRONMENT

ATF_SHELL Path to the system shell to be used when the **-x** is given to run commands.

EXIT STATUS

atf-check exits 0 on success, and other (unspecified) value on failure.

EXAMPLES

The following are sample invocations from within a test case. Note that we use the **atf_check** function provided by `atf-sh(3)` instead of executing **atf-check** directly:

```
# Exit code 0, nothing on stdout/stderr
atf_check 'true'

# Typical usage if failure is expected
atf_check -s not-exit:0 'false'

# Checking stdout/stderr
echo foobar >expout
atf_check -o file:expout -e inline:"xx\tyy\n" \
  'echo foobar ; printf "xx\tyy\n" >&2'

# Checking for a crash
atf_check -s signal:segv my_program
```

```
# Combined checks
atf_check -o match:foo -o not-match:bar echo foo baz
```

```
# Wait 5 seconds for a line to show up in a file
( sleep 2 ; echo "testing 123" > $test_path ) &
atf-check -o ignore -e ignore -s exit:0 -r 5 \
  grep "testing 123" $test_path
```

SEE ALSO

atf-sh(1)