Malware Analysis Report For elf-Linux-hppa-bash

Binary Type

ELF (Executable and Linkable Format). (Approved)

Analyzing File

- **File Name**: elf-Linux-hppa-bash
- **File Extension**:
- **File Type**: ELF (Executable and Linkable Format).
- **MD5 Hash**: 6031df417ad2e8e279bab331597ad32b
- **SHA256 Hash**: a50a8b9f592606816df0f4139d5f56a400f62535ed48085757b3a1d1925d211e

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File Identification

File detected as a valid Linux executable.

ELF File Analysis

ELF File Analysis: True

ELF File Imports

- libncurses.so.5
- libdl.so.2
- libc.so.6

ELF File Exports

No Exported functions were found.

String Analysis

ASCII Strings

- /lib/ld.so.1
-)l*5dyv,
- uus F|
- X0PCs0
- ac.'6Q
- H\jh"
- 'Q2]*;'
- PuMc7d~
- *_LqV;u
- S+,CjPF
- $Ri;G>GM$
-)|$o>>M

- q:=|v~
- F^(`AO"
- libncurses.so.5
- *GLOBAL*OFFSET*TABLE*
- *Jv*RegisterClasses
- tgetflag
- tgetent
- **gmon_start**
- tgetnum
- tgetstr
- libdl.so.2
- dlopen
- dlclose
- dlerror
- libc.so.6
- setuid
- socket
- fflush
- strcpy
- setgrent
- pathconf
- *IO*putc
- setlocale
- mbrtowc
- towlower
- gai_strerror
- strsignal
- strncmp
- getpwent
- strrchr
- setservent
- regexec
- dcgettext
- wcrtomb
- getpwuid
- closedir
- strncpy
- sigprocmask
- regfree
- getgrent
- unlink
- putchar
- select
- towupper
- strpbrk
- getpid
- strftime
- iswalnum
- iswlower
- strtod
- _*ctype*get*mb*cur_max
- strtol

- endpwent
- isatty
- getpwnam
- getppid
- wcschr
- iswctype
- __mbrlen
- sigemptyset
- getaddrinfo
- memset
- strstr
- _*errno*location
- tcsetattr
- confstr
- memcmp
- endgrent
- mbtowc
- ttyname
- clearerr
- unsetenv
- __fxstat64
- vsnprintf
- sigaddset
- iswupper
- putenv
- __sigsetjmp
- stdout
- getrusage
- _*strtoll*internal
- strnlen
- memcpy
- fclose
- tcsetpgrp
- wcscmp
- strtoul
- siglongjmp
- killpg
- strcat
- strcasecmp
- setpgid
- getpeername
- mbsinit
- getgid
- asprintf
- __lxstat64
- opendir
- __xstat64
- _*ctype*b_loc
- regcomp
- wcwidth
- stderr
- sigdelset

- setrlimit64
- group_member
- getgroups
- getuid
- readlink
- getegid
- strncasecmp
- fileno
- gethostname
- getcwd
- fwrite
- gettimeofday
- sigaction
- geteuid
- waitpid
- localtime
- lseek64
- fdopen
- readdir64
- tcgetattr
- _*ctype*toupper_loc
- _*ctype*tolower_loc
- freeaddrinfo
- setvbuf
- wcscoll
- getrlimit64
- wcsdup
- getdtablesize
- memmove
- fopen64
- endservent
- wcsrtombs
- bindtextdomain
- setgid
- _*strtoull*internal
- tcgetpgrp
- _*libc*start_main
- setpwent
- ferror
- wcslen
- strcoll
- vfprintf
- wcsncmp
- sysconf
- getservent
- __environ
- _edata
- _*bss*start
- initialize*job*control
- sys_error
- maybe*make*export_env
- emacs*meta*keymap

- eval_doc
- dispose_word
- sh*double*quote
- *rl*clear_screen
- rl*completion*query_items
- *rl*term_IC
- last*command*exit_signal
- *rl*insert_typein
- times_builtin
- rl*copy*text
- last*command*subst_pid
- ifs_firstc
- *rl*find*completion*word
- get*history*event
- rl*vi*yank_to
- prompt*string*pointer
- *rl*disable*tty*signals
- get*job*by_pid
- list*minus*o_opts
- make*select*command
- emacs*standard*keymap
- disable*priv*mode
- rl*tty*status
- rl*tilde*expand
- builtin_doc
- *rl*nsearch_callback
- current*host*name
- sh_canonpath
- put*command*name*into*env
- discard*unwind*frame
- running*under*emacs
- dequote_string
- posix*readline*initialize
- string*list*dollar_star
- execute*command*internal
- printf_builtin
- *rl*init*line*state
- rl*copy*forward_word
- sh*contains*shell_metas
- sh_exit
- named*function*string
- it_groups
- reader_loop
- sv_ignoreeof
- tt_setonechar
- readline*internal*char
- no_args
- update*export*env_inplace
- *rl*erase*entire*line
- prog*completion*enabled
- sccs_version

- readline*top*level
- extract*array*assignment_list
- rl*backward*word
- print_command
- local_builtin
- progcomp_size
- rl*transpose*chars
- the*current*working_directory
- ansiexpand
- *rl*keyseq*cxt*alloc
- rl*kill*word
- indirection*level*string
- array_dispose
- rl*tty*unset*default*bindings
- set*signal*handler
- make*subshell*command
- arith*for*doc
- last*command*exit_value
- sv_histignore
- rl*completion*mode
- kill*current*pipeline
- history_base
- dstack
- polite*directory*format
- xdupmbstowcs
- make*builtin*argv
- rl*vi*start_inserting
- bash*add*history
- enable_doc
- logout_doc
- *rl*input_queued
- *rl*parsing*conditionalized*out
- strlist*to*word_list
- rl*overwrite*mode
- remember_args
- dispose*cond*node
- *rl*strip_prompt
- rl*filename*quote_characters
- while_doc
- new*var*context
- set*bash*input_fd
- substring
- bash*tilde*find_word
- rl*backward*char_search
- last*shell*builtin
- history_length
- _*libc*csu_fini
- rl_initialize
- list_opttype
- number*of*args
- prog_completes

- array*dispose*element
- rl*forward*char
- make_word
- set*current*prompt_level
- rl*vi*append_mode
- list*rest*of_args
- source_builtin
- rl*completion*type
- builtin_error
- *rl*get*screen*size
- bind*variable*value
- pushd_builtin
- xpg_echo
- remove_history
- *rl*enable*meta*key
- *rl*convert*meta*chars*to*ascii
- rl*vi*redo
- tt_setnocanon
- get*variable*value
- *rl*term_im
- rl*gnu*readline_p
- free*buffered*stream
- rl*funmap*names
- shopt_setopt
- sh_readonly
- *rl*set*mark*at_pos
- it_signals
- *rl*savestring
- shell_execve
- wlcache
- sv_histchars
- continue_doc
- pat_subst
- brace*arg*separator
- start_pipeline
- rl_dispatching
- rl*reset*terminal
- hash_walk
- just*one*command
- rl*add*funmap_entry
- rl*directory*rewrite_hook
- find_function
- *rl*complete*mark*directories
- command*string*index
- get*dirstack*from_string
- write_history
- rl*display*prompt
- read_octal
- rl*vi*tilde_expand
- rl*set*keyboard*input*timeout
- rl*unbind*command*in*map

- *rl*out_stream
- rl_instream
- xstrchr
- rl*display*fixed
- all*visible*variables
- rl_forward
- replace*history*entry
- rl*show*char
- rl*resize*terminal
- rl*bind*key*if*unbound*in*map
- rl*reset*screen_size
- sh_getopt
- rl_message
- replace*history*data
- umask_doc
- rl*macro*dumper
- array_rshift
- *rl*vi*initialize*line
- find*variable*internal
- ifs*first*clen
- signal_name
- find_variable
- internal_strmatch
- rl_abort
- no_options
- initialize_traps
- parse*and*execute
- sh_notfound
- end*job*control
- unbind_args
- *rl*init*terminal*io
- umask_builtin
- rl*on*new*line*with_prompt
- hash_string
- sh_notbuiltin
- quote*globbing*chars
- dist_version
- executing
- subshell_argv
- ttsetattr
- source*searches*cwd
- rl*nonin*creverse_search
- get*current*user_info
- rl*execute*next
- *rl*copy*undo*entry
- rl*macro*bind
- *rl*control_keypad
- rl*get*keymap_name
- command_connect
- *rl*kscxt
- it_shopts

- select_doc
- *rl*free*saved*history_line
- *rl*term*forward*char
- popd_builtin
- rl*byte*oriented
- show*name*attributes
- history*write*timestamps
- break_doc
- bash*readline*initialized
- *rl*horizontal*scroll*mode
- with*input*from_stdin
- make*word*from_token
- no*invisible*vars
- check*hashed*filenames
- rl*variable*value
- history*expansion*char
- maybe*execute*file
- hist*last*line_added
- save*parser*state
- change_flag
- true_doc
- current*readline*line_index
- describe_pid
- top*level*mask
- rl*on*new_line
- *rl*adjust_point
- it_keywords
- maybe*append*history
- all*exported*variables
- set_shellopts
- the*printed*command
- signal_names
- delete_job
- *rl*term_ei
- maybe*set*sigchld_trap
- unquoted*glob*pattern_p
- push_stream
- rl*bind*key*in*map
- last*asynchronous*pid
- rl*basic*word*break*characters
- suspend_doc
- find*shell*builtin
- array_patsub
- rl*pending*input
- *rl*page_completions
- builtin*address*internal
- initialize*terminating*signals
- *rl*possible*control*prefixes
- *rl*eof_char
- *rl*suppress_redisplay

- give*terminal*to
- rl*unbind*function*in*map
- rl*copy*keymap
- rl*reverse*search_history
- alias*expand*all
- rl*filename*dequoting_function
- parse*and*execute_level
- execute_command
- rl_done
- should*ignore*glob_matches
- strlist*prefix*suffix
- time*to*check_mail
- set*buffered*stream
- rl*restore*state
- rl*inhibit*completion
- history*expansion*inhibited
- pipeline_pgrp
- rl*key*sequence_length
- *rl*set*insert*mode
- remember*on*history
- rl*ignore*completion_duplicates
- strsub
- pwd_doc
- enable*hostname*completion
- tt_setcbreak
- pop_context
- let_builtin
- dispose_variable
- ttattr
- *rl*output*some*chars
- command*word*completion_function
- sh_regmatch
- all*array*variables
- bash*brace*completion
- read_history
- make*cond*node
- rl*completion*append_character
- eof*encountered*limit
- posix_initialize
- *rl*keyseq*chain*dispose
- rl_yank
- max*input*history
- initialize*bash*input
- pop*var*context
- rl*universal*argument
- check_identifier
- sh*single*quote
- list*running*jobs
- zsyncfd
- history*quotes*inhibit_expansion
- strlist*from*word_list

- termsig_sighandler
- bash*default*completion
- binary_test
- ps2_prompt
- history_get
- uinttostr
- current_user
- current*command*line_count
- *rl*arg_overflow
- rl*yank*pop
- return*catch*flag
- *rl*enable_keypad
- initialize_aliases
- rl*possible*completions
- rl*binding*keymap
- exit_builtin
- rl*restore*prompt
- suspend_builtin
- rl*ignore*some*completions*function
- rl*generic*bind
- rl*filename*quoting_desired
- tt_seteightbit
- rl*set*keymap
- rl*vi*change_char
- build_version
- readline*internal*setup
- rl*getc*function
- get*array*value
- word_split
- file_status
- set*sigchld*handler
- rl*visible*prompt_length
- history*lines*this_session
- *rl*term_clreol
- it_arrayvars
- tilde_initialize
- exec_doc
- close*buffered*fd
- all*variables*matching_prefix
- rl*rubout*or_delete
- *rl*last*v*pos
- rl*translate*keyseq
- current*readline*prompt
- *rl*isearch_dispatch
- it_services
- error*trace*mode
- find*reserved*word
- sh*set*lines*and*columns
- xtrace*print*for*command*head
- duplicate*buffered*stream
- get*shopt*options

- *rl*push*executing*macro
- history_builtin
- zreadc
- rl*vi*search
- variable_context
- *rl*enable_meta
- user*command*matches
- strvec_dispose
- *rl*dispatch_subseq
- history*lines*in_file
- rl*executing*macro
- rl*backward*char
- *rl*input_available
- hashing_enabled
- ulimit_doc
- current*command*subst_pid
- rl*deprep*term_function
- array_remove
- rl*dump*variables
- compgen_builtin
- *rl*char_value
- trap*to*sighandler
- rl*character*len
- type_builtin
- set*pipestatus*array
- strlist_dispose
- it_jobs
- rl_rubout
- err_badarraysub
- rl*add*defun
- set*locale*var
- add*history*time
- sh_optopt
- return_builtin
- sv*strict*posix
- pop_scope
- *rl*doing*an*undo
- rl*catch*sigwinch
- history*inhibit*expansion_function
- clear_history
- cdspelling
- return_catch
- strvec_copy
- save*token*state
- getmaxchild
- make*word*list
- rl*editing*mode
- rl*forward*search_history
- make*simple*command
- command_errstr
- history*is*stifled

- get*directory*stack
- *rl*vi*reset*last
- source_doc
- rl*beg*of_line
- rl_complete
- *rl*backspace
- popd_doc
- rl_redisplay
- last*history*line
- unset_builtin
- rl*clear*pending_input
- bash*servicename*completion_function
- *rl*insert_char
- compgen_doc
- getmaxgroups
- ttnocanon
- rl*get*keymap*by*name
- stream*on*stack
- expand*arith*string
- rl*kill*region
- sh_mktmpfd
- unbound*var*sis_error
- disown_doc
- progcomp_remove
- bind*var*to_int
- export_builtin
- bind_builtin
- noclobber
- set*tty*state
- expand*prompt*string
- remove_alias
- hist*last*line_pushed
- parse_shellopts
- initialize*shell*builtins
- *rl*clear*to*eol
- command*execution*string
- maybe*add*history
- indirection_level
- rl*copy*backward_word
- other*token*alist
- sh_stat
- cmd_init
- set*signal*ignored
- current*command*number
- absolute_pathname
- string*list*internal
- rl*arg*sign
- strvec_sort
- print*func*list
- reset*signal*handlers
- *rl*terminal*can*insert

- *rl*term_ip
- want*pending*command
- history_search
- sh_invalidopt
- wait*signal*received
- restore*default*signal
- set*job*control
- unbind*array*element
- array_create
- set*error*trap
- rl*bind*keyseq*in*map
- shift_builtin
- no*symbolic*links
- builtin_usage
- readonly_builtin
- rl*clear*signals
- tilde*expansion*preexpansion_hook
- kill_doc
- fg*percent*doc
- interrupt_immediately
- sh_mktmpname
- dispose*fd*bitmap
- rl*insert*comment
- rl_newline
- do*word*assignment
- *rl*internal*char*cleanup
- get*minus*o_opts
- set*dollar*vars_unchanged
- *rl*term_pc
- default*tty*job_signals
- rl*readline*state
- array_insert
- history*subst*char
- rl*completer*word*break*characters
- unset_doc
- sv_histtimefmt
- unwind*protect*mem
- wdcache
- cleanup*the*pipeline
- sh_invalidsig
- wait_builtin
- exec_builtin
- dirs_builtin
- parse*string*to*word*list
- *rl*enable*paren*matching
- copy*function*def_contents
- pop*dollar*vars
- *rl*dispatch
- sourcelevel
- get*current*prompt_level
- find*string*in_alist

- describe_command
- trap_doc
- make*word*flags
- *rl*rubout_char
- phash_search
- rl*vi*subst
- *rl*complete*mark*symlink_dirs
- bash*input*fd_changed
- *rl*set*the*line
- test_doc
- alloc*word*desc
- rl*insert*mode
- rl*directory*completion_hook
- sv_opterr
- stupidly*hack*special_variables
- *rl*search_getchar
- setifs
- stream_list
- set*itemlist*dirty
- fatal_error
- subshell_argc
- pre*process*line
- print*arith*command
- rl*completion*matches
- rl*tab*insert
- string*rest*of_args
- print*var*function
- loop_level
- extract*arithmetic*subst
- localetrans
- array*to*string
- rl_modifying
- history_tokenize
- *rl*redisplay*after*sigwinch
- find_flag
- *rl*make*prompt*for_search
- fg_builtin
- dispose*exec*redirects
- return_doc
- *rl*get*char*len
- local*exported*variables
- unset*bash*input
- *rl*abort_internal
- *IO*stdin_used
- rl*copy*region*to*kill
- *rl*move_vert
- *rl*meta_flag
- make*case*command
- rl*undo*list
- printf_doc
- conditional_doc

- *rl*reset_argument
- rl*make*bare_keymap
- initialize*shell*options
- fail*glob*expansion
- get*working*directory
- rl*get*next_history
- find*tempenv*variable
- make*function*def
- *rl*term_dc
- command_builtin
- sh*unset*nodelay_mode
- static*shell*builtins
- set*var*read_only
- rl*completion*mark*symlink*dirs
- colon_doc
- cd_doc
- rl*invoking*keyseqs
- function_doc
- history*get*time
- ttcbreak
- time_doc
- zwrite
- _getenv
- stdin_redir
- get_exitstat
- rl*read*init_file
- vi*insertion*keymap
- builtin_builtin
- rl*filename*completion_desired
- builtin_address
- history_expansion
- *rl*term_goto
- restore*original*signals
- maybe*save*shell_history
- unset*sigwinch*handler
- *rl*in_stream
- rl*completion*display*matches*hook
- reset*shell*flags
- rl*end*undo_group
- begin*unwind*frame
- disown_builtin
- rl_crlf
- set*debug*trap
- *rl*copy*undo*list
- run*return*trap
- declare_doc
- *rl*restore*tty*signals
- check*binary*file
- dispose*saved*dollar_vars
- sh_invalidoptname
- *rl*screenchars

- rl*named*function
- list*all*jobs
- rl*bind*key*if*unbound
- rl*unix*word_rubout
- alias_expand
- make*local*variable
- disallow*filename*globbing
- already*making*children
- reset*internal*getopt
- rl*vi*prev_word
- expand*string*unsplit
- ifs_var
- *rl*keymap
- de_backslash
- bash*directory*completion_matches
- rl*executing*keymap
- rl*complete*with*tilde*expansion
- same_file
- _*data*start
- current*command*first*line*saved
- bash*history*disable
- which*set*flags
- rl*display*match_list
- rl*delete*horizontal_space
- rl*unbind*key*in*map
- *rl*move*cursor*relative
- get*group*list
- bash*initialize*history
- sh_mktmpfp
- glob*ignore*case
- all*shell*variables
- list*one*job
- rl*replace*from_history
- sh_invalidid
- rl*vi*put
- rl*backward*kill_line
- rl*free*undo_list
- zreadintr
- history*delimiting*chars
- without*job*control
- rl*arrow*keys
- make*command*string
- type_doc
- map_over
- set*default*lang
- dispose*used*env_vars
- lcurrent
- fifos_pending
- *rl*callback*data*dispose
- make*if*command

- wait_for
- variable*help*doc
- this*command*name
- source_file
- ignore*tty*job_signals
- clean_itemlist
- subshell_envp
- sv_histsize
- history_doc
- *rl*free*history*entry
- close*fd*bitmap
- bash*getcwd*errstr
- push*dollar*vars
- err_readonly
- rl*free*line_state
- set*working*directory
- subshell_environment
- rl_outstream
- print*simple*command
- sv*comp*wordbreaks
- phash_insert
- rl*save*prompt
- rl*dump*macros
- make*variable*value
- read*from*stdin
- initialize_signals
- until_doc
- it_functions
- tilde*expand*word
- legal*alias*name
- funmap*program*specific*entry*start
- expand*words*shellexp
- sh_neednumarg
- tilde*additional*prefixes
- command_substitute
- add_alias
- get*word*from_string
- get*hostname*list
- yychar
- asynchronous_notification
- rl*completion*found_quote
- ifs_cmap
- case_doc
- assign*array*from_string
- rl*pre*input_hook
- shopt_builtin
- dirs_doc
- $global$
- getifs
- *rl*char*search*internal
- strlist_resize

- rl*vi*back*to*indent
- rl*vi*check
- executable_file
- malloc*trace*at_exit
- initialize_flags
- strvec*from*word_list
- stdin_redirects
- bind*keyseq*to*unix*command
- sh*backslash*quote
- posixly_correct
- set*login*shell
- terminate*stopped*jobs
- bash*badsub*errmsg
- array*unshift*element
- rl*vi*delete
- *rl*vi*textmod*command
- rl*vi*bWord
- rl*reset*line_state
- rl*variable*dumper
- it_builtins
- hist_verify
- get*name*for_error
- privileged_mode
- no*line*editing
- history*comment*char
- rl*already*prompted
- split*at*delims
- *rl*arg_callback
- sh_restricted
- interrupt_state
- the*current*maintainer
- rl*tty*set*default*bindings
- sh_setlinebuf
- rl*unix*line_discard
- rl*vi*fWord
- rl*make*keymap
- *rl*fix_point
- *rl*with*macro*input
- sh*backslash*quote*for*double_quotes
- valid*array*reference
- sh_makepath
- *rl*find*prev*mbchar
- expand*words*no_vars
- rl*completion*entry_function
- rl*vi*insert_beg
- fmtulong
- long_args
- pipefail_opt
- mailstat
- history*search*delimiter_chars
- history*search*pos

- map*over*funcs
- rl*vi*char_search
- sh_nojobs
- ttrestore
- print*cond*command
- rltty*set*default_bindings
- assign*array*var*from*word_list
- rl*begin*undo_group
- rl*initialize*funmap
- rl*library*version
- *rl*unget_char
- *rl*pop*executing*macro
- internal_wstrmatch
- get*job*by_name
- *rl*comment_begin
- kill*all*local_variables
- it_setopts
- execute*variable*command
- rl*get*keymap*name*from*edit*mode
- rl*insert*text
- rl*attempted*completion_function
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- array_keys
- *rl*want_redisplay
- set*default*locale
- it_files
- mark*modified*vars
- read_builtin
- run*debug*trap
- get*random*number
- wordexp_only
- *rl*complete*show*all
- reset_parser
- sigint_sighandler
- num*shell*builtins
- gen*compspec*completions
- set*return*trap
- rl*get*termcap
- mk_msgstr
- *rl*init_eightbit
- *rl*term_backspace
- history_expand
- *rl*callback_data
- executing*line*number
- expand*string*to_string
- unstifle_history
- *rl*find*next*mbchar
- rl*event*hook
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- init*yy*io

- clear*hostname*list
- list_optarg
- *rl*output*meta*chars
- hash_copy
- array*create*element
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- expand*word*unsplit
- shell*is*restricted
- rl*vi*overstrike_delete
- rl*digit*argument
- rl*vi*overstrike
- rl*capitalize*word
- rl*bind*keyseq
- save_pipeline
- strlist_create
- rl*vi*set_mark
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- *rl*scxt_dispose
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- find*index*in_alist
- signal*is*special
- with*input*from_string
- rl*noninc*forward_search
- rl*yank*nth_arg
- *rl*dispatching_keymap
- rl*stop*output
- force*append*history
- *rl*dispatch_callback
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- *rl*to_lower
- bash_logout
- clear*unwind*protect_list
- rl*vi*delete_to
- secondary_prompt
- sh_optarg
- rl*history*search_backward
- is_directory
- move*to*high_fd
- rl*num*chars*to*read
- rl*transpose*words
- sh*un*double_quote
- rl*char*is*quoted*p
- make*arith*for_command
- bash*history*enable
- rl*terminal*name
- find*user*command

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- global*error*list
- sh_erange
- zcatfd
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- unbind_variable
- *rl*pushed*input*available
- rl*callback*read_char
- signal*is*trapped
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- delete*last*history
- rl*revert*line
- release_status
- rl*start*kbd_macro
- *rl*overwrite_rubout
- *rl*strindex
- trap_builtin
- help_builtin
- dispose*var*context
- shopt_listopt
- sh_needarg
- ansicstr
- dispose*function*def
- array*to*argv
- *rl*callback_func
- sv_locale
- subshell*top*level
- shell_name
- xstrmatch
- *rl*vis_botlin
- strlist_append
- fc_doc
- rl*get*keymap
- restricted_shell
- dont*save*function_defs
- *rl*set_cursor
- strcreplace
- close*pgrp*pipe
- history*no*expand_chars
- rl*set*signals
- completions*to*stringlist
- *rl*output*character*function
- rl*delete*text
- show*shell*version
- evalexp
- _*libc*csu_init
- ungetc*with*restart
- *rl*argcxt
- ttnoecho
- declare_builtin

- *rl*term_up
- rl*attempted*completion_over
- rl_delete
- push_context
- rl*replace*line
- sh_badjob
- rl*upcase*word
- rl*completion*word*break*hook
- strip*trailing*ifs_whitespace
- rl_mark
- array*variable*name
- *rl*term_ic
- rl*backward*byte
- *rl*last*command*was_kill
- dispose*word*desc
- clean*simple*command
- rl*re*read*init*file
- rl*vi*goto_mark
- cd_builtin
- *rl*isearch_callback
- make_redirection
- rl*forced*update_display
- check*window*size
- programming_error
- rl*nonin*creverse*search*again
- xmbsrtowcs
- array*expand*index
- *rl*arg_getchar
- *rl*completion*case*fold
- rl*vi*change_case
- command_error
- loptend
- arith_doc
- shell*version*string
- expanding_redir
- return_EOF
- sync*buffered*stream
- rl_linefunc
- logout_builtin
- *rl*term_autowrap
- *rl*allow*pathname*alphabetic_chars
- trap*saved*exit_value
- *rl*isearch_terminators
- set_ppid
- startup_state
- strlist_merge
- expand*compound*array_assignment
- rl*vi*fetch_history
- it_disabled
- history*get*history_state
- progcomp_flush

- echo*command*at_execute
- *rl*pure_alphabetic
- force_fignore
- wait_doc
- rl*exchange*point*and*mark
- shell*start*time
- bind_function
- parser_error
- bash*groupname*completion_function
- current*prompt*string
- getopts_reset
- rl*vi*domove
- remember*mail*dates
- expand_words
- parse*symbolic*mode
- decode*prompt*string
- rl*set*mark
- wait*for*background_pids
- strvec_resize
- if_doc
- extended_glob
- assign*array*var*from*string
- display*signal*list
- free*pushed*string_input
- vi*movement*keymap
- do_redirections
- start_job
- get*new*window_size
- continuing
- addtimeval
- match*ignore*case
- running_trap
- ansic_shouldquote
- extract*process*subst
- rl_ding
- false_doc
- set_pwd
- *rl*callback*data*alloc
- rl*vi*column
- need*here*doc
- absolute_program
- history_reediting
- rl*refresh*line
- *rl*is*mbchar*matched
- rl*last*func
- strvec_remove
- breaking
- xtrace*print*assignment
- bind*array*variable
- expand*string*assignment
- jump*to*top_level

- rl*complete*internal
- strlist_copy
- ignore_signal
- find_alias
- delete*all*aliases
- sh_syntabsiz
- ttgetattr
- unlink*fifo*list
- strvec_len
- getopts_doc
- pop_stream
- make*group*command
- *rl*digit_p
- skipsubscript
- rl*set*prompt
- hash_size
- rl*vi*first_print
- redirection_expand
- legal_identifier
- file_error
- list_optopt
- grouping*braces*doc
- place*keywords*in_env
- *rl*erase*at*end*of*line
- array*keys*to*word*list
- bind*int*variable
- optflags
- reset*mail*files
- skip*to*delim
- caller_builtin
- command*oriented*history
- sh_validfd
- rl*discard*keymap
- sv*history*control
- sigwinch_received
- sh_physpath
- wait*intr*buf
- maybe*make*restricted
- rl*unbind*key
- *rl*digit_value
- rl*vi*eword
- add*unwind*protect
- hash_dispose
- rl*invoking*keyseqs*in*map
- rl*line*buffer_len
- colon_builtin
- *rl*history*preserve*point
- unbind_func
- sh_realpath
- rl*vi*replace
- rl*reset*after_signal

- get*tty*state
- make*until*command
- copy*function*def
- *rl*iscxt
- rl*filename*completion_function
- do_assignment
- rl_alphabetic
- rl*vi*insertion_mode
- rl*catch*signals
- rl*kill*text
- rl*visible*stats
- copy*history*entry
- *rl*scxt_alloc
- rl*forward*word
- remove_backslashes
- history*arg*extract
- get*local*evar
- run*unwind*protects
- rl*basic*quote_characters
- setup*async*signals
- current*readline*line
- search*for*command
- rl*add*undo
- *rl*fix*last*undo*of*type
- unfreeze*jobs*list
- signal*in*progress
- test_command
- rl*special*prefixes
- rl*vi*bword
- phash_flush
- dispose_redirects
- rl*vi*eof_maybe
- ttonechar
- check*bash*input
- sh*get*home_dir
- emacs*ctlx*keymap
- *rl*vi*last*command
- setup*ignore*patterns
- rl*forward*byte
- sh_badpid
- full_pathname
- tteightbit
- forced_interactive
- rl*completion*suppress_quote
- times_doc
- rl_backward
- array*assign*list
- set*minus*o_option
- all_digits
- debugging*login*shell
- rl*get*previous_history

- rl_getc
- rl*variable*bind
- get*numeric*arg
- eof_encountered
- shift_doc
- ifs_value
- make_command
- rl*deprep*terminal
- reset*mail*timer
- rl*completion*suppress_append
- hup*on*exit
- yyerror
- make*bare*simple_command
- fg_doc
- rl_prompt
- rl*filename*quoting_function
- filter_stringlist
- rl*kill*full_line
- sh*getopt*restore_state
- delete*all*jobs
- sigwinch_sighandler
- *rl*compare_chars
- sv_optind
- rl*vi*fword
- rl_point
- *rl*any_typein
- echo_builtin
- read_command
- sh_invalidnum
- make*here*document
- set_lang
- rl*readline*version
- rl*function*of_keyseq
- current*fds*to_close
- array_quote
- quote*string*for_globbing
- gnu*error*format
- close*buffered*stream
- local_doc
- interactive_shell
- ulimit_builtin
- typeset_doc
- expand*assignment*string*to*string
- *rl*mark*modified*lines
- set*dirstack*element
- wait*for*single_pid
- rl_end
- bash*dequote*text
- set*or*show_attributes
- rl*beginning*of_history
- strlist_flush

- *rl*saved*line*for_history
- decode_signal
- *rl*free*match*list
- rl*parse*and_bind
- phash_remove
- rl*menu*complete
- unalias_builtin
- brace_expand
- find*path*file
- base_pathname
- ansic_quote
- make*local*array_variable
- print_timeval
- history*search*prefix
- nohup*all*jobs
- rl*expand*prompt
- throw*to*top_level
- compspec_copy
- connect*async*list
- ttsave
- *rl*last*c*pos
- copy_redirect
- all*visible*functions
- list_string
- copy_command
- pushd_doc
- kill_pid
- new*fd*bitmap
- terminating_signal
- rl*vi*movement_mode
- adjust*shell*level
- sh_badopt
- dequote_list
- sh_mkdoublequoted
- find*special*builtin
- dispose*function*def_contents
- rl*prep*terminal
- parse*and*execute_cleanup
- parse_command
- *rl*set*screen*size
- run*pending*traps
- file_iswdir
- *rl*current*display*line
- bg_builtin
- sh*get*env_value
- *rl*vi*set*last
- trap_list
- rl*insert*close
- strlist_print
- rl*clear*message
- fc_builtin

- xtrace*print*select*command*head
- timeval*to*secs
- false_builtin
- rl*vi*next_word
- *rl*bell_preference
- array*shift*element
- continue_builtin
- array_shift
- find*or*make*array*variable
- rl*discard*argument
- run*interrupt*trap
- get*group*array
- print*shift*error
- getopts_builtin
- buffered_ungetchar
- tempenv*assign*error
- show*var*attributes
- xtrace*print*cond_term
- print*var*value
- sh_wrerror
- sh_syntaxtab
- current_builtin
- fmtumax
- it_commands
- rl*blink*matching_paren
- rl*set*paren*blink*timeout
- rl*vi*undo
- restore*parser*state
- rl*quoted*insert
- where_history
- rl*startup*hook
- *rl*arg_init
- *rl*vi*done*inserting
- cdable_vars
- global_command
- extract*colon*unit
- wcsmatch
- *rl*nscxt
- maybe*call*trap_handler
- open*buffered*stream
- patch_level
- sv_path
- it_aliases
- *rl*to_upper
- check*dev*tty
- strip_trailing
- brace_expansion
- *rl*update_final
- it_directories
- read_doc
- progcomp_create

- glob*error*return
- *rl*term_cr
- dispose_words
- rl*prefer*env_winsize
- default*buffered*input
- cond*expand*word
- it_hostnames
- rl*cleanup*after_signal
- find*token*in_alist
- rl*char*search
- progcomp_search
- rl*set*keymap*from*edit_mode
- command_doc
- rl*maybe*replace_line
- reset*shell*options
- it_exports
- dollar*dollar*pid
- rl_insert
- hash_doc
- last*made*pid
- unclosed_pair
- set*dollar*vars_changed
- makunbound
- terminate_immediately
- run*unwind*frame
- subshell_level
- *rl*next*macro*key
- hangup*all*jobs
- this*shell*builtin
- convert*var*to_array
- make*new*array_variable
- it_users
- buffered_getchar
- progcomp_dispose
- readonly_doc
- rl*noninc*forward*search*again
- xtrace*print*case*command*head
- *rl*lowercase_p
- test*bracket*doc
- promptvars
- initialize_itemlist
- jobs_doc
- netopen
- minus*o*option_value
- dump*po*strings
- notify*and*cleanup
- rl*kill*line
- rl*vi*match
- current_history
- set*default*locale_vars
- *rl*possible*meta*prefixes

- history_list
- compspec_create
- complete_builtin
- *rl*arg_dispatch
- run*exit*trap
- shell_tty
- strvec*to*word_list
- rl*insert*completions
- strlist_walk
- rl*backward*kill_word
- extract*command*subst
- perform*hostname*completion
- rl*vi*end_word
- bashline_reinitialize
- pop_args
- exec*redirection*undo_list
- nohup_job
- signal*is*signored
- array*quote*escapes
- sh_optind
- assign*compound*array_list
- with*input*from_stream
- restore*token*state
- rl*push*macro_input
- rl*readline*name
- rl*bind*keyseq*if*unbound
- dispose_command
- mbstrlen
- xmalloc
- save*bash*input
- test_binop
- *rl*read_mbchar
- array*variable*part
- rl*undo*command
- *rl*screenwidth
- all*shell*functions
- expand_aliases
- echo_doc
- export_doc
- ps1_prompt
- progcomp_insert
- fd*is*bash_input
- history*word*delimiters
- reset*shopt*options
- history*max*entries
- *rl*start*using*history
- sh_opterr
- restart*job*control
- sort_variables
- mail_warning
- compspec_dispose

- test_builtin
- push*var*context
- strlist_remove
- rl*callback*handler_install
- spname
- array_flush
- rl*emacs*editing_mode
- rl*maybe*unsave_line
- word*token*alist
- free*mail*files
- history*total*bytes
- push_args
- xtrace*print*word_list
- terminate*current*pipeline
- unary_test
- list_reverse
- array*to*word_list
- make*while*command
- primary_prompt
- allow*null*glob_expansion
- check*add*history
- yylval
- rl*explicit*arg
- restore_pipeline
- rl*read*key
- stop*making*children
- tilde*expansion*failure_hook
- dump*translatable*strings
- let_doc
- make*arith*command
- break_builtin
- history_number
- phash_create
- do*assignment*no_expand
- rl*maybe*save_line
- add*or*supercede*exported*var
- unalias_doc
- setup*glob*ignore
- make_absolute
- rl*list*funmap_names
- var_lookup
- shell_initialized
- rl*completer*quote_characters
- EOF_Reached
- global_variables
- word*list*remove*quoted*nulls
- print_rlimtype
- array_copy
- rl*vi*yank_arg
- rl*end*of_history
- rl*callback*handler_remove

- rl*extend*line_buffer
- rl*set*retained_kills
- *rl*match*hidden*files
- set*pipestatus*from_exit
- internal_error
- rl*via*append_eol
- string*list*dollar_at
- *rl*kill*kbd*macro
- copy_word
- run*trap*cleanup
- debugging_mode
- rl*vi*eWord
- remove*unwind*protect
- bash*reedit*
- *rl*undo*group*level
- yynerrs
- print*var*list
- eval_builtin
- array*from*word_list
- exit_doc
- exit*immediately*on_error
- array_slice
- get*alias*value
- tt_setnoecho
- rl*completion*quote_character
- jobs_builtin
- return*catch*value
- bg_doc
- set_signal
- err_unboundvar
- report_error
- read*but*dont_execute
- sv_ifs
- delete*all*contexts
- echo*input*at_read
- string*to*rlimtype
- dot*found*in_search
- yyparse
- make*for*command
- rl*unix*filename_rubout
- rl*downcase*word
- it_bindings
- no*empty*command_completion
- rl*stuff*char
- set*var*attribute
- bgpids
- set*sigint*handler
- programmable_completions
- alloc*history*entry
- shell*glob*filename
- rl*do*undo

- this*shell*function
- array*needs*making
- sh_eaccess
- complete_doc
- noglob*dot*filenames
- wait*for*job
- *rl*term_DC
- *rl*bind*stty*chars
- *rl*qsort*string*compare
- string*quote*removal
- difftimeval
- find*function*def
- hostname*list*initialized
- source*uses*path
- get*dollar*var_value
- rl*vi*change_to
- array*to*assign
- run*error*trap
- it_enabled
- hash_bucket
- rl*erase*empty_line
- sv_globignore
- executable*or*directory
- zreset
- *rl*read_mbstring
- *rl*screenheight
- rl*do*lowercase_version
- get*job*spec
- rl*dump*functions
- make*funcname*visible
- kill_builtin
- rl*vi*arg_digit
- xrealloc
- expand*word*leave_quoted
- subst*assign*varlist
- *rl*overwrite_char
- *rl*term_clrpag
- rl*set*key
- history*truncate*file
- rl*vi*bracktype
- reset*terminating*signals
- jobs*m*flag
- expand_string
- rl*call*last*kbd*macro
- history*set*pos
- print*array*assignment
- make*bare*word
- rl*function*dumper
- sv_terminal
- original_pgrp

- isnetconn
- dot_doc
- initialize*shell*variables
- *rl*clean*up*for_exit
- reap*dead*jobs
- alias*expand*word
- *rl*complete*show*unmodified
- xtrace*print*arith_cmd
- *rl*uppercase_p
- *rl*keyseq*cxt*dispose
- get*string*value
- array_walk
- rl*history*search_forward
- the*printed*command_size
- push_scope
- execute*shell*function
- with*input*from*buffered*stream
- rl*prep*term_function
- make*pattern*list
- the*printed*command*except*trap
- redirection_error
- rl*delete*or*show*completions
- rl*yank*last_arg
- it_stopped
- set*if*not
- rl*username*completion_function
- list*stopped*jobs
- *rl*replace_text
- *rl*walphabetic
- no*exit*on*failed*exec
- gather*here*documents
- bash*history*reinit
- sv_hostfile
- timeval*to*cpu
- merge*temporary*env
- sub*append*string
- rl*bind*keyseq*if*unbound*in*map
- interactive_comments
- strlist_sort
- make*default*mailpath
- rl*save*state
- *rl*add*macro*char
- function*trace*mode
- it_variables
- load_history
- assign*array*element
- tilde*additional*suffixes
- termsig_handler
- pwd_builtin
- it_running
- extended_quote

- *rl*history*saved*point
- setup*history*ignore
- copy*word*list
- pushed*string*list
- make*cond*command
- test_unop
- init*job*stats
- localeexpand
- strvec_flush
- rl*vi*search_again
- bash*tilde*expand
- readline*internal*teardown
- bind_doc
- shopt_doc
- rl*line*buffer
- rl*restart*output
- rl*numeric*arg
- count*all*jobs
- rl*end*kbd_macro
- legal_number
- read*history*range
- array_subrange
- rl*vi*editing_mode
- initialize_readline
- initialize*job*signals
- rl*vi*rubout
- make_child
- unbind*function*def
- rl*end*of_line
- rl*bind*key
- literal_history
- read*secondary*line
- sv_mail
- history_offset
- strvec_create
- shell*function*defs
- copy_redirects
- xbcopy
- delete*all*variables
- rl*untranslate*keyseq
- expand*string*unsplit*to*string
- stop_pipeline
- fd*to*buffered_stream
- *rl*print*completions*horizontally
- rl*vi*complete
- progcomp_walk
- terminal_pgrp
- assign*in*env
- file_isdir
- shell_pgrp
- strvec_strcmp

- GLIBC_2.1
- GLIBC_2.0
- GLIBC_2.4
- GLIBC_2.3
- GLIBC_2.3.4
- GLIBC_2.2
- `?m+d0
- `6]+b0
- ` @+b0
- Z @+b0
- |@ 6|=
- D 8+d0
- @ +b0
- |
- bA(+b0
- | `+b0
- t@B+b0
- |+<+b0
- b@(+b0
- b@(+b0
- |7 +b0
- |)p+b0
- b@(+b0
- `:=4|?
- |0h+b0
- \0@+b0
- `!X+b0
- ` (+b0
- b@ +b0
- b@(+b0
- b@(+b0
- <x+b0
- b@ +b0
- `<:+b0
- | p+b0
- |Rr+b0
- `1%+b0
- b@(+b0
- b@(+b0
- b@(+b0
- b@ +b0
- b@(+b0
- b@(+b0
- b@(+b0
- |%7+b0
- b@(+b0
- `4Y+b0
- b@(+b0
- bI@+b0
- b@(+b0
- b@(+b0
- b@(+b0

- b@(+b0
- `.=+b0
- b@(+b0
- b@(+b0
- |%`+d0
- | p+b0
- |"@+d0
- 0Hd?
- 0Hd?
- 0Hd?
- 0Hd?
- @ @+`
- |@`4|=
- `9%+b0
- |# 6y?
- ` X+b0
- `4/+b0
- ``X+c
- _ 0+c
- _ 0+c
- | +c
- `!x+b0
- \ (+d0
- |6`6|?
- `!h+d0
- `:04c?
- ?}6s?3
- #J4c?
- >m+b0
- `$H+b0
- +d0
- b x+b0
- B+b
- |b +c
- | (+b0
- `"x+d0
- 06u?S6u?
- |% 4y?
- |?u+`
- 06t?S6t?
- 06t?S6t?
- `%0+`
- `?g7Z?
- | h6t??4
- Z@p+`
- `R+`
- 06u?S6u?
- \A 7\?
- |85+a0
- E:m+b0
- @/M+a0
- `@p+a0

- `??7Z?
- @+`
- ?979(&k
- \ R4c?
- @`0+d0
- `'X+d0
- \0:7\?
- |-b6t?
- #(+a0
- ! +a0
- |#X4|?
- ?$j7!?
- 9 B4=?
- 9 J4=?
- /bin/sh
- I have no name!
- BASH_ENV
- GNU bash, version %s-(%s)
- hppa2.0-unknown-linux-gnu
- Usage:
- %s [GNU long option] [option] ...
- %s [GNU long option] [option] script-file ...
- GNU long options:
- Shell options:
- -irsD or -c command or -O shopt_option
- (invocation only)
- -%s or -o option
- Type `%s -c "help set"' for more information about shell options.
- Type `%s -c help' for more information about shell builtin commands.
- Use the `bashbug' command to report bugs.
- /usr/local/share/bashdb/bashdb-main.inc
- run_wordexp
- --wordexp
- run*one*command
- FUNCNAME
- BASH_SOURCE
- BASH_LINENO
- %s: is a directory
- %s: cannot execute binary file
- POSIXLY_CORRECT
- POSIX_PEDANTIC
- \s-\v\$
- ~/.bashrc
- %s: option requires an argument
- %s: invalid option
- %c%c: invalid option
- ??host??
- SSH_CLIENT
- SSH2_CLIENT
- /etc/bash/bashrc
- /etc/profile
- ~/.profile

- ~/.bash_profile
- ~/.bash_login
- debugger
- dump-po-strings
- dump-strings
- noediting
- noprofile
- protected
- rcfile
- verbose
- version
- timed out waiting for input: auto-logout
- PROMPT_COMMAND
- reader_loop
- PIPESTATUS
- readline stdin
- syntax error near unexpected token `%s'
- syntax error near `%s'
- syntax error: unexpected end of file
- syntax error
- %a %b %d
- %H:%M:%S
- %I:%M:%S
- %I:%M %p
- unexpected EOF while looking for matching `%c'
- unexpected EOF while looking for `]]'
- syntax error in conditional expression: unexpected token `%s'
- syntax error in conditional expression
- unexpected EOF while looking for matching `)'
- unexpected token `%s', expected `)'
- expected `)'
- unexpected argument `%s' to conditional unary operator
- unexpected argument to conditional unary operator
- unexpected token `%s', conditional binary operator expected
- conditional binary operator expected
- unexpected argument `%s' to conditional binary operator
- unexpected argument to conditional binary operator
- unexpected token `%c' in conditional command
- unexpected token `%s' in conditional command
- unexpected token %d in conditional command
- Use "%s" to leave the shell.
- memory exhausted
- select
- function
- newline
- !"#$%&'()-
- .1;5207689:
- &,)/vw
- {{{{{{{
- FG{{{{
- YpqrstPfa
- {lRX{{{{gO

- {{DEJK
- {ibc{{
- {{{_de
- 67777888999999999999999999999999999999:::;;<<====>>>>>>>>>>>>????????
  @@@@AAAAAABBBCCCDDEFFFGHIJJJKKLLL
- OLDPWD
- /dev/tty
- `%s': not a valid identifier
- getcwd: cannot access parent directories
- clean*simple*command
- make_redirection: redirection instruction `%d' out of range
- make*here*document: bad instruction type %d
- syntax error: arithmetic expression required
- syntax error: `;' unexpected
- syntax error: `((%s))'
- cprintf: `%c': invalid format character
- case %s in
- select %s in
- for %s in
- <<%s%s
- <<< %s
- %d<&%d
- %d>&%d
- %d<&%s
- %d>&%s
- %d<&%d-
- %d>&%d-
- %d<&%s-
- %d>&%s-
- for ((
- print_command: bad connector `%d'
- function %s ()
- print_command
- case %s in
- %s=(%s)
- dispose_command
- cannot duplicate fd %d to fd %d
- %s: %s: bad interpreter
- /dev/null
- cannot redirect standard input from /dev/null: %s
- eval_builtin
- builtin_env
- return*temp*env
- execute*cond*node
- execute-command
- COLUMNS
- %*d%s%s
- pipe error
- pipe-file-descriptors
- execute_connection
- loop_redirections
- %s: readonly function

- execute_command
- function_calling
- simple-command
- auto_resume
- substring
- saved redirects
- saved_redirects
- %s: restricted: cannot specify `/' in command names
- %s: command not found
- execute-shell-function
- real %2R
- user %2U
- sys %2S
- TIMEFORMAT: `%c': invalid format character
- rpop*var*context: head of shell_variables not a function context
- pop*var*context: no global_variables context
- pop*scope: head of shell*variables not a temporary environment scope
- BASH_ARGV
- BASH_ARGC
- all*local*variables: no function context at current scope
- make*local*variable: no function context at current scope
- OPTERR
- ignorespace
- erasedups
- ignoredups
- ignoreboth
- HISTFILE
- shell-init
- shell level (%d) too high, resetting to 1
- error importing function definition for `%s'
- /usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin
- HOSTTYPE
- hppa2.0
- OSTYPE
- MACHTYPE
- HOSTNAME
- MAILCHECK
- OPTIND
- BASH_VERSION
- BASH_VERSINFO
- BASH*EXECUTION*STRING
- ~/.sh_history
- ~/.bash_history
- IGNOREEOF
- ignoreeof
- HISTCONTROL
- HISTIGNORE
- SECONDS
- BASH_COMMAND
- BASH_SUBSHELL
- RANDOM
- LINENO

- HISTCMD
- COMP_WORDBREAKS
- DIRSTACK
- GROUPS
- GLOBIGNORE
- HISTFILESIZE
- HISTSIZE
- HISTTIMEFORMAT
- HOSTFILE
- LC_ALL
- LC_COLLATE
- LC_CTYPE
- LC_MESSAGES
- LC_NUMERIC
- LC_TIME
- MAILPATH
- TERMCAP
- TERMINFO
- TEXTDOMAIN
- TEXTDOMAINDIR
- histchars
- line
- %s: %s:%s%d:
- last command: %s
- (null)
- Aborting...
- %s: %s: %d
- %s: warning:
- %s: readonly variable
- %s: unbound variable
- bash-maintainers@gnu.org
- unknown command error
- bad command type
- bad connector
- bad jump
- %s%s%s: %s (error token is "%s")
- expression recursion level exceeded
- syntax error in expression
- recursion stack underflow
- invalid arithmetic base
- value too great for base
- */%+-&^|
- syntax error: invalid arithmetic operator
- syntax error: operand expected
- identifier expected after pre-increment or pre-decrement
- missing `)'
- exponent less than 0
- division by 0
- `:' expected for conditional expression
- attempted assignment to non-variable
- bug: bad expassign token
- (core dumped)

- (wd: %s)
- Signal %d
-
- [%d]%c
- Stopped
- Stopped(%s)
- Running
- Done(%d)
- Exit %d
- Unknown status
- %s: line %d:
- (core dumped)
- (wd now: %s)
- notify*of*job_status
- SIGCHLD trap
- [%d] %ld
- describe_pid: %ld: no such pid
- [%ld: %d] tcsetattr
- initialize*job*control: getpgrp failed
- initialize*job*control: setpgid
- no job control in this shell
- deleting stopped job %d with process group %ld
- wait_for: No record of process %ld
- %s: job has terminated
- %s: job %d already in background
- [%d]%s
- (wd: %s)
- wait*for*job: job %d is stopped
- wait: pid %ld is not a child of this shell
- job-working-directory
- start_pipeline: pgrp pipe
- child setpgid (%ld to %ld)
- forked pid %d appears in running job %d
- cannot make pipe for command substitution
- cannot make child for command substitution
- command_substitute: cannot duplicate pipe as fd 1
- command substitution
- %s: cannot assign list to array member
- bad substitution: no closing `%s' in %s
- #%:-=?+/}
- %s: substring expression < 0
- %s: bad substitution
- $%s: cannot assign in this way
- cannot make pipe for process substitution
- /dev/fd/
- cannot make child for process substitution
- cannot duplicate named pipe %s as fd %d
- process substitution
- bad substitution: no closing "`" in %s
- no match: %s
- %s: parameter null or not set
- You have mail in $_

- You have new mail in $_
- The mail in %s has been read
- interrupt trap
- return trap
- error trap
- debug trap
- exit trap
- invalid signal number
- run*pending*traps: bad value in trap_list[%d]: %p
- run*pending*traps: signal handler is SIG_DFL, resending %d (%s) to myself
- trap_handler: bad signal %d
- SIGHUP
- SIGINT
- SIGQUIT
- SIGILL
- SIGTRAP
- SIGABRT
- SIGEMT
- SIGFPE
- SIGKILL
- SIGBUS
- SIGSEGV
- SIGSYS
- SIGPIPE
- SIGALRM
- SIGTERM
- SIGUSR1
- SIGUSR2
- SIGCHLD
- SIGPWR
- SIGVTALRM
- SIGPROF
- SIGWINCH
- SIGSTOP
- SIGTSTP
- SIGCONT
- SIGTTIN
- SIGTTOU
- SIGURG
- SIGLOST
- SIGJUNK(31)
- SIGJUNK(32)
- SIGXCPU
- SIGXFSZ
- SIGJUNK(35)
- SIGSTKFLT
- SIGJUNK(37)
- SIGJUNK(38)
- SIGRTMIN
- SIGRTMIN+1
- SIGRTMIN+2
- SIGRTMIN+3

- SIGRTMIN+4
- SIGRTMIN+5
- SIGRTMIN+6
- SIGRTMIN+7
- SIGRTMIN+8
- SIGRTMIN+9
- SIGRTMIN+10
- SIGRTMIN+11
- SIGRTMIN+12
- SIGRTMAX-12
- SIGRTMAX-11
- SIGRTMAX-10
- SIGRTMAX-9
- SIGRTMAX-8
- SIGRTMAX-7
- SIGRTMAX-6
- SIGRTMAX-5
- SIGRTMAX-4
- SIGRTMAX-3
- SIGRTMAX-2
- SIGRTMAX-1
- SIGRTMAX
- RETURN
- cannot allocate new file descriptor for bash input from fd %d
- save*bash*input: buffer already exists for new fd %d
- %s: integer expression expected
- argument expected
- %s: unary operator expected
- %s: binary operator expected
- `)' expected
- `)' expected, found %s
- missing `]'
- too many arguments
- %s.%d(%d)-%s
- %s.%d(%d)
- GNU bash, version %s (%s)
- Copyright (C) 2005 Free Software Foundation, Inc.
- release
- @(#)Bash version 3.2.17(1) release GNU
- %s[%s: %s
- [%s]: %s
- %s: cannot assign to non-numeric index
- array assign
- bad array subscript
- b%s%s%s
- ;&()|<>
- %s: cannot create: %s
- R%s: first non-whitespace character is not `"'
- no closing `%c' in %s
- %s: missing colon separator
- bash*execute*unix_command: cannot find keymap for command
- bash*execute*unix_command

- completion-ignore-case
- ;|&{(`
- $include
- hostname*completion*file
- /etc/hosts
- symlink-hook
- ()<>;&|
- C-xC-e
- fc -e "${VISUAL:-${EDITOR:-emacs}}"
- fc -e vi
- fc -e "${VISUAL:-${EDITOR:-vi}}"
- shell-expand-line
- history-expand-line
- magic-space
- history-and-alias-expand-line
- insert-last-argument
- operate-and-get-next
- display-shell-version
- edit-and-execute-command
- complete-into-braces
- complete-filename
- possible-filename-completions
- complete-username
- possible-username-completions
- complete-hostname
- possible-hostname-completions
- complete-variable
- possible-variable-completions
- complete-command
- possible-command-completions
- glob-complete-word
- glob-expand-word
- glob-list-expansions
- dynamic-complete-history
- \"'@<>=;|&()#$`?*[!:{
- comment-begin
- FIGNORE
- "'@><=;|&(:
- "'><=;|&(:
- ,#: %s:%d
- msgid %s%s
- msgstr ""
- /usr/share/locale
- redirection error: cannot duplicate fd
- sh-thd
- file descriptor out of range
- %s: ambiguous redirect
- %s: cannot overwrite existing file
- %s: restricted: cannot redirect output
- cannot create temp file for here document: %s
- /dev/tcp//
- /dev/udp//

- COMP_LINE
- COMP_POINT
- COMP_WORDS
- COMP_CWORD
- completion: function `%s' not found
- COMPREPLY
- jprogcomp_insert: %s: NULL COMPSPEC
- xrealloc: cannot reallocate %lu bytes (%lu bytes allocated)
- xmalloc: cannot allocate %lu bytes (%lu bytes allocated)
- alias [-p] [name[=value] ...]
- unalias
- unalias [-a] name [name ...]
- bind [-lpvsPVS] [-m keymap] [-f filename] [-q name] [-u name] [-r keyseq] [-x keyseq:shell-command]
- break [n]
- continue
- continue [n]
- builtin [shell-builtin [arg ...]]
- caller
- caller [EXPR]
- cd [-L|-P] [dir]
- pwd [-LP]
- command [-pVv] command [arg ...]
- declare
- declare [-afFirtx] [-p] [name[=value] ...]
- typeset
- typeset [-afFirtx] [-p] name[=value] ...
- local name[=value] ...
- echo [-neE] [arg ...]
- enable
- enable [-pnds] [-a] [-f filename] [name ...]
- eval [arg ...]
- getopts
- getopts optstring name [arg]
- exec [-cl] [-a name] file [redirection ...]
- exit [n]
- fc [-e ename] [-nlr] [first] [last] or fc -s [pat=rep] [cmd]
- fg [job_spec]
- bg [job_spec ...]
- hash [-lr] [-p pathname] [-dt] [name ...]
- help [-s] [pattern ...]
- history [-c] [-d offset] [n] or history -awrn [filename] or history -ps arg [arg...]
- jobs [-lnprs] [jobspec ...] or jobs -x command [args]
- disown
- disown [-h] [-ar] [jobspec ...]
- kill [-s sigspec | -n signum | -sigspec] pid | jobspec ... or kill -l [sigspec]
- let arg [arg ...]
- read [-ers] [-u fd] [-t timeout] [-p prompt] [-a array] [-n nchars] [-d delim] [name ...]
- return
- return [n]
- set [--abefhkmnptuvxBCHP] [-o option] [arg ...]
- unset [-f] [-v] [name ...]
- export

- export [-nf] [name[=value] ...] or export -p
- readonly
- readonly [-af] [name[=value] ...] or readonly -p
- shift [n]
- source
- source filename [arguments]
- . filename [arguments]
- suspend
- suspend [-f]
- test [expr]
- [arg...]
- trap [-lp] [arg signal_spec ...]
- type [-afptP] name [name ...]
- ulimit
- ulimit [-SHacdefilmnpqrstuvx] [limit]
- umask [-p] [-S] [mode]
- wait [n]
- for NAME [in WORDS ... ;] do COMMANDS; done
- for ((exp1; exp2; exp3)); do COMMANDS; done
- select NAME [in WORDS ... ;] do COMMANDS; done
- time [-p] PIPELINE
- case WORD in [PATTERN [| PATTERN]...) COMMANDS ;;]... esac
- if COMMANDS; then COMMANDS; [elif COMMANDS; then COMMANDS;]... [else COMMANDS;] fi
- while COMMANDS; do COMMANDS; done
- until COMMANDS; do COMMANDS; done
- function NAME { COMMANDS ; } or NAME () { COMMANDS ; }
- { ... }
- JOB_SPEC [&]
- ((...))
- ((expression))
- [[...]]
- [[expression]]
- variables
- variables - Some variable names and meanings
- pushd [dir | +N | -N] [-n]
- popd [+N | -N] [-n]
- dirs [-clpv] [+N] [-N]
- shopt [-pqsu] [-o long-option] optname [optname...]
- printf
- printf [-v var] format [arguments]
- complete [-abcdefgjksuv] [-pr] [-o option] [-A action] [-G globpat] [-W wordlist] [-P prefix] [-S su
- compgen
- compgen [-abcdefgjksuv] [-o option] [-A action] [-G globpat] [-W wordlist] [-P prefix] [-S suffix] [
- `alias' with no arguments or with the -p option prints the list
- of aliases in the form alias NAME=VALUE on standard output.
- Otherwise, an alias is defined for each NAME whose VALUE is given.
- A trailing space in VALUE causes the next word to be checked for
- alias substitution when the alias is expanded. Alias returns
- true unless a NAME is given for which no alias has been defined.
- Remove NAMEs from the list of defined aliases. If the -a option is given,
- then remove all alias definitions.
- Bind a key sequence to a Readline function or a macro, or set

- a Readline variable. The non-option argument syntax is equivalent
- to that found in ~/.inputrc, but must be passed as a single argument:
- bind '"\C-x\C-r": re-read-init-file'.
- bind accepts the following options:
- -m keymap Use `keymap' as the keymap for the duration of this
- command. Acceptable keymap names are emacs,
- emacs-standard, emacs-meta, emacs-ctlx, vi, vi-move,
- vi-command, and vi-insert.
- -l List names of functions.
- -P List function names and bindings.
- -p List functions and bindings in a form that can be
- reused as input.
- -r keyseq Remove the binding for KEYSEQ.
- -x keyseq:shell-command
- Cause SHELL-COMMAND to be executed when
- KEYSEQ is entered.
- -f filename Read key bindings from FILENAME.
- -q function-name Query about which keys invoke the named function.
- -u function-name Unbind all keys which are bound to the named function.
- -V List variable names and values
- -v List variable names and values in a form that can
- be reused as input.
- -S List key sequences that invoke macros and their values
- -s List key sequences that invoke macros and their values
- in a form that can be reused as input.
- Exit from within a FOR, WHILE or UNTIL loop. If N is specified,
- break N levels.
- Resume the next iteration of the enclosing FOR, WHILE or UNTIL loop.
- If N is specified, resume at the N-th enclosing loop.
- Run a shell builtin. This is useful when you wish to rename a
- shell builtin to be a function, but need the functionality of the
- builtin within the function itself.
- Returns the context of the current subroutine call.
- Without EXPR, returns "$line $filename". With EXPR,
- returns "$line $subroutine $filename"; this extra information
- can be used to provide a stack trace.
- The value of EXPR indicates how many call frames to go back before the
- current one; the top frame is frame 0.
- Change the current directory to DIR. The variable $HOME is the
- default DIR. The variable CDPATH defines the search path for
- the directory containing DIR. Alternative directory names in CDPATH
- are separated by a colon (:). A null directory name is the same as
- the current directory, i.e. `.'. If DIR begins with a slash (/),
- then CDPATH is not used. If the directory is not found, and the
- shell option `cdable_vars' is set, then try the word as a variable
- name. If that variable has a value, then cd to the value of that
- variable. The -P option says to use the physical directory structure
- instead of following symbolic links; the -L option forces symbolic links
- to be followed.
- Print the current working directory. With the -P option, pwd prints
- the physical directory, without any symbolic links; the -L option
- makes pwd follow symbolic links.

- No effect; the command does nothing. A zero exit code is returned.
- Return a successful result.
- Return an unsuccessful result.
- Runs COMMAND with ARGS ignoring shell functions. If you have a shell
- function called `ls', and you wish to call the command` ls', you can
- say "command ls". If the -p option is given, a default value is used
- for PATH that is guaranteed to find all of the standard utilities. If
- the -V or -v option is given, a string is printed describing COMMAND.
- The -V option produces a more verbose description.
- Declare variables and/or give them attributes. If no NAMEs are
- given, then display the values of variables instead. The -p option
- will display the attributes and values of each NAME.
- The flags are:
- -a
- to make NAMEs arrays (if supported)
- -f
- to select from among function names only
- -F
- to display function names (and line number and source file name if
- debugging) without definitions
- -i
- to make NAMEs have the `integer' attribute
- -r
- to make NAMEs readonly
- -t
- to make NAMEs have the `trace' attribute
- -x
- to make NAMEs export
- Variables with the integer attribute have arithmetic evaluation (see
- `let') done when the variable is assigned to.
- When displaying values of variables, -f displays a function's name
- and definition. The -F option restricts the display to function
- name only.
- Using `+' instead of` -' turns off the given attribute instead. When
- used in a function, makes NAMEs local, as with the `local' command.
- Obsolete. See `declare'.
- Create a local variable called NAME, and give it VALUE. LOCAL
- can only be used within a function; it makes the variable NAME
- have a visible scope restricted to that function and its children.
- Output the ARGs. If -n is specified, the trailing newline is
- suppressed. If the -e option is given, interpretation of the
- following backslash-escaped characters is turned on:
- alert (bell)
- backspace
- suppress trailing newline
- escape character
- form feed
- new line
- carriage return
- horizontal tab
- vertical tab
- backslash

- the character whose ASCII code is NNN (octal). NNN can be
- 0 to 3 octal digits
- You can explicitly turn off the interpretation of the above characters
- with the -E option.
- Enable and disable builtin shell commands. This allows
- you to use a disk command which has the same name as a shell
- builtin without specifying a full pathname. If -n is used, the
- NAMEs become disabled; otherwise NAMEs are enabled. For example,
- to use the `test' found in $PATH instead of the shell builtin
- version, type `enable -n test'. On systems supporting dynamic
- loading, the -f option may be used to load new builtins from the
- shared object FILENAME. The -d option will delete a builtin
- previously loaded with -f. If no non-option names are given, or
- the -p option is supplied, a list of builtins is printed. The
- -a option means to print every builtin with an indication of whether
- or not it is enabled. The -s option restricts the output to the POSIX.2
- `special' builtins. The -n option displays a list of all disabled builtins.
- Read ARGs as input to the shell and execute the resulting command(s).
- Getopts is used by shell procedures to parse positional parameters.
- OPTSTRING contains the option letters to be recognized; if a letter
- is followed by a colon, the option is expected to have an argument,
- which should be separated from it by white space.
- Each time it is invoked, getopts will place the next option in the
- shell variable $name, initializing name if it does not exist, and
- the index of the next argument to be processed into the shell
- variable OPTIND. OPTIND is initialized to 1 each time the shell or
- a shell script is invoked. When an option requires an argument,
- getopts places that argument into the shell variable OPTARG.
- getopts reports errors in one of two ways. If the first character
- of OPTSTRING is a colon, getopts uses silent error reporting. In
- this mode, no error messages are printed. If an invalid option is
- seen, getopts places the option character found into OPTARG. If a
- required argument is not found, getopts places a ':' into NAME and
- sets OPTARG to the option character found. If getopts is not in
- silent mode, and an invalid option is seen, getopts places '?' into
- NAME and unsets OPTARG. If a required argument is not found, a '?'
- is placed in NAME, OPTARG is unset, and a diagnostic message is
- printed.
- If the shell variable OPTERR has the value 0, getopts disables the
- printing of error messages, even if the first character of
- OPTSTRING is not a colon. OPTERR has the value 1 by default.
- Getopts normally parses the positional parameters ($0 - $9), but if
- more arguments are given, they are parsed instead.
- Exec FILE, replacing this shell with the specified program.
- If FILE is not specified, the redirections take effect in this
- shell. If the first argument is `-l', then place a dash in the
- zeroth arg passed to FILE, as login does. If the `-c' option
- is supplied, FILE is executed with a null environment. The `-a'
- option means to make set argv[0] of the executed process to NAME.
- If the file cannot be executed and the shell is not interactive,
- then the shell exits, unless the shell option `execfail' is set.
- Exit the shell with a status of N. If N is omitted, the exit status

- is that of the last command executed.
- Logout of a login shell.
- fc is used to list or edit and re-execute commands from the history list.
- FIRST and LAST can be numbers specifying the range, or FIRST can be a
- string, which means the most recent command beginning with that
- string.
- -e ENAME selects which editor to use. Default is FCEDIT, then EDITOR,
- then vi.
- -l means list lines instead of editing.
- -n means no line numbers listed.
- -r means reverse the order of the lines (making it newest listed first).
- With the `fc -s [pat=rep ...] [command]' format, the command is
- re-executed after the substitution OLD=NEW is performed.
- A useful alias to use with this is r='fc -s', so that typing `r cc'
- runs the last command beginning with `cc' and typing` r' re-executes
- the last command.
- Place JOB_SPEC in the foreground, and make it the current job. If
- JOB_SPEC is not present, the shell's notion of the current job is
- used.
- Place each JOB_SPEC in the background, as if it had been started with
- `&'. If JOB_SPEC is not present, the shell's notion of the current
- job is used.
- For each NAME, the full pathname of the command is determined and
- remembered. If the -p option is supplied, PATHNAME is used as the
- full pathname of NAME, and no path search is performed. The -r
- option causes the shell to forget all remembered locations. The -d
- option causes the shell to forget the remembered location of each NAME.
- If the -t option is supplied the full pathname to which each NAME
- corresponds is printed. If multiple NAME arguments are supplied with
- -t, the NAME is printed before the hashed full pathname. The -l option
- causes output to be displayed in a format that may be reused as input.
- If no arguments are given, information about remembered commands is displayed.
- Display helpful information about builtin commands. If PATTERN is
- specified, gives detailed help on all commands matching PATTERN,
- otherwise a list of the builtins is printed. The -s option
- restricts the output for each builtin command matching PATTERN to
- a short usage synopsis.
- Display the history list with line numbers. Lines listed with
- with a `*' have been modified. Argument of N says to list only
- the last N lines. The `-c' option causes the history list to be
- cleared by deleting all of the entries. The `-d' option deletes
- the history entry at offset OFFSET. The `-w' option writes out the
- current history to the history file; `-r' means to read the file and
- append the contents to the history list instead. `-a' means
- to append history lines from this session to the history file.
- Argument `-n' means to read all history lines not already read
- from the history file and append them to the history list.
- If FILENAME is given, then that is used as the history file else
- if $HISTFILE has a value, that is used, else ~/.bash_history.
- If the -s option is supplied, the non-option ARGs are appended to
- the history list as a single entry. The -p option means to perform
- history expansion on each ARG and display the result, without storing

- anything in the history list.
- If the $HISTTIMEFORMAT variable is set and not null, its value is used
- as a format string for strftime(3) to print the time stamp associated
- with each displayed history entry. No time stamps are printed otherwise.
- Lists the active jobs. The -l option lists process id's in addition
- to the normal information; the -p option lists process id's only.
- If -n is given, only processes that have changed status since the last
- notification are printed. JOBSPEC restricts output to that job. The
- -r and -s options restrict output to running and stopped jobs only,
- respectively. Without options, the status of all active jobs is
- printed. If -x is given, COMMAND is run after all job specifications
- that appear in ARGS have been replaced with the process ID of that job's
- process group leader.
- By default, removes each JOBSPEC argument from the table of active jobs.
- If the -h option is given, the job is not removed from the table, but is
- marked so that SIGHUP is not sent to the job if the shell receives a
- SIGHUP. The -a option, when JOBSPEC is not supplied, means to remove all
- jobs from the job table; the -r option means to remove only running jobs.
- Send the processes named by PID (or JOBSPEC) the signal SIGSPEC. If
- SIGSPEC is not present, then SIGTERM is assumed. An argument of `-l'
- lists the signal names; if arguments follow `-l' they are assumed to
- be signal numbers for which names should be listed. Kill is a shell
- builtin for two reasons: it allows job IDs to be used instead of
- process IDs, and, if you have reached the limit on processes that
- you can create, you don't have to start a process to kill another one.
- Each ARG is an arithmetic expression to be evaluated. Evaluation
- is done in fixed-width integers with no check for overflow, though
- division by 0 is trapped and flagged as an error. The following
- list of operators is grouped into levels of equal-precedence operators.
- The levels are listed in order of decreasing precedence.
- id++, id--
- variable post-increment, post-decrement
- ++id, --id
- variable pre-increment, pre-decrement
- unary minus, plus
- logical and bitwise negation
- exponentiation
- *, /, %
- multiplication, division, remainder
- addition, subtraction
- <<, >>
- left and right bitwise shifts
- <=, >=, <, >
- comparison
- ==, !=
- equality, inequality
- bitwise AND
- bitwise XOR
- bitwise OR
- logical AND
- logical OR
- expr ? expr : expr

- conditional operator
- =, *=, /=, %=,
- +=, -=, <<=, >>=,
- &=, ^=, |=
- assignment
- Shell variables are allowed as operands. The name of the variable
- is replaced by its value (coerced to a fixed-width integer) within
- an expression. The variable need not have its integer attribute
- turned on to be used in an expression.
- Operators are evaluated in order of precedence. Sub-expressions in
- parentheses are evaluated first and may override the precedence
- rules above.
- If the last ARG evaluates to 0, let returns 1; 0 is returned
- otherwise.
- One line is read from the standard input, or from file descriptor FD if the
- -u option is supplied, and the first word is assigned to the first NAME,
- the second word to the second NAME, and so on, with leftover words assigned
- to the last NAME. Only the characters found in $IFS are recognized as word
- delimiters. If no NAMEs are supplied, the line read is stored in the REPLY
- variable. If the -r option is given, this signifies `raw' input, and
- backslash escaping is disabled. The -d option causes read to continue
- until the first character of DELIM is read, rather than newline. If the -p
- option is supplied, the string PROMPT is output without a trailing newline
- before attempting to read. If -a is supplied, the words read are assigned
- to sequential indices of ARRAY, starting at zero. If -e is supplied and
- the shell is interactive, readline is used to obtain the line. If -n is
- supplied with a non-zero NCHARS argument, read returns after NCHARS
- characters have been read. The -s option causes input coming from a
- terminal to not be echoed.
- The -t option causes read to time out and return failure if a complete line
- of input is not read within TIMEOUT seconds. If the TMOUT variable is set,
- its value is the default timeout. The return code is zero, unless end-of-file
- is encountered, read times out, or an invalid file descriptor is supplied as
- the argument to -u.
- Causes a function to exit with the return value specified by N. If N
- is omitted, the return status is that of the last command.
- -a Mark variables which are modified or created for export.
- -b Notify of job termination immediately.
- -e Exit immediately if a command exits with a non-zero status.
- -f Disable file name generation (globbing).
- -h Remember the location of commands as they are looked up.
- -k All assignment arguments are placed in the environment for a
- command, not just those that precede the command name.
- -m Job control is enabled.
- -n Read commands but do not execute them.
- -o option-name
- Set the variable corresponding to option-name:
- allexport same as -a
- braceexpand same as -B
- emacs use an emacs-style line editing interface
- errexit same as -e
- errtrace same as -E

- functrace same as -T
- hashall same as -h
- histexpand same as -H
- history enable command history
- ignoreeof the shell will not exit upon reading EOF
- interactive-comments
- allow comments to appear in interactive commands
- keyword same as -k
- monitor same as -m
- noclobber same as -C
- noexec same as -n
- noglob same as -f
- nolog currently accepted but ignored
- notify same as -b
- nounset same as -u
- onecmd same as -t
- physical same as -P
- pipefail the return value of a pipeline is the status of
- the last command to exit with a non-zero status,
- or zero if no command exited with a non-zero status
- posix change the behavior of bash where the default
- operation differs from the 1003.2 standard to
- match the standard
- privileged same as -p
- verbose same as -v
- vi use a vi-style line editing interface
- xtrace same as -x
- -p Turned on whenever the real and effective user ids do not match.
- Disables processing of the $ENV file and importing of shell
- functions. Turning this option off causes the effective uid and
- gid to be set to the real uid and gid.
- -t Exit after reading and executing one command.
- -u Treat unset variables as an error when substituting.
- -v Print shell input lines as they are read.
- -x Print commands and their arguments as they are executed.
- -B the shell will perform brace expansion
- -C If set, disallow existing regular files to be overwritten
- by redirection of output.
- -E If set, the ERR trap is inherited by shell functions.
- -H Enable ! style history substitution. This flag is on
- by default when the shell is interactive.
- -P If set, do not follow symbolic links when executing commands
- such as cd which change the current directory.
- -T If set, the DEBUG trap is inherited by shell functions.
-
    - Assign any remaining arguments to the positional parameters.
- The -x and -v options are turned off.
- Using + rather than - causes these flags to be turned off. The
- flags can also be used upon invocation of the shell. The current
- set of flags may be found in $-. The remaining n ARGs are positional
- parameters and are assigned, in order, to $1, $2, .. $n. If no

- ARGs are given, all shell variables are printed.
- For each NAME, remove the corresponding variable or function. Given
- the `-v', unset will only act on variables. Given the` -f' flag,
- unset will only act on functions. With neither flag, unset first
- tries to unset a variable, and if that fails, then tries to unset a
- function. Some variables cannot be unset; also see readonly.
- NAMEs are marked for automatic export to the environment of
- subsequently executed commands. If the -f option is given,
- the NAMEs refer to functions. If no NAMEs are given, or if `-p'</li> <li>is given, a list of all names that are exported in this shell is</li> <li>printed. An argument of` -n' says to remove the export property
- from subsequent NAMEs. An argument of `--' disables further option</li> <li>processing.</li> <li>The given NAMEs are marked readonly and the values of these NAMEs may</li> <li>not be changed by subsequent assignment. If the -f option is given,</li> <li>then functions corresponding to the NAMEs are so marked. If no</li> <li>arguments are given, or if` -p' is given, a list of all readonly names
- is printed. The `-a' option means to treat each NAME as</li> <li>an array variable. An argument of` --' disables further option
- processing.
- The positional parameters from $N+1 ... are renamed to $1 ... If N is
- not given, it is assumed to be 1.
- Read and execute commands from FILENAME and return. The pathnames
- in $PATH are used to find the directory containing FILENAME. If any
- ARGUMENTS are supplied, they become the positional parameters when
- FILENAME is executed.
- Suspend the execution of this shell until it receives a SIGCONT
- signal. The `-f' if specified says not to complain about this</li> <li>being a login shell if it is; just suspend anyway.</li> <li>Exits with a status of 0 (true) or 1 (false) depending on</li> <li>the evaluation of EXPR. Expressions may be unary or binary. Unary</li> <li>expressions are often used to examine the status of a file. There</li> <li>are string operators as well, and numeric comparison operators.</li> <li>File operators:</li> <li>-a FILE True if file exists.</li> <li>-b FILE True if file is block special.</li> <li>-c FILE True if file is character special.</li> <li>-d FILE True if file is a directory.</li> <li>-e FILE True if file exists.</li> <li>-f FILE True if file exists and is a regular file.</li> <li>-g FILE True if file is set-group-id.</li> <li>-h FILE True if file is a symbolic link. </li> <li>-L FILE True if file is a symbolic link.</li> <li>-k FILE True if file has its` sticky' bit set.
- -p FILE True if file is a named pipe.
- -r FILE True if file is readable by you.
- -s FILE True if file exists and is not empty.
- -S FILE True if file is a socket.
- -t FD True if FD is opened on a terminal.
- -u FILE True if the file is set-user-id.
- -w FILE True if the file is writable by you.
- -x FILE True if the file is executable by you.
- -O FILE True if the file is effectively owned by you.
- -G FILE True if the file is effectively owned by your group.
- -N FILE True if the file has been modified since it was last read.
- FILE1 -nt FILE2 True if file1 is newer than file2 (according to
- modification date).
- FILE1 -ot FILE2 True if file1 is older than file2.
- FILE1 -ef FILE2 True if file1 is a hard link to file2.
- String operators:
- -z STRING True if string is empty.
- -n STRING
- STRING True if string is not empty.

- STRING1 = STRING2
- True if the strings are equal.
- STRING1 != STRING2
- True if the strings are not equal.
- STRING1 < STRING2
- True if STRING1 sorts before STRING2 lexicographically.
- STRING1 > STRING2
- True if STRING1 sorts after STRING2 lexicographically.
- Other operators:
- -o OPTION True if the shell option OPTION is enabled.
- ! EXPR True if expr is false.
- EXPR1 -a EXPR2 True if both expr1 AND expr2 are true.
- EXPR1 -o EXPR2 True if either expr1 OR expr2 is true.
- arg1 OP arg2 Arithmetic tests. OP is one of -eq, -ne,
- -lt, -le, -gt, or -ge.
- Arithmetic binary operators return true if ARG1 is equal, not-equal,
- less-than, less-than-or-equal, greater-than, or greater-than-or-equal
- than ARG2.
- This is a synonym for the "test" builtin, but the last
- argument must be a literal `]', to match the opening` ['.
- Print the accumulated user and system times for processes run from
- the shell.
- The command ARG is to be read and executed when the shell receives
- signal(s) SIGNAL*SPEC. If ARG is absent (and a single SIGNAL*SPEC
- is supplied) or `-', each specified signal is reset to its original</li> <li>value. If ARG is the null string each SIGNAL_SPEC is ignored by the</li> <li>shell and by the commands it invokes. If a SIGNAL_SPEC is EXIT (0)</li> <li>the command ARG is executed on exit from the shell. If a SIGNAL_SPEC</li> <li>is DEBUG, ARG is executed after every simple command. If the` -p' option
- is supplied then the trap commands associated with each SIGNAL*SPEC are*
- *displayed. If no arguments are supplied or if only `-p' is given, trap</li> <li>prints the list of commands associated with each signal. Each SIGNAL_SPEC</li> <li>is either a signal name in <signal.h> or a signal number. Signal names</li> <li>are case insensitive and the SIG prefix is optional.` trap -l' prints*
- *a list of signal names and their corresponding numbers. Note that a*
- *signal can be sent to the shell with "kill -signal $$".*
- *For each NAME, indicate how it would be interpreted if used as a*
- *command name.*
- *If the -t option is used, `type' outputs a single word which is one of</li> <li><code>alias',</code>keyword', <code>function',</code>builtin', <code>file' or</code>', if NAME is an</li> <li>alias, shell reserved word, shell function, shell builtin, disk file,</li> <li>or unfound, respectively.</li> <li>If the -p flag is used,` type' either returns the name of the disk*
- *file that would be executed, or nothing if `type -t NAME' would not</li> <li>return` file'.*
- *If the -a flag is used, `type' displays all of the places that contain</li> <li>an executable named` file'. This includes aliases, builtins, and*
- *functions, if and only if the -p flag is not also used.*
- *The -f flag suppresses shell function lookup.*
- *The -P flag forces a PATH search for each NAME, even if it is an alias,*
- *builtin, or function, and returns the name of the disk file that would*
- *be executed.*
- *Ulimit provides control over the resources available to processes*
- *started by the shell, on systems that allow such control. If an*
- *option is given, it is interpreted as follows:*
- *-S*

- use the `soft' resource limit</li> <li>-H</li> <li>use the` hard' resource limit
- -a
- all current limits are reported
- -c
- the maximum size of core files created
- -d
- the maximum size of a process's data segment
- -e
- the maximum scheduling priority (`nice')</li> <li>-f</li> <li>the maximum size of files written by the shell and its children</li> <li>-i</li> <li>the maximum number of pending signals</li> <li>-l</li> <li>the maximum size a process may lock into memory</li> <li>-m</li> <li>the maximum resident set size</li> <li>-n</li> <li>the maximum number of open file descriptors</li> <li>-p</li> <li>the pipe buffer size</li> <li>-q</li> <li>the maximum number of bytes in POSIX message queues</li> <li>-r</li> <li>the maximum real-time scheduling priority</li> <li>-s</li> <li>the maximum stack size</li> <li>-t</li> <li>the maximum amount of cpu time in seconds</li> <li>-u</li> <li>the maximum number of user processes</li> <li>-v</li> <li>the size of virtual memory</li> <li>-x</li> <li>the maximum number of file locks</li> <li>If LIMIT is given, it is the new value of the specified resource;</li> <li>the special LIMIT values <code>soft',</code>hard', and` unlimited' stand for
- the current soft limit, the current hard limit, and no limit, respectively.
- Otherwise, the current value of the specified resource is printed.
- If no option is given, then -f is assumed. Values are in 1024-byte
- increments, except for -t, which is in seconds, -p, which is in
- increments of 512 bytes, and -u, which is an unscaled number of
- processes.
- The user file-creation mask is set to MODE. If MODE is omitted, or if
- `-S' is supplied, the current value of the mask is printed. The` -S'
- option makes the output symbolic; otherwise an octal number is output.
- If `-p' is supplied, and MODE is omitted, the output is in a form</li> <li>that may be used as input. If MODE begins with a digit, it is</li> <li>interpreted as an octal number, otherwise it is a symbolic mode string</li> <li>like that accepted by chmod(1).</li> <li>Wait for the specified process and report its termination status. If</li> <li>N is not given, all currently active child processes are waited for,</li> <li>and the return code is zero. N may be a process ID or a job</li> <li>specification; if a job spec is given, all processes in the job's</li> <li>pipeline are waited for.</li> <li>The` for' loop executes a sequence of commands for each member in a
- list of items. If `in WORDS ...;' is not present, then` in "$@"' is
- assumed. For each element in WORDS, NAME is set to that element, and
- the COMMANDS are executed.
- Equivalent to
- ((EXP1))
- while ((EXP2)); do
- COMMANDS
- ((EXP3))
- EXP1, EXP2, and EXP3 are arithmetic expressions. If any expression is
- omitted, it behaves as if it evaluates to 1.
- The WORDS are expanded, generating a list of words. The
- set of expanded words is printed on the standard error, each
- preceded by a number. If `in WORDS' is not present,` in "$@"'
- is assumed. The PS3 prompt is then displayed and a line read
- from the standard input. If the line consists of the number
- corresponding to one of the displayed words, then NAME is set
- to that word. If the line is empty, WORDS and the prompt are
- redisplayed. If EOF is read, the command completes. Any other

- value read causes NAME to be set to null. The line read is saved
- in the variable REPLY. COMMANDS are executed after each selection
- until a break command is executed.
- Execute PIPELINE and print a summary of the real time, user CPU time,
- and system CPU time spent executing PIPELINE when it terminates.
- The return status is the return status of PIPELINE. The `-p' option</li> <li>prints the timing summary in a slightly different format. This uses</li> <li>the value of the TIMEFORMAT variable as the output format. </li> <li>Selectively execute COMMANDS based upon WORD matching PATTERN. The</li> <li>`|' is used to separate multiple patterns.
- The `if COMMANDS' list is executed. If its exit status is zero, then the</li> <li><code>then COMMANDS' list is executed. Otherwise, each</code>elif COMMANDS' list is</li> <li>executed in turn, and if its exit status is zero, the corresponding</li> <li>`then COMMANDS' list is executed and the if command completes. Otherwise,
- the `else COMMANDS' list is executed, if present. The exit status of the</li> <li>entire construct is the exit status of the last command executed, or zero</li> <li>if no condition tested true.</li> <li>Expand and execute COMMANDS as long as the final command in the</li> <li>`while' COMMANDS has an exit status of zero.
- Expand and execute COMMANDS as long as the final command in the
- `until' COMMANDS has an exit status which is not zero.</li> <li>Create a simple command invoked by NAME which runs COMMANDS.</li> <li>Arguments on the command line along with NAME are passed to the</li> <li>function as $0 .. $n.</li> <li>Run a set of commands in a group. This is one way to redirect an</li> <li>entire set of commands.</li> <li>Equivalent to the JOB_SPEC argument to the`fg' command. Resume a
- stopped or background job. JOBSPEC can specify either a job name
- or a job number. Following JOBSPEC with a `&' places the job in</li> <li>the background, as if the job specification had been supplied as an</li> <li>argument to`bg'.
- The EXPRESSION is evaluated according to the rules for arithmetic
- evaluation. Equivalent to "let EXPRESSION".
- Returns a status of 0 or 1 depending on the evaluation of the conditional
- expression EXPRESSION. Expressions are composed of the same primaries used
- by the `test' builtin, and may be combined using the following operators</li> <li>(EXPRESSION)</li> <li>Returns the value of EXPRESSION</li> <li>! EXPRESSION</li> <li>True if EXPRESSION is false; else false</li> <li>EXPR1 && EXPR2</li> <li>True if both EXPR1 and EXPR2 are true; else false</li> <li>EXPR1 || EXPR2</li> <li>True if either EXPR1 or EXPR2 is true; else false</li> <li>When the <code>==' and</code>!=' operators are used, the string to the right of the</li> <li>operator is used as a pattern and pattern matching is performed. The</li> <li>&& and || operators do not evaluate EXPR2 if EXPR1 is sufficient to</li> <li>determine the expression's value.</li> <li>BASH_VERSION</li> <li>Version information for this Bash.</li> <li>CDPATH</li> <li>A colon-separated list of directories to search</li> <li>for directries given as arguments to`cd'.
- GLOBIGNORE
- A colon-separated list of patterns describing filenames to
- be ignored by pathname expansion.
- HISTFILE
- The name of the file where your command history is stored.
- HISTFILESIZE
- The maximum number of lines this file can contain.
- HISTSIZE
- The maximum number of history lines that a running
- shell can access.
- HOME
- The complete pathname to your login directory.
- HOSTNAME
- The name of the current host.

- *HOSTTYPE*
- *The type of CPU this version of Bash is running under.*
- *IGNOREEOF*
- *Controls the action of the shell on receipt of an EOF*
- *character as the sole input. If set, then the value*
- *of it is the number of EOF characters that can be seen*
- *in a rowon an empty line before the shell will exit*
- *(default 10). When unset, EOF signifies the end of input.*
- *MACHTYPE*
- *A string describing the current system Bash is running on.*
- *MAILCHECK*
- *Howoften, in seconds, Bash checks for newmail.*
- *MAILPATH*
- *A colon-separated list of filenames which Bash checks*
- *for newmail.*
- *OSTYPE*
- *The version of Unix this version of Bash is running on.*
- *PATH*
- *A colon-separated list of directories to search when*
- *looking for commands.*
- *PROMPT*COMMAND
- A command to be executed before the printing of each
- primary prompt.
- PS1
- The primary prompt string.
- PS2
- The secondary prompt string.
- PWD
- The full pathname of the current directory.
- SHELLOPTS
- A colon-separated list of enabled shell options.
- TERM
- The name of the current terminal type.
- TIMEFORMAT
- The output format for timing statistics displayed by the
- `time' reserved word.</li> <li>auto_resume</li> <li>Non-null means a command word appearing on a line by</li> <li>itself is first looked for in the list of currently</li> <li>stopped jobs. If found there, that job is foregrounded.</li> <li>A value of` exact' means that the command word must
- exactly match a command in the list of stopped jobs. A
- value of `substring' means that the command word must</li> <li>match a substring of the job. Any other value means that</li> <li>the command must be a prefix of a stopped job.</li> <li>histchars</li> <li>Characters controlling history expansion and quick</li> <li>substitution. The first character is the history</li> <li>substitution character, usually` !'. The second is
- the `quick substitution' character, usually` ^'. The
- third is the `history comment' character, usually` #'.
- HISTIGNORE
- A colon-separated list of patterns used to decide which
- commands should be saved on the history list.
- Adds a directory to the top of the directory stack, or rotates
- the stack, making the new top of the stack the current working
- directory. With no arguments, exchanges the top two directories.
- +N

- Rotates the stack so that the Nth directory (counting
- from the left of the list shown by `dirs', starting with</li> <li>zero) is at the top.</li> <li>-N</li> <li>Rotates the stack so that the Nth directory (counting</li> <li>from the right of the list shown by` dirs', starting with
- zero) is at the top.
- -n
- suppress the normal change of directory when adding directories
- to the stack, so only the stack is manipulated.
- dir
- adds DIR to the directory stack at the top, making it the
- new current working directory.
- You can see the directory stack with the `dirs' command.</li> <li>Removes entries from the directory stack. With no arguments,</li> <li>removes the top directory from the stack, and cd's to the new</li> <li>top directory.</li> <li>+N</li> <li>removes the Nth entry counting from the left of the list</li> <li>shown by <code>dirs', starting with zero. For example:</code>popd +0'</li> <li>removes the first directory,` popd +1' the second.
- -N
- removes the Nth entry counting from the right of the list
- shown by `dirs', starting with zero. For example:` popd -0'
- removes the last directory, `popd -1' the next to last.</li> <li>-n</li> <li>suppress the normal change of directory when removing directories</li> <li>from the stack, so only the stack is manipulated.</li> <li>You can see the directory stack with the` dirs' command.
- Display the list of currently remembered directories. Directories
- find their way onto the list with the `pushd' command; you can get</li> <li>back up through the list with the` popd' command.
- The -l flag specifies that `dirs' should not print shorthand versions</li> <li>of directories which are relative to your home directory. This means</li> <li>that <code>~/bin' might be displayed as</code>/homes/bfox/bin'. The -v flag</li> <li>causes` dirs' to print the directory stack with one entry per line,
- prepending the directory name with its position in the stack. The -p
- flag does the same thing, but the stack position is not prepended.
- The -c flag clears the directory stack by deleting all of the elements.
- +N
- displays the Nth entry counting from the left of the list shown by
- dirs when invoked without options, starting with zero.
- -N
- displays the Nth entry counting from the right of the list shown by
- dirs when invoked without options, starting with zero.
- Toggle the values of variables controlling optional behavior.
- The -s flag means to enable (set) each OPTNAME; the -u flag
- unsets each OPTNAME. The -q flag suppresses output; the exit
- status indicates whether each OPTNAME is set or unset. The -o
- option restricts the OPTNAMEs to those defined for use with
- `set -o'. With no options, or with the -p option, a list of all</li> <li>settable options is displayed, with an indication of whether or</li> <li>not each is set.</li> <li>printf formats and prints ARGUMENTS under control of the FORMAT. FORMAT</li> <li>is a character string which contains three types of objects: plain</li> <li>characters, which are simply copied to standard output, character escape</li> <li>sequences which are converted and copied to the standard output, and</li> <li>format specifications, each of which causes printing of the next successive</li> <li>argument. In addition to the standard printf(1) formats, %b means to</li> <li>expand backslash escape sequences in the corresponding argument, and %q</li> <li>means to quote the argument in a way that can be reused as shell input.</li> <li>If the -v option is supplied, the output is placed into the value of the</li> <li>shell variable VAR rather than being sent to the standard output.</li> <li>For each NAME, specify how arguments are to be completed.`

</li> <li>If the -p option is supplied, or if no options are supplied, existing</li> <li>completion specifications are printed in a way that allows them to be</li> <li>reused as input. The -r option removes a completion specification for</li> <li>each NAME, or, if no NAMEs are supplied, all completion specifications.</li> <li>Display the possible completions depending on the options. Intended</li> <li>to be used from within a shell function generating possible completions.</li> <li>If the optional WORD argument is supplied, matches against WORD are</li> <li>generated.</li> <li>alias </li> <li> %s': invalid alias name

- bind*builtin*
- *lvpVPsSf:q:u:m:r:x:*
- `%s': invalid keymap name</li> <li>%s: cannot read: %s</li> <li>` *%s': unknown function name*
- *%s is not bound to any keys.*
- *%s can be invoked via*
- *"%s"%s*
- `%s': cannot unbind</li> <li>only meaningful in a <code>for',</code>while', or` *until' loop*
- *loop count*
- *%s %s %s*
- *OLDPWD=*
- *HOME not set*
- *OLDPWD not set*
- *CDPATH*
- *command*builtin
- /bin:/usr/bin:/sbin:/usr/sbin
- R%s: error retrieving current directory: %s: %s
- %s: usage:
- %s: ambiguous job spec
- write error: %s
- %s: not a shell builtin
- %s: restricted
- %s: no job control
- %s: no such job
- %s: %s out of range
- `%s': not a pid or valid job spec</li> <li>%s: invalid signal specification</li> <li>SIGJUNK</li> <li>Unknown</li> <li>%2d) %s</li> <li>%s: invalid number</li> <li>%s: invalid option name</li> <li>%s: not found</li> <li>%s: numeric argument required</li> <li>cannot use` -f' to make functions
- %s %d %s
- %s: cannot destroy array variables in this way
- +afiprtxF
- can only be used in a function
- adnpsf:
- enable %s
- enable -n %s
- cannot open shared object %s: %s
- *struct*
- *cannot find %s in shared object %s: %s*
- *%s: not dynamically loaded*
- *%s: cannot delete: %s*
- *%s: not a regular file*
- *%s: file is too large*
- evalfile
- parse*and*execute*top*
- *pe*dispose
- parse*and*execute

- %s: cannot execute: %s
- ~/.bash*logout*
- */etc/bash/bash*logout
- There are stopped jobs.
- not login shell: use `exit'</li> <li>logout</li> <li>${FCEDIT:-${EDITOR:-ed}}</li> <li>${FCEDIT:-${EDITOR:-vi}}</li> <li>fc builtin</li> <li>:e:lnrs</li> <li>no command found</li> <li>history specification</li> <li>bash-fc</li> <li>%s: cannot open temp file: %s</li> <li>current</li> <li>job %d started without job control</li> <li>builtin hash -p %s %s</li> <li>hashing disabled</li> <li>dlp:rt</li> <li>command</li> <li>%s: hash table empty</li> <li>These shell commands are defined internally. Type` help' to see this list.
- Type `help name' to find out more about the function` name'.
- Use `info bash' to find out more about the shell in general.</li> <li>Use <code>man -k' or</code>info' to find out more about commands not in this list.</li> <li>A star (*) next to a name means that the command is disabled.</li> <li>Shell commands matching keywords`
- Shell commands matching keyword `</li> <li>%s: cannot open: %s</li> <li>no help topics match <code>%s'. Try</code>help help' or <code>man -k %s' or</code>info %s'.</li> <li>%5d%c %s%s</li> <li>acd:npsrw</li> <li>cannot use more than one of -anrw</li> <li>%s: history expansion failed</li> <li>history position</li> <li>no other options allowed with` -x'
- lpnxrs
- jobs*builtin*
- *Unknown error*
- *(%ld) - %s*
- *%s: arguments must be process or job IDs*
-
- *%2d %s*
- *%2d %s*
- *dirstack*
- *directory stack empty*
- *directory stack index*
- *no other directory*
- *read*builtin
- read error: %d: %s
- %s: invalid timeout specification
- %s: invalid file descriptor specification
- %d: invalid file descriptor: %s
- ersa:d:n:p:t:u:
- can only `return' from a function or sourced script</li> <li>editing-mode</li> <li>cannot simultaneously unset a function and a variable</li> <li>%s: cannot unset</li> <li>%s: cannot unset: readonly %s</li> <li>%s: not an array variable</li> <li>SHELLOPTS</li> <li>set %co %s</li> <li>allexport</li> <li>braceexpand</li> <li>errexit</li> <li>errtrace</li> <li>functrace</li> <li>hashall</li> <li>histexpand</li> <li>interactive-comments</li> <li>keyword</li> <li>monitor</li> <li>noclobber</li> <li>noexec</li> <li>noglob</li> <li>notify</li> <li>nounset</li> <li>onecmd</li> <li>physical</li> <li>pipefail</li> <li>privileged</li> <li>xtrace</li> <li>(declare -%s </li> <li>%s -%s </li> <li>%s: not a function</li> <li>*shift count</li> <li>filename argument required</li> <li>%s: file not found</li> <li>zcannot suspend</li> <li>cannot suspend a login shell</li> <li>unknown</li> <li>trap -- %s %d</li> <li>trap -- %s %s</li> <li>%s is aliased to` %s'
- alias %s=%s
- %s is a shell keyword
- %s is a function
- %s is a shell builtin
- %s is %s
- %s is hashed (%s)
- (%s, -%c)

- (-%c)
- %-20s %16s
- unlimited
- %s: cannot get limit: %s
- `%c': bad command</li> <li>%s: cannot modify limit: %s</li> <li>core file size</li> <li>blocks</li> <li>data seg size</li> <li>kbytes</li> <li>scheduling priority</li> <li>file size</li> <li>pending signals</li> <li>max locked memory</li> <li>max memory size</li> <li>open files</li> <li>pipe size</li> <li>512 bytes</li> <li>POSIX message queues</li> <li>real-time priority</li> <li>stack size</li> <li>cpu time</li> <li>seconds</li> <li>max user processes</li> <li>virtual memory</li> <li>file locks</li> <li>umask%s </li> <li>` %c': invalid symbolic mode operator
- `%c': invalid symbolic mode character</li> <li>u=%s,g=%s,o=%s</li> <li>octal number</li> <li>OPTARG</li> <li>%s: invalid shell option name</li> <li>shopt %s %s</li> <li>cannot set and unset shell options simultaneously</li> <li>cdable_vars</li> <li>cdspell</li> <li>checkhash</li> <li>checkwinsize</li> <li>cmdhist</li> <li>dotglob</li> <li>execfail</li> <li>expand_aliases</li> <li>extdebug</li> <li>extglob</li> <li>extquote</li> <li>failglob</li> <li>force_fignore</li> <li>gnu_errfmt</li> <li>histappend</li> <li>histreedit</li> <li>histverify</li> <li>hostcomplete</li> <li>huponexit</li> <li>interactive_comments</li> <li>lithist</li> <li>login_shell</li> <li>mailwarn</li> <li>no<em>empty</em>cmd_completion</li> <li>nocaseglob</li> <li>nocasematch</li> <li>nullglob</li> <li>progcomp</li> <li>promptvars</li> <li>restricted_shell</li> <li>shift_verbose</li> <li>sourcepath</li> <li>xpg_echo</li> <li>(missing hex digit for \x</li> <li>warning: %s: %s</li> <li>#'- + 0</li> <li>hjlLtz</li> <li>` %s': missing format character
- %s: illegal option -- %c
- %s: option requires an argument -- %c
- warning: -F option may not work as you expect
- warning: -C option may not work as you expect
- %s: invalid action name
- abcdefgjko:prsuvA:G:W:P:S:X:F:C:
- complete
- -o %s
- bashdefault
- dirnames
- filenames
- nospace
- plusdirs
- -A %s
- arrayvar
- binding
- enabled
- helptopic
- hostname
- running
- setopt
- signal
- %s %s
- %s: no completion specification
- service
- BASH*REMATCH*
- */dev/std*
- *%s: bad network path specification*
- *socket*
- *connect*
- *%ldm%d.%03ds*

- *sh*makepath
- sh*realpath*
- *TMPDIR*
- */var/tmp*
- */usr/tmp*
- *%s/%s-%lu*
- *b%s/cur*
- *%s/tmp*
- *%s/new*
- *invalid base*
- *0123456789ABCDEF*
- *0123456789abcdef*
- *l|h^0%bB*
- *l|hwW^0bB*
- *l|h^0bB*
- *hl^$0ftFT;,%wbeWBE|*
- *\AaliCcDdPpYyRrSsXx~
- accept-line
- arrow-key-prefix
- backward-byte
- backward-char
- backward-kill-line
- backward-kill-word
- backward-word
- beginning-of-history
- beginning-of-line
- call-last-kbd-macro
- capitalize-word
- character-search
- character-search-backward
- clear-screen
- copy-backward-word
- copy-forward-word
- copy-region-as-kill
- delete-char
- delete-char-or-list
- delete-horizontal-space
- digit-argument
- do-lowercase-version
- downcase-word
- dump-functions
- dump-macros
- dump-variables
- emacs-editing-mode
- end-kbd-macro
- end-of-history
- end-of-line
- exchange-point-and-mark
- forward-backward-delete-char
- forward-byte
- forward-char
- forward-word

- history-search-backward
- history-search-forward
- insert-comment
- insert-completions
- kill-whole-line
- kill-line
- kill-region
- kill-word
- menu-complete
- next-history
- non-incremental-forward-search-history
- non-incremental-reverse-search-history
- non-incremental-forward-search-history-again
- non-incremental-reverse-search-history-again
- overwrite-mode
- possible-completions
- previous-history
- quoted-insert
- re-read-init-file
- redraw-current-line
- revert-line
- self-insert
- set-mark
- start-kbd-macro
- tab-insert
- tilde-expand
- transpose-chars
- transpose-words
- tty-status
- universal-argument
- unix-filename-rubout
- unix-line-discard
- unix-word-rubout
- upcase-word
- yank-last-arg
- yank-nth-arg
- yank-pop
- vi-append-eol
- vi-append-mode
- vi-arg-digit
- vi-back-to-indent
- vi-bWord
- vi-bword
- vi-change-case
- vi-change-char
- vi-change-to
- vi-char-search
- vi-column
- vi-complete
- vi-delete
- vi-delete-to
- vi-eWord

- vi-editing-mode
- vi-end-word
- vi-eof-maybe
- vi-eword
- vi-fWord
- vi-fetch-history
- vi-first-print
- vi-fword
- vi-goto-mark
- vi-insert-beg
- vi-insertion-mode
- vi-match
- vi-movement-mode
- vi-next-word
- vi-overstrike
- vi-overstrike-delete
- vi-prev-word
- vi-put
- vi-redo
- vi-replace
- vi-rubout
- vi-search
- vi-search-again
- vi-set-mark
- vi-subst
- vi-tilde-expand
- vi-yank-arg
- vi-yank-to
- --More--
- Display all %d possibilities? (y or n)
- readline: bad value %d for what*t*odo in rl*complete*
- *"\'@$><=;|&{(</li> <li>"%s%s": "%s"</li> <li>%s%s outputs %s</li> <li>readline: %s: line %d: %s</li> <li>readline: %s</li> <li>$endif without matching $if</li> <li>$else found without matching $if</li> <li>audible</li> <li>visible</li> <li>bell-style</li> <li>completion-query-items</li> <li>isearch-terminators</li> <li>keymap</li> <li>set %s %s</li> <li>%s is set to %s'*
- *blink-matching-paren*
- *prefer-visible-bell*
- *# %s (not bound)*
- *"%s": %s*
- *%s is not bound to any keys*
- *%s can be found on*
- *unknown parser directive*
- *no closing "' in key binding</li> <li>prefix-meta</li> <li>INPUTRC</li> <li>~/.inputrc</li> <li>/etc/inputrc</li> <li>Control-</li> <li>bind-tty-special-chars</li> <li>byte-oriented</li> <li>convert-meta</li> <li>disable-completion</li> <li>enable-keypad</li> <li>expand-tilde</li> <li>history-preserve-point</li> <li>horizontal-scroll-mode</li> <li>input-meta</li> <li>mark-directories</li> <li>mark-modified-lines</li> <li>mark-symlinked-directories</li> <li>match-hidden-files</li> <li>meta-flag</li> <li>output-meta</li> <li>page-completions</li> <li>print-completions-horizontally</li> <li>show-all-if-ambiguous</li> <li>show-all-if-unmodified</li> <li>visible-stats</li> <li>emacs-standard</li> <li>emacs-meta</li> <li>emacs-ctlx</li> <li>vi-move</li> <li>vi-command</li> <li>vi-insert</li> <li>include</li> <li>Escape</li> <li>Newline</li> <li>Return</li> <li>Rubout</li> <li>reverse-</li> <li>i-search)*

- *readline: debug: insertsomechars: count (%d) != col (%d)*
- */-=~.#$*
- Rreadline: readline*callback*read*char() called with no handler!*
- *(arg: %d)*
- *<>;&|$*
- *no previous substitution*
- *unknown expansion error*
- *event not found*
- *bad word specifier*
- *substitution failed*
- *unrecognized history modifier*
- *;&()|<>*
- *b.history*
- *xdigit*
- *backspace*
- *vertical-tab*
- *form-feed*
- *carriage-return*
- *exclamation-mark*
- *quotation-mark*
- *number-sign*
- *dollar-sign*
- *percent-sign*
- *ampersand*
- *apostrophe*
- *left-parenthesis*
- *right-parenthesis*
- *asterisk*
- *plus-sign*
- *hyphen*
- *hyphen-minus*
- *period*
- *full-stop*
- *semicolon*
- *less-than-sign*
- *equals-sign*
- *greater-than-sign*
- *question-mark*
- *commercial-at*
- *left-square-bracket*
- *backslash*
- *reverse-solidus*
- *right-square-bracket*
- *circumflex*
- *circumflex-accent*
- *underscore*
- *grave-accent*
- *left-brace*
- *left-curly-bracket*
- *vertical-line*
- *right-brace*
- *right-curly-bracket*

- *.shstrtab*
- *.interp*
- *.note.ABI-tag*
- *.gnu.hash*
- *.dynsym*
- *.dynstr*
- *.gnu.version*
- *.gnu.versionr*
- .rela.dyn
- .rela.plt
- .rodata
- .PARISC.unwind
- .eh*frame*hdr
- .eh_frame
- .ctors
- .dtors
- .dynamic

UTF-8 Strings

No detected.

UTF-16LE Strings

- 244.,,
- &'()55
- " !"#$3&'()
- /0<=@b1
-]^T9Uwy:~sz
- mnogh_
- !c"#$%&'()
- 56tufp7/

Extracted URLs

No detected.

Base64 Strings

No valid Base64-encoded strings found.

File Entropy Analysis

- **Entropy**: `6.64`
- **Status**: This file is likely packed or encrypted.

VirusTotal Analysis

Scan Date: 2024-12-10 07:32:37

Scan Results

- Malicious: 0

- Suspicious: 0
- Undetected: 64
- Harmless: 0
- Timeout: 0
- Confirmed-timeout: 0
- Failure: 0
- Type-unsupported: 12

Community Votes

- Harmless: 0
- Malicious: 0

Detailed Engine Results

Engine Name	Detection Category	Detection
No results	No results	No results