CFEngine 3.7.1 Agent Promise Attributes

Contents

1   Preface

CFEngine is designed to be comprehensive and to let you model nearly any aspect of system configuration. There are tens of promise types and hundreds of unique promise attributes to enable modeling the desired configuration.

The purpose of this work is to facilitate learning and to serve as reference.

To make this sea of options navigable, this document lists the promise types and attributes affecting the agent (the part of CFEngine that actually makes changes to your system) in a short format (name and synopsis only).

For more detail, please consult the reference manual: https://docs.cfengine.com/latest/reference.html

Don't let the complexity of hundreds of promise attributes scare you - CFEngine 3 is designed to address the challenges of Knowledge Management, including complexity, and allows you to summarize and abstract the underlying details, to the extent of Webserver("on") to configure a web server.

But if you need to configure your Web server a special way, the below details will enable you to do so. Have fun getting under the hood of your system configuration and getting greasy to the elbows!

In-depth hands on professional training is available from Vertical Sysadmin (www.verticalsysadmin.com).

Book your on-site course by email to hello@verticalsysadmin.com.

Yours sincerely,

Aleksey Tsalolikhin, Configuration Management Enthusiast

2   Attributes of promises common to all CFEngine components

2.1   Attributes that can be used in any promise

action	action_policy	Determines whether to repair or report about non-kept promises
	ifelapsed	The number of minutes before next allowed assessment of a promise. This overrides the global settings. Promises which take a long time to verify should usually be protected with a long value for this parameter.
	expireafter	The Number of minutes before a repair action is interrupted and retried. This is the locking time after which CFEngine will attempt to kill and restart its attempt to keep a promise.
	log_string	The message to be written to the log when a promise verification leads to a repair.
	log_kept	The names of files to which log_string will be saved for kept promises.
	log_repaired	The names of files to which log_string will be saved for repaired promises.
	log_failed	The names of files to which log_string will be saved for failed promises.
	log_level	Describes the reporting level sent to syslog.
	log_priority	This menu option policy is the priority level of the log message, as interpreted by a syslog server. It determines the importance of messages from CFEngine.
	value_kept	(deprecated) This menu option policy is deprecated as of 3.6.0. It performs no action and is kept for backward compatibility.
	value_repaired	(deprecated) This menu option policy is deprecated as of 3.6.0. It performs no action and is kept for backward compatibility.
	value_notkept	(deprecated) This menu option policy is deprecated as of 3.6.0. It performs no action and is kept for backward compatibility.
	audit	A true/false switch for detailed audit records of a promise.
	background	A true/false switch for parallelizing the promise repair.
	report_level	Defines the reporting level for standard output for this promise.
	measurement_class	If set, performance will be measured and recorded under this identifier.
classes	scope	Scope of the class set by this body.
	promise_repaired	Classes to be defined globally if the promise was *repaired*.
	repair_failed	Classes to be defined globally if the promise could not be kept.

	repair_denied	Classes to be defined globally if the promise could not be repaired due to denied access to required resources.
	repair_timeout	Classes to be defined globally if the promise could not be repaired due to timeout.
	promise_kept	Classes to be defined globally if the promise was kept without any corrective action.
	cancel_kept	Classes to be canceled if the promise is kept.
	cancel_repaired	Classes to be canceled if the promise is repaired.
	cancel_notkept	Classes to be canceled if the promise is not kept for any reason.
	kept_returncodes	Return codes that indicate a kept commands promise.
	repaired_returncodes	Return codes that indicate a repaired commands promise
	failed_returncodes	This slist contains return codes indicating a failed command-related promise.
	persist_time	The number of minutes the specified classes should remain active.
	timer_policy	Determines whether a persistent class restarts its counter when rediscovered.
comment		Describes the real intention of the promise.
depends_on		A list of promise handles for promises that must have an outcome of KEPT or REPAIRED in order for the promise to be actuated.
handle		A unique id-tag string for referring to this as a promisee elsewhere.
ifvarclass		Describes extended classes ANDed with context.
if		Describes extended classes ANDed with context. This is an exact alias for ifvarclass.
meta		User-data associated with policy, e.g. key=value strings.
unless		Describes negated extended classes ANDed with context. This is exactly like ifvarclass but logically inverted.

2.2 Attributes of "classes" promises

and	Combine class sources with AND
dist	Generate a probabilistic class distribution
expression	Evaluate string expression of classes in normal form
or	Combine class sources with inclusive OR
persistence	Make the class persistent to avoid re-evaluation
not	Evaluate the negation of string expression in normal form
scope	Scope of the class set by this promise.
select_class	Select one of the named list of classes to define based on host identity
xor	Combine class sources with XOR

2.3 Attributes of "defaults" promises

if_match_regex	If this regular expression matches the current value of the variable, replace it with default

2.4 Attributes of "meta" promises

string	Used to represent arbitrary information about promise bundles. Internally, meta promises are just vars promises. Their purpose is to allow policy writers to document bundles with information about the bundles (such as author, version, creation date, etc.)
slist	
data	

2.5 Attributes of "reports" promises

friend_pattern		Regular expression to keep selected hosts from the friends report list
intermittency		Real number threshold [0,1] of intermittency about current peers, report above
printfile	file_to_print	Path name to the file that is to be sent to standard output
	number_of_lines	Integer maximum number of lines to print from selected file
report_to_file		The path and filename to which output should be appended

bundle_return_value_index	The promiser is to be interpreted as a literal value that the caller can accept as a result for this bundle; in other words, a return value with array index defined by this attribute.
lastseen	Integer time threshold in hours since current peers were last seen, report absence
showstate	(deprecated) This attribute is kept for source compatibility, and has no effect.

2.6 Attributes of "vars" promises

string	A scalar string
int	A scalar integer
real	A scalar real number
slist	A list of scalar strings
ilist	A list of integers
rlist	A list of real numbers
data	A data container structure
policy	The policy for (dis)allowing (re)definition of variables

3 Attributes of promises specific to the Agent

3.1 Attributes of "commands" promises

args		Allows to separate the arguments to the command from the command itself.
contain		Allows running the command in a *sandbox*.
contain	useshell	Specifies which shell to use when executing the command.
	umask	Sets the internal umask for the process.
	exec_owner	Specifies the user under which the command executes.
	exec_group	Associates the command with a group.
	exec_timeout	Attempt to time-out after this number of seconds.
	chdir	Run the command with a working directory.
	chroot	Specify the path that will be the root directory for the process.
	preview	This is the preview command when running in dry-run mode (with -n).
	no_output	Allows to discard all output from the command.
	module	Set variables and classes based on command output.

3.2 Attributes of "databases" promises

database_server	db_server_owner	This string represents the user name for a database connection.
	db_server_password	This string represents the clear text password for a database connection.
	db_server_host	This string represents the hostname or address for a database connection.
	db_server_type	This string represents the type of database server being used.
	db_server_connection_db	This string is the name of an existing database to connect to in order to create/manage other databases.
database_type		This menu option is a type of database that is to be manipulated.
database_operation		This menu option represents the nature of the promise.
database_columns		This slist defines column definitions to be promised by SQL databases.
database_rows		This is an ordered list of row values to be promised by SQL databases.
registry_exclude		This slist contains regular expressions to ignore in key/value verification.

3.3 Attributes of "files" promises

acl	aces	Native settings for access control entry are defined by *aces*. POSIX ACL are available in CFEngine Community starting with 3.4.0. NTFS ACL are available in with CFEngine Enterprise.
	acl_default	Determines the access control list type for the affected file system.
	acl_inherit	Defines whether the object inherits its ACL from its parent.
	acl_method	This menu option defines the editing method for an access control list.
	acl_type	This menu option defines the access control list type for the affected file system.
	specify_default_aces	This slist specifies the native settings for access control entry.
changes	hash	This menu option defines the ash files for change detection.
	report_changes	This menu option specifies criteria for change warnings.
	update_hashes	Determines whether hash values should be updated immediately after a change.
	report_diffs	Determines whether to generate reports summarizing the major differences between individual text files.
copy_from	source	This string represents the reference source file from which to copy. For remote copies this refers to the file name on the remote server.
	servers	This slist names servers in order of preference from which to copy. The servers are tried in order until one of them succeeds.
	collapse_destination_dir	Use to flatten the directory hierarchy during copy. All the files will end up in the root destination directory.
	compare	The menu option policy compare is used for comparing source and image file attributes.
	copy_backup	Menu option policy for file backup/version control
	encrypt	The encrypt menu option policy describes whether to use encrypted data stream to connect to remote hosts.
	check_root	The check_root menu option policy checks permissions on the root directory when copying files recursively by depth_search.
	copylink_patterns	The copylink_patterns slist of patterns are matching files that should be copied instead of linked.
	copy_size	The integers specified in copy_size determines the range for the size of files that may be copied.
	findertype	The findertype menu option policy describes the default finder type on MacOSX.
	linkcopy_patterns	The linkcopy_patterns contains patterns for matching files that should be replaced with symbolic links.
	link_type	The link_type menu option policy contains the type of links to use when copying.
	force_update	The force_update menu option policy instructs whether to always force copy update.
	force_ipv4	The force_ipv4 menu option policy can determine whether to use ipv4 on an ipv6 enabled network.
	portnumber	Setting portnumber determines the port number to connect to on a server host.
	preserve	Determines whether to preserve file permissions on copied files.
	protocol_version	Defines the protocol to use for the outgoing connection in this copy operation.
	purge	The purge menu option policy instructs on whether to purge files on client that do not match files on server when a depth_search is used.
	stealth	Setting the stealth menu option policy determines whether to preserve time stamps on copied files. This preserves file access and modification times on the promiser files.
	timeout	The integer set in timeout is the value for the connection timeout, in seconds.
	trustkey	The trustkey menu option policy determines whether to trust public keys from a remote server, if previously unknown.
	type_check	The type_check menu option policy compares file types before copying.
	verify	The verify menu option policy instructs whether to verify transferred file by hashing after copy.
create		true/false whether to create non-existing file
delete	dirlinks	Menu option policy for dealing with symbolic links to directories during deletion
	rmdirs	true/false whether to delete empty directories during recursive deletion
depth_search	depth	Maximum depth level for search

	exclude_dirs	List of regexes of directory names NOT to include in depth search
	include_basedir	true/false include the start/root dir of the search results
	include_dirs	List of regexes of directory names to include in depth search
	rmdeadlinks	true/false remove links that point to nowhere
	traverse_links	true/false traverse symbolic links to directories
	xdev	true/false exclude directories that are on different devices
edit_defaults	edit_backup	Menu option for backup policy on edit changes
	empty_file_before_editing	Baseline memory model of file to zero/empty before commencing promised edits.
	inherit	If true this causes the sub-bundle to inherit the private classes of its parent
	max_file_size	Do not edit files bigger than this number of bytes
	recognize_join	Join together lines that end with a backslash, up to 4kB limit
	rotate	How many backups to store if *rotate* edit_backup strategy is selected. Defaults to 1
edit_line		Specifies name of edit_line bundle
edit_template		The name of a Mustache or native-CFEngine template file to expand
edit_xml		Specifies name of edit_xml bundle
file_select	leaf_name	List of regexes that match an acceptable name
	path_name	List of pathnames to match acceptable target
	search_mode	A list of mode masks for acceptable file permissions
	search_size	Integer range of file sizes in bytes
	search_owners	List of acceptable user names or ids for the file, or regexes to match
	search_groups	List of acceptable group names or ids for the file, or regexes to match
	search_bsdflags	String of flags for bsd file system flags expected set
	ctime	Range of change times (ctime) for acceptable files
	mtime	Range of modification times (mtime) for acceptable files
	atime	Range of access times (atime) for acceptable files
	exec_regex	Matches file if this regular expression matches any full line returned by the command
	exec_program	Execute this command on each file and match if the exit status is zero
	file_types	List of acceptable file types from menu choices
	issymlinkto	List of regular expressions to match file objects
	file_result	Logical expression combining classes defined by file search criteria
link_from	copy_patterns	A set of patterns that should be copied and synchronized instead of linked
	link_children	true/false whether to link all directory's children to source originals
	link_type	The type of link used to alias the file
	source	The source file to which the link should point
	when_linking_children	Policy for overriding existing files when linking directories of children
	when_no_source	Behavior when the source file to link to does not exist
move_obstructions		true/false whether to move obstructions to file-object creation
pathtype		Menu option for interpreting promiser file object
perms	bsdflags	List of menu options for BSD file system flags to set
	groups	List of acceptable groups of group ids, first is change target
	mode	File permissions
	owners	List of acceptable owners or user ids, first is change target
	rxdirs	true/false add execute flag for directories if read flag is set
rename	disable	true/false automatically rename and remove permissions
	disable_mode	The permissions to set when a file is disabled
	disable_suffix	The suffix to add to files when disabling
	newname	The desired name for the current file
	rotate	Maximum number of file rotations to keep
repository		Name of a repository for versioning
template_data		The data to be passed to the template (Mustache only)
template_method		The template type.
touch		true/false whether to touch time stamps on file
transformer		Command (with full path) used to transform current file (no shell wrapper used)

3.4 Attributes of promises in edit_line bundles

3.4.1 Attributes of any promises in edit_line bundles

select_region	include_start_delimiter	Whether to include the section delimiter
	include_end_delimiter	Whether to include the section delimiter
	select_start	Anchored regular expression matching start of edit region
	select_end	Anchored regular expression matches end of edit region from start

3.4.2 Attributes of "field_edits" promises in edit_line bundles

edit_field	allow_blank_fields	Defines how blank fields in a line are handled.
	extend_fields	Permits adding new fields, to avoid triggering an error.
	field_operation	Menu option policy for editing subfields.
	field_separator	The regular expression used to separate fields in a line.
	field_value	Set a field to a constant value.
	select_field	Sets the index of the field required, see also start_fields_from_zero.
	start_fields_from_zero	The numbering of fields is a matter for consistency and convention. Arrays are usually thought to start with first index equal to zero (0), but the first column in a file would normally be 1. By setting this option, you can tell CFEngine that the first column should be understood as number 0 instead, for consistency with other array functions.
	value_separator	Defines the character separator for subfields inside the selected field.

3.4.3 Attributes of "insert_lines" promises in edit_line bundles

expand_scalars		Expand any unexpanded variables
insert_type		Type of object the promiser string refers to
insert_select	insert_if_startwith_from_list	Insert line if it starts with a string in the list
	insert_if_not_startwith_from_list	Insert line if it DOES NOT start with a string in the list
	insert_if_match_from_list	Insert line if it fully matches a regex in the list
	insert_if_not_match_from_list	Insert line if it DOES NOT fully match a regex in the list
	insert_if_contains_from_list	Insert line if a regex in the list match a line fragment.
	insert_if_not_contains_from_list	Insert line if a regex in the list DOES NOT match a line fragment.
location	before_after	Menu option, point cursor before of after matched line
	first_last	Choose first or last occurrence of match in file.
	select_line_matching	Regular expression for matching file line location
whitespace_policy		Criteria for matching and recognizing existing lines

3.4.4 Attributes of "replace_patterns" promises in edit_line bundles

replace_with	occurrences	Defines which occurrences should be replaced.
	replace_value	Value used to replace regular expression matches in search

3.4.5 Attributes of "delete_lines" promises in edit_line bundles

delete_select	delete_if_startwith_from_list	Delete lines from a file if they begin with the sub-strings listed.
	delete_if_not_startwith_from_list	Delete lines from a file unless they start with the sub-strings in the list given.
	delete_if_match_from_list	Delete lines from a file if the lines completely match any of the anchored regular expressions listed.

	delete_if_not_match_from_list	Delete lines from a file unless the lines completely match any of the anchored regular expressions listed.
	delete_if_contains_from_list	Delete lines from a file if they contain the sub-strings listed.
	delete_if_not_contains_from_list	Delete lines from the file which do not contain the sub-strings listed.
not_matching		When this option is true, it negates the pattern match of the promised lines.

3.5 Attributes of promises in edit_xml bundles

3.5.1 Attributes of any promises in edit_xml bundles

build_xpath	Builds an XPath within the XML file
select_xpath	Select the XPath node in the XML file to edit

3.5.2 Attributes of "insert_tree" promises in edit_xml bundles

This promise type does not have any attributes.

3.5.3 Attributes of "delete_tree" promises in edit_xml bundles

This promise type does not have any attributes.

3.5.4 Attributes of "insert_text" promises in edit_xml bundles

This promise type does not have any attributes.

3.5.5 Attributes of "set_text" promises in edit_xml bundles

This promise type does not have any attributes.

3.5.6 Attributes of "delete_text" promises in edit_xml bundles

This promise type does not have any attributes.

3.5.7 Attributes of "delete_attribute" promises in edit_xml bundles

This promise type does not have any attributes.

3.5.8 Attributes of "set_attribute" promises in edit_xml bundles

attribute_value	Value of the attribute to be inserted into the XPath node of the XML file

3.6 Attributes of "guest_environments" promises

environment_host		Class indicating which physical node will execute this guest machine
environment_interface	env_addresses	The IP addresses of the environment's network interfaces
	env_name	The hostname of the virtual environment.
	env_network	The hostname of the virtual network
environment_resources	env_cpus	Represents the number of virtual CPUs in the environment.

	env_memory	Represents the amount of primary storage (RAM) in the virtual environment (in KB).
	env_disk	Represents the amount of secondary storage (DISK) in the virtual environment (in KB).
	env_baseline	This string represents a path to an image with which to baseline the virtual environment.
	env_spec	This string contains a technology specific set of promises for the virtual instance.
environment_state		Defines the desired dynamic state of the specified environment.
environment_type		Defines the virtual environment type.

3.7 Attributes of "methods" promises

inherit	If true this causes the sub-bundle to inherit the private classes of its parent
usebundle	Take on a whole bundle of other promises
useresult	Specify the name of a local variable to contain any result/return value from the child

3.8 Attributes of "packages" promises

architecture		The architecture we want the promise to consider.
options		Options to pass to the underlying package module.
policy		Whether the package should be present or absent on the system.
version		The version we want the promise to consider.
package_module	default_options	Options to pass to to the package module by default.
	query_installed_ifelapsed	How often to query the system for currently installed packages.
	query_updates_ifelapsed	How often to query the package manager for new updates.

3.9 Attributes of "processes" promises

process_count	in_range_define	List of classes to define if the matches are in range
	match_range	Integer range for acceptable number of matches for this process
	out_of_range_define	List of classes to define if the matches are out of range
process_select	command	Regular expression matching the command/cmd field of a process
	pid	Range of integers matching the process id of a process
	pgid	Range of integers matching the parent group id of a process
	ppid	Range of integers matching the parent process id of a process
	priority	Range of integers matching the priority field (PRI/NI) of a process
	process_owner	List of regexes matching the user of a process
	process_result	Boolean class expression with the logical combination of process selection criteria
	rsize	Range of integers matching the resident memory size of a process, in kilobytes
	status	Regular expression matching the status field of a process
	stime_range	Range of integers matching the start time of a process
	ttime_range	Range of integers matching the total elapsed time of a process.
	tty	Regular expression matching the tty field of a process
	threads	Range of integers matching the threads (NLWP) field of a process
	vsize	Range of integers matching the virtual memory size of a process, in kilobytes.
process_stop		A command used to stop a running process
restart_class		A class to be defined globally if the process is not running, so that a command: rule can be referred to restart the process
signals		A list of menu options representing signals to be sent to a process.

3.10 Attributes of "services" promises

service_policy		Policy for CFEngine service status.
service_dependencies		A list of services on which the named service abstraction depends
service_method	service_args	Parameters for starting the service as command
	service_autostart_policy	Should the service be started automatically by the OS
	service_bundle	Specify bundle name of a bundle agent. The default "standard_services" bundle agent will be used if not specified.
	service_dependence_chain	How to handle dependencies and dependent services
	service_type	Service abstraction type

3.11 Attributes of "storage" promises

mount	edit_fstab	true/false add or remove entries to the file system table ("fstab")
	mount_type	Protocol type of remote file system
	mount_source	Path of remote file system to mount.
	mount_server	Hostname or IP or remote file system server.
	mount_options	List of option strings to add to the file system table ("fstab").
	unmount	true/false unmount a previously mounted filesystem
volume	check_foreign	If true, verify storage that is mounted from a foreign system on this host.
	freespace	Absolute or percentage minimum disk space that should be available before warning
	sensible_size	Minimum size in bytes that should be used on a sensible-looking storage device
	sensible_count	Minimum number of files that should be defined on a sensible-looking storage device.
	scan_arrivals	If true, generate pseudo-periodic disk change arrival distribution.

3.12 Attributes of "users" promises

description		Sets the description associated with a user.
group_primary		Sets the user's primary group.
groups_secondary		Sets the user's secondary group membership(s), in addition to his/her primary group.
home_bundle		Specifies a bundle that is evaluated when the user is created.
home_bundle_inherit		Specifies if classes set in the current bundle are inherited by the bundle specified in the home_bundle attribute.
home_dir		Associates a user with the given home directory.
password	format	Specifies the format of the given password data.
	data	Specifies the password data.
policy		Specifies what state the user account has on the system.
shell		Specifies the user's login shell.
uid		Specifies the user's UID number.

4 Control

Attributes specified in a "body __ control" (also called simply a "control body") supplement the built-in "control" promises. Control promises affect the runtime behavior of CFEngine.

4.1 Common Control

Attributes specified in a common control body apply to all parts of CFEngine, e.g., monitor, server, executor, agent, etc. We include them here because they can affect the agent.

bundlesequence	The bundlesequence contains promise bundles to verify, in a specific order.
bwlimit	Coarse control of bandwidth any cf-serverd or cf-agent process will send out. In Bytes/sec.
cache_system_functions	Controls the caching of the results of system functions, e.g. execresult() and returnszero() for shell execution and ldapvalue() and friends for LDAP queries. Without this setting, CFEngine's evaluation model will evaluate functions multiple times, which is a performance concern. See Functions.
domain	This string specifies the domain name for this host.
fips_mode	This menu option policy determines whether to activate full FIPS mode restrictions.
goal_patterns	Contains regular expressions that match promisees/topics considered to be organizational goals
host_licenses_paid	(deprecated) The value of host_licenses_paid represents the number of licenses that you promise to have paid for by setting this value (legally binding for CFEngine Enterprise).
ignore_missing_bundles	Determines whether to ignore missing bundles.
ignore_missing_inputs	If any input files do not exist, ignore and continue
inputs	This slist contains additional filenames to parse for promises.
lastseenexpireafter	The number of minutes after which last-seen entries are purged. It is an enterprise-only feature.
output_prefix	The string prefix for standard output
package_inventory	List of package modules to query for package lists.
package_module	The default package module to use.
protocol_version	Defines the protocol to use for all outgoing connections.
require_comments	This menu option policy warns about promises that do not have comment documentation.
site_classes	contains classes that will represent geographical site locations for hosts. These should be defined elsewhere in the configuration in a classes promise.
syslog_host	Contains the name or address of a host to which syslog messages should be sent directly by UDP.
syslog_port	Represents the port number of a UDP syslog service.
tls_ciphers	List of ciphers allowed when making outgoing connections.
tls_min_version	Minimum tls version to allow for outgoing connections.
version	This string contains the scalar version of the configuration.

4.2 Agent Control

Attributes specified in a "body agent control" apply to the agent control promise which affects the behavior of the agent only.

abortclasses	This slist contains classes which if defined lead to termination of cf-agent.
abortbundleclasses	This slist contains classes which if defined lead to termination of current bundle.
addclasses	This slist contains classes to be defined always in the current context.
agentaccess	This slist contains user names that are allowed to execute cf-agent.
agentfacility	This menu option policy sets the agent's syslog facility level.
allclassesreport	This menu option policy determines whether to generate the allclasses.txt report.
alwaysvalidate	This menu option policy is a true/false flag to determine whether configurations will always be checked before executing, or only after updates.
auditing	(deprecated) This menu option policy is deprecated, does nothing and is kept for backward compatibility.
binarypaddingchar	Contains the character used to pad unequal replacements in binary editing.
bindtointerface	This string describes the interface to be used for outgoing connections.
hashupdates	Determines whether stored hashes are updated when change is detected in source.
childlibpath	This string contains the LD_LIBRARY_PATH for child processes.
checksum_alert_time	Represents the persistence time for the checksum_alert class.
defaultcopytype	This menu option policy sets the global default policy for comparing source and image in copy transactions.
default_repository	This string contains the path to the default file repository.
default_timeout	Represents the maximum time a network connection should attempt to connect.
dryrun	This menu option, if set, makes no changes to the system, and will only report what it needs to do.
editbinaryfilesize	Represents the limit on maximum binary file size to be edited.

editfilesize	The limit on maximum text file size to be edited.
environment	This slist contains environment variables to be inherited by children.
expireafter	A global default for time before on-going promise repairs are interrupted.
files_single_copy	This slist contains filenames to be watched for multiple-source conflicts.
files_auto_define	This slist contains filenames to define classes if copied.
hostnamekeys	(deprecated) The hostnamekeys menu option policy determines whether to label ppkeys by hostname not IP address.
ifelapsed	A global default representing the time that must elapse before a promise will be rechecked.
inform	This menu option policy sets the default output level *permanently* within the class context indicated.
intermittency	(deprecated) This attribute does nothing and is kept for backward
max_children	Represents the maximum number of background tasks that should be allowed concurrently.
maxconnections	Represents the maximum number of outgoing connections to cf-serverd.
mountfilesystems	This menu option policy determines whether to mount any filesystems promised.
nonalphanumfiles	This menu option policy determines whether to warn about filenames with no alphanumeric content.
repchar	This string represents a character used to canonize pathnames in the file repository.
refresh_processes	This slist contains bundles to reload the process table before verifying the bundles named in this list (lazy evaluation).
secureinput	This menu option policy checks whether input files are writable by unauthorized users.
sensiblecount	Represents the minimum number of files a mounted filesystem is expected to have.
sensiblesize	Represents the minimum number of bytes a mounted filesystem is expected to have.
skipidentify	This menu option policy determines whether to send an IP/name during server connection because address resolution is broken.
suspiciousnames	This slist contains names to warn about if found during any file search.
syslog	This menu option policy determines whether to switch on output to syslog at the inform level.
track_value	(deprecated) This menu option policy is deprecated as of 3.6.0. It performs no action and is kept for backward compatibility.
timezone	This slist contains allowed timezones this machine must comply with.
verbose	Determines whether to switch on verbose standard output.

4.3 File Control

inputs	This slist contains additional filenames to parse for promises.
namespace	This string identifies a private namespace to switch to in order to protect the current file from duplicate definitions.