Functions Summary for CFEngine 3.7.1

accessedbefore	Compares the atime fields of two files.
accumulated	Convert an accumulated amount of time into a system representation.
ago	Convert a time relative to now to an integer system representation.
and	Returns whether all arguments evaluate to true.
bundlesmatching	Return the list of defined bundles matching `name` and any tags given. Both bundlename and tags are regular expressions. `name` is required, tags are optional.
bundlestate	Returns the current evaluation data state for bundle `bundlename`.
canonify	Convert an arbitrary string `text` into a legal class name.
canonifyuniquely	Convert an arbitrary string `text` into a unique legal class name.
changedbefore	Compares the ctime fields of two files.
classesmatching	Return the list of set classes matching `name` and any tags given. Both `name` and tags are regular expressions. `name` is required, tags are optional.
classify	Returns whether the canonicalization of `text` is a currently set class.
classmatch	Tests whether `regex` matches any currently set class.
concat	Concatenates all arguments into a string.
countclassesmatching	Count the number of defined classes matching `regex`.
countlinesmatching	Count the number of lines in file `filename` matching `regex`.
data_expand	Transforms a data container to expand all variable references.
data_readstringarray	Returns a data container (map) with up to `maxentries`-1 fields from the first `maxbytes` bytes of file `filename`. The first field becomes the key in the map.
data_readstringarrayidx	Returns a data container (array) with up to `maxentries` fields from the first `maxbytes` bytes of file `filename`.
data_regextract	Returns a data container filled with backreferences and named captures if the anchored `regex` matches the `string`.
datastate	Returns the current evaluation data state.
difference	Returns the unique elements in `list1` that are not in `list2`.
dirname	Return the parent directory name for given `path`.
diskfree	Splits the file filename into separated values and returns the list.
escape	Escape regular expression characters in `text`.
eval	Returns `expression` evaluated according to `mode` and `options`. Currently only the math and class modes with infix option are supported for evaluating traditional math expressions.
every	Returns whether every element in the variable `list` matches the unanchored `regex`.
execresult	Execute `command` and return output as string.
expandrange	Generates a list based on an ordered list of numbers selected from a range of integers, in steps specified by the second argument.
file_hash	Return the hash of `file` using the hash `algorithm`.
fileexists	Returns whether the file `filename` can be accessed.
filesexist	Returns whether all the files in `list` can be accessed.
filesize	Returns the size of the file `filename` in bytes.
filestat	Returns the requested file field `field` for the file object `filename`.
filter	Transforms a list or data container into a list subset thereof.
findfiles	Return the list of files that match any of the given glob patterns.
format	Applies sprintf-style formatting to a given `string`.
getclassmetatags	Returns the list of meta tags for class `classname`.
getenv	Return the environment variable `variable`, truncated at `maxlength` characters
getfields	Fill `array_lval` with fields in the lines from file `filename` that match `regex`, split on `split`.
getgid	Return the integer group id of the group `groupname` on this host.
getindices	Returns the list of keys in `varref` which can be the name of an array or container.
getuid	Return the integer user id of the named user on this host
getusers	Returns a list of all users defined, except those names in `exclude_names` and uids in `exclude_ids`
getvalues	Returns the list of values in `varref` which can be the name of an array or container.

getvariablemetatags	Returns the list of meta tags for variable `varname`.
grep	Returns the sub-list if items in `list` matching the anchored regular expression `regex`.
groupexists	Returns whether a group `group` exists on this host.
hash	Return the hash of `input` using the hash `algorithm`.
hashmatch	Compute the hash of file `filename` using the hash `algorithm` and test if it matches `hash`.
host2ip	Returns the primary name-service IP address for the named host `hostname`.
hostinnetgroup	True if the current host is in the named `netgroup`.
hostrange	Returns whether the current host lies in the `range` of enumerated hostnames specified with `prefix`.
hostsseen	Returns a list with the information `field` of hosts that were seen or not seen within the last `horizon` hours.
hostswithclass	Returns a list from the CFEngine Database with the information field of hosts on which `classs` is set.
hubknowledge	Read global knowledge from the CFEngine Database host by `id`.
ifelse	Evaluate each pair of arguments up to the last one as a (class, value) tuple, returning value if class is set.
intersection	Returns the unique elements in `list1` that are also in `list2`.
ip2host	Returns the primary name-service host name for the IP address `ip`.
iprange	Returns whether the current host lies in the `range` of IP addresses specified.
irange	Define a range of integer values for CFEngine internal use.
isdir	Returns whether the named object `filename` is a directory.
isexecutable	Returns whether the named object `filename` has execution rights for the current user.
isgreaterthan	Returns whether `value1` is greater than `value2`.
islessthan	Returns whether `value1` is less than `value2`.
islink	Returns whether the named object `filename` is a symbolic link.
isnewerthan	Returns whether the file `newer` is newer (modified later) than the file `older`.
isplain	Returns whether the named object `filename` is a plain/regular file.
isvariable	Returns whether a variable named `var` is defined.
join	Join the items of `list` into a string, using the conjunction in `glue`.
lastnode	Returns the part of `string` after the last `separator`.
laterthan	Returns whether the current time is later than the given date and time.
ldaparray	Fills `array` with the entire LDAP record, and returns whether there was a match for the search.
ldaplist	Returns a list with all named values from multiple ldap records.
ldapvalue	Returns the first matching named value from ldap.
length	Returns the length of `list`.
lsdir	Returns a list of files in the directory `path` matching the regular expression `regex`.
makerule	Evaluates whether a `target` file needs to be built or rebuilt from one or more `sources` files.
maparray	Returns a list with each `array_or_container` element modified by a `pattern`.
mapdata	Returns a data container holding a JSON array. The array is a map across each element of `array_or_container`, modified by a `pattern`. The map is either collected literally when `interpretation` is none or parsed as JSON when `interpretation` is json.
maplist	Return a list with each element in `list` modified by a `pattern`.
max	Return the maximum of the items in `list` according to `sortmode` (same sort modes as in sort()).
mean	Return the mean of the numbers in `list`.
mergedata	Returns the merger of any named data containers or lists. Can also wrap and unwrap data containers.
min	Return the minimum of the items in `list` according to `sortmode` (same sort modes as in sort()).

none	Returns whether no element in `list` matches the regular expression `regex`.
not	Calculate whether `expression` is false
now	Return the time at which this agent run started in system representation.
nth	Returns the element of `list_or_container` at zero-based `position_or_key`.
on	Returns the specified date/time in integer system representation.
or	Calculate whether any argument evaluates to true
packagesmatching	Return a data container with the list of installed packages matching the parameters.
packageupdatesmatching	Return a data container with the list of available packages matching the parameters.
parseintarray	Parses up to `maxentries` values from the first `maxbytes` bytes in string `input` and populates `array`. Returns the dimension.
parsejson	Parses JSON data directly from an inlined string and returns the result as a data variable
parserealarray	Parses up to `maxentries` values from the first `maxbytes` bytes in string `input` and populates `array`. Returns the dimension.
parsestringarray	Parses up to `maxentries` values from the first `maxbytes` bytes in string `input` and populates `array`. Returns the dimension.
parsestringarrayidx	Populates the two-dimensional array `array` with up to `maxentries` fields from the first `maxbytes` bytes of the string `input`.
parseyaml	Parses YAML data directly from an inlined string and returns the result as a data variable
peerleader	Returns the current host's partition peer leader.
peerleaders	Returns a list of partition peer leaders from a file of host names.
peers	Returns the current host's partition peers (excluding it).
product	Returns the product of the reals in `list`.
randomint	Returns a random integer between `lower` and up to but not including `upper`.
readcsv	Parses CSV data from the first 1 MB of file `filename` and returns the result as a data variable.
readdata	Parses CSV, JSON, or YAML data from file `filename` and returns the result as a data variable.
readfile	Returns the first `maxbytes` bytes from file `filename`. When `maxbytes` is 0, the maximum possible bytes will be read from the file (but see Notes below).
readintarray	Populates `array` with up to `maxentries` values, parsed from the first `maxbytes` bytes in file `filename`.
readintlist	Splits the file `filename` into separated values and returns the list.
readjson	Parses JSON data from the first `maxbytes` bytes of file `filename` and returns the result as a data variable.
readrealarray	Populates `array` with up to `maxentries` values, parsed from the first `maxbytes` bytes in file `filename`.
readreallist	Splits the file `filename` into separated values and returns the list.
readstringarray	Populates `array` with up to `maxentries` values, parsed from the first `maxbytes` bytes in file `filename`.
readstringarrayidx	Populates the two-dimensional array `array` with up to `maxentries` fields from the first `maxbytes` bytes of file `filename`.
readstringlist	Splits the file `filename` into separated values and returns the list.
readtcp	Connects to tcp `port` of `hostnameip`, sends `sendstring`, reads at most `maxbytes` from the response and returns those.
readyaml	Parses YAML data from the first `maxbytes` bytes of file `filename` and returns the result as a data variable.
regarray	Returns whether `array` contains elements matching the anchoredregular expression `regex`.
regcmp	Returns whether the anchored regular expression `regex` matches the `string`.
regextract	Returns whether the anchored `regex` matches the `string`, and fills the array `backref` with back-references.
registryvalue	Returns the value of `valueid` in the Windows registry key `key`.

regldap	Returns whether the regular expression `regex` matches a value item in the LDAP search.
regline	Returns whether the anchored regular expression `regex` matches a line in file `filename`.
reglist	Returns whether the anchored regular expression `regex` matches any item in `list`.
remoteclassesmatching	Reads persistent classes matching regular expression `regex` from a remote CFEngine server `server` and adds them into local context with prefix `prefix`.
remotescalar	Returns a scalar value identified by `id` from a remote CFEngine `server`. Communication is encrytped depending on `encrypt`.
returnszero	Runs `command` and returns whether it has returned with exit status zero.
reverse	Reverses a `list`.
rrange	Define a range of real numbers for CFEngine internal use.
selectservers	Returns the number of tcp servers from `hostlist` which respond with a reply matching `regex` to a `query` send to `port`, and populates `array` with their names.
shuffle	Return `list` shuffled with `seed`.
some	Return whether any element of `list` matches the Unanchored regular expression `regex`.
sort	Returns `list` sorted according to `mode`.
splayclass	Returns whether `input`'s time-slot has arrived, according to a `policy`.
splitstring	Splits `string` into at most `maxent` substrings wherever `regex` occurs, and returns the list with those strings.
storejson	Converts a data container to a JSON string.
strcmp	Returns whether the two strings `string1` and `string2` match exactly.
strftime	Interprets a time and date format string at a particular point in GMT or local time using Unix epoch `time`.
string_downcase	Returns `data` in lower case.
string_head	Returns the first `max` bytes of `data`.
string_length	Returns the byte length of `data`.
string_mustache	Formats a Mustache string template into a string, using either the system datastate() or an explicitly provided data container.
string_reverse	Returns `data` reversed.
string_split	Splits `string` into at most `maxent` substrings wherever `regex` occurs, and returns the list with those strings.
string_tail	Returns the last `max` bytes of `data`.
string_upcase	Returns `data` in uppercase.
sublist	Returns list of up to `max_elements` of `list`, obtained from head or tail depending on `head_or_tail`.
sum	Return the sum of the reals in `list`.
translatepath	Translate separators in `path` from Unix style to the host's native style and returns the result.
unique	Returns list of unique elements from `list`.
usemodule	Execute CFEngine module script `module` with `args`, and return whether successful.
userexists	Return whether `user` name or numerical id exists on this host.
variablesmatching	Return the list of variables matching `name` and any tags given. Both `name` and tags are regular expressions.
variance	Return the variance of the numbers in `list`.