API AutoFlow Actions Cheat Sheet

ACTIONS LIST

conditional	if | switch
iteration	filter | map
scope	break | raise | set
api	operation
config	execute | get-api | get[apis | get-client | get-clients | get-intent | get-intents | get-server | get-server-api | get-servers | get-service | get-service-operation-arguments | get-services
database	delete | insert | process-database-result | query | select | update
file	append | delete | list | mkdir | read | write
http	request
ldap	add | add-attribute | bind | delete | delete-attribute | modify | search
mqtt	get-subsription | publish
redis	command
service	operation
service/aws	operation
syslog	syslog-udp-rfc3164 | syslog-udp-rfc5424
system	async | async-stream | command | elixir | get-os-variable | log | ratelimit
array	add | at | chunk | concatenate | count | de-duplicate | delete | delete-at | drop | drop-every | duplicate | first | flatten | insert-at | intersection | intersperse | is-empty | is-member | join | last | maximum | minimum | minimum-maximum | not-in | random | replace-at | reverse | reverse-slice |

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	shuffle | slice | sort | sort-by-path | split | starts-with | sum | take | take-every | take-random | to-integer | to-object | to-string | trim | union | unique | wrap
condition	is-array | is-boolean | is-equal-to | is-float | is-integer | is-larger-than | is-larger-than-or-equal-to | is-less-than | is-less-than-or-equal-to | is-non-empty-list | is-non-empty-string | is-null | is-number | is-object | is-string
data	larger | smaller
data/binary	16-decode | 16-encode | 32-decode | 32-encode | 32-hex-extended-decode | 32-hex-extended-encode | 64-decode | 64-encode | 64-url-decode | 64-url-encode | base-decode | base-encode | byte-size
data/csv	decode | encode
data/execution	decode | encode
data/json	decode | encode | to-xml
data/jwt	decode | encode
data/uri	decode | decode-query | encode
data/xml	decode | encode | to-json
data/yaml	decode | encode
datetime	current-date | current-day | current-monotonic-time | current-os-time | current-system-time | current-time | current-unix-time | date-compare | date-diff | datetime-add | datetime-add-to-now | datetime-compare | datetime-diff | datetime-from-unix-time | datetime-to-date | datetime-to-time | datetime-to-unix-time | now | time-compare
float	ceiling | floor | random | ratio | round | to-integer | to-string
integer	divide | divide-quotient | divide-remainder | random | to-array | to-float | to-string

API AutoFlow **Actions** Cheat Sheet

math	div
object	delete | get | get-in | has-key | keys | map-key | merge | put | put-in | put-if-exist | put-if-new | split | take | to-delimited-string | values
security	authentication-decode | auth-encode-basic | auth-encode-bearer | auth-encode-digest | authorization-decode | decrypt | encrypt | hash | mac
string	at | capitalize-first | concatenate | contains | downcase | duplicate | ends-with | escape | first | interpolate | join | last | length | pad-leading | pad-trailing | replace | replace-leading | replace-prefix | replace-suffix | replace-trailing | reverse | slice | split | split-at | split-by | split-by-newline | starts-with | to-float | to-integer | to-integer-by-base | trim | trim-by | trim-leading | trim-leading-by | trim-trailing | trim-trailing-by | unescape | upcase
uuid	md5 | random | sha1 | standard
variable	set

API AutoFlow Actions Cheat Sheet

Flow creation actions

Actions that create the flow such as IF condition, LOOP iteration, and more.

conditional	if	This Action returns values that fits the condition
	switch	This Action returns values that fits on switch case. If the input value is not in the case list, it returns the value of default.

iteration	filter	Iterate over array of data filtering for each truthy value
	map	Iterate over array of data mapping result to each array position

scope	break	This Action breaks Operation, then returns results that 'Scope' on values.
	raise	This action will raise an exception and halt execution.
	set	This Action returns value which you set in 'Scope' Value.

API AutoFlow **Actions** Cheat Sheet

Actions to make Calls

Actions used to make internal and external calls such as making a call to database using the database client.

api	operation	This Action performs the API operation based on the input for a given API operation.

config	execute	Execute API AutoFlow Custom Flow configuration
	get-api	Get configuration of a specified API.
	get[apis	Get all API configuration.
	get-client	Get current version of the specified Client configuration.
	get-clients	Get all Client configuration.
	get-intent	Get configuration of a specified Intent.
	get-intents	Get all Intent configuration.
	get-server	Get current version of the specified Server configuration.
	get-server-api	Get version of OpenAPI specification currently being used by the server process.
	get-servers	Get all Server configuration.
	get-service	Get configuration of a specified Service.
	get-service-operation-arguments	
	get-services	Get all Service configuration.

database	delete	Issue delete query to configured DB connection based on the information provided

	insert	Issue insert query to configured DB connection based on the information provided
	process-database-result	
	query	Issue query to configured DB connection based on the information provided
	select	Issue select query to configured DB connection based on the information provided
	update	Issue update query to configured DB connection based on the information provided

file	append	Append content to a file
	delete	Delete content to a file
	list	List all the components in the path
	mkdir	Make a directory
	read	Read a file
	write	Write data in a file

http	request	This Action returns results base on http/request.

ldap	add	Add a new LDAP entry
	add-attribute	Add attributes to an LDAP entry
	bind	Bind to LDAP
	delete	Delete a new LDAP entry
	delete-attribute	Delete attributes from an LDAP entry
	modify	Modify attributes from an LDAP entry
	search	Search LDAP for a match

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mqtt	get-subsription	Get subscription topics
	publish	Publish a new MQTT message

redis	command	This action returns the result value of the redis command based on the message you sent.

service	operation	This Action returns your Service results.

service/aws	operation	This Action returns your Service results from AWS

syslog	syslog-udp-rfc3164	The This Action returns a syslog message in RFC 3164 format based on the given input, and transmits the message using the UDP protocol.
	syslog-udp-rfc5424	The This Action returns a syslog message in RFC 5324 format based on the given input, and transmits the message using the UDP protocol.

system	async	This action can asynchronously perform multiple sets of actions.
	async-stream	This action can asynchrously perform a set of actions over an array of inputs.
	command	This Action returns result of System command.
	elixir	This Action returns result of Elixir command.
	get-os-variable	Used to get variables from the OS.
	log	This Action returns a log message based on the given input, and outputs the message according to the specified log 'level'.

AutoFlow Actions Cheat Sheet

ratelimit	This Action is used to limit the number of requests for a particular Action based on the given input.

Actions to work with the Data

Everything you need to work with the data.

array

add	Add an item to the end of the array.
at	This action returns element of the number you selected in the array.
chunk	This action divide a given array into subarrays of a certain size.
concatenate	This Action takes two arrays and merges them into one array.
count	This Action counts the number of values in the array.
de-duplicate	This Action returns Array where all consecutive duplicated elements are collapsed to a single element.
delete	This Action deletes the given element from Array. Returns a new Array without the element.
delete-at	This Action returns a new Array by removing the value at the specified index.
drop	This Action drops the Count of elements from Array.

API AutoFlow Actions Cheat Sheet

drop-every	This Action returns new Array of every nth element in Array dropped, starting with the first element.
duplicate	This Action duplicates the given Array 'count' times in new Array.
first	This Action returns the first element in Array or default if Array is empty.
flatten	This Action returns Flattens the given Array of nested Array.
insert-at	This Action returns new Array with value inserted at the specified index.
intersection	This Action returns new Array containing only elements that 'array' and 'with' have in common.
intersperse	This Action returns new Array which intersperses separator between each element of Array.
is-empty	This Action returns true or false if Array is empty or not.
is-member	This Action returns true or false if element exists within Array or not.
join	This Action returns new value that joins the given Array into a string using 'separator'.
last	This Action returns the last element in Array or default if Array is empty.
maximum	This Action returns the maximal element in Array.
minimum	This Action returns the minimal element in Array.
minimum-maximum	This Action returns the minimal and the maximal element in Array.
not-in	This action returns a new array of elements in 'array' that 'in' Array does not have.

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random	This action returns random element in Array.
replace-at	This Action returns Array with a replaced value at the specified index.
reverse	This Action returns Array of elements in reverse order.
reverse-slice	This Action returns Reverses Array in the range from initial 'index' through 'count' elements.
shuffle	This Action returns new Array with the elements of Array shuffled.
slice	This Action returns a subset new Array of the given Array, from 'index' with 'count' number of elements if available.
sort	This Action returns sorted Array.
sort-by-path	This Action returns sorted Array by path.
split	This Action returns new split Array.
starts-with	This Action returns true if list starts with the given 'value' otherwise returns false.
sum	This Action returns the sum of all elements.
take	This Action returns new Array. Takes 'count' of elements from the beginning or the end of 'Array'.
take-every	This Action returns new Array of every 'nth' element in 'Array', starting with the first element.
take-random	This Action returns new Array Takes 'count' random elements from 'Array'.
to-integer	This Action returns Integer represented by the ordered.
to-object	This Action returns Object type from Array.

AutoFlow Actions Cheat Sheet

to-string	This Action returns String represented by the ordered.
trim	This Action returns new Array without null value.
union	This Action returns new Array containing all members of 'array' and 'with'.
unique	This Action returns new Array removing all duplicated elements.
wrap	This Action returns new Array which is wrapped 'value' in array if this is not array.

condition

is-array	This Action returns true or false if the given input is array or not.
is-boolean	This Action returns true or false if the given input is boolean-type or not.
is-equal-to	This Action returns true or false if the given value equals the target.
is-float	This Action returns true or false if the given input is float type or not.
is-integer	This Action returns true or false if the given input is integer type or not.
is-larger-than	This Action returns true or false if the given value is larger than the target.
is-larger-than-or-equal-to	This Action returns true or false if the given value is larger than or equal to the target.
is-less-than	This Action returns true or false if the given value is less than the target.
is-less-than-or-equal-to	This Action returns true or false if the given value is less than or equal to the target.
is-non-empty-list	This Action returns true or false if the given input array is empty or not.

AutoFlow **Actions** Cheat Sheet

	is-non-empty-string	This Action returns true or false if the given input string is empty or not.
	is-null	This Action returns true or false if the given input is null or not.
	is-number	This Action returns true or false if the given input is number or not.
	is-object	This Action returns true or false if the given input is object or not.
	is-string	This Action returns true or false if the given input is string or not.

data	larger	This Action compares the two values(first, second) and returns a large value.
	smaller	This Action compares the two values(first, second) and returns a small value.

data/binary	16-decode	Decodes a base 16 encoded HEX string into a binary
	16-encode	Encodes a binary into a base 16 encoded HEX string
	32-decode	Decodes a base 32 encoded string into a binary
	32-encode	Encodes a binary into a base 32 encoded string
	32-hex-extended-decode	Decodes a base 32 encoded string with extended hexadecimal alphabet into a binary
	32-hex-extended-encode	Encodes a binary into a base 32 encoded string with extended hexadecimal alphabet
	64-decode	Decodes a base 64 encoded string into a binary string.

AutoFlow Actions Cheat Sheet

64-encode	Encodes a binary into a base 64 encoded string
64-url-decode	Decodes a base 64 encoded string with URL and filename safe alphabet into a binary
64-url-encode	Encodes a binary into a base 64 encoded string with URL and filename safe alphabet
base-decode	Decodes a string encoded in specified base into a binary.
base-encode	Encodes a binary into a string encoded in specified base
byte-size	Returns byte size of data provided

data/csv		
	decode	This Action returns the ability to parse CSV strings to separate headers and data, and to convert each row into object form.
	encode	This Action returns new CSV that is the ability to generate CSV strings using given headers and data.

data/execution		
	decode	This Action provides the ability to decode a given JSON string and convert it into a data structure.
	encode	This Action provides the ability to encode data structures into JSON strings.

data/json		
	decode	This Action provides the ability to decode a given JSON string and convert it into a data structure.
	encode	This Action provides the ability to encode data structures into JSON strings.

AutoFlow **Actions** Cheat Sheet

	to-xml	This Action provides the ability to convert a given JSON data structure into an XML string.

data/jwt	decode	Decode JWT into its claim/data
	encode	Encode claim/data into JWT

data/uri	decode	Parses an RFC 3986 compliant uri string into a uri map
	decode-query	Decode query string according to type selected
	encode	Creates an RFC 3986 compliant URI String, based on the components of URI Map

data/xml	decode	This Action provides the ability to convert a given XML string into data structure.
	encode	This Action provides the ability to convert a given data structure into XML string.
	to-json	This Action provides the ability to convert a given XML into JSON.

data/yaml	decode	This Action decodes a given yaml string into data structure.
	encode	This Action decodes the ability to convert a given yaml string into data structure.

datetime	current-date	Returns the current date in UTC
	current-day	Calculates the current day of the week.
	current-monotonic-time	Returns the current monotonic time in the given time unit.

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current-os-time	Returns the current operating system (OS) time in the given time unit as unix time.
current-system-time	Returns the current system time in the given time unit as unix time.
current-time	Returns the current time in UTC.
current-unix-time	Returns the current unix time in UTC.
date-compare	Compares two dates.
date-diff	Calculates the difference between two dates.
datetime-add	Adds a specified amount of time to a DateTime.
datetime-add-to-now	Adds a specified amount of time to Now.
datetime-compare	Compares two datetimes.
datetime-diff	Calculates the difference between two datetimes.
datetime-from-unix-time	Converts the given Unix time to datetime.
datetime-to-date	Converts a datetime into a date.
datetime-to-time	Converts a datetime into a time.
datetime-to-unix-time	Converts the given datetime to unix time.
now	Returns the current datetime.
time-compare	Compares two times.

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float		
	ceiling	This Action return integer that rounds 'float' to the smallest integer greater than or equal to 'float'.
	floor	This Action return integer that rounds 'float' to the largest number less than or equal to 'float'.
	random	This Action returns random float number more than 0 and less than 1.
	ratio	This Action returns ration of input number.
	round	This Action is used to round a given floating-point number to the nearest integer.
	to-integer	This Action is to convert a given float number from an input into an integer.
	to-string	This Action is to convert a given float number from an input into a String.

integer		
	divide	This Action returns quotient and remainder by divison of Integer.
	divide-quotient	This Action returns only quotient by divison of Integer.
	divide-remainder	This Action returns only remainder by divison of Integer.
	random	This Action returns one of the random Integer up to the maximum Integer you set.
	to-array	This Action returns an array that is a value converted from the value of the integer to numeral system base on base.
	to-float	This Action returns float that is a value converted from the value of the integer.

AutoFlow Actions **Cheat Sheet**

	to-string	This Action returns an array that is a value converted from the value of the integer to numeral system base on base.

math	div	Division of numbers.

object	delete	This Action delete given 'key' from 'object'.
	get	This action returns the value corresponding to the key value in the object.
	get-in	This action returns the value corresponding to the path value in the object.
	has-key	This action returns whether the given 'key' exists in the given 'object'.
	keys	This action returns all keys in the object.
	map-key	This action returns new object with keys mapped to new keys.
	merge	This action returns new object which Merges two 'object' into one.
	put	This action returns new object which puts the given 'value' under 'key' in 'object'
	put-in	This action returns new object which puts the given 'value' under 'path' in 'object'
	put-if-exist	This action returns new object which puts a 'value' under 'key' only if the 'key' already exists in 'object'.
	put-if-new	This Action returns new object which puts the given 'value' under 'key' unless the entry 'key 'already exists in 'object'.

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	split	This Action returns split objects.
	take	This Action returns a new 'object' with all the key-value pairs in 'object' where the key is in keys.
	to-delimited-string	Convert object to delimited string
	values	This Action returns all values from 'object'.

security	authentication-decode	Decode an authentication string
	auth-encode-basic	Encode a map to an authorization token
	auth-encode-bearer	Encodes a token string to a bearer token string
	auth-encode-digest	Encode a map to a digest token string
	authorization-decode	Decode an authorization token
	decrypt	Decrypt data to a string
	encrypt	Encrypt a data string to a binary
	hash	Hash data string using hash algorithm
	mac	Compute Mac data using mac algorithm

string	at	This Action returns the grapheme 'at' of the given string.
	capitalize-first	This Action returns new string which the first letter is capitalized.
	concatenate	This Action takes two string and merges them into one string.
	contains	This Action returns true or false if 'contents' exists within 'string' or not.

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downcase	This Action returns downcase string.
duplicate	This Action returns duplicated string 'count' times.
ends-with	This Action returns true if string ends with any of the suffixes given.
escape	This Action returns escaped string to be literally matched in a regex.
first	This Action returns the first string in string.
interpolate	This action returns new string by replacing 'variable' with its value in a given string.
join	This Action returns new string that joins the given Array into a string using 'delimiter'.
last	This Action returns the last string in string.
length	This Action returns Count the number of characters in the string.
pad-leading	This Action returns returns a new string padded with a leading filler which is made of elements from 'padding'.
pad-trailing	This Action returns returns a new string padded with a trailing filler which is made of elements from 'padding'.
replace	This Action returns a new string created by replacing occurrences of 'pattern' in 'string' with 'replacement'.
replace-leading	This Action returns new string that Replaces all leading occurrences of 'pattern' by 'replacement' of match in string.
replace-prefix	This Action returns new string that replaces prefix in 'string' by replacement if it matches 'pattern'.

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replace-suffix	This Action returns new string that replaces suffix in 'string' by replacement if it matches 'pattern'.
replace-trailing	This Action returns new string that replaces all trailing occurrences of 'pattern' by replacement in string.
reverse	This Action returns string in reverse order.
slice	This Action returns a substring starting at the offset 'start', and of the given 'length'.
split	This Action returns array that divides a string into substrings at each Unicode whitespace occurrence with leading and trailing whitespace ignored.
split-at	This Action returns array that splits a string into two at the specified offset.
split-by	This Action returns array that divides a string into parts based on a pattern.
split-by-newline	The This Action returns array that splits a given string based on a newline.
starts-with	The This Action returns true or false if string starts with any of the 'prefix' given.
to-float	The This Action returns float that string is parsed a binary into a float.
to-integer	The This Action returns integer that string is parsed a binary into a integer.
to-integer-by-base	The This Action returns integer which corresponds to 'string' representation of integer in the given 'base'.
trim	The This Action returns a string where all leading Unicode whitespaces have been removed.

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	trim-by	The This Action returns a string where all leading and trailing 'pattern' characters have been removed.
	trim-leading	The This Action returns a string where all leading Unicode whitespaces have been removed.
	trim-leading-by	The This Action returns a string where all leading 'pattern' characters have been removed.
	trim-trailing	The This Action returns a string where all trailing Unicode whitespaces has been removed.
	trim-trailing-by	The This Action returns a string where all trailing 'pattern' characters have been removed.
	unescape	The This Action returns a string where unescapes characters in a string.
	upcase	The This Action returns a string where converts all characters in the given string to uppercase.

uuid	md5	Create a new UUID based on MD5 of fixed value.
	random	Create a new UUID based on pseudo random value.
	sha1	Create a new UUID based on SHA1 of fixed value.
	standard	Create a new standard UUID

variable	set	This Action set variable.