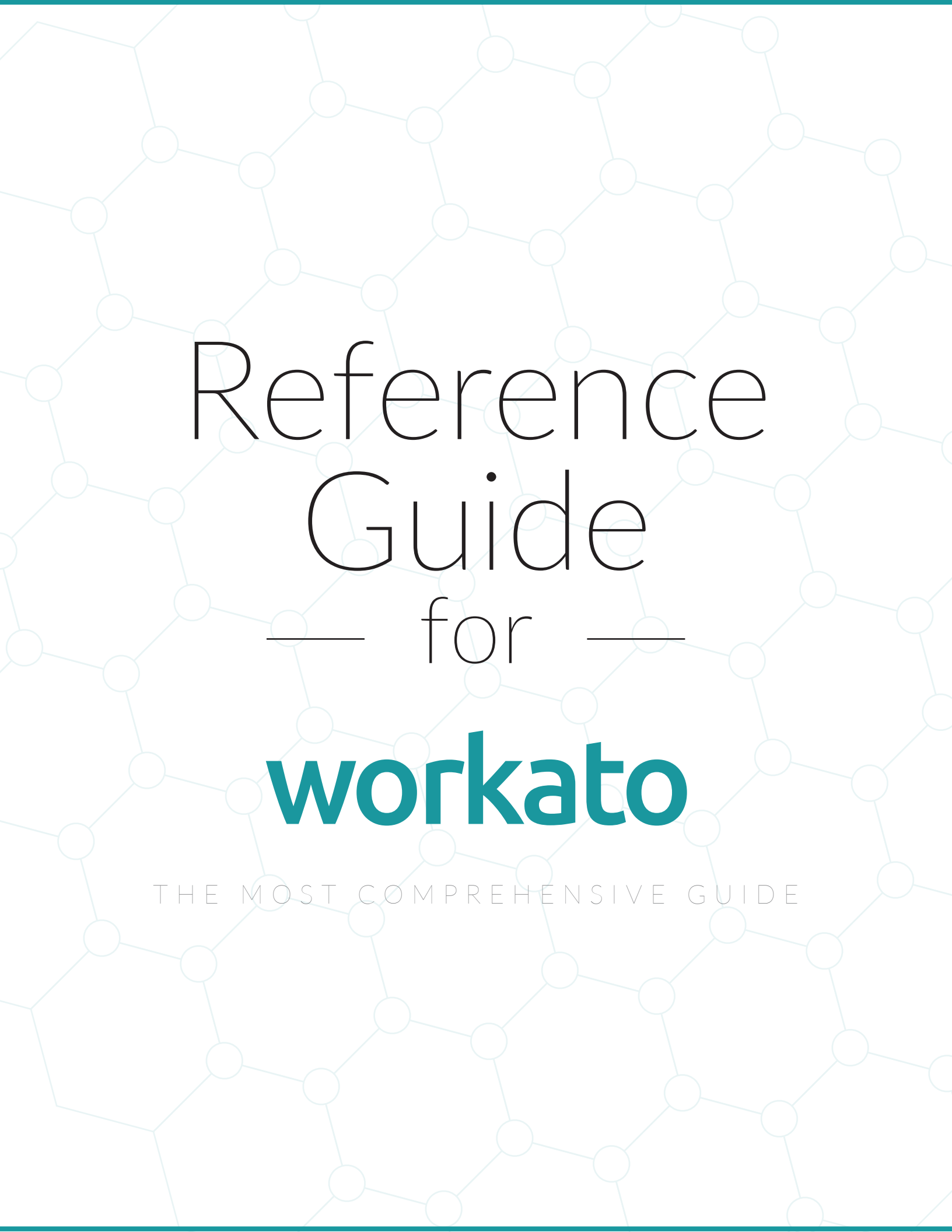




Reference Guide

— for —

workato

THE MOST COMPREHENSIVE GUIDE

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Key Concepts

WHAT ARE RECIPES?

Recipes are simple-to-build yet powerful connections between your apps that automates your work for you, enabling you to work smarter and better — with less effort. We built the Workato platform to manage the integrations between apps in the background for you so you can create your own integrations intuitively in minutes without requiring knowledge of programming.

You can create recipes from scratch or use existing recipes shared by the Workato community. A recipe contains a **Trigger** followed by one or more **Actions**. The trigger determines when your recipe will be executed and the actions determine what work your recipe will perform automatically. In a recipe you can connect multiple apps, have multiple actions and conditional actions. When turned on, it runs in the background until you manually stop your recipe.

A **public** recipe can be viewed by anyone on the web, even without signing in. However, if you have subscribed to a paid account, you'll have the option to keep your recipe **private** and they won't be seen by others, unless you explicitly share it.

COMPONENTS OF A RECIPE

UNIQUE ID

A unique number appended to your recipe

NAME

A name or title which can be modified

TRIGGER

One trigger, which specifies what event to look out for

ACTION(S)

One or more actions, which takes place when the trigger fires

JOB HISTORY

Will exist when the recipe has processed at least one record

START BUTTON

Starts and stops the recipe

COPY/DELETE BUTTON

Creates a copy (duplicates) the recipe or deletes it completely

SOCIAL SHARING BUTTONS

Like or share via email or Twitter

RECIPE DESCRIPTION

Lets you write a simple or elaborate description for your recipe

APP CONNECTION PARAMETERS

Specifies the sign-in credentials to login to each app

SAVE RECIPE BUTTON

Saves the current settings of your recipe to the cloud.



Reference Card

INPUT FIELDS

Input fields are the fields that are used to map data into. Most actions have input fields and you can find them on the left side of the recipe.

DATA FIELDS / DATA PILLS

Data Fields (also known as Data Pills) are data from previous steps that you can drag and drop into inputs fields on the left. Doing so simply maps the Data Fields into the Input Fields.

TRIGGER

Each recipe has only one trigger, which describes and tells the system when to start a recipe.

ACTION(S)

Actions describes the linear sequence of work your recipe performs when it is triggered. There are 4 types of actions — *action, conditional action, repeat action, conditional stop.*

FEATURED RECIPES

Featured Recipes are high quality recipes that are widely used by the Workato community.

workato featured

ACTIVE / INACTIVE RECIPES

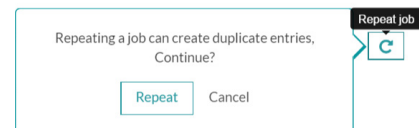
While logged in, your main Workato page displays running recipes in the 'Active' tab and displays stopped recipes in the 'Inactive' tab.

Active (7)

Inactive (69)

REPEAT JOBS

You can repeat a job that was previously processed by clicking on the Repeat Job button on the right of every job (in Job History).



JOB HISTORY

Job History shows a list of completed jobs in a recipe. There are a few states — Processing, Warning, Complete, Error.

Job history			Hide ▾
Job started	Status	Description	
Jun 18, 2015 4:28:33 PM	Complete	Processed new attendee registered for event from Eventbrite where Event=	
		["resource_uri"=>"https://www.eventbriteapi.com/v3/events/174106	
Jun 18, 2015 4:28:34 PM	Complete	Processed new attendee registered for event from Eventbrite where Event=	
		["resource_uri"=>"https://www.eventbriteapi.com/v3/events/174106	
Jun 18, 2015 4:03:37 PM	Complete	Processed new attendee registered for event from Eventbrite where Event=	
		["resource_uri"=>"https://www.eventbriteapi.com/v3/events/174106	
Jun 18, 2015 4:03:35 PM	Complete	Processed new attendee registered for event from Eventbrite where Event=	
		["resource_uri"=>"https://www.eventbriteapi.com/v3/events/174106	
< Previous		Page 1 of 1	Next >

RECOMMENDED RECIPE

Recommended recipes are recipes you might find useful based on apps that you are using. You can get your own copy of a recipe by clicking 'Get recipe', and start using it to integrate your apps.

[https://support.workato.com/solution/... \(with screenshots\)](https://support.workato.com/solution/... (with screenshots))

How To

SEARCH

<https://support.workato.com/solution/categories/1000062615/folders/1000098653/articles/1000186445-how-do-i-search-for-recipes->

Workato allows you to search from thousands of recipes in a quick and simple way. Pull up the [EXPLORE](#) page from the top navigation bar and simply type in the relevant apps to search. For example, entering 'salesforce quickbooks invoice' will bring up a list of recipes that you can 'Get' and use (or customize).

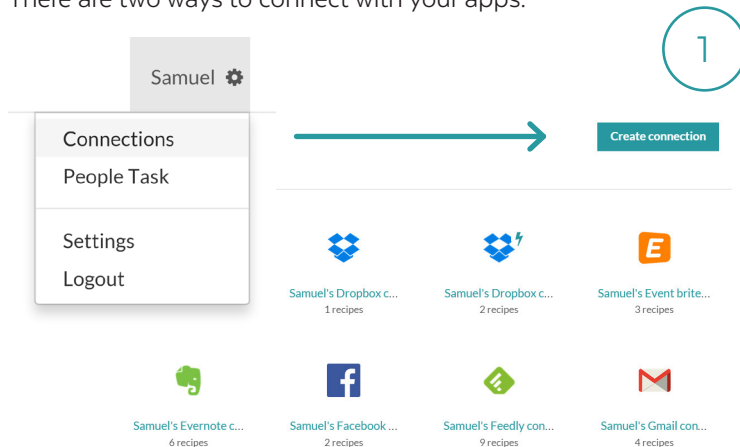
Search for	Example
apps	salesforce gmail
keyword	invoice
user	will
combinations	sheets quickbooks estimate
acronyms	sfdc, qbo
exclusion search	salesforce -clock
user exclusion search	eventbrite -user_name:samuel

APP CONNECTIONS

<https://support.workato.com/solution/categories/1000062615/folders/1000098653/articles/1000167157-app-connections-how-do-i-connect-to-apps-why-do-i-need-it->

Most apps require that you are connected to them before you can exchange information with them. Notable exceptions are the [Clock](#) and [Email](#) app. You may not see all the information for the recipes if you are not connected — stuff like trigger events, sample data for the input fields on the right.

There are two ways to connect with your apps.



From the top right of the page, access your button with your name and head to the 'Connections' page. Then, create a new connection using 'Create connection'.

The other way is to connect them within the recipe page itself in either [Step 3](#) when creating a new recipe, or at the bottom of the page under the 'Connections' section.

TRIGGER AND ACTIONS

<https://support.workato.com/solution/categories/1000062615/folders/1000098653/articles/1000166851-triggers-and-actions-in-workato>

[Triggers](#) and [Actions](#) are the key components of a recipe.

The screenshot shows the 'Recipe' configuration page. The 'Trigger' section is set to 'New timer event in Clock'. The 'Application' is 'Clock' and the 'Trigger' is 'New timer event'. The 'Configure trigger' section shows 'Every' set to 'one month' and 'Start at' set to 'Date and time on which to start the event. Leave blank to start immediately'. The 'Actions' section shows a single action 'Send email via Workato'.

The [Trigger](#) defines the event that this recipe is watching for. In this example it is looking for a new timer event by the Clock app in Workato. Every trigger has at least these two elements:

- 1 The App (in this case, Clock) and
- 2 The Event (in this case, 'New Timer event').

Some triggers have additional parameters to specify how far back it will go to look for the events. For example for Salesforce, you can specify that you want to pick up 'New leads' from a week back or from a day back, and so on.

The screenshot shows the 'Recipe' configuration page. The 'Trigger' section is set to 'New timer event in Clock'. The 'Actions' section shows a single action 'Send email via Workato'. The 'Configure action' section shows 'To' set to 'User email', 'Subject' set to 'My first Workato recipe', and 'Message' set to 'Yay! I got my first recipe to run on | Start time |'. A 'Start time' button is visible.

The Trigger is followed by the [Actions](#). The actions specify what the recipe should do when the trigger fires. When a 'New Timer event' is started in clock, grab the time when the recipe started and send it to the user with the email body specified.

There are other types of actions; four types in fact — *action*, *conditional action*, *repeat action* and *conditional stop*. Details for the conditional actions and the repeat action are explained later.

CREATING / COPYING A RECIPE

<https://support.workato.com/solution/categories/1000062615/folders/1000098653/articles/1000165710-how-do-i-create-or-clone-a-recipe->

You can view a recipe as a guest, but to create, change or copy recipes you must be logged into Workato.

You can create a recipe from scratch very easily. On the home page (accessible by clicking on the top left Workato logo), click on the “Create Recipe” button.

The screenshot shows the Workato interface with a top navigation bar containing 'Active (1)', 'Inactive (13)', and 'Apps (2)' tabs. A red arrow points to a 'Create recipe' button. Below this, a recipe titled 'New contact in zoho CRM will create customer in QuickBooks' is displayed, with a 'Get recipe' button. A 'Start recipe' button is also visible. A 'Copy | Delete' link is at the bottom right.

To get a copy of someone else’s recipe, click ‘Get Recipe’.

To make a copy of your own recipe, click ‘Copy’ underneath the ‘Start recipe’ button.

INPUT FIELDS

<https://support.workato.com/support/solutions/articles/1000166846-configuring-actions-understanding-the-input-fields>

For actions such as to create or update or add line items, they need to be configured — which means you have to provide input data for each action. To do this, you are presented with two things.

On the left, there are blank fields that need an input. Values can be entered in multiple ways. You can enter **static text/numbers** (known as hardcoding), select from dropdowns, **map data from available data fields** or input certain **formulas** (covered later).

The screenshot shows the 'Input fields' section of a recipe. It lists fields for 'Erik Debnath' (Object created, Get account details, Search customers) and 'Search customers' (Step 2 output). Fields include 'First name', 'Family name', 'Company name', 'Customer ID', 'Primary phone', 'Primary email addr', 'Fully qualified name', 'Currency ref', 'Parent ref', and 'Parent details'.

On the right, we have all the fields available to you, the **Data tree**. These are records you have retrieved or created so far. The first one is the user details of the logged in user, and in the example below the next ones are Salesforce custom object details that was from Create Object action, Salesforce account details from the Get Account details action, and

QuickBooks customer details from Search customers action. The rounded gray boxes are called **Data pills** and come in a variety of data types.

The screenshot shows a row of data type icons: Phone Number, Email, List/Array, Link, Yes/No, Text, Group Item, Number Values, and Date & Time.

List data is unique because it contains multiple lines of data — putting that in an input field would only result in the use of the first line of data.
See later article — Working with lists.

REPEAT JOB

<https://support.workato.com/support/solutions/articles/1000153137-how-do-i-repeat-a-job-should-i-rerun-or-repeat-jobs-will-it-create-duplicates->
<https://support.workato.com/solution/categories/1000062615/folders/1000200900/articles/1000144426-rerun-a-failed-job-how-and-when-should-i-rerun-a-job->

Any job in the job history overview, regardless of if it completed or failed, can be rerun by clicking on the green arrow icon on the rightmost side of each job. There are two options:

OPTION 1

If you run the job while the recipe is running it uses the *original* (old) recipe definition (when it was first run).

OPTION 2

If you stop the job and then rerun, then the *new* recipe definition will be used.

NOTE (1)

Duplicates may occur when jobs are rerun, so be sure to check and remove duplicates (if present) before re-running the job.

NOTE (2)

When you are testing recipes or re-running a failed job, always stop the recipe first before repeating the job to ensure it uses the new schematics/instructions/definition when processing the data.

NESTED STEPS

<https://support.workato.com/support/solutions/articles/1000142722-how-can-i-implement-nested-steps-in-a-recipe->

A nested step is denoted by the slight indentation as seen for Step 4:

The screenshot shows a recipe with two steps. Step 3 is 'If QuickBooks Search customers' with a condition 'Company name is not present then do'. Step 4 is 'Create customer in QuickBooks' with a description 'Create a new customer in Quickbooks'.

All steps indented under a “for” loop will only be executed within the loop, and all steps indented under a conditional “if” step will only be executed if the conditional step is true. If the condition is not met, the recipe does nothing.

To add multiple nested steps within a “for” loop or a conditional “if” step, select the up and down arrows on the nested step and choose the step you want to add.

To get multiple doubly nested steps, again just select the up and down arrows on the nested steps and choose the step you want to add. You can nest steps almost indefinitely.

MISSING CUSTOM FIELDS

<https://support.workato.com/support/solutions/articles/1000172114-i-can-t-see-all-the-fields-to-map-why-are-the-fields-missing-for-the-action->

When you open up an action, only the most important fields that are to be mapped show up. This is to reduce clutter on the page. A ‘Show more’ link is located at the bottom.

You can do the same thing with the data tree on the right, where the same ‘Show more’ and ‘Show less’ buttons will show up.

REFRESH(ING THE SCHEMA / API)

If you have added a new custom field into your Salesforce account while editing the recipe, you will notice that it does not show up. You need to manually refresh the recipe by pressing the [Refresh schema](#) button.

CONDITIONAL STEPS

<https://support.workato.com/support/solutions/articles/1000153148-what-are-conditional-actions-and-what-conditions-do-they-support->

There are four types of actions — *action*, *conditional action*, *repeat action* and *conditional stop*. Two of these actions, Number (2) and (4), are conditional.

Conditional action (2) will perform the actions that are under it only if the condition is true. For example, if the account is not present in Salesforce, then create an account and send out an email.

Conditional stop (4) will stop processing the recipe if the condition is true. You **cannot** have any other actions nested under it. For example, if the account is present in Salesforce, then stop.

Conditional actions support 11 conditions. In general, all the conditions checks for the value of the specified string, except for “is present” and “is not present”. Instead, these two conditions check for the presence of a value (ie: null or not null).

CONTAINS	True if the specified field contains the specified string (word/ letters/numbers). False otherwise. Case sensitive.
STARTS WITH	True if the specified field starts with the specified string (word/letters/numbers). False otherwise.
ENDS WITH	True if the specified field ends with the specified string (word/letters/numbers). False otherwise.
EQUALS TO	True if the specified field exactly matches the specified string (word/letters/numbers). False otherwise.
NOT EQUALS TO	True if the specified field does not match the specified string (word/letters/numbers). False otherwise.
GREATER THAN	True if the specified field is greater than the specified object. False otherwise. This can be used to compare numbers, dates and text.
LESS THAN	True if the specified field is greater than the specified object. False otherwise. This can be used to compare numbers, dates and text.
IS TRUE	Checks for boolean (true/false) values.
IS NOT TRUE	Checks for boolean (true/false) values.
IS PRESENT	True if field is not null. False otherwise.
IS NOT PRESENT	True if field is null. False otherwise.

Formulas

HOW TO USE

When you are defining the input for a field, you can be in text mode (T) or formula mode (fx), indicated by the box at the right of the field. You can toggle between the two modes.

Billing address line 1

A-Z

fx T

The default mode is text mode. In text mode you can assign plain text or map any field from the input data you have. You can add more than one field, for example, you can put the First name and Last name next to each other. Spaces and symbols work here.

Display name

A-Z

Account name : Account ID

Required

When you toggle to formula mode, you see a slightly different view of the input field. It is easily identified by the presence of the extra block below the field that says ‘Press Alt+Space to show suggestions’.

First name

A-Z

Account name .split("").first

fx T

Press Alt + Space to show suggestions

Formula mode accepts operators and methods to transform the data in the input field. You can bring up a simple list of commonly used Ruby methods by appending a period to the end of your data or by pressing Alt+Space. The choices will dynamically show up below, and is dependent on the type of the data - number, text, date etc.

ARITHMETIC OPERATORS

Workato supports one of the key basic arithmetic operations.

If *Amount* is 45 and *Qty* is 5, the results will be as follows:

+	Addition: Adds values on either side of the operator.	Amount + Qty = 50
-	Subtraction: Subtracts right hand operand from left hand operand	Amount - Qty = 40
*	Multiplication: Multiplies values on either side of the operator	Amount * Qty = 225
/	Division: Divides left hand operand by right hand operand	Amount / Qty = 9
%	Modulus: Divides left hand operand by right hand operand and returns remainder	Amount % Qty = 0

OTHER OPERATORS

<https://support.workato.com/solution/articles/1000173152-how-do-i-use-formula-mode->

Operator	Explanation (Scenario)	Examples	Output
ago	Goes back a specified period of time, with the base time as server time when job occurs.	Taking date of job as 6/15/2015: 1.days.ago 1.months.ago If [pill] is 3: [pill].days.ago [pill].months.ago	Taking date of job as 6/15/2015: 6/14/2015 5/15/2015 If [pill] is 3: 6/12/2015 3/15/2015
blank?	Checks to see if [pill] is empty. If pill is empty, returns true. If pill is not empty, returns false. Null values and blank spaces count as empty.	If [pill] is null: [pill].blank? If [pill] has an empty string “ ”: [pill].blank? If [pill] has a non empty string “ x”: [pill].blank?	If [pill] is null: true If [pill] has an empty string “ ”: true If [pill] has a non empty string “ x”: false
capitalize	Capitalizes the first letter of the entire string only	“Double Bubble”.capitalize “Double. Bubble”.capitalize	“Double bubble” “Double. bubble”
casecmp	Compares 2 strings, and disregards case sensitivity. Returns 0 if strings are identical, returns 1 if [pill] has a greater ASCII value, and returns -1 if [pill] has a smaller ASCII value.	If [pill] is the string “Double bubble”: [pill].casecmp(“DOUBLE BUBBLE”) [pill].casecmp(“DOUBLE UBBLE”) [pill].casecmp(“DOUBLE BUBBLE BUBBLE”)	If [pill] is the string “Double bubble”: 0 1 -1
days	Units of measurement for dates. Can be used to add or subtract days from a date.	If [pill] is the date 6/15/2015: [pill] + 1.days [pill] + 1.months [pill] - 12.months	If [pill] is the date 6/15/2015: 6/16/2015 7/15/2015 6/15/2014
downcase	Makes all letters in the string to be in the lowercase.	“Double bubble”.downcase “DOUBLE bubble”.downcase	“double bubble” “double bubble”
ends_with?	Checks to see if a string ends with a certain string. This is case sensitive. If it does, returns true. If it doesn't, returns false.	If [pill] is “Double bubble”: [pill].ends_with?(“bubble”) [pill].ends_with?(“Bubble”) [pill].ends_with?(“ubble”)	If [pill] is “Double bubble”: true false false
first	Returns the first item in a list. Can also be used to return the first n items in a list, as a list. You can also use ‘second’, ‘third’, ‘fourth’.	If [list] = [item1, item2, item3, item4, item5]: [list].first [list].first[2] [list].first[0..-2]	If [list] = [item1, item2, item3, item4, item5]: item1 [item1, item2] [item1, item2, item3, item4]
gsub	Replaces a specific letter in a string with another one.	‘Jean Marie’.gsub(‘J’, ‘M’) ‘Jean Marie’.gsub(‘e’, ‘i’)	“Mean Marie” “Jian Marii”
join	Joins elements in a list by a specified character to form a string. If no character is defined, by default, elements will just be joined together.	If [list] = [1, 2, 3, 4, 5]: [list].join [list].join(“ ”) [1, 2, 3, 4, 5].join(“, ”)	If [list] = [1, 2, 3, 4, 5]: “12345” “1 2 3 4 5” “1, 2, 3, 4, 5”
last	Returns the last item in a list. Can also be used to return the last n items in a list, as a list.	If [list] = [item1, item2, item3, item4, item5]: [list].last [list].last[2] [list].last[0..-2]	If [list] = [item1, item2, item3, item4, item5]: item5 [item4, item5] [item2, item3, item4, item5]
length	Returns the number of elements in a list.	If [list] = [item1, item2, item3, item4, item5]: [list].length If [list] = []: [list].length	If [list] = [item1, item2, item3, item4, item5]: 5 If [list] = []: 0
lstrip	Removes only leading white space in a string.	“ Double bubble ”.strip “Double bubble”.strip	“Double bubble” “Double bubble”
present?	Checks to see if [pill] is empty. If [pill] is not empty, returns true. If [pill] is empty, returns false. Null values and blank spaces count as empty.	If [pill] is null: [pill].present? If [pill] has an empty string “ ”: [pill].present? If [pill] has a non empty string “ x”: [pill].present?	If [pill] is null: false If [pill] has an empty string “ ”: false If [pill] has a non empty string “ x”: true

presence	Checks to see if [pill] is null. If [pill] is null, returns null. If [pill] is not null, returns [pill].	If [pill] is null: [pill].presence If [pill] has an empty string “ ”: [pill].presence If [pill] has a non empty string “ x”: [pill].presence If you want to process a [pill] without returning *null*: [pill].presence “N/A”	If [pill] is null: null If [pill] has an empty string “ ”: “ ” If [pill] has a non empty string “ x”: “ x” If [pill] has a non empty string “998.76”: “998.76” otherwise: “N/A”
reverse	Reverses the order of lists or strings.	If [list] = [item1, item2, item3, item4, item5]: [list].reverse “Double bubble”.reverse	If [list] = [item1, item2, item3, item4, item5]: [item5, item4, item3, item2, item1] “elbbub elbuoD”
rstrip	Removes only trailing white space in a string.	“ Double bubble ”.rstrip “Double bubble”.rstrip	“ Double bubble” “Double bubble”
size	Returns the number of characters in a string if used on strings, inclusive of white spaces.	“Double bubble”.size “12345 6789”.size	13 10
slice	Returns a partial segment of a string. Pass in 2 parameters — the first parameter is the index that decides which part of the string to start returning from (first letter being 0 and subsequently progressing incrementally), the second parameter decides how many characters to return. If only the first parameter is passed in, only 1 character will be returned.	“Double bubble”.slice(0) “Double bubble”.slice(0, 6) “Double bubble”.slice(7) “Double bubble”.slice(7, 6)	“D” “Double” “b” “bubble”
split	Splits up a string based on certain characters. Character is case sensitive. If no character is defined, by default, strings are split up by white spaces. Null values cannot be split. An error will be thrown.	“Double bubble”.split “Double bubble”.split(“b”) “Double bubble”.split(“d”) “Double bubble”.split(“D”)	[“Double”, “bubble”] [“Dou”, “le ”, “”, “u”, “”, “le”] “Double bubble” [“”, “ouble bubble”]
starts_with?	Checks to see if a string starts with a certain string. This is case sensitive. If it does, returns true. If it doesn’t, returns false.	If [pill] is “Double bubble”: [pill].starts_with?(“Double”) [pill].starts_with?(“Do”) [pill].starts_with?(“double”)	If [pill] is “Double bubble”: true true false
strip	Removes leading and trailing white space in a string.	“ Double bubble ”.strip “Double bubble”.strip	“Double bubble” “Double bubble”
strip_tags	Removes HTML tags in a string. Retains ASCII characters like ‘&’.	“<html><body>Double bubble</body></html>”	“Double bubble”
titleize	Converts the first letter of each word in a string to uppercase.	“double bubble”.titleize “DOUBLE BUBBLE”.titleize	“Double Bubble” “Double Bubble”
to_f	Changes the type of a variable to a float.	If [pill] is “Double bubble”: [pill].to_f “Double123”.to_f “123”.to_f “123bubble321”.to_f 123.555.to_f	If [pill] is “Double bubble”: 0 0 123.0 123.0 123.555
to_i	Changes the type of a variable to an integer. Converts strings into the value 0.	If [pill] is “Double bubble”: [pill].to_i “Double123”.to_i “123”.to_i “123bubble321”.to_i	If [pill] is “Double bubble”: 0 0 123 123
to_s	Changes the type of a variable to a string.	If [pill] is “Double bubble”: [pill].to_s 123.to_s	If [pill] is “Double bubble”: “Double bubble” “123”
upcase	Makes all letters in the string to be in the uppercase.	If [pill] is “Double bubble”: [pill].upcase “DOUBLE bubble”.upcase	If [pill] is “Double bubble”: “DOUBLE BUBBLE” “DOUBLE BUBBLE”
yday	Returns the day number of the year.	If [pill] is “Mon, 5 Oct 2015”: [pill].yday	If [pill] is “Mon, 5 Oct 2015”: “278”
yweek	Returns the week number of the year.	If [pill] is “Mon, 5 Oct 2015”: [pill].yweek	If [pill] is “Mon, 5 Oct 2015”: “41”

Common Scenarios

SPLIT, JOIN; WORKING WITH ADDRESSES

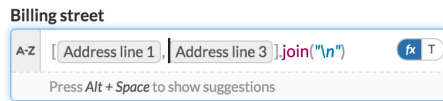
<https://support.workato.com/support/solutions/articles/1000172077-how-do-i-add-new-line-in-my-formula-how-do-i-format-the-address-into-multiple-lines->

When trying to transfer text from one system to another, you may want to concatenate multiple elements or you may want to format it onto multiple lines. A good example of this is Address lines — in Xero, address lines are split into address line 1, address line 2, address line 3 but in Salesforce there is just one field, Billing street.

HOW TO DO IT

For Billing Street, turn formula mode (fx) instead of the default 'T'

- » add a “[
- » select the first field
- » add a “,
- » select the second field
- » close the block with “]”
- » add a period “.”
- » key in or select join
- » key in (“\n”)



The basic split breaks a string into its components. It is not really useful when used on its own.

“Joseph Robinette Biden”.split
returns [*“Joseph”, “Robinette”, “Biden”*]

In *“Joseph Joe Robinette Biden”*,
“Joseph Joe Robinette Biden”.split.first returns *“Joseph”* while
“Joseph Joe Robinette Biden”.split.last returns *“Biden”*.

ADVANCED MANIPULATION OF NAMES/CHARACTERS

For more advanced control, you can do fine-grained *split* and *join* them with some other character(s).

The numbering scheme for split is as follows: the array starts with 0, and ends with -1. You may also use ‘second, third, fourth.. etc’. You specify the start and stop positions for the split.

Joseph Joe Robinette Biden

0 1 2 -1

Formula

"Joseph Robinette Biden".split[0..1].join(" ")	"Joseph Robinette"
"Joseph Joe Robinette Biden".split[2..-1].join("@")	"Robinette@Biden"
"Joseph Robinette Biden".split[2..-1].join(" ")	"Biden"
"Joseph Joe Robinette Biden".split[2..-1].join(" ")	"Robinette Biden"
"Joseph Joe Robinette Biden".split[2..-1].join(".") + "@.gmail.com"	"Robinette.Biden@.gmail.com"

Result

EXTRACTING DOMAIN NAME FROM EMAILS

“amlan@workato.com”.split("@").last.split(".").first
returns *“workato”*

amlan@workato.com

Functions and
formulas are
read in
sequence.

split("@")

amlan

workato.com

split(".")

workato

com

workato

PRESENT?, PRESENCE AND NULL DATA

<https://support.workato.com/support/solutions/articles/1000177311-formula-mode-present-and-presence>

You can use the two functions – presence and present? to check for presence of a value and perform functions accordingly.

.present? checks to see if a value exists, and if it is present it will return one value; if not present it will return the second value.

Formula

's'.present? ? "a" : "b"	"a"
''present? ? "a" : "b"	"b"
1.present? ? "a" : "b"	"a"
0.present? ? 0 : 1	"0"
[Full Name].present? ? [Full Name] : "No name given"	[Full Name] if it was present

Result

.presence just checks to see if the value exists and returns the value only if it exists, otherwise it returns nothing.

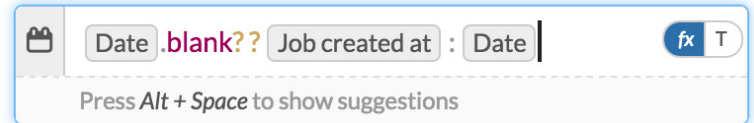
Formula

's'.presence	"s"
''presence	Nothing

Result

You can also use “.blank?” to check for null data, similar to “.present?”

Invoice Date



If the date is blank, it will use the date when the job was created, otherwise it will use the original date.

DATE FUNCTIONS

<https://support.workato.com/support/solutions/articles/1000177317-formula-mode-date-functions>

Dates are quite common elements in data structures. Occasionally, the date may not be in the right format, e.g. it may be sent as a string (which generates errors!).

“to_date” changes a string to a proper date and you may also specify the format to be converted to.

Some examples to manipulate dates:

Formula

'20150420':to_date	Mon, 20 Apr 2015
'04/20/2015':to_date(format: 'MM/DD/YYYY')	Mon, 20 Apr 2015
'04-20-2015':to_date(format: 'MM-DD-YYYY')	Mon, 20 Apr 2015
'Mon, 20 Apr 2015':to_date(format: '%a, %d %b %Y')	Mon, 20 Apr 2015
'20150420':to_date + 2.days	Wed, 22 Apr 2015
'20150420':to_date - 2.weeks	Mon, 06 Apr 2015
'20150420':to_date + 2.years	Thu, 20 Apr 2017

Result

LOOKUP TABLES

<https://support.workato.com/support/solutions/articles/1000185431-how-do-i-define-the-mapping-of-one-set-of-values-to-another-set-across-systems->

When building recipes, one may chance upon sets of fields which are conceptually similar, but their actual values don't match up.

What if I wish to sync tickets from an app with statuses such as "new, pending, solved, closed" while my project management app represents projects as only either "closed" or "not closed"?

With Workato's lookup tables, you can define which value on system A should be mapped to which value in system B. If I'm building a recipe that syncs Zendesk tickets to Trello cards:

Trigger

New ticket in Zendesk

Actions

1 Create card in Trello

+ Add

When creating a card or updating a card in Trello upon new or updated tickets in Zendesk, I want to ensure that the Trello card's "closed" status corresponds to the Zendesk ticket status. Therefore, let's use formula mode for the input field "Closed" in Trello's create card action (or update card action), and select lookup_table.

Actions

1 Create card in Trello

Application

Trello

Configure action

Closed

A-Z

ljust

Left justify string

lookup_table

Lookup table

lstrip

Remove white space from the beginning of string

Exar

["act

"For

Closed

A-Z

{"key1" => "value1", "key2" => "value2"}["key1"]

Closed

A-Z

{"key1" => "value1", "key2" => "value2",
"key3" => "value3", "key4" => "value4"}["key1"]

The default example has only 2 values, so in this case you would need to enter a few more pairs.

Now, you need to replace the keys on the left-hand-side with the value of the Zendesk statuses (new, pending, solved, or closed), and replace the values on the right-hand-side with true or false, as "Closed" is a boolean field.

In simpler terms, Open and Closed is a true-false (yes-no) data type, which is incidentally what Trello accepts. Therefore, you need to manually specify what the tickets are converted to; i.e. a manual, one-time interpretation for the system.

You also need to put the data pill/pillbox within the square brackets on the extreme right.

Essentially, we're saying: take the value of my Zendesk ticket, the [Status] pill, and depending on what its actual value (new, pending, solved, closed) is, substitute it out for the right-hand-side value (true or false). We then pass this right-hand-side value into the action.

Closed

A-Z {"new" => "false", "pending" => "false",
"solved" => "false", "closed" => "true"}[Status]

FURTHER NOTES

You can substitute the above into any other scenarios. For example, when syncing the type of employee from your HR management system into your payroll system (i.e. full-time, part-time, contractor) or for syncing the type of customer from your sales/customer management system into your accounting/customer service system (i.e. VIP, levels of priority, SLA type).

Whenever there are two sets of conceptually similar values across systems that does not map directly to each other in terms of actual labels/values, lookup tables can come in handy to map them.

WORKING WITH LIST DATA/ARRAYS

When you encounter list data in your data tree, the normal method of mapping may not work as intended. List data is indicated by . The method to use here is the action: *foreach*.

7 For each item in Salesforce Get related objects Invoice item cs do > Get each invoice line in Salesforce

Input list

A-Z Invoice item cs

For each works only on data fields that are lists.

A foreach step (Step 7 in this example) has a field for the list data in which each item in the list will be processed and mapped into the other app. Place the list data pill in this field and define the actions in the following nested step (Step 8 in this example).

8 Add line item to invoice in QuickBooks > Add a corresponding invoice line in Quickbooks

Application

qb QuickBooks

Action

Add line to

Configure action

Show more

Invoice ID

A-Z ID

Required Add line item to this specific invoice

Line item detail

Sales item detail

Required

Line item

11

The most common use for this is to transfer line items to an invoice in an accounting app, like QuickBooks Online. Contact us for help on more advanced manipulations of list data.

PEOPLE TASK

Workato has a powerful built-in app called People Task which allows what would be called human interaction & approval in an automated workflow process. This allows for multiple people (possibly from different departments) to coordinate within an automated recipe. Check out a [sample recipe](#).

SETTING UP

Customize people task site

Company subdomain

Unique company subdomain used to login to the people task user interface. Allowed characters: A-Z, 0-9, -, .
URL to the UI is <https://www.workato.com/tasks/amp>

Company name

Logo



Choose File

No file chosen

UI title

Title color

UI footer

Save

Cancel

Access the People Task page from your profile at the top right of the page. Set up a site so that you are able to add participants.

ADDING PARTICIPANTS

People task participants

+ Add participant		
Name	Email	Active
 John Smith	johns@domain.com	false

Participants need to be manually added, and then verified from the email address that it was added.

USING PEOPLE TASK IN YOUR RECIPE

Add a step for People Task where approval is required. Contact us for more advanced configurations.

1 Request approval via People Task

Application

People Task

People Task

Task document

Required Document to help approver make a decision

Requester

Required The person requesting approval

Approver

Required The person who can approve this task

Decision by

Required Time to wait for a decision

Requester comments

CLOCK

Another simple, basic yet powerful app in Workato is the clock. The clock is great for testing recipes and scheduling certain events in recipes. The clock has different functions when used in the Trigger and Actions.

TRIGGER

As a trigger, the Clock app can be made to trigger on a new timer event or scheduled task. The 'New timer event' is a simple repeating trigger that has a fixed time interval, e.g. 5 minutes. The 'Schedule task' function can be configured in a more precise way.

Note that in both cases, the first instance will run immediately when 'Start recipe' is pressed.

Trigger

New timer event in Clock

Application

Clock

Trigger

New timer event

Configure trigger

Every

5 minutes

Required Time interval between timer events

Start at

Date and time on which to start the event. Leave blank to start immediately

Trigger

Schedule a task in Clock

Application

Clock

Trigger

Schedule task

Configure trigger

Show less

Hour

Leave empty for hourly task(in 24-hour format).

Minute

Required

Time zone

Required

Sunday

Required

Monday

Required

ACTIONS

When used as an action, the Clock app can do two things; it can obtain the current time and wait for a specified time before the next action is run. This allows one to work with time within recipes.

Action

Get the current time

Application

Clock

Action

Get current time

TESTING RECIPES

To test whether an action will work when triggered in the Trigger step, you may just set your trigger to a new timer event and configure the actions in the recipe to be performed. This is especially useful if you are testing if data can be pulled from your app (visible in each job's *Input* and *Output* tab).

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