

AUTOMATION PRO II – BONUS LABS

Table of Contents

Bonus labs.....	1
Notes.....	1
Lab 1: Create a contact in Salesforce.....	2
Create a Salesforce sandbox account.....	2
Create a new recipe in Workato.....	2
Configure your trigger.....	3
Add an action.....	5
Connect to Salesforce.....	6
Input data.....	7
Test your recipe.....	8
See your results in Salesforce.....	11
Lab 2: New/updated opportunity in Salesforce will create a case in Salesforce.....	12
Create a new recipe and configure your trigger.....	12
Add actions to your recipe.....	16
Map and transform data through your recipe.....	19
Add an opportunity to Salesforce.....	20
Test your recipe and see your results in Salesforce.....	21
Lab 3: Modify your job report.....	23
Add columns.....	23

Bonus labs

The following series of labs takes you through a slightly more complex scenario than featured in the Automation Pro II course. While still focusing on core recipe concepts and basic recipe design, these labs present more use cases for Workato.

Notes

We recommend completing these labs in order as you will build on skills previously learned.

Icons



The information icon will appear when there is important or additional information available about Workato.



The attention icon indicates important information or a required step.

Lab 1: Create a contact in Salesforce

In this recipe, we'll explore the fundamental components of a recipe: the trigger, the connection, and actions. Through this recipe, we will create a contact in Salesforce with inputs from Workato.

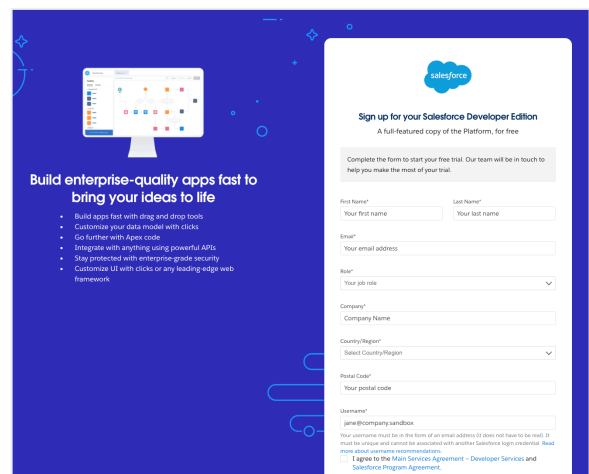


A Salesforce account is **required** for these bonus labs.

Create a Salesforce sandbox account

If you do not have a Salesforce sandbox account, **create** one at developer.salesforce.com/signup.

Save the username and password you create for your Salesforce account as you will need them to configure your Salesforce connection for this exercise.

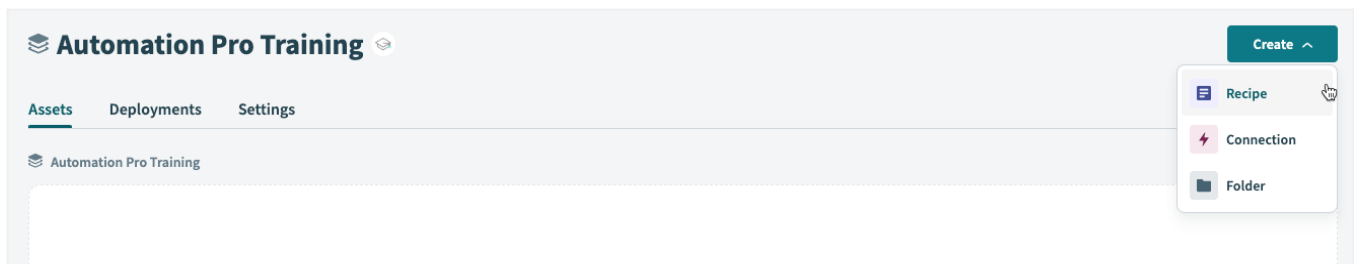


Create a new recipe in Workato

To begin building your recipe, **navigate** to the training project we created earlier.

Click the **Create** button and choose **Recipe**.

This will begin a guided walkthrough of setting up your recipe.



We can name this recipe **Create a contact in Salesforce**.

Next, choose your training folder as the **location**.

My new recipe

Set up your recipe

Name
Create a contact in Salesforce

Location
Automation Pro Training

Pick a starting point

- Trigger from an app
- Run on a schedule
- Trigger from a webhook
- Manage other recipes
- Build recipe function
- Build an API endpoint
- Build a Slack bot command

Start building

Configure your trigger

Triggers determine what event to listen to execute the actions described in a recipe.

As we will be using a scheduled trigger for this recipe, let's select the starting point as **Run on a schedule** and click the **Start Building** button.

Pick a starting point

- Trigger from an app
- Run on a schedule
- Trigger from a webhook
- Manage other recipes
- Build recipe function
- Build an API endpoint
- Build a Slack bot command

Start building

You will then see the recipe edit mode with your trigger ready to run on a specified schedule.

Create a contact in Salesforce

RECIPE TEST JOBS

Save Test Refresh Exit

App → Trigger → Setup

Trigger on a specified schedule

Find Show optional fields

HELP

Run your recipe on a regular interval (e.g. every 15 minutes), or on a set schedule (e.g. at 9:00AM every week on Monday). Users may also specify a cron expression by selecting **Custom schedule** in the "Time unit" dropdown. The minimum accepted interval is every 5 minutes. [Learn more](#)

Time unit
Minutes

Select an interval or custom schedule to specify cron expression.

Trigger every
123 5 minutes

Define repeating schedule. Enter whole numbers only. This field can be set to a minimum of 5 minutes.

+ 1 optional field available

Set trigger condition
Only trigger events matching specified condition will be processed. [Learn more](#)

If you do not see your trigger ready to run on a specified schedule, navigate to the **Trigger** tab in the **Setup** menu and choose, **New Recurring Event**.

This will allow you to determine the interval at which to execute recipe actions.

This application requires the time interval between triggers. We will set our interval at **5 minutes** for this lab.

 You can toggle optional fields to view additional fields that are not required.

For example, in the **Start after** input field, you can specify the date and time to start the first trigger event.

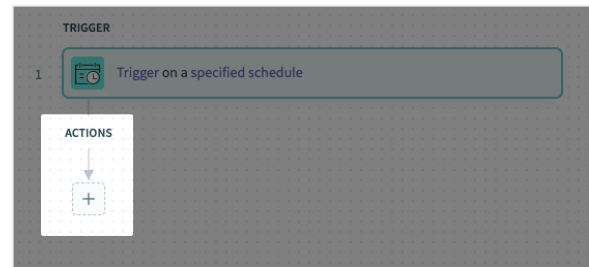
For this lab, we will leave this blank.

Why this is important

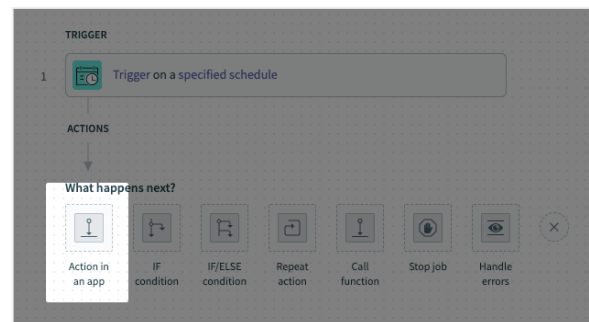
This feature is called the **Time Machine**. It makes it easy to capture business events that have already occurred, such as before the recipe is started. For example, you can set your recipe to poll for new or updated Salesforce cases since yesterday.

Add an action

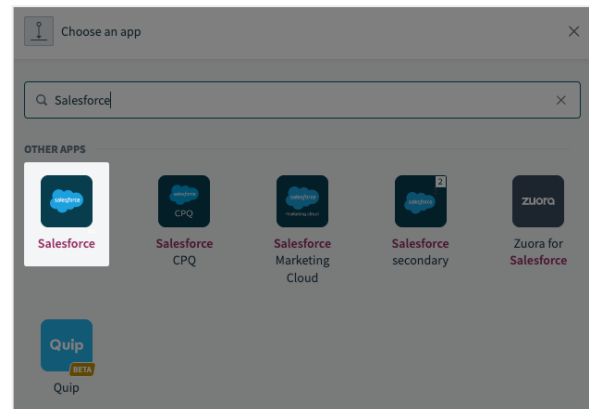
Next, let's click the **plus (+) icon** to add an **Action in an app**, as our action will involve the application, Salesforce.



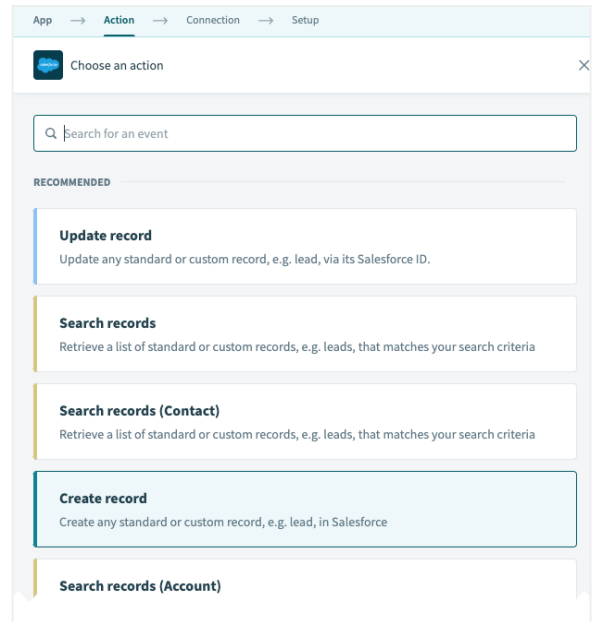
Select **Action in an app** to add the next step.



Search for and select the **Salesforce** application.



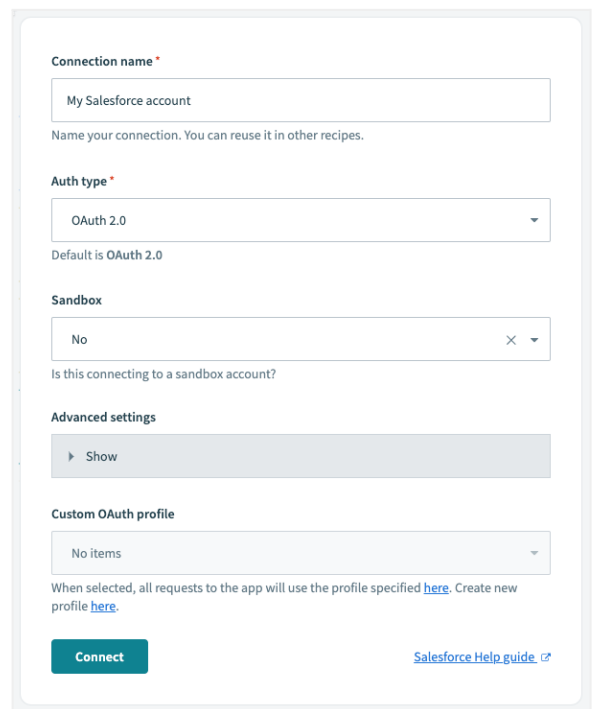
For action, choose **Create** record, which will allow us to create standard or custom records in Salesforce.



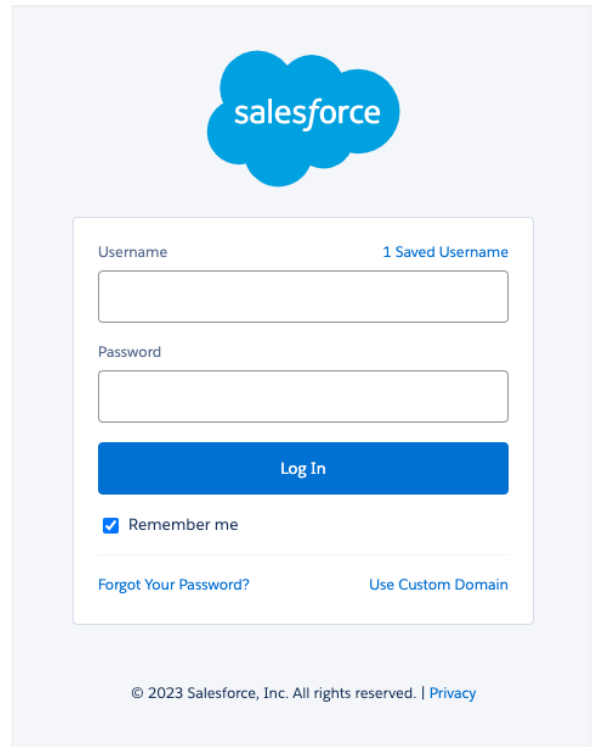
Connect to Salesforce

Next, let's establish a connection to our Salesforce sandbox.

To create a new connection, give the connection a name, such as **My Salesforce account**, and click **Connect**.

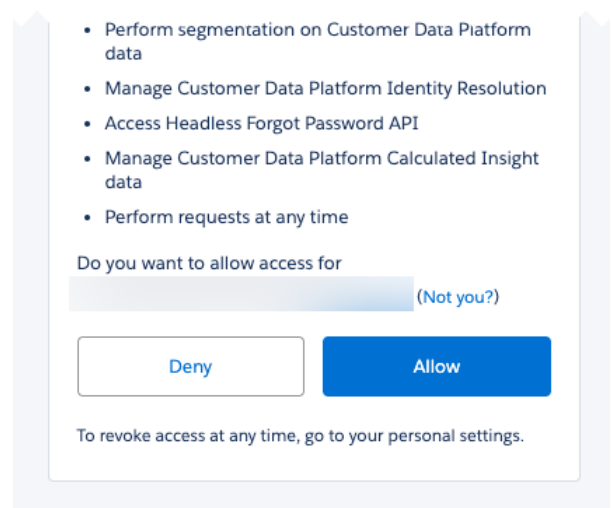


Then, input the username and password of the sandbox Salesforce account you just created to authenticate the connection.



The image shows the Salesforce login page. At the top is the Salesforce logo. Below it is a login form with fields for 'Username' and 'Password'. The 'Username' field has a link '1 Saved Username' to its right. Below the password field is a blue 'Log In' button. Under the button is a checkbox labeled 'Remember me' which is checked. At the bottom of the form are two links: 'Forgot Your Password?' and 'Use Custom Domain'. Below the form is a copyright notice: '© 2023 Salesforce, Inc. All rights reserved. | Privacy'.

When prompted to allow access via Workato, click the **Allow** button.



The image shows a Salesforce permission request dialog. It lists several permissions: 'Perform segmentation on Customer Data Platform data', 'Manage Customer Data Platform Identity Resolution', 'Access Headless Forgot Password API', 'Manage Customer Data Platform Calculated Insight data', and 'Perform requests at any time'. Below the list is the question 'Do you want to allow access for' followed by a greyed-out input field and the text '(Not you?)'. At the bottom are two buttons: 'Deny' and 'Allow'. Below the buttons is a link: 'To revoke access at any time, go to your personal settings.'

Input data

Once connected, we will set up our trigger.



Typically, your recipes should not have any hardcoded values, but we will make an exception for this lab.

In our scenario, we are creating a contact in Salesforce. For the Object input field, select **Contact**.

Additional available fields will then appear based on the object chosen.

For the purposes of this lab, let's hardcode the required **Last Name** field to your last name.

Next, fill in your **Email** and **First Name**.

HELP ^

Create any standard or custom record, e.g. lead, in Salesforce. Select the object to create, then provide the data for creating the record.

Object *

Contact

Account **Contact** Role

Case **Contact** Role

Contact

Contact Point Address

Contact Point Address Share

Contact Point Consent

Object *

Contact

Select any standard or custom Salesforce object, e.g. lead

Last Name *

Text Formula

ABC YourLastNameHere

Email

ABC youremail@address

First Name

ABC YourFirstName



Make note of this record as we will use this contact for subsequent labs.

Test your recipe

Once all fields have been filled, we can test the recipe which will pick up one trigger event to run and will stop thereafter.

Click **Save** and **Test** in the upper right corner of your recipe.

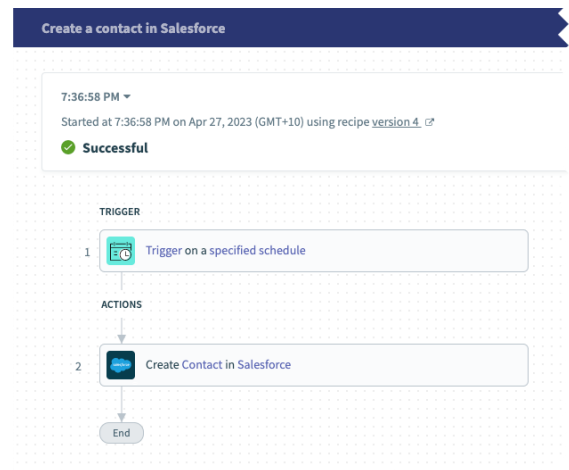
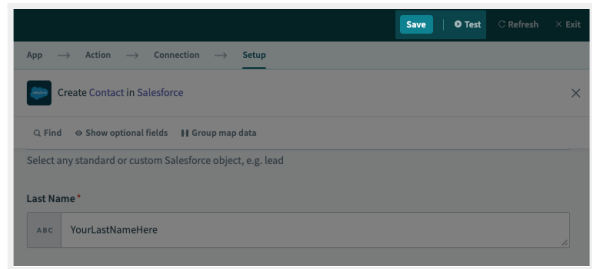
Since our trigger is run by a scheduler, it will pick up a job immediately.

Once the recipe has run successfully, you will see a status message and have access to job details.

Click the **Create record** step.

In the **Input** tab, you will see hard coded data for the first and last name as well as for the email address.

In the **Output** tab, you will see details of the created record in Salesforce, such as the Object ID.



Input Output Debug

Q Search ^ v X Copy raw JSON

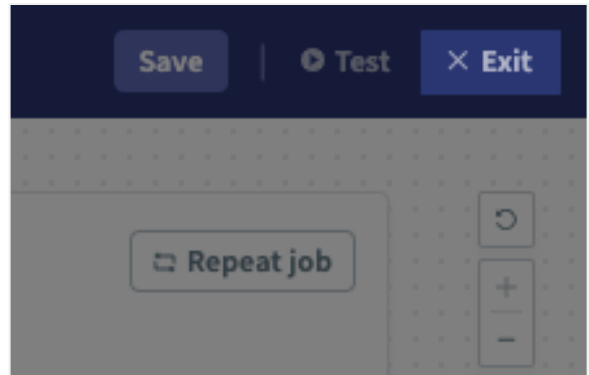
```
1 {
2   Object: "Contact",
3   Last Name: "Kent",
4   First Name: "Clark",
5   Email: "training@automationinstitute.sandbox"
6 }
```

Input Output Debug

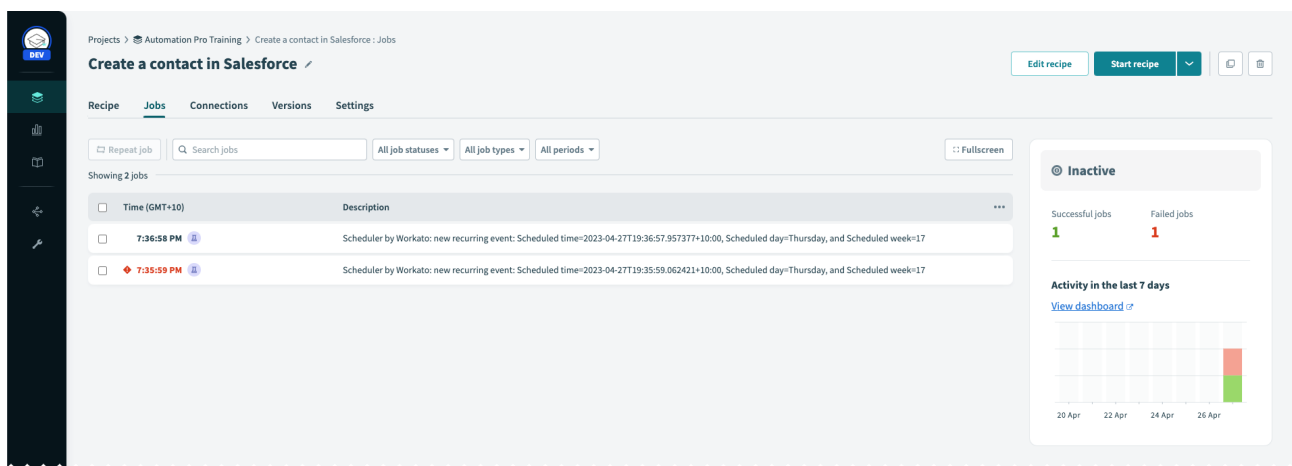
Q Search ^ v X Copy raw JSON Expand data

```
1 {
2   Object ID: "003Do00000H1zwbIAB",
3   success: true,
4   errors: []
5 }
```

Click **Exit** in the upper right corner to close your recipe. Now, let's take a look at the job report for this test.

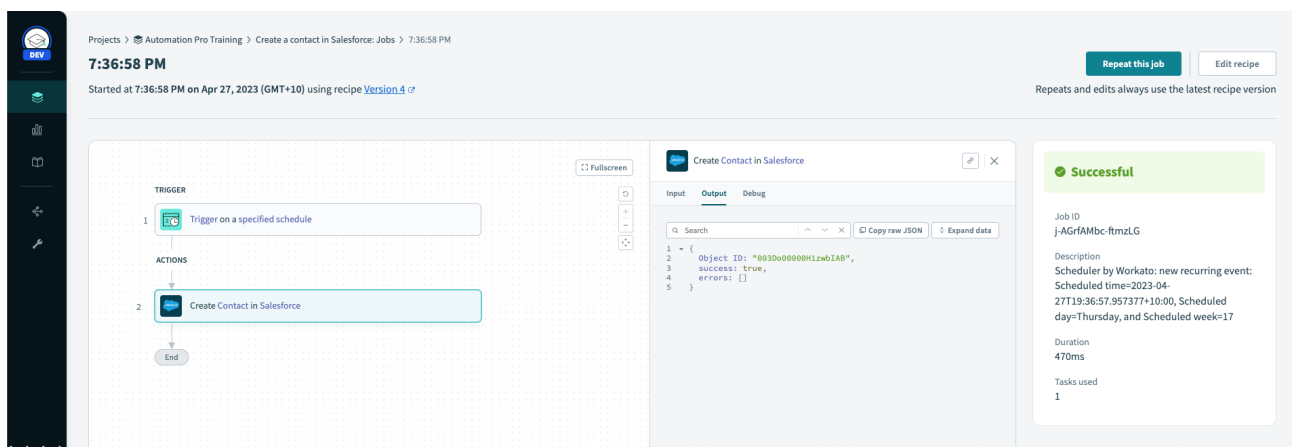


Click the **Jobs** tab to view job reports.



Double-click the latest job to open its job details.

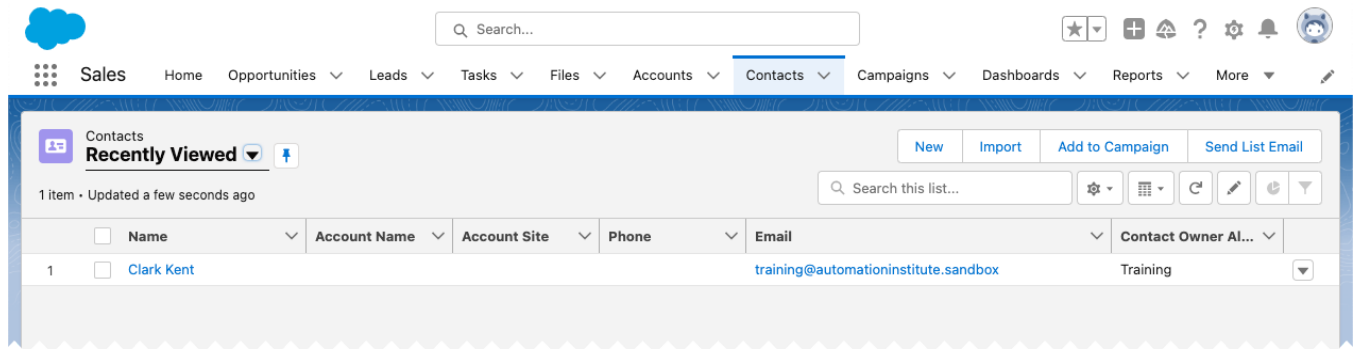
Here, you can see that each processed job has complete details such as the data input and output from every step.



See your results in Salesforce

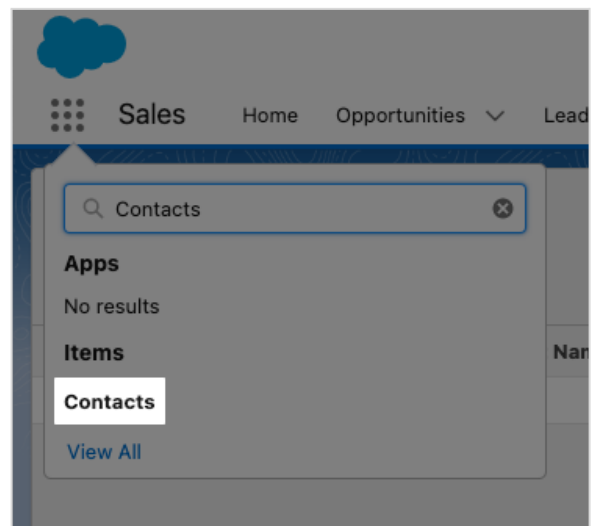
Now, in your Salesforce account, let's find out if the contact has been created.

Under the **Contacts** tab, you will notice that a contact has been created with the last and first name, as well as the email address, that we have configured.



If you are unable to locate Contacts in your Salesforce dashboard, click the **App Launcher** and search for **Contacts** from the app launcher.

And that's it!



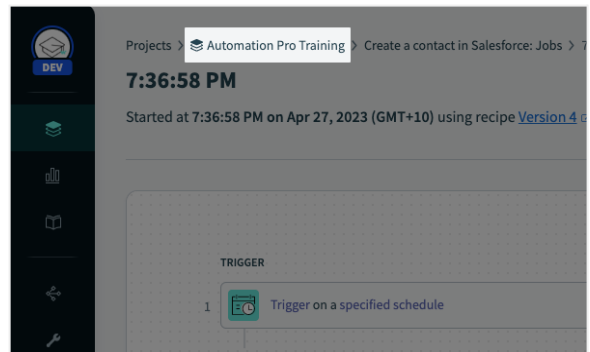
Lab 2: New/updated opportunity in Salesforce will create a case in Salesforce

In this recipe, we will explore frequently used functions in Workato recipes: trigger conditions, data mapping, and formula mode.

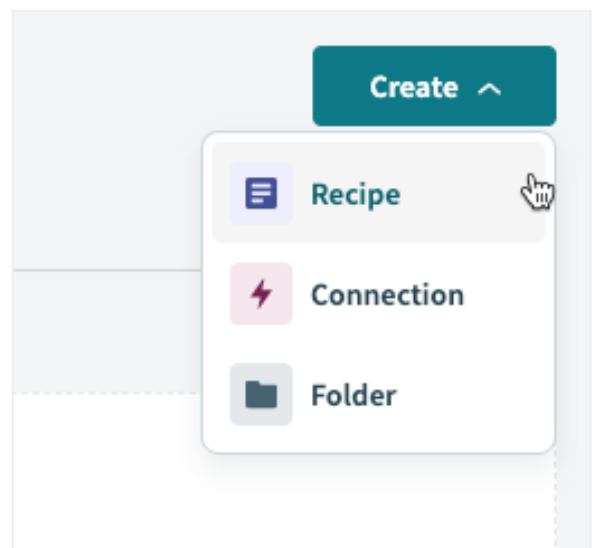
Create a new recipe and configure your trigger

First, let's return to the **Automation Pro Training** folder you created earlier.

You'll see a link to your folder in the recipe breadcrumb.

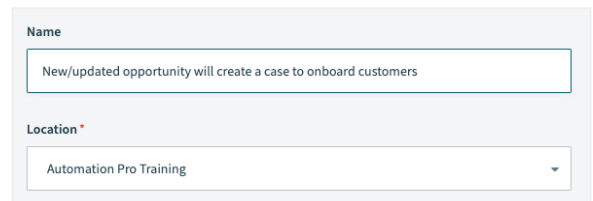


Click the **Create** button and choose **Recipe**. This will begin a guided walkthrough of setting up your recipe.

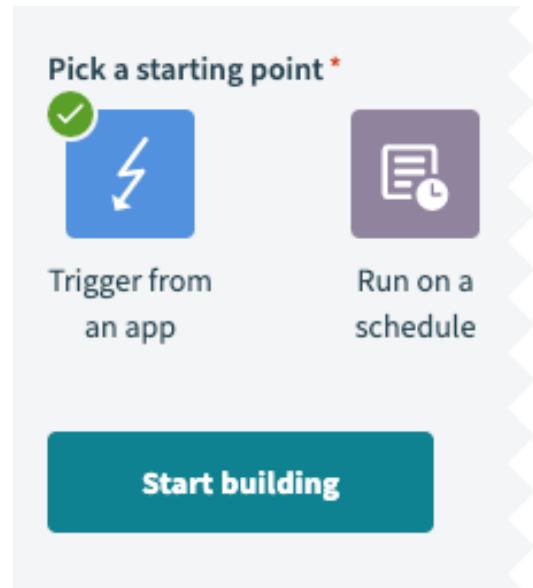


Remember: when naming your recipe, think of a name that makes it easy for you to find. We can name this recipe **New/updated opportunity will create a case to onboard Customers**.

Choose your training project for **Location**.



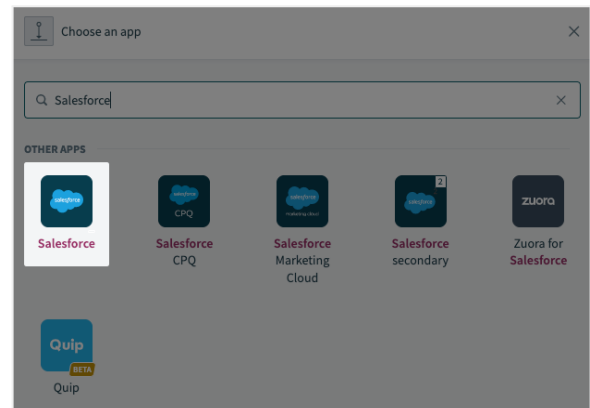
As a starting point, select **Trigger** from an app and click the **Start building** button.



Why this is important

Automations are typically started in response to business events. Workato triggers are a powerful and unique capability that makes it simple to detect business events, such as new hires, opportunities won, etc.

Next, let's search for and select **Salesforce** as the application.

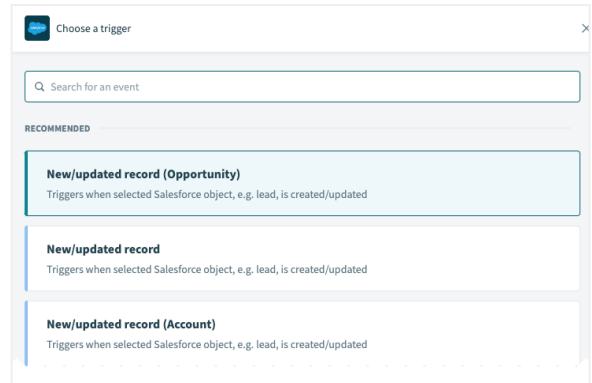


Choose **New/Updated Record (Opportunity)** as the trigger.

Then, select the **Salesforce** connection that you established in the previous lab for this recipe.

For the setup, let's leave the time at which the recipe should pick up events from as it is – **one hour ago**.

Scroll down to toggle **Trigger conditions**.



Choose a trigger

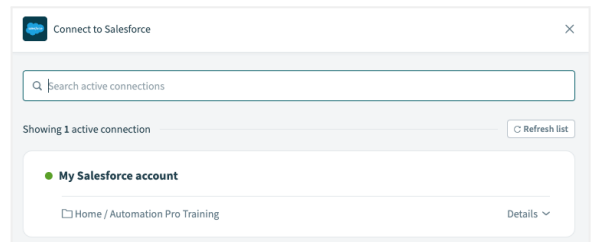
Search for an event

RECOMMENDED

New/updated record (Opportunity)
Triggers when selected Salesforce object, e.g. lead, is created/updated

New/updated record
Triggers when selected Salesforce object, e.g. lead, is created/updated

New/updated record (Account)
Triggers when selected Salesforce object, e.g. lead, is created/updated



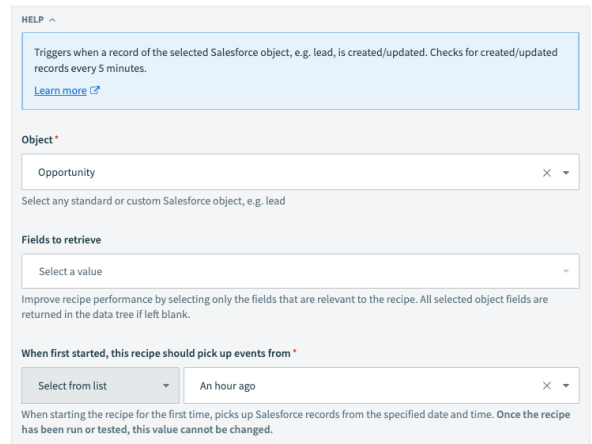
Connect to Salesforce

Search active connections

Showing 1 active connection Refresh list

● **My Salesforce account**

Home / Automation Pro Training Details



HELP

Triggers when a record of the selected Salesforce object, e.g. lead, is created/updated. Checks for created/updated records every 5 minutes. [Learn more](#)

Object *

Opportunity

Select any standard or custom Salesforce object, e.g. lead

Fields to retrieve

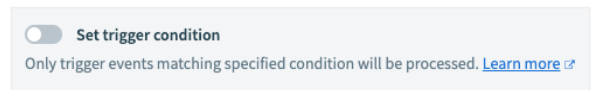
Select a value

Improve recipe performance by selecting only the fields that are relevant to the recipe. All selected object fields are returned in the data tree if left blank.

When first started, this recipe should pick up events from *

Select from list An hour ago

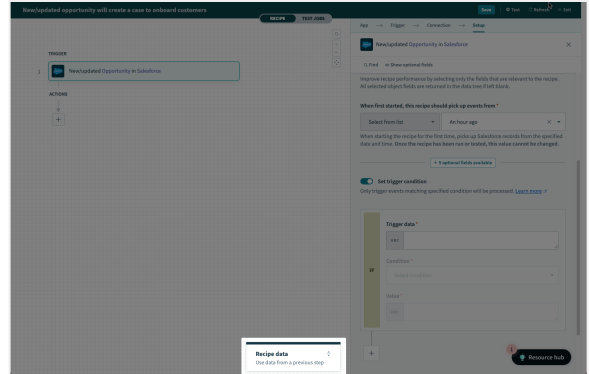
When starting the recipe for the first time, picks up Salesforce records from the specified date and time. Once the recipe has been run or tested, this value cannot be changed.



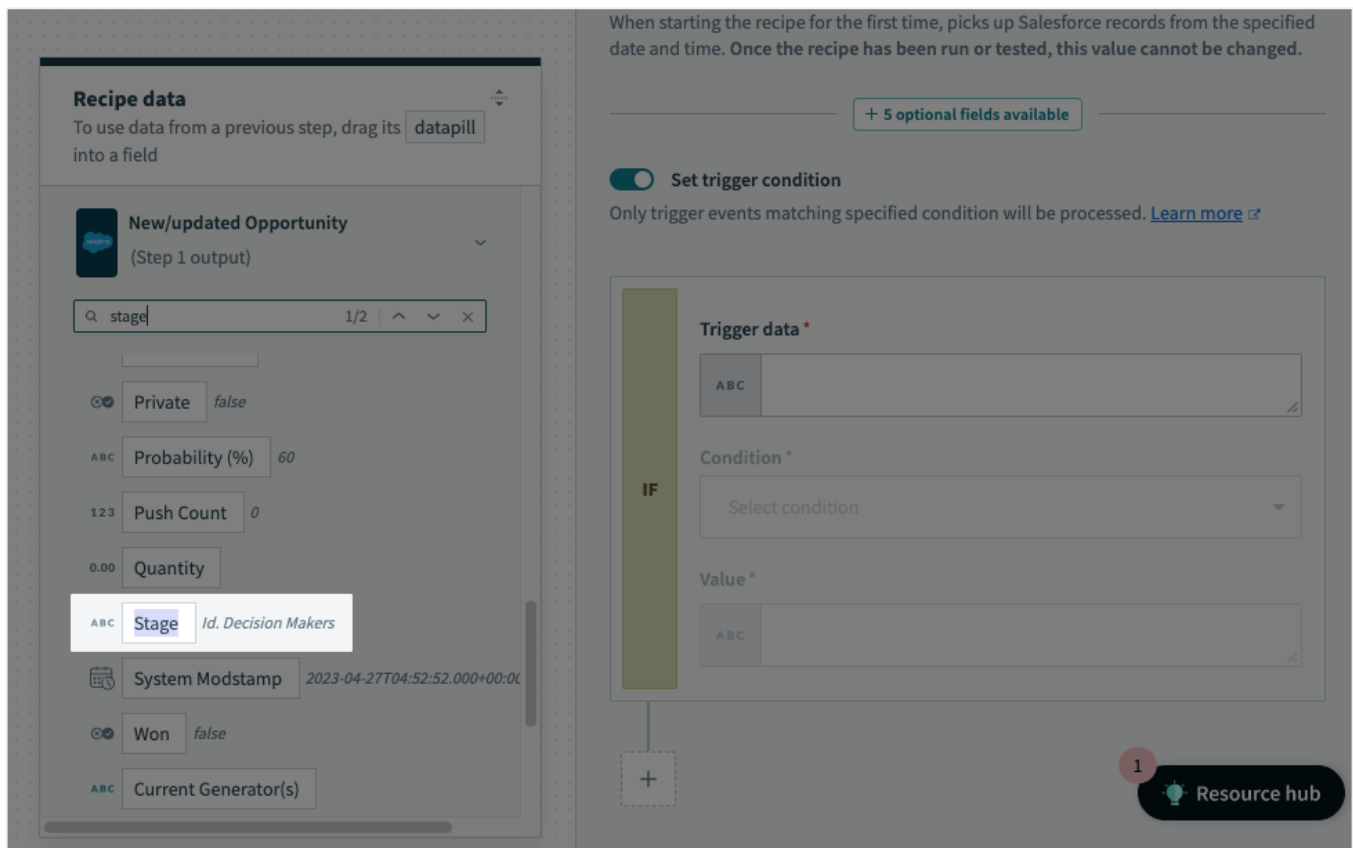
☐ **Set trigger condition**

Only trigger events matching specified condition will be processed. [Learn more](#)

Locate and maximize the Recipe Data window in the lower middle area of your recipe.



To specify the trigger condition, let's search for the **Stage** datapill under **New/updated Opportunity (Step 1 output)** and drag and drop it in the **Trigger Data** input field.



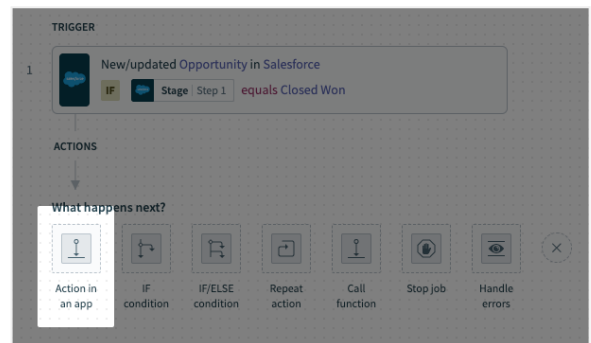
We will select **Equals** as the condition type and input **Closed Won** as the value.

The screenshot shows the configuration for an 'IF' condition. On the left, a vertical bar is labeled 'IF'. The main configuration area has three sections: 'Trigger data' with a dropdown set to 'Stage | Step 1', 'Condition' with a dropdown set to 'equals', and 'Value' with a dropdown set to 'Closed Won'. There are 'Text' and 'Formula' tabs for the value field.

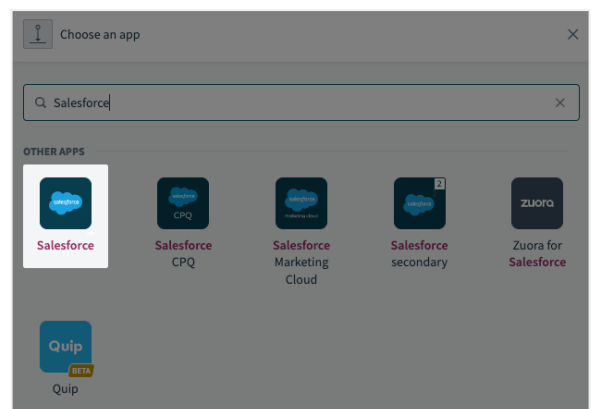
Add actions to your recipe

Now that we have configured the trigger, let's look at making actions.

For the first part of this recipe, we want to search for contacts in Salesforce. Let's click the **plus (+) icon** to add an **Action in an app**.



Search for and select the **Salesforce** application.



Scroll and choose **Search records** as the action.

Choose an action

- Reject record in approval process**
Reject a record in the approval process in Salesforce
- Retry bulk job for failed records from CSV file** (Bulk)
Retry bulk job in Salesforce for failed records
- Search records**
Retrieve a list of standard or custom records, e.g. leads, that matches your search criteria
- Search records in bulk using SOQL query (API 1.0)** (Bulk)
Retrieve a CSV stream of records that match your SOQL WHERE clause with Salesforce bulk API

Select **Contact** as the object so as to search within contacts in Salesforce.

Next, in choosing the field to match, we will search by the **Email** input field, as email addresses are usually unique to every contact.

Search for *

Contact

Select the Salesforce object to search for, then specify at least one field to match

Fields to retrieve

× Email

Improve recipe performance by selecting only the fields that are relevant to the recipe. All selected object fields are returned in the data tree if left blank.

Let's enter the email address of the contact that we've created in the previous lab.

If you do not see the Email input field, toggle to show **optional fields available** and add the field.

We will leave the other fields as is.

Limit

123 150

Enter the number of records to be returned with the matching search criteria. Maximum supported limit is 2000.
Note: Salesforce might return less records than the limit specified.

Email

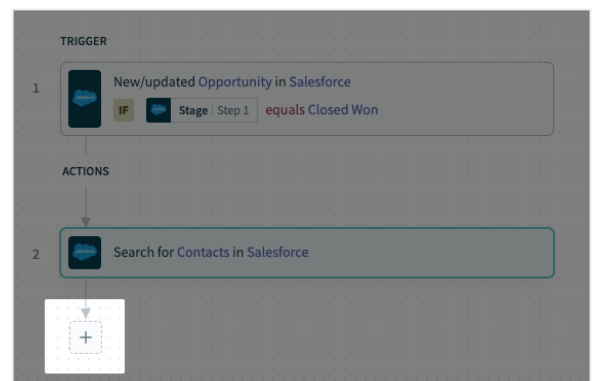
Text Formula

ABC

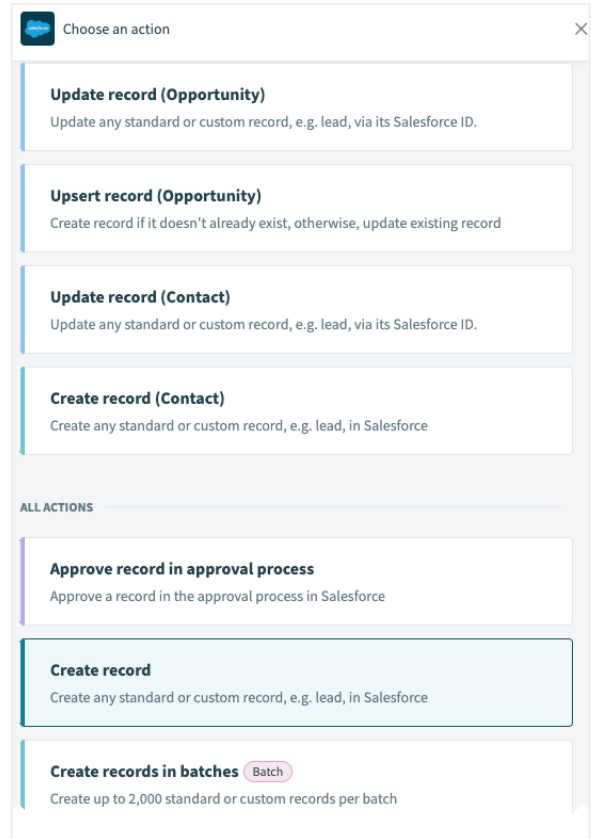
+ 59 optional fields available

We will now configure the next action to create a case.

To do so, click the **plus (+) icon** to add another **Action in an app**.



Select **Salesforce** as the application and **Create record** as the action.



Choose an action

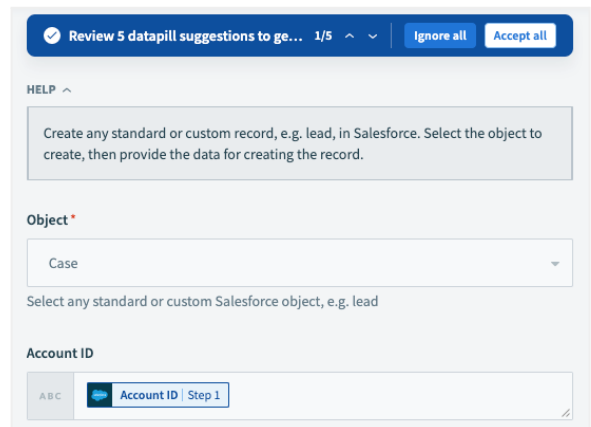
- Update record (Opportunity)**
Update any standard or custom record, e.g. lead, via its Salesforce ID.
- Upsert record (Opportunity)**
Create record if it doesn't already exist, otherwise, update existing record
- Update record (Contact)**
Update any standard or custom record, e.g. lead, via its Salesforce ID.
- Create record (Contact)**
Create any standard or custom record, e.g. lead, in Salesforce

ALL ACTIONS

- Approve record in approval process**
Approve a record in the approval process in Salesforce
- Create record**
Create any standard or custom record, e.g. lead, in Salesforce
- Create records in batches** Batch
Create up to 2,000 standard or custom records per batch

Then, select **Case** as the object, since we want to create a case.

Workato might suggest some datapills for different fields. For this lab, you can **Ignore all** suggestions as we will manually add all the datapills we will need for this recipe.



Review 5 datapill suggestions to generate... 1/5 Ignore all Accept all

HELP ^

Create any standard or custom record, e.g. lead, in Salesforce. Select the object to create, then provide the data for creating the record.

Object *

Case

Select any standard or custom Salesforce object, e.g. lead

Account ID

ABC Account ID Step 1

Map and transform data through your recipe

Let's now make use of data mapping and data transformation.

Why this is important

Data mapping is essential for the flow of data from one step in a recipe to another. Workato's RecipeIQ will make data mapping suggestions and next steps/business logic recommendations to accelerate the build process and improve productivity.

In the **Contact ID** input field, let's drag and drop the **Contact ID** datapill from the Step 1 output so that the case will be linked to the contact that was created in the previous lab.

The screenshot shows the 'New/updated Opportunity' step configuration. On the left, the 'Step 1 output' section lists various fields: Campaign ID, Close Date (2023-04-29), Closed (false), Contact ID, and Created By ID (005Do00000wSBylAM). On the right, the 'Contact ID' input field is being mapped to the 'Contact ID | Step 1' datapill. Other fields like 'Account ID' and 'Case Origin' are also visible.

Let's also fill in the **Description** input field by mapping in the **Description** of the opportunity from the **Step 1** output.

The screenshot shows the 'New/updated Opportunity' step configuration. On the left, the 'Step 1 output' section lists various fields: Created Date (2023-04-27T04:52:00+00:00), Deleted (false), Description, and Expected Amount (21000). On the right, the 'Description' input field is being mapped to the 'Description | Step 1' datapill. Other fields like 'Case Type' and 'Contact ID' are also visible.

Next, let's leave the **Owner ID** input field blank and set the **Priority** for these cases to be created as **High** by selecting from a list.

Let's also set the status of these cases as **New** by selecting from a list.

For the **Subject** of the case, we will use a combination of static and dynamic input, by mapping the opportunity's **Name** from the Step 1 output as well as input **-onboarding** to indicate that this is a case about onboarding.

If any of these input fields are missing, you may add them by choosing from the list of optional fields.

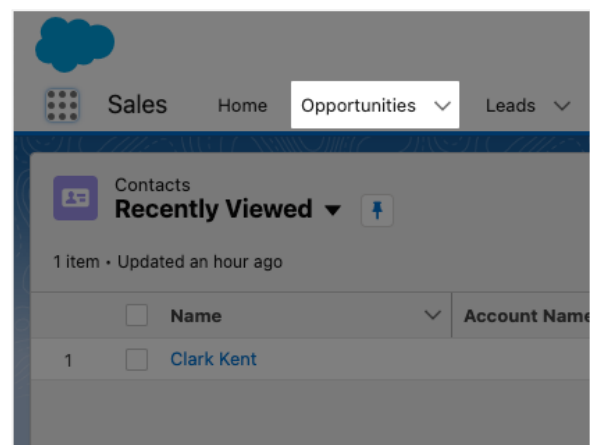
The screenshot shows a form with two sections. The first section, labeled 'Owner ID', contains a text input field with a placeholder 'ABC'. The second section, labeled 'Priority', contains a dropdown menu with 'Select from list' and a text input field with 'High' and a close button 'X'.

The screenshot shows a form with a section labeled 'Subject'. It contains a text input field with a placeholder 'ABC' and a dynamic input field with a blue icon, 'Name Step 1', and '-onboarding'. Below the input fields is a button that says '+ 15 optional fields available'.

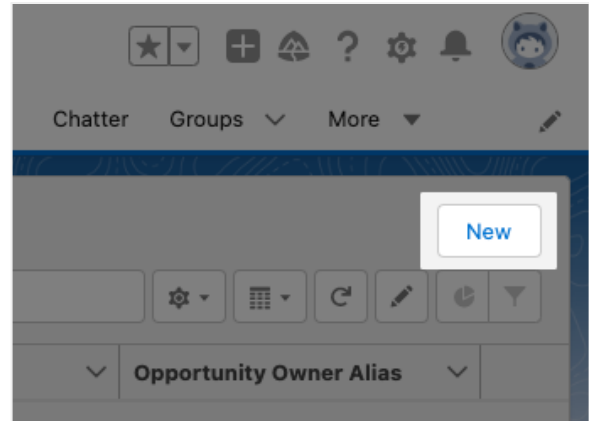
Add an opportunity to Salesforce

Now that we are done, before testing our recipe, let's go into our Salesforce account to create an opportunity that's marked as Closed Won.

In your Salesforce homepage, click the **Opportunities** tab.



Next, click **New** to fill in information about the opportunity.



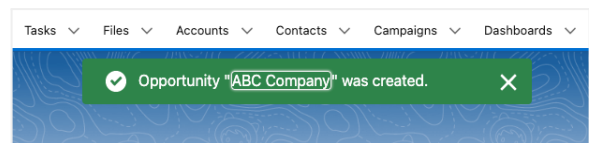
Let's key in **15,000** for the amount, and select any date as the close date.

A screenshot of the Salesforce form. The 'Amount' field is highlighted in yellow and contains the value '\$15,000.00'. Below it, the 'Close Date' field is also highlighted in yellow and contains the date '4/10/2023'. Both fields have a right arrow icon for undo.

We will also name the opportunity as **ABC Company** and select **Closed Won** as the stage.

A screenshot of the Salesforce form. The 'Opportunity Name' field is highlighted in yellow and contains the text 'ABC Company'. Below it, the 'Stage' dropdown menu is highlighted in yellow and shows 'Closed Won' selected. Both fields have a right arrow icon for undo.

Let's also input a simple description such as **5 licenses purchased** and click **Save**.



Test your recipe and see your results in Salesforce

Now that a Closed Won opportunity is created, let's go back to the Workato platform to test the recipe.

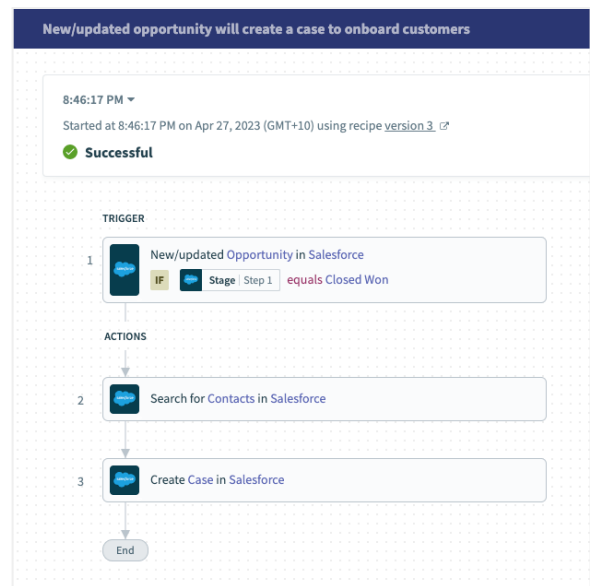
Why this is important

It's important to know that our recipe does what is expected. Workato can run tests jobs and re-un the same trigger event as you change the recipe logic.

Click Test Recipe and one job should be processed.

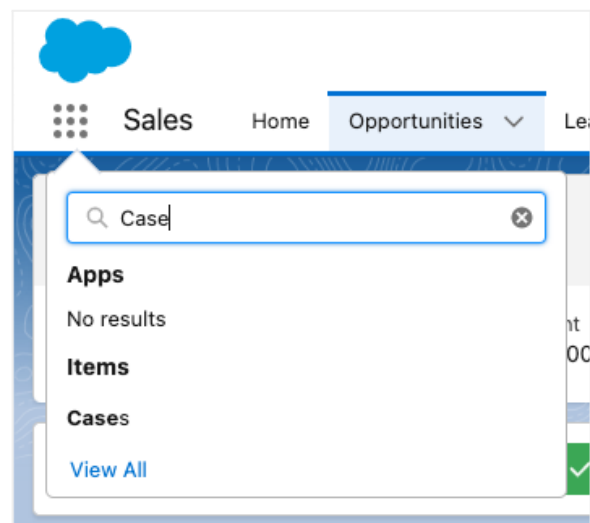
If a successful test has been completed, you may click each step in your recipe to expand the input, output, and debug tab for your steps.

This is useful for any debugging and record checking of synced records.



Now back in the Salesforce platform, let's click **Cases**.

Don't forget: if you don't see **Cases** in your Salesforce dashboard or menu bar, you can search for it in the **App Launcher**.




Under **Cases**, you will notice that a case with the subject **ABC Company-onboarding** has been created. Click it to view the case information.

Cases Recently Viewed			
1 Item - Updated a few seconds ago			
	Case Number	Subject	Status
1	00001026	ABC Company-onboarding	New

We will notice that the contact name for this case is the contact we created in our previous lab, meeting the requirements of our scenario.

And it contains other data that we have mapped from the opportunity, such as the description.

And that's it! You've just successfully added multiple actions to your recipe, and mapped and transformed data between steps.

Details	
Case Owner	 Clark Kent
Case Number	00001026

Subject
ABC Company-onboarding
Description
5 licenses purchased
Internal Comments

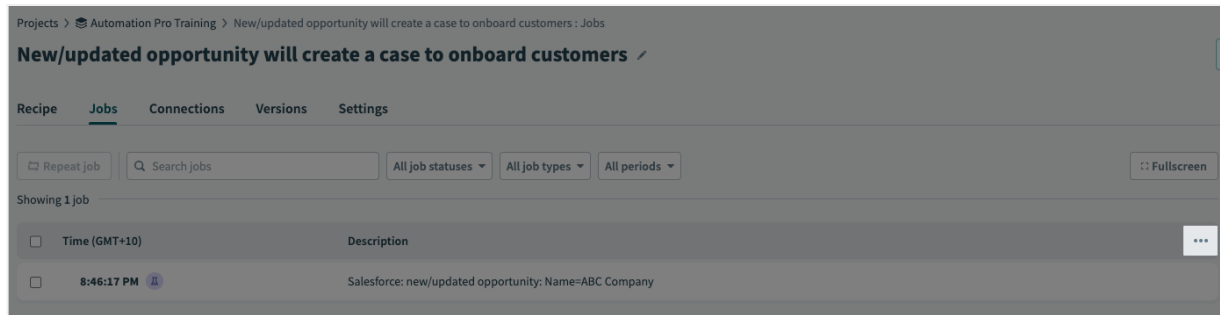
Lab 3: Modify your job report

Why this is important

A job is created every time a recipe processes a trigger event. The job logs provide seamless access to the input and output of every step and are useful for troubleshooting issues and auditing data.

Add columns

Using the recipe that we just created, go into the **Jobs** tabs and click the **More** icon at the top right corner of the job report. Click **Customize Job Table**.



We want to display fields that help us identify data mapped within the recipe.

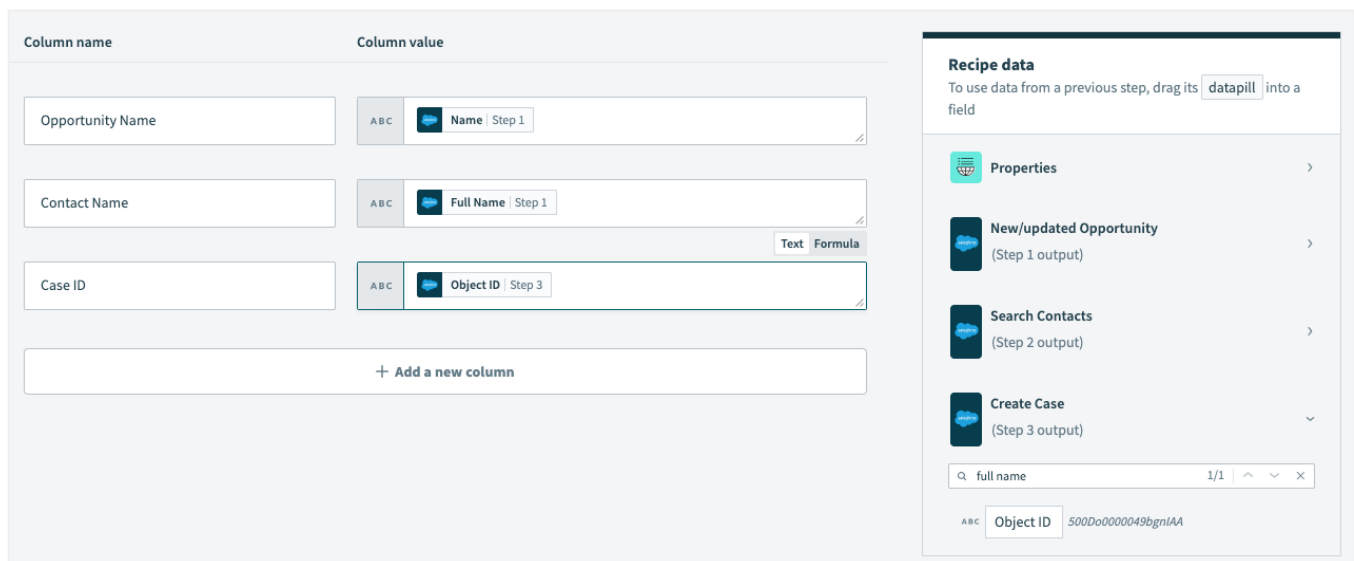
First, let's specify the first column name as **Opportunity Name** and map in the **Name** datapill coming from the Step 1 output in the recipe data box.



Next, let's add another column called **Contact Name** and search for and map in the **Full Name** datapill coming from Step 1.



Last, let's add a **Case ID** column with the **Object ID** mapped from Step 3.



Do note that there can only be a maximum of ten columns in the customized job report.


Click **Apply Changes** and the job report will reflect changes according to what we have customized. However, the columns are blank.


Showing 1 job

<input type="checkbox"/>	Time (GMT+10)	Opportunity Name	Contact Name	Case ID	...
<input type="checkbox"/>	8:46:17 PM				

Let's repeat the job to refresh the job report so that the column values will be refreshed to reflect the accurate values. You can do this by selecting the checkbox next to the job and clicking the **Repeat Job** button.

You'll see your columns filled in as appropriate!

 Repeat 1 job

 Search jobs

Showing 1 job

<input checked="" type="checkbox"/>	Time (GMT+10)
<input checked="" type="checkbox"/>	8:46:17 PM 