

Salesforce Import Integration

You can connect Salesforce with Treasure Data for greater control over your Salesforce data and better integration with the other business applications in your marketing and sales operations stack.

Integrating Salesforce with Treasure Data makes it easy to:

- **Add new features to Salesforce.** For example, you can prevent churn by tracking web usage and receiving alerts when customers' product usage declines.
- **Use Salesforce data to improve other parts of your marketing stack.** For example, you can increase your Facebook Ads ROI by automatically removing new customers from your Facebook Custom Audiences.

For sample workflows on importing data from Salesforce, go to [Treasure Boxes](#).

If you don't have a Treasure Data account yet, [contact us](#) so that we can get you set up.

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Limitations

- **SOQL:** This configuration allows to use of a custom SOQL (Salesforce Object Query Language) to query and filter data. With SOQL, you can retrieve the data from a single object or multiple objects that are related to each other. You can pick specific columns and filter or sort the output with your own conditional statement. As a limitation, our data connector doesn't support SOQL syntax such as `count() FROM Object` and `SELECT * from salesforceObject`.
- **Bulk API limits:** Bulk API offers faster ingestion but also has a limitation of 10,000 batch allocations within a 24-hour period. If your target is large, your entire available batch allocation might be consumed, causing your job to fail eventually. If you try to use the Bulk API, and the result is the ingestion of all records, consider enabling the **synchronous transfer only** option and using REST API. The use of REST API avoids the batch allocation limitation but might be slower.

Support

SFDC import supports these authentication types:

- Credential
- OAuth

Using **Session ID for authentication** is not supported for import.


Session ID is supported for the [Salesforce Export Integration](#) only.

Connect to Salesforce Using TD Console

Connecting to Salesforce using the TD Console is quick and easy. Alternatively, you can create a Salesforce connection using the command line. The import integration supports credentials; you need a client ID and client secret to authenticate using credentials.

Allow TD to Access Salesforce using Salesforce

These instructions guide you to locate the client ID and client secret that is necessary to authenticate using credentials.

 Connected Apps UI is not supported in the Lightning UI. Switch to the Classic UI first.

1. Go to **Setup > Apps > App Manage**.
2. Select **New Connected App**.

The steps may vary depending on the version of Salesforce you are running. In Spring 19 classic UI: **Setup > Build > Create > Apps > Connect**
d Apps > New.

The screenshot shows the 'App Manager' interface in Salesforce. The 'Basic Information' section includes fields for 'Connected App Name' (Treasure Data), 'API Name' (Treasure_Data), 'Contact Email' (myname@ABCDE.com), 'Contact Phone', 'Logo Image URL', 'Icon URL', 'Info URL', and 'Description'. The 'API (Enable OAuth Settings)' section is expanded, showing 'Enable OAuth Settings' checked, 'Enable for Device Flow' unchecked, and 'Callback URL' set to https://www.treasuredata.com/callback. Under 'Selected OAuth Scopes', 'Full access (full)' is selected from a list of available scopes.

3. Navigate to **Setup > Build > Create (Apps)**, and validate all your connected apps:

The screenshot shows the Salesforce navigation menu on the left, with 'Build > Create > Apps' highlighted by a red box. On the right, the 'Connected Apps' page is displayed, showing a table with one entry: 'Treasure Data'. The 'Action' column for this entry contains 'Edit | Manage', and the 'Connected App Name' column contains 'Treasure Data', both of which are highlighted by a red box.

4. Select your app name to go to the page where you can view and manage all information about your connected app.
5. Write down or copy your **Consumer Key** (client_id) and **Consumer Secret** (client_secret).



6. For secure account access, get a Salesforce Security Token. If you don't have a security token, go to **Account > Settings > Reset My Security Token** and select **Reset Security Token**. You'll receive your Security Token by email.

In Spring 19 classic UI: **My account > My Settings > Personal > Reset My Security Token**.

Create New Connection in TD Console

1. Open **TD Console**.
2. Navigate to **Integrations Hub > Catalog** and search for **Salesforce**.
3.
 - a. To authenticate with your credentials, enter your username (your email) and password, as well as your Client ID, Client Secret, and Security Token.
 - b. In the dialog box, enter login.salesforce.com as the login URL. Remove unnecessary letters from Login URL parameter.

New Authentication

Salesforce

✕

1 Credentials > 2 Details

Login URL:

Authentication method:
Authentication by "Session ID" currently works only for export

Username:
Username for Force.com

Password:
Password for Force.com

Client ID:
Client ID for your application. Required for import from Salesforce

Client secret:
Client secret for your application. Required for import from Salesforce

[Learn more](#) [Continue](#)

New Authentication
Salesforce Legacy
✕

1 Credentials >
 2 Details

Login URL:

Authentication method: OAuth ▼

Authentication by "Session ID" currently works only for export

OAuth connection: ▼

[Click here](#) to connect a new account

Initial retry delay:

The first time we fail to connect, wait this many seconds before retrying (with exponential backoff)

Retry limit:

[Learn more](#)
Continue

4. Select **Continue**.
5. Give your connection a descriptive name and select **Create Connection**.

Validate Your Salesforce Connection

To validate the user permission, make sure to use Salesforce to validate:

- Authority: check the Salesforce import integration connection steps.
- Allowed access to Salesforce from Treasure Data: sometimes configuring this requires knowing and configuring your TD static IP address. Please contact support if you require the static IP address information.

Without properly configured authority and access, you might encounter access restriction errors. For example:

```
Response not 2xx:
400 Bad Request {"error": "invalid_grant", "error_description": "authentication failure"}
```

Transfer Your Salesforce Account Data in Treasure Data

After creating the authenticated connection, you are automatically taken to Authentications.

1. Search for the connection you created.
2. Select **New Source**.
3. Type a name for your **Source** in the Data Transfer field.

Create Source
Using anh_salesforce_v2

✕

- 1 Connection
- 2 Source Table
- 3 Data Settings
- 4 Data Preview
- 5 Data Placement

Data Transfer Name:

Authentication: anh_salesforce_v2 ▼

4. Click **Next**.
5. Edit the following parameters:

1 Connection

Source:

2 Source Table

Include deleted records?:
If true, it enables including deleted records in ingested records

3 Data Settings

Use synchronous transfer only:
If true, only REST API is used to ingest records

4 Data Preview

Incremental?:
When run repeatedly, attempt to only import new data since the last import

5 Data Placement

▾ COLUMN NAMES FOR INCREMENTAL LOADING
 When you specifies 'ld' here for example, the following clause is appended in next loading: 'WHERE ld > {last_value} ORDER BY ld'

Parameters	Description
Source	Name of the object you want to import
Include deleted records	Enables including deleted records
Use synchronous transfer only	Enables synchronous transfer using REST API
Incremental	Imports only new data since the last import

Data Settings

1. Select **Next**. The Data Settings page opens.
2. You can edit the SOQL query, WHERE conditions and Schema settings here.
3. Optionally, skip this page of the dialog.

1 Connection

Optionally, you can modify data settings and then see your changes in Data Preview. [Skip This Step](#)

2 Source Table

SOQL query:

3 Data Settings

WHERE condition:

4 Data Preview

5 Data Placement

Schema Settings

Column Name	Data Type	Timestamp Format	Actions
times	timestamp	YYYY	<input type="button" value="⊗"/>
a1	string		<input type="button" value="⊗"/>
a2	string		<input type="button" value="⊗"/>
a3	string		<input type="button" value="⊗"/>

4 Fields Reset to default

▾ LAST RECORD

It is latest record on previous loading.

Data Preview

You can see a [preview](#) of your data before running the import by selecting Generate Preview.

Data shown in the data preview is approximated from your source. It is not the actual data that is imported.

1. Select **Next**.
Data preview is optional and you can safely skip to the next page of the dialog if you want.
2. To preview your data, select **Generate Preview**. Optionally, select **Next**.
3. Verify that the data looks approximately like you expect it to.

Create Source
Using onetrust_demo

1 Connection
2 Source Table
3 Data Settings
4 **Data Preview**
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The preview shows a subset of data from the source based on the data settings. Refer to [help document](#) to learn more about preview data.

	Ab_id	Ab_language	Ab_identifier	last_updated_date	Ab_link_token	
1	f7abf910-b5da-47c2-bbee-37f4c86...	NULL	Quan3	2020-09-25 22:42:59...	NULL	0
2	9022117f-cf3c-418c-b527-a8bd9a9...	NULL	Quan2	2020-08-05 03:48:19...	NULL	0
3	a432b52f-3d93-483b-b65f-3c7530...	NULL	Quan4	2020-08-05 03:48:19...	NULL	0
4	233ec0c2-70ab-4de4-ac48-a4a048f...	NULL	Quan5	2020-08-05 03:48:19...	NULL	0
5	f78be70b-8b5d-404e-b663-b606a2...	NULL	Quan1	2020-08-05 03:48:19...	NULL	0
6	db5d9899-c264-4d82-a246-5939e5...	NULL	example@otprivacy.com	2020-08-06 17:51:12...	NULL	0
7	5ef9542c-315d-4b56-ad1c-c63ad0...	NULL	Michael.White@gmail.com	2020-09-09 20:01:45...	NULL	0
8	3f1dfcb9-1904-4517-9087-0cc45f0...	NULL	Robert.Brown@gmail.com	2020-09-09 20:01:45...	NULL	0
9	4a3a88dd-11a3-4c8b-a1d9-d7043f...	NULL	Mary.Anderson@gmail.com	2020-09-09 20:01:46...	NULL	0
10	4f69893a-9e49-46dc-9519-1cf9dea...	NULL	Elizabeth.Scott@gmail.com	2020-09-09 20:01:47...	NULL	0
11	33342e5d-4c95-4cfe-a622-4e91dc5...	NULL	David.Miller@aol.com	2020-09-09 20:01:47...	NULL	0
12	f54b0d7c-df75-4bf3-934a-dc19a96...	NULL	Robert.Anderson@att.com	2020-09-10 04:57:16...	NULL	0
13	43bfe156-dfba-43b8-964d-1b2a4ae...	NULL	Elizabeth.Miller@google.com	2020-09-10 04:57:16...	NULL	0

Cancel Back Next

4. Select **Next**.

Data Placement

For data placement, select the target database and table where you want your data placed and indicate how often the import should run.

1. Select **Next**. Under **Storage** you will create a new or select an existing database and create a new or select an existing table for where you want to place the imported data.

1 Connection
2 Source Table
3 Data Settings
4 Data Preview
5 **Data Placement**

STORAGE

Database: chung_default_db

Table: sftp_v2_devproxy

Method:

- Append: Add records into existing table.
- Always Replace: Always clear the destination table before adding records.
- Replace on new data: When there is new data, delete existing data, and insert new data.

Timestamp-based Partition Key: time

Select a column. Columns for user-defined partitions are not supported. See [data partitioning](#).

Data Storage Timezone: UTC (default)

Timezone the data is stored in; data will also be displayed in this timezone.

SCHEDULE

Repeat: Off On

Scheduling Timezone: Asia/Saigon

Timezone the schedule operates on.

2. Select a **Database** > **Select an existing** or **Create New Database**.

3. Optionally, type a database name.

4. Select a **Table** > **Select an existing** or **Create New Table**.

5. Optionally, type a table name.

6. Choose the method for importing the data.

- **Append** (default)-Data import results are appended to the table. If the table does not exist, it will be created.
- **Always Replace**-Replaces the entire content of an existing table with the result output of the query. If the table does not exist, a new table is created.
- **Replace on New Data**-Only replace the entire content of an existing table with the result output when there is new data.

7. Select the **Timestamp-based Partition Key** column.

If you want to set a different partition key seed than the default key, you can specify the long or timestamp column as the partitioning time. As a default time column, it uses upload_time with the add_time filter.

8. Select the **Timezone** for your data storage.

9. Under **Schedule**, you can choose when and how often you want to run this query.

- Run once:

- a. Select **Off**.
 - b. Select **Scheduling Timezone**.
 - c. Select **Create & Run Now**.
- Repeat the query:
 - a. Select **On**.
 - b. Select the **Schedule**. The UI provides these four options: *@hourly*, *@daily* and *@monthly* or custom *cron*.
 - c. You can also select **Delay Transfer** and add a delay of execution time.
 - d. Select **Scheduling Timezone**.
 - e. Select **Create & Run Now**.

After your transfer has run, you can see the results of your transfer in **Data Workbench > Databases**.