

# Iterable Import Integration

You can connect Iterable to import Campaign metrics or a user's email into Treasure Data.

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## Prerequisites

- Basic knowledge of Treasure Data
- Iterable API Key

## Limitation

- Due to getting the user list rate limit (5 requests/minutes), we do not support all lists import in a single job. User must specify a single list id to import in each job.

## About Incremental Data Loading

Incremental loading is the activity of loading only new or updated records from a source into Treasure Data. Incremental loads are useful because they run efficiently when compared to full loads, and particularly for large data sets.

Incremental loading is available for many of the Treasure Data integrations. In some cases, it is a simple checkbox choice and in others, after you select incremental loading you are provided with other fields that must be specified.

## Limitations, Supported, Suggestions

- For some integrations, if you choose incremental loading, you might need to make sure that there is an index on the columns to avoid a full table scan.
- Only Timestamp, Datetime, and numerical columns are supported as incremental\_columns.
- For the raw query, the incremental\_columns is required because it won't be able to detect the Primary keys for a complex query.

## About Incremental Loading for Integrations

Treasure Data Incremental loading has 4 patterns (3 types of data connector + 1 workflow `td_load` operator.), then the 3 data connector loading examples are as follows:

- Cloud storage service (e.g. AWS S3, GCS and etc.)
  - Lexicographic order of file name
- Query (e.g. MySQL, BigQuery and etc.)
  - Date time
- Variable period (Google Analytics, etc)
  - Use `start_date` for loading

## Incremental Loading for Connectors

If incremental loading is selected, data for the connector is loaded incrementally.

This mode is useful when you want to fetch just the object targets that have changed since the previously scheduled run.

For example, in the UI:

Incremental?:  When run repeatedly, attempt to only import new data since the last import. (Assumes lexicographic order)

Database integrations, such as MySQL, BigQuery, and SQL server, require column or field names to load incremental data. For example:

Incremental Loading:  When enabled, attempt to ingest only new data from the last import

Incremental Field:  The timestamp column to compare with last ingestion

Learn more [About Database-based Integrations](#).

## Obtaining API Key

1. Navigate to <https://app.iterable.com/settings/apiKeys>

Name	Status	JWT Required	Key	Type	Created	Modified	
Treasure Data Workflow	Enabled	No	...1ec88aaa	Standard	2 months ago	2 months ago	Edit
Treasure Data QA test	Enabled	No	...a339c9fa	Standard	21 days ago	21 days ago	Edit
Treasure Data Notebook	Enabled	No	...971a5a86	Standard	2 months ago	2 months ago	Edit
Treasure Data Connector Test	Enabled	No	...e269b3d8	Standard	2 months ago	2 months ago	Edit

2. Click **New API KEY**
3. Select **Standard (Server-side)**

## Use the TD Console to Create Your Connection

### Create a New Connection

In Treasure Data, you must create and configure the data connection prior to running your query. As part of the data connection, you provide authentication to access the integration.

1. Open **TD Console**.
2. Navigate to **Integrations Hub > Catalog**.
3. Search for and select Iterable.

4. The following dialog opens.

The screenshot shows a dialog titled "New Authentication" for "Iterable". It has a close button in the top right corner. Below the title bar, there are two steps: "1 Credentials" and "2 Details". The "Credentials" step is active. There is a label "API Key:" followed by a text input field. To the right of the input field is a "mask" icon with the number "8". At the bottom right of the dialog, there are two buttons: "Learn more" and "Continue".

5. Enter your API Key
6. Enter a name for your connection.
7. Select **Continue**.

## Transfer Your Data to Treasure Data

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

1. Select **New Source**.
2. Type a name for your **Source** in the Data Transfer field.

The screenshot shows a dialog titled "Create Source" for "ps\_iterable". It has a close button in the top right corner. On the left, there is a sidebar with five steps: "1 Connection", "2 Source Table", "3 Data Settings", "4 Data Preview", and "5 Data Placement". The "1 Connection" step is active. The main area has two fields: "Data Transfer Name:" with a text input field containing "iterable\_demo", and "Authentication:" with a dropdown menu showing "ps\_iterable". At the bottom right, there are three buttons: "Cancel", "Back", and "Next".

3. Select **Next**.  
The Source Table dialog opens.

The screenshot shows the "Create Source" dialog for "ps\_iterable" at the "2 Source Table" step. The sidebar on the left has "2 Source Table" selected. The main area has several fields: "Data Type:" with a dropdown menu showing "Campaign"; "Campaign Id(s):" with a text input field and a note: "Optional. List of comma-separated campaign ids for import. Leave blank to import all campaigns."; "Start Time:" with a date-time picker showing "mm/dd/yyyy, --:-- --"; "End Time:" with a date-time picker showing "mm/dd/yyyy, --:-- --"; "New Format?:" with a checked checkbox; "Number of Ids for Each Request:" with a text input field containing "20"; and "Incremental?:" with a checked checkbox and a note: "When run repeatedly, only data since the last import is collected." At the bottom right, there are three buttons: "Cancel", "Back", and "Next".

4. Edit the following parameters:

Parameters	Description
<b>Data Type</b>	Data type to import: <ul style="list-style-type: none"> <li>▪ Campaign</li> <li>▪ List</li> </ul>
<b>Campaign id (s)</b>	An array of campaign's id, separated by commas. Leave it blank to import all campaigns
<b>List id</b>	List id to fetch all users belong to it
<b>Start Time</b>	For UI configuration, you can pick the date and time from the supported browser, or input the date that suits the browser expectation of date-time. For example, on Chrome, you will have a calendar to select Year, Month, Day, Hour, and Minute; on Safari, you need to input the text such as <code>2020-10-25T00:00</code> .  For CLI configuration, we need a timestamp in RFC3339 UTC "Zulu" format, accurate to nanoseconds, for example: <code>"2014-10-02T15:01:23Z"</code> .
<b>End Time</b>	For UI configuration, you can pick the date and time from the supported browser, or input the date that suits the browser's expectation of date-time. For example, on Chrome, you will have a calendar to select Year, Month, Day, Hour, and Minute; on Safari, you need to input the text such as <code>2020-10-25T00:00</code> .  For CLI configuration, we need a timestamp in RFC3339 UTC "Zulu" format, accurate to nanoseconds, for example: <code>"2014-10-02T15:01:23Z"</code> .
<b>New format</b>	Receive data in New Format if it is true and Old format if is false
<b>Number of Ids for Each Request</b>	The number of ids for one request. From 1 to 20
<b>Incremental</b>	Import new data only from the last run. See About Incremental Loading.

## Data Settings

1. Select **Next**.  
The Data Settings page opens.
2. [Skip this page of the dialog](#).

## 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    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.

2 Source Table

3 Data Settings

4 **Data Preview**    8 columns

	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	db5d8f89-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	4f6b983a-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	f540d7c-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.

The screenshot shows the 'Data Placement' configuration window. On the left is a sidebar with steps: 1 Connection, 2 Source Table, 3 Data Settings, 4 Data Preview, and 5 Data Placement (highlighted). The main area is divided into two sections: 'STORAGE' and 'SCHEDULE'.  
In the 'STORAGE' section:  
- Database: dropdown menu with 'chung\_default\_db' selected.  
- Table: dropdown menu with 'sftp\_v2\_devproxy' selected.  
- Method: three radio buttons. 'Append: Add records into existing table.' is selected. Other options are 'Always Replace: Always clear the destination table before adding records.' and 'Replace on new data: When there is new data, delete existing data, and insert new data.'  
- Timestamp-based Partition Key: dropdown menu with 'time' selected. Below it is a note: 'Select a column. Columns for user-defined partitions are not supported. See [data partitioning](#).'  
- Data Storage Timezone: dropdown menu with 'UTC (default)' selected. Below it is a note: 'Timezone the data is stored in; data will also be displayed in this timezone.'  
In the 'SCHEDULE' section:  
- Repeat: two radio buttons. 'Off' is selected. The other is 'On'.  
- Scheduling Timezone: dropdown menu with 'Asia/Saigon' selected. Below it is a note: '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**.