

Amplitude Import Integration

[Learn more about Amplitude Export Integration.](#)

You can integrate Amplitude with Treasure Data to enhance data, add more data points, and to integrate the data Amplitude collects with all the other parts of your marketing stack.

To view sample workflows for importing data from Amplitude, view [Treasure Boxes](#).

You use this same connector to create and export Amplitude Events. See [Amplitude Export Integration](#).

Integrating Amplitude with Treasure Data makes it easy to:

- **Add new features to Amplitude.** As an example, you can use Treasure Data to unify Amplitude behavior data with customer data from Salesforce, creating personally identifiable records with cross-device behavior tracking.
- **Use data collected from Amplitude to make the rest of your marketing stack smarter.** For example, you can use Treasure Data and Amplitude to reduce churn by setting up automated triggers to create segments based on usage and feeding them into custom nurture funnels in Marketo.

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

This topic includes:

- [How to Connect to Amplitude Using the Treasure Data Console](#)
- [How to Transfer Your Amplitude Data to Treasure Data](#)
- [How to Connect to Amplitude Using the Command Line](#)
- [Scheduled Execution](#)
- [Configuration](#)
- [Appendix](#)

How to Connect to Amplitude Using the Treasure Data Console

Connecting to Amplitude using the Treasure Data Console is quick and easy. Alternatively, you can use a CLI to create connections.

In Amplitude

Go to Settings -> Projects and get your **API Key** and **Secret Key**, which you need for the next step.

The screenshot shows the Amplitude web interface. The browser address bar displays <https://analytics.amplitude.com/org/28878/settings/projects>. The page title is "Projects - Amplitude". The user is logged in as "Hello, Glenn".

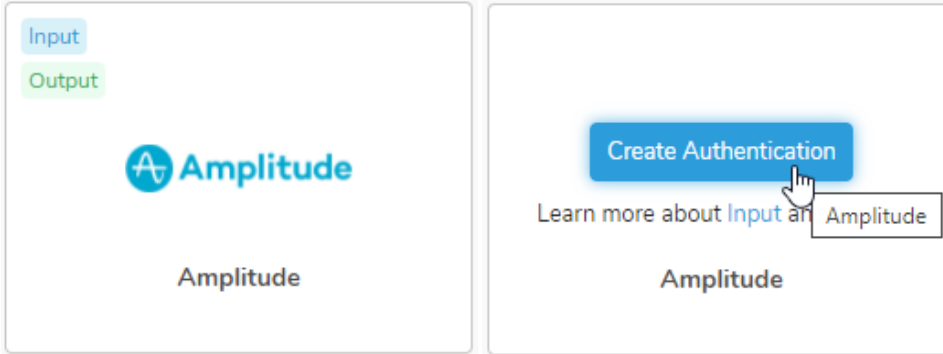
The main content area is titled "Projects" and includes a "Create Project" button. Below this, there is a section for "Web behavior data" with a "MANAGE" link. The project details are as follows:

Project ID	API Key	We haven't received any data from you yet Install one of our SDKs so you can start understanding your users' behavior. Start Sending Data
173274	cfada08232ed7ce866cb889f1e203a7f	
Time Zone	Secret Key	
UTC	Show	

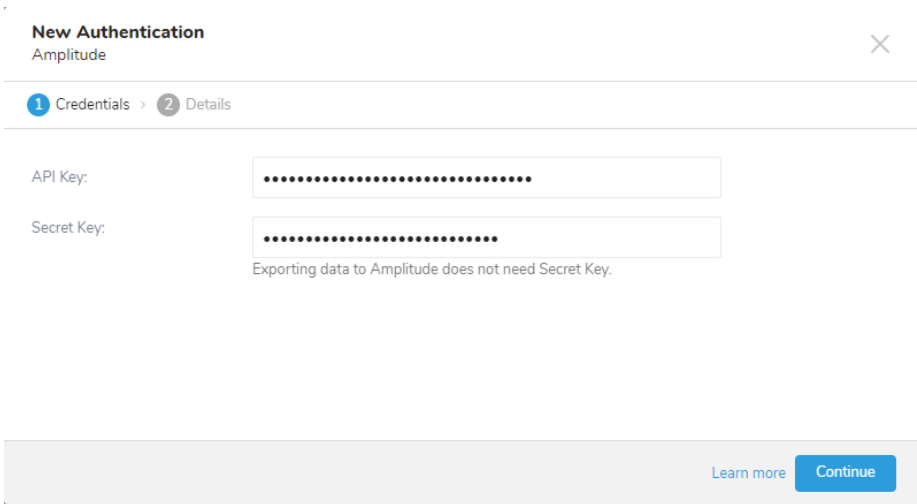
Below the project details, there is an "Amplitude Demo" section with a "Start Exploring" button. The demo description reads: "This demo contains example data from a music streaming app and some other projects. Check it out to learn more about charts and analysis features in Amplitude."

In the Treasure Data Console

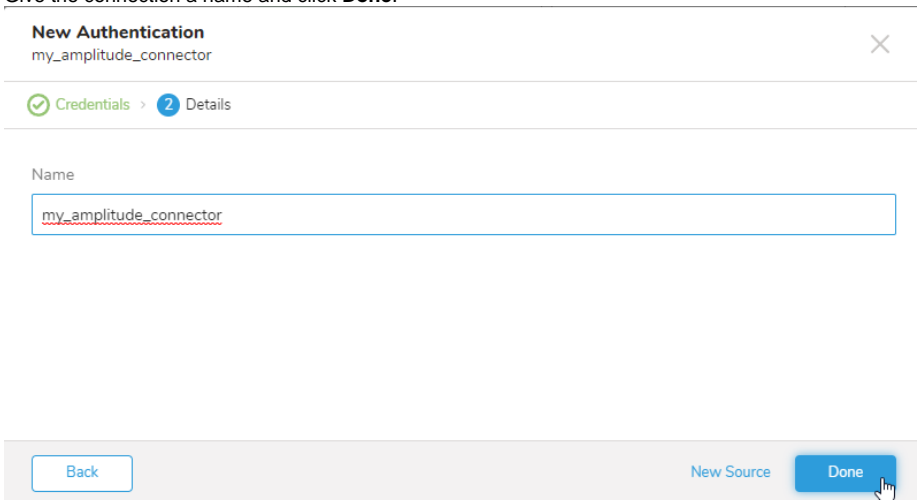
1. Open the **TD Console**.
2. Navigate to the **Integrations Hub > Catalog**.
3. Click the search icon on the far-right of the Catalog screen, and enter **Amplitude**.
4. Hover over the Amplitude connector and select **Create Authentication**.



5. Enter the required credentials and select **Continue**.

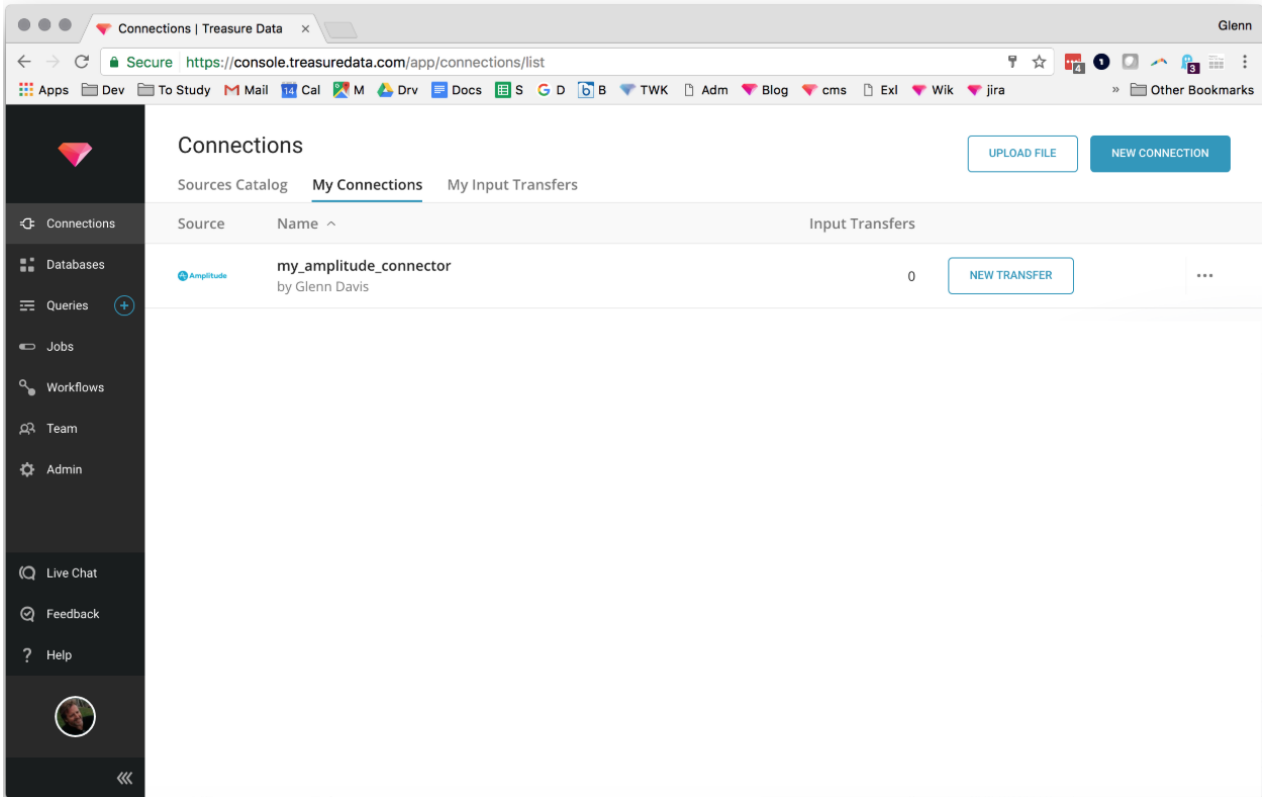


6. Give the connection a name and click **Done**.



How to Transfer Your Amplitude Data to Treasure Data

Select the Amplitude connection you created in Connections -> My Connections.



Select **New Transfer**.

Edit Transfer

amplitude_import_1537962385

1 Fetch from > 2 Preview > 3 Transfer to > 4 When

Start time

Export data from this time. The format is "%Y%m%dT%H" in UTC timezone.

End time (Optional)

Export data from start_time to this time. The format is "%Y%m%dT%H" in UTC timezone. It will obtain records until current time if omitted.

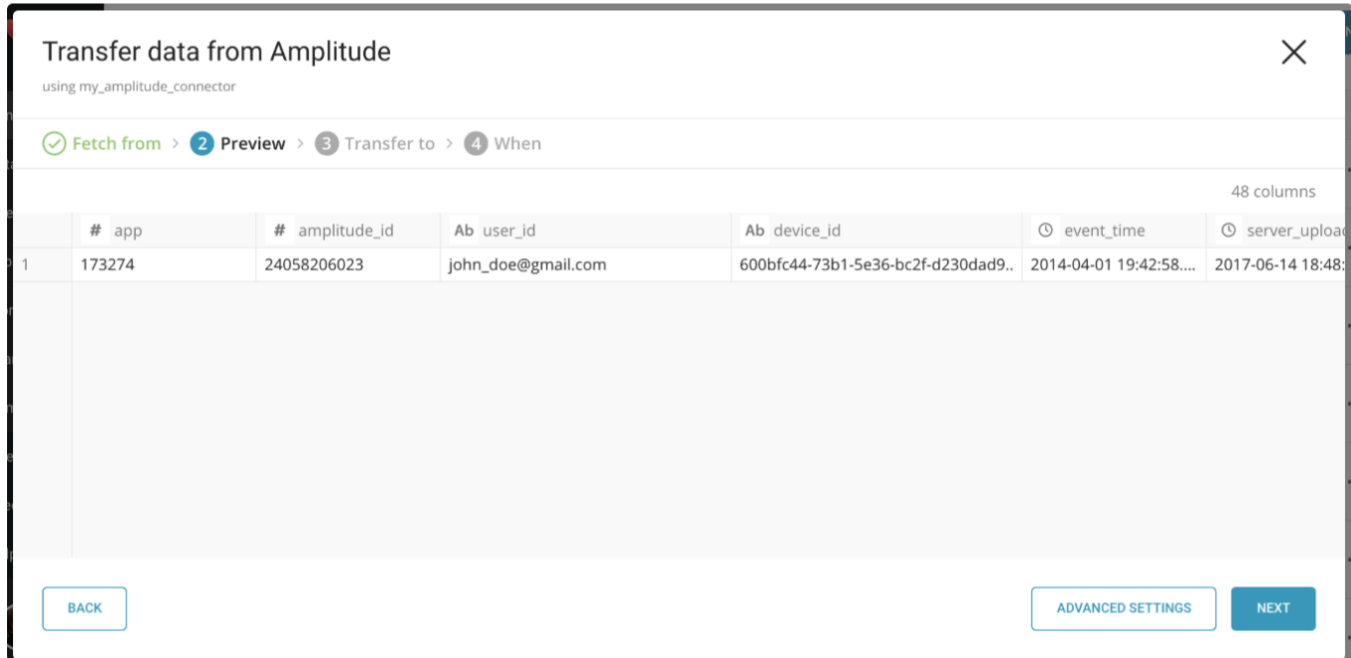
Incremental?
When run repeatedly, attempt to only import new data since the last import

NEXT

Enter the start time in the format YYYYMMDDTHH.

Optionally, you can specify an End Time using the same format. If End Time is not specified the default is the current time of your browser timezone.

Select **Next** to preview your data.

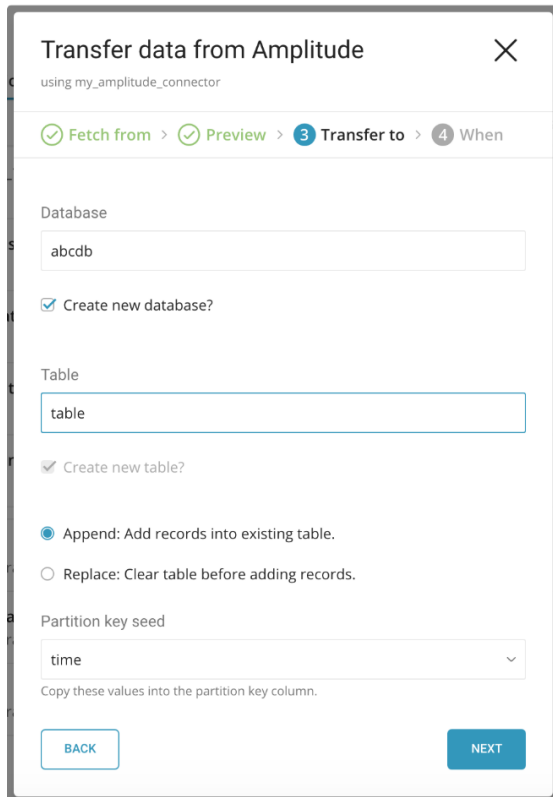


The screenshot shows a modal window titled "Transfer data from Amplitude" with a close button (X) in the top right. Below the title, it says "using my_amplitude_connector". A progress bar at the top indicates the current step: "Fetch from" (checked), "Preview" (active), "Transfer to", and "When". Below the progress bar, a table with 48 columns is displayed. The first row of data is as follows:

#	app	# amplitude_id	Ab user_id	Ab device_id	event_time	server_upload
1	173274	24058206023	john_doe@gmail.com	600bfc44-73b1-5e36-bc2f-d230dad9..	2014-04-01 19:42:58...	2017-06-14 18:48:

At the bottom of the modal, there are three buttons: "BACK", "ADVANCED SETTINGS", and "NEXT".

You'll see a preview of your data. Select **Next**.



The screenshot shows the same modal window, but now the "Preview" step is completed and the "Transfer to" step is active. The configuration options are as follows:

- Database:
- Create new database?
- Table:
- Create new table?
- Append: Add records into existing table.
- Replace: Clear table before adding records.
- Partition key seed:
- Copy these values into the partition key column.

At the bottom, there are "BACK" and "NEXT" buttons.

If you are creating a new database, check **Create new database** and give your database a name. Do the same with **Create new table**

Select whether to **append** records to an existing table or **replace** your existing table.

If you want to set a different **partition key seed** than the default key, you can specify a key using the popup menu.

Transfer data from Amplitude ✕

using my_amplitude_connector

Fetch from >
 Preview >
 Transfer to >
 4 When

When

Once now
 Repeat...

Schedule

@daily (midnight) ▾

Delay transfer

Timezone

America/Los_Angeles ▾

In the **When** tab, you can specify a one-time transfer, or you can schedule an automated recurring transfer. If you select **Once now**, select **Start Transfer**. If you select **Repeat...** specify your schedule options, then select **Schedule Transfer**.

After your transfer runs, you can see the results of your transfer in the Databases tab.

The screenshot shows a web browser window with the URL <https://console.treasuredata.com/app/databases/134840>. The page displays a table named 'table' with the following details:

Name	Columns	Records	Last Imported
table Glenn Davis · 0 bytes	46	1	1:05 pm

The interface includes a sidebar with navigation options: Connections, Databases, Queries, Jobs, Workflows, Team, Admin, Live Chat, Feedback, and Help. The main content area shows the table details and a search icon.

How to Connect to Amplitude Using the Command Line

Before you can use the command line to configure a connector, you must install the Treasure Data Toolbelt.

Install the Treasure Data Toolbelt

Install the newest [Treasure Data Toolbelt](#).

```
$ td --version
0.15.3
```

Create a Seed File

First, create a file called seed.yml as shown in the following example, with your credentials.

```
in:
  type: amplitude
  api_key: "<YOUR_API_KEY>"
  secret_key: "<YOUR_SECRET_KEY>"
  start_time: "20160901T03" # UTC Timezone. The format is yyyyymmddThh. "T" is a static character.
```

Run the Guess Fields Command

Run the following command in your terminal:

```
$ td connector:guess seed.yml -o load.yml
```

Connector:guess automatically reads the target data and intelligently guesses the data format.

Open the file load.yml, where you'll see guessed file format definitions including, in some cases, file formats, encodings, column names, and types.

```
in: {type: amplitude, api_key: API_KEY, secret_key: SECRET_KEY,
     start_time: 20160901T03}
out: {}
exec: {}
filters:
- type: rename
  rules:
  - rule: upper_to_lower
  - rule: character_types
    pass_types: ["a-z", "0-9"]
    pass_characters: "_"
    replace: "_"
  - rule: first_character_types
    pass_types: ["a-z"]
    pass_characters: "_"
    prefix: "_"
  - rule: unique_number_suffix
    max_length: 128
- type: add_time
  to_column: {name: time}
  from_value: {mode: upload_time}
```

For more details on the rename filter, see the [rename filter plugin for Data Connector](#) (needs link).

You can preview how the system will parse the file by using the preview command.

```
$ td connector:preview load.yml
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
```

```

+-----+
+-----+
+-----+
+-----+
+-----+
+-----+
+-----+
+-----+
| app:long | amplitude_id:long | user_id:string | device_id:string | event_time:
timestamp | server_upload_time:timestamp | client_event_time:timestamp | client_upload_time:timestamp |
event_id:long | session_id:long | event_type:string | amplitude_event_type:string | version_name:string |
_schema:long | adid:string | groups:json | idfa:string | library:string | processed_time:timestamp |
user_creation_time:timestamp | platform:string | os_name:string | os_version:string | device_brand:string |
device_manufacturer:string | device_model:string | device_carrier:string | device_type:string | device_family:
string | location_lat:double | location_lng:double | country:string | language:string | city:string | region:
string | dma:string | revenue:double | ip_address:string | paying:boolean | start_version:string |
event_properties:json | user_properties:json | data:json | uuid:
string | _insert_id:string | time:timestamp |
+-----+
+-----+
+-----+
+-----+
+-----+
+-----+
+-----+
+-----+
+-----+
+-----+
+-----+
+-----+
+-----+
+-----+
+-----+
+-----+
+-----+
+-----+
+-----+
+-----+
+-----+
| 154962 | 10158089806 | "alice@gmail.com" | "600bfc44-73b1-5e36-bc2f-d230dad9b1fd" |
nil | "2016-09-13 04:25:31.405 UTC" | nil | "2016-09-13 04:25:31.405
UTC" | 823811538 | -1 | "watch_tutorial" | nil | nil
| 10 | nil | "{}" | nil | "http/1.0" | "2016-09-13 04:25:32.791225 UTC" |
nil | nil | nil | nil | nil | nil
nil | nil | nil | nil | nil | nil
nil | nil | nil | nil | "United States" | nil |
nil | nil | nil | nil | "127.0.0.1" | nil |
nil | "{}" | {"\Cohort\":"Test A\"} | {"\first_event\":"true"} | "1bc49492-
796a-11e6-ae6a-22000a2589e5" | nil | "2016-09-28 08:00:10.137 UTC" |
| 154962 | 10158089806 | "alice@gmail.com" | "600bfc44-73b1-5e36-bc2f-d230dad9b1fd" |
nil | "2016-09-13 04:25:36.952 UTC" | nil | "2016-09-13 04:25:36.952
UTC" | 38872708 | -1 | "watch_tutorial" | nil | nil
| 10 | nil | "{}" | nil | "http/1.0" | "2016-09-13 04:25:38.171848 UTC" |
nil | nil | nil | nil | nil | nil
nil | nil | nil | nil | nil | nil
nil | nil | nil | nil | "United States" | nil |
nil | nil | nil | nil | "127.0.0.1" | nil |
nil | "{}" | {"\Cohort\":"Test A\"} | {} | "1f635fde-
796a-11e6-ae6a-22000a2589e5" | nil | "2016-09-28 08:00:10.137 UTC" |
| 154962 | 10158089806 | "alice@gmail.com" | "600bfc44-73b1-5e36-bc2f-d230dad9b1fd" |
nil | "2016-09-13 05:00:03.679 UTC" | nil | "2016-09-13 05:00:03.679
UTC" | 689967922 | -1 | "watch_tutorial" | nil | nil
| 10 | nil | "{}" | nil | "http/1.0" | "2016-09-13 05:00:04.692970 UTC" |
nil | nil | nil | nil | nil | nil
nil | nil | nil | nil | nil | nil
nil | nil | nil | nil | "United States" | nil |
nil | nil | nil | nil | "127.0.0.1" | nil |
nil | "{}" | {"\Cohort\":"Test A\"} | {} | "ef211fbe-
796e-11e6-ae6a-22000a2589e5" | nil | "2016-09-28 08:00:10.137 UTC" |
| 154962 | 10158359360 | "john@gmail.com" | "b37e7b0d-5474-5618-ae0a-e3d5b36b35f6" |
nil | "2016-09-13 06:00:25.511 UTC" | nil | "2016-09-13 06:00:25.511
UTC" | 44814028 | -1 | "eventtest" | nil | nil
| 10 | nil | "{}" | nil | "http/1.0" | "2016-09-13 06:00:26.509410 UTC" |
nil | nil | nil | nil | nil | nil
nil | nil | nil | nil | nil | nil
nil | nil | nil | nil | "Japan" | nil |
nil | nil | nil | nil | "127.0.0.1" | nil |
nil | "{}" | {"\Cohort\":"Test B\"} | {} | "5da3baf2-
7977-11e6-ba91-22000a5680d9" | nil | "2016-09-28 08:00:10.137 UTC" |
| 154962 | 10158089806 | "alice@gmail.com" | "600bfc44-73b1-5e36-bc2f-d230dad9b1fd" |
nil | "2016-09-13 06:00:25.541 UTC" | nil | "2016-09-13 06:00:25.541

```

```

UTC" | 847463167 | -1 | "watch_tutorial" | nil | nil
| 10 | nil | "{}" | nil | "http/1.0" | "2016-09-13 06:00:26.735517 UTC" |
nil | nil | nil | nil | nil | nil |
nil | nil | nil | nil | nil | nil |
nil | nil | nil | nil | "United States" | nil |
nil | nil | nil | nil | "127.0.0.1" | nil |
nil | "{}" | {"\Cohort\":"Test A\"} | "{}" | "5e0badba-
7977-11e6-ae6a-22000a2589e5" | nil | "2016-09-28 08:00:10.137 UTC" |
| 154962 | 10158359360 | "john@gmail.com" | "b37e7b0d-5474-5618-ae0a-e3d5b36b35f6" |
nil | "2016-09-13 07:00:00.437 UTC" | nil | "2016-09-13 07:00:00.437
UTC" | 808687647 | -1 | "eventttest" | nil | nil
| 10 | nil | "{}" | nil | "http/1.0" | "2016-09-13 07:00:01.389360 UTC" |
nil | nil | nil | nil | nil | nil |
nil | nil | nil | nil | nil | nil |
nil | nil | nil | nil | "Japan" | nil |
nil | nil | nil | nil | "127.0.0.1" | nil |
nil | "{}" | {"\Cohort\":"Test B\"} | "{}" | "b07c57b8-
797f-11e6-ba91-22000a5680d9" | nil | "2016-09-28 08:00:10.137 UTC" |
| 154962 | 10158089806 | "alice@gmail.com" | "600bfc44-73b1-5e36-bc2f-d230dad9b1fd" |
nil | "2016-09-13 07:00:00.589 UTC" | nil | "2016-09-13 07:00:00.589
UTC" | 145913611 | -1 | "watch_tutorial" | nil | nil
| 10 | nil | "{}" | nil | "http/1.0" | "2016-09-13 07:00:01.178515 UTC" |
nil | nil | nil | nil | nil | nil |
nil | nil | nil | nil | nil | nil |
nil | nil | nil | nil | "United States" | nil |
nil | nil | nil | nil | "127.0.0.1" | nil |
nil | "{}" | {"\Cohort\":"Test A\"} | "{}" | "b091fe4c-
797f-11e6-ae6a-22000a2589e5" | nil | "2016-09-28 08:00:10.137 UTC" |
| 154962 | 10158089806 | "alice@gmail.com" | "600bfc44-73b1-5e36-bc2f-d230dad9b1fd" |
nil | "2016-09-13 08:00:26.193 UTC" | nil | "2016-09-13 08:00:26.193
UTC" | 118354173 | -1 | "watch_tutorial" | nil | nil
| 10 | nil | "{}" | nil | "http/1.0" | "2016-09-13 08:00:26.888901 UTC" |
nil | nil | nil | nil | nil | nil |
nil | nil | nil | nil | nil | nil |
nil | nil | nil | nil | "United States" | nil |
nil | nil | nil | nil | "127.0.0.1" | nil |
nil | "{}" | {"\Cohort\":"Test A\"} | "{}" | "21a9a762-
7988-11e6-ae6a-22000a2589e5" | nil | "2016-09-28 08:00:10.137 UTC" |
| 154962 | 10158359360 | "john@gmail.com" | "b37e7b0d-5474-5618-ae0a-e3d5b36b35f6" |
nil | "2016-09-13 08:00:26.297 UTC" | nil | "2016-09-13 08:00:26.297
UTC" | 177419860 | -1 | "eventttest" | nil | nil
| 10 | nil | "{}" | nil | "http/1.0" | "2016-09-13 08:00:27.323531 UTC" |
nil | nil | nil | nil | nil | nil |
nil | nil | nil | nil | nil | nil |
nil | nil | nil | nil | "Japan" | nil |
nil | nil | nil | nil | "127.0.0.1" | nil |
nil | "{}" | {"\Cohort\":"Test B\"} | "{}" | "21ebf04a-
7988-11e6-ba91-22000a5680d9" | nil | "2016-09-28 08:00:10.137 UTC" |
| 154962 | 10158359360 | "john@gmail.com" | "b37e7b0d-5474-5618-ae0a-e3d5b36b35f6" |
nil | "2016-09-13 09:00:00.890 UTC" | nil | "2016-09-13 09:00:00.890
UTC" | 256548632 | -1 | "eventttest" | nil | nil
| 10 | nil | "{}" | nil | "http/1.0" | "2016-09-13 09:00:01.668570 UTC" |
nil | nil | nil | nil | nil | nil |
nil | nil | nil | nil | nil | nil |
nil | nil | nil | nil | "Japan" | nil |
nil | nil | nil | nil | "127.0.0.1" | nil |
nil | "{}" | {"\Cohort\":"Test B\"} | "{}" | "7409a27a-
7990-11e6-ba91-22000a5680d9" | nil | "2016-09-28 08:00:10.137 UTC" |
| 154962 | 10158089806 | "alice@gmail.com" | "600bfc44-73b1-5e36-bc2f-d230dad9b1fd" |
nil | "2016-09-13 09:00:00.982 UTC" | nil | "2016-09-13 09:00:00.982
UTC" | 496536219 | -1 | "watch_tutorial" | nil | nil
| 10 | nil | "{}" | nil | "http/1.0" | "2016-09-13 09:00:01.650288 UTC" |
nil | nil | nil | nil | nil | nil |
nil | nil | nil | nil | nil | nil |
nil | nil | nil | nil | "United States" | nil |
nil | nil | nil | nil | "127.0.0.1" | nil |
nil | "{}" | {"\Cohort\":"Test A\"} | "{}" | "746275a8-
7990-11e6-ae6a-22000a2589e5" | nil | "2016-09-28 08:00:10.137 UTC" |
| 154962 | 10158089806 | "alice@gmail.com" | "600bfc44-73b1-5e36-bc2f-d230dad9b1fd" |
nil | "2016-09-13 10:16:46.350 UTC" | nil | "2016-09-13 10:16:46.350
UTC" | 958097131 | -1 | "watch_tutorial" | nil | nil

```


10	nil	"{}"	nil	"http/1.0"	"2016-09-13 10:16:46.663451 UTC"	
nil		nil	nil	nil	nil	
nil		nil	nil	nil	nil	
nil	nil	nil	nil	"United States"	nil	
nil	nil	nil	nil	"127.0.0.1"	nil	
nil	"{}"	"{}\Cohort\":"Test A\"	"{}"			"2d2fb2bc-
799b-11e6-ae6a-22000a2589e5"	nil	"2016-09-28 08:00:10.137 UTC"				
154962	10158359360	"john@gmail.com"	"b37e7b0d-5474-5618-ae0a-e3d5b36b35f6"			
nil	"2016-09-13 10:16:46.393 UTC"	nil	"2016-09-13 10:16:46.393 UTC"	nil		
UTC"	474656866	-1	"eventtest"	nil	nil	
10	nil	"{}"	nil	"http/1.0"	"2016-09-13 10:16:47.669048 UTC"	
nil		nil	nil	nil	nil	
nil		nil	nil	nil	nil	
nil	nil	nil	nil	"Japan"	nil	
nil	nil	nil	nil	"127.0.0.1"	nil	
nil	"{}"	"{}\Cohort\":"Test B\"	"{}"			"2dc7129c-
799b-11e6-ba91-22000a5680d9"	nil	"2016-09-28 08:00:10.137 UTC"				
154962	10158089806	"alice@gmail.com"	"600bfc44-73b1-5e36-bc2f-d230dad9b1fd"			
nil	"2016-09-13 14:25:43.820 UTC"	nil	"2016-09-13 14:25:43.820 UTC"	nil		
UTC"	562771389	-1	"watch_tutorial"	nil	nil	
10	nil	"{}"	nil	"http/1.0"	"2016-09-13 14:25:44.723185 UTC"	
nil		nil	nil	nil	nil	
nil		nil	nil	nil	nil	
nil	nil	nil	nil	"United States"	nil	
nil	nil	nil	nil	"127.0.0.1"	nil	
nil	"{}"	"{}\Cohort\":"Test A\"	"{}"			"f4f3f0ca-
79bd-11e6-ae6a-22000a2589e5"	nil	"2016-09-28 08:00:10.137 UTC"				
154962	10158359360	"john@gmail.com"	"b37e7b0d-5474-5618-ae0a-e3d5b36b35f6"			
nil	"2016-09-13 14:25:43.825 UTC"	nil	"2016-09-13 14:25:43.825 UTC"	nil		
UTC"	714909881	-1	"eventtest"	nil	nil	
10	nil	"{}"	nil	"http/1.0"	"2016-09-13 14:25:45.332413 UTC"	
nil		nil	nil	nil	nil	
nil		nil	nil	nil	nil	
nil	nil	nil	nil	"Japan"	nil	
nil	nil	nil	nil	"127.0.0.1"	nil	
nil	"{}"	"{}\Cohort\":"Test B\"	"{}"			"f5472bb4-
79bd-11e6-ba91-22000a5680d9"	nil	"2016-09-28 08:00:10.137 UTC"				
154962	10158359360	"john@gmail.com"	"b37e7b0d-5474-5618-ae0a-e3d5b36b35f6"			
nil	"2016-09-13 16:25:52.992 UTC"	nil	"2016-09-13 16:25:52.992 UTC"	nil		
UTC"	966142739	-1	"eventtest"	nil	nil	
10	nil	"{}"	nil	"http/1.0"	"2016-09-13 16:25:54.925309 UTC"	
nil		nil	nil	nil	nil	
nil		nil	nil	nil	nil	
nil	nil	nil	nil	"Japan"	nil	
nil	nil	nil	nil	"127.0.0.1"	nil	
nil	"{}"	"{}\Cohort\":"Test B\"	"{}"			"be8c64a2-
79ce-11e6-ba91-22000a5680d9"	nil	"2016-09-28 08:00:10.137 UTC"				
154962	10158089806	"alice@gmail.com"	"600bfc44-73b1-5e36-bc2f-d230dad9b1fd"			
nil	"2016-09-13 16:25:52.980 UTC"	nil	"2016-09-13 16:25:52.980 UTC"	nil		
UTC"	136550534	-1	"watch_tutorial"	nil	nil	
10	nil	"{}"	nil	"http/1.0"	"2016-09-13 16:25:55.159777 UTC"	
nil		nil	nil	nil	nil	
nil		nil	nil	nil	nil	
nil	nil	nil	nil	"United States"	nil	
nil	nil	nil	nil	"127.0.0.1"	nil	
nil	"{}"	"{}\Cohort\":"Test A\"	"{}"			"beb0e872-
79ce-11e6-ae6a-22000a2589e5"	nil	"2016-09-28 08:00:10.137 UTC"				
154962	10158089806	"alice@gmail.com"	"600bfc44-73b1-5e36-bc2f-d230dad9b1fd"			
nil	"2016-09-13 18:26:06.237 UTC"	nil	"2016-09-13 18:26:06.237 UTC"	nil		
UTC"	911332926	-1	"watch_tutorial"	nil	nil	
10	nil	"{}"	nil	"http/1.0"	"2016-09-13 18:26:07.308899 UTC"	
nil		nil	nil	nil	nil	
nil		nil	nil	nil	nil	
nil	nil	nil	nil	"United States"	nil	
nil	nil	nil	nil	"127.0.0.1"	nil	
nil	"{}"	"{}\Cohort\":"Test A\"	"{}"			"897c0d24-
79df-11e6-ae6a-22000a2589e5"	nil	"2016-09-28 08:00:10.137 UTC"				
154962	10158359360	"john@gmail.com"	"b37e7b0d-5474-5618-ae0a-e3d5b36b35f6"			
nil	"2016-09-13 18:26:06.582 UTC"	nil	"2016-09-13 18:26:06.582 UTC"	nil		
UTC"	637365591	-1	"eventtest"	nil	nil	
10	nil	"{}"	nil	"http/1.0"	"2016-09-13 18:26:07.932679 UTC"	

Execute a Load Job

Finally, submit the load job. It may take a couple of hours depending on the size of your data.

```
Amplitude connector provides a time column automatically, but you can also specify it as any timestamp column such as --time-column server_upload_time.
```

```
$ td connector:issue load.yml --database td_sample_db --table td_sample_table
```

Scheduled Execution

You can also schedule incremental, periodic Data Connector execution from the command line, removing the need for a cron daemon on your local data center.

For the first scheduled import, the Data Connector for Amplitude imports all of your data. On the second and subsequent runs, only newly added files are imported.

Create the Schedule

A new schedule can be created by using the `td connector:create` command.

The name of the schedule, cron-style schedule, database and table where data will be stored, and the Data Connector configuration file are required.

```
$ td connector:create \  
  daily_import \  
  "10 0 * * *" \  
  td_sample_db \  
  td_sample_table \  
  load.yml
```

The ``cron`` parameter also accepts three special options: ``@hourly``, ``@daily`` and ``@monthly``.

By default, the schedule is set in the UTC time zone. You can set the schedule in a time zone using the ``-t`` or ``--timezone`` option. The ``--timezone`` option only supports extended timezone formats like 'Asia/Tokyo', 'America/Los_Angeles' etc. Timezone abbreviations like PST, CST are *not* supported and may lead to unexpected results.

List the Schedules

You can see the list of scheduled entries by running the command `td connector:list`.

```
$ td connector:list  
+-----+-----+-----+-----+-----+-----+-----+  
| Name          | Cron      | Timezone | Delay | Database   | Table           | Config                                     |  
+-----+-----+-----+-----+-----+-----+-----+  
| daily_import  | 10 0 * * * | UTC      | 0     | td_sample_db | td_sample_table | {"in"=>{"type"=>"amp", ... |  
+-----+-----+-----+-----+-----+-----+-----+
```

Show the Settings and Schedule History

`td connector:show` shows the execution settings of a schedule entry.

```

% td connector:show daily_import
Name      : daily_import
Cron      : 10 0 * * *
Timezone  : UTC
Delay     : 0
Database  : td_sample_db
Table     : td_sample_table
Config
---
in:
  type: amplitude
  api_key: "<YOUR_API_KEY>"
  secret_key: "<YOUR_SECRET_KEY>"
  start_time: "20160901T03" # UTC Timezone. The format is yyyyymmddThh. "T" is a static character.
out:
  mode: append

```

td connector:history shows the execution history of a schedule entry. To investigate the results of each individual run, use td job <jobid>.

```

% td connector:history daily_import
+-----+-----+-----+-----+-----+-----+-----+-----+
+
| JobID | Status | Records | Database | Table | Priority | Started | Duration |
+-----+-----+-----+-----+-----+-----+-----+-----+
+
| 578066 | success | 10000 | td_sample_db | td_sample_table | 0 | 2016-09-18 00:10:05 +0000 | 160 |
| 577968 | success | 10000 | td_sample_db | td_sample_table | 0 | 2016-09-17 00:10:07 +0000 | 161 |
| 577914 | success | 10000 | td_sample_db | td_sample_table | 0 | 2016-09-16 00:10:03 +0000 | 152 |
| 577872 | success | 10000 | td_sample_db | td_sample_table | 0 | 2016-09-15 00:10:04 +0000 | 163 |
| 577810 | success | 10000 | td_sample_db | td_sample_table | 0 | 2016-09-14 00:10:04 +0000 | 164 |
| 577766 | success | 10000 | td_sample_db | td_sample_table | 0 | 2016-09-13 00:10:04 +0000 | 155 |
| 577710 | success | 10000 | td_sample_db | td_sample_table | 0 | 2016-09-12 00:10:05 +0000 | 156 |
| 577610 | success | 10000 | td_sample_db | td_sample_table | 0 | 2016-09-11 00:10:04 +0000 | 157 |
+-----+-----+-----+-----+-----+-----+-----+-----+
+
8 rows in set

```

Delete the Schedule

td connector:delete removes the schedule.

```
$ td connector:delete daily_import
```

Configuration

See the following table for more details on available in modes.

Option name	Description	Type	Required?	Default value
api_key	API key	string	yes	N/A
secret_key	API Secret key	string	yes	N/A

start_time	First hour included in data series, formatted YYYYMMDDTHH (e.g. '20150201T05'). This is UTC timezone.	string	yes	N/A
end_time	Last hour included in data series, formatted YYYYMMDDTHH (e.g. '20150203T20'). This is UTC timezone.	string	no	processed time
incremental	true for "mode: append", false for "mode: replace" (See below).	bool	no	true

Appendix

Modes for Out Plugin

You can specify the file import mode in the out section of seed.yml.

append (default)

This is the default mode, which appends records to the target table.

```
in:
  ...
out:
  mode: append
```

replace (In td 0.11.10 and later)

This mode replaces data in the target table. Any manual schema changes made to the target table remains intact with this mode.

```
in:
  ...
out:
  mode: replace
```