



Like Legos, But Better

User segmentation with reverse ETL

Agenda

Who's here
and why



What Census does

Make Census
work for you



Make someone
happy

Who I am

Census Customer Data Architect
Presales, Post-sales

Data, data, data

Enterprise, growth, small

DW Frontier: activating data



Who we are

“On a mission to build a data platform that enables everyone to have access to trusted data so they can take action and automate their business”

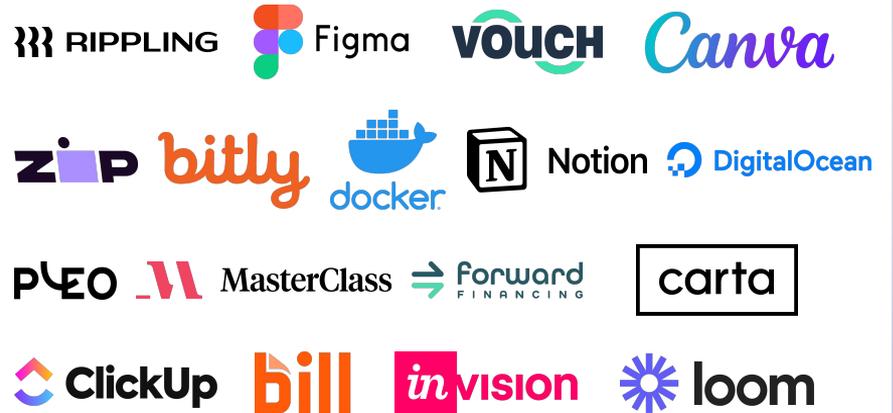
Total funding: \$80.3 million
Series B: \$60 million

SEQUOIA 

INSIGHT
PARTNERS

TIGERGLOBAL

andreessen.
horowitz

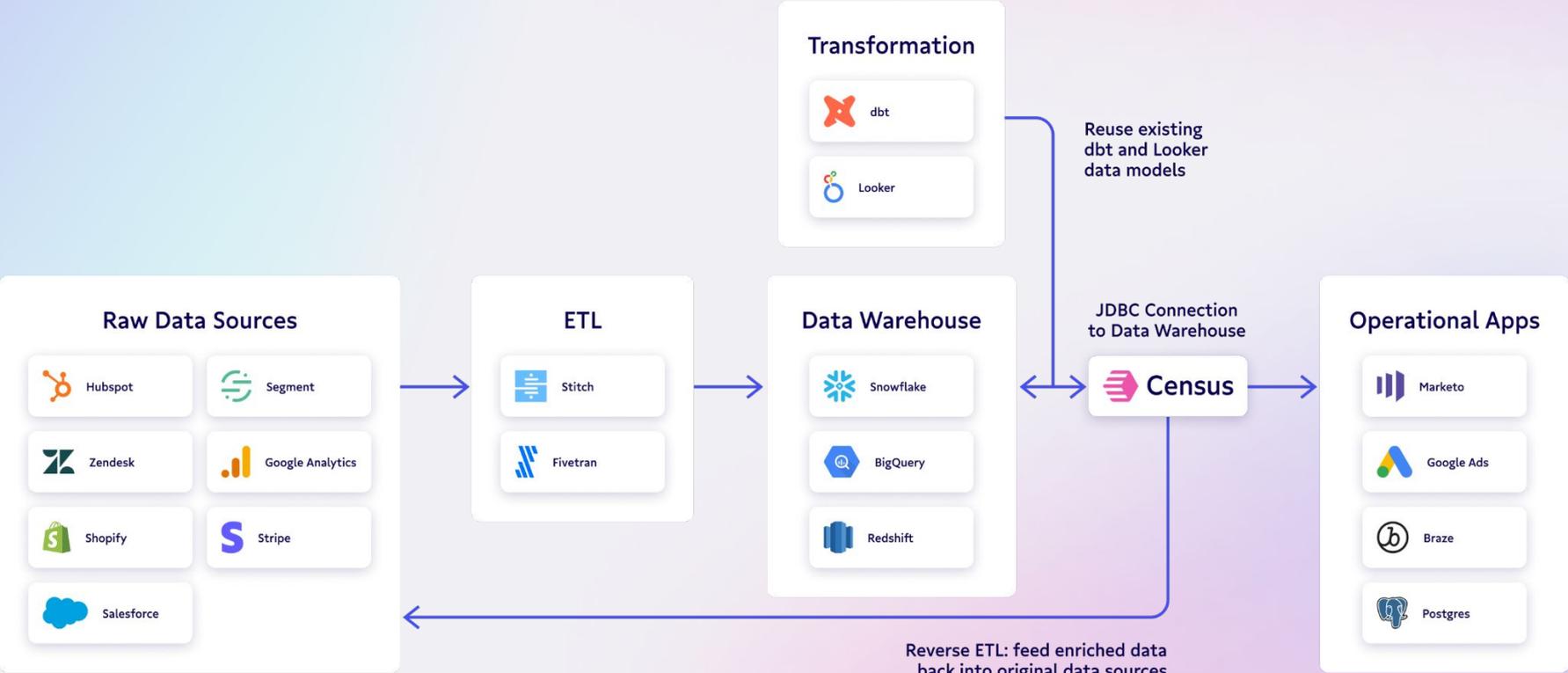


Who you are

- Curious about making segmentation easier
- Data person who brings the data dream to life!
- Want to make better use of their data warehouse
- Just realizing you wandered into the wrong session...*but decided to stay anyway*

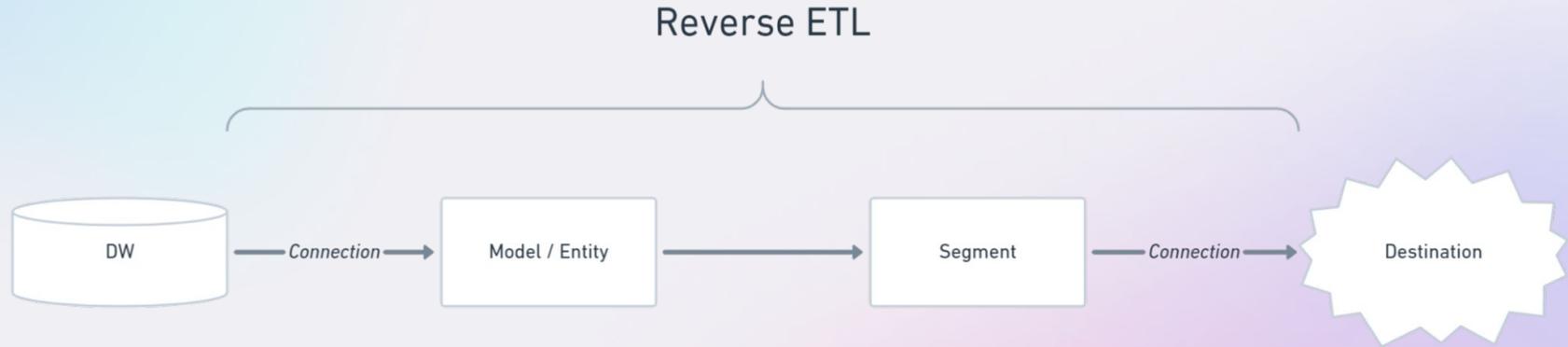


Where Reverse ETL Fits



How Reverse ETL Supports *Segmentation*

Warehouse-native data activation platform



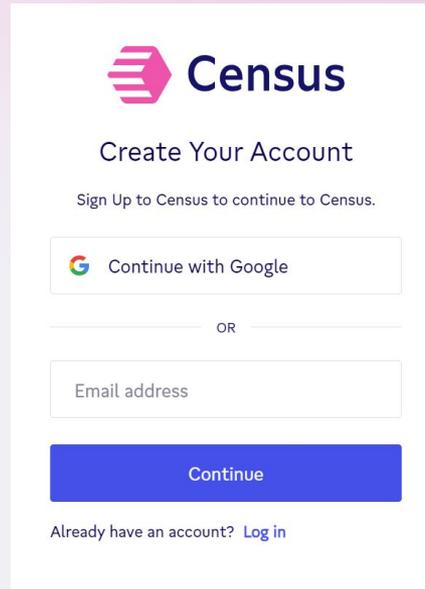
Segmentation In The Real World

(AKA how it makes your stakeholders <3 you)

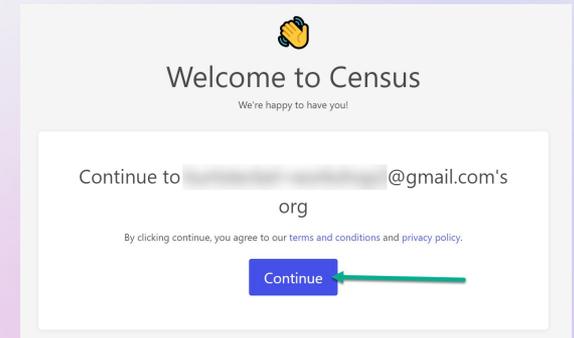
Let's do this!

There's a prize.
So really, you should do this.

1. Go here: app.getcensus.com
2. Click "Sign up"
3. Use Gmail or enter your email address
4. Go through sign up flow
5. When you get to the end, click "Continue" to complete the process!



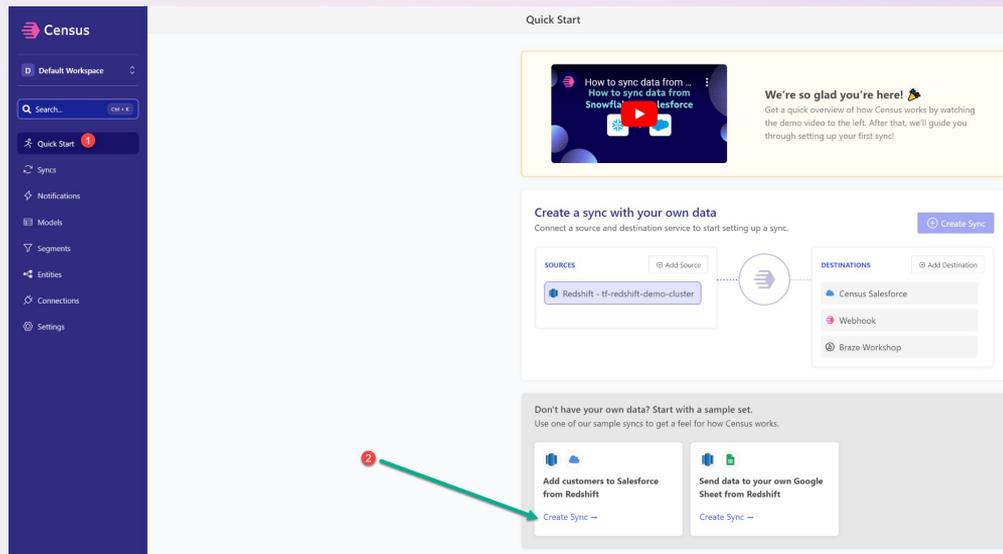
The screenshot shows the 'Create Your Account' page for Census. At the top is the Census logo, which consists of a stylized hand icon with five fingers pointing right, followed by the word 'Census'. Below the logo is the heading 'Create Your Account' and the text 'Sign Up to Census to continue to Census.'. There are two main options for signing up: 'Continue with Google' with the Google logo, and an 'OR' separator. Below that is an input field labeled 'Email address'. At the bottom of the form is a blue button labeled 'Continue'. Below the button is the text 'Already have an account? [Log in](#)'.



The screenshot shows the 'Welcome to Census' page. At the top is a small hand icon with a yellow palm. Below it is the heading 'Welcome to Census' and the text 'We're happy to have you!'. There is a form with the text 'Continue to [redacted]@gmail.com's org'. Below the form is the text 'By clicking continue, you agree to our [terms and conditions](#) and [privacy policy](#).'. At the bottom of the form is a blue button labeled 'Continue', with a green arrow pointing to it from the right.

Alright, let's create your first sync

1. Click "Quick Start"
2. Click "Create Sync →" for *Salesforce from Redshift*

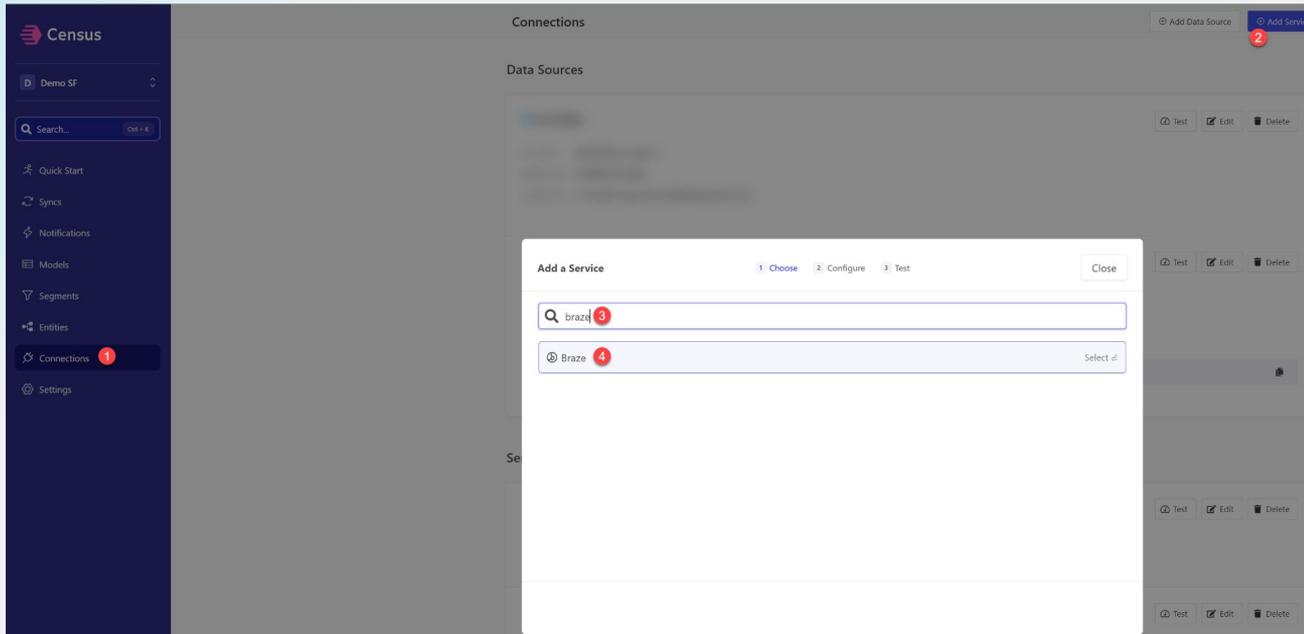


The screenshot shows the Census Quick Start interface. On the left is a dark blue sidebar with the following menu items: Default Workspace, Search..., Quick Start (with a red notification badge), Syncs, Notifications, Models, Segments, Entities, Connections, and Settings. The main content area is titled "Quick Start" and contains three sections:

- Top section:** A yellow banner with a video thumbnail titled "How to sync data from ... How to sync data from Snowflake to Salesforce" and a "We're so glad you're here!" message.
- Middle section:** "Create a sync with your own data" with a "Create Sync" button. It features a "SOURCES" list with "Redshift - tf-redshift-demo-cluster" and a "DESTINATIONS" list with "Salesforce", "Webhook", and "Braze Workshop".
- Bottom section:** "Don't have your own data? Start with a sample set." with two sample sync options: "Add customers to Salesforce from Redshift" and "Send data to your own Google Sheet from Redshift".

A green arrow with a red circle containing the number "2" points to the "Create Sync →" button under the "Add customers to Salesforce from Redshift" sample sync option.

1. Click "Connections"
Click "OK" to the warning message
2. Click "Add Service"
3. Type "braze"
4. Select "Braze"



1. Change name to "Braze Workshop"
2. Go to getcensus.com/datacouncil to retrieve the Endpoint URL & API Key
3. Click "Connect"
4. Click "Finish"

Add a Service 1 Choose 2 Configure 3 Test Close

Connect Braze to Census  

Start syncing data to Braze by checking out [our documentation](#), which contains step-by-step instructions on getting your first sync up and running!

Name

 1

Endpoint URL

 2

API Key

 2 

Data Import Key (for Cohorts only)

Back 3 Connect

1. Click “Models”
2. Then click “All Users”

The screenshot shows the Census dashboard interface. On the left is a dark blue sidebar with the 'Census' logo and a navigation menu. The 'Models' menu item is highlighted with a red circle containing the number '1'. The main content area has a light yellow header with 'Models' and a source dropdown set to 'Redshift - tf-redshift-demo-clu...'. Below the header are tabs for 'SQL Queries', 'dbt Project', and 'Looker Looks'. A table displays a list of models, with 'All Users' selected and marked with a red circle containing the number '2'. The table columns are 'NAME', 'SYNCED TO', and 'MODIFIED'. The 'All Users' row shows it was modified 10 minutes ago.

NAME	SYNCED TO	MODIFIED ↓
All Users		10 minutes ago
Team Details		10 minutes ago
User Stats		10 minutes ago
All Events		10 minutes ago
All Teams		10 minutes ago

1. Click "Query"
2. Click "Preview Results"
3. See the *Model Results* at the bottom

The screenshot displays the Census web interface. On the left is a dark blue sidebar with navigation options: Quick Start, Syncs, Notifications, Models (highlighted), Segments, Entities, Connections, and Settings. The main area is titled "All Users" and has tabs for Overview, Query (marked with a red '1'), Activity, and Syncs. Below the tabs, the "Source" is set to "Redshift - tr-redshift-demo-cluster" and the "Model Name" is "All Users". The "ROWS" count is 813. A central code editor contains a SQL query:

```
1 select
2 users.*
3   , teams.email_domain as team_domain
4 from demo.users
5 left join demo.teams on team_id = teams.id;
```

At the bottom, a "Model Results" section (marked with a red '3') shows a table with 9 columns: ID, FIRST NAME, LAST NAME, EMAIL, CREATED AT, UPDATED AT, TEAM ID, VERSION NUMBER, and TEAM DOMAIN. The first two rows of data are visible.

ID	FIRST NAME	LAST NAME	EMAIL	CREATED AT	UPDATED AT	TEAM ID	VERSION NUMBER	TEAM DOMAIN
476773	Lucinda	Zborvak	lucinda@snoodlr.com	2018-11-02 18:38:12	2020-07-28 19:17:37	48415	0.11.3	snoodlr.com
515551	Colby	Strasini	colby@cookbrght.com	2019-06-18 16:28:14	2020-04-06 21:12:32	46856	0.11.3	cookbrght.com

1. Click "Entities"
2. Click "Get Started"
3. Click "Add Entity"

Census

Default Workspace

Search... Ctrl + K

- Quick Start
- Synics
- Notifications
- Models
- Segments
- Entities** 1
- Connections
- Settings

Entities

Define important entities in your data source and approve them for marketing segmentation.

- Passionate Promoters 2M
- VIP Events** 1.2M +
- Churn Risk Red Alert 2K

Define Object Data

- Object Model
- VIP Events
- Object Type
- Generic

Specify Unique Columns

- Unique ID → event_id
- Event Name → vip_event_name
- Event Timestamp → vip_time_date

Relationships

- Relation Types

Entity Library

Define business entities once to make your most important data available for everyone.

Use SQL or dbt to expose data from the warehouse so your business teams can sync and segment with no code.

[Learn More about Entity Library](#)

[Watch a Demo](#) [Get Started](#) 2

Define trusted data models
Approve ready-to-use entities to share trusted data across business teams. Users can easily activate data and make it actionable in every business tool.

Ensure data governance and quality
Build on top of your existing data investments and source of truth, and proactively prevent errors with end-to-end visibility and logging.

Empower business self-service
Work together with end users to define what's important to your business, so business teams can explore, segment, and sync with confidence.

Not sure where to start? [How to get started](#)

[Learn More](#) [Add Entity](#) 3

1. Choose Data Source "All Users"
2. Set Data Type to "User"
3. Specify Schema Column "id"
4. Click "Save Entity"
5. Click "Add Entity"

The screenshot shows the configuration page for an entity named "All Users". At the top right, there are buttons for "Add Entity" (with a red circle 5) and "Save Entity" (with a red circle 4). Below the entity name, there are tabs for "Configuration", "Data Enrichments", "Segments", and "Syncs". The main content area is divided into three sections:

- Select Data Source:** "The data source to add to the entity library". It contains a dropdown menu for "Data Source" with "All Users" selected (marked with a red circle 1).
- Data Type:** A dropdown menu with "User" selected (marked with a red circle 2).
- Specify Schema Columns:** "The expected columns for any User entity". It shows a field "Unique ID" followed by an arrow and a dropdown menu containing "# id" (marked with a red circle 3).

1. Choose Data Source “All Events”
2. Choose Data Type “Event”
3. Specify Schema Columns:
 4. id
 4. name
 5. time
6. Click “+ Add a Relationship”
7. Choose “All Users”
8. Choose unique key “user_id”
9. Joins with “id”
10. Click “Save Entity”

The screenshot shows the configuration page for an entity named "All Events". The page is divided into several sections:

- Header:** "All Events" with a question mark icon, a trash icon, "Add Entity", and "Save Entity" buttons. A red circle with the number "10" is next to the "Save Entity" button.
- Configuration:** Includes tabs for "Configuration", "Data Enrichments", "Segments", and "Syncs".
- Select Data Source:** "The data source to add to the entity library".
 - Data Source:** A dropdown menu with "All Events" selected, marked with a red circle "1".
 - Data Type:** A dropdown menu with "Event" selected, marked with a red circle "2".
- Specify Schema Columns:** "The expected columns for any Event entity".
 - Unique ID:** A dropdown menu with "T id" selected, marked with a red circle "3".
 - Event Name:** A dropdown menu with "T name" selected, marked with a red circle "4".
 - Event Timestamp:** A dropdown menu with "time" selected, marked with a red circle "5".
- Relationships:** "View, create, and edit relationships for this entity".
 - A red circle "6" is next to the "+ Add a Relationship" button.
 - Choose relation type and related entity:** A dropdown menu with "All Events" selected, a "Many to One" dropdown, and another dropdown menu with "All Users" selected, marked with a red circle "7".
 - Choose unique keys for each entity:** A dropdown menu with "user_id" selected, marked with a red circle "8", followed by "joins with" and another dropdown menu with "id" selected, marked with a red circle "9".
 - A trash icon is located at the bottom right of the Relationships section.

1. Click "Segments"
2. Click "Add Segment"

The screenshot shows a software interface with a top navigation bar. On the left, it says "All Events" with a pencil icon. To the right of this are a green checkmark icon, a trash can icon, an "Add Entity" button, and a "Save Entity" button. Below the navigation bar is a horizontal menu with four items: "Configuration", "Data Enrichments", "Segments", and "Syncs". The "Segments" item is highlighted in blue and has a red circle with the number "1" above it. Below the menu, the text "No segments created yet" is centered. At the bottom center, there is a blue button with a white plus sign and the text "Add Segment", which has a red circle with the number "2" above it.

1. Select "All Users"
2. Select "team_domain"
3. Type "weavel.com"
4. Click "Add group > All Events"
5. Select with "Event named one of"
6. Type "Add Image" and "Delete Image", enter after each and match caps
7. Select "at least", 2, after date, 5/1/2020
8. Click "Save Segment"

The screenshot shows the Segment Builder interface for a segment named "All Users Segment". The interface includes a navigation bar with "View SQL", "Preview Results", "Discard Changes", and "Save Segment" buttons. Below the navigation bar, there are tabs for "Definition", "Activity", "Syncs", and "Overlap".

The "Segment of" section shows a dropdown menu set to "All Users" (marked with a red circle 1) and a "Segment Name" field containing "All Users Segment". To the right, an "ESTIMATED SIZE" box displays "4" records, which is "< 1%" of the total, with a "0%" indicator.

The "Records which meet" section is set to "All" of the following conditions... The conditions are:

- 1. "Have Properties" that match "All" of the following conditions...
 - 2. "team_domain" is "weavel.com" (marked with red circles 2 and 3).
- 3. "Performed All Events" with "Event named one of" (marked with red circles 4 and 5) "Add Image" and "Delete Image" (marked with red circle 6) occurring "at least" (marked with red circle 7) "2" times "after date" "5/1/2020" (marked with red circle 8).

Buttons for "+ Add condition" and "+ Add subgroup" are visible between the conditions. A "+ Add group" button (marked with red circle 4) is located at the bottom left of the conditions list.

1. Select "Syncs"
2. Select "Quick Sync"
3. Select "New Sync"

The screenshot displays a user interface for managing segments. At the top, there are navigation tabs: "Definition", "Activity", "Syncs" (highlighted with a red circle 1), and "Overlap". To the right of these tabs are buttons for "View SQL", "Preview Results", "Discard Changes", and "Save Segment". Below the tabs, the "Segment of" dropdown is set to "All Users", and the "Segment Name" field contains "All Users Segment". To the right, a box shows "ESTIMATED SIZE" as "4 < 1%" and a percentage field set to "- %". Below this, the "Syncs within this Segment" section features a "Quick Sync" button (marked with a red circle 2) and a message: "This segment has not been synced to a destination yet". On the right sidebar, there is a search bar and a "New Sync" button (marked with a red circle 3) with the text "No sync templates available, create a new sync now!".

On the next screen be sure to do this

Pick a number between
1 and 1,000.
Closest *without* going
over wins swag!

Mappings

 first_name	→ Set	 Email	×
 last_name	→ Set	 Email	×
 email	→ Set	 Email	×
 511 Constant	→ Set	kurt_s_workshop	⊕ ×

Type Automatic (currently Integer) ▾

Add Mapping Multiple ▾

Would you like to test your sync?

Running a test sync will attempt to create/update a single record from your source data to Braze.

Run Test

Cancel Next ¹⁰

1. Select Connection “Braze Workshop”
2. Select Object “User”

Create a new sync

What data do you want to sync?

Connection
Redshift - tf-redshift-demo-cluster [Read-only] ▼

Source
All Users (All Users) ▼

Segment
All Users Segment ▼

The All Users entity relates to the All Events entity
Tables, views, and models updated 2 hours ago [Refresh](#)

Where do you want to sync data to?

Connection
Braze Workshop 1 ▼

Object
User 2 ▼

Objects updated a few seconds ago [Refresh](#)

How do you want to update the destination?

The type of change this sync should make when it finds a matching source and destination record.

Update or Create
Update existing destination records when IDs match, otherwise create new ones if they're missing.

Append
Append every new record in the source to the destination.

Mirror
Keep the destination in sync with the source. Update records, create missing, and take action when records disappear.

When a record disappears from the source data ▼

Delete
Attempts to delete records in the destination that are listed in the source.

1. Select Identifier "id"
2. Select "Multiple > All Matching"
3. Type `firstname_lastname_workshop`

4. Click "Create new field..."
5. TYPE IN YOUR GUESS
6. Click "Use...as a constant value"
7. Click "Next"

How are source and destination records matched?

The source and destination match when they have the same ID value in these fields.

All Users / All Users Segment Identifier

id ¹

Options updated a day ago Refresh

User Identifier

External User ID

Options updated a few seconds ago Refresh

Which properties should be updated?

Refresh Fields

Specific Properties
Specify exactly which columns apply to the destination.

Sync All Properties
Sync every column in the source to the destination.
Any new columns will be automatically added.

Mappings

first_name	→ Set	First Name	×
last_name	→ Set	Last Name	×
email	→ Set	Email	×
511 Constant ⁵	→ Set	kurt_s_workshop ³	×

Type Automatic (currently Integer)

Add Mapping

Multiple ²

Would you like to test your sync?

Running a test sync will attempt to create/update a single record from your source data to Braze.

Run Test

Cancel Next ⁷

Multiple ²

All Matching

All From Source

Search kurt_s_workshop ³

No available fields match 'kurt_s_workshop'

Create new field 'kurt_s_workshop' ⁴

511 ⁵

Use '511' as a constant value... ⁶

No matching source columns - Refresh

1. Check “Run a sync now”
2. Click “Create Sync”

Create a new sync

Confirm details

SOURCE  All Users / All Users Segment (4 current records)

DESTINATION  User

SCHEMA CHANGES  kurt_s_workshop

MAPPING TYPE Specific Properties - Only sync the specified columns.

MAPPED FIELDS  id ↔ External User ID first_name → First Name last_name → Last Name email → Email 511 (Constant Value) → kurt_s_workshop

SYNC ACTIONS Update or Create - Update existing destination records when IDs match, otherwise create new ones if they're missing.

The next sync will automatically be a **full sync**.

 Run a sync now?



Your data in Braze!

♥ Custom Attributes

kurt_s_workshop

511



Please reach out

kurt@getcensus.com

[linkedin.com/in/steckelio](https://www.linkedin.com/in/steckelio)

