analyze data across various applications and systems in real time.

Getting started

Create the Kafka Destination

1. From your workspace's Destination catalog page search for "Kafka".

2. Select the "Kafka" tile and click **Add Destination**.

3. Select an existing Source to connect to Kafka.

4. Enter a name for your Kafka destination.

Configure the Kafka Destination

The way you've configured your Kafka Cluster informs the authentication and encryption settings you'll need to apply to the Segment Kafka Destination. You may need the assistance of someone technical to provide values for the following Settings:

5. On the Settings tab, enter values into the **Client ID**, **Brokers** and **Authentication Mechanism** setting fields.

6 Populate fields based on the value you selected from the **Authentication Mechanism** field:

- **Plain** or **SCRAM-SHA-256 / 512** authentication: provide values for **Username** and **Password** fields.

- **AWS** authentication: provide values for **AWS Access Key ID** and **AWS Secret Key** fields, and optionally for the **AWS Authorization Identity** field.

- **Client Certificate** authentication: provide values for the **SSL Client Key** and **SSL Client Certificate** fields.

7 Populate the **SSL Certificate Authority** field, if necessary.

8 Save your changes and proceed to Configure the Send Action.

Configure the "Send" Action

9 Select the Mappings tab and add a new **Send** mapping.

10 Select a Topic to send data to. This field should auto-populate based on the credentials you provided in the Settings tab.

11 Map your payload using the **Payload** field.
(Optional): Specify partitioning preferences, Headers and Message Key values.

12 Save and enable the Action, then navigate back to the Kafka destination's Settings tab to enable and save the Destination.

Destination Settings

SETTING	DESCRIPTION
AWS Access Key ID	The Access Key ID for your AWS IAM instance. Must be populated if using AWS IAM Authentication Mechanism.
AWS Authorization Identity	AWS IAM role ARN used for authorization. This field is optional, and should only be populated if using the AWS IAM Authentication Mechanism.
Brokers	*Required.* The brokers for your Kafka instance, in the format of `host:port`. E.g. localhost:9092. Accepts a comma delimited string.
Client ID	*Required.* The client ID for your Kafka instance. Defaults to 'segment-actions-kafka-producer'.
Authentication Mechanism	*Required.* Select the Authentication Mechanism to use. For SCRAM or PLAIN populate the 'Username' and 'Password' fields. For AWS IAM populated the 'AWS Access Key ID' and 'AWS Secret Key' fields. For 'Client Certificate' populated the 'SSL Client Key' and 'SSL Client Certificate' fields
Password	The password for your Kafka instance. Should only be populated if using PLAIN or SCRAM Authentication Mechanisms.
AWS Secret Key	The Secret Key for your AWS IAM instance. Must be populated if using AWS IAM Authentication Mechanism.
SSL Certificate Authority	The Certificate Authority for your Kafka instance. Exclude the first and last lines from the file. i.e `-----BEGIN CERTIFICATE-----` and `-----END CERTIFICATE-----`.
SSL Client Certificate	The Certificate Authority for your Kafka instance. Exclude the first and last lines from the file. i.e `-----BEGIN CERTIFICATE-----` and `-----END CERTIFICATE-----`.
SSL Enabled	*Required.* Indicates if SSL should be enabled.
SSL Client Key	The Client Key for your Kafka instance. Exclude the first and last lines from the file. i.e `-----BEGIN CERTIFICATE-----` and `-----END CERTIFICATE-----`.

SETTING	DESCRIPTION
SSL - Reject Unauthorized Certificate Authority	*Required.* Whether to reject unauthorized CAs or not. This can be useful when testing, but is unadvised in Production.
Username	The username for your Kafka instance. Should be populated only if using PLAIN or SCRAM Authentication Mechanisms.

Available Actions

Build your own Mappings. Combine supported triggers with the following Kafka-supported actions:

> ℹ️ **Mapping limits per destination**
>
> Individual destination instances have support a maximum of 50 mappings.

Send

Send

Send data to a Kafka topic

Send is a **Cloud** action. The default Trigger is:

```
type = "track" or type = "identify" or type = "page" or type = "screen" or type = "group"
```

Click to show / hide fields

FIELD	DESCRIPTION
Topic *	Type: `STRING` The Kafka topic to send messages to. This field auto-populates from your Kafka instance.
Payload *	Type: `OBJECT` The data to send to Kafka
Headers	Type: `OBJECT` Header data to send to Kafka. Format is Header key, Header value (optional).
Partition	Type: `INTEGER` The partition to send the message to (optional)
Default Partition	Type: `INTEGER` The default partition to send the message to (optional)
Message Key	Type: `STRING` The key for the message (optional)
Enable Batching?	Type: `BOOLEAN` When enabled, Segment will send events in batches.

FAQ

Which Kafka Platforms are supported?

The Kafka Destination can send data to Topics on self-hosted Kafka Clusters, or to Clusters hosted on Managed Service platforms like **Confluent Cloud** and **Aiven**.

Which data formats are supported?

Segment sends data to Kafka in JSON format only. Segment does not yet support other formats, like Avro or

Protobuf.

Which authentication mechanisms are supported?

The Authentication Mechanism is controlled with the **Authentication Mechanism** Setting field.

Segment supports the following SASL-based authentication methods:

- Plain
- SCRAM-SHA-256
- SCRAM-SHA-512
- AWS

Segment also supports **Client Certificate** authentication.

How is partitioning controlled?

The **Send** Action provides multiple ways to specify which Partition an event should be sent to.

- **Partition**: Use this field to specify the name of the Partition Segment should send events to.
- **Default Partition**: Use this field to specify a default Partition. Segment uses this when you don't provide a value in the **Partition** field.
- **Message Key**: Segment uses a hash of this field's value to determine which Partition should receive an event. If you don't provide a Message Key, Segment uses a round robin algorithm to select the partition to send the event to.

What is the "SSL – Reject Unauthorized Certificate Authority" field for?

This field specifies if Segment should reject server connections when a certificate is not signed by a trusted Certificate Authority (CA). This can be useful for testing purposes or when using a self-signed certificate.

Engage

You can send computed traits and audiences generated using Engage to this destination as a **user property**. To learn more about Engage, schedule a demo.

For user-property destinations, an identify call is sent to the destination for each user being added and removed. The property name is the snake_cased version of the audience name, with a true/false value to indicate membership. For example, when a user first completes an order in the last 30 days, Engage sends an Identify call with the property `order_completed_last_30days: true`. When the user no longer satisfies this condition (for example, it's been more than 30 days since their last order), Engage sets that value to `false`.

When you first create an audience, Engage sends an Identify call for every user in that audience. Later audience syncs only send updates for users whose membership has changed since the last sync.

> ℹ️
> **Real-time to batch destination sync frequency**
>
> Real-time audience syncs to Kafka may take six or more hours for the initial sync to complete. Upon completion, a sync frequency of two to three hours is expected.

Settings

Segment lets you change these destination settings from the Segment app without having to touch any code.

SETTING	DESCRIPTION

SETTING	DESCRIPTION
AWS Access Key ID	`string` . The Access Key ID for your AWS IAM instance. Must be populated if using AWS IAM Authentication Mechanism.
AWS Authorization Identity	`string` . AWS IAM role ARN used for authorization. This field is optional, and should only be populated if using the AWS IAM Authentication Mechanism.
Brokers *(required)*	`string` . The brokers for your Kafka instance, in the format of `host:port` . E.g. localhost:9092. Accepts a comma delimited string.
Client ID *(required)*	`string` , defaults to `segment-actions-kafka-producer` . The client ID for your Kafka instance. Defaults to 'segment-actions-kafka-producer'.
Authentication Mechanism *(required)*	`select` , defaults to plain. Select the Authentication Mechanism to use. For SCRAM or PLAIN populate the 'Username' and 'Password' fields. For AWS IAM populated the 'AWS Access Key ID' and 'AWS Secret Key' fields. For 'Client Certificate' populated the 'SSL Client Key' and 'SSL Client Certificate' fields
Password	`password` . The password for your Kafka instance. Should only be populated if using PLAIN or SCRAM Authentication Mechanisms.
AWS Secret Key	`password` . The Secret Key for your AWS IAM instance. Must be populated if using AWS IAM Authentication Mechanism.
SSL Certificate Authority	`string` . The Certificate Authority for your Kafka instance. Exclude the first and last lines from the file. i.e `-----BEGIN CERTIFICATE-----` and `-----END CERTIFICATE-----` .
SSL Client Certificate	`string` . The Certificate Authority for your Kafka instance. Exclude the first and last lines from the file. i.e `-----BEGIN CERTIFICATE-----` and `-----END CERTIFICATE-----` .
SSL Enabled *(required)*	`boolean` , defaults to `TRUE` . Indicates if SSL should be enabled.
SSL Client Key	`string` . The Client Key for your Kafka instance. Exclude the first and last lines from the file. i.e `-----BEGIN CERTIFICATE-----` and `-----END CERTIFICATE-----` .
SSL - Reject Unauthorized Certificate Authority *(required)*	`boolean` , defaults to `TRUE` . Whether to reject unauthorized CAs or not. This can be useful when testing, but is unadvised in Production.
Username	`string` . The username for your Kafka instance. Should be populated only if using PLAIN or SCRAM Authentication Mechanisms.

This page was last modified: 07 Aug 2024

Need support?

Questions? Problems? Need more info? Contact Segment Support for assistance!

Visit our Support page

Help improve these docs!

⯈ **Edit this page**

⊕ **Request docs change**

Was this page helpful?

👍 Yes

👎 No

Get started with Segment

Segment is the easiest way to integrate your websites & mobile apps data to over 300 analytics and growth tools.

Your work e-mail

Request Demo

or

Create free account

Privacy

Terms

Website Data Collection Preferences