

Kafka Connect Transformations

Single Message Transformations (SMTs) are applied to messages as they flow through Connect. SMTs transform inbound messages after a source connector has produced them, but before they are written to Kafka. SMTs transform outbound messages before they are sent to a sink connector.

These single message transforms (SMTs) are available for use with Kafka Connect:

Transform	Description
Cast	Cast fields or the entire key or value to a specific type, e.g. to force an integer field to a smaller width.
Drop	Drop either a key or a value from a record and set it to null.
ExtractField	Extract the specified field from a Struct when schema present, or a Map in the case of schemaless data. Any null values are passed through unmodified.
ExtractTopic	Replace the record topic with a new topic derived from its key or value.
Flatten	Flatten a nested data structure. This generates names for each field by concatenating the field names at each level with a configurable delimiter character.
HoistField	Wrap data using the specified field name in a Struct when schema present, or a Map in the case of schemaless data.
InsertField	Insert field using attributes from the record metadata or a configured static value.
MaskField	Mask specified fields with a valid null value for the field type.
RegexRouter	Update the record topic using the configured regular expression and replacement string.
ReplaceField	Filter or rename fields.
SetSchemaMetadata	Set the schema name, version, or both on the record's key or value schema.
TimestampConverter	Convert timestamps between different formats such as Unix epoch, strings, and Connect Date and Timestamp types.
TimestampRouter	Update the record's topic field as a function of the original topic value and the record timestamp.
TombstoneHandler	Manage tombstone records. A tombstone record is defined as a record with the entire value field being null, whether or not it has ValueSchema.
ValueToKey	Replace the record key with a new key formed from a subset of fields in the record value.

© Copyright 2019, Confluent, Inc. [Privacy Policy](#) | [Terms & Conditions](#). Apache, Apache Kafka, Kafka and the Kafka logo are trademarks of the [Apache Software Foundation](#). All other trademarks, servicemarks, and copyrights are the property of their respective owners.

Please report any inaccuracies on [this page](#) or [suggest an edit](#).

15 Votes



