Cloudera Streaming Analytics 1.3.0

Using Input Transforms

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Creating Input Transforms

Input Transforms are a powerful way to clean, mutate, and arrange data that is poorly organized, has changing format, has data that is junk or otherwise hard to use. You create a javascript function to transform the data after it has been consumed from the source and before queries happen in SQL Stream Builder.

About this task

You define your schema on the output of the transform. You can use the input transforms on the following sources:

- Not in your control, for example, data feed from a third party provider
- The format is hard to change, for example, a legacy feed, other teams of feeds within your organization
- · Inconsistent message to message
- Have no uniform keys, or data without keys (like nested arrays), but are still valid JSON
- The schema you want does not match the incoming topic exactly



In case your input data is JSON, and it is hard to express with a schema, you can use Input Transformations.

- Input Transformations are defined for a virtual table source.
- One transformation per source.
- Takes record as a JSON formatted string input variable. The input is always named record.
- Emits the output of the last line to the calling JVM. It could be any variable name. In the following examples, out and emit is used as a JSON formatted string.

A basic input transformation looks like this:

```
var out = JSON.parse(record);
tring to object

JSON.stringify(out);
bject

// record is input, parse JSON formatted s

// do whatever you want here..

// emit JSON formatted string of o
```

Procedure

- 1. Select Console from the left hand menu.
- 2. Select the Virtual Tables tab.
- 3. Select the edit button (pencil icon) for the Virtual Table Name you would like to add a transform to.
- **4.** Select the Display/Edit Transformations link.
- **5.** Add your transform code.
- **6.** Make sure the output of your transform matches the Manual Schema definition.