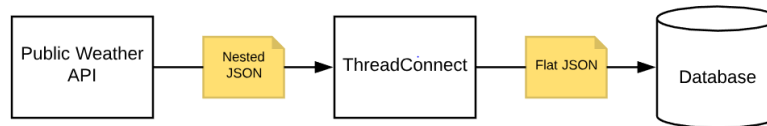


## MAPPER (JSON TRANSFORMATION)



To transform nested JSON (response of Weather API) into a flat JSON using ThreadConnectMapper. Specific fields of flat JSON is inputted as a record into Postgres DB.

Created by K Sanghavi



### KEY ATTRIBUTES

- `InvokeHttp`: invokes the weather API endpoint
- `ThreadConnectMapper`: transforms incoming JSON data into required JSON format using jolt-specs.
- `EvaluateJsonPath`: extracts specified values from the incoming JSON based on the path.
- `ReplaceText`: creates SQL statement with extracted flowfile attributes.
- `PutSQL`: executes the SQL command on the specified (postgres) database. `PutSQL` inputs the record passed as data into "test" table.

### CONTROLLER SERVICES USED

- `StandardSSLContextService`: helps to communicate with secure API endpoint(HTTPS)
- `DBCConnectionPool`: connects to the specified postgres database

### MAPPING USING THREADCONNECTMAPPER

1. To view the Advance UI, click on ADVANCED button at the bottom left corner of the processor's configuration dialog.

Configure Processor

SETTINGS

SCHEDULING

PROPERTIES

COMMENTS

Required field +

Property	Value
Source Type	<span>ⓘ</span> No value set
Target Type	<span>ⓘ</span> No value set
Map Spec	<span>ⓘ</span> No value set
Map Spec File Location	<span>ⓘ</span> No value set

⚙️ ADVANCED

CANCEL

APPLY

## 2. ThreadConnectMapper Advance UI view

THREADCONNECTMAPPER

Source Type

Source Input

Choose File

Target Type

Target Input

Choose File

Raw

Map

View Mapping

Source

1

Target

1

Source Filename:

Download

Target Filename:

Download

- Based on the type of transformation (JSON-JSON), select the Source & Target type and upload Source and Target input file using Choose File button. (extensions supported for JSON - .json). If the loaded file content for source and target has no syntax errors (if present, corresponding line will be highlighted), then click on Map tab.

THREADCONNECTMAPPER

Source Type

Source Input

Choose File

Target Type

Target Input

Choose File

Raw

Map

View Mapping

Source

```

1 {
2   "coord" : {
3     "lon" : -9.13,
4     "lat" : 51.51
5   },
6   "weather" : [ {
7     "id" : 300,
8     "main" : "Drizzle",
9     "description" : "light intensity drizzle",
10    "icon" : "09d"
11  } ],
12  "base" : "stations",
13  "main" : {
14    "temp" : 280.32,
15    "pressure" : 1012,
16    "humidity" : 81.

```

Target

```

1 {
2   "cityId": 2643743,
3   "cityName": "London",
4   "coordLon": -9.13,
5   "coordLat": 51.51,
6   "temp" : 280.32,
7   "temp_min" : 279.15,
8   "temp_max" : 281.15,
9   "weather" : "light intensity drizzle"
10  }

```

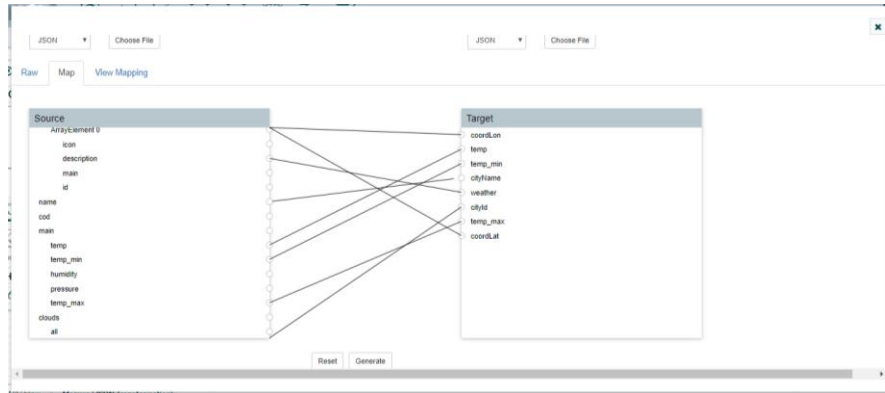
Source Filename: input\_format.json

Download

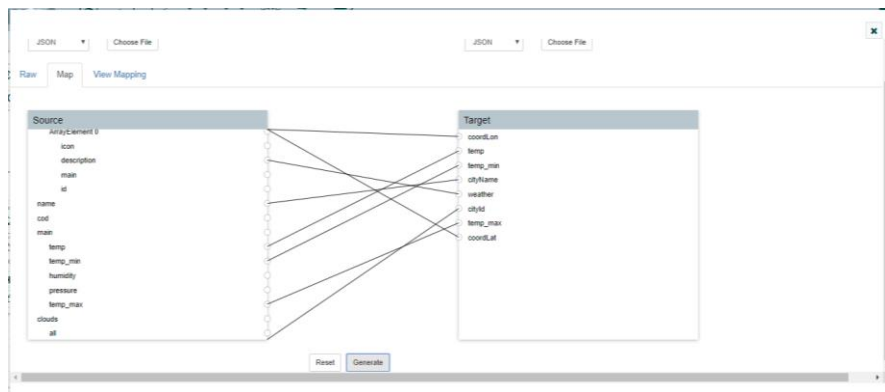
Target Filename: output\_format.json

Download

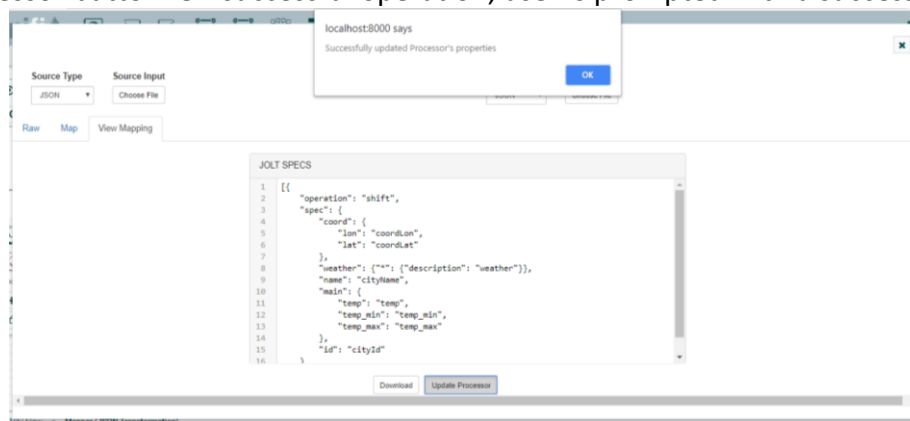
- The Map tab represents the source and target data as collapsible tree structure. To create a mapping drag a line from the required source element and drop at the target element. To scroll, scrollbar is provided for both Source and Target. Mapping can be deleted by double clicking on the specific mapping. If all the mappings has to be deleted then by clicking on Reset button, mappings created get deleted.



- On mapping the required elements, click on the Generate button. This generates the required jolt-spec based on the mapping. Which can be viewed in the ViewMapping tab.



- To update the ThreadConnectMapper with the generated spec click on Update Processor button. On successful operation, user is prompted with a success message.



## 7. Properties Tab

Property	Value
Source Type	JSON
Target Type	JSON
Map Spec	[{"operation": "shift", "spec": {"lon": "coordLon", ...}}
Map Spec File Location	MAPPER\JOLT\JOLT(2018-08-16_14-44).json

### NOTES

- The template requires Postgres DB with following requirements:  
DB Name: postgres  
User: postgres  
Password: postgres  
Table Name: test  
Schema:  
{  
  "column name" : "type"  
  id : character varying,  
  cityname : character varying,  
  citytemp : character varying,  
}
- Database Driver Location : Postgresql JDBC Driver jar location (download from <https://jdbc.postgresql.org/download.html> )
- Carefully check that database configuration details are updated across the **entire** flow when configuring a new database connection.