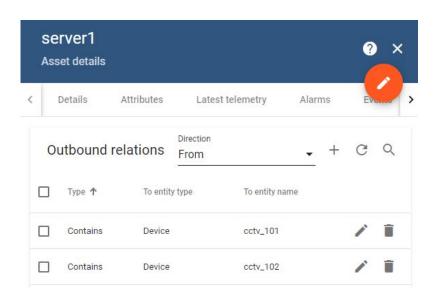
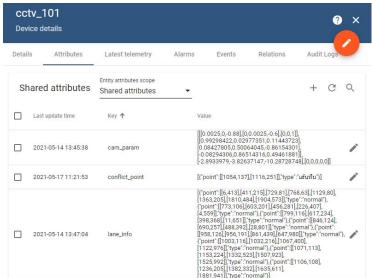
Traffic Analysis System

Progress Report: 17/05/2021

System Configuration

1. Thingsboard Relationship and Attributes





System Configuration

2. Local configuration (config.ini)

```
config.ini M X
opt > igi > bin > 🌼 config.ini
       [sys]
       python = /root/miniconda3/bin/python
       mqtt host = 172.23.0.87
       mqtt port = 1883
       thingsboard url = http://iot.sappasing.com
       thingsboard username = tenant@thingsboard.org
       thingsboard password = tenant
       thingsboard name = server1
       [cctv]
       width = 1920
  12
       height = 1080
```

System Configuration

3. Database: CCTV Table

Column	Description
id	ID of CCTV (Integer)
name	Thingsboard: Name of CCTV
device_id	Thingsboard: Device ID
access_token	Thingsboard: Access Token
cam_param, conflict_point, lane_info, roadInfo, speed_marker	Thingsboard: Other attributes

Components

1) Config Updater (config_update.py)

Periodically update CCTV config from Thingsboard to DB (every 5 minutes)

2) Path Monitor (monitor.py)

Watch and process file in the path

3) CCTV Processor (cctv_processor.py)

Continuously process CCTV data

4) Status Updater (status_update.py)

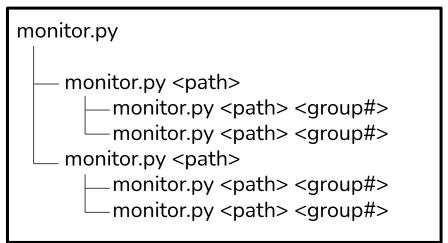
Update status of CCTV processing to Thingsboard

Type of Processing

System processing	Concurrent processing	Per CCTV processing
Config Updater Status Updater	Path Monitor	 CCTV Processor rtsp_download rtsp_process track mod_send mod_serve

Path Monitor / Concurrent Processing

Input Path	Operation	Output Path
-	rtsp_download	rtsp
rtsp	rtsp_process	incoming
incoming	detect	queue
queue	upload	done
done	archive	archive



Traffic Analysis System

