

# Getting Rav4 Data in Home Assistant



You can use [https://github.com/DurgNomis-drol/ha\\_toyota](https://github.com/DurgNomis-drol/ha_toyota) instead, many of the same data (and more) are present.

As I am not into python programming, this is kind of a workaround; I assume that some small python code could extend the tojota code to a custom Home Assistant AddOn.

As the output is json, it can be imported into [Splunk](#), [Humio](#), Power BI, E(LK), [DataDog Logs](#) etc etc - pretty easy. Most of these just require a collector application/agent on the server.

## Prerequisites

A Linux sever running python 3.6+

An (apache) web server

Pulling <https://github.com/calmjm/tojota> to the linux server

## Changing the tojota code

I will not go into setting up the <https://github.com/calmjm/tojota> as such, but as the code does make date-marked files, I am changing the code to make a static filename instead. This must be done every time a new version is pulled from guthub.

These lines are mine (replacing existing lines):

```
odometer_file = odometer_path / 'odometer.json'

parking_file = parking_path / 'parking.json'

remote_control_file = remote_control_path / 'remote_control.json'
```

making sure is a static file each time, that is just being overwritten.

I am running this code from cron to get the data from MyT:

### tojota.sh

```
#!/bin/bash

cd /home/bnp
source /home/bnp/tojota/bin/activate
export PYTHONIOENCODING=utf8
cd /home/bnp/tojota
python tojota.py
```



<https://github.com/calmjm/tojota> also downloads Trips, but I have found no usage for the currently in Home Assistant..

## Exposing data for the HA Rest service

I am making the files available on the local apache server; same server where [Home Assitant](#) runs:

```
tojota git:(master) cd /var/www/html/mytoyota
mytoyota ls -l
total 4
lrwxrwxrwx 1 root root 45 May 4 19:35 odometer.json -> /home/bnp/toyota/cache/odometer/odometer.json
lrwxrwxrwx 1 root root 43 May 5 07:26 parking.json -> /home/bnp/toyota/cache/parking/parking.json
lrwxrwxrwx 1 root root 57 May 4 19:35 remote_control.json -> /home/bnp/toyota/cache/remote_control
/remote_control.json
mytoyota
```

## Output of code

The output looks like this:

### odometer.json

```
odometer git:(master) cat odometer.json
[{"type": "mileage", "value": 34938, "unit": "km"}, {"type": "Fuel", "value": 77.0}]
```

### remote\_control.json

```
remote_control git:(master) cat remote_control.json
{"ReturnCode": "000000", "VehicleInfo": {"AcquisitionDatetime": "2022-05-08T01:17:15Z", "ChargeInfo": {"BatteryPowerSupplyPossibleTime": 16383, "ChargeEndTime": "42:35", "ChargeRemainingAmount": 100, "ChargeStartTime": "42:35", "ChargeType": 15, "ChargeWeek": 0, "ChargingStatus": "chargeComplete", "ConnectorStatus": 5, "EvDistanceInKm": 82.1, "EvDistanceWithAirCoInKm": 79.64, "EvTravelableDistance": 82.1, "EvTravelableDistanceSubtractionRate": 3, "GasolineTravelableDistance": 452, "GasolineTravelableDistanceUnit": 1, "PlugInHistory": 33, "PlugStatus": 45, "RemainingChargeTime": 65535, "SettingChangeAcceptanceStatus": 0}, "RemoteHvacInfo": {"BlowerStatus": 0, "FrontDefoggerStatus": 0, "InsideTemperature": 23, "LatestAcStartTime": "2022-04-27T05:50:09Z", "RearDefoggerStatus": 0, "RemoteHvacMode": 0, "RemoteHvacProhibitionSignal": 1, "SettingTemperature": 19.5, "TemperatureDisplayFlag": 1, "Temperaturelevel": 30}}}
```

### parking.json

```
parking git:(master) cat parking.json
{"event": {"lat": "57.010397", "lon": "10.034043", "timestamp": "1651936945000"}, "tripStatus": "0"}
```

Fecthing the data via REST, using sensor.yaml:

```
- platform: rest
  name: Toyota RAV4 Fuel
  resource: http://127.0.0.1/mytoyota/odometer.json
  method: GET
  value_template: '{{ value_json.1.value }}'
  unit_of_measurement: Pct
  scan_interval: 3000

- platform: rest
  name: Toyota RAV4 Mileage
  resource: http://127.0.0.1/mytoyota/odometer.json
  method: GET
  value_template: '{{ value_json.0.value }}'
  unit_of_measurement: Km
  scan_interval: 3000

- platform: rest
  name: Toyota RAV4 Gasoline Travelable Distance
  resource: http://127.0.0.1/mytoyota/remote_control.json
  method: GET
  value_template: '{{ value_json.VehicleInfo.ChargeInfo.GasolineTravelableDistance }}'
  unit_of_measurement: Km
  scan_interval: 3000

- platform: rest
  name: Toyota RAV4 EV Travelable Distance (with EC)
  resource: http://127.0.0.1/mytoyota/remote_control.json
  method: GET
  value_template: '{{ value_json.VehicleInfo.ChargeInfo.EvDistanceWithAirCoInKm }}'
  unit_of_measurement: Km
  scan_interval: 3000

- platform: rest
  name: Toyota RAV4 EV Travelable Distance (without EC)
  resource: http://127.0.0.1/mytoyota/remote_control.json
  method: GET
  value_template: '{{ value_json.VehicleInfo.ChargeInfo.EvTravelableDistance }}'
  unit_of_measurement: Km
  scan_interval: 3000

- platform: rest
  name: Toyota RAV4 Inside Temperature
  resource: http://127.0.0.1/mytoyota/remote_control.json
  method: GET
  value_template: '{{ value_json.VehicleInfo.RemoteHvacInfo.InsideTemperature }}'
  unit_of_measurement: C
  scan_interval: 3000

- platform: rest
  name: Toyota RAV4 Charging Status
  resource: http://127.0.0.1/mytoyota/remote_control.json
  method: GET
  value_template: '{{ value_json.VehicleInfo.ChargeInfo.ChargingStatus }}'
  scan_interval: 3000

- platform: rest
  name: Toyota RAV4 Parking
  resource: http://127.0.0.1/mytoyota/parking.json
  method: GET
  value_template: '{{ value_json.result }}'
  scan_interval: 3000
  json_attributes_path: $.event
  json_attributes:
    - lat
    - lon
```

# Getting the GPS Data on a Device

Taken from <https://community.home-assistant.io/t/create-a-device-tracker-from-sensor-template-gps-coordinates-from-rest-api/93993>

In `known_devices.yaml` I create the car:

```
rav4:
  hide_if_away: false
  icon: mdi:car
  name: Toyota Rav4
  track: true
```

And an automation set the lat and lon onto the device:

```
alias: Update Car Tracker
trigger:
  - platform: event
    event_type: state_changed
    event_data:
      entity_id: sensor.toyota_rav4_parking
condition: []
action:
  - service: device_tracker.see
    data:
      dev_id: rav4
      gps:
        - '{{ state_attr(''sensor.toyota_rav4_parking'', ''lat'') }}'
        - '{{ state_attr(''sensor.toyota_rav4_parking'', ''lon'') }}'
mode: single
```