

The Junction Analytics archive package contains separate .CSV files with data presented for every minute in consecutive Excel format rows.

The files located in this package are described below:

1. Definition

In this file, you can find all the information about the definition of your junction. Please keep in mind, that there will be more files related to this information in case you made any adjustments to the junction geometry in the past.

The information about any changes is indicated in the file name - it starts with the exact time the definition of your junction was changed.

The rows in the .CSV file show values for different approaches and exits but also for the junction itself, therefore some values will be duplicated as they are the same for every path (approaches and exits).

The values located in this file are:

junctionID - a unique ID number assigned to your junction.

junctionName - the name given to the junction (either automatically based on the street names or manually by the user).

id - unlike junctionID, this id is related to each separate approach and exit of our junction.

type - connected to the "id" column, it indicates which segmented pathway it's related to, the approach of our junction, or one its exits.

name - the name of each approach and exit, it also contains information about the road direction.

countryCode - an indicator in which country our junction is located. The three-letter country code defined in the [ISO 3166-1 alpha-3 standard] (<https://www.iban.com/country-codes>).

driveOnLeft - this is information about left-hand traffic (LHT) or right-hand traffic (RHT).

trafficLights - information if there are traffic lights on our junction (true or false).

roadName - the name of the road where each approach and exit lines are located.

direction - information about the direction of the traffic flow on a given approach or exit.

frc - information about the road class. One of the values: 0 , 1 , 2 , 3 , 4 , 5 , 6 , 7. The lower this number is, the bigger the road it's related to (0 being a motorway).

length - information about the length of a given approach (in meters).

oneWayRoad - indicates if the approach or exit is a one-way road (if the value is "False" then it means the road is bi-directional)

excluded – indicates if the junction approach was excluded from the results or not (for example disabled via toggle in the web application).

driveable - this value provides information if this specific road section (the approach or the exit) is classified as "drivable" on our map.

segmentGeometryWKT - coordinates of the geometry for the whole approach or exit line. This value is defined in the WKT format as a MultiLineString (https://en.wikipedia.org/wiki/Well-known_text_representation_of_geometry)

openLR - the geometry of a given approach or exit, encoded into OpenLR format. See the OpenLR specification here: <http://www.openlr.org/>

dataNotAvailable – in case there is something wrong with any of the approaches (errors in processing the data), this value will be set to "True" and there won't be any data for it.

rawJunctionGeometryWKT – this column contains the junction boundary used in the creation process in the WKT format.

rawJunctionRadius – If the junction was created by defining a circle (one of the drawing tools in Junction Analytics), this column contains information about its radius.

2. Approaches

This file contains all the historical data for all the approaches you defined during junction creation process. The data is gathered every 1 minute with a few-second deviation.

The values located in this file are:

time – the exact timestamp of saved data.

junctionID - a unique ID number assigned to your whole junction.

approachID – a unique ID number assigned to this specific approach line.

travelTimeSec - information on how long (in seconds) it currently takes for the vehicles to travel through the approach.

freeFlowTravelTime - information on how long (in seconds) it takes for the vehicles to travel through the approach during free-flow conditions (e.g. when there is no traffic congestion during the night). This is a fixed value based on historical data.

delaySec - the current delay (in seconds) for the whole approach, measured based on the comparison of

travel time and freeFlowTravelTime (**travelTime** value minus **freeFlowTravelTime** value).

usualDelaySec - this is the usual delay that is expected at this time of day, on this day of the week (as derived using historical data). This is calculated by using data from speed profiles, and fixed value from historical data.

Stops - the average number of stops per vehicle on the approach (calculated from all probes in the last 15 minutes).

queueLengthMeters - information on how long (in meters) the current line of vehicles waiting on the junction approach is.

volumePerHour - an estimated value of how many vehicles we observe traveling through the approach per hour. This is an experimental feature that might have a big error margin. Please use it at your own risk.

isClosed – information if the approach was closed for traffic during the observation time.

stopsHistogram - a container that stores histogram data specific to stops. You can read this data in the following way:

0,3 is displaying the data like this:

```
"numberOfStops": 0, "numberOfVehicles": 3
```

0,2;1,1 is displaying the data like this:

```
"numberOfStops": 0, "numberOfVehicles": 2
```

```
"numberOfStops": 1, "numberOfVehicles": 1
```

3. Turn Ratios

This file contains information about the turn ratios, so where are the vehicles going from the approach (while leaving the intersection).

The values located in this file are:

time - the exact timestamp of saved data.

junctionID - a unique ID number assigned to your whole junction.

approachID - a unique ID number assigned to this specific approach line.

exitID - the exit identifier that this turn ratio points to.

exitIndex – it's based on the order of the exits in the exit list in the junctionModel.

Example from Developer Portal response:

<https://developer.tomtom.com/junction-analytics/junction-analytics-api-documentation/junction-live-data-details>

First Street North Bound

has exitIndex = 0

Second Street East Bound

has exitIndex = 1

ratioPercent - the percentage ratio from all the vehicles leaving the approach, that turned into this specific exit. This value is calculated for the last 30 minutes. Only exits for which traffic has been observed are included in the output.

probesCount - this is the absolute number of observed probes for this particular approach to exit pass, as occurred during the last thirty minutes.