DB4IoT

A Database Engine Purpose-Built for the Internet of Moving Things

DB4IoT visualizes and analyzes time-series data with blazing-fast interactive maps and analytics for the "Internet of Moving Things."

DB4IoT tracks and displays the time-series GPS location, CAD/AVL and other sensor data from tens of thousands of moving objects simultaneously over interactive maps with analytics. Track, monitor and analyze both real-time and historical insights from data collected from moving objects – cars, trucks, buses, trains, shipments, people and more.

Making your data available to DB4IoT:

Ideally, we would prefer to receive a flat file CSV where every record includes:

VehicleID (Primary Key)
Preferably as an Integer in a single field. We can work with Varchars or other data types if needed. We can combine multiple fields in a pre-processing step if needed.

Timestamp
Ideally as a Unix Timestamp UTC Integer in a single field so we don't need to convert time zones or combine fields. Use a decimal if the data is sub-second. If the data is in a time-zone specific format please let us know what time zone it was generated in as we will need to convert it. If the data is in a time-zone format we'd (really) like all data to be in a single time zone(.).

Latitude/Longitude
We need to know what projection you are using. We use a Mercator Projection EPSG 4269. This is the projection that is used by OpenStreetMaps, Bing Maps and Google Maps. If you use a different projection please let us know which one it is, as we will need to convert it.

Additional Data Fields
Please provide a data dictionary and data types. Data fields that don't comply with the specified data type (text in a numeric column, for instance) are disregarded. The other fields in the record are imported. If you know the value range and the precision (decimal point) of a field please let us know. This will help us make the database smaller and faster. Please let us know if you have data values that have a special meaning (-9999 means NULL, for instance) in one or more columns.

We also distinguish between static fields that don't usually change (car model, for instance) and dynamic fields that change frequently (speed, for instance). It is good to know which columns are static and which are dynamic but we can usually guess from the data and the data dictionary.