Converting a Maps Shapefile to geoJSON for use in Oracle Data Visualization

This document outline steps to convert a shape file (.shp) to geoJSON using Oracle Map Builder.

Shapefile format is a digital vector storage format for storing geometric location and associated attribute information. The shapefile format can spatially describe vector features like points, lines, and polygons representing different kind of geographies. File name extension of shapefiles is **.shp.** More information on shapefiles can be found <u>here</u>.

GeoJSON is a format for encoding a variety of geographic data structures like maps of Cities, State, countries etc. More information on GeoJSON format can be found here: http://geojson.org/ Oracle Data Visualization supports custom map layers that are in geoJSON format, users can directly upload these JSON files through the maps console available in Oracle DV.

Using Oracle Map Builder you can convert shapefiles to geoJSON files. GeoJSON can be directly uploaded into OracleDV as a custom map layer and the data can be visualized directly on top of the Map layer.

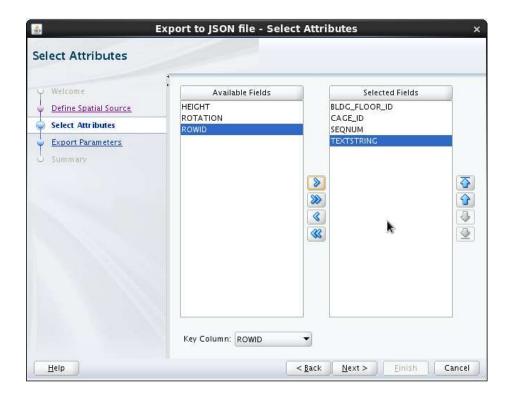
NOTE: Please ensure you agree and comply with license and usage terms for each Oracle tool and software referenced in this document.

Here are the steps to convert a shape file (.shp) to a geoJSON (.json):

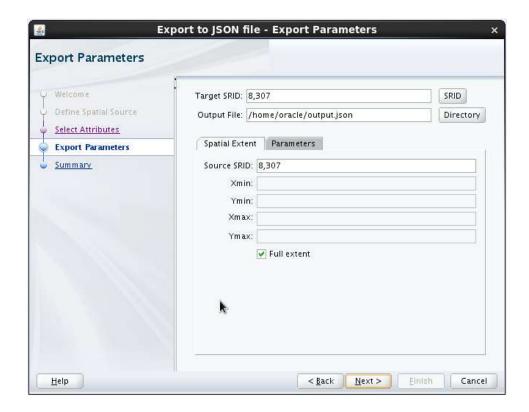
- 1) Install Oracle Map Builder if not installed already. Steps to install Oracle Map Builder can be found in "Installing and Configuring Map Builder" section in this Tutorial.
- 2) Open Oracle Map Builder and connect to the Database Schema which contains Maps tables/views. Instructions for this step are mentioned in the same section in the Tutorial mentioned in step-1.
- 3) Click on **Tools** in Map Builder menu and click on **Export to JSON** and Click **Next** on the console.
- 4) In the **Data Source** drop down list select **ShapefileSDP**.



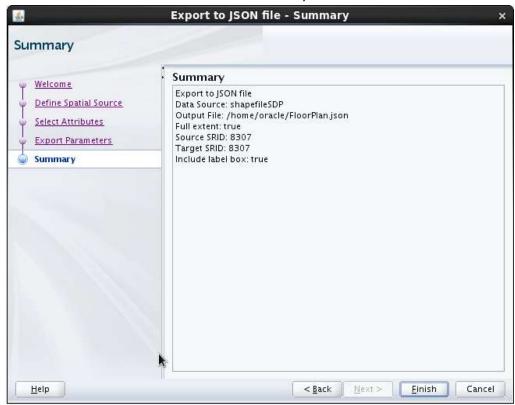
- 5) Select on the first entry in "**Provider Run Time Parameters**" and click on **Select Value.** This will open file browser.
- 6) Browse and select the shape file and click "Next".
- 7) You will see the list of Available columns; choose the columns/attribute information to be included in the geoJSON file. **Optionally** you can choose the KeyColumn which will be unique identity column "_id" in the geoJSON file. Each entry in the JSON file will have this unique column.



8) Leave the default values as they are except for "Output File" field. Please note that SRID should be one of the supported SRIDs, in your case it should be 8307. If it's not 8307 change it to 8307. Choose Output file according to your preference. Leave the SRID as it is. Click "Next".



9) In this tab you will see the summary, if you intend to make any changes, you can click on "Back" button and make the necessary changes. Click Finish. This will generate the geoJSON(.json) in the chosen directory.



Extracted geoJSON can be uploaded as a Custom map layer in Oracle DV. More instructions on how to do this can be found in this <u>video</u>.