
Command Reference: WriteTableToGeoJSON()

Write a table to a GeoJSON file

Version 11.12.00, 2016-08-20

The `WriteTableToGeoJSON()` command writes a table to a GeoJSON file, which is a spatial data format that can be viewed in geographic information system (GIS) software and other visualization tools. See:

<http://geojson.org/geojson-spec.html>

The table must include columns for longitude and latitude or a column containing Well Known Text (WKT) geometry strings. See:

http://en.wikipedia.org/wiki/Well-known_text

Currently only point and polygon data can be processed but in the future support for well-known text for other geometry types will be added. A future enhancement of this command will allow the geometry feature data to be read from other spatial formats.

The following dialog is used to edit the command and illustrates the command syntax for point data in separate columns.

WriteTableToGeoJSON() Command Editor for Point Data Parameters

The following figure illustrates the command syntax for layers specified with a geometry data column.

Point Data Geometry Data Coordinate Reference System Bounding Box Properties JavaScript Text Inserts

Geometry (shape) data can be specified using Well Known Text (WKT) strings in a table column.
Currently only POINT and POLYGON geometry are recognized but support for other geometry types will be added in the future.
Coordinates in the WKT strings must be geographic (longitude and latitude decimal degrees).

WKT geometry column: Required for geometry data - column containing WKT strings.

WriteTableToGeoJSON_WKTGeometry

WriteTableToGeoJSON() Command Editor for Geometry Data Parameter

The following figure illustrates the command syntax for coordinate reference system parameter.

Point Data Geometry Data Coordinate Reference System Bounding Box Properties JavaScript Text Inserts

Coordinate reference system text can be specified using one-line syntax similar to the following (in this case for geographic coordinates).
The double quotes in the text will automatically be replaced with \s in the command parameter value to escape from normal command quotes.
"crs": { "type": "name", "properties": { "name": "urn:ogc:def:crs:OGC:1.3:CRS84" } },

CRS text: Optional - CRS text to insert (default=no CRS data=geographic).

WriteTableToGeoJSON_crs

WriteTableToGeoJSON() Command Editor for Coordinate Reference System Parameter

The following figure illustrates the command syntax for bounding box parameters.

Point Data Geometry Data Coordinate Reference System Bounding Box Properties JavaScript Text Inserts

The bounding box is by default output at the layer (FeatureCollection) and Feature level.
This allows visualization software to quickly zoom to the bounding box.
Parameters are provided to turn off this feature if necessary.

Include layer bounding box?: Optional - include layer bbox? (default=True).

Include feature bounding box?: Optional - include feature bbox? (default=True).

WriteTableToGeoJSON_bbox

WriteTableToGeoJSON() Command Editor for Bounding Box Parameters

The following figure illustrates the command syntax for specifying table columns to include as properties in the GeoJSON output.

Specify columns to be output in the GeoJSON feature "properties" list.

Include columns:

Optional - columns to include (default=include all).

Exclude columns:

Optional - columns to exclude (default=exclude none).

WriteTableToGeoJSON_Properties

WriteTableToGeoJSON() Command Editor for Property Parameters

The following figure illustrates the command syntax for specifying the JavaScript variable for the output object.

The default is to output GeoJSON in a format similar to the following:

```
{
  "type": "FeatureCollection",
  "features": [
    {
      "type": "Feature",
      "properties": {
      }
      "geometry": {
        "type": "Point",
        "coordinates": [-105.89194, 38.99333]
      }
    }, { repeat for each feature },...
  ]
}
```

The entire output will correspond to one JavaScript object.
However, if a JavaScript variable is specified, the object will be assigned to a JavaScript variable. This allows direct use of the file in a website.

JavaScript variable:

Optional - JavaScript variable for GeoJSON object (default=none).

WriteTableToGeoJSON_JavaScript

WriteTableToGeoJSON() Command Editor for JavaScript Parameters

The following figure illustrates the command syntax for specifying inserts before and after the GeoJSON content.

Specify text to insert before and after the GeoJSON. For example, use the following to initialize the object in an array:

```
prepend: var stationData = []; stationData['Org1'] =
append: ;
```

Prepend text:

Optional - text to prepend before GeoJSON object (default=none).

Append text:

Optional - text to append after GeoJSON object (default=none).

WriteTableToGeoJSON_Inserts

WriteTableToGeoJSON() Command Editor for Text Insert Parameters

The command syntax is as follows:

```
WriteTableToGeoJSON (Parameter=Value, ...)
```

Command Parameters

Parameter	Description	Default
TableID	Identifier for the table to write. Can be specified using <code>\${Property}</code> notation.	None – must be specified.
OutputFile	The name of the GeoJSON file to write, as an absolute path or relative to the command file location. Can be specified using <code>\${Property}</code> notation.	None – must be specified.
Append	Indicate whether to append the GeoJSON content to the output file, <code>True</code> or <code>False</code> .	False
Longitude Column	The name of the table column that contains longitude. Can be specified using <code>\${Property}</code> notation.	None – must be specified.
Latitude Column	The name of the table column that contains latitude. Can be specified using <code>\${Property}</code> notation.	None – must be specified.
Elevation Column	The name of the table column that contains elevation. Can be specified using <code>\${Property}</code> notation.	Elevation is omitted.
WKTGeometry Column	The name of the table column that contains Well Known Text (WKT) geometry strings. Can be specified using <code>\${Property}</code> notation.	
CRSText	Full text to define the coordinate reference system using the <code>crs</code> GeoJSON property. The text will be inserted at the top level of the GeoJSON. This should be used when other than geographic coordinates are used. For more information, see: <ul style="list-style-type: none"> http://geojson.org/geojson-spec.html#named-crs https://en.wikipedia.org/wiki/Spatial_reference_system http://spatialreference.org/ 	No <code>crs</code> property is included which means that GeoJSON defaults to EPSG:4326 (geographic).
IncludeBBox	Indicate whether to include <code>bbox</code> GeoJSON property for the full layer.	True
Include FeatureBBox	Indicate whether to include <code>bbox</code> GeoJSON property for each feature.	True
IncludeColumns	List of comma-separated table column names to include as feature properties. Can be specified using <code>\${Property}</code> notation.	Include all columns.
ExcludeColumns	List of comma-separated table column names to exclude as feature properties. Can be specified using <code>\${Property}</code> notation.	Exclude no columns.
JavaScriptVar	Name of JavaScript variable to assign object to in output. This parameter will be ignored if <code>PrependText</code> or <code>AppendText</code> are specified. Can be specified using <code>\${Property}</code> notation.	Output GeoJSON object surrounded by <code>{ }</code> .
PrependText	Provide text to insert before the GeoJSON object, for example to provide custom JavaScript. Can be specified using <code>\${Property}</code> notation.	No insert.
AppendText	Provide text to append after the GeoJSON object, for example to provide custom JavaScript. Can be specified using <code>\${Property}</code> notation.	

The following example illustrates a CSV table that specifies WKT for points (see WKTGeometry column):

```
"ID","ID_text","Lon","Lat","Name","WKTGeometry"
50263,050263,-105.891940,38.993330,ANTERO RSVR,"POINT (-105.891940 38.993330) "
50454,050454,-105.476670,39.404720,BAILEY,"POINT (-105.476670 39.404720) "
50848,050848,-105.266670,39.991940,BOULDER,"POINT (-105.266670 39.991940) "
```

The following example illustrates a CSV table that specifies WKT for polygons:

```
"ID","ID_text","Lon","Lat","Name","WKTGeometry"
50263,050263,-105.891940,38.993330,ANTERO RSVR,"POLYGON (-105.891940
38.993330,-106 39,-106 37.5) "
50454,050454,-105.476670,39.404720,BAILEY,"POLYGON (-105.476670 39.404720, -
104 39, -103 37.5) "
```

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