

# DZ\_JSON

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Utility for the creation of JSON and GeoJSON from Oracle data types and structures. Support for the deserialization of JSON is not implemented.

## Summary

### DZ\_JSON

#### FUNCTIONS

|  |  |
|--|--|
| <code>dz_json_main.<br/>geojson2sdo</code>         | Unimplemented function to convert GeoJSON into SDO_GEOMETRY.                           |
| <code>dz_json_main.<br/>sdo2geojson</code>         | Function to convert SDO_GEOMETRY into GeoJSON geometry object.                         |
| <code>dz_json_main.sdo2bbox</code>                 | Function to convert SDO_GEOMETRY into four ordinate JSON array of [minx,miny,max,maxy] |
| <code>dz_json_main.<br/>sdo2geojson_feature</code> | Function to convert SDO_GEOMETRY into a GeoJSON feature object.                        |
| <code>dz_json_main.fastname</code>                 | Utility function to format a json name attribute.                                      |
| <code>dz_json_main.json_format</code>              | Utility function to format a json name attribute.                                      |
| <code>dz_json_main.value2json</code>               | Utility function to format a json named attribute.                                     |
| <code>dz_json_main.<br/>formatted2json</code>      | Utility function to wrap a preformatted JSON value with an attribute name.             |
| <code>dz_json_main.<br/>empty_scalar2json</code>   | Utility function to create a null JSON attribute.                                      |
| <code>dz_json_main.<br/>empty_scalar2json</code>   | Utility function to create an empty JSON array attribute.                              |

## FUNCTIONS

### `dz_json_main.geojson2sdo`

Unimplemented function to convert GeoJSON into SDO\_GEOMETRY. The plan as much as there is one is to implement this using Oracle 12c JSON toolset.

#### Parameters

|                      |   |
|----------------------|---|
| <code>p_input</code> | GeoJSON geometry as CLOB                                |
| <code>p_srid</code>  | Optional SRID value to apply to resulting SDO_GEOMETRY. |

#### Returns

MDSYS.SDO\_GEOMETRY spatial type

#### Notes

- If no SRID is provided, then the resulting SDO\_GEOMETRY will receive WGS84 geodetic SRID 8307 per GeoJSON specifications.

### `dz_json_main.sdo2geojson`

Function to convert SDO\_GEOMETRY into GeoJSON geometry object. Currently supports simple point, linestring, polygon, multipoint, point cluster, multilinestring, multipolygon and collection geometry types. As GeoJSON does not currently support complex curve geometries, use SDO\_ARC\_DENSIFY to densify any such geometries before using this function.

## Parameters

|                |  |
|----------------|--|
| p_input        | SDO_GEOMETRY   |
| p_pretty_print | Optional JSON formatter.                                   |
| p_2d_flag      | Optional TRUE/FALSE flag to remove 3rd and 4th dimensions. |
| p_prune_number | Optional length to truncate precision of ordinates.        |

## Returns

CLOB of GeoJSON geometry object

## Notes

- Leave pretty print value NULL to output compact JSON. Use zero for pretty print formatting. Larger values will continually indent the JSON three spaces to the right.

## dz\_json\_main.sdo2bbox

Function to convert SDO\_GEOMETRY into four ordinate JSON array of [minx,miny,max,maxy]

## Parameters

|                |   |
|----------------|---|
| p_input        | SDO_GEOMETRY  |
| p_prune_number | Optional length to truncate precision of ordinates. |

## Returns

CLOB of JSON array of four bbox ordinates

## dz\_json\_main.sdo2geojson\_feature

Function to convert SDO\_GEOMETRY into a GeoJSON feature object.

## Parameters

|                |  |
|----------------|--|
| p_input        | SDO_GEOMETRY   |
| p_pretty_print | Optional JSON formatter.                                   |
| p_2d_flag      | Optional TRUE/FALSE flag to remove 3rd and 4th dimensions. |
| p_prune_number | Optional length to truncate precision of ordinates.        |
| p_add_bbox     | Optional TRUE/FALSE flag to add bbox element.              |
| p_properties   | Optional properties to add to the output.                  |

## Returns

CLOB of GeoJSON feature object

## Notes

- Leave pretty print value NULL to output compact JSON. Use zero for pretty print formatting. Larger values will continually indent the JSON three spaces to the right.
- Properties must be provided as valid CLOB of GeoJSON properties array.

## dz\_json\_main.fastname

Utility function to format a json name attribute.

## Parameters

|                |                          |
|----------------|--------------------------|
| p_name         | name for JSON attribute. |
| p_pretty_print | Optional JSON formatter. |

## Returns

VARCHAR2 snippet for JSON attribute name

## dz\_json\_main.json\_format

Utility function to format a json name attribute.

## Parameters

|                 |   |
|-----------------|---|
| p_input         | value to format as JSON.                                  |
| p_quote_strings | Optional TRUE/FALSE flag whether to quote the JSON value. |

## Returns

VARCHAR2 snippet for JSON attribute name.

## Notes

- Input values may be VARCHAR2, NUMBER, DATE or CLOB.

## dz\_json\_main.value2json

Utility function to format a json named attribute.

## Parameters

|                |                          |
|----------------|--------------------------|
| p_name         | JSON attribute name      |
| p_input        | value to format as JSON. |
| p_pretty_print | Optional JSON formatter. |

## Returns

CLOB of JSON attribute.

## Notes

- Input values may be VARCHAR2, NUMBER, DATE, CLOB, MDSYS.SDO\_STRING2\_ARRAY or MDSYS.SDO\_NUMBER\_ARRAY.

## dz\_json\_main.formatted2json

Utility function to wrap a preformatted JSON value with an attribute name.

## Parameters

|                |   |
|----------------|---|
| p_name         | JSON attribute name                       |
| p_input        | JSON value (preformatted as proper JSON). |
| p_pretty_print | Optional JSON formatter.                  |

## Returns

CLOB of JSON attribute.

## dz\_json\_main.empty\_scalar2json

Utility function to create a null JSON attribute.

## Parameters

|        |                     |
|--------|---------------------|
| p_name | JSON attribute name |
|--------|---------------------|

|                |  |
|----------------|--|
| p_comma_flag   | optional TRUE/FALSE flag to add a trailing comma to results. |
| p_pretty_print | Optional JSON formatter.                                     |

### Returns

VARCHAR2 of null JSON attribute.

## dz\_json\_main.empty\_scalar2json

Utility function to create an empty JSON array attribute.

### Parameters

|                |  |
|----------------|--|
| p_name         | JSON attribute name  |
| p_comma_flag   | optional TRUE/FALSE flag to add a trailing comma to results. |
| p_pretty_print | Optional JSON formatter.                                     |

### Returns

VARCHAR2 of null JSON attribute.