

DZ_JSON

- Build ID: 4
- TFS Change Set: 8323

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.geojson2sdo</code>	Unimplemented function to convert GeoJSON into SDO_GEOMETRY.
<code>dz_json_main.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.srid2geojson_crs</code>	Function to convert Oracle Spatial srid into GeoJSON CRS object.
<code>dz_json_main.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.formatted2json</code>	Utility function to wrap a preformatted JSON value with an attribute name.
<code>dz_json_main.empty_scalar2json</code>	Utility function to create a null JSON attribute.
<code>dz_json_main.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_output_srid	Optional SRID to transform geometry before conversion.
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.
- The GeoJSON geometry object does not itself carry coordinate system information outside of a feature or feature collection object. Use the GeoJSON default of WGS84 (8307 or 4326) for output without further documentation.

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_output_srid	Optional SRID to transform geometry before conversion.
p_prune_number	Optional length to truncate precision of ordinates.

Returns

CLOB of JSON array of four bbox ordinates

dz_json_main.srid2geojson_crs

Function to convert Oracle Spatial srid into GeoJSON CRS object.

Parameters

p_input	Oracle Spatial srid.
p_pretty_print	Optional JSON formatter.

Returns

CLOB of JSON CRS object

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_output_srid	Optional SRID to transform geometry before conversion.

p_prune_number	Optional length to truncate precision of ordinates.
p_add_crs	Optional TRUE/FALSE flag to add crs element.
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.