

## Gisaf - Feature #9534

### GeoJson store: systematically use geodataframes

06/01/2020 17:56 - Philippe May

<b>Status:</b>	Resolved	<b>Start date:</b>	06/01/2020
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Philippe May	<b>% Done:</b>	100%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>		<b>Spent time:</b>	0.00 hour
<b>Description</b>			
Currently, there's a mix of: - (for category/survey models): get data from DB with Geopandas and process using vectorised pandas/numpy operations - (for custom defined models): get data from DB using gino  -> change all models to allow feature retrieving through GeoPandas.  Benefits: - unified process - expected bug speedups when Geopandas, Shapely and PyGeos get integrated, which will provide vectorized operations on geometries (see <a href="https://github.com/Toblerity/Shapely/issues/782">https://github.com/Toblerity/Shapely/issues/782</a> and related tickets, eg. <a href="https://github.com/pygeos/pygeos/issues/82">https://github.com/pygeos/pygeos/issues/82</a> )  Biggest refactorings:  - popup: implement get_popup_from_df and deprecate caption, get_popup - properties: implement get_properties_from_df and deprecate get_properties - styles (mapbox-layout and mapbox-paint): currently, they are added to GeoJson FeatureCollection object, which might not follow the standard: move to HTTP headers			
<b>Related issues:</b>			
Related to Gisaf - Support #9483: Performance: writing gpkg is slower than sh...			<b>New</b> <b>23/12/2019</b>

#### Associated revisions

##### Revision c78a3cb2 - 06/01/2020 18:10 - Philippe May

Refs #9534: generalize GeoDataframes

Use gdf.to\_json() (slightly faster, gygeos should bring an order of magnitude speed improvement

Implement:

- model.get\_geojson\_http\_headers
- model.get\_popup\_from\_df
- model.model.get\_popup\_from\_df
- mapbox-paint and mapbox-layout move HTTP headers

##### Revision 702d99aa - 06/01/2020 18:15 - Philippe May

Refs #9534: geodataframe for geojson generation

Implement:

- get\_popup\_from\_df
- get\_properties\_from\_df

Exception: Well

##### Revision 68c1e319 - 06/01/2020 23:11 - Philippe May

Refs #9534: Well: use dataframe for geojson

**Revision 775bd7be - 06/01/2020 23:12 - Philippe May**

Refs #9534: cadastral: use dataframe for geojson

**Revision e522ab9b - 07/01/2020 00:25 - Philippe May**

Refs #9534: Refactoring, cleanups

**Revision cfd05cef - 07/01/2020 00:31 - Philippe May**

Refs #9534: Refactoring, cleanups

**Revision f9bac55 - 07/01/2020 02:38 - Philippe May**

Refs #9534: update live layers  
Mapbox style given in HTTP headers  
Use redis stores for mapbox\_paint and mapbox\_layout  
Fix performance goofup

**Revision ece2a8e9 - 07/01/2020 15:03 - Philippe May**

Refs #9534: fix well get\_properties

**Revision 35dbd145 - 07/01/2020 15:17 - Philippe May**

Refs #9534: fix cadastral location text on map

**Revision fd2a621e - 07/01/2020 15:50 - Philippe May**

Refs #9534: fix waste water treatment plant style

**Revision af95b914 - 07/01/2020 16:49 - Philippe May**

Refs #9534: cleanup: use nice pandas string ops  
instead of dirty numpy

**History**

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**#1 - 07/01/2020 13:15 - Philippe May**

TODO: fix:  
- CadastralLocation text  
- wells  
- optical fiber style  
- geological formation style

**#2 - 07/01/2020 16:51 - Philippe May**

- % Done changed from 0 to 100  
- Status changed from New to Resolved

**#3 - 08/01/2020 11:07 - Philippe May**

- Related to Support #9483: Performance: writing gpkg is slower than shapefiles added