

# API Geomatis

This documentation explains the API provided by Geomatis for georeferencing raster map produced from BPS surveys. It covers the services starting from uploading master map (such as regional map and census block map), to georeferencing multiple raster map at once.

## POST /master-maps

Upload master map to the database

### Parameter

Field	Type	Description
file	File	Geojson file that contain master map
name	String	name of master map to store in database. If not filled in, master map name using uploaded file name. optional

### Success 200

Field	Type	Description
message	String	Success message

### Error 400

Field	Type	Description
error	String	Error message

## GET /master-maps

Get list of master maps which has been uploaded to database.

### Parameter

*No parameter required*

### Success 200

Field	Type	Description
name	String	Name of master map
dimension	Integer	Geometry dimension
srid	Integer	A spatial reference identifier (SRID) is a unique identifier associated with a specific coordinate system, tolerance, and resolution.
type	String	Type of geometry, such as Point, LineString, Polygon, and MultiPolygon.

### Error 400

Field	Type	Description
error	String	Error message

## GET /master-maps/{name}

Get the detail of the specific master map

### Parameter

*No parameter required*

### Success 200

Field	Type	Description
name	String	Name of master map
dimension	Integer	Geometry dimension
srid	Integer	A spatial reference identifier (SRID) is a unique identifier associated with a specific coordinate system, tolerance, and resolution.
type	String	Type of geometry, such as Point, LineString, Polygon, and MultiPolygon.

### Error 400

Field	Type	Description
error	String	Error message

## DELETE /master-maps/{name}

Delete existing master map from the database.

### Parameter

*No parameter required*

### Success 200

Field	Type	Description
message	String	Success message

### Error 400

Field	Type	Description
error	String	Error message

## GET /master-maps/{name}/attributes

Get the list of master map attributes name and the data type

### Parameter

*No parameter required*

### Success 200

Field	Type	Description
name	String	The name of master map attribute
type	String	Data type

### Error 400

Field	Type	Description
error	String	Error message

GET http://localhost:8000/master-maps/balikpapan\_selatan/attributes

Send

Params Auth Headers (6) Body Pre-req. Tests Settings Cookies

Body Cookies Headers (6) Test Results 200 OK 6 ms 1.28 KB Save as Example

Pretty Raw Preview Visualize JSON

```
1 {
2   {
3     "name": "bsbtt",
4     "type": "numeric"
5   },
6   {
7     "name": "bstt",
8     "type": "numeric"
9   },
10  {
11    "name": "bstt_k",
12    "type": "numeric"
13  },
14  {
15    "name": "dom_sls",
16    "type": "varchar"
17  },
18  {
19    "name": "fid",
20    "type": "numeric"
21  },
22  {
23    "name": "gid",
24    "type": "int4"
25  },
26  {
27    "name": "iddesa",
28    "type": "varchar"
29  },
30  {
31    "name": "idkec",
32    "type": "varchar"
33  }
34 }
```

## POST / georeference

This service is used to georeferencing raster maps to match feature from master map.

### Parameter

Field	Type	Description
master_map	String	Master map that has been uploaded
rasters	Files	Raster image files to be georeferenced. Only jpg/jpeg, png, and tiff are allowed.
attr_key	Integer	Master map attribute to match raster key
raster_key_type	String (all, prefix, suffix, or regex)	Part of the raster file name to match attribute key.
raster_key_prefix_num_char	Integer	The number of initial characters of the raster name to be taken as the raster key. Required if raster_key_type = prefix.
raster_key_suffix_num_char	Integer	The number of final characters of the raster name to be taken as the raster key Required if raster_key_type = suffix.
raster_key_regex	String	Using regex to get raster key from raster filename Required if raster_key_type = regex.
target_dir	String	Target directory to save result file, consist of uploaded raster image and world file (such as .jgw for jpg/jpeg raster image), optional
separate_dir	Object : Json array of string	Save files into separate directories based on master map attributes value
feature_x_position	String (none, left, right)	Horizontal position of the feature in the raster template, optional
feature_y_position	String (none, top, bottom)	Vertical position of the feature in the raster template, optional
feature_margin	integer	Margin around feature in the raster image (in percent), optional, default value = 5

### Success 200

Field	Type	Description
dir_path	String	Directory path to save uploaded and georeferenced raster file
success	Integer	Number of raster files that successfully georeferenced
fail	Integer	The number of raster files that failed to georeferenced
error		Error message if there are errors when georeferencing multiple raster image. This error indicate which file that run into error.

## Error 400

Field	Type	Description
error	String	Error message

### example georeference request using postman

POST ▼ http://localhost:8080/georeference Send ▼

Params Authorization Headers (8) **Body** Pre-request Script Tests Settings Cookies

☐ none ☒ form-data ☐ x-www-form-urlencoded ☐ raw ☐ binary ☐ GraphQL

	KEY	VALUE	DESCRIPTION	...	Bulk Edit
<input checked="" type="checkbox"/>	files	6 files selected <span>×</span>			
<input checked="" type="checkbox"/>	master_map	master_sls			
<input checked="" type="checkbox"/>	attr_key	idsls			
<input checked="" type="checkbox"/>	raster_key_type	prefix			
<input checked="" type="checkbox"/>	raster_key_prefix_num_char	14			
<input checked="" type="checkbox"/>	raster_key_suffix_num_char				
<input checked="" type="checkbox"/>	raster_key_regex				
<input checked="" type="checkbox"/>	target_dir	Text <span>▼</span> uploads/ <span>×</span>			
<input checked="" type="checkbox"/>	separate_dir	["nmkec","nmdesa"]			
<input checked="" type="checkbox"/>	feature_x_position	left			
<input checked="" type="checkbox"/>	feature_y_position				
<input checked="" type="checkbox"/>	feature_margin	5			

### partial success response

Not all uploaded files are always uploaded and successfully georeferenced. So in this success (200) response, there are parameters to identify number of success or fail in georeferencing process. In this example, 6 raster files are uploaded, but only 4 that success. There are 2 files that have errors which we can see the reason of the error in the **"error"** parameter.

Body Cookies Headers (3) Test Results 200 OK 4.57 s 408 B Save as Example ...

Pretty Raw Preview Visualize JSON ▼ 🔍

```
1 {
2   "dir_path": "uploads",
3   "success": 4,
4   "fail": 2,
5   "error": "error file 647101000600.JPG : Error GetRasterKey: Length of string is not
6           enough (less than rasterKeySettings.NumChar)..\n error file 6471010006001.JPG :
           Error GetRasterKey: Length of string is not enough (less than rasterKeySettings.
           NumChar).."
}
```

## GET /repos

Get list of directories and files from specific path.

### Parameter

Field	Type	Description
path	String	Directory or file path in the repository

### Success 200

Field	Type	Description
name	String	Directory or file name
is_dir	Boolean	If it is true, the entity is directory. If it is false, the entity is not a directory or it is a file.
size	integer	Size of directory or file in bytes

### Error 400

Field	Type	Description
error	String	Error message

## DELETE /repos

Delete existing directory or file from repository.

### Parameter

Field	Type	Description
path	String	Directory or file path to delete from repository

### Success 200

Field	Type	Description
message	String	Success message

### Error 400

Field	Type	Description
error	String	Error message

## PUT /repos

Rename or move the directory or file inside repository.

### Parameter

Field	Type	Description
path	String	Directory or file path to rename or move
new_path	String	New path to rename or move the directory or file
method	String	Method used to manipulate path. Currently, there is only 1 method, its “ <b>rename</b> ” method

### Success 200

Field	Type	Description
message	String	Success message

### Error 400

Field	Type	Description
error	String	Error message

## GET /exports

Download directory or file from repository.

### Parameter

Field	Type	Description
path	String	Directory or file path to download

### Success 200

Field	Type	Description
message	String	Success message

### Error 400

Field	Type	Description
error	String	Error message