URBAN GEO BIG DATA
Meeting
Milan, 11 July 2017

- CNR-IREA
- R.Lanari
  - Milano - L.Frigerio, G.Bordogna, P. Carrara, S.Lanucara
  - Napoli - M.Bonano, M.R. Manzo, A.Pepe

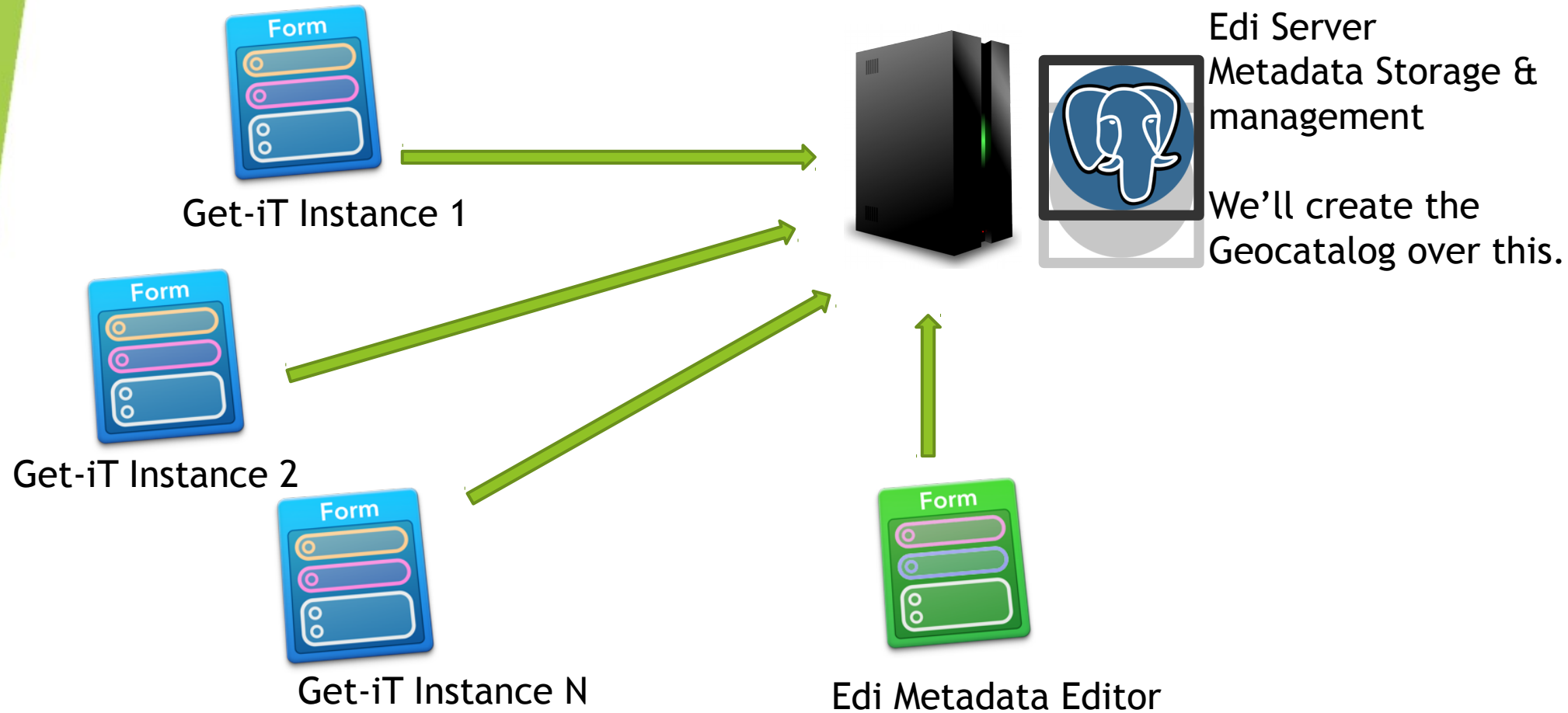PRIN PROJECT: *URBAN GEOmatics for Bulk Information Generation, Data Assessment and Technology Awareness*

METADATA : what we have done.
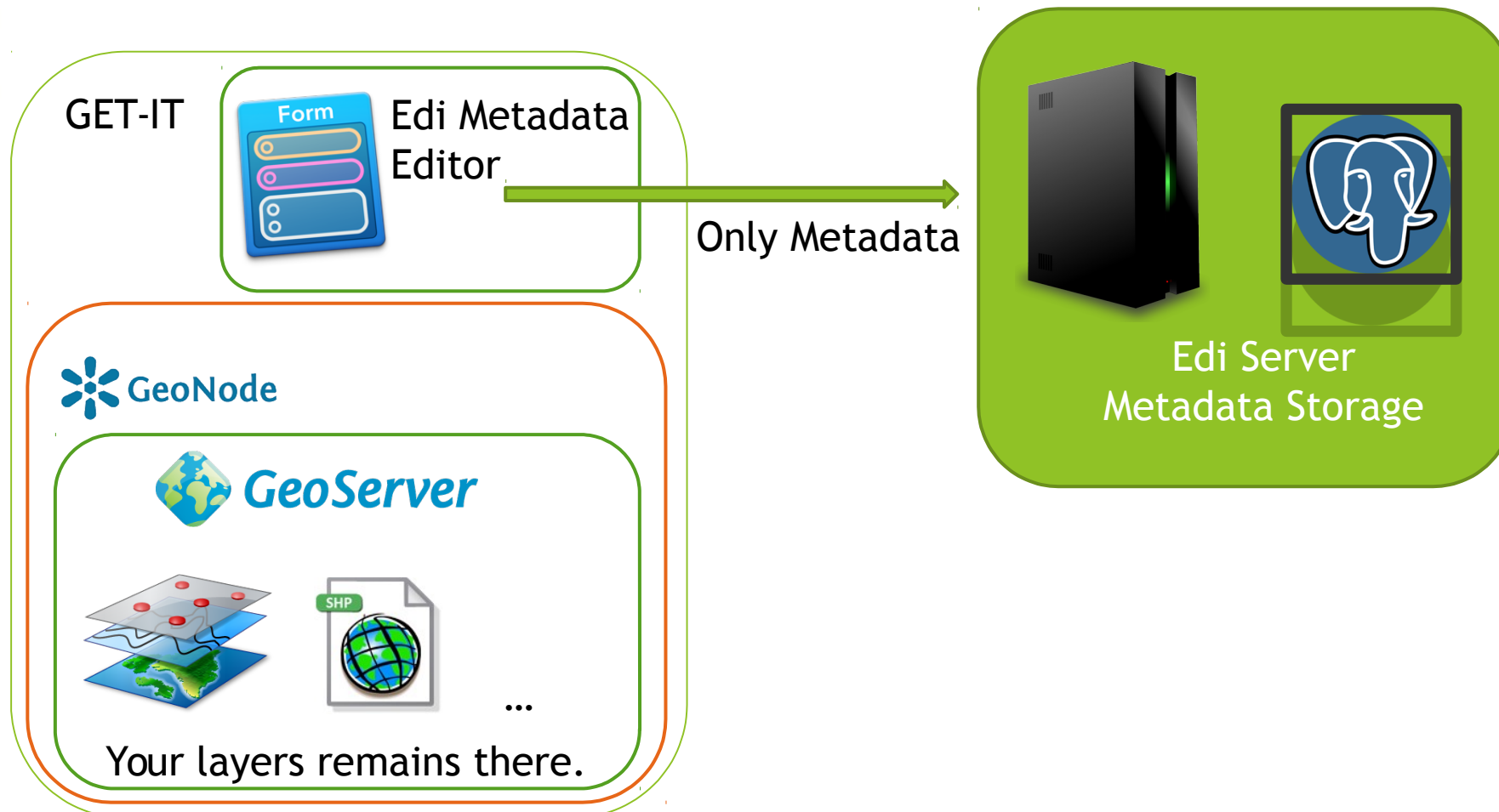
We have created 2 EndPoints to create Metadata:

▶ An instance of Get-it both to upload layers and to deploy related web services and to create their metadata.
It is a sandbox for learning to use Get-It.
http://ugbd.get-it.it/

▶ An instance of EDI, the stand alone metadata editor to create metadata for those units who deploy their layers at their own end-point.
http://test-ugbd.get-it.it/dist/RNDT_dataset.html

And an instance of Edi Server to store them all.

What is Edi-Server ?

Get-iT Instance 1

Get-iT Instance 2

Get-iT Instance N

Edi Metadata Editor

Edi Server Metadata Storage & management

We'll create the Geocatalog over this.

Schema 2 : How Edi-Server Works

GET-IT

Edi Metadata Editor

Only Metadata

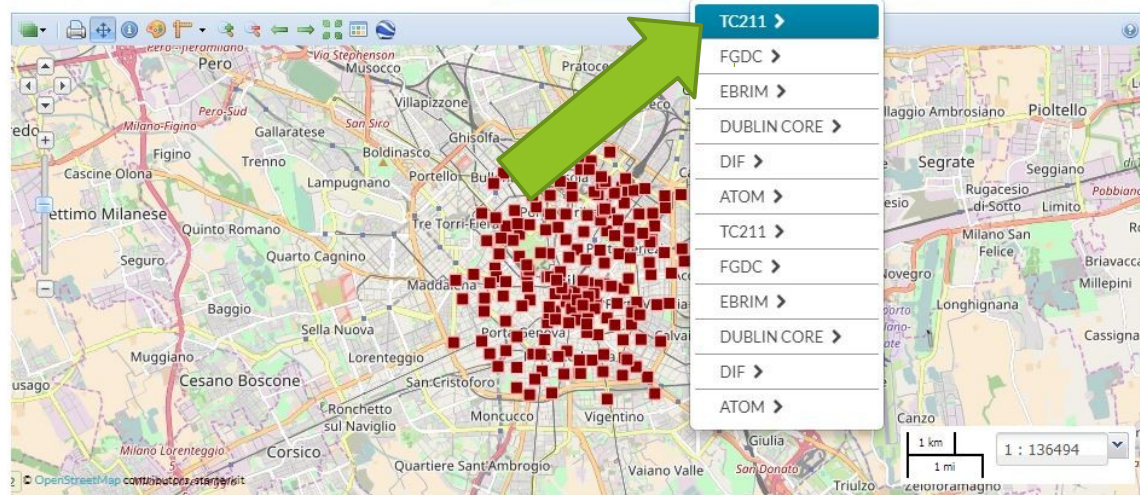Edi Server
Metadata Storage

GeoNode

GeoServer

SHP

…

Your layers remains there.

Differences between stand alone and get-it metadata editor.

► Both the EndPoints offer the possibility to download the XML metadata created compliant with the RNDT standard schema.

GET-IT

EDI EDITOR
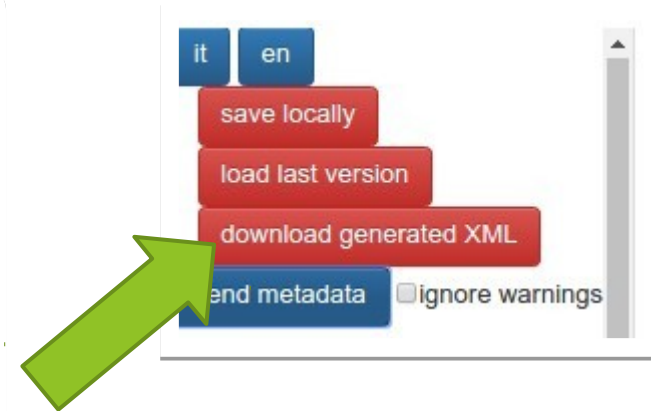
Differences between stand alone and get-it metadata editor.

▶ What does it mean Save Locally in the stand alone editor ?
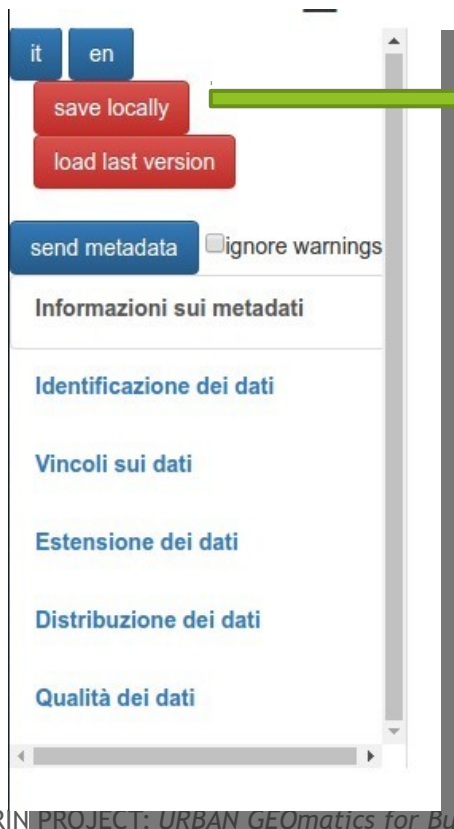
It saves (and loads) data in the local SQLite database of your browser

Differences between stand alone and get-it metadata editor.

▶ In order to create and download metadata by the Edi stand alone metadata editor you must send them to the Edi-Server using this button. After that you can download them.

Differences between stand alone and get-it metadata editor.

- In order to create metadata in the Get-IT Edi metadata editor you must send them to the Edi-Server using this button. After that you can download them.

Here it is the button

Differences between stand alone and get-it metadata editor.

▶ With Get-IT Edi metadata editor you can modify the metadata of your layer.
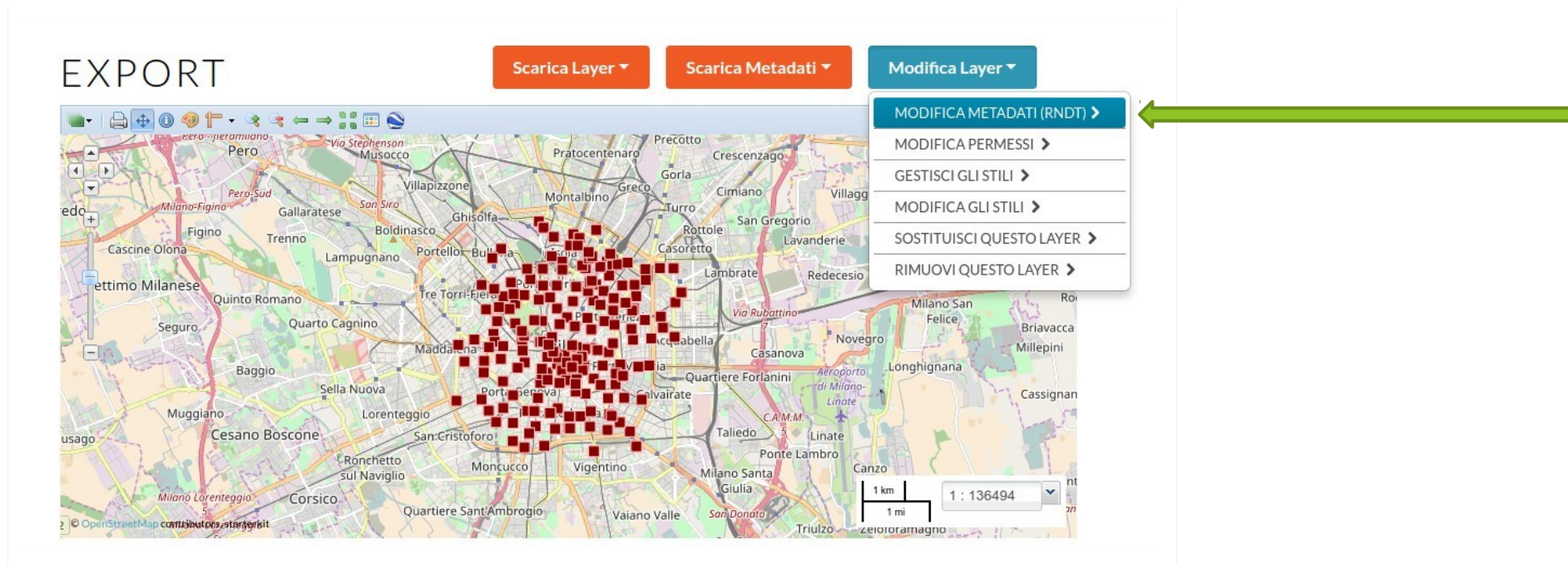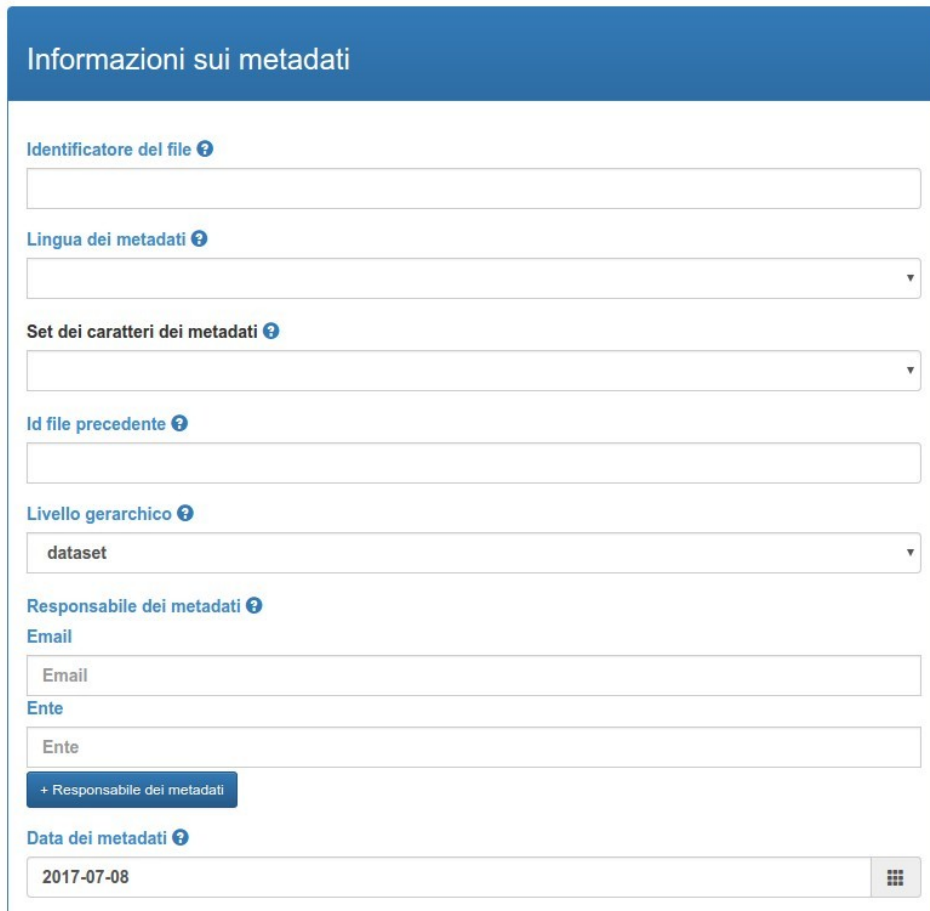
An example : bycicle rental layer from OSM.

- Downloaded with Overpass Turbo

- Converted with Qgis

- Deployed on the Web as WFS by using Get-IT
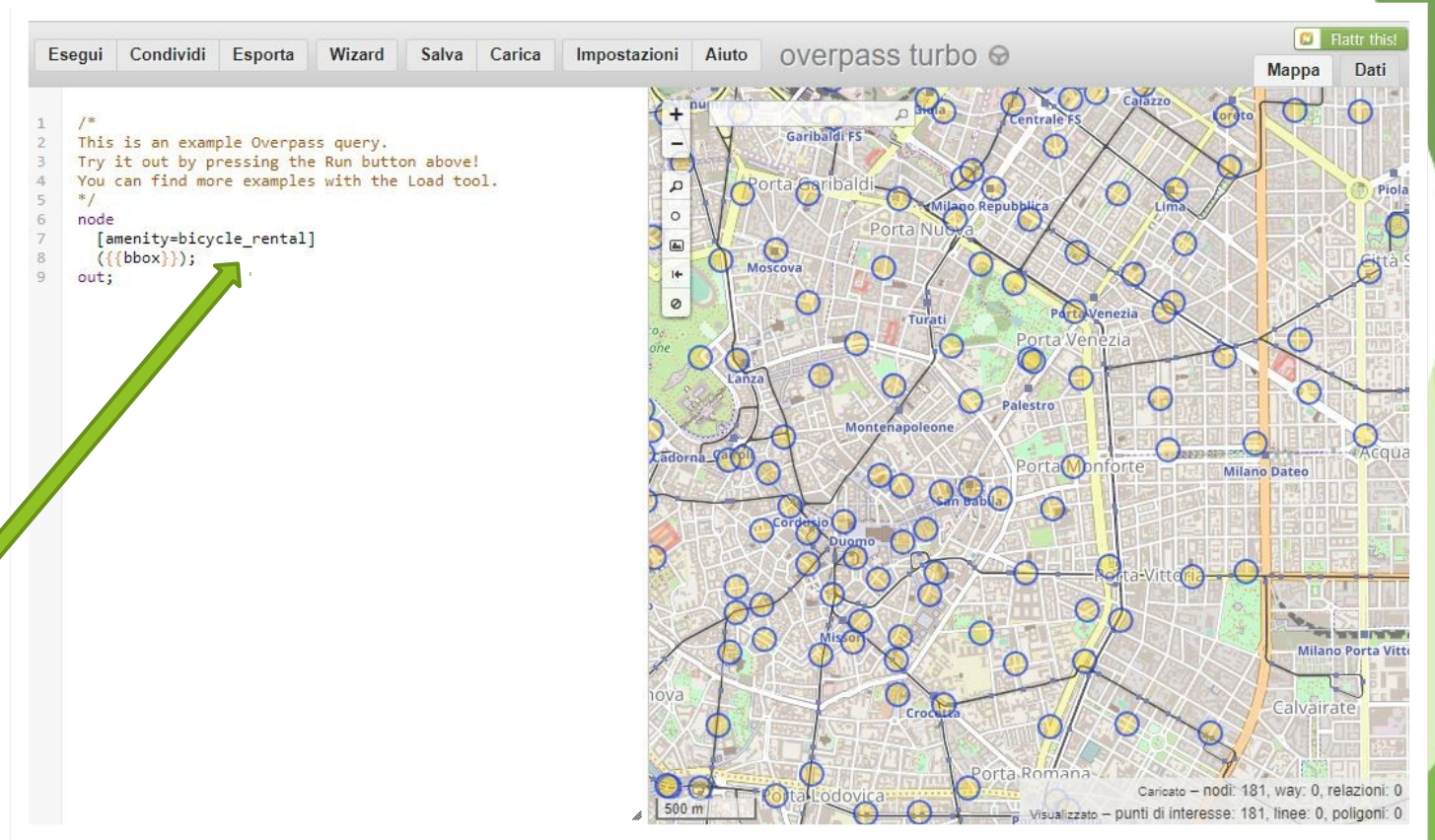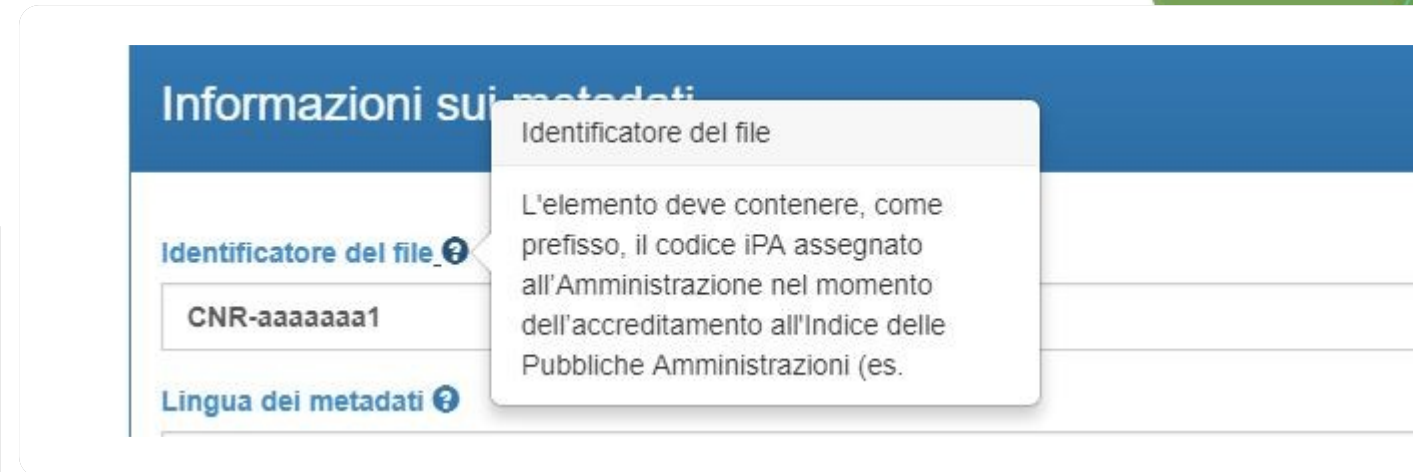
RNDT metadata fields:
IPA code ?

Informazioni sui metadati

Identificatore del file

L'elemento deve contenere, come prefisso, il codice iPA assegnato all'Amministrazione nel momento dell'accreditamento all'Indice delle Pubbliche Amministrazioni (es.

Identificatore del file

CNR-aaaaaaa1

Lingua dei metadati

Informazioni sui metadati

Identificatore del file

Lingua dei metadati

Set dei caratteri dei metadati

Id file precedente

Livello gerarchico

dataset

Responsabile dei metadati
Email

Email

Ente

Ente

+ Responsabile dei metadati

Data dei metadati

2017-07-08

Each institute has its own IPA code.
You can find a document in the Google Drive repository with those of the PRIN URBAN GEO-BIG DATA project units.
The identifier string needs to have this IPA code according to the Inspire rules.

i.e. CNR-6b9fd4c9-a4ef-4656-81d3-5422363ad7ee
i.e. 6b9fd4c9-a4ef-4656-CNR-81d3-5422363ad7ee

RNDT metadata fields: Autocompletion

Please fill in the Google Sheets in the Drive repository.

The importance of the Inspire Theme

The importance of the Inspire Theme

Only for scientific purpose.

RNDT metadata fields:
Next Step : extend quality fields

Useful Links :

▶ RNDT Fields Manual :
http://
www.rndt.gov.it/RNDT/home/images/RNDT_guida_operativa_dati_v2.0_20140
725.pdf

▶ Get-IT
http://www.get-it.it/

IREA Naples : Web Deploy of Time Series

GET-IT

Internal Process

Imports data
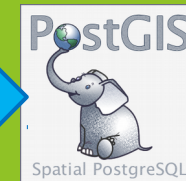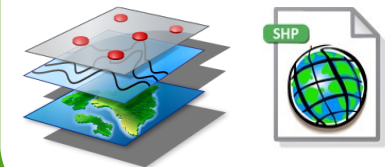
PostGIS — Spatial PostgreSQL

GeoNode

GeoServer

Powered By **GNU/Linux**

Creates layer

SHP

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Development of a Data Parser Application working on every operating system

JAR

The result :
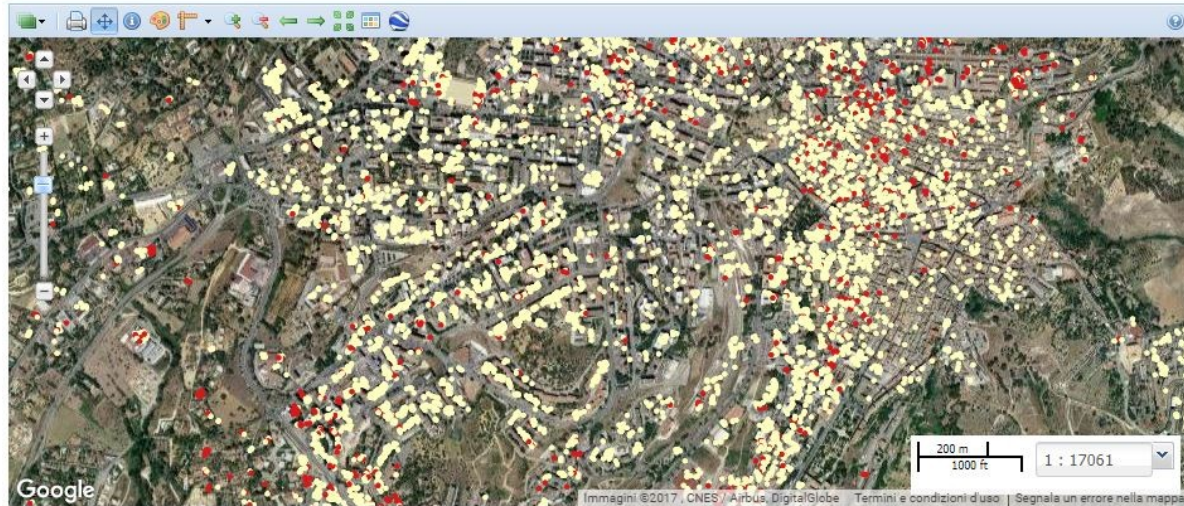
The Layer of average values of
Terrain Displacement was
created and deployed by using Get IT

WMS

The Layer Terrain Displacement is served as WMS layer in a standard way
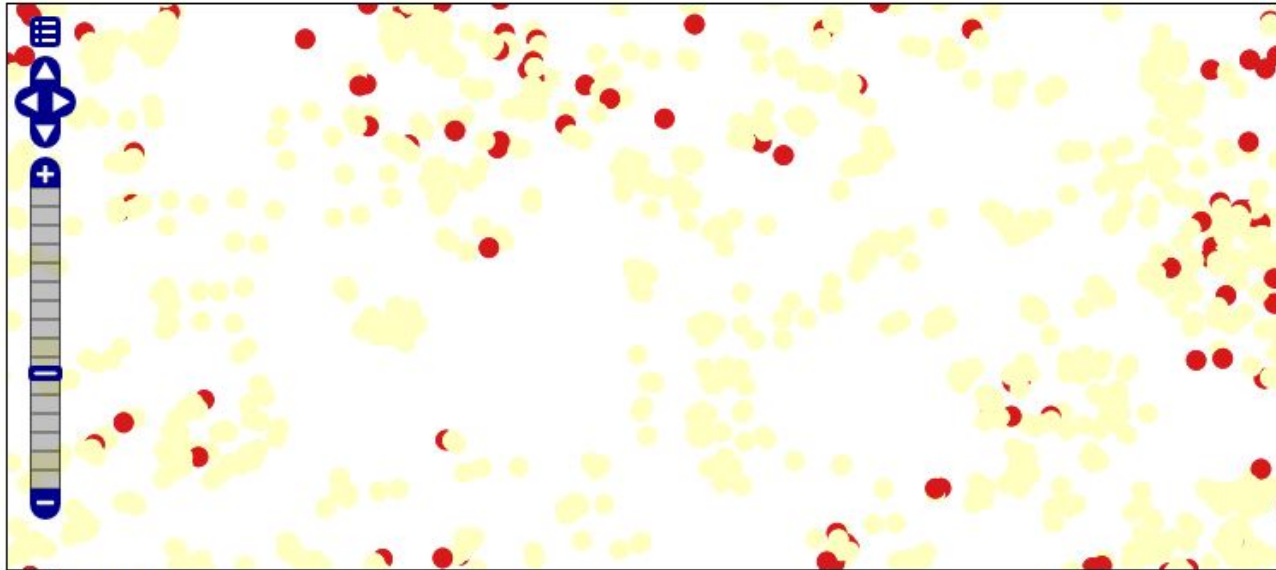
Scale = 1 : 6054   14.05427, 37.49438

1497886024382_2

fid	id	est_utm	nord_utm	coher	vel	az	range	topo	WFS URL
1497886024382_2.5727	uptrbb5t5vra2p8ifhc8d7einj	416428.69	4149874.0	0.514661	-0.068072	1388.0	565.0	-1.0	http://test.get-it.it:6080/arcgis/servi..
1497886024382_2.5728	2icgc7t7el37fgqvik6l75v8lt	416431.28	4149871.9	0.548098	-0.0179395	1389.0	565.0	-1.0	
1497886024382_2.5789	aqtlhhq42n17h8phgejrqdje3i	416419.03	4149878.0	0.415833	0.00340635	1388.0	566.0	-7.0	
1497886024382_2.5790	rmv5raq9n1vh055hmnt23lgig9	416425.66	4149873.9	0.617064	0.00961886	1389.0	566.0	-8.0	
1497886024382_2.5661	mak3ansrs9imol7ab9naaragkh	416422.0	4149861.8	0.432214	0.0195313	1392.0	564.0	14.5	
1497886024382_2.5662	qoro54qtnpkqjthvi1hb8820e8	416427.09	4149853.6	0.443658	-0.037897	1393.0	564.0	11.0	
1497886024382_2.5729	otoksnn817rg8285tqgqnfv1ie	416425.75	4149865.9	0.419432	-0.0498185	1390.0	565.0	-2.0	
1497886024382_2.5730	fnmul9e3k7782eft6m8vceug1u	416423.59	4149855.1	0.412794	0.0276491	1393.0	565.0	1.0	
1497886024382_2.5791	gg7mk64i31tk3a125qkufoiaol	416423.94	4149865.8	0.408513	-0.0169161	1390.0	566.0	-9.5	
1497886024382_2.5792	sasaahaophlvar0ilhc2lanbma	416423.53	4149863.8	0.606791	0.0255828	1391.0	566.0	-7.0	

Link to time series

Each acquisition point is deployed as WFS so as to be able to access all the time series in the point.

The service is available for any standard WFS requests

Useful Link:

▶ Get-IT instance hosting the example of Metadata from IREA-Napoli :
http://heavy.get-it.it/