

WP5: The Vaia Observatory

Marco Piragnolo, Francesco Pirotti



Objectives WP5

- 1) Create a repository of data and tools related to the project activities
- 2) Provide the necessary infrastructure that allows to collect, manage, and store datasets and link documents
- 3) Allow assisted uploading and sharing of data with other project participants and with the broader public

How?

- 1) Platform development
- 2) Data collection and organization
- 3) Development of ways to maximise the public use of the data

Web-GIS

Using a Web-GIS, the exchange of information takes place between a server and a client.

The server is a “Geospatial Information System (GIS) server”

The client is a web browser, desktop application or mobile app

The platform is a Web-GIS?



Advisory Board mid-term evaluation



Spatial Data Infrastructure (SDI)

Is framework of technologies, policies, and institutional arrangements

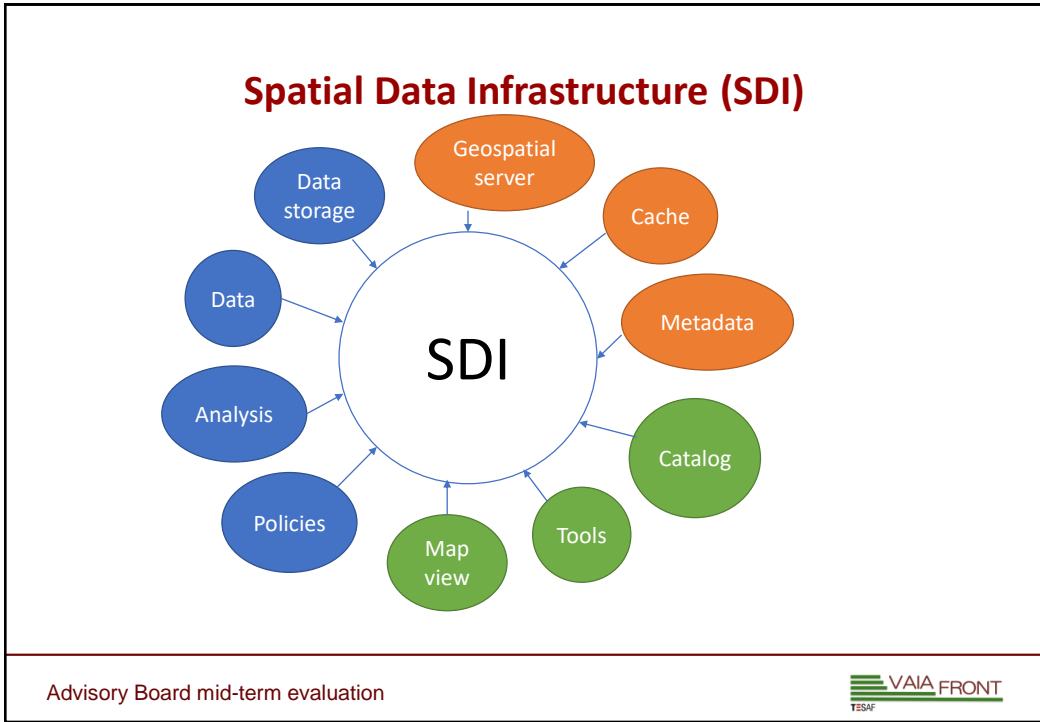
that together facilitate

the creation, exchange, and use of geospatial data and related information resources across an information-sharing community.

U.S. National Research Council 1993

Advisory Board mid-term evaluation







Geonode

GeoNode is an Open Source Content Management System (CMS) for geospatial data.

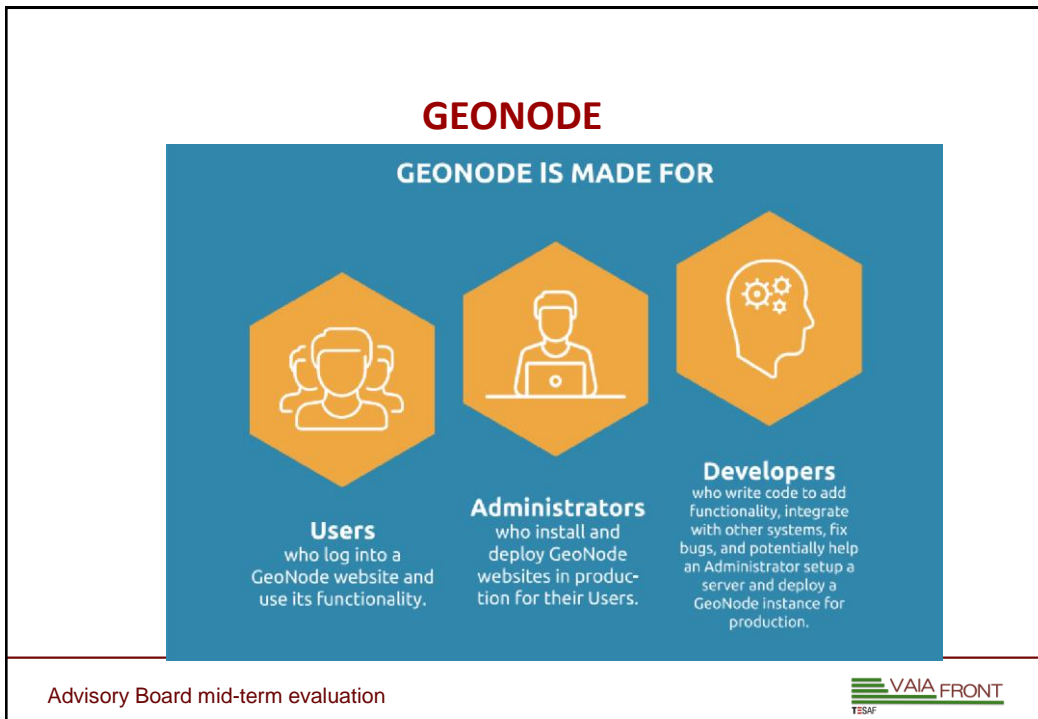
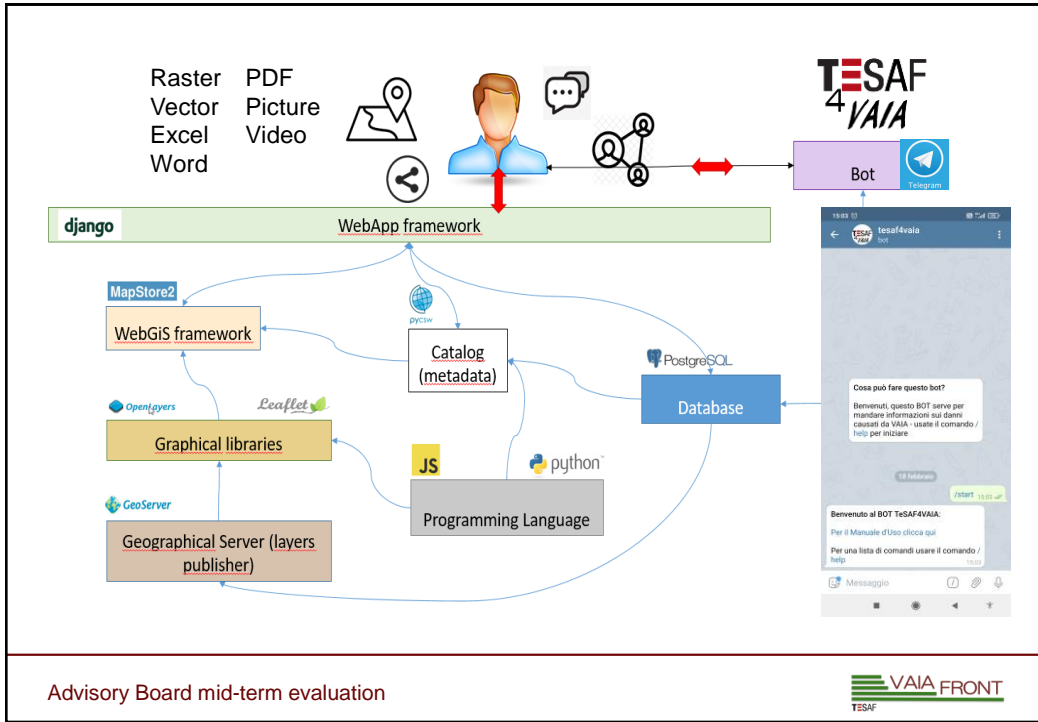
It is a web-based application and platform for developing geospatial information systems (GIS) and for deploying spatial data infrastructures (SDI).



Advisory Board mid-term evaluation



TESAF



GEONODE

Features

Spatial Data Discovery

- Spatial research Engine
- Federated OGC services
- Metadata Catalogue

Import and Manage

- Publish raster, vector, and tabular data
- Metadata management
- Secure file sharing

Interactive mapping

- GeoExplorer GIS client
- Graphical style editor
- Create multi-layer interactive maps
- Share and embed maps in web pages


Collaboration

- Quality score on data
- Group of users
- Post and message service

Advisory Board mid-term evaluation



GEONODE



Spatial Data Discovery


Browse and search for geospatial data

By combining collaboration found in social networks with specialized geospatial tools, GeoNode makes it easy to explore, process, style, and share maps and geospatial data.

Spatial datasets can be imported and shared, all through a non-technical user interface.

Features include:

- ✔ Powerful spatial search engine
- ✔ Federated OGC services
- ✔ Metadata catalogue



https://geonode.org/user_features/

Advisory Board mid-term evaluation



2 Import and Manage


Upload and share geospatial data, securely

GeoNode makes it easy to upload and manage geospatial data on the web. Any user can upload and make content available via standard OGC protocols such as Web Map Service (WMS) and Web Feature Service (WFS). Data is available for browsing, searching, styling, and processing to generate maps which can be shared publicly or restricted to specific users only.

Supported upload formats include shapefile, GeoTIFF, KML and CSV. In addition, it is possible to connect to existing external spatial databases and services.


Features include:

- ✔ Publish raster, vector, and tabular data
- ✔ Manage metadata and associated documents
- ✔ Securely or publicly share data
- ✔ Versioned geospatial data editor



https://geonode.org/user_features/

Advisory Board mid-term evaluation



GEONODE

Interactive Mapping


Create and share interactive web maps

GeoNode comes with helpful cartography tools for styling and composing maps graphically. These tools make it easy for anyone to use **GEONODE** a web-based mapping application with functionality traditionally found in desktop GIS applications.

Users can gain enhanced interactivity with GIS-specific tools such as querying and measuring.


Features include:

- ✔ GeoExplorer GIS client
- ✔ Graphical style editor
- ✔ Create multi-layer interactive maps
- ✔ Share and embed maps in web pages



https://geonode.org/user_features/

Advisory Board mid-term evaluation



GEONODE

Titolo	URL	Tipo
OSM-WMS Uni Heidelberg ³	https://maps.heigit.org/osm-wms/service?SERVICE=WMS	Web Map Service
OpenStreetMap WMS ⁵	https://ows.terrestris.de/osm/service	Web Map Service
IOW Web Map Service ¹	https://www.aquacoope.org/geoserver/ows	GeoNode (Web Map Service)
GeoNode Local GeoServer ¹	https://webgis.adbpo.it/geoserver/ows	GeoNode (Web Map Service)
GeoServer Web Map Service OSM ¹	http://ogcserver.gis.wfp.org/geoserver/wms	Web Map Service
GeoNode Local GeoServer ¹	https://geoportalouot.unah.edu.hk/geoserver/ows	GeoNode (Web Map Service)

Advisory Board mid-term evaluation



GEONODE - Landing page

Welcome

GeoNode is an open source platform for sharing geospatial data and maps.

[Inizio »](#)

Ricerca dei dati.

[Ricerca Avanzata](#)

<https://master.demo.geonode.org/>

Advisory Board mid-term evaluation




GEONODE – Text Query

Cerca : Forest

2 trovate

https://geonode.org/user_features/

Advisory Board mid-term evaluation




GEONODE

19 Documenti trovati

<https://master.demo.geonode.org/>

Advisory Board mid-term evaluation



GEONODE

The most dangerous active volcanoes in the world

Scarica la mappa

Dettagli dei metadati

Visualizza mappa

Livelli della mappa
Questa mappa utilizza i seguenti livelli:
the_most_dangerous_active_volcanoes_in_the_wor

Copia questa mappa
Duplica questa mappa e modificala in base ai tuoi obiettivi

Crea una nuova mappa

A proposito
Responsabile, Punto di contatto, Autore di metadati

egallo
Nessun gruppo

Informazioni Condividi Valutazioni Commenti

Titolo The most dangerous active volcanoes in the world
Licenza Not Specified
Data di pubblicazione Mercoledì 10 Febbraio 2021 14:36
Regioni Global
Responsabile egallo

Maggiori informazioni -

Documento WMS GetCapabilities dei livelli della mappa

<https://master.demo.geonode.org/>

Advisory Board mid-term evaluation

GEONODE

Vesuvius

Dettagli dei metadati

Scarica il documento

Scarica metadati

Elenco delle risorse che utilizzano questo documento
Il presente documento non è correlato ad alcuna mappa o livello

A proposito
Responsabile, Punto di contatto, Autore di metadati

egallo
Nessun gruppo

Informazioni Condividi Valutazioni Commenti

Titolo Vesuvius
Licenza Not Specified
Abstract No abstract provided
Data di pubblicazione Martedì 09 Febbraio 2021 17:18
Regioni Global
Responsabile egallo

<https://master.demo.geonode.org/>

Advisory Board mid-term evaluation

GEONODE

The most dangerous active volcanoes in the world

<https://master.demo.geonode.org/>

Advisory Board mid-term evaluation



GEONODE - user

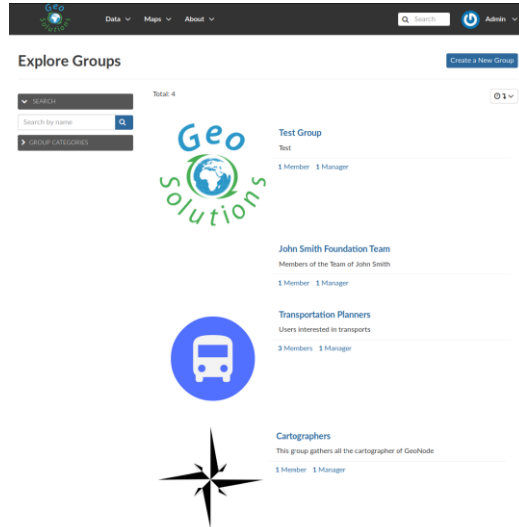
https://docs.geonode.org/en/master/_images/add_user_button.png

Advisory Board mid-term evaluation



GEONODE - user

In GeoNode is possible to create new groups with set of permissions which will be inherited by all the group members.

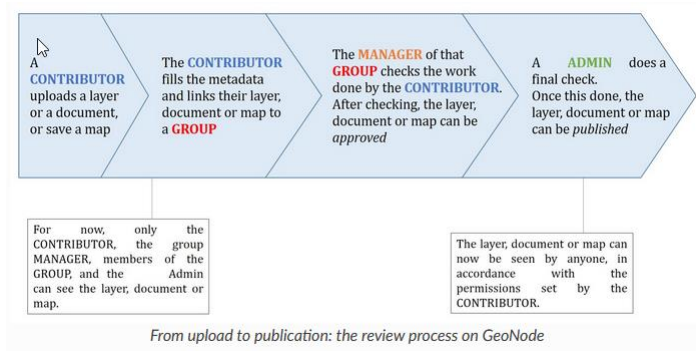


https://docs.geonode.org/en/master/admin/admin_panel/

Advisory Board mid-term evaluation



GEONODE - Groups



From upload to publication: the review process on GeoNode

Public / Private

https://docs.geonode.org/en/master/admin/admin_panel/

Advisory Board mid-term evaluation



LICENSE

Before upload a dataset you have to answer some question :

Can I share the data set?



Is my dataset copyrighted?

Do I have the right license?

Do I need to pay fee of charge for sharing copyrighted material, or do I need only a written authorization?

Advisory Board mid-term evaluation



Inspire

Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an **Infrastructure for Spatial Information** in the European Community (INSPIRE)



INSPIRE – an efficient way to share European spatial data!



Government authorities, businesses and citizens need
to easily share and use spatial data for making the right
decisions about our environment and well-being in
a timely manner

<https://inspire.ec.europa.eu/file/2834/download?token=sVeAlhcn>

The Directive requires that common Implementing Rules (IR) are adopted in a number of specific areas (**Metadata, Data Specifications, Network Services, Data and Service Sharing and Monitoring and Reporting**) → GEONODE

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02007L0002-20190626>

Advisory Board mid-term evaluation



Inspire

**CHAPTER V
DATA-SHARING
Article 17**



[...] measures provided for in paragraph 1 shall preclude any restrictions likely to create practical obstacles, occurring at the point of use, to the sharing of spatial data sets and services.

 **License - FREE?! **

[...] member States may allow public authorities that supply spatial data sets and services to **license** them to, **and/or require payment** from, the public authorities or institutions and bodies of the Community that use these spatial data sets and services.

Any such charges and **licenses must be fully compatible with the general aim of facilitating the sharing** of spatial data sets and services between public authorities.

Where **charges** are made, these **shall be kept to the minimum required to ensure the necessary quality** and supply of spatial data sets and services together with a reasonable return on investment,

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02007L0002-20190626>

Advisory Board mid-term evaluation



Copyleft

CAN I SHARE MY DATA?!



<https://www.dati.gov.it/fare-opendata>

Creative Commons License <https://creativecommons.org/licenses/>

CC-BY 4.0	Obligation Attribution	Permission Distribution	Obligation State Changes	Obligation Notice	Permission Derivative Works	Permission Reproduction
CC-BY 3.0 NL	Obligation Attribution	Permission Distribution	Obligation Notice	Permission Derivative Works	Permission Reproduction	
CC-BY-NC 4.0	Obligation Attribution	Permission Distribution	Prohibition Commercial use	Obligation State Changes	Obligation Notice	Permission Derivative Works
CC-BY-NC-ND 4.0	Obligation Attribution	Permission Distribution	Prohibition Commercial use	Obligation State Changes	Obligation Notice	Permission Reproduction
CC-BY-NC-SA 4.0	Obligation Attribution	Permission Distribution	Prohibition Commercial use	Obligation State Changes	Obligation Notice	Obligation Sharealike
CC-BY-ND 4.0	Obligation Attribution	Permission Distribution	Obligation State Changes	Obligation Notice	Obligation Copyleft	Permission Derivative Works

<https://www.europeandataportal.eu/it/training/licensing-assistant>

Advisory Board mid-term evaluation



Data Analysis

Please fill the form!

Cognome *

La tua risposta

Dati e dimensione in Mega
Indicare il tipo di dato da caricare e la dimensione approssimativa

	< 100 Mb	200 Mb	400 Mb	800 Mb	1 GB	10 GB	200 GB	400 GB	600 GB	8+
raster	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
foto	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vettoriale (es shapefile)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
las / laz	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
excel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
testo o csv	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
word	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<https://forms.gle/sQuPJeZ3NpB8jPiE6>

Advisory Board mid-term evaluation



**Thank You
for Your
Attention!**

marco.piragnolo@unipd.it

Zoom: markgis

Telegram bot: markgis_bot


Advisory Board mid-term evaluation



Advisory Board mid-term evaluation



Open (Government) Data refers to the information **collected, produced or paid** for by the public bodies (also referred to as Public Sector Information) and made **freely available for re-use for any purpose**. The licence will specify the terms of use.



<https://www.dati.gov.it/fare-opendata>

These principles for Open Data are described in detail in the [Open Definition](#).

Public sector information is information held by the public sector. The Directive on the re-use of public sector information provides a common legal framework for a European market for government-held data. It is built around the key pillars of the internal market: free flow of data, transparency and fair competition.

It is important to note that not all of the public sector information is Open Data.

<https://www.europeandataportal.eu/en/training/what-open-data>

Advisory Board mid-term evaluation

