



## Section : 1. GeoNode

### Module : 1.1. GeoNode dengan QGIS server



#### Apa itu GeoNode?

"GeoNode merupakan sebuah 'sistem pengelola konten geospasial'. GeoNode merupakan 'infrastruktur data spasial' (IDS) dengan fitur lengkap dan dapat langsung digunakan."

GeoNode menyimpan dokumen dan lapisan dataset SIG sebagai tipe konten dasar. Data lapisan SIG tersebut dapat diatur style-nya, ditampilkan maupun diunduh. Lapisan ini dapat juga digabungkan dengan tipe konten komposit yang dinamakan Peta. Konten dapat dibagikan maupun dibatasi berdasarkan pengguna dan kelompok pengguna. Selain itu GeoNode juga memiliki peralatan untuk membagikan konten melalui media sosial. GeoNode menyediakan layanan web OGC serta merupakan platform pertukaran metadata yang memenuhi standar OGC CSW.

GeoNode merupakan platform sumber terbuka yang juga dibangun dengan peralatan sumber terbuka meliputi Django (framework aplikasi web berbasis Python), basisdata spasial PostgreSQL+ PostGIS dan Geoserver ataupun QGIS Server pada backend ; dan bisa dimodifikasi maupun diintegrasikan dengan perangkat lunak lainnya.

The screenshot shows the GeoNode homepage with the following elements:

- Header:** GeoNode logo, navigation links for Data, Maps, About, a search bar, and user links for Register and Sign in.
- Welcome Section:** A large blue box with "Welcome" and "GeoNode is an open source platform for sharing geospatial data and maps."
- Search Section:** "Search for Data." with a search bar and "Advanced Search" link.
- Statistics:**
  - 16 Layers:** Click to search for geospatial data published by other users, organizations and public sources. Download data in standard formats. Includes "Explore layers" link.
  - 3 Maps:** Data is available for browsing, aggregating and styling to generate maps which can be saved, downloaded, shared publicly or restricted to specify users only. Includes "Explore maps" link.
  - 2 Documents:** As for the layers and maps GeoNode allows to publish tabular and text data, manage theirs metadata and associated documents. Includes "Explore documents" link.
  - 4 Users:** GeoNode allows registered users to easily upload geospatial data and various documents in several formats. Includes "See users" link.

**You try:**

**Goal:** -



#### GeoNode functionality

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

## Import and Manage

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

## Interactive Mapping

- Create multi-layer interactive maps
- Share and embed maps in web pages

## How GeoNode with Geoserver differs from GeoNode with QGIS server

- GeoExplorer GIS client
- Graphical style editor
- Versioned geospatial data editor

The screenshot shows the GeoNode web application. At the top, there is a navigation bar with the GeoNode logo, a search bar, and links for 'Register' and 'Sign in'. Below the navigation bar, a sidebar on the left has 'Layers' selected, along with 'Documents' and 'Remote Services'. The main content area features a heading 'Discover the available datasets.' followed by a grid of dataset icons. Below this, a section titled 'Featured Datasets' displays four maps: 'OSM ROADS', 'MANN', 'DEM', and 'COUNTRIES'. At the bottom, there is a footer with links for 'Data Layers', 'Maps Explore Maps', 'About People Groups', and 'Powered by GeoNode Developers | About'. A language selector shows 'English'.

### Check your knowledge:

1. What is GeoNode:
  - A web based GIS
  - A spatial data management system and publishing platform
  - A full stack open source GIS application and database
2. What functionality does GeoNode provide:
  - Data storage and metadata management
  - Access control and permissions management
  - An ecommerce interface for digital geospatial products
  - Answer a. and Answer b.
  - Answer b. and Answer c.

### Module video tutorial:

- [https://www.youtube.com/watch?v=N\\_PoLsbnLX0&list=PLrZxneE\\_xfYtdMxOPXzeCmFft9Id0gywM&index=1](https://www.youtube.com/watch?v=N_PoLsbnLX0&list=PLrZxneE_xfYtdMxOPXzeCmFft9Id0gywM&index=1)

### Further reading:

- View the GeoNode Website <https://geonode.org>

- Kartoza Demo for GeoNode with QGIS server <http://geonode.kartoza.com>
- UN WFP GeoNode training <https://geonode.wfp.org/trainings/4/>
- Geo-Solutions training guides <http://training.geonode.geo-solutions.it/>