

A year with GeoNode in review 2020

2020 has been a busy year

Year: 2020, commits: 1317 (ongoing)

Year: 2019, commits: 1633

Year: 2018, commits: 1168

Year: 2017, commits: 1424

Year: 2016, commits: 510

Year: 2015, commits: 938

Year: 2014, commits: 1742

Year: 2013, commits: 2323

Year: 2012, commits: 2368

Year: 2011, commits: 807

Year: 2010, commits: 1282

1000+ Conversations @ gitter & Mailinglists

302 closed issues 951 closed PRs

Most discussed Issue: Enable spatial Datastore (GNIP 75)

Most wanted feature

Running multiple Instances with Docker (?)

Release 3.0 and 3.1 (2020)

- o Let's check what's new in 3.0 and 3.1 release
- o Check the bottom of each slide to see who sponsored a certain feature, who implemented it, and what version contains it

Sponsor

Author

Version



Upgrade to Python3 and Django 2.2 (GeoNode 3)

- o Important Security and performance fixes
- o Support Python 3.7+ and Django 2.2.16

Upgrade to GeoServer 2.16.2 / 2.17.2

Improvements and Fixes

- Support for vector custom dimensions (in addition to time and elevation)
- Allow limiting the number of concurrent jobs in the importer extension
- Default style descriptions wording improvement (as they are visible in capabilities documents)
- The REST API fixes regarding datastore and feature type handling (see notes for details)
- Fixed 100% CPU usage at idle on data directories with tens of thousands of layers
- Don't delay startup on an unresponsive cascaded WMS server
- Make GWC caching kick in also when using local workspaces along with non qualified layer names
- And various others!
- For more information check the [2.16.2](#) and [2.17.2](#) release notes.

Community Updates

- ✓ *Backup & Restore*
- ✓ *OAuth2*
- ✓ *GeoFence*

Internationalization and Documentation

- ✓ Internationalization has been improved,
we have almost 90% coverage for 5 main languages
- ✓ Added languages: Portuguese / Spanish
- ✓ Completely revised and updated Documentation:
 - GetFeatureInfo Templating For GeoNode
 - HowTo: Geonode with QGIS
 - Improve GeoNode OpenID SP Protocol in order to be able to provide access to external clients
 - Document the use of slide show in themes
 - Update Advanced Installation steps to work against Ubuntu 20.04LTS
 - Update Advanced Installation steps to work against RHEL 7.x
 - How to setup rabbitmq, supervisor and memcached in order to fully enable async workers
 - How to Upgrade from 2.10.x / 3.0

MapStore2 Default Client

The screenshot displays the MapStore2 Default Client interface. On the left, there is a map of Europe and Southeast Asia with several layers visible, including 'Metacite' and 'Default'. An inset map shows a bar chart titled 'Population Estimate' comparing the populations of various countries. On the right, a detailed map of Southeast Asia (Indonesia, Malaysia, Thailand, Singapore) is shown with a styling dialog open. The styling dialog is titled 'ne_10m_admin_0_sovereignty' and allows users to select styles for features like 'Fill', 'Border', 'Dashed Border', 'Simple', 'Line Pattern', 'Dot Pattern', 'Marker', 'Fill Pattern', 'Section', 'Random Dots', 'Label', 'Label & Fill', and 'Label & Marker'. It also includes sections for 'CSS' and 'SLD'. Below the styling dialog, a table titled 'ne_10m_admin_0_sovereignty' lists 206 items, each with columns for fid, featurecla, scalarank, LABELRANK, SOVEREIGNTY, SOV_A3, ADM0_DIFF, LEVEL, and TYPE. The table shows data for countries like Indonesia, Malaysia, Chile, Bolivia, IDN, MYS, CHL, BOL, etc. At the bottom right, a small map of Indonesia is shown with a search bar.

- Drop of GeoExt, with MapStore client as the new official one

MapStore2 Client Updates

- ✓ Save Search Services to the Map
- ✓ Save Map Preferences into the adapter model
- ✓ Advanced Style Editor with graphical UI
- ✓ Improved Map Save Widget, specific for GeoNode



GeoSolutions

3.1



Improve MapStore Styler Integration

- o Current Styler is somewhat “poor”

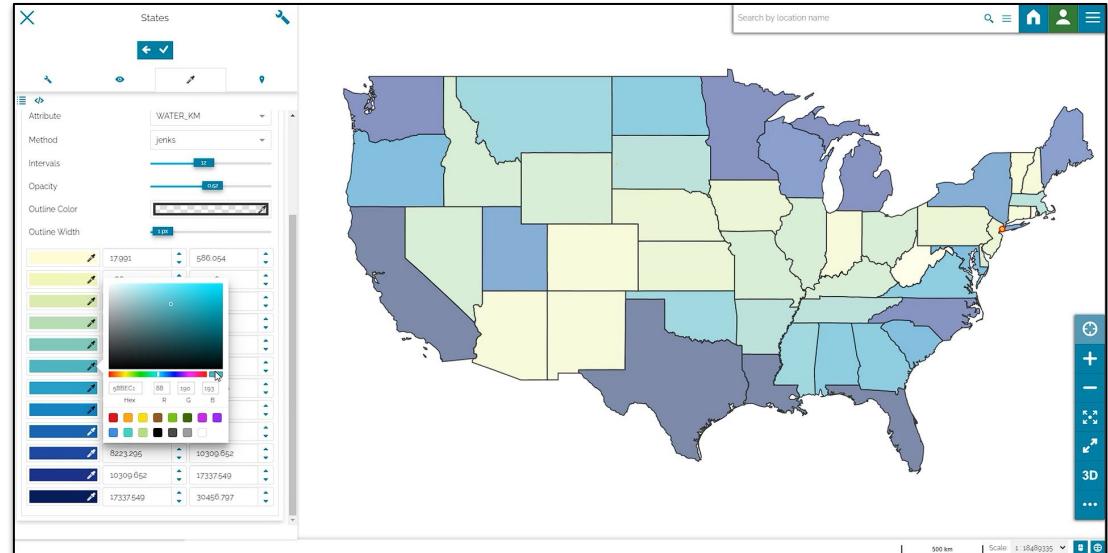
✓ *Widget based styler*

✓ *Vector data classifications*

✓ *Raster Data Classifications*

✓ *Well Known Markers*

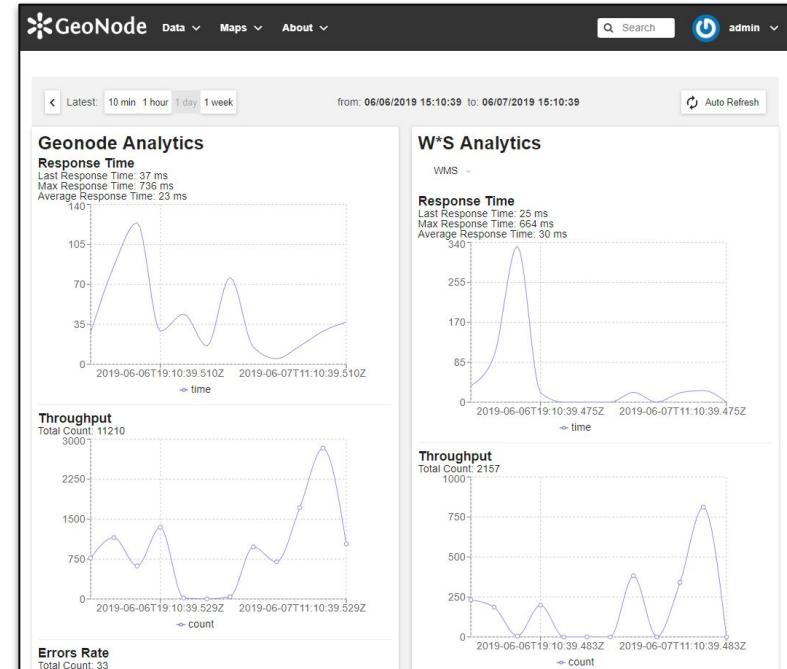
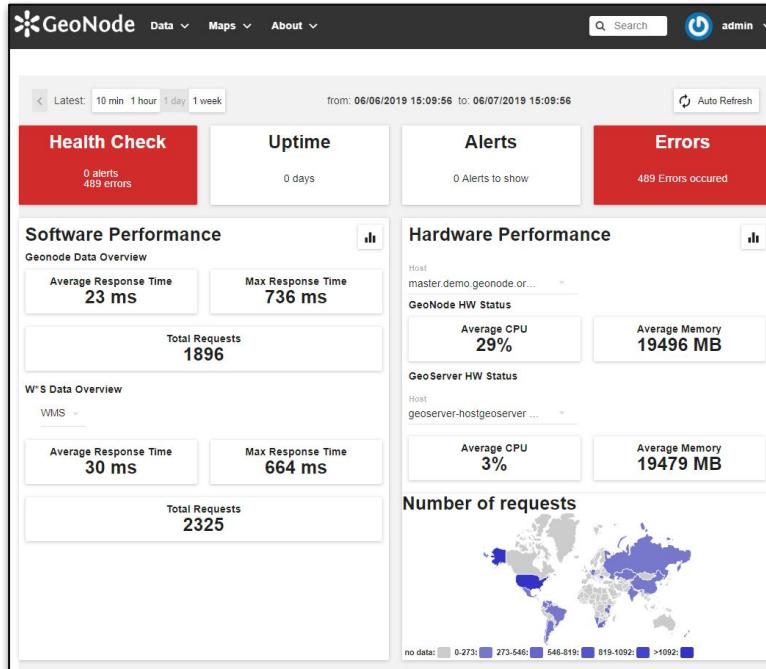
✓ *Advanced Styling Options*



Docker Improvements / GeoNode-Project Compose

- ✓ Docker Compose installation has been simplified a lot on GeoNode-Project
<https://docs.geonode.org/en/master/install/basic/index.html>
- ✓ The setup is also usable for Geonode development or customization.
- ✓ **Built-in GeoNode Contribs and settings**
<https://github.com/GeoNode/geonode-contribs>
- ✓ Check out the features with “Docker built-in” label.
Those are now included into the Docker build automatically.

GeoNode Integrated Monitoring



Contrib Apps Promotion

✓ Favorites



✓ EXIF support for Document Images



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GeoNode

Contrib Apps Promotion



Create Empty Layer

Create an empty layer

Layer name

Layer title

Geometry type

Add Attribute

FT_NAME

String
Remove

FT_NUM

Float
Remove

Create



WMS GetCapabilities for single Layers

	Info		Attributes		Share
	Ratings		Comments		Favorite
Title	Test Empty Layer	License	Not Specified	Abstract	No abstract provided
Publication Date	June 7, 2019, 9:44 a.m.	Type	Vector Data	Keywords	features,test_1
Regions	Global	Owner	admin		
		More info	-		
			Layer WMS GetCapabilities document		

Community

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GeoNode

Contrib Apps Promotion



Metadata XSL Renderer

Metadata for iwa_city_charges_test_wins

Completeness
Check Schema mandatory fields
75%

[Edit](#) [Preview](#) [Settings](#)

iwa_city_charges_test_wins

Abstract: No abstract provided

Hierarchy level	dataset
Resource Identifier	
Alternative Title	
Resource Status	completed

WHAT

Resource Purpose	
Spatial Representation Type	
Topic Category	Environment
Keywords	Anomaly Data features iwa_city_charges_test_wins theme Global place

WHERE

GEOGRAPHIC LOCATION

North Bound	South Bound	West Bound	East Bound
-------------	-------------	------------	------------



Original Dataset Download Link

Download Layer

[Images](#) [Data](#)

Do you want to filter it?

Pick your download format:

- GeoJSON
- Excel
- CSV
- GML 3.1.1
- GML 2.0
- Zipped Shapefile
- Original Dataset

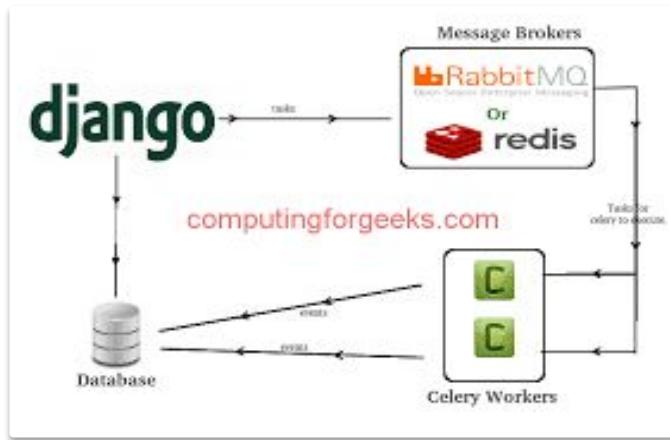
[Close](#)

Community

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GeoNode Celery Beat and Workers



[Flower 1.0.0 documentation](#) » [next](#)

Flower - Celery monitoring tool

Flower is a web based tool for monitoring and administrating [Celery](#) clusters

Table Of Contents

- Features
- Screenshots
- Installation
 - Usage
- Configuration
 - Options
 - Task filter syntax
- API Reference
- Authentication
 - HTTP Basic Authentication
 - Google OAuth 2.0
 - GitHub OAuth
- Running behind reverse proxy
- Docker Usage

Features

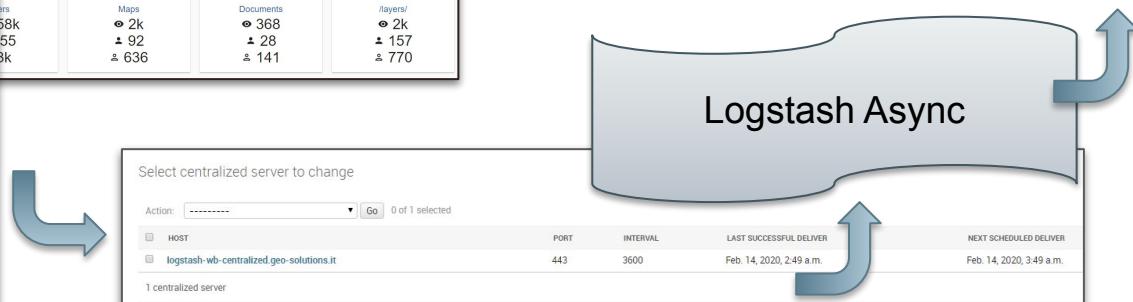
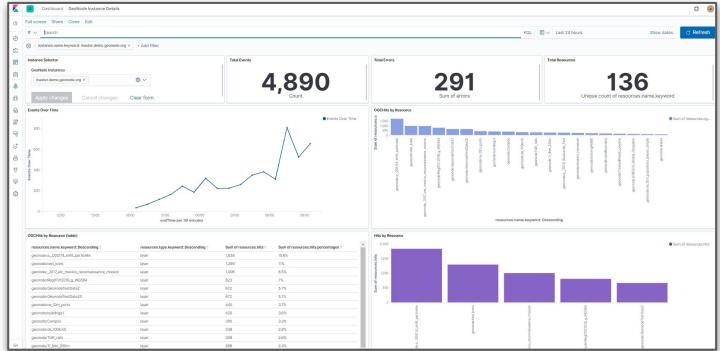
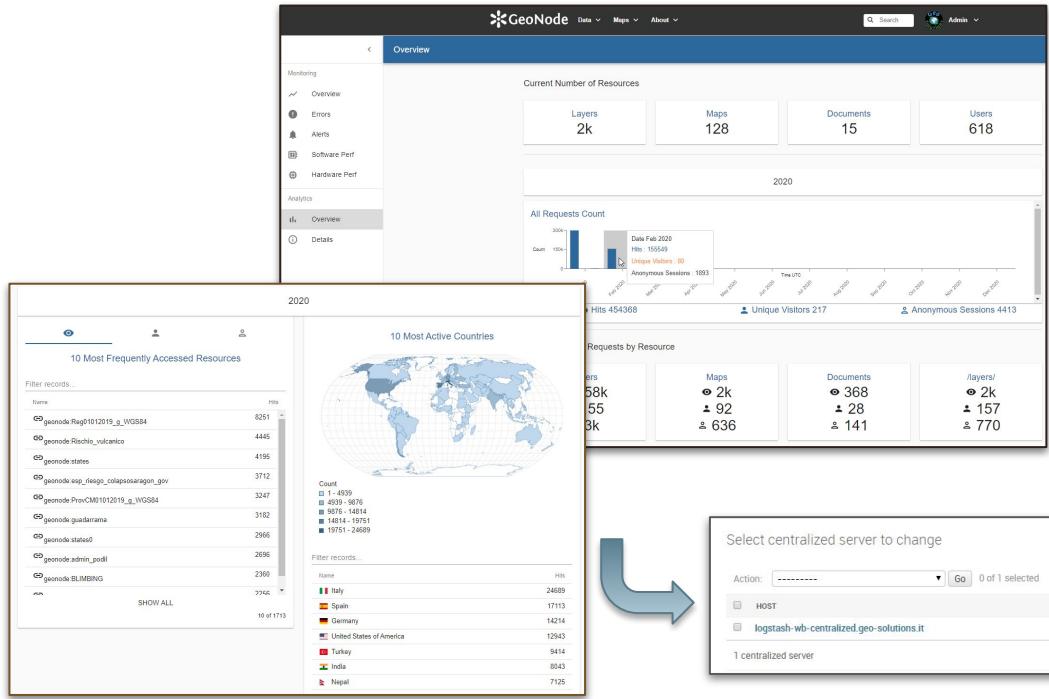
- Real-time monitoring using Celery Events
 - Task progress and history
 - Ability to show task details (arguments, start time, runtime, and more)
 - Graphs and statistics
- Remote Control
 - View worker status and statistics
 - Shutdown and restart worker instances
 - Control worker pool size and autoscale settings
 - View and modify the queues a worker instance consumes from
 - View currently running tasks
 - View scheduled tasks (ETA/countdown)
 - View reserved and revoked tasks
 - Apply time and rate limits
 - Configuration viewer
 - Revoke or terminate tasks
- Broker monitoring
 - View statistics for all Celery queues
 - Queue length graphs
- HTTP API
- Basic Auth, GitHub OAuth2 and Google OpenID authentication

Quick search

Go

Enter search terms or a module, class or function name.

GeoNode Analytics and Centralized Dahsboard



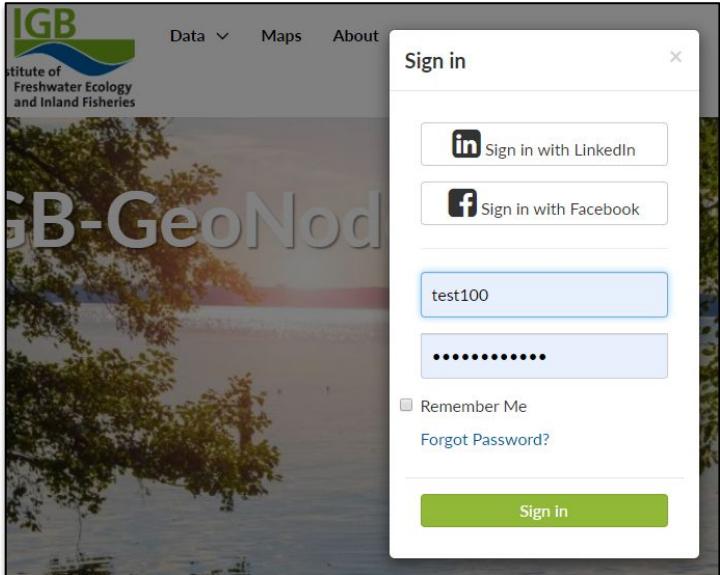
The World Bank

GeoSolutions

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LDAP Authentication

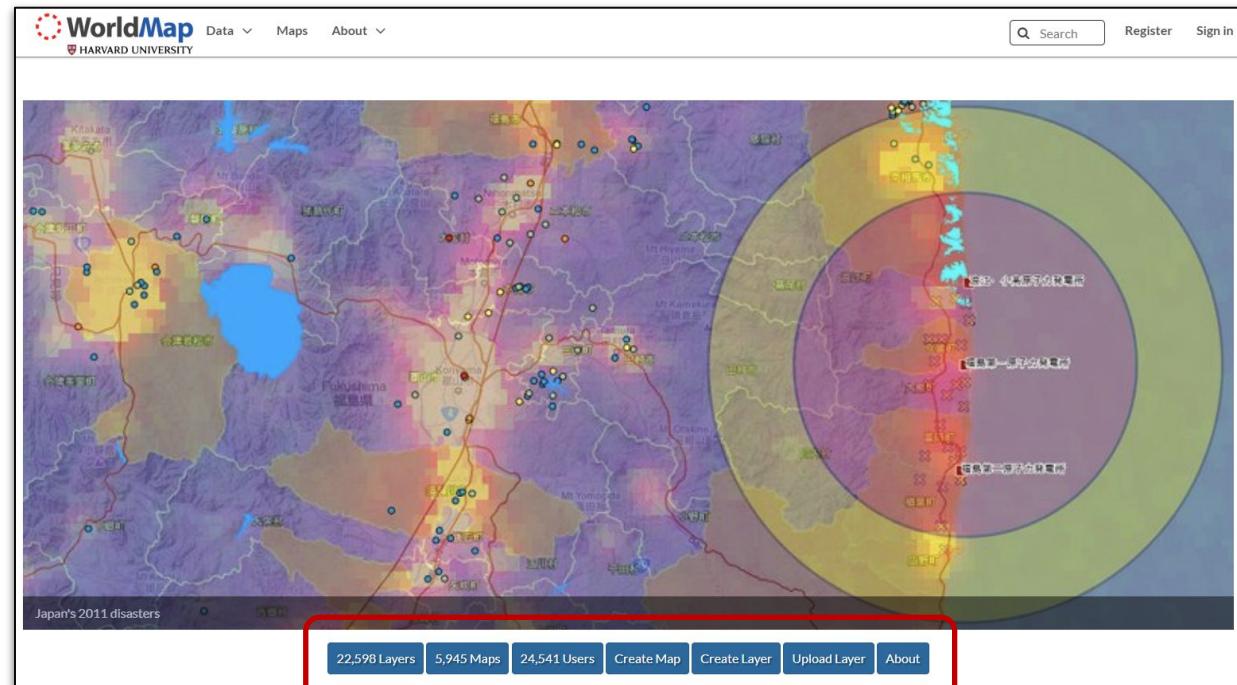


The screenshot shows a user profile for "Test User (test100)". The profile includes a placeholder image for a profile picture, the name "Test", and various fields: Position (Not provided), Organization (Not provided), Location (Not provided), Voice (Not provided), Fax (Not provided), Description (Not provided), and Keywords (ldap). A blue arrow points from the user profile back towards the central cylinder.

The screenshot shows a "Explore Groups" page with a search bar and a list of groups. The groups listed are: abt1 (Abteilung 1, 5 Members, 1 Manager), abt2 (Abteilung 2, 6 Members, 1 Manager), abt3 (Abteilung 3, 1 Member, 1 Manager), abt4 (Abteilung 4, 1 Member, 1 Manager), and abt5. A blue arrow points from the "Explore Groups" page towards the right edge of the diagram.

GeoNode and GeoFence Performance Optimizations

- Performance improvements and hardening to support a huge number of resources and maps, 10k+ layers!
- The possibility to activate **DELAYED SECURITY** signals in order to allow GeoNode and GeoFence align asynchronously
- **DB Stored Rules**



Full Backup/Restore - Read only Mode

Select restored backup to view

NAME	RESTORATION DATE	ARCHIVE MD5	CREATION DATE
2020-03-19_151016.zip	March 24, 2020, 1:33 p.m.	3dfdec2ac8df0ce78e2ef046bed2ef81	March 19, 2020, 3:11 p.m.
2020-03-19_151016.zip	March 24, 2020, 12:11 p.m.	3dfdec2ac8df0ce78e2ef046bed2ef81	March 19, 2020, 3:11 p.m.

2 restored backups

- o Improved Backup/Restore Management Commands
- o Stores the settings used along with the archive
- o Now able to check **md5** and send notifications
- o Automatically puts GeoNode in “Read-only mode”
- o **Docker built-in**

- o Activate “Read only” and “Maintenance” modes from the Admin GUI

Django administration

WELCOME, ADMIN | VIEW SITE / CHANGE PASSWORD / LOG OUT

Home · Base · Configuration · Configuration

Change configuration

Read only

Maintenance

Save and add another | Save and continue editing | **SAVE**

Geospatial Security Restrictions (Geo-Limits)

Set permissions for this resource

People and Groups **Geo Limits** ←

Who can view it?

Anyone

The following users:
x admin

The following groups:

Who can download it?

Who can change metadata for it?

Who can edit data for this layer?

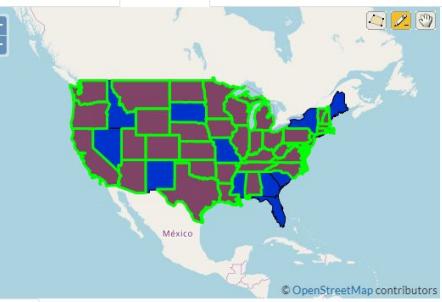
Who can edit styles for this layer?

Who can manage it? (update, delete, change permissions, publish/unpublish it)

Cancel Apply Changes

Set permissions for this resource

People and Groups **Geo Limits**



Users Groups

Search

AnonymousUser
No Group

afabiani
No Group

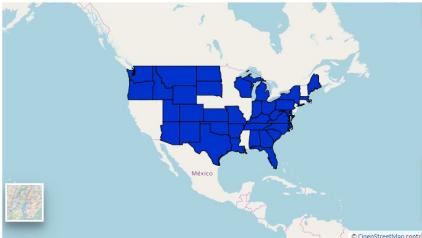
Save Geo Limits

Cancel Apply Changes

GeoNode Data Maps About

Search afabiani

states



Download Layer Metadata Detail View Layer Download Metadata

Legend Azure polygon style

Maps using this layer This layer is not currently used in any maps.

Create a map using this layer Click the button below to generate a new map based on this layer.

Title: states
License: Not Specified

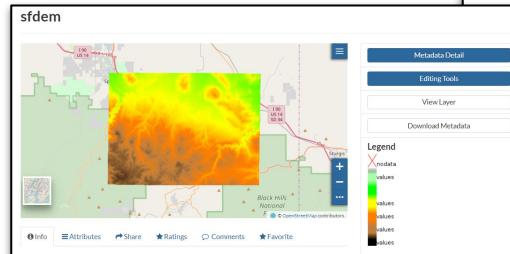
Remote Services Improvements

Remote Services

Register a new Service

Title	URL	Type
GeoServer Web Map Service 2	https://demo.geo-solutions.it/geoserver/wms	Web Map Service
World Imagery 0	http://server.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer	ArcGIS REST MapServer

- o Import Legends and as much as metadata fields as possible
- o Allows remote resource filtering and exposure to the catalogue



- o Improved stability on harvesting
- o Support for more endpoints, WMS, ArcGIS REST, GeoNode OWS APIs
- o **Allow GeoServer WMS CASCADE support for unsupported projections**

Import resources
https://server.arcgisonline.com/arcgis/rest/services/world_imagery/MapServer

Manage

Service rescaned Re-scan Service for new Resources

Name	Description
World Imagery	World Imagery
Low Resolution 15m Imagery	Low Resolution 15m Imagery
High Resolution 60cm Imagery	High Resolution 60cm Imagery
High Resolution 30cm Imagery	High Resolution 30cm Imagery
Citations	Citations

5 resources can be imported

Metadata Detail, Editing Tools, View Layer, Download Metadata, Legend, Clear Filter, Back to service details, Import Resources

GetFeatureInfo Templating For GeoNode

Metadata for Test Get Feature Info Templates

Check Schema mandatory fields
64 %

Basic Metadata Location and Licenses Optional Metadata Dataset Attributes

1 2 3 4

Use a custom template? Off

Attribute	Label	Description	Display Order
fid			1
the_geom			2
attr_type	Type		3
attr_description	Description		4
attr_value	Value		5

Label
URL
Image
Video (mp4)
Video (ogg)
Video (webm)
Video (3gp)
Video (flv)

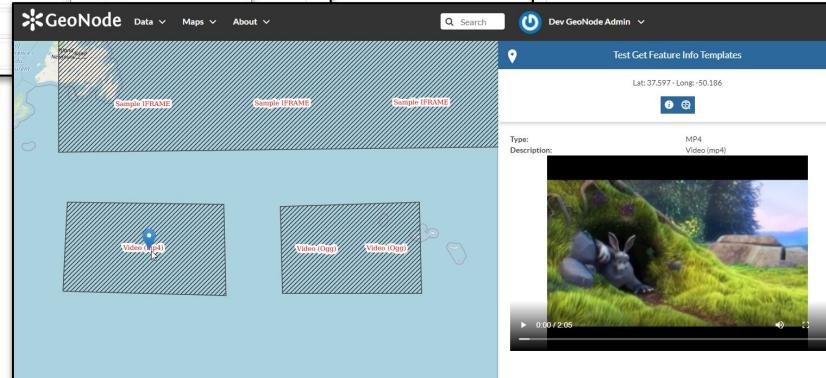
Basic Metadata Location and Licenses Optional Metadata Dataset Attributes

Use a custom template? On

File Edit View Insert Format Tools Table Help

Test HTML Template

Return to Layer << Back Update



TinyMce wysiwyg editor for metadata fields

The diagram illustrates the process of publishing a styled description from a local editor to a public metadata record.

Left Panel (Local Editor): A screenshot of a TinyMCE editor interface. It shows a red header bar labeled "Mandatory". Below it, a circular icon with the number "2" is followed by the text "Location and Licenses". The main content area contains a "Title" field with the value "swamp", an "Abstract" section with a rich text toolbar, and a text area containing the styled description "A styled description." This text area is highlighted with a red border. At the bottom, there is a status bar with the text "3 WORDS POWERED BY TINY".

Right Panel (Public Record): A screenshot of a GeoNode metadata record for a dataset titled "swamp". The record includes the following fields:

- Title:** swamp
- License:** Not Specified
- Abstract:** A styled description. (This field is also highlighted with a red border)
- Publication Date:** Nov. 23, 2020, 2:05 p.m.
- Type:** Vector Data
- Keywords:** features , swamp
- Regions:** Global
- Responsible:** tschoenbuchner

Bottom Navigation: A blue arrow points from the local editor to the public record. Below the panels are three buttons: a brown button with a question mark, a light blue button with the text "GeoSolutions", and a green button with the text "3.1".

Support for more media-types on documents

The screenshot shows the GeoNode interface for uploading documents. At the top, there is a navigation bar with links for 'Data', 'Maps', and 'About'. On the right, there is a search bar and a user profile for 'Toni Schönbuchner'. Below the navigation bar, the main title is 'Upload Documents' with a 'Explore Documents' button. A list of 'Allowed document types:' is provided, including various file extensions such as .txt, .log, .doc, .docx, .ods, .odt, .slid, .qml, .xls, .xlsx, .xml, .bm, .bmp, .dwg, .dxr, .fif, .gif, .jpg, .jpeg, .png, .tif, .tiff, .pbm, .odp, .ppt, .pptx, .pdf, .tar, .tgz, .rar, .gz, .7z, .zip, .aif, .aifc, .aiff, .au, .mp3, .mpga, .wav, .afl, .avi, .avs, .fli, .mp2, .mp4, .mpg, .ogg, .webm, .3gp, .flv, .vdo. The form fields for 'Title' (name by which the cited resource is known), 'File' (Datei auswählen - Keine ausgewählt), 'URL' (The URL of the document if it is external.), and 'Link to' are visible. To the right, there is a 'Permissions' section with dropdown menus for 'Who can view it?' (Anyone selected) and 'Who can download it?'. Buttons for 'Choose users...' and 'Choose groups...' are also present.

GeoNode Data Maps About

Search Toni Schönbuchner

Upload Documents

Explore Documents

Allowed document types:

.txt .log .doc .docx .ods .odt .slid .qml .xls .xlsx .xml .bm .bmp .dwg .dxr .fif .gif .jpg .jpeg .png .tif .tiff .pbm .odp .ppt .pptx .pdf .tar
.tgz .rar .gz .7z .zip .aif .aifc .aiff .au .mp3 .mpga .wav .afl .avi .avs .fli .mp2 .mp4 .mpg .ogg .webm .3gp .flv .vdo

Title:
name by which the cited resource is known

File:
Datei auswählen Keine ausgewählt

URL:
The URL of the document if it is external.

Link to:

Permissions

Who can view it?

Anyone

The following users:
Choose users...

The following groups:
Choose groups...

Who can download it?

?

GeoSolutions

3.1

GeoNode

QGIS Desktop 3.x+ OAuth2 auth integration

The image shows two dialog boxes side-by-side. On the left is the 'Modify WFS Connection' dialog under 'Connection Details'. It has fields for 'Name' (GeoNode Local) and 'URL' (http://localhost:8000/gs/ows). A red box highlights the URL field, and a red arrow points from it to the 'Authentications' tab on the right. The 'Authentications' tab shows a dropdown set to 'GeoNode Local OAuth2 (OAuth2)' and a '+' button highlighted with a red box. A red arrow points from this button to the 'Configurations' section below, which contains the text: 'Configurations store encrypted credentials in the QGIS authentication database.' On the right is the 'Authentication' configuration dialog. It shows a 'Name' field (GeoNode Local OAuth2), 'Grant Flow' (Authorization Code), and several URLs: Request URL (http://localhost:8000/o/authorize/), Token URL (http://localhost:8000/o/token/), Refresh Token URL (http://localhost:8000/o/token/), and Redirect URL (http://127.0.0.1: 7070/qgis-client). A red box highlights the Redirect URL field. Below these are fields for Client ID (Jrchz2pPY3ekmznmgUTYrs9gcZgoV20YPSvqAV), Client Secret (redacted), Scope (openid write), and API Key (Optional). Under 'Advanced', there is a checked checkbox for 'Persist between launches' and settings for 'Access Method' (Header) and 'Request Timeout' (30 seconds). A note at the bottom states: 'Note: Saving writes directly to authentication database.'

https://docs.geonode.org/en/master/usage/other_apps/qgis/index.html?highlight=qgis



RTL Support

- For RTL languages like Arabic

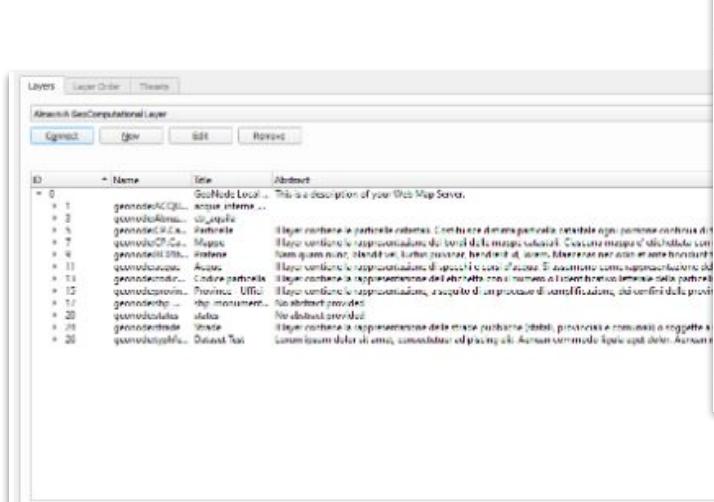
The screenshot shows the GeoNode application interface with Right-to-Left (RTL) language support. The top navigation bar includes links for Toni Schönbuchner, ابحث (Search), حول (About), خرائط (Maps), البيانات (Data), تحميل البيانات (Download Data), and the GeoNode logo. The main title "تصفح التطبيقات" (View Applications) is displayed in Arabic. Below it, a message states "3084 طبقات وجدت" (3084 layers found). The application lists two datasets:

- geonode_master_data**: A vector layer from Nov 2020 30 by vinhpt. It has 0 stars, 0 reviews, and 1 download. The description includes Arabic text: "إنشأء خريطة" (Create map).
- Global administrative boundaries level 2**: A vector layer from Nov 2020 29 by ktm. It has 0 stars, 0 reviews, and 4 downloads. The description includes Arabic text: "إنشأء خريطة" (Create map) and "نهاية هي متصل على الانترنت" (The end is connected to the internet).

On the right side, there is a sidebar titled "Selection" with the message "No list items selected. Use the .selection fields to add". It also includes filters for "مسح مرجعيات" (Clear references), "رس" (rtl), "ابحث" (Search), "الكلمات الدالة" (Keywords), " نوع" (Type), "Raster Layer" (523), "Vector Layer" (2275), "Vector Temporal Serie" (17), "Remote Layer" (286), and "الملفات" (Files). The bottom of the sidebar shows pagination: 215 / 31 / 151.

WFS-T GeoFence rules respect edit permissions

- Important when using GeoNode with QGIS



GeoFence Data Rules

Configure data rules for the internal GeoFence server.

- [Add new rule](#)
- [Remove selected rules](#)

<<	<	1	2	3	4	5	>	>>	Ergebnisse 1 bis 25 (von 36.040 Objekten)	Search
P	R	Role	User	Service	Request	Workspace	Layer	Access		
<input type="checkbox"/>	0	*	ktm	*	*	remoteWorkspace	geonode:_01_provincias	ALLOW		
<input type="checkbox"/>	1	*	ktm	WPS	*	remoteWorkspace	geonode:_01_provincias	ALLOW		
<input type="checkbox"/>	2	*	*	WFS	GETFEATUREWITHLOCK	geonode	Boundary_State0	DENY		
<input type="checkbox"/>	3	*	*	WFS	LOCKFEATURE	geonode	Boundary_State0	DENY		
<input type="checkbox"/>	5	*	admin	WMS	*	remoteWorkspace	geonode:aep_2015_rurale_madagascar	ALLOW		
<input type="checkbox"/>	15	*	emeadows	WMS	*	remoteWorkspace	1	ALLOW		
<input type="checkbox"/>	16	*	emeadows	GWC	*	remoteWorkspace	1	ALLOW		
<input type="checkbox"/>	17	*	emeadows	WCS	*	remoteWorkspace	1	ALLOW		
<input type="checkbox"/>	18	*	emeadows	WPS	*	remoteWorkspace	1	ALLOW		
<input type="checkbox"/>	19	*	emeadows	*	*	remoteWorkspace	1	ALLOW		

Revised/enhanced approval workflow

- The “unpublished” resources will be hidden to anonymous users only.
The registered users will be still able to access the resources
- The “unpublished” resources will remain hidden to users if the permission will be explicitly removed
- During the upload, whenever the advanced workflow is enabled, the owner’s Groups are automatically allowed to access the resource, even if the “anonymous” flag has been disabled.
- During the upload, “managers” of the owner’s Groups associated to the resource, are always allowed to edit the resource, the same as they are admin for that resource
- “managers” of the owner’s Groups associated to the resource are allowed to “publish” also the resources, not only to “approve” them

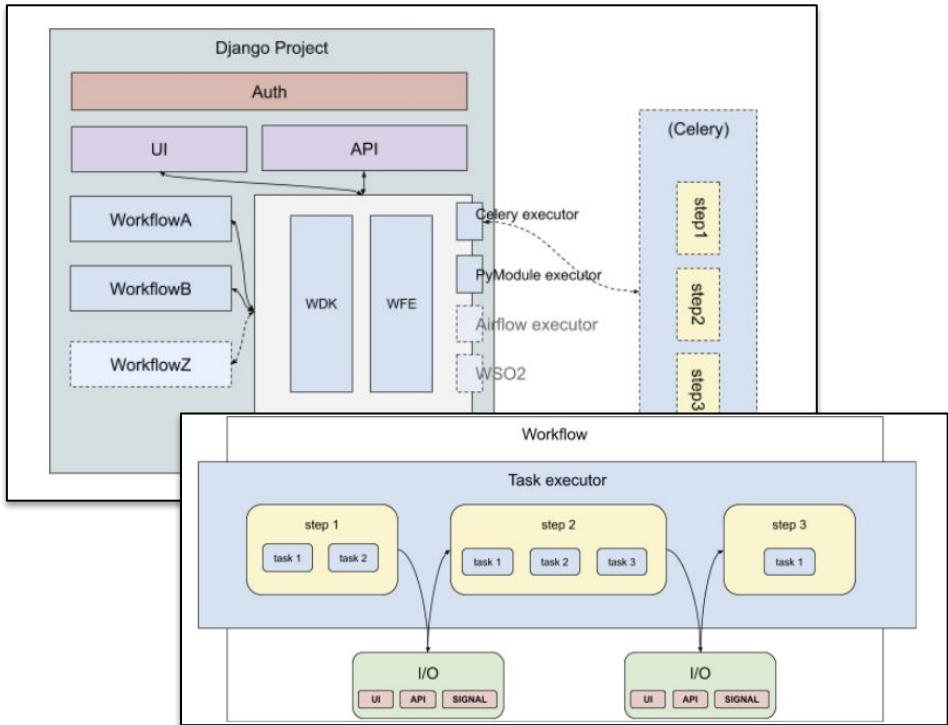
Fixes and Improvements

- ✓ Well known 2.10 issues:
- ✓ Added "DOI" field to base metadata
- ✓ Extend resource search APIs with abstract and purpose fields
- ✓ Improved Remote Services and Metadata Fetch
- ✓ Improved Message Inbox and Messaging & Notification System
- ✓ Improved Thumbnails and Thumbnails Upload / edit before posting
- ✓ Improved Management Commands
- ✓ and many more...

Where do we go
from here?
2021, 2022, ...

Integrated Workflow

- o We lack the ability to execute a series of asynchronous actions as part of an upload
- ✓ Decouple upload workflow from GeoNode
- ✓ Make use of a workflow engine to expose upload APIs (e.g. <https://github.com/geosolutions-it/django-wfe>)
- ✓ Allow the users to define more complex upload workflows in order to perform {pre/post}-processing of geospatial datasets
 - e.g:
 - Optimize GeoTIFFs before ingestion
 - Being able to provide DB storages connection params
 - ...



API v2 REST pluggable module

- o What if I want to consume GeoNode from third party apps or a SPA client?
- ✓ A clean REST API for CRUD operations on GeoNode model would be nice!
- ✓ Cleaner Authentication support - Oauth2 but also proper API keys management
- ✓ OpenAPI 3.0 specification, for documentation and versioning
- ✓ GNIP-79: GeoNode REST APIs (v2)

REST API based on DRF v2 (Tastypie, v1)

The screenshot shows a dual-pane interface. On the left, a terminal window displays the JSON schema for the API, starting with a timestamp and URLs for various resources like base, categories, documents, featured, group_profile, groupcategory, groups, and keywords. On the right, a browser window titled 'Django REST framework' shows the 'Api' documentation page. It includes a 'GET /api/v2/' endpoint entry with details such as HTTP 200 OK, Allow: GET, HEAD, OPTIONS, Content-Type: application/json, and Vary: Accept. Below this, a large JSON object lists 'base_resources', 'documents', 'geoservices', 'geostories', 'groups', 'layers', 'maps', and 'users' with their respective URLs.

```
// 2020-01-30 16:24:58
// https://master.demo.geonode.org/api/
{
    "base": {
        "list_endpoint": "/api/base/",
        "schema": "/api/base/schema/"
    },
    "categories": {
        "list_endpoint": "/api/categories/",
        "schema": "/api/categories/schema/"
    },
    "documents": {
        "list_endpoint": "/api/documents/",
        "schema": "/api/documents/schema/"
    },
    "featured": {
        "list_endpoint": "/api/featured/",
        "schema": "/api/featured/schema/"
    },
    "group_profile": {
        "list_endpoint": "/api/group_profile/",
        "schema": "/api/group_profile/schema/"
    },
    "groupcategory": {
        "list_endpoint": "/api/groupcategory/",
        "schema": "/api/groupcategory/schema/"
    },
    "groups": {
        "list_endpoint": "/api/groups/",
        "schema": "/api/groups/schema/"
    },
    "keywords": {
        "list_endpoint": "/api/keywords/",
        "schema": "/api/keywords/schema/"
    }
}
```

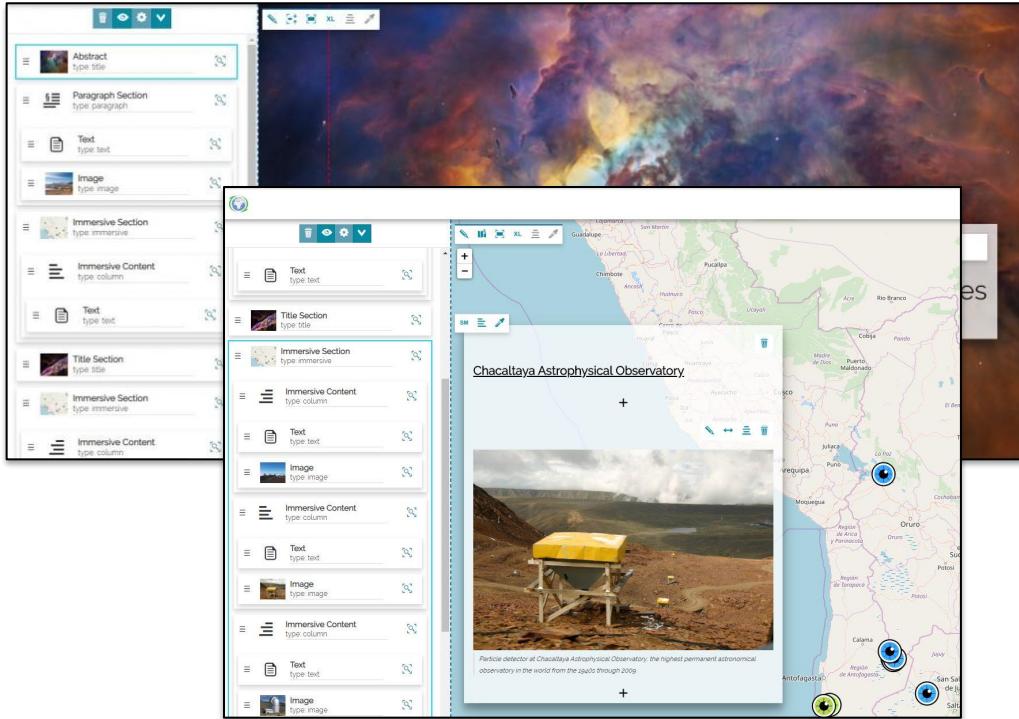
Concept of a generic abstract “App” model

- ✓ Manage and share "Geo Applications" similarly to the other GeoNode entities, such as Documents, Layers and Maps.
- ✓ Such Geo Applications could be any kind of object provided by a plugged in client library, which is not a Layer nor a Map. As an instance Dashboards, GeoStories, Charts, Geospatial Analysis and so forth.
- ✓ GNIP-78: GeoNode generic "Apps" model to include pluggable entities into the framework

The screenshot illustrates the GeoNode application interface. On the left, a sidebar menu includes 'Maps', 'Apps' (which is currently selected), and 'About'. Below this, a search bar and a 'Create New Apps' button are visible. The main content area is titled 'Explore Apps' and displays a list of found applications. Two items are listed: 'Satellite Imagery' and 'Teststory 2'. A red box highlights the 'Create New Apps' button. A dashed line connects this button to a larger, detailed view of the 'Satellite Imagery' application on the right. This detailed view shows a thumbnail image, the application name, its type (Geostory), a creation date (19 Oct 2020), and a preview of its content. A red box also highlights the 'Geostory' label under the application type.

GeoStory Integration

- o GeoSpatial Storytelling in GeoNode
- ✓ MapStore Plugin
- ✓ Reuse GeoNode Layers and Resources to build Story
- ✓ Images, Video, Maps and so on
- ✓ Integrated visual editor



GeoSolutions (?)
... (?)

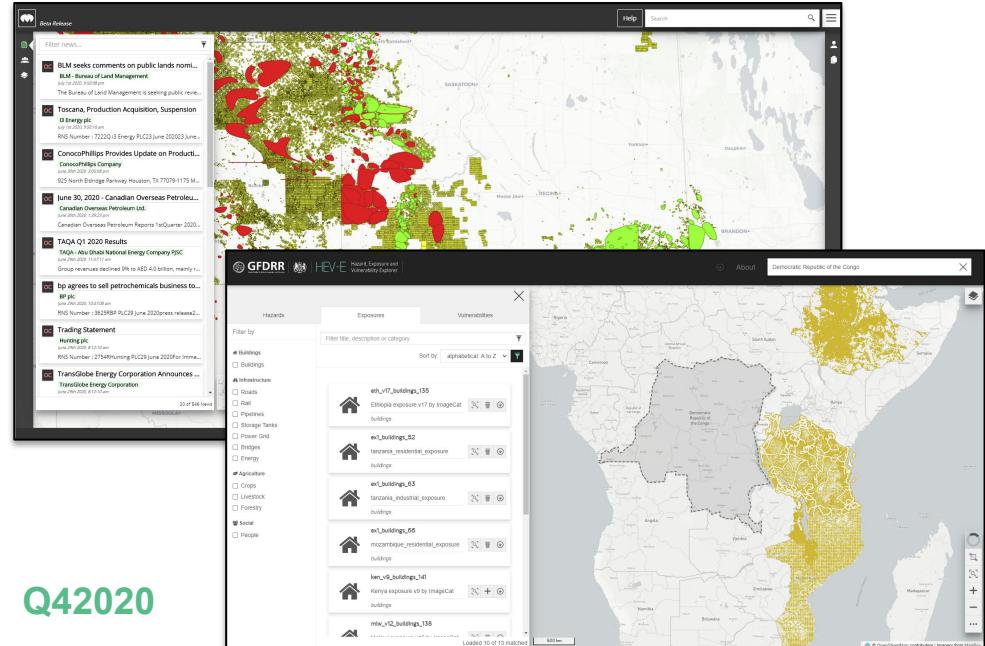
GeoSolutions

3.2

GeoNode

Single Page Application (SPA) for end users

- o GeoNode GUI looks “oldish” and cluttered
- ✓ MapStore based with improved layout
- ✓ Simplified UI for end users
- ✓ Improved UX with a clear distinction between end users and back-office functionalities
- ✓ Visual and functional separation between catalogue and dataviz functionalities
- ✓ Improved organization of tools, layered on multiple visual levels, depending on the user profile (end user, data owner, administrator)
- ✓ Charts, dashboards and other dataviz tools as first citizens



Q42020

... (?)

GeoSolutions

3.2

GeoNode

GNIP: GeoNode 4 (24 August 2017)

- Django
- Minimal core
- Behavior Driven Development
- Fresh Start
- Web UI Framework Agnostic
- API First & API Gateway
- Support for multiple data providers

<https://github.com/GeoNode/geonode-vision/blob/master/geonode-vision.md>

GNIP: GeoNode 4 (December 2020)

- ~~Fresh Start~~
- ~~Web UI Framework Agnostic~~
- API First & API Gateway
- A Frontend based on Mapstore (Geosolutions)
- A general blog like frontend (Thünen)
- An Updated Version of GeoNode Django based Frontend with Bootstrap 4
- Combine Docker compositions (SPX+main)
- Remove QGIS Server, Leaflet Hookset, ... ?
- Improved Testing with Circle CI
- [GeoApps & GeoStories](#)
- Clustering and High Availability
- [Improved/Modular Storage](#)
- [Improve Upload/Download](#)
- Let's open the discussion

Thanks