Cartoview

Apps for GeoNode

GeoNode Summit 2020
GIS Application Development Company established 2006

AHMED OSMAN

General Manager
What is CartoView?

A custom Django project for GeoNode
APPS for a Standard GeoNode

open source
What is CartoView?

Sync apps to all portals
Install App at Run-Time
Why CartoView?

Quickly Transform data to compelling Apps
Control over app content and presentation
Very easy to get started
Extensible to build and distribute your work
Why CartoView?

Our Goal is to get you started easy and fast with your GIS Experience

- Appstore to install and update
- GeoNode installer on windows
Installation

Install with Existing GeoNode

Install CartoView On Windows

Docker install

CartoView Project Template
Data Driven Web Apps

1. Register
2. Upload
3. Create Map
4. Create App

GeoNode

Content

Experience

Cartoview

open source

Data        >>>     Apps
Developer Experience

1. App Template on GitHub
2. Fork and Develop Apps
3. Write your code
4. Run on your own Server
5. Upload To App to Store

Make your app available to all portals
Administrator Experience

Django Admin

Cartoview

GeoServer
Admin Experience

App Management

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**Server Restart Required**

In order to have the effect of the recently installed apps please restart the server.

Please notice:

1. This may take several minutes
2. The server will drop all the connections and tasks during the restart
3. Ask the administrator to restart GeoNode Service if the app does not appear in the installed apps

Restart Server

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<table>
<thead>
<tr>
<th>App Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMS</td>
<td>Content Management System for Cartoview</td>
</tr>
<tr>
<td>ArcGIS Importer</td>
<td>Cartoview app to import arcgis feature layer into PostGIS Layer and add to geoserver and geonode.</td>
</tr>
<tr>
<td>Data Manager</td>
<td>Data Manager</td>
</tr>
<tr>
<td>Swipe</td>
<td>Swipe Tool</td>
</tr>
</tbody>
</table>

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Search for an App

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Reorder Installed Apps
Admin Experience

App Management

- **Point In Polygon**
  - Computes statistics for the distribution of a given attribute in a set of polygonal zones for point layers & save the result in a new geonode/geoserver... **Full Description**
  - Ratings: 5/5
  - Latest Version: v1.6.5
  - Installed Version: v1.6.5
  - Installations: 199
  - **Cartologic**

- **Heatmap Styler**
  - Create heatmap style for point layers. Creates geoserver SLD. The SLD will be published in the geonode layer info page
  - Ratings: 0/5
  - Latest Version: v1.4.2
  - Installed Version: v1.4.2
  - Installations: 191
  - **Cartologic**

- **Categorized Thematic Styler**
  - Create layer style by category. Creates geoserver SLD. The SLD will be published in the geonode layer info page
  - Ratings: 0/5
  - Latest Version: v1.4.2
  - Installed Version: v1.4.2
  - Installations: 200
  - **Cartologic**

- **Graduated Thematic Styler**
  - Create layer color range for graduated value style. Creates geoserver SLD. The SLD will be published in the geonode layer info page
  - Ratings: 0/5
  - Latest Version: v1.4.2
  - Installed Version: v1.4.2
  - Installations: 175
  - **Cartologic**

- **Dashboard**
  - Create a custom dashboard with a variety of components: maps, charts, summaries, and entity details. Dashboards are powered by geoserver WPS.
  - Ratings: 5/5
  - Latest Version: v1.4.9
  - Installed Version: v1.4.9
  - Installations: 817
  - **Cartologic**
User Experience

APP Launcher Page

Multi Instance

Single Function

Cartoview
User Experience

GeoNode Resources

Maps/Layers/Documents/APPs
User Experience

Map Viewers

BasicViewer

Select Map

General
Access Configuration
Bookmarks
GeoCoding
Navigation Tools

Search by title

My Maps
All Maps

Indiana Census County
Indiana Census County
owner: admin
Details

Indiana Census
Indiana County Census
owner: admin
Details

Hydro Power Dams
owner: admin
Details

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User Experience

Map Viewers

BasicViewer

Access Configuration

Who can view (optional)
Select Users or empty for anyone

Who can change metadata (optional)
Select Users or empty for owner(you) only

Who can delete (optional)
Select Users or empty for owner(you) only

Who can change configuration (optional)
Select Users or empty for owner(you) only

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BasicViewer

Bookmarks

Select Map
- General
- Access Configuration
- Bookmarks
- GeoCoding
- Navigation Tools

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App
Groups
Map
Viewers
Analysis
Content Management
App
Groups
Data Management
Field Work
Report
User Experience
User Experience
Gallery
Create single responsive page catalog with content, maps, layers, apps More

Blog
Create a blog page with apps, publish in your app(s) as a blog entry. More

Cartview DashBoard
Create dashboard with chart, summary, identify dashboard More

Data Management
GeoContext
collect XY Location and associate Attributes and Images. Work Field Cr More

Field Work
Categorized Thematic Stylers
Create Layer style by category. Creates crossover SLD. The SLD will be More

Summary Viewer
Summarizes the attributes of features specified. More

Heatmap Stylers
Create heatmap style for point layers. Creates crossover SLD. The SLD More

Map Viewers
Feature List Viewer
Map and configure multiple feature list side by side. Map and feature list More

Analysis
WebApp Builder
Configure a map with multiple components, based on Boundless SDK More

App Groups
Buffer Analysis Tool
Takes a feature collection and applies a buffer to the feature. The More

Content Management
Point in Polygon
Computes statistics for the distribution of a given attribute in a set More

Field Work
Time Data Viewer
Prepares an interactive view of time-enabled layers. Requires More

User Experience
User Experience
User Experience Analysis

Point in Polygon

Computes statistics for the distribution of a given attribute...

Select Point Layer
Select Statistics Attribute
Select Polygon Layer
Output Layer Name
Results

Select Attribute
- fid(xsd:int)
- NumStories(xsd:long)
- Cost(xsd:double)
- BackupPower(xsd:long)
- NumBeds(xsd:long)
- OBJECTID_1(xsd:long)

Tip:
Numeric attributes are only available for this step

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Point in Polygon

Point Layer: IndianaMedicalCareFacilities
Attribute: NumBeds
Polygon Layer: IndianaCensusCounty

Select Point Layer
Select Statistics Attribute
Select Polygon Layer
Output Layer Name

Process Successfully Completed

The result of this process has been published as a portal layer. You can view the result and further configure the properties and set permission of the resulting Layer: IndianaCountyFacilityBeds
User Experience

Map

Viewers

Analysis

App

Groups

Data Management

Field Work

Report

Content Management

Manage

Data

Manage

User Experience

User Experience

Map and configurable feature list side by side. More

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Create dashboard with chart, summary, identify dashboard More

Cartview Info Viewer
Summarizes the attributes of features in a specific operational More

GeoTask Manager
GeoTask Manager Field WorkForce and task management application with Geo Task Manager. More

GeoContacts
GeoContacts collect XY Location and associate Attributes and Images. More

Blog

Create a blog page with apps, publish in your own app as a blog entry. More

Gallery
Create a responsive, single page catalog with content, maps, layers, apps. More

News
Publish and real news feeds.

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<table>
<thead>
<tr>
<th>Title</th>
<th>Dashboard Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>About this dashboard...</td>
</tr>
</tbody>
</table>

Create a custom dashboard with a variety of components; More

[Explore] [Create new]
User Experience
Analysis

Dashboard
Create a custom dashboard with a variety of components; More

Explore Create new

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### Uploaded List

<table>
<thead>
<tr>
<th>Layer Name</th>
<th>Layer Type</th>
<th>Feature Count</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>irrigation_dams</td>
<td>Point</td>
<td>100</td>
<td>PUBLISH NEW, UPDATE EXISTING</td>
</tr>
<tr>
<td>hydropower_dams</td>
<td>Point</td>
<td>40</td>
<td>PUBLISH NEW, UPDATE EXISTING</td>
</tr>
</tbody>
</table>

Uploaded At: 12/5/2020, 6:24:40 PM
Owner: admin
Demographics/Census_Counties (MapServer)

View In:  ArcGIS JavaScript  ArcGIS Online Map Viewer  ArcGIS Earth  ArcMap  ArcGIS Pro

View Footprint In:  ArcGIS Online Map Viewer

Service Description: County Census Data, 2000 (1:24,000) - Shows counties and contains 2000 U.S. Census data regarding Census 2000 SF1 tables.

Map Name: Layers

Legend

All Layers and Tables

Layers:
  * Census Counties (0)

Description:

Copyright Text: U.S. Census Bureau

Spatial Reference: 26916 (26916)

Single Fused Map Cache: true

Tile Info:
  * Height: 512
  * Width: 512
  * DPI: 96
  * Levels of Detail: 12
    * Level ID: 0 [Start Tile, End Tile]
      * Resolution: 661,4596562526459
      * Scale: 2500000
    * Level ID: 1 [Start Tile, End Tile]
      * Resolution: 661,4596562526459
      * Scale: 2500000

https://maps.indiana.edu/arcgis/rest/services/Demographics/Census_Counties/MapServer
ArcGIS Importer

*Layer URL*

Layer URL Example: https://xxx/ArcGIS/rest/services/xxx/xxx/MapServer/0

Open

Import Layer

Result: your layer title is census_counties and url is https://summit2020.cartoview.net/layers/geonode:census_counties

Layer Permissions

Who can view it?

- [x] Anyone
- The following users:
  - Choose users...
- The following groups:
  - Choose groups...

Who can download it?

Who can change metadata for it?

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

http://portal.arabspatial.org/

http://mapsaudi.com/

https://nafcoast.org/
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