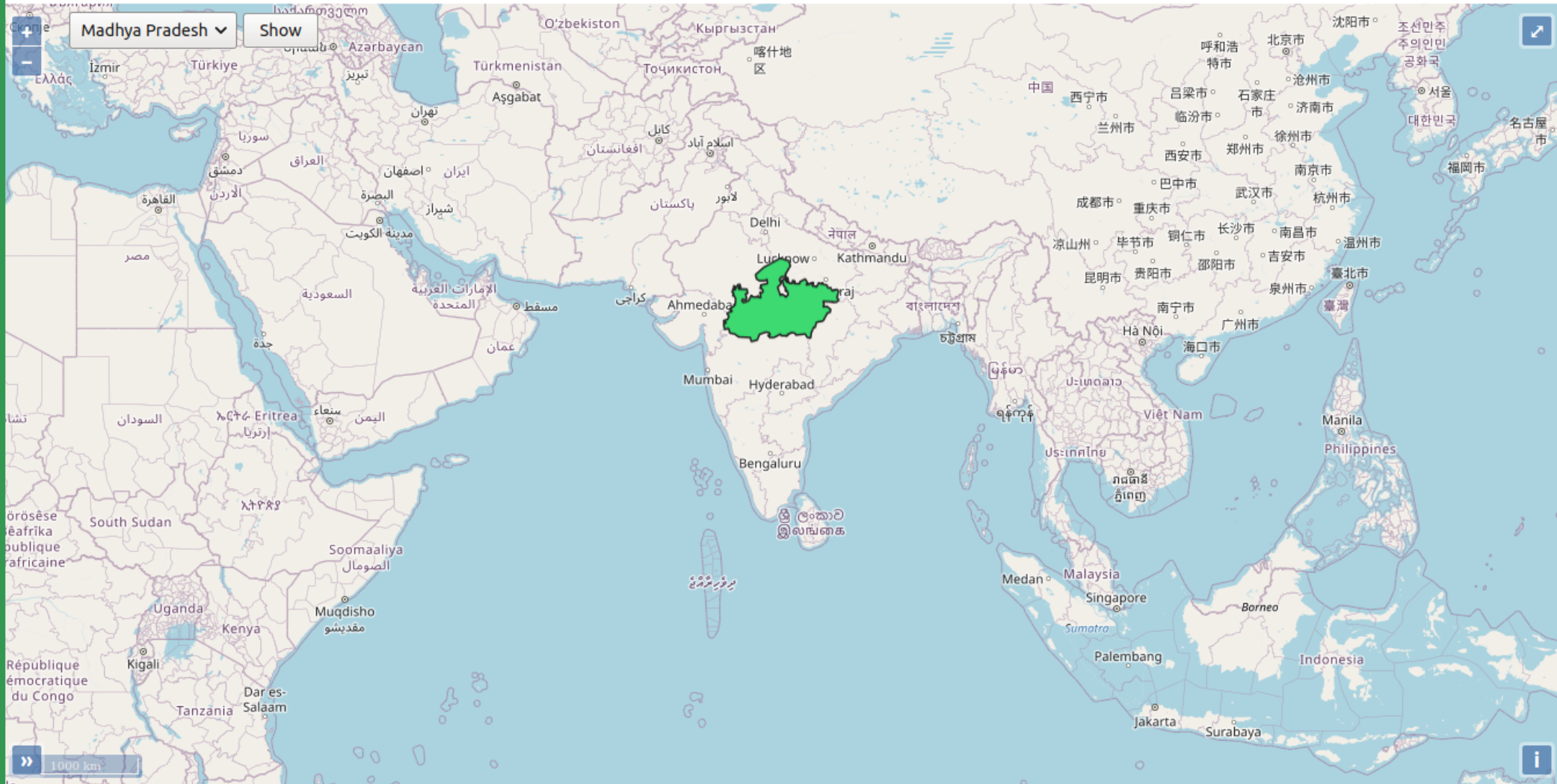
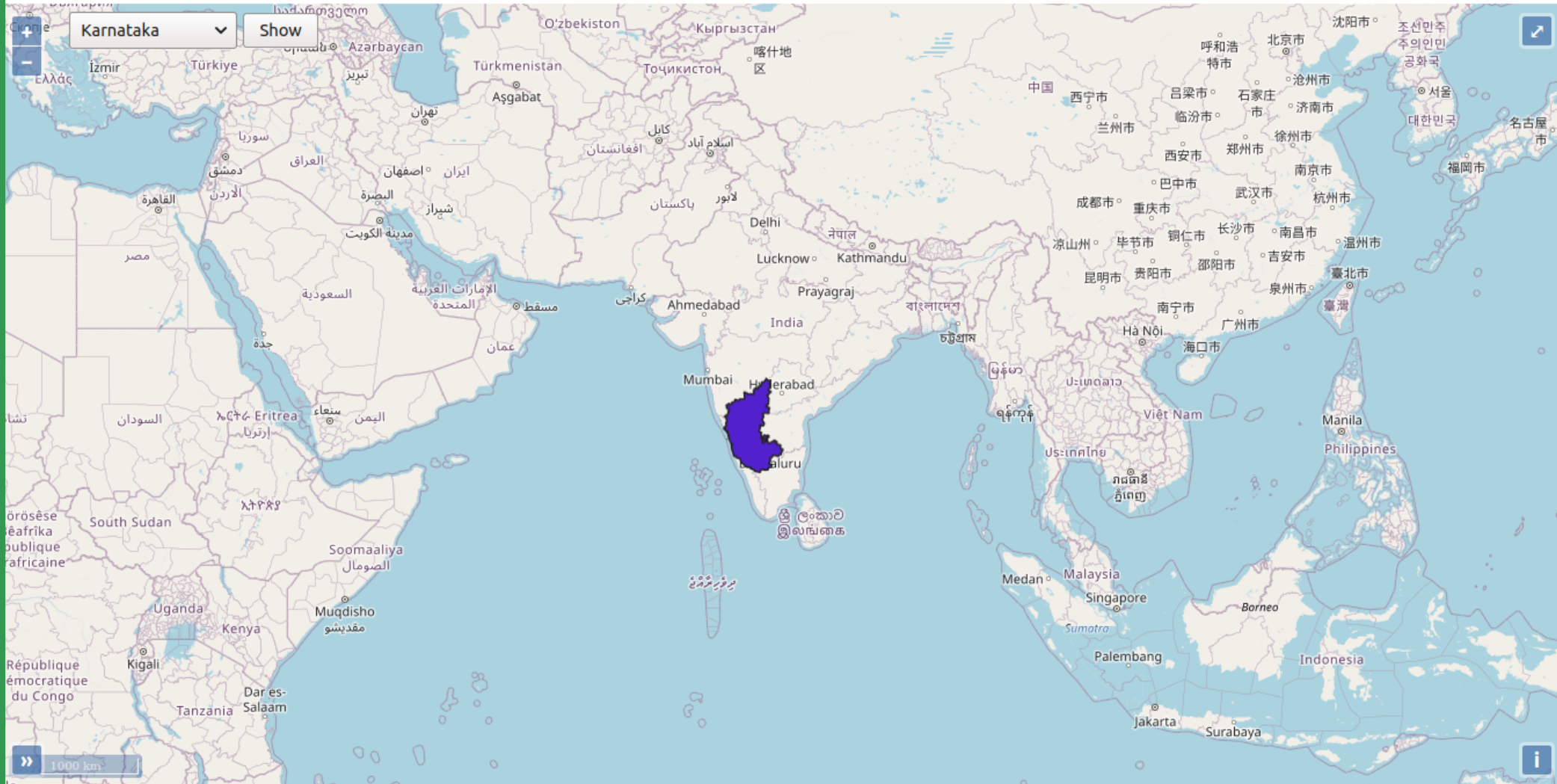


Introduction to WebGIS

Final output




Final output



Publishing data in Geoserver

Publishing data in Geoserver

http://localhost:8080/geoserver



Username password Remember me

Welcome

Welcome

This GeoServer belongs to [The Ancient Geographers](#).

This GeoServer instance is running version **2.9.0**. For more information please contact the [administrator](#).

Service Capabilities

WCS

1.1.0
1.1.1
1.1
1.0.0
2.0.1

WFS

1.0.0
1.1.0
2.0.0

WMS

1.1.1
1.3.0

TMS

1.0.0

WMS-C

1.1.1

WMTS

1.0.0

Username : admin

Password : geoserver

Publishing data in Geoserver



Logged in as admin.

Logout

Welcome

Welcome

This GeoServer belongs to [The Ancient Geographers](#).

26 Layers	+ Add layers
13 Stores	+ Add stores
10 Workspaces	+ Create workspaces

The master password for this server has not been changed from the default. It is **highly** recommended that you change it now. [Change it](#)

The administrator password for this server has not been changed from the default. It is **highly** recommended that you change it now. [Change it](#)

Strong cryptography available

This GeoServer instance is running version **2.9.0**. For more information please contact the [administrator](#).

Service Capabilities

WCS

1.1.0
1.1.1
1.1
1.0.0
2.0.1

WFS

1.0.0
1.1.0
2.0.0

WMS

1.1.1
1.3.0

TMS

1.0.0

WMS-C

1.1.1

WMTS

1.0.0

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- Raster Access

Tile Caching

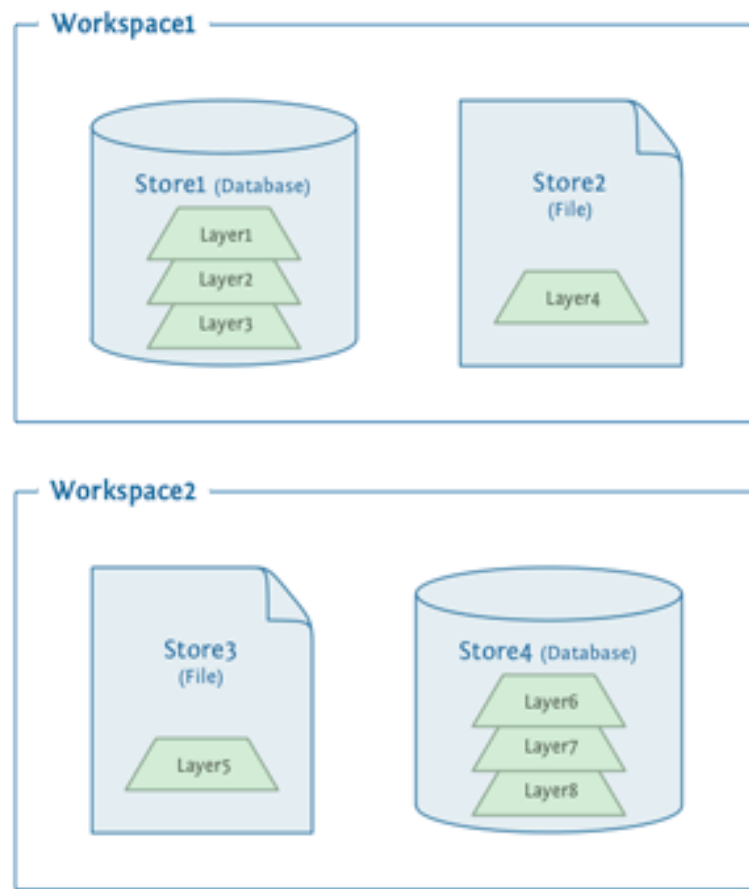
- Tile Layers
- Caching Defaults
- Gridsets
- Disk Quota
- BlobStores

Security

- Settings

Workspace

Workspace is a container which organizes items in GeoServer & used to group similar layers together.




Workspaces

Manage GeoServer workspaces

 [Add new workspace](#)





 [Remove selected workspace\(s\)](#)

<< < 1 > >> Results 1 to 10 (out of 10 items)







<input type="checkbox"/>	Workspace Name	Default
<input type="checkbox"/>	cite	
<input type="checkbox"/>	crda	
<input type="checkbox"/>	it.geosolutions	
<input type="checkbox"/>	nurc	
<input type="checkbox"/>	rjy	
<input type="checkbox"/>	sde	
<input type="checkbox"/>	sf	
<input type="checkbox"/>	tiger	
<input type="checkbox"/>	timbaktu	
<input type="checkbox"/>	topp	

<< < 1 > >> Results 1 to 10 (out of 10 items)

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Tile Caching

-  Tile Layers
-  Caching Defaults
-  Gridsets
-  Disk Quota
-  BlobStores







Security

Create workspace





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Tile Caching

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Security

-  Settings
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-  Passwords

Edit Workspace

Edit existing workspace

Name





Namespace URI

The namespace uri associated with this workspace

 Default Workspace**Settings**

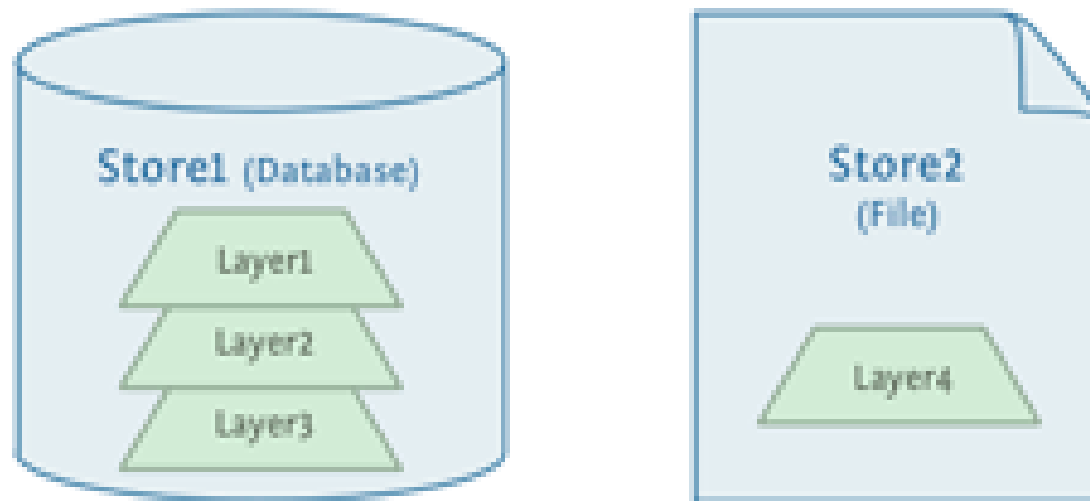
Enabled

[Save](#)[Cancel](#)**Services**

-  WCS
-  WFS
-  WMTS
-  WMS

Store

Store connects to a data source that contains raster or vector data. A data source can be a file or group of files, a table in a database, a single raster file, or a directory (for example, a Vector Product Format library).



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Security

Stores

Manage the stores providing data to GeoServer

[Add new Store](#)

Remove selected Stores

<< < 1 > >> Results 1 to 13 (out of 13 items)

<input type="checkbox"/>	Data Type	Workspace	Store Name	Type	Enabled?
<input type="checkbox"/>		nurc	arcGridSample	ArcGrid	
<input type="checkbox"/>		nurc	img_sample2	WorldImage	
<input type="checkbox"/>		nurc	mosaic	ImageMosaic	
<input type="checkbox"/>		tiger	nyc	Directory of spatial files (shapefiles)	
<input type="checkbox"/>		crda	postGIS	PostGIS	
<input type="checkbox"/>		rjy	postGIS	PostGIS	
<input type="checkbox"/>		timbaktu	postGIS	PostGIS	
<input type="checkbox"/>		timbaktu	sentinal_timbaktu	GeoTIFF	
<input type="checkbox"/>		sf	sf	Directory of spatial files (shapefiles)	
<input type="checkbox"/>		sf	sfdem	GeoTIFF	
<input type="checkbox"/>		topp	states_shapefile	Shapefile	
<input type="checkbox"/>		topp	taz_shapes	Directory of spatial files (shapefiles)	
<input type="checkbox"/>		nurc	worldImageSample	WorldImage	








<< < 1 > >> Results 1 to 13 (out of 13 items)

Create Vector Data Source







New data source

Choose the type of data source you wish to configure



Vector Data Sources

-  [Directory of spatial files \(shapefiles\)](#) - Takes a directory of shapefiles and exposes it as a data store
-  [GeoPackage](#) - GeoPackage
-  [PostGIS](#) - PostGIS Database
-  [PostGIS \(JNDI\)](#) - PostGIS Database (JNDI)
-  [Properties](#) - Allows access to Java Property files containing Feature information
-  [Shapefile](#) - ESRI(tm) Shapefiles (*.shp)
-  [Web Feature Server \(NG\)](#) - Provides access to the Features published a Web Feature Service, and the ability to perform transactions on the server (when supported / allowed).





Raster Data Sources

-  [ArcGrid](#) - ARC/INFO ASCII GRID Coverage Format
-  [GeoPackage \(mosaic\)](#) - GeoPackage mosaic plugin
-  [GeoTIFF](#) - Tagged Image File Format with Geographic information
-  [Gtopo30](#) - Gtopo30 Coverage Format
-  [ImageMosaic](#) - Image mosaicking plugin
-  [WorldImage](#) - A raster file accompanied by a spatial data file







Other Data Sources

-  [WMS](#) - Cascades a remote Web Map Service
-  [WMTS](#) - Cascades a remote Web Map Tile Service





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Tile Caching

-  [Tile Layers](#)
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Security

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Create Vector Data Source

New Vector Data Source

Add a new vector data source

PostGIS
PostGIS Database

Basic Store Info

Workspace *

lsi

Data Source Name *

lsi

Description

Enabled

Connection Parameters

host *

localhost

port *

5432

database

lsi

schema

public

user *

postgres

passwd

Namespace *

lsi

Expose primary keys

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Existing Tables

New Layer

Add a new layer

You can create a new feature type by manually configuring the attribute names and types. [Create new feature type...](#)
On databases you can also create a new feature type by configuring a native SQL statement. [Configure new SQL view...](#)
Here is a list of resources contained in the store 'lsl'. Click on the layer you wish to configure

<< < 1 > >> Results 1 to 4 (out of 4 items)

Published	Layer name	Action
	ind_districts	Publish
	ind_points	Publish
	ind_states	Publish
	water	Publish

<< < 1 > >> Results 1 to 4 (out of 4 items)

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Edit Layer

Edit layer data and publishing

Isi:ind_states

Configure the resource and publishing information for the current layer

- Data** **Publishing** **Dimensions** **Tile Caching**

Edit Layer

Basic Resource Info

Name

- Enabled
 Advertised

Title

Abstract

Keywords

Current Keywords

Remove selected

New Keyword

Vocabulary

Publish Layer

Tools

No metadata links so far

Add link

Note only FGDC and TC211 metadata links show up in WMS 1.1.1 capabilities

Data links

No data links so far

Add link

Coordinate Reference Systems

Native SRS

EPSG:4326

EPSG:WGS 84...

Declared SRS

EPSG:4326

Find...

EPSG:WGS 84...

SRS handling

Force declared

Bounding Boxes

Native Bounding Box

Min X

Min Y

Max X

Max Y

68.186248992297; 6.7559528996066; 97.415292668022; 37.078268059623;

[Compute from data](#)

[Compute from SRS bounds](#)

Lat/Lon Bounding Box

Min X

Min Y

Max X

Max Y

68.186248992297; 6.7559528996066; 97.415292668022; 37.078268059623;

[Compute from native bounds](#)

Curved geometries control

Linear geometries can contain circular arcs

Linearization tolerance (useful only if your data contains curved geometries)

Feature Type Details

Property Type Mappable Min/Max Occurrences

Publish Layer

68.186248992297, 6.7559528996066, 97.415292668022, 37.078268059623

[Compute from data](#)

[Compute from SRS bounds](#)

Lat/Lon Bounding Box

Min X	Min Y	Max X	Max Y
68.186248992297	6.7559528996066	97.415292668022	37.078268059623

[Compute from native bounds](#)

Curved geometries control

Linear geometries can contain circular arcs

Linearization tolerance (useful only if your data contains curved geometries)

Feature Type Details

Property	Type	Nullable	Min/Max Occurrences
the_geom	MultiPolygon	true	0/1
sid	BigDecimal	true	0/1
name	String	true	0/1
area	BigDecimal	true	0/1

[Reload feature type](#) ⚠...

Restrict the features on layer by CQL filter

[Save](#)

[Cancel](#)

Layer Preview



Logged in as admin. [Logout](#)

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- [Tile Layers](#)
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- [BlobStores](#)

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Layer Preview

List of all layers configured in GeoServer and provides previews in various formats for each.

<< < 1 > >> Results 1 to 2 (out of 2 matches from 23 items)

Type	Title	Name	Common Formats	All Formats
	USA Population	topp:states	OpenLayers KML GML	Select one
	ind_states	Isi:ind_states	OpenLayers KML GML	Select one

<< < 1 > >> Results 1 to 2 (out of 2 matches from 23 items)

Published layer



Result

MS version: 1.1.1 Tiling: Single tile Antialias: Full Format: PNG 24bit Styles: Default Width/Height: Auto Auto

Filter: CQL [Apply](#) [Reset](#)



Result

MS version: 1.1.1 ▾ Tiling: Single tile ▾ Antialias: Full ▾ Format: PNG 24bit ▾ Styles: Default ▾ Width/Height: Auto ▾ Auto ▾

Filter: FeatureID ▾ ind_states.26 [Apply](#) [Reset](#)



Parameter based layer

New Layer

Add a new layer

Add layer from

- Choose One
- lsi:lsi
- nurc:arcGridSample
- nurc:img_sample2
- nurc:mosaic
- nurc:worldImageSample
- sf:sf
- sf:sfдем
- tiger:nyc
- topp:states_shapefile
- topp:taz_shapes

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New Layer

Add a new layer

Add layer from

You can create a new feature type by manually configuring the attribute names and types. [Create new feature type...](#)
On databases you can also create a new feature type by configuring a native SQL statement. [Configure new SQL view...](#)
Here is a list of resources contained in the store 'lsi'. Click on the layer you wish to configure

<< < 1 > >> Results 0 to 0 (out of 0 items)

Published	Layer name	Action
✓	ind_states	Publish again
	ind_districts	Publish
	ind_points	Publish
	water	Publish

<< < 1 > >> Results 0 to 0 (out of 0 items)

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Tile Caching

- Tile Layers
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Security

- Settings
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Edit SQL view

Update the definition of the SQL view and its metadata

View Name

SQL statement

```
select * from ind_states where name ilike '%x%'
```

SQL view parameters

[Guess parameters from SQL](#) [Add new parameter](#) [Remove selected](#)

<input type="checkbox"/>	Name	Default value	Validation regular expression
<input type="checkbox"/>	x	telangana	^[w\d\s]+\$

Escape special SQL characters

Attributes

Refresh Guess geometry type and srid

Name	Type	SRID	Identifier
id	Integer		<input type="checkbox"/>

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- GeoServer Logs
- Contact Information
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- WMS

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- Tile Layers
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- Settings
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- Passwords

Layer

- WMTS
- WMS

Settings

- Global
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Tile Caching

- Tile Layers
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Security

- Settings
- Authentication
- Passwords
- Users, Groups, Roles
- Data
- Services

Demos

Tools



SQL view parameters

[Guess parameters from SQL](#) [Add new parameter](#) [Remove selected](#)

<input type="checkbox"/>	Name	Default value	Validation regular expression
<input type="checkbox"/>	x	telangana	^[w\d\s]+\$

Escape special SQL characters

Attributes

[Refresh](#) Guess geometry type and srid

Name	Type	SRID	Identifier
id	Integer		<input type="checkbox"/>
the_geom	MultiPolygon	4326	<input type="checkbox"/>
sid	BigDecimal		<input type="checkbox"/>
name	String		<input type="checkbox"/>
area	BigDecimal		<input type="checkbox"/>

Save

Cancel

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Edit Layer

Edit layer data and publishing

Isi:query

Configure the resource and publishing information for the current layer

- Data** | Publishing | Dimensions | Tile Caching

Edit Layer

Basic Resource Info

Name

 Enabled Advertised

Title

Abstract

Keywords

Current Keywords

 [Remove selected](#)

New Keyword

Vocabulary

Data links

No data links so far

Add link

Coordinate Reference Systems

Native SRS

EPSG:4326 [EPSG:WGS 84...](#)

Declared SRS

EPSG:4326 [EPSG:WGS 84...](#)

SRS handling

Force declared

Bounding Boxes

Native Bounding Box

Min X	Min Y	Max X	Max Y
77.238991066484	15.833175518135	81.325340674205	19.916462020705

[Compute from data](#)

[Compute from SRS bounds](#)

Lat/Lon Bounding Box

Min X	Min Y	Max X	Max Y
77.238991066484	15.833175518135	81.325340674205	19.916462020705

[Compute from native bounds](#)

Curved geometries control

Linear geometries can contain circular arcs

Linearization tolerance (useful only if your data contains curved geometries)

Feature Type Details

Property	Type	Nullable	Min/Max Occurrences
id	Integer	false	1/1
the aeom	MultiPolygon	true	0/1

17.238971000484 | 13.853173318133 | 81.323340074203 | 13.910402020703

[Compute from native bounds](#)

Curved geometries control

Linear geometries can contain circular arcs

Linearization tolerance (useful only if your data contains curved geometries)

Feature Type Details

Property	Type	Nullable	Min/Max Occurrences
id	Integer	false	1/1
the_geom	MultiPolygon	true	0/1
sid	BigDecimal	true	0/1
name	String	true	0/1
area	BigDecimal	true	0/1


[Edit sql view](#)

Restrict the features on layer by CQL filter

Layer Preview





List of all layers configured in GeoServer and provides previews in various formats for each.

<< < 1 > >> Results 1 to 1 (out of 1 matches from 24 items)







Type	Title	Name	Common Formats	All Formats
	query	lsi:state_query	OpenLayers KML GML	<input type="text" value="Select one"/>

<< < 1 > >> Results 1 to 1 (out of 1 matches from 24 items)





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-  WMS



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-  Global
-  Image Processing
-  Raster Access

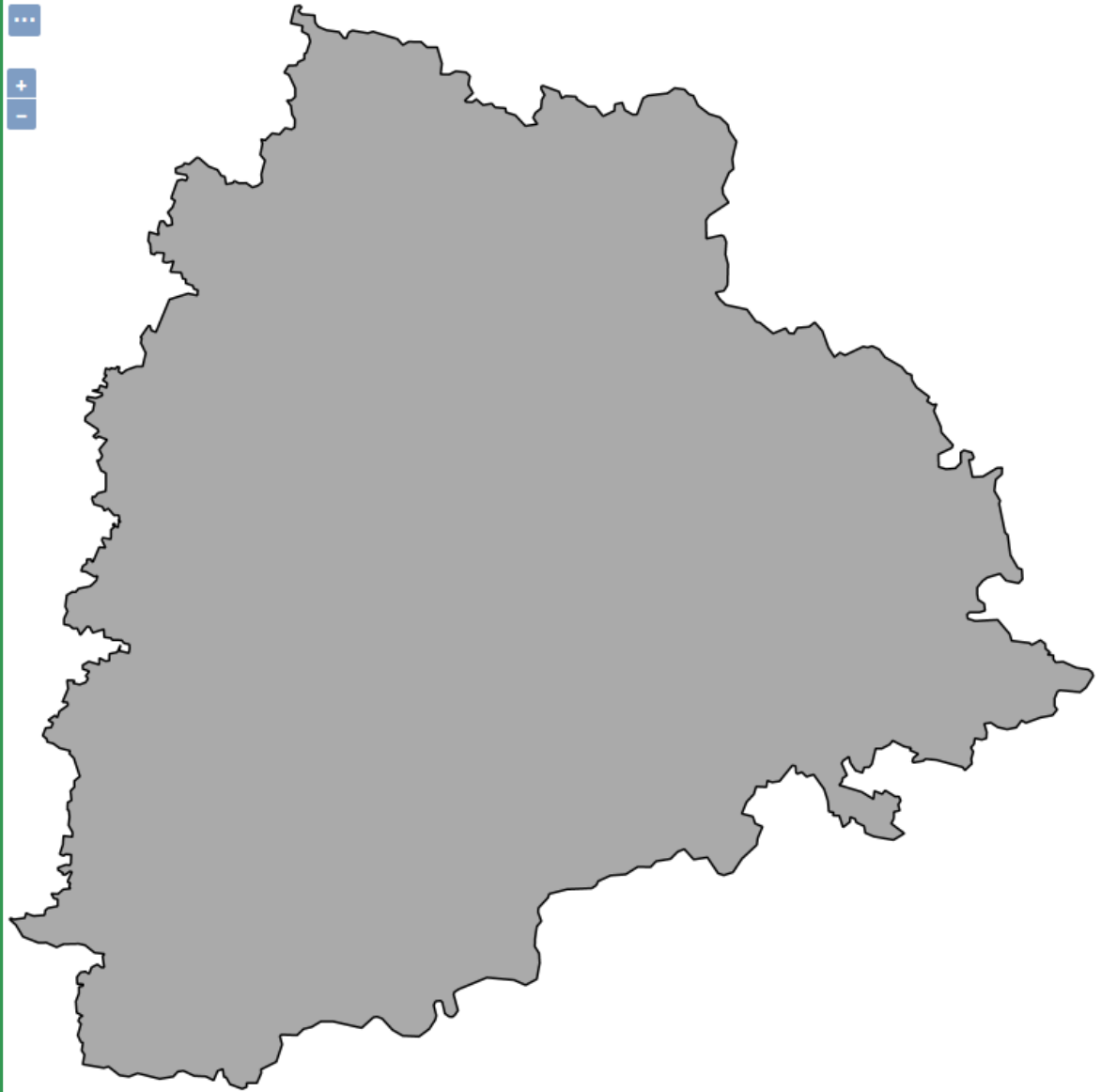
Tile Caching

-  Tile Layers
-  Caching Defaults
-  Gridsets
-  Disk Quota
-  BlobStores

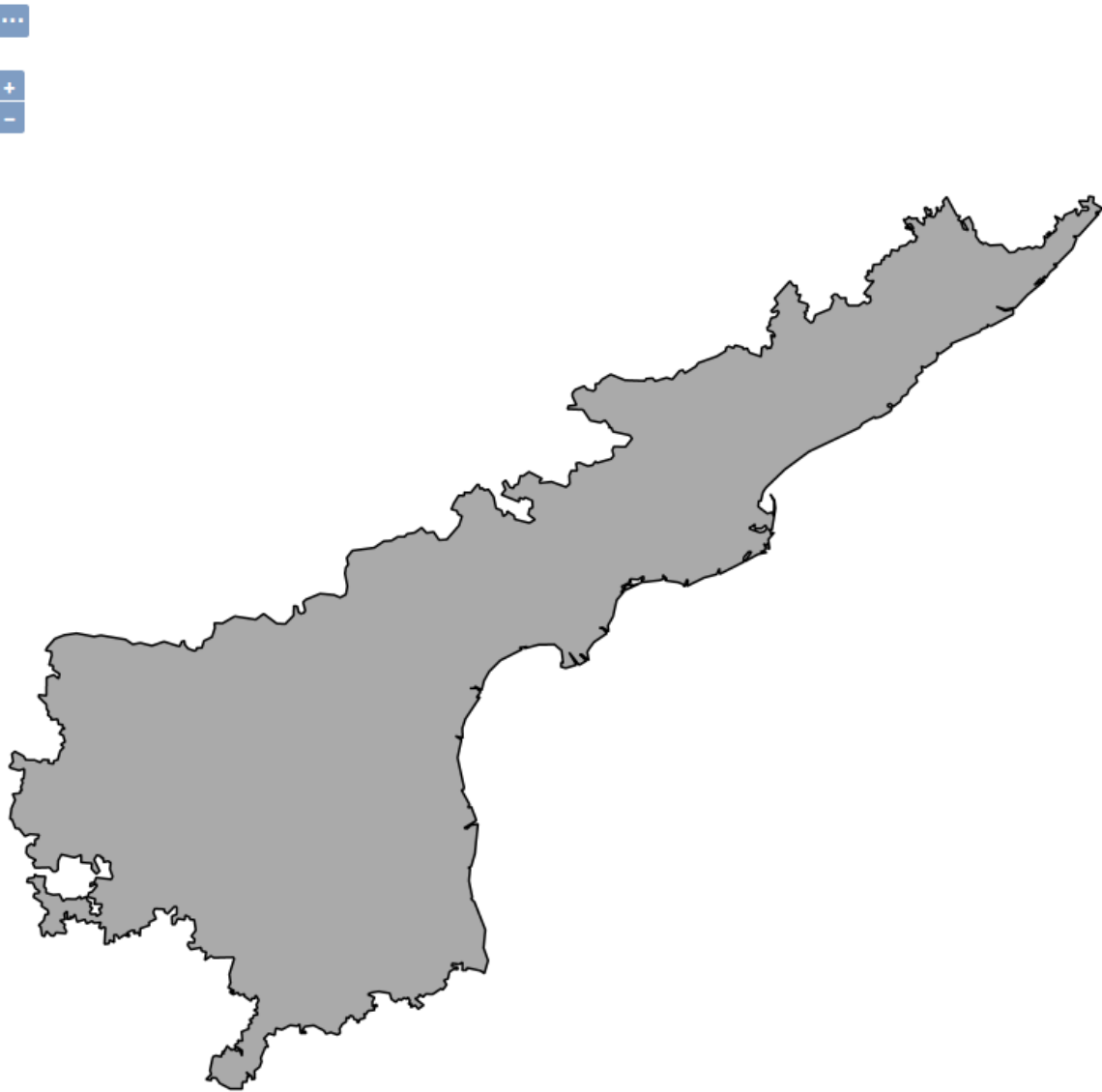
Security

-  Settings
-  Authentication

Layer Preview



Layer Preview



[http://localhost:8080/geoserver/lsi/wms?
service=WMS&version=1.1.0&request=GetMap&layers=lsi:state_query&styles=&bbox=77.2389910664846,15.8331755181357,81.325340674205,19.9164620207058&width=768&height=767&srs=EPSG:4326&format=application/openlayers&viewparams=x:andhra%20pradesh](http://localhost:8080/geoserver/lsi/wms?service=WMS&version=1.1.0&request=GetMap&layers=lsi:state_query&styles=&bbox=77.2389910664846,15.8331755181357,81.325340674205,19.9164620207058&width=768&height=767&srs=EPSG:4326&format=application/openlayers&viewparams=x:andhra%20pradesh)

Layer Preview



```
http://localhost:8080/geoserver/lsi/wms?  
service=WMS&version=1.1.0&request  
=GetMap&layers=lsi:state_query&styl  
es=&bbox=77.2389910664846,15.833  
1755181357,81.325340674205,19.91  
64620207058&width=768&height=76  
7&srs=EPSG:4326&format=applicatio  
n/openlayers&viewparams=x:kerala
```

Styling

Styles

*Untitled Project — QGIS

Project Edit View Layer Settings Plugins Vector Raster Database Web Mesh Processing Help

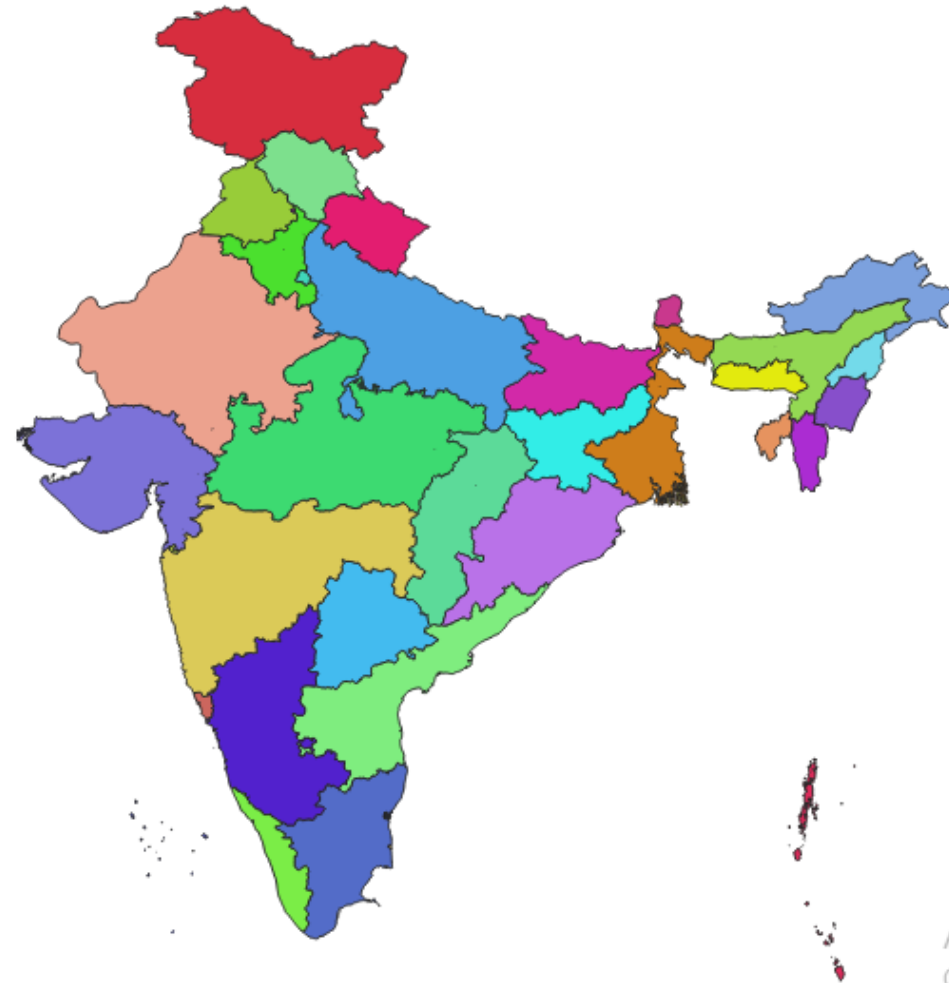


Browser

- ★ Favorites
- ▶ Spatial Bookmarks
- ▶ Home
- ▶ C:\
- ▶ D:\
- ▶ E:\
- ▶ F:\
- ▶ G:\
- ▶ H:\
- ▶ I:\
- ▶ J:\
- ▶ GeoPackage
- ▶ SpatiaLite

Layers

- ▶ ind states



Save Style As SLD

*Untitled Project — QGIS

Project Edit View Layer Settings Plugins Vector Raster Database Web Mesh Processing Help

Layer Properties — ind_states — Symbology

Categorized

Value: abc name

Symbol: [Orange bar]

Color ramp: Random colors

Symbol	Value	Legend
<input checked="" type="checkbox"/>	ANDAMAN & NICOBAR ISLAND	ANDAMAN & NICOBAR ISLAND
<input checked="" type="checkbox"/>	ANDHRA PRADESH	ANDHRA PRADESH
<input checked="" type="checkbox"/>	ARUNANCHAL PRADESH	ARUNANCHAL PRADESH
<input checked="" type="checkbox"/>	ASSAM	ASSAM
<input checked="" type="checkbox"/>	BIHAR	BIHAR
<input checked="" type="checkbox"/>	CHANDIGARH	CHANDIGARH
<input checked="" type="checkbox"/>	CHHATTISGARH	CHHATTISGARH
<input checked="" type="checkbox"/>	DADARA & NAGAR HAVELLI	DADARA & NAGAR HAVELLI
<input checked="" type="checkbox"/>	DAMAN & DIU	DAMAN & DIU
<input checked="" type="checkbox"/>	GOA	GOA
<input checked="" type="checkbox"/>	GUJARAT	GUJARAT
<input checked="" type="checkbox"/>	HARYANA	HARYANA
<input checked="" type="checkbox"/>	HIMACHAL PRADESH	HIMACHAL PRADESH
<input checked="" type="checkbox"/>	JAMMU & KASHMIR	JAMMU & KASHMIR
<input checked="" type="checkbox"/>	JHARKHAND	JHARKHAND
	KARNATAKA	KARNATAKA
	KERALA	KERALA
	LAKSHADWEEP	LAKSHADWEEP
	MADHYA PRADESH	MADHYA PRADESH
	MAHARASHTRA	MAHARASHTRA
	MANIPUR	MANIPUR

Load Style...
Save Style...
Save as Default
Restore Default
Add...
Rename Current...
default

delete All

Advanced

OK Cancel Apply Help





Save Style As SLD

The screenshot displays the QGIS interface with the 'Save Layer Style' dialog box open. The dialog is titled 'Save Layer Style' and has a close button (X) in the top right corner. The 'Save style' dropdown menu is set to 'As SLD Style File'. The 'File' field contains the path 'C:\Users\SATYAM\Desktop\states.sld'. Below the file field is a list of categories with checkboxes, all of which are checked:







- Layer Configuration
- Symbology
- 3D Symbology
- Labels
- Fields
- Forms
- Actions
- Map Tips
- Diagrams
- Attribute Table Settings
- Rendering
- Custom Properties
- Geometry Options
- Relations
- Temporal Properties

At the bottom of the dialog, there are three buttons: 'OK', 'Cancel', and 'Help'. The background shows the QGIS main window with the 'Layer Properties' dialog open for the 'ind_states' layer. The 'Layer Properties' dialog has a 'Symbology' tab selected, and a 'Color ramp' section is visible. The 'Layer Rendering' section at the bottom of the 'Layer Properties' dialog has a 'Style' dropdown menu.





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Styles

Manage the Styles published by GeoServer

-  Add a new style
-  Removed selected style(s)

<< < 1 > >> Results 1 to 21 (out of 21 items)

<input type="checkbox"/>	Style Name	Workspace
<input type="checkbox"/>	burg	
<input type="checkbox"/>	capitals	
<input type="checkbox"/>	cite_lakes	
<input type="checkbox"/>	dem	
<input type="checkbox"/>	generic	
<input type="checkbox"/>	giant_polygon	
<input type="checkbox"/>	grass	
<input type="checkbox"/>	green	
<input type="checkbox"/>	line	
<input type="checkbox"/>	poi	
<input type="checkbox"/>	point	
<input type="checkbox"/>	poly_landmarks	
<input type="checkbox"/>	polygon	
<input type="checkbox"/>	pophatch	
<input type="checkbox"/>	population	
<input type="checkbox"/>	rain	
<input type="checkbox"/>	raster	

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New style

Type a new style definition, or use an existing one as a template, or upload a ready made style from your file system. The editor can provide syntax highlighting and automatic formatting. Click on the "validate" button to verify the style is a valid style document.

Data

Style Data

Name

Workspace

Format

Style Content

Generate a default style

 [Generate ...](#)

Copy from existing style

 [Copy ...](#)

Upload a style file

 [Upload ...](#)

Legend

Legend

[Preview legend](#)

Style Editor

[↶](#) [↷](#) [📄](#) [☰](#)

1

Apply Style to layer

WMTS
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Style Content

Generate a default style

Choose One Generate ...

Copy from existing style

Choose One Copy ...

Upload a style file

Browse... No file selected. Upload ...

Style Editor

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <StyledLayerDescriptor xmlns="http://www.opengis.net/sld" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" version="1.1.0" xsi:schemaLocation="http://www.opengis.net/sld http://schemas.opengis.net
/sld/1.1.0/StyledLayerDescriptor.xsd" xmlns:ogc="http://www.opengis.net/ogc"
xmlns:se="http://www.opengis.net/se" xmlns:xlink="http://www.w3.org/1999/xlink">
3   <NamedLayer>
4     <se:Name>ind_states</se:Name>
5     <UserStyle>
6       <se:Name>ind_states</se:Name>
7       <se:FeatureTypeStyle>
8         <se:Rule>
9           <se:Name>ANDAMAN & NICOBAR ISLAND</se:Name>
10          <se:Description>
11            <se:Title>ANDAMAN & NICOBAR ISLAND</se:Title>
12          </se:Description>
13          <ogc:Filter xmlns:ogc="http://www.opengis.net/ogc">
14            <ogc:PropertyIsEqualTo>
15              <ogc:PropertyName>name</ogc:PropertyName>
16              <ogc:Literal>ANDAMAN & NICOBAR ISLAND</ogc:Literal>
17            </ogc:PropertyIsEqualTo>
18          </ogc:Filter>
19          <se:PolygonSymbolizer>
20            <se:Fill>
21              <se:SvgParameter name="fill">#db2b5a</se:SvgParameter>
22            </se:Fill>
23          </se:PolygonSymbolizer>
24        </se:Rule>
25      </se:FeatureTypeStyle>
26    </UserStyle>
27  </NamedLayer>
28 </StyledLayerDescriptor>
```

Validate Apply Submit Cancel

javascript:;

Assigned Style to layer



Logged in as admin. [Logout](#)

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Style Editor - Isi:states

Edit the current style. The editor can provide syntax highlighting and automatic formatting. Click on the "validate" button to verify the style is a valid SLD document.

Data	Publishing	Layer Preview	Layer Attributes
Results 1 to 2 (out of 2 matches from 21 items) <input type="text" value="states"/>			
Workspace	Layer	Default	Associated
topp	states	<input type="checkbox"/>	<input type="checkbox"/>
Isi	ind_states	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Results 1 to 2 (out of 2 matches from 21 items)

Style Editor

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <StyledLayerDescriptor xmlns="http://www.opengis.net/sld" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" version="1.1.0" xsi:schemaLocation="http://www.opengis.net/sld http://schemas.opengis.net
/sld/1.1.0/StyledLayerDescriptor.xsd" xmlns:ogc="http://www.opengis.net/ogc"
xmlns:se="http://www.opengis.net/se" xmlns:xlink="http://www.w3.org/1999/xlink">
3   <NamedLayer>
4     <se:Name>ind_states</se:Name>
5     <UserStyle>
6       <se:Name>ind_states</se:Name>
7       <se:FeatureTypeStyle>
8         <se:Rule>
9           <se:Name>ANDAMAN & NICOBAR ISLAND</se:Name>
10          <se:Description>
11            <se:Title>ANDAMAN & NICOBAR ISLAND</se:Title>
12          </se:Description>
13          <ogc:Filter xmlns:ogc="http://www.opengis.net/ogc">
14            <ogc:PropertyIsEqualTo>
15              <ogc:PropertyName>name</ogc:PropertyName>
16              <ogc:Literal>ANDAMAN & NICOBAR ISLAND</ogc:Literal>
17            </ogc:PropertyIsEqualTo>
18          </ogc:Filter>
19          <se:PolygonSymbolizer>
20            <se:Fill>
21              <se:SvgParameter name="fill">#db2b5a</se:SvgParameter>
22            </se:Fill>

```

[Validate](#) [Apply](#) [Submit](#) [Cancel](#)

Assigned Style to layer



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Style Editor - Isi:states

Edit the current style. The editor can provide syntax highlighting and automatic formatting. Click on the "validate" button to verify the style is a valid SLD document.

- Data
- Publishing
- Layer Preview
- Layer Attributes

Preview on layer: Isi:ind_states

Preview as style group:

ind_states	
	ANDAMAN & NICOBAR ISLAND
	ANDHRA PRADESH
	ARUNACHAL PRADESH
	ASSAM
	BIHAR
	CHANDIGARH
	CHHATTISGARH
	DADARA & NAGAR HAVELLI
	DAMAN & DIU
	GOA
	GUJARAT
	HARYANA
	HIMACHAL PRADESH
	JAMMU

Scale = 1 : 69806910

Style Editor

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <StyledLayerDescriptor xmlns="http://www.opengis.net/sld" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" version="1.1.0" xsi:schemaLocation="http://www.opengis.net/sld http://schemas.opengis.net
/sld/1.1.0/StyledLayerDescriptor.xsd" xmlns:ogc="http://www.opengis.net/ogc"
xmlns:se="http://www.opengis.net/se" xmlns:xlink="http://www.w3.org/1999/xlink">
3   <NamedLayer>
4     <se:Name>ind_states</se:Name>
5     <UserStyle>
6       <se:Name>ind states</se:Name>
```

Access Layer as WMS/WFS

A **map** is made of **layers**, a **view** to visualize them, interactions to modify map content and **controls** with UI components.

```
<div id="map" class="map"></div>
```

The map in the application is contained in a `<div>` HTML element. Through this `<div>` the map properties like width, height and border can be controlled through CSS. Here's the CSS element used to make the map 400 pixels high and as wide as the browser window.

Code snippet to add Map

```
var map = new ol.Map({  
  layers: [  
    new ol.layer.Tile({  
      source: new ol.source.OSM(),  
      title: 'OSM'  
    })  
  ],  
  target: 'map',  
  view: new ol.View({  
    center: ol.proj.transform([76.9639, 10.9905], 'EPSG:4326',  
    'EPSG:900913'),  
    zoom: 10  
  })  
});
```

The view manages the visual parameters of the map view, like resolution or rotation.

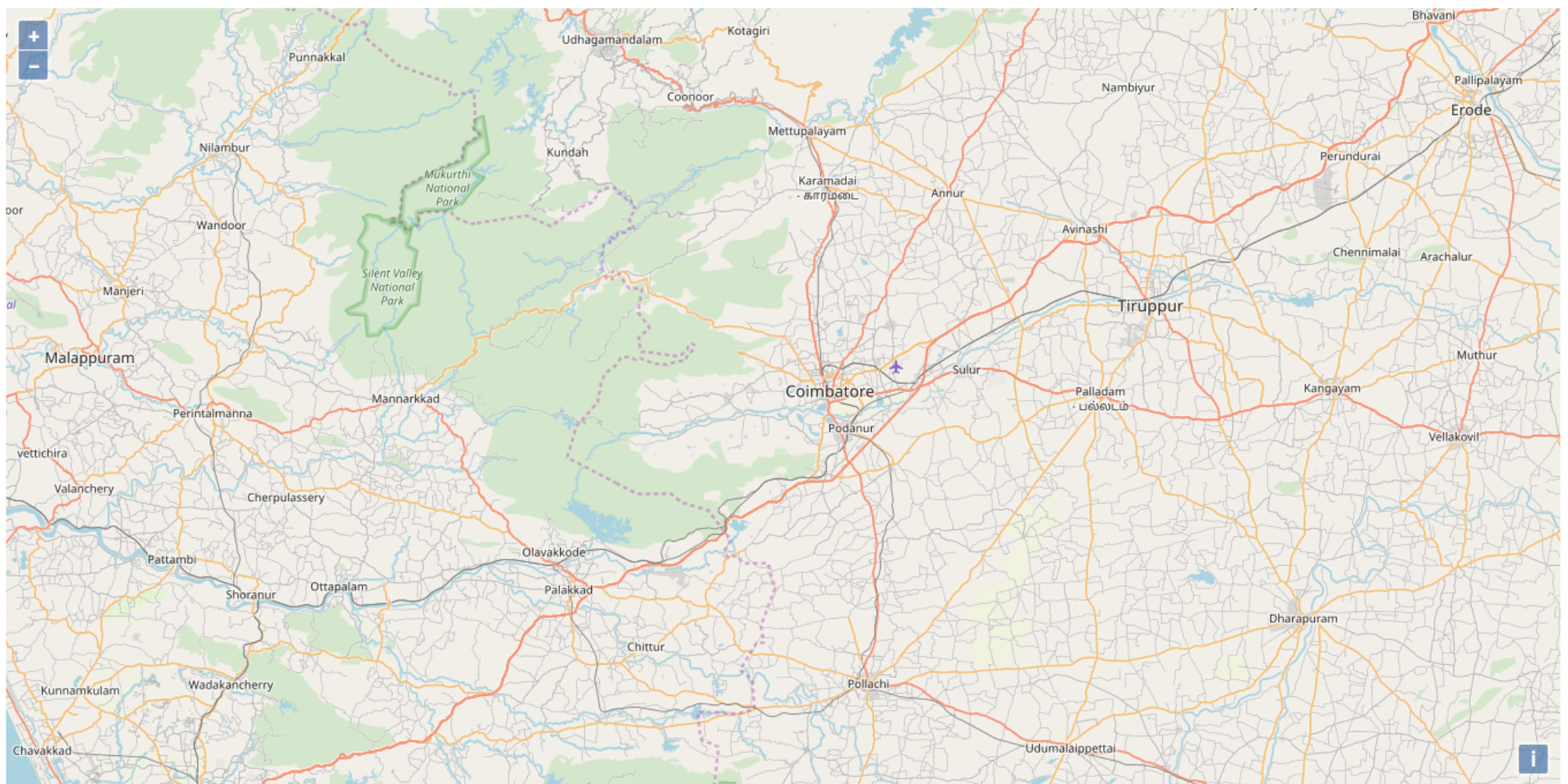
View with center, projection, resolution and rotation

```
view: new ol.View({  
  center: ol.proj.transform([76.9639, 10.9905], 'EPSG:4326', 'EPSG:900913')
```

Layers are lightweight containers that get their data from sources.

```
layers: [  
    new ol.layer.Tile({  
        source: new ol.source.OSM(),  
        title: 'OSM'  
    })  
]
```


Map



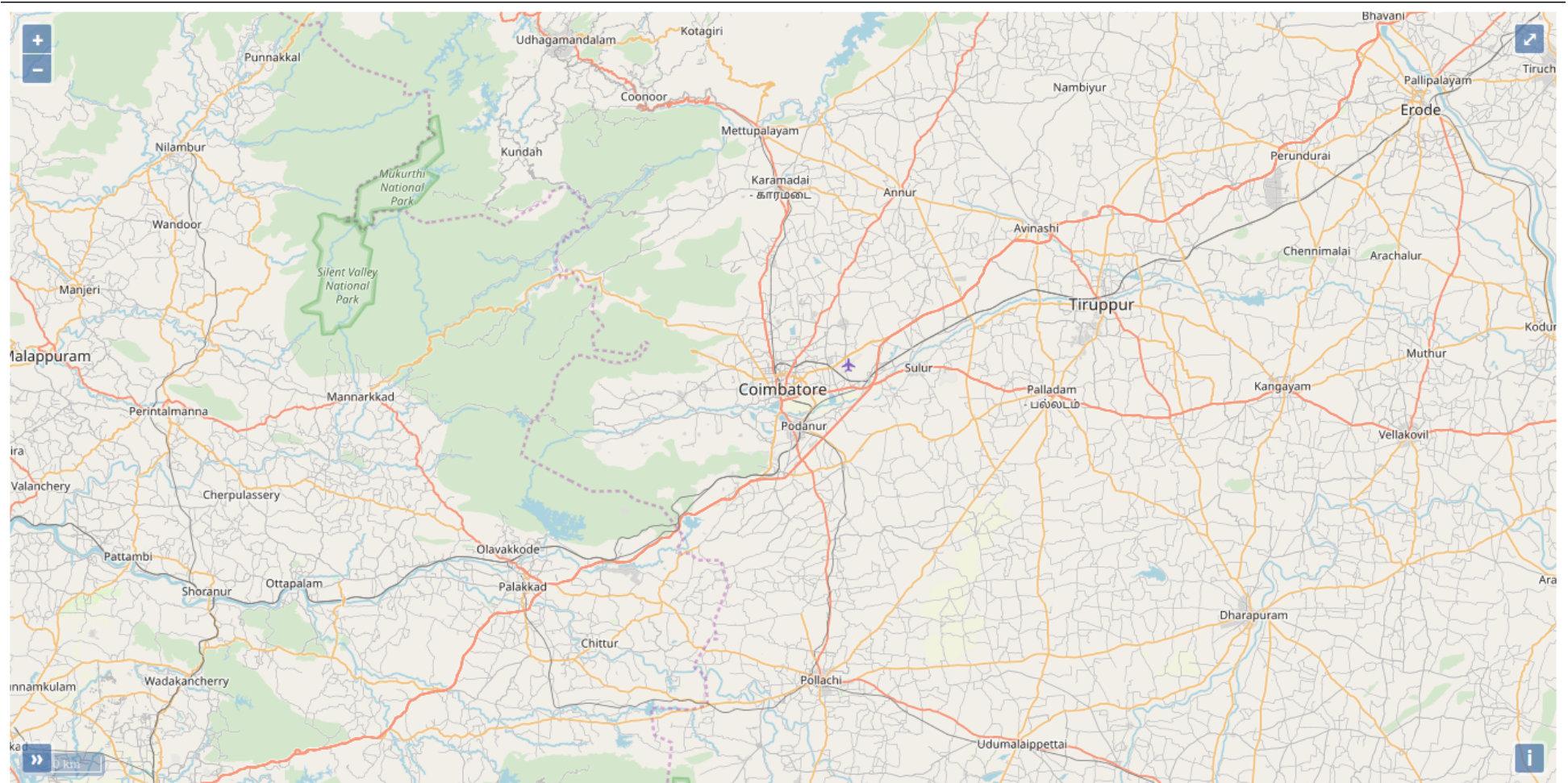
Controls

A control is a visible widget with a DOM element in a fixed position on the screen. They can involve user input (buttons), or be informational only; the position is determined using CSS

Code snippet to add controls

```
Controlscontrols : ol.control.defaults({
  attributionOptions : ({
    collapsible : true
  })
}).extend([ new ol.control.ScaleLine(),new
ol.control.FullScreen(),
            new ol.control.OverviewMap() ])
```

Map with controls



Code snippet to add WMS

```
var wms = new ol.layer.Tile({
    source : new ol.source.TileWMS({
    url : 'http://localhost:8080/geoserver/lsi/wms',
    params : {
        'LAYERS' : 'lsi:india_states',
        'FORMAT' : 'image/png',
        'TILED' : true
    },
    serverType : 'geoserver',
    projection : 'EPSG:4326'
    }),
    title: 'States',
    visible : true
});

map.addLayer(wms);
```