

# News from GeoStyler

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# Contents

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2. Feature news
3. Project news
4. Community news
5. What's next?



# What is GeoStyler?

- Graphical editor for styling geodata
- Converter of styling formats



# What is GeoStyler?

Graphical editor for styling geodata

Docs [npm](#)

Language: EN DE ES 中文 Compact:  Symbolizer Renderer: OpenLayers SLD Load Style:  Examples

### Graphical Editor

Name: Demo Style

	Name	Filter	Min. Scale	Max. Scale	Σ	⊕
<input type="checkbox"/>	Hamburg	GEN = 'Hamburg'	<input type="button" value="⊖"/>		1	0
<input type="checkbox"/>	Niedersachsen	GEN = 'Niedersachsen'	<input type="button" value="⊖"/>		1	0
<input type="checkbox"/>	Bremen	GEN = 'Bremen'	<input type="button" value="⊖"/>		1	0
<input type="checkbox"/>	Nordrhein-Westfalen	GEN = 'Nordrhein-Westfalen'	<input type="button" value="⊖"/>		1	0
<input type="checkbox"/>	Hessen	GEN = 'Hessen'	<input type="button" value="⊖"/>		1	0
<input type="checkbox"/>	Rheinland-Pfalz	GEN = 'Rheinland-Pfalz'	<input type="button" value="⊖"/>		1	0
<input type="checkbox"/>	Baden-WÄrttemberg	GEN = 'Baden-WÄrttemberg'	<input type="button" value="⊖"/>		1	0
<input type="checkbox"/>	Bayern	GEN = 'Bayern'	<input type="button" value="⊖"/>		1	0
<input type="checkbox"/>	Saarland	GEN = 'Saarland'	<input type="button" value="⊖"/>		1	0
<input type="checkbox"/>	Berlin	GEN = 'Berlin'	<input type="button" value="⊖"/>		1	0
<input type="checkbox"/>	Brandenburg	GEN = 'Brandenburg'	<input type="button" value="⊖"/>		1	0
<input type="checkbox"/>	Mecklenburg-Vorpommern	GEN = 'Mecklenburg-Vorpommern'	<input type="button" value="⊖"/>		1	0
<input type="checkbox"/>	Sachsen	GEN = 'Sachsen'	<input type="button" value="⊖"/>		1	0
<input type="checkbox"/>	Sachsen-Anhalt	GEN = 'Sachsen-Anhalt'	<input type="button" value="⊖"/>		1	0
<input type="checkbox"/>	ThÄringen	GEN = 'ThÄringen'	<input type="button" value="⊖"/>		1	0
<input type="checkbox"/>	Schleswig-Holstein	GEN = 'Schleswig-Holstein'	<input type="button" value="⊖"/>		1	0

+Add Rule    Clone Rules    Remove Rules    Multi edit

Classification

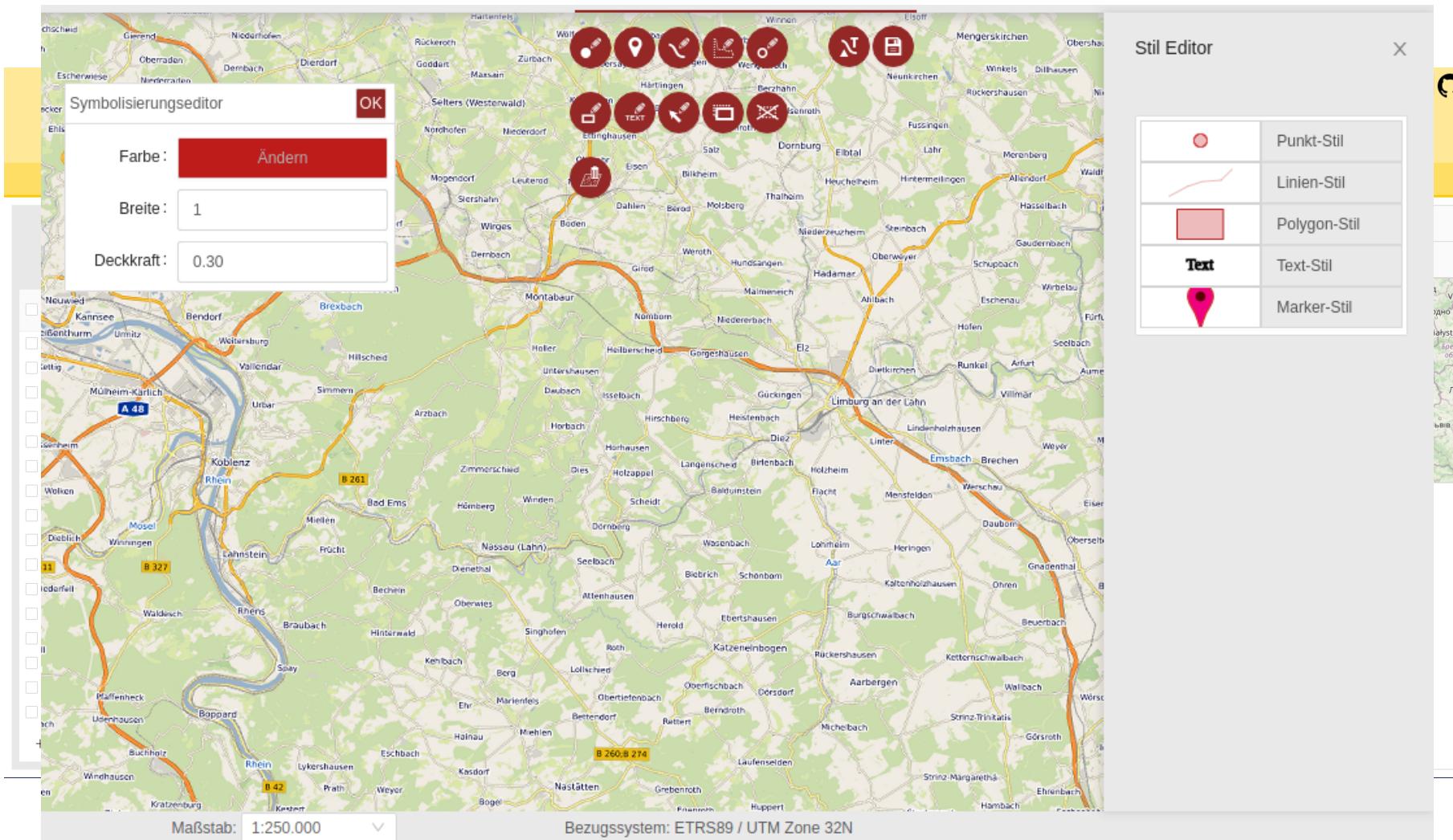
> Code Editor

▼ Preview Map



# What is GeoStyler?

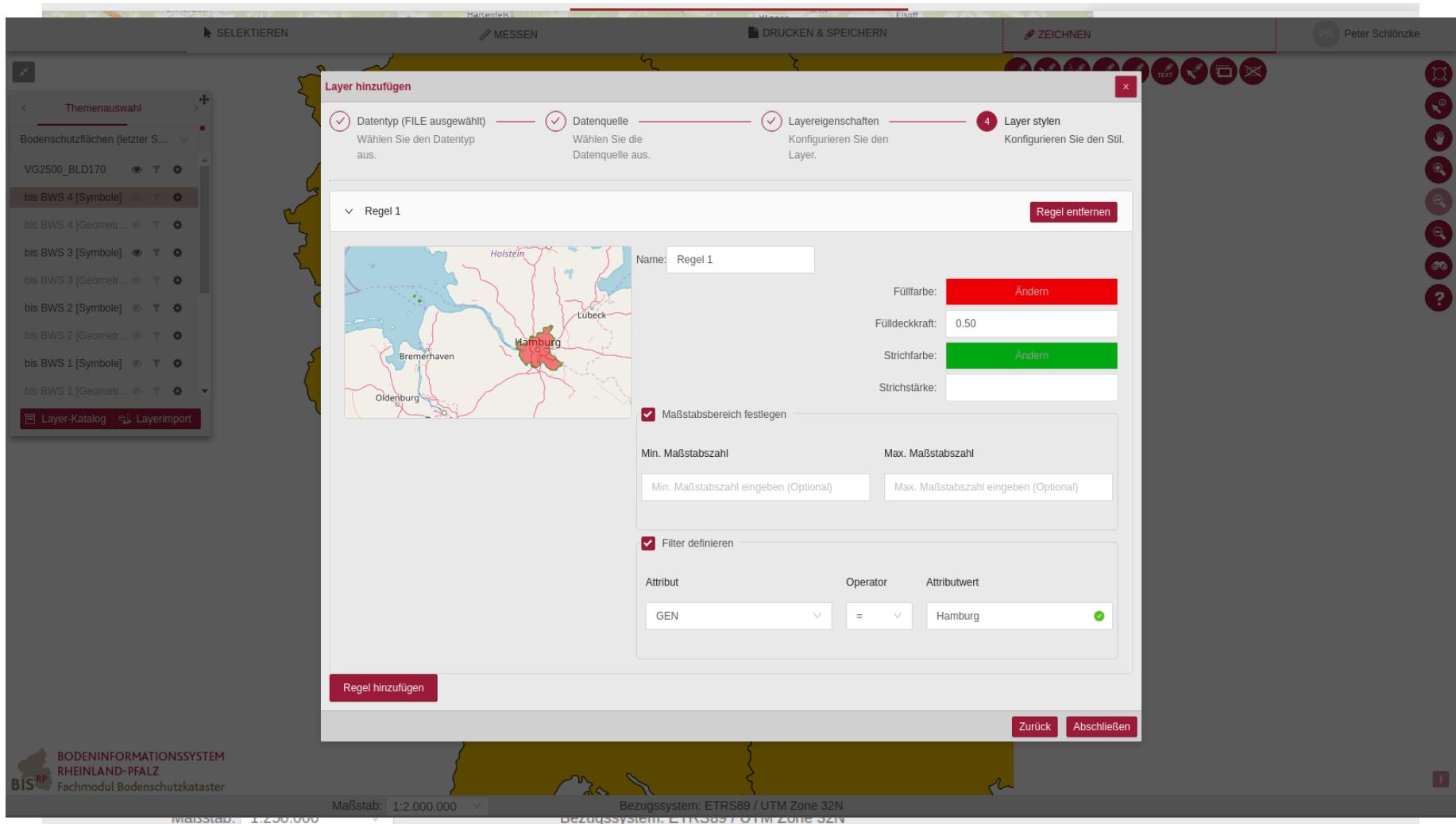
Graphical editor for styling geodata





# What is GeoStyler?

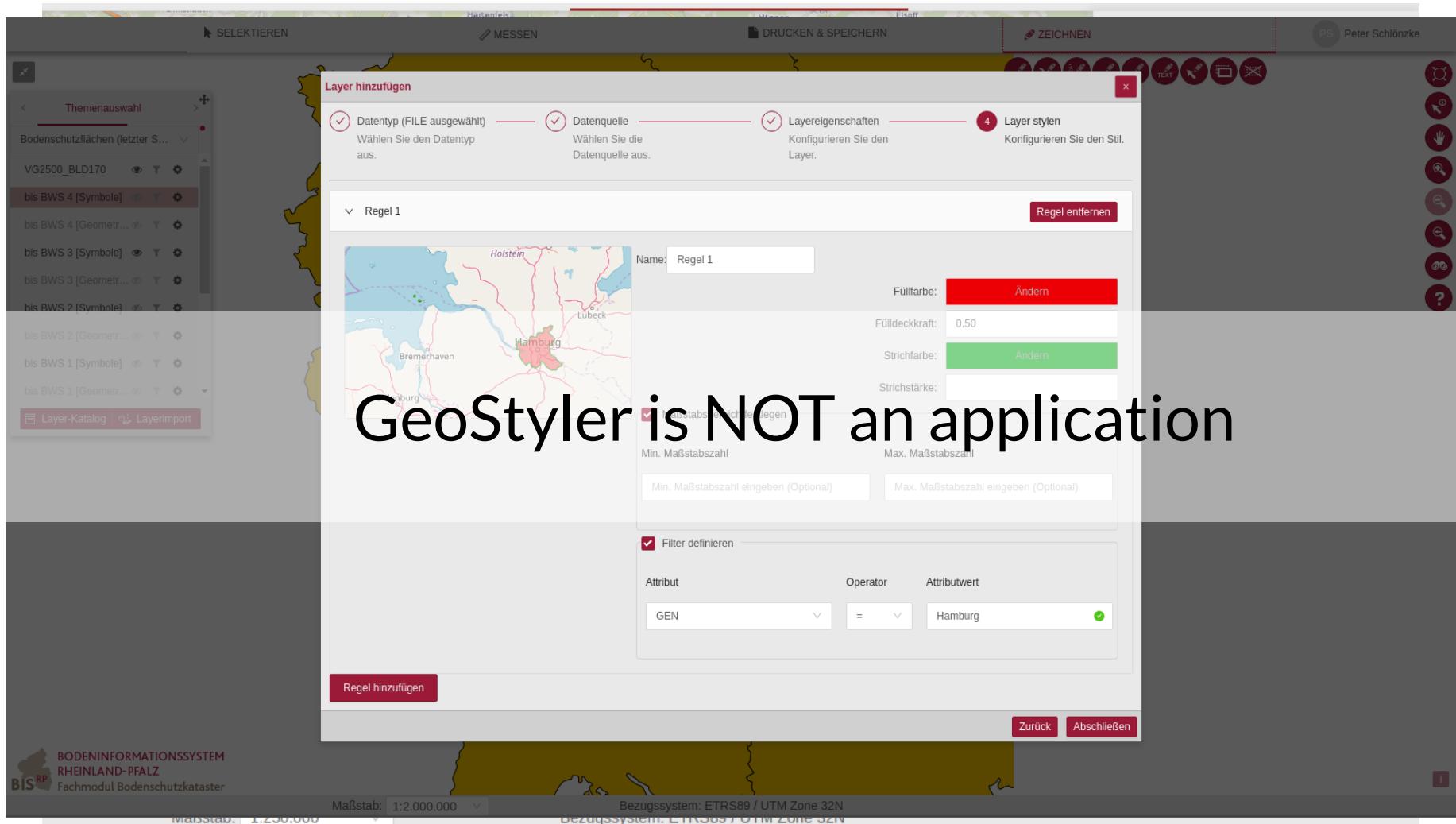
Graphical editor for styling geodata





# What is GeoStyler?

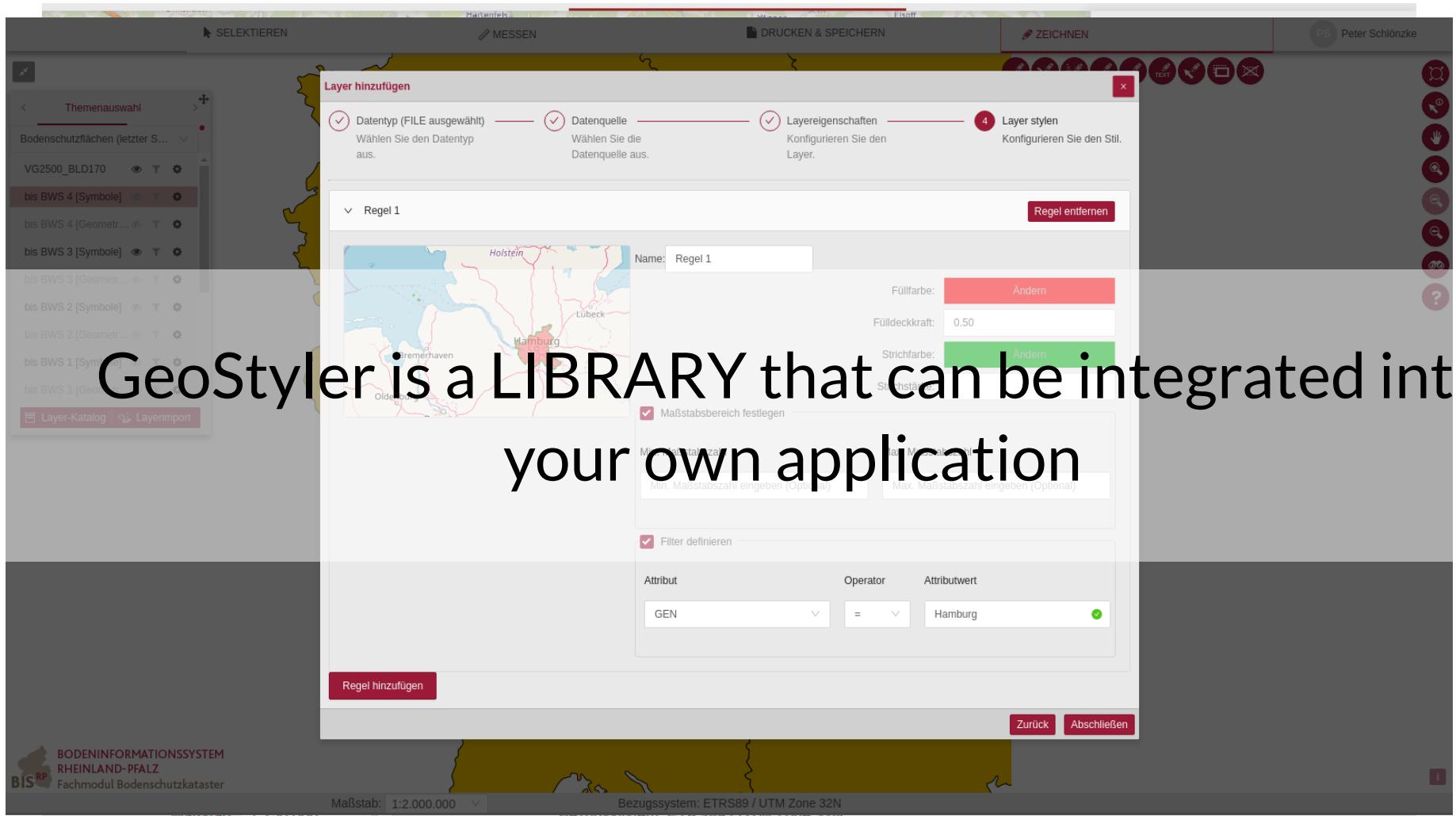
Graphical editor for styling geodata





# What is GeoStyler?

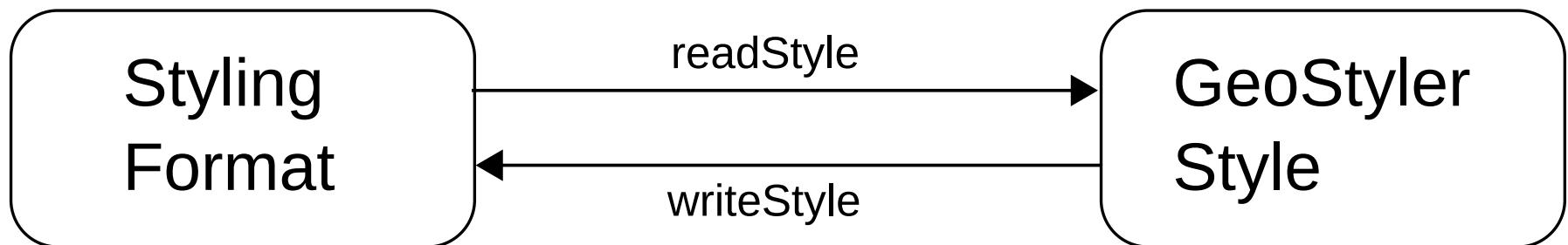
Graphical editor for styling geodata





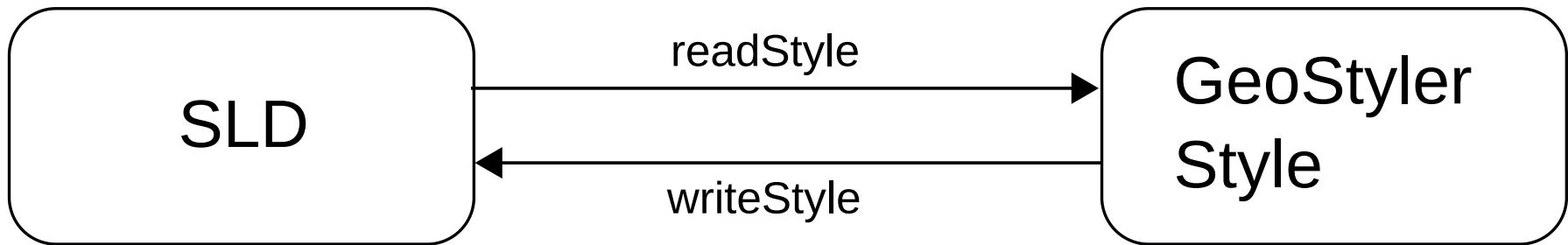
# What is GeoStyler?

Converter of styling formats



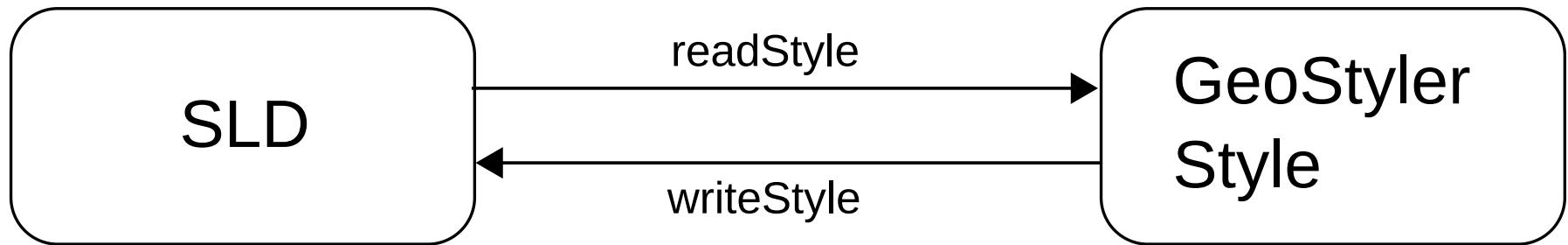
# What is GeoStyler?

Converter of styling formats



# What is GeoStyler?

Converter of styling formats



```
<!--?xml version="1.0" encoding="UTF-8" standalone="yes"?-->
<styledlayerdescriptor version="1.0.0" xsi:schemalocation=
  <namedlayer>
    <name>Demo Style</name>
    <userstyle>
      <name>Demo Style</name>
      <title>Demo Style</title>
      <featuretypestyle>
        <rule>
          <name>Rule 1</name>
          <pointsymbolizer>
            <graphic>
              <mark>
```

```
{
  "name": "Demo Style",
  "rules": [
    {
      "name": "Rule 1",
      "symbolizers": [
        {
          "kind": "Mark",
          "wellKnownName": "circle"
        }
      ]
    }
  ]
}
```



# What is GeoStyler?

Converter of styling formats



# What is GeoStyler?

Converter of styling formats



# What is GeoStyler?

Converter of styling formats



```
LAYER
  NAME "point_simple_point"
  TYPE POINT
  DATA "../shapes/points.shp"
  EXTENT -180 -90 180 90
  METADATA
    "wms_title" "point_simple_point"
    "wms_srs" "EPSG:4326"
  END
  CLASS
    STYLE
      SYMBOL "circle"
      COLOR 0 255 0
```

```
<!--?xml version="1.0" encoding="UTF-8" standalone="yes"?-->
<StyledLayerDescriptor version="1.0.0" xsi:schemaLocation=
  <namedlayer>
    <name>Demo Style</name>
    <userstyle>
      <name>Demo Style</name>
      <title>Demo Style</title>
      <featuretypestyle>
        <rule>
          <name>Rule 1</name>
          <pointsymbolizer>
            <graphic>
              <mark>
```



# Feature news

# Feature news

i18n

Chinese translations

	▲▼	名称	过滤器	最小比例尺	最大比例尺	Σ	%
<input type="checkbox"/>	▲▼	Hamburg	GEN = 'Hamburg'			1	0
<input checked="" type="checkbox"/>	▲▼	Bayern	GEN = 'Bayern'			1	0
<input checked="" type="checkbox"/>	▲▼	Schleswig-Holstein	GEN = 'Schleswig-Holstein'			1	0

+添加规则     克隆规则    -移除规则     同时编辑



# Feature news

# Feature news

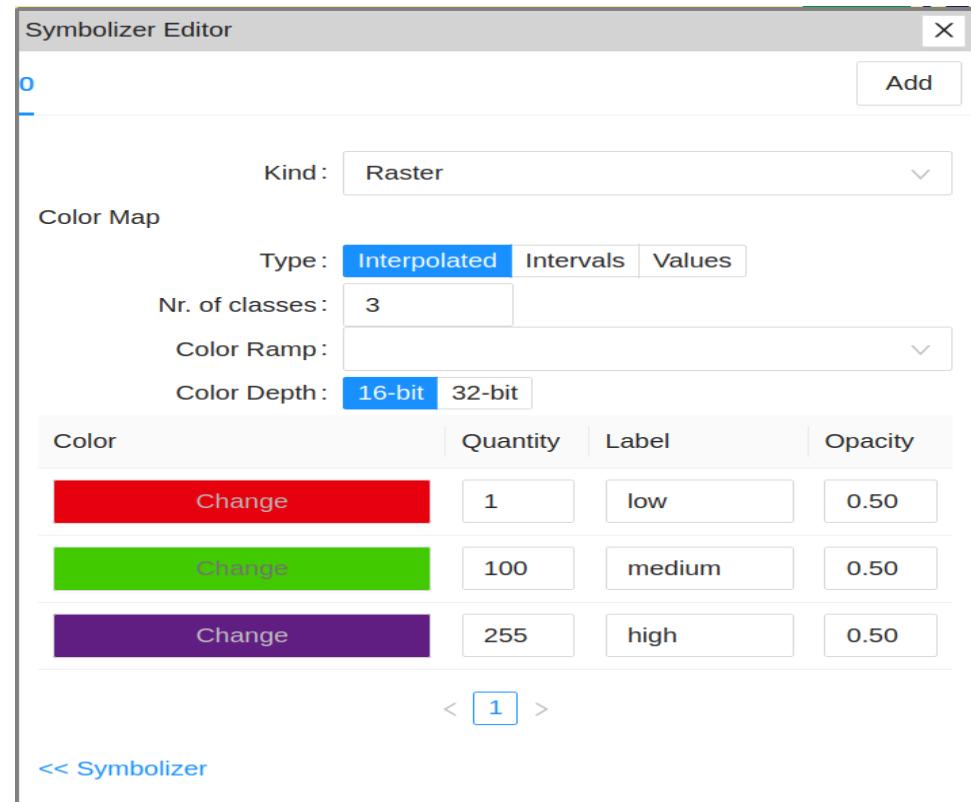
Components  
PreviewMap



# Feature news

## Components

### RasterSymbolizer



# Feature news

## Parser

### Mapfile Parser

See [geostyler-mapfile-parser](#)

```
LAYER
  NAME "point_simple_point"
  TYPE POINT
  DATA "../shapes/points.shp"
  EXTENT -180 -90 180 90
  METADATA
    "wms_title" "point_simple_point"
    "wms_srs" "EPSG:4326"
  END
  CLASS
    STYLE
      SYMBOL "circle"
      COLOR 0 255 0
      SIZE 15
    END
  END
END
```

Balthasar Teuscher - GeoStyler Mapfile Parser  
Thursday, 29.09.2021 [@FOSS4G 2021](#)



# Feature news

## Parser Support for SLD 1.1

See [geostyler-sld-parser](#)

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<StyledLayerDescriptor version="1.1.0" xsi:schemaLocation="http://www.opengis.net/sld S
<NamedLayer>
  <se:Name>Demo Style</se:Name>
  <UserStyle>
    <se:Name>Demo Style</se:Name>
    <se:FeatureTypeStyle>
      <se:Rule>
        <se:Name>Rule 1</se:Name>
        <se:PointSymbolizer uom="http://www.opengeospatial.org/se/units/pixel">
          <se:Graphic>
            <se:Mark>
              <se:WellKnownName>circle</se:WellKnownName>
            </se:Mark>
          </se:Graphic>
        </se:PointSymbolizer>
      </se:Rule>
    </se:FeatureTypeStyle>
  </UserStyle>
</NamedLayer>
</StyledLayerDescriptor>
```



# Feature news

Development

Typeguards for style interfaces

See [geostyler-style](#)



# Project news

# Project news

## GeoStyler CLI

Automated conversion between styling formats

```
geostyler -s qgis -t sld -o output.sld input.qml
```

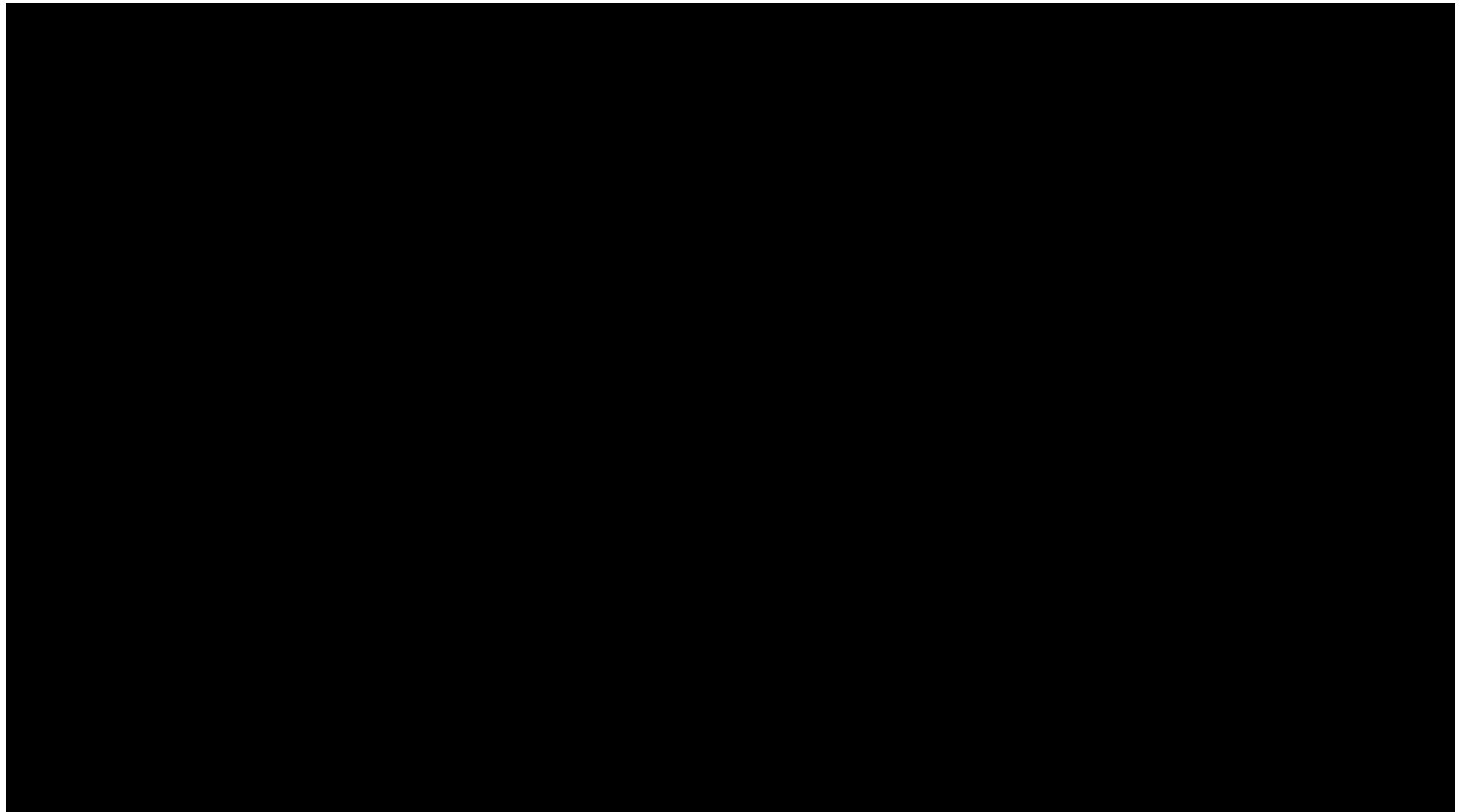
See [geostyler-cli](#)



# Project news

# Project news

GeoStyler CLI



# Project news

GeoStyler REST

Convert styles via REST API

See [geostyler-rest](#)



# Project news

GeoServer

Improvements on  
GeoStyler community  
extension

See [GeoStyler Extension](#)

The screenshot displays the GeoStyler extension interface for GeoServer. At the top, there are tabs for Data, Publishing, Layer Preview, and Layer Attributes, with Publishing selected. Below the tabs, the 'Style Data' section shows a 'Name' field set to 'line'. A 'Format' dropdown is set to 'SLD'. The 'Style Content' section includes options for generating a default style from a choice or existing style, or uploading a style file. To the right, a 'Legend' panel has an 'Add legend' button and a 'Preview legend' link. The main workspace shows a table for rules, with a row for 'Blue Line'. Buttons for adding, cloning, removing, and editing rules are at the bottom. At the bottom of the interface, a code editor shows the XML for the SLD document, starting with:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<StyledLayerDescriptor xmlns="http://www.opengis.net/ogc" xsi:schemaLocation="http://www.opengis.net/sld StyledLayerDescriptor.xsd"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:ogc="http://www.opengis.net/def/crs/OGC/1.3/CRS_OGC">
  <NamedLayer>
    <Name>default_line</Name>
    <UserStyle>
      <Title>Default Line</Title>
      <FeatureTypeStyle>
        <LineSymbolizer>
          <stroke>#0000ff</stroke>
        </LineSymbolizer>
      </FeatureTypeStyle>
    </UserStyle>
  </NamedLayer>
</StyledLayerDescriptor>
```

At the very bottom are buttons for Validate, Save, Apply, and Cancel.



**Style Data**

Name

Workspace

Format  
 ⓘ Format only editable for new styles

**Style Content**

Generate a default style

ⓘ

Copy from existing style

Upload a style file

No file selected.

**Legend**

Legend

# GeoStyler

Live preview enabled? (automatically saves the style on changes)

Name:

<input type="checkbox"/>		Name	Filter	Min. Scale	Max. Scale
<input type="checkbox"/>				<input type="text" value="Blue Line"/>	



```

1 <?xml version="1.0" encoding="ISO-8859-1"?>
2 <StyledLayerDescriptor version="1.0.0"
3   xsi:schemaLocation="http://www.opengis.net/sld StyledLayerDescriptor.xsd"
4   xmlns="http://www.opengis.net/sld"
5   xmlns:ogc="http://www.opengis.net/ogc"
6   xmlns:xlink="http://www.w3.org/1999/xlink"
7   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
8   <!-- a Named Layer is the basic building block of an SLD document -->
9   <NamedLayer>
10    <Name>default_line</Name>
11    <UserStyle>
12      <!-- Styles can have names, titles and abstracts -->
13      <Title>Default Line</Title>
14      <Abstract>A sample style that draws a line</Abstract>
15      <!-- FeatureTypeStyles describe how to render different features -->
16      <!-- A FeatureTypeStyle for rendering lines -->
17      <FeatureTypeStyle>
18        <Rule>

```



# Community news



# Community news

OSGeo Community Project

We are now officially an OSGeo Community Project



See [osgeo.org](http://osgeo.org)



# Community news



# Community news

New Project Website

Infos, Docs & Tutorials on [geostyler.org](https://geostyler.org)

[See geostyler.org](https://geostyler.org)



# GeoStyler

Generic Styler for GeoData

Demo

Getting Started

Docs



# Community news

New GitHub Organisation

All GeoStyler Repositories on  
[github.com/geostyler](https://github.com/geostyler)

 [geostyler](#) 

Generic Styler for geodata

● TypeScript ⭐ 106 📂 27

 [geostyler-style](#) 

Style declaration files for the GeoStyler project

● TypeScript ⭐ 10 📂 10

 [geostyler-sld-parser](#) 

GeoStyler-Style-Parser implementation for SLD

● TypeScript ⭐ 22 📂 18

 [geostyler-openlayers-parser](#) 

GeoStyler Style Parser implementation for OpenLayers styles

● TypeScript ⭐ 18 📂 16

 [geostyler-demo](#) 

GeoStyler Demo App

● TypeScript ⭐ 7 📂 10

 [geostyler-data](#) 

Data declaration files for the GeoStyler project

⭐ 4 📂 5



# Community news

## Contributors

Thanks to all Contributors  
who helped improving GeoStyler



KaiVolland



jansule



ahennr



chrismayer



hwblmn



weskamm



LukasLohoff



marcjansen



jahow



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initialdmg



samtux



mholthausen



simonseyock



JakobMiksch



raitisbe



geographika



b4l



faselm



ger-benjamin



# What's next?



# What's next?

More styling formats

**?? geostyler-arcgis-parser ??**  
on-going discussion...



# What's next?



# What's next?

## Support of SLD Expressions

```
<se:SvgParameter name="fill">  
  <ogc:PropertyName>Feature_Color</ogc:PropertyName>  
</se:SvgParameter>
```



# What's next?

## Improving Label Templating

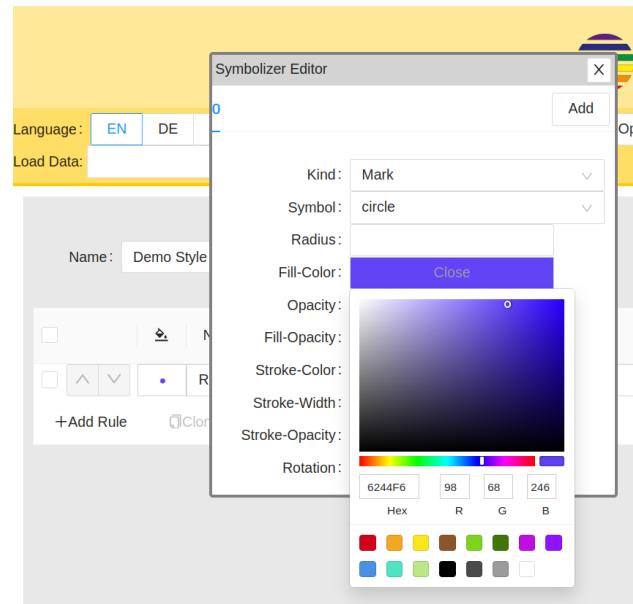
Location: {{city}}, {{state}}



# What's next?

Windowless Layout

Improving responsiveness



# What's next?

QGIS Plugin  
Import/Export Styles in QGIS



# What's next?

GeoStyler Code Sprint

Bugfixing, New Features, Community Building

When? TBA



# What's next?

## Talks on FOSS4G

- Balthasar Teuscher - GeoStyler Mapfile Parser, 29.09.2021 @Humahuaca
- Marc Jansen, Till Adams - Optimized publishing of map and dataservices with GeoServer, GeoStyler and MapProxy, 30.09.2021 @Buenos Aires
- Marc Jansen, Christian Mayer - The state of GeoExt along with an outlook on its future, 30.09.2021 @Córdoba



# Thank you for your attention

and enjoy FOSS4G 2021



# Imprint

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[terrestris.github.io/foss4g2021/geostyler](https://terrestris.github.io/foss4g2021/geostyler)

[PDF-Version](#), git repository

# Imprint

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