Table of Contents

Style

Create

Create a simple style.

geo-shell> **style create** --params "stroke=black stroke-width=0.25 fill=wheat" --file examples/style_create.sld

Name	Description	Mandatory	Specified Default	Unspecified Default
params	The style parameters	true		
file	The output file	true		

geo-shell> **style create** --params "stroke=black stroke-width=0.25 fill=wheat" --file examples/style_create.sld
Style stroke=black stroke-width=0.25 fill=wheat written to /home/runner/work/geo-shell/geo-shell/examples/style_create.sld!

geo-shell> **workspace open** --name naturalearth --params src/test/resources/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/style_create.sld

Style /home/runner/work/geo-shell/geo-shell/examples/style_create.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/runner/work/geo-shell/geo-shell/examples/ocean.sld set on ocean

geo-shell> **map open** --name map
Map map opened!

geo-shell> **map add layer** --name map --layer ocean
Added ocean layer to map map

geo-shell> **map add layer** --name map --layer countries
Added countries layer to map map

geo-shell> **map draw** --name map --file examples/style_create.png
Done drawing /home/runner/work/geo-shell/geo-shell/examples/style_create.png!

geo-shell> **map close** --name map
Map map closed!

```xml
<?xml version="1.0" encoding="UTF-8"?><sld:StyledLayerDescriptor xmlns=
"http://www.opengis.net/sld" xmlns:sld="http://www.opengis.net/sld" xmlns:gml=
"http://www.opengis.net/gml" xmlns:ogc="http://www.opengis.net/ogc" version="1.0.0">
  <sld:UserLayer>
    <sld:LayerFeatureConstraints>
      <sld:FeatureTypeConstraint/>
    </sld:LayerFeatureConstraints>
    <sld:UserStyle>
      <sld:Name>Default Styler</sld:Name>
      <sld:FeatureTypeStyle>
        <sld:Name>name</sld:Name>
        <sld:Rule>
          <sld:PolygonSymbolizer>
            <sld:Fill>
              <sld:CssParameter name="fill">#f5deb3</sld:CssParameter>
              <sld:CssParameter name="fill-opacity">0.6</sld:CssParameter>
            </sld:Fill>
          </sld:PolygonSymbolizer>
          <sld:LineSymbolizer>
            <sld:Stroke>
              <sld:CssParameter name="stroke-width">0.25</sld:CssParameter>
            </sld:Stroke>
          </sld:LineSymbolizer>
        </sld:Rule>
      </sld:FeatureTypeStyle>
    </sld:UserStyle>
  </sld:UserLayer>
</sld:StyledLayerDescriptor>
```

Vector Default

Create a default vector style.

geo-shell> **style vector default** --layer countries --color #F5F5DC --file examples/countries_default.sld

Name	Description	Mandatory	Specified Default	Unspecified Default
layer	The Layer	true		
color	The color	false	#f2f2f2	#f2f2f2
opacity	The opacity	false	1.0	1.0
file	The output file	true		

geo-shell> **workspace open** --name naturalearth --params src/test/resources/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **style vector default** --layer countries --color #F5F5DC --file examples/countries_default.sld
Default Vector Style for countries written to /home/runner/work/geo-shell/geo-shell/examples/countries_default.sld!

geo-shell> **layer style set** --name countries --style examples/countries_default.sld
Style /home/runner/work/geo-shell/geo-shell/examples/countries_default.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **style vector default** --layer ocean --color DeepSkyBlue --file examples/ocean_default.sld
Default Vector Style for ocean written to /home/runner/work/geo-shell/geo-shell/examples/ocean_default.sld!

geo-shell> **layer style set** --name ocean --style examples/ocean_default.sld
Style /home/runner/work/geo-shell/geo-shell/examples/ocean_default.sld set on ocean

geo-shell> **map open** --name map
Map map opened!

geo-shell> **map add layer** --name map --layer ocean
Added ocean layer to map map

geo-shell> **map add layer** --name map --layer countries
Added countries layer to map map

geo-shell> **map draw** --name map --file examples/style_vector_default.png
Done drawing /home/runner/work/geo-shell/geo-shell/examples/style_vector_default.png!

geo-shell> **map close** --name map
Map map closed!

Country Style

```xml
<?xml version="1.0" encoding="UTF-8"?><sld:StyledLayerDescriptor xmlns=
"http://www.opengis.net/sld" xmlns:sld="http://www.opengis.net/sld" xmlns:gml=
"http://www.opengis.net/gml" xmlns:ogc="http://www.opengis.net/ogc" version="1.0.0">
  <sld:UserLayer>
    <sld:LayerFeatureConstraints>
      <sld:FeatureTypeConstraint/>
    </sld:LayerFeatureConstraints>
    <sld:UserStyle>
      <sld:Name>Default Styler</sld:Name>
      <sld:FeatureTypeStyle>
        <sld:Name>name</sld:Name>
        <sld:Rule>
          <sld:PolygonSymbolizer>
            <sld:Fill>
              <sld:CssParameter name="fill">#f5f5dc</sld:CssParameter>
            </sld:Fill>
          </sld:PolygonSymbolizer>
          <sld:LineSymbolizer>
            <sld:Stroke>
              <sld:CssParameter name="stroke">#abab9a</sld:CssParameter>
              <sld:CssParameter name="stroke-width">0.5</sld:CssParameter>
            </sld:Stroke>
          </sld:LineSymbolizer>
        </sld:Rule>
      </sld:FeatureTypeStyle>
    </sld:UserStyle>
  </sld:UserLayer>
</sld:StyledLayerDescriptor>
```

Ocean Style

```xml
<?xml version="1.0" encoding="UTF-8"?><sld:StyledLayerDescriptor xmlns=
"http://www.opengis.net/sld" xmlns:sld="http://www.opengis.net/sld" xmlns:gml=
"http://www.opengis.net/gml" xmlns:ogc="http://www.opengis.net/ogc" version="1.0.0">
  <sld:UserLayer>
    <sld:LayerFeatureConstraints>
      <sld:FeatureTypeConstraint/>
    </sld:LayerFeatureConstraints>
    <sld:UserStyle>
      <sld:Name>Default Styler</sld:Name>
      <sld:FeatureTypeStyle>
        <sld:Name>name</sld:Name>
        <sld:Rule>
          <sld:PolygonSymbolizer>
            <sld:Fill>
              <sld:CssParameter name="fill">#00bfff</sld:CssParameter>
            </sld:Fill>
          </sld:PolygonSymbolizer>
          <sld:LineSymbolizer>
            <sld:Stroke>
              <sld:CssParameter name="stroke">#0085b2</sld:CssParameter>
              <sld:CssParameter name="stroke-width">0.5</sld:CssParameter>
            </sld:Stroke>
          </sld:LineSymbolizer>
        </sld:Rule>
      </sld:FeatureTypeStyle>
    </sld:UserStyle>
  </sld:UserLayer>
</sld:StyledLayerDescriptor>
```

Vector Gradient

Create a gradient vector style.

geo-shell> **style vector gradient** --layer countries --field PEOPLE --colors greens --number 8 --method quantile --file examples/style_vector_gradient.sld

Name	Description	Mandatory	Specified Default	Unspecified Default
layer	The Layer	true		
field	The field	true		
number	The number of categories	true		
colors	The colors	true		
method	The classification method (Quantile or EqualInterval)	false	Quantile	Quantile
elsemode	The else mode (ignore, min, max)	false	ignore	ignore
file	The output file	true		

geo-shell> **workspace open** --name naturalearth --params src/test/resources/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **style vector gradient** --layer countries --field PEOPLE --colors greens --number 8 --method quantile --file examples/style_vector_gradient.sld
Gradient Vector Style for countries's PEOPLE Field written to /home/runner/work/geo-shell/geo-shell/examples/style_vector_gradient.sld!

geo-shell> **layer style set** --name countries --style examples/style_vector_gradient.sld
Style /home/runner/work/geo-shell/geo-shell/examples/style_vector_gradient.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/runner/work/geo-shell/geo-shell/examples/ocean.sld set on ocean

geo-shell> **map open** --name map
Map map opened!

geo-shell> **map add layer** --name map --layer ocean
Added ocean layer to map map

geo-shell> **map add layer** --name map --layer countries
Added countries layer to map map

geo-shell> **map draw** --name map --file examples/style_vector_gradient.png
Done drawing /home/runner/work/geo-shell/geo-shell/examples/style_vector_gradient.png!
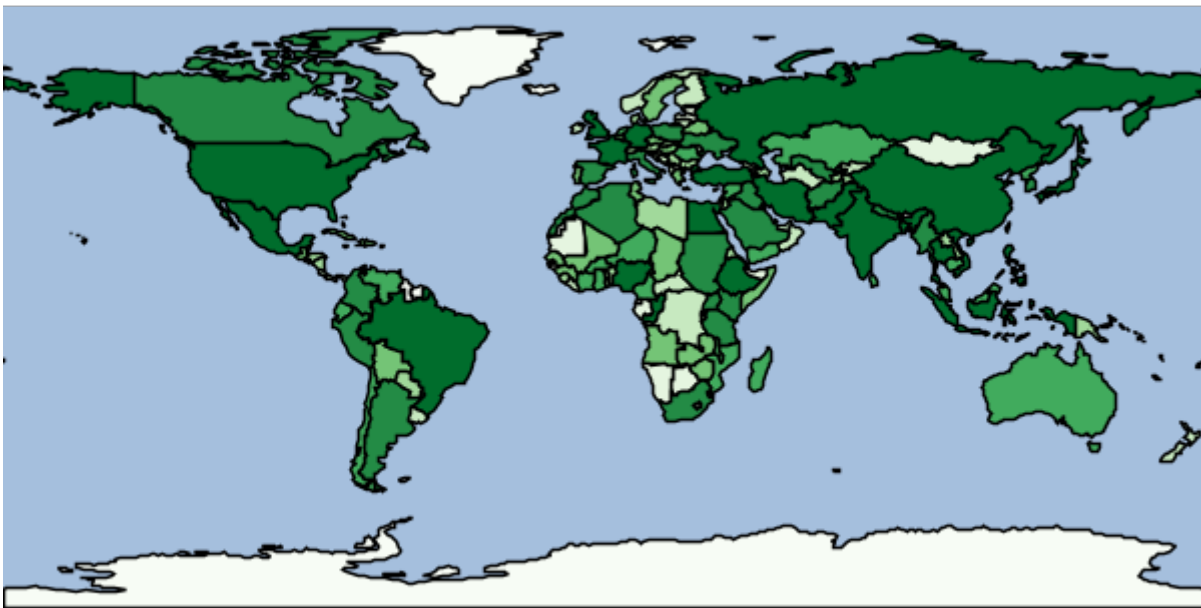
geo-shell> **map close** --name map
Map map closed!

```xml
<?xml version="1.0" encoding="UTF-8"?><sld:StyledLayerDescriptor xmlns=
"http://www.opengis.net/sld" xmlns:sld="http://www.opengis.net/sld" xmlns:gml=
"http://www.opengis.net/gml" xmlns:ogc="http://www.opengis.net/ogc" version="1.0.0">
  <sld:UserLayer>
    <sld:LayerFeatureConstraints>
      <sld:FeatureTypeConstraint/>
    </sld:LayerFeatureConstraints>
    <sld:UserStyle>
      <sld:Name>Default Styler</sld:Name>
      <sld:FeatureTypeStyle>
        <sld:Name>name</sld:Name>
        <sld:Rule>
          <ogc:Filter>
            <ogc:And>
              <ogc:PropertyIsGreaterThanOrEqualTo>
                <ogc:PropertyName>PEOPLE</ogc:PropertyName>
                <ogc:Literal>0</ogc:Literal>
              </ogc:PropertyIsGreaterThanOrEqualTo>
              <ogc:PropertyIsLessThan>
                <ogc:PropertyName>PEOPLE</ogc:PropertyName>
                <ogc:Literal>833285</ogc:Literal>
              </ogc:PropertyIsLessThan>
            </ogc:And>
          </ogc:Filter>
          <sld:PolygonSymbolizer>
            <sld:Fill>
              <sld:CssParameter name="fill">#F7FCF5</sld:CssParameter>
            </sld:Fill>
          </sld:PolygonSymbolizer>
          <sld:LineSymbolizer>
            <sld:Stroke/>
          </sld:LineSymbolizer>
        </sld:Rule>
        <sld:Rule>
          <ogc:Filter>
            <ogc:And>
              <ogc:PropertyIsGreaterThanOrEqualTo>
                <ogc:PropertyName>PEOPLE</ogc:PropertyName>
                <ogc:Literal>833285</ogc:Literal>
              </ogc:PropertyIsGreaterThanOrEqualTo>
              <ogc:PropertyIsLessThan>
```

```xml
                <ogc:PropertyName>PEOPLE</ogc:PropertyName>
                <ogc:Literal>3360474</ogc:Literal>
              </ogc:PropertyIsLessThan>
            </ogc:And>
          </ogc:Filter>
          <sld:PolygonSymbolizer>
            <sld:Fill>
              <sld:CssParameter name="fill">#E5F5E0</sld:CssParameter>
            </sld:Fill>
          </sld:PolygonSymbolizer>
          <sld:LineSymbolizer>
```


Vector Unique Values

Create a unique values vector style.

geo-shell> **style vector uniquevalues** --layer countries --field NAME --colors random --file examples/style_vector_uniquevalues.sld

Name	Description	Mandatory	Specified Default	Unspecified Default
layer	The Layer	true		
field	The field	true		
colors	The colors	true		
file	The output file	true		

geo-shell> **workspace open** --name naturalearth --params src/test/resources/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **style vector uniquevalues** --layer countries --field NAME --colors random --file examples/style_vector_uniquevalues.sld
Unique Values Vector Style for countries's NAME Field written to /home/runner/work/geo-shell/geo-shell/examples/style_vector_uniquevalues.sld!

geo-shell> **layer style set** --name countries --style examples/style_vector_uniquevalues.sld
Style /home/runner/work/geo-shell/geo-shell/examples/style_vector_uniquevalues.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/runner/work/geo-shell/geo-shell/examples/ocean.sld set on ocean

geo-shell> **map open** --name map
Map map opened!

geo-shell> **map add layer** --name map --layer ocean
Added ocean layer to map map

geo-shell> **map add layer** --name map --layer countries
Added countries layer to map map

geo-shell> **map draw** --name map --file examples/style_vector_uniquevalues.png
Done drawing /home/runner/work/geo-shell/geo-shell/examples/style_vector_uniquevalues.png!

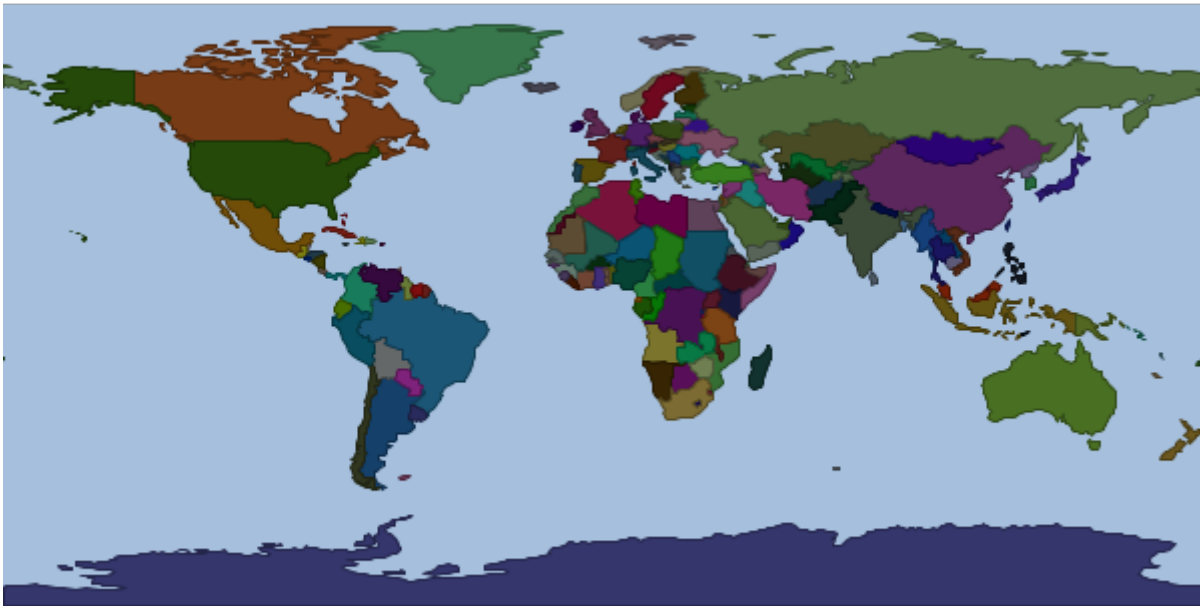geo-shell> **map close** --name map
Map map closed!

```xml
<?xml version="1.0" encoding="UTF-8"?><sld:StyledLayerDescriptor xmlns=
"http://www.opengis.net/sld" xmlns:sld="http://www.opengis.net/sld" xmlns:gml=
"http://www.opengis.net/gml" xmlns:ogc="http://www.opengis.net/ogc" version="1.0.0">
  <sld:UserLayer>
    <sld:LayerFeatureConstraints>
      <sld:FeatureTypeConstraint/>
    </sld:LayerFeatureConstraints>
    <sld:UserStyle>
      <sld:Name>Default Styler</sld:Name>
      <sld:FeatureTypeStyle>
        <sld:Name>name</sld:Name>
        <sld:Rule>
          <sld:Name>Afghanistan</sld:Name>
          <ogc:Filter>
            <ogc:PropertyIsEqualTo>
```

```xml
        <ogc:PropertyName>NAME</ogc:PropertyName>
        <ogc:Literal>Afghanistan</ogc:Literal>
      </ogc:PropertyIsEqualTo>
    </ogc:Filter>
    <sld:PolygonSymbolizer>
      <sld:Fill>
        <sld:CssParameter name="fill">#172e4d</sld:CssParameter>
      </sld:Fill>
    </sld:PolygonSymbolizer>
    <sld:LineSymbolizer>
      <sld:Stroke>
        <sld:CssParameter name="stroke">#102035</sld:CssParameter>
        <sld:CssParameter name="stroke-width">0.5</sld:CssParameter>
      </sld:Stroke>
    </sld:LineSymbolizer>
  </sld:Rule>
  <sld:Rule>
    <sld:Name>Albania</sld:Name>
    <ogc:Filter>
      <ogc:PropertyIsEqualTo>
        <ogc:PropertyName>NAME</ogc:PropertyName>
        <ogc:Literal>Albania</ogc:Literal>
      </ogc:PropertyIsEqualTo>
    </ogc:Filter>
    <sld:PolygonSymbolizer>
      <sld:Fill>
        <sld:CssParameter name="fill">#1a201d</sld:CssParameter>
      </sld:Fill>
    </sld:PolygonSymbolizer>
    <sld:LineSymbolizer>
      <sld:Stroke>
        <sld:CssParameter name="stroke">#121614</sld:CssParameter>
        <sld:CssParameter name="stroke-width">0.5</sld:CssParameter>
      </sld:Stroke>
    </sld:LineSymbolizer>
  </sld:Rule>
  <sld:Rule>
```

Vector Unique Values From Text File

Create a unique values vector style from a text file

geo-shell> **style vector uniquevaluesfromtext** --field UnitSymbol --textFile src/test/resources/mars/I1802ABC_geo_units_RGBlut.txt --geometryType polygon --styleFile examples/style_vector_uniquevaluesfromtext.sld

Name	Description	Mandatory	Specified Default	Unspecified Default
field	The field name	true		
geometryType	The geometry type	true		
textFile	The input text file	true		
styleFile	The output sld or ysld file	true		

geo-shell> **workspace open** --name mars --params src/test/resources/mars
Workspace mars opened!

geo-shell> **layer open** --workspace mars --layer geo_units_oc_dd --name mars
Opened Workspace mars Layer geo_units_oc_dd as mars

geo-shell> **style vector uniquevaluesfromtext** --field UnitSymbol --textFile src/test/resources/mars/I1802ABC_geo_units_RGBlut.txt --geometryType polygon --styleFile examples/style_vector_uniquevaluesfromtext.sld
Create a unique values style from /home/runner/work/geo-shell/geo-shell/src/test/resources/mars/I1802ABC_geo_units_RGBlut.txt for UnitSymbol and polygon to

/home/runner/work/geo-shell/geo-shell/examples/style_vector_uniquevaluesfromtext.sld

geo-shell> **layer style set** --name mars --style examples/style_vector_uniquevaluesfromtext.sld
Style   /home/runner/work/geo-shell/geo-shell/examples/style_vector_uniquevaluesfromtext.sld   set on mars

geo-shell> **map open** --name map
Map map opened!

geo-shell> **map add layer** --name map --layer mars
Added mars layer to map map

geo-shell> **map draw** --name map --file examples/style_vector_uniquevaluesfromtext.png
Done   drawing   /home/runner/work/geo-shell/geo-shell/examples/style_vector_uniquevaluesfromtext.png!

geo-shell> **map close** --name map
Map map closed!

```xml
<?xml version="1.0" encoding="UTF-8"?><sld:StyledLayerDescriptor xmlns=
"http://www.opengis.net/sld" xmlns:sld="http://www.opengis.net/sld" xmlns:gml=
"http://www.opengis.net/gml" xmlns:ogc="http://www.opengis.net/ogc" version="1.0.0">
  <sld:UserLayer>
    <sld:LayerFeatureConstraints>
      <sld:FeatureTypeConstraint/>
    </sld:LayerFeatureConstraints>
    <sld:UserStyle>
      <sld:Name>Default Styler</sld:Name>
      <sld:FeatureTypeStyle>
        <sld:Name>name</sld:Name>
        <sld:Rule>
          <ogc:Filter>
            <ogc:PropertyIsEqualTo>
              <ogc:PropertyName>UnitSymbol</ogc:PropertyName>
              <ogc:Literal>AHa</ogc:Literal>
            </ogc:PropertyIsEqualTo>
          </ogc:Filter>
          <sld:PolygonSymbolizer>
            <sld:Fill>
              <sld:CssParameter name="fill">#af006f</sld:CssParameter>
            </sld:Fill>
          </sld:PolygonSymbolizer>
          <sld:LineSymbolizer>
            <sld:Stroke>
              <sld:CssParameter name="stroke">#7a004d</sld:CssParameter>
              <sld:CssParameter name="stroke-width">0.5</sld:CssParameter>
            </sld:Stroke>
          </sld:LineSymbolizer>
        </sld:Rule>
        <sld:Rule>
```

```
            <ogc:Filter>
              <ogc:PropertyIsEqualTo>
                <ogc:PropertyName>UnitSymbol</ogc:PropertyName>
                <ogc:Literal>AHat</ogc:Literal>
              </ogc:PropertyIsEqualTo>
            </ogc:Filter>
            <sld:PolygonSymbolizer>
              <sld:Fill>
                <sld:CssParameter name="fill">#c03616</sld:CssParameter>
              </sld:Fill>
            </sld:PolygonSymbolizer>
            <sld:LineSymbolizer>
              <sld:Stroke>
                <sld:CssParameter name="stroke">#86250f</sld:CssParameter>
                <sld:CssParameter name="stroke-width">0.5</sld:CssParameter>
              </sld:Stroke>
            </sld:LineSymbolizer>
          </sld:Rule>
          <sld:Rule>
            <ogc:Filter>
              <ogc:PropertyIsEqualTo>
```


Raster Default

Create a default raster style.

geo-shell> **style raster default** --raster pc --opacity 0.75 --file examples/style_raster_default.sld

Name	Description	Mandatory	Specified Default	Unspecified Default
raster	The Raster	true		
opacity	The opacity	false	1.0	1.0
file	The output file	true		

geo-shell> **format open** --name pierce_county --input src/test/resources/pc.tif
Format pierce_county opened!

geo-shell> **raster open** --format pierce_county --raster pc --name pc
Opened Format pierce_county Raster pc as pc

geo-shell> **style raster default** --raster pc --opacity 0.75 --file examples/style_raster_default.sld
Default Raster Style for pc written to /home/runner/work/geo-shell/geo-shell/examples/style_raster_default.sld!

geo-shell> **raster style set** --name pc --style examples/style_raster_default.sld
Style /home/runner/work/geo-shell/geo-shell/examples/style_raster_default.sld set on pc

geo-shell> **map open** --name map
Map map opened!

geo-shell> **map add raster** --name map --raster pc
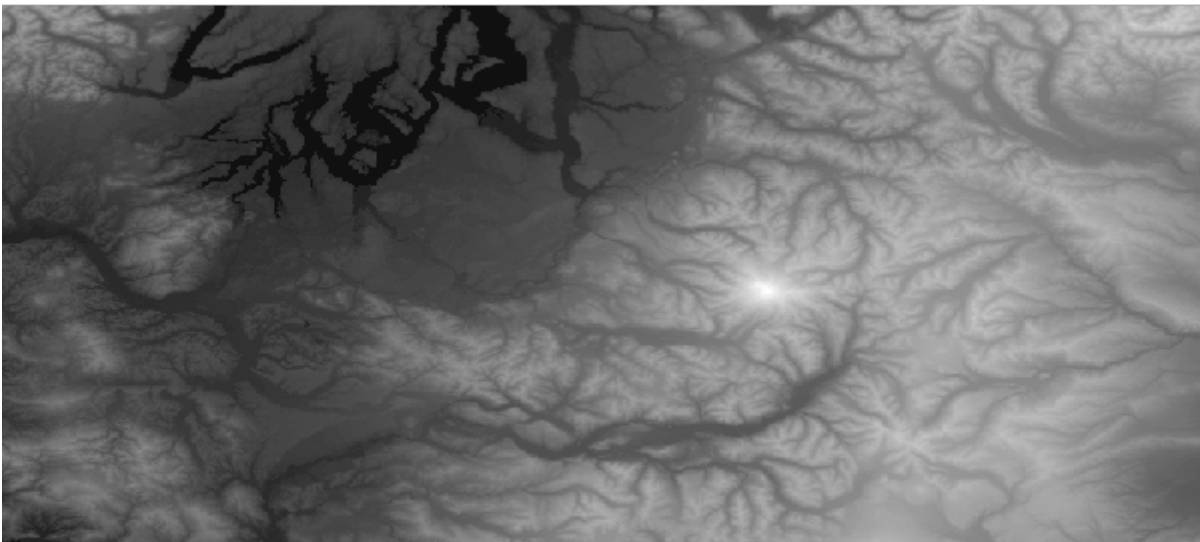Added pc layer to map map

geo-shell> **map draw** --name map --file examples/style_raster_default.png
Done drawing /home/runner/work/geo-shell/geo-shell/examples/style_raster_default.png!

geo-shell> **map close** --name map
Map map closed!

```
<?xml version="1.0" encoding="UTF-8"?><sld:StyledLayerDescriptor xmlns=
"http://www.opengis.net/sld" xmlns:sld="http://www.opengis.net/sld" xmlns:gml=
"http://www.opengis.net/gml" xmlns:ogc="http://www.opengis.net/ogc" version="1.0.0">
  <sld:UserLayer>
    <sld:LayerFeatureConstraints>
      <sld:FeatureTypeConstraint/>
    </sld:LayerFeatureConstraints>
    <sld:UserStyle>
      <sld:Name>Default Styler</sld:Name>
      <sld:FeatureTypeStyle>
        <sld:Name>name</sld:Name>
        <sld:Rule>
          <sld:RasterSymbolizer>
            <sld:Geometry>
              <ogc:Literal>grid</ogc:Literal>
            </sld:Geometry>
            <sld:Opacity>0.75</sld:Opacity>
            <sld:ContrastEnhancement/>
          </sld:RasterSymbolizer>
        </sld:Rule>
      </sld:FeatureTypeStyle>
    </sld:UserStyle>
  </sld:UserLayer>
</sld:StyledLayerDescriptor>
```

Raster Color Map

Create a color map raster style.

geo-shell> **style raster colormap** --raster pc --values "25=#9fd182,470=#3e7f3c,920=#133912,1370=#08306b,1820=#fffff5" --file examples/style_raster_colormap.sld

Name	Description	Mandatory	Specified Default	Unspecified Default
raster	The Raster	true		
opacity	The opacity	false	1.0	1.0
values	The comma delimited list of values (key=value)	true		
type	The type (intervals, values, ramp)	false	ramp	ramp
extended	Whether to use extended colors or not	false	false	false
file	The output file	true		

geo-shell> **format open** --name pierce_county --input src/test/resources/pc.tif
Format pierce_county opened!

geo-shell> **raster open** --format pierce_county --raster pc --name pc
Opened Format pierce_county Raster pc as pc

geo-shell> **style raster colormap** --raster pc --values "25=#9fd182,470=#3e7f3c,920=#133912,1370=#08306b,1820=#fffff5" --file examples/style_raster_colormap.sld
Colormap Raster Style for pc written to /home/runner/work/geo-shell/geo-shell/examples/style_raster_colormap.sld!

geo-shell> **raster style set** --name pc --style examples/style_raster_colormap.sld
Style /home/runner/work/geo-shell/geo-shell/examples/style_raster_colormap.sld set on pc
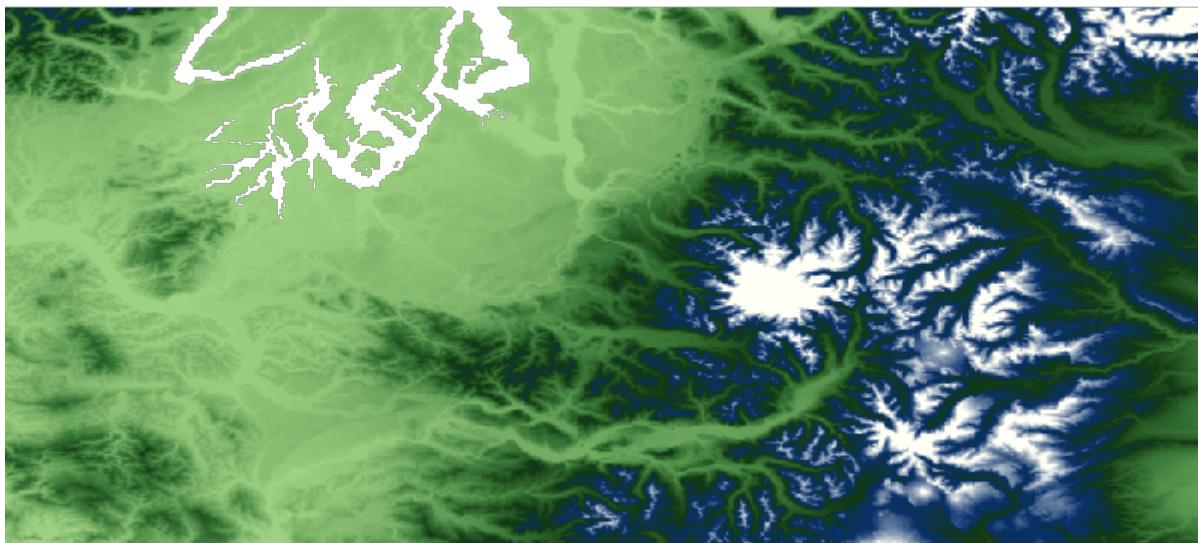
geo-shell> **map open** --name map
Map map opened!

geo-shell> **map add raster** --name map --raster pc
Added pc layer to map map

geo-shell> **map draw** --name map --file examples/style_raster_colormap.png
Done drawing /home/runner/work/geo-shell/geo-shell/examples/style_raster_colormap.png!

geo-shell> **map close** --name map
Map map closed!

```xml
<?xml version="1.0" encoding="UTF-8"?><sld:StyledLayerDescriptor xmlns=
"http://www.opengis.net/sld" xmlns:sld="http://www.opengis.net/sld" xmlns:gml=
"http://www.opengis.net/gml" xmlns:ogc="http://www.opengis.net/ogc" version="1.0.0">
  <sld:UserLayer>
    <sld:LayerFeatureConstraints>
      <sld:FeatureTypeConstraint/>
    </sld:LayerFeatureConstraints>
    <sld:UserStyle>
      <sld:Name>Default Styler</sld:Name>
      <sld:FeatureTypeStyle>
        <sld:Name>name</sld:Name>
        <sld:Rule>
          <sld:RasterSymbolizer>
            <sld:Geometry>
              <ogc:Literal>grid</ogc:Literal>
            </sld:Geometry>
            <sld:ColorMap>
              <sld:ColorMapEntry color="#9fd182" opacity="1.0" quantity="25"/>
              <sld:ColorMapEntry color="#3e7f3c" opacity="1.0" quantity="470"/>
              <sld:ColorMapEntry color="#133912" opacity="1.0" quantity="920"/>
              <sld:ColorMapEntry color="#08306b" opacity="1.0" quantity="1370"/>
              <sld:ColorMapEntry color="#fffff5" opacity="1.0" quantity="1820"/>
            </sld:ColorMap>
            <sld:ContrastEnhancement/>
          </sld:RasterSymbolizer>
        </sld:Rule>
      </sld:FeatureTypeStyle>
    </sld:UserStyle>
  </sld:UserLayer>
</sld:StyledLayerDescriptor>
```

Raster Palette Color Map

Create a color map raster style from a color palette.

geo-shell> **style raster palette colormap** --min 1 --max 50 --palette MutedTerrain --number 20 --file examples/style_raster_palette_colormap.sld

Name	Description	Mandatory	Specified Default	Unspecified Default
min	The min value	true		
max	The max value	true		
palette	The color palette name (from Color Brewer)	true		
number	The number of categories	true		
type	The type of interpolation	false	ramp	ramp
extended	Whether to use extended colors	false	false	false
opacity	The opacity	false	1.0	1.0
file	The output file	true		

geo-shell> **format open** --name high --input src/test/resources/high.tif
Format high opened!

geo-shell> **raster open** --format high --raster high --name high
Opened Format high Raster high as high

geo-shell> **style raster palette colormap** --min 1 --max 50 --palette MutedTerrain --number 20 --file examples/style_raster_palette_colormap.sld
Colormap   Palette   Raster   Style   written   to   /home/runner/work/geo-shell/geo-shell/examples/style_raster_palette_colormap.sld!

geo-shell> **raster style set** --name high --style examples/style_raster_palette_colormap.sld
Style /home/runner/work/geo-shell/geo-shell/examples/style_raster_palette_colormap.sld set on high
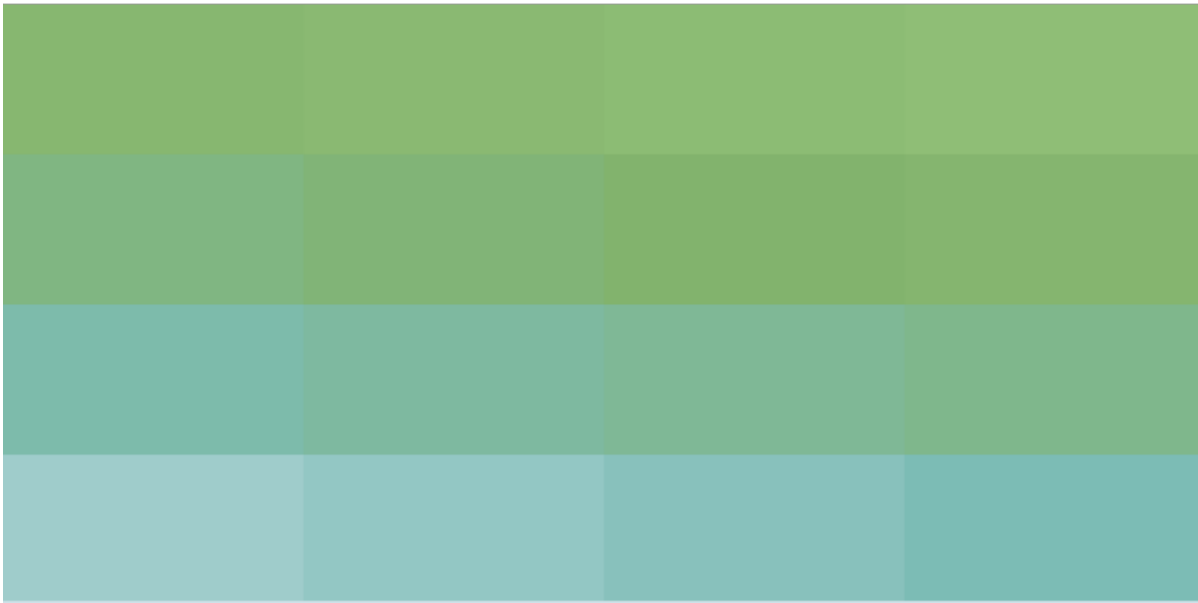
geo-shell> **map open** --name map
Map map opened!

geo-shell> **map add raster** --name map --raster high
Added high layer to map map

```xml
<?xml version="1.0" encoding="UTF-8"?><sld:StyledLayerDescriptor xmlns=
"http://www.opengis.net/sld" xmlns:sld="http://www.opengis.net/sld" xmlns:gml=
"http://www.opengis.net/gml" xmlns:ogc="http://www.opengis.net/ogc" version="1.0.0">
  <sld:UserLayer>
    <sld:LayerFeatureConstraints>
      <sld:FeatureTypeConstraint/>
    </sld:LayerFeatureConstraints>
    <sld:UserStyle>
      <sld:Name>Default Styler</sld:Name>
      <sld:FeatureTypeStyle>
        <sld:Name>name</sld:Name>
        <sld:Rule>
          <sld:RasterSymbolizer>
            <sld:Geometry>
              <ogc:Literal>grid</ogc:Literal>
            </sld:Geometry>
            <sld:ColorMap>
              <sld:ColorMapEntry color="#CEE1E8" opacity="1.0" quantity="1.0"/>
              <sld:ColorMapEntry color="#7CBCB5" opacity="1.0" quantity="8.0"/>
              <sld:ColorMapEntry color="#82B36D" opacity="1.0" quantity="15.0"/>
              <sld:ColorMapEntry color="#94C279" opacity="1.0" quantity="22.0"/>
              <sld:ColorMapEntry color="#D1DE8D" opacity="1.0" quantity="29.0"/>
              <sld:ColorMapEntry color="#EDECC3" opacity="1.0" quantity="36.0"/>
              <sld:ColorMapEntry color="#CCAFB4" opacity="1.0" quantity="43.0"/>
              <sld:ColorMapEntry color="#C99884" opacity="1.0" quantity="50.0"/>
            </sld:ColorMap>
            <sld:ContrastEnhancement/>
          </sld:RasterSymbolizer>
        </sld:Rule>
      </sld:FeatureTypeStyle>
    </sld:UserStyle>
  </sld:UserLayer>
</sld:StyledLayerDescriptor>
```

Style Repository Save

Save a style to a style repository

geo-shell> **style repository save** --type sqlite --options file=target/styles.db --layerName fields --styleName fields --styleFile examples/fields.sld

Name	Description	Mandatory	Specified Default	Unspecified Default
type	The type of style repository (directory, nested-directory, h2, sqlite, postgres)	true		
options	The style repository options	true		
layerName	The layer name	true		
styleName	The style name	true		
styleFile	The style file (sld or css)	true		

geo-shell> **style create** --params "stroke=black stroke-width=0.25 fill=wheat" --file examples/fields.sld
Style stroke=black stroke-width=0.25 fill=wheat written to /home/runner/work/geo-shell/geo-shell/examples/fields.sld!

geo-shell> **style repository save** --type sqlite --options file=target/styles.db --layerName fields --styleName fields --styleFile examples/fields.sld
Style fields for Layer fields saved to sqlite

Style Repository List

List styles in a style repository

geo-shell> **style repository list** --type h2 --options file=target/styles_county.db

Name	Description	Mandatory	Specified Default	Unspecified Default
type	The type of style repository (directory, nested-directory, h2, sqlite, postgres)	true		
options	The style repository options	true		
layerName	The layer name	false		

geo-shell> **style create** --params "stroke=black stroke-width=1.0" --file examples/roads.sld
Style stroke=black stroke-width=1.0 written to /home/runner/work/geo-shell/geo-shell/examples/roads.sld!

geo-shell> **style create** --params "stroke=red stroke-width=0.50" --file examples/parcels.sld
Style stroke=red stroke-width=0.50 written to /home/runner/work/geo-shell/geo-shell/examples/parcels.sld!

geo-shell> **style repository save** --type h2 --options file=target/styles_county.db --layerName roads --styleName roads --styleFile examples/roads.sld
Style roads for Layer roads saved to h2

geo-shell> **style repository save** --type h2 --options file=target/styles_county.db --layerName parcels --styleName parcels --styleFile examples/parcels.sld
Style parcels for Layer parcels saved to h2

geo-shell> **style repository list** --type h2 --options file=target/styles_county.db
roads roads
parcels parcels

geo-shell> **style repository list** --type h2 --options file=target/styles_county.db --layerName roads
roads roads

Style Repository Delete

Delete a style from a style repository

geo-shell> **style repository delete** --type directory --options file=examples/styles --layerName parcels --styleName parcels

Name	Description	Mandatory	Specified Default	Unspecified Default
type	The type of style repository (directory, nested-directory, h2, sqlite, postgres)	true		
options	The style repository options	true		
layerName	The layer name	true		
styleName	The style name	true		

geo-shell> **style create** --params "stroke=black stroke-width=1.0" --file examples/roads.sld
Style stroke=black stroke-width=1.0 written to /home/runner/work/geo-shell/geo-shell/examples/roads.sld!

geo-shell> **style create** --params "stroke=red stroke-width=0.50" --file examples/parcels.sld
Style stroke=red stroke-width=0.50 written to /home/runner/work/geo-shell/geo-shell/examples/parcels.sld!

geo-shell> **style repository save** --type directory --options file=examples/styles --layerName roads --styleName roads --styleFile examples/roads.sld
Style roads for Layer roads saved to directory

geo-shell> **style repository save** --type directory --options file=examples/styles --layerName parcels --styleName parcels --styleFile examples/parcels.sld
Style parcels for Layer parcels saved to directory

geo-shell> **style repository list** --type directory --options file=examples/styles
parcels parcels
roads roads

geo-shell> **style repository delete** --type directory --options file=examples/styles --layerName parcels --styleName parcels
Style parcels for Layer parcels deleted from directory

geo-shell> **style repository list** --type directory --options file=examples/styles
roads roads

Style Repository Get

Get a style from a style repository

geo-shell> **style repository get** --type nested-directory --options file=examples/county_styles --layerName roads --styleName roads

Name	Description	Mandatory	Specified Default	Unspecified Default
type	The type of style repository (directory, nested-directory, h2, sqlite, postgres)	true		
options	The style repository options	true		
layerName	The layer name	true		
styleName	The style name	true		
styleFile	The style file (sld or css)	false		

geo-shell> **style create** --params "stroke=black stroke-width=1.0" --file examples/roads.sld
Style stroke=black stroke-width=1.0 written to /home/runner/work/geo-shell/geo-shell/examples/roads.sld!

geo-shell> **style create** --params "stroke=red stroke-width=0.50" --file examples/parcels.sld
Style stroke=red stroke-width=0.50 written to /home/runner/work/geo-shell/geo-shell/examples/parcels.sld!

geo-shell> **style repository save** --type nested-directory --options file=examples/county_styles --layerName roads --styleName roads --styleFile examples/roads.sld
Style roads for Layer roads saved to nested-directory

geo-shell> **style repository save** --type nested-directory --options file=examples/county_styles --layerName parcels --styleName parcels --styleFile examples/parcels.sld
Style parcels for Layer parcels saved to nested-directory

geo-shell> **style repository get** --type nested-directory --options file=examples/county_styles --layerName roads --styleName roads
<?xml version="1.0" encoding="UTF-8"?><sld:StyledLayerDescriptor xmlns="http://www.opengis.net/sld" xmlns:sld="http://www.opengis.net/sld" xmlns:gml="http://www.opengis.net/gml" xmlns:ogc="http://www.opengis.net/ogc" version="1.0.0">
<sld:UserLayer>
<sld:LayerFeatureConstraints>
<sld:FeatureTypeConstraint/>
</sld:LayerFeatureConstraints>
<sld:UserStyle>
<sld:Name>Default Styler</sld:Name>
<sld:FeatureTypeStyle>
<sld:Name>name</sld:Name>
<sld:Rule>
<sld:LineSymbolizer>
<sld:Stroke/>

```
</sld:LineSymbolizer>
</sld:Rule>
</sld:FeatureTypeStyle>
</sld:UserStyle>
</sld:UserLayer>
</sld:StyledLayerDescriptor>
```

geo-shell> **style repository get** --type nested-directory --options file=examples/county_styles --layerName parcels --styleName parcels --styleFile examples/roads_simple.sld
Style parcels for Layer parcels saved to roads_simple.sld

Style Repository Copy

Copy styles from one repository to another

geo-shell> **style repository copy** --inputType sqlite --inputOptions file=target/my-styles.db --outputType h2 --outputOptions file=target/h2-styles.db

Name	Description	Mandatory	Specified Default	Unspecified Default
inputType	The type of style repository (directory, nested-directory, h2, sqlite, postgres)	true		
inputOptions	The style repository options	true		
outputType	The type of style repository (directory, nested-directory, h2, sqlite, postgres)	true		
outputOptions	The style repository options	true		

geo-shell> **style create** --params "stroke=black stroke-width=1.0" --file examples/roads.sld
Style stroke=black stroke-width=1.0 written to /home/runner/work/geo-shell/geo-shell/examples/roads.sld!

geo-shell> **style create** --params "stroke=red stroke-width=0.50" --file examples/parcels.sld
Style stroke=red stroke-width=0.50 written to /home/runner/work/geo-shell/geo-shell/examples/parcels.sld!

geo-shell> **style repository save** --type sqlite --options file=target/my-styles.db --layerName roads --styleName roads --styleFile examples/roads.sld
Style roads for Layer roads saved to sqlite

geo-shell> **style repository save** --type sqlite --options file=target/my-styles.db --layerName parcels --styleName parcels --styleFile examples/parcels.sld
Style parcels for Layer parcels saved to sqlite

geo-shell> **style repository list** --type sqlite --options file=target/my-styles.db
roads roads
parcels parcels

geo-shell> **style repository copy** --inputType sqlite --inputOptions file=target/my-styles.db --outputType h2 --outputOptions file=target/h2-styles.db
Copy styles from sqlite to h2

geo-shell> **style repository list** --type h2 --options file=target/h2-styles.db
roads roads
parcels parcels