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Tile

Open

Open a Tile Layer.

```
geo-shell> tile open --name countries --params src/test/resources/countries.mbtiles
```

| Name | Description | Mandatory | Specified Default | Unspecified Default |
|--------|---------------------------|-----------|-------------------|---------------------|
| name | The tile name | true | | |
| params | The connection parameters | true | | |

```
geo-shell> tile open --name countries --params src/test/resources/countries.mbtiles  
Tile Layer countries opened!
```

```
geo-shell> tile close --name countries  
Tile Layer countries closed!
```

Close

Close a Tile Layer.

```
geo-shell> tile close --name countries
```

| Name | Description | Mandatory | Specified Default | Unspecified Default |
|------|---------------|-----------|-------------------|---------------------|
| name | The tile name | true | | |

```
geo-shell> tile open --name countries --params src/test/resources/countries.mbtiles
```

Tile Layer countries opened!

geo-shell> **tile close** --name countries
Tile Layer countries closed!

List

List open Tile Layers.

geo-shell> **tile list**



No parameters

geo-shell> **tile open** --name countries --params src/test/resources/countries.mbtiles
Tile Layer countries opened!

geo-shell> **tile list**
countries = MBTiles

geo-shell> **tile close** --name countries
Tile Layer countries closed!

Info

Get information about a Tile Layer.

geo-shell> **tile info** --name countries

| Name | Description | Mandatory | Specified Default | Unspecified Default |
|------|---------------|-----------|-------------------|---------------------|
| name | The tile name | true | | |

geo-shell> **tile open** --name countries --params src/test/resources/countries.mbtiles
Tile Layer countries opened!

geo-shell> **tile info** --name countries
countries
EPSG:3857
-2.003639514788131E7,
-2.0037471205137067E7,2.003639514788131E7,2.003747120513706E7,EPSG:3857
BOTTOM_LEFT
256,256
0,1,1,156412.0,156412.0
1,2,2,78206.0,78206.0
2,4,4,39103.0,39103.0
3,8,8,19551.5,19551.5
4,16,16,9775.75,9775.75
5,32,32,4887.875,4887.875

6,64,64,2443.9375,2443.9375
 7,128,128,1221.96875,1221.96875
 8,256,256,610.984375,610.984375
 9,512,512,305.4921875,305.4921875
 10,1024,1024,152.74609375,152.74609375
 11,2048,2048,76.373046875,76.373046875
 12,4096,4096,38.1865234375,38.1865234375
 13,8192,8192,19.09326171875,19.09326171875
 14,16384,16384,9.546630859375,9.546630859375
 15,32768,32768,4.7733154296875,4.7733154296875
 16,65536,65536,2.38665771484375,2.38665771484375
 17,131072,131072,1.193328857421875,1.193328857421875
 18,262144,262144,0.5966644287109375,0.5966644287109375
 19,524288,524288,0.29833221435546875,0.29833221435546875

geo-shell> **tile close** --name countries
 Tile Layer countries closed!

Delete

Delete tiles from a Tile Layer.

geo-shell> **tile delete** --name tiles --z 3

| Name | Description | Mandatory | Specified Default | Unspecified Default |
|--------|---------------------|-----------|-------------------|---------------------|
| name | The tile name | true | | |
| tile | The tile z/x/y | false | | |
| bounds | The bounds | false | | |
| width | The width | false | 400 | 400 |
| height | The height | false | 400 | 400 |
| z | The zoom level | false | 0 | -1 |
| minx | The min x or column | false | | -1 |
| miny | The min y or row | false | | -1 |
| maxx | The max x or column | false | | -1 |
| maxy | The max y or row | false | | -1 |

geo-shell> **tile open** --name tiles --params target/tiles.mbtiles
 Tile Layer tiles opened!

geo-shell> **workspace open** --name naturalearth --params examples/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/countries.sld
Style /home/runner/work/geo-shell/geo-shell/examples/countries.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 world
Map world opened!

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

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

geo-shell> **tile generate** --name tiles --map world --start 0 --end 3
Tiles generated!

geo-shell> **tile delete** --name tiles --z 3
Deleting tiles at z level 3

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

Generate

Generate tiles for a Tile Layer.

geo-shell> **tile generate** --name tiles --map world --start 0 --end 3

| Name | Description | Mandatory | Specified Default | Unspecified Default |
|-------------|---------------------------|-----------|-------------------|---------------------|
| name | The tile name | true | | |
| map | The map name | true | | |
| start | The map name | true | | |
| end | The map name | true | | |
| bounds | The map name | false | | |
| metatile | The metatile width,height | false | | |
| missingOnly | The map name | false | false | false |

| | | | | |
|---------|--------------|-------|-------|-------|
| verbose | The map name | false | false | false |
|---------|--------------|-------|-------|-------|

geo-shell> **tile open** --name tiles --params target/tiles.mbtiles

Tile Layer tiles opened!

geo-shell> **workspace open** --name naturalearth --params examples/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/countries.sld

Style /home/runner/work/geo-shell/geo-shell/examples/countries.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 world

Map world opened!

geo-shell> **map add layer** --name world --layer ocean

Added ocean layer to map world

geo-shell> **map add layer** --name world --layer countries

Added countries layer to map world

geo-shell> **tile generate** --name tiles --map world --start 0 --end 3

Tiles generated!

geo-shell> **format open** --name world_level2 --input examples/tile_generate.png

Format world_level2 opened!

geo-shell> **tile stitch raster** --name tiles --format world_level2 --raster world_level2 --z 2

Done stitching Raster world_level2 from tiles!

geo-shell> **map close** --name world

Map world closed!



Stitch Raster

Create a Raster from a Tile Layer.

```
geo-shell> tile stitch raster --name countries --format states --raster states --bounds  
-18217695.5734,1222992.4526,-4207094.0368,7924991.0926
```

| Name | Description | Mandatory | Specified Default | Unspecified Default |
|--------|------------------------|-----------|-------------------|---------------------|
| name | The tile name | true | | |
| format | The raster format name | true | | |
| raster | The raster name | true | | |

| | | | | |
|--------|---------------------|-------|-----|-----|
| bounds | The bounds | false | | |
| width | The raster width | false | 400 | 400 |
| height | The raster height | false | 400 | 400 |
| z | The zoom level | false | 0 | -1 |
| minx | The min x or column | false | | -1 |
| miny | The min y or row | false | | -1 |
| maxx | The max x or column | false | | -1 |
| maxy | The max y or row | false | | -1 |

Create a Raster from a Tile Layer with a geographic bounds.

```
geo-shell> tile open --name countries --params src/test/resources/countries.mbtiles
Tile Layer countries opened!
```

```
geo-shell> format open --name states --input examples/tile_stitch_bounds.png
Format states opened!
```

```
geo-shell> tile stitch raster --name countries --format states --raster states --bounds
-18217695.5734,1222992.4526,-4207094.0368,7924991.0926
Done stitching Raster states from countries!
```



Tiles

List tiles within a given bounds.

```
geo-shell> tile tiles --name countries --z 8 --bounds -13787405.4140,5872198.2610,
-13349574.1159,6081635.7185
```

| Name | Description | Mandatory | Specified Default | Unspecified Default |
|--------|----------------|-----------|-------------------|---------------------|
| name | The tile name | true | | |
| bounds | The bounds | true | | |
| z | The zoom level | true | | |

```
geo-shell> tile open --name countries --params src/test/resources/countries.mbtiles
```

Tile Layer countries opened!

```
geo-shell> tile tiles --name countries --z 8 --bounds -13787405.4140,5872198.2610,-13349574.1159,6081635.7185
```

8/39/165

8/40/165

8/41/165

8/42/165

8/39/166

8/40/166

8/41/166

8/42/166

```
geo-shell> tile close --name countries
```

Tile Layer countries closed!

Vector Grid

Create a Vector Grid Layer from the pyramid of a Tile Layer.

```
geo-shell> tile vector grid --name countries --workspace layers --layer level3 --z 3
```

| Name | Description | Mandatory | Specified Default | Unspecified Default |
|-----------|---------------------|-----------|-------------------|---------------------|
| name | The tile name | true | | |
| workspace | The workspace name | true | | |
| layer | The layer name | true | | |
| bounds | The bounds | false | | |
| width | The raster width | false | 400 | 400 |
| height | The raster height | false | 400 | 400 |
| z | The zoom level | false | 0 | -1 |
| minx | The min x or column | false | | -1 |
| miny | The min y or row | false | | -1 |

| | | | | |
|------|---------------------|-------|--|----|
| maxx | The max x or column | false | | -1 |
| maxy | The max y or row | false | | -1 |

```
geo-shell> tile open --name countries --params src/test/resources/countries.mbtiles
Tile Layer countries opened!
```

```
geo-shell> workspace open --name layers --params memory
Workspace layers opened!
```

```
geo-shell> tile vector grid --name countries --workspace layers --layer level3 --z 3
Done generating the vector grid level3 from countries!
```

```
geo-shell> style vector default --layer level3 --color #ffffff --opacity 0.25 --file examples/level3.sld
Default Vector Style for level3 written to /home/runner/work/geo-shell/geo-shell/examples/level3.sld!
```

```
geo-shell> layer style set --name level3 --style examples/level3.sld
Style /home/runner/work/geo-shell/geo-shell/examples/level3.sld set on level3
```

```
geo-shell> workspace open --name naturalearth --params examples/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/countries.sld
Style /home/runner/work/geo-shell/geo-shell/examples/countries.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 vectorGridMap
Map vectorGridMap opened!
```

```
geo-shell> map add layer --name vectorGridMap --layer ocean
Added ocean layer to map vectorGridMap
```

```
geo-shell> map add layer --name vectorGridMap --layer countries
Added countries layer to map vectorGridMap
```

```
geo-shell> map add layer --name vectorGridMap --layer level3
Added level3 layer to map vectorGridMap
```

```
geo-shell> map draw --name vectorGridMap --file examples/tile_vector_grid.png --projection
EPSG:3857 --width 400 --height 400 --bounds -20026376.39,-20048966.10,20026376.39,20048966.10
Done drawing /home/runner/work/geo-shell/geo-shell/examples/tile_vector_grid.png!
```

```
geo-shell> map close --name vectorGridMap  
Map vectorGridMap closed!
```

