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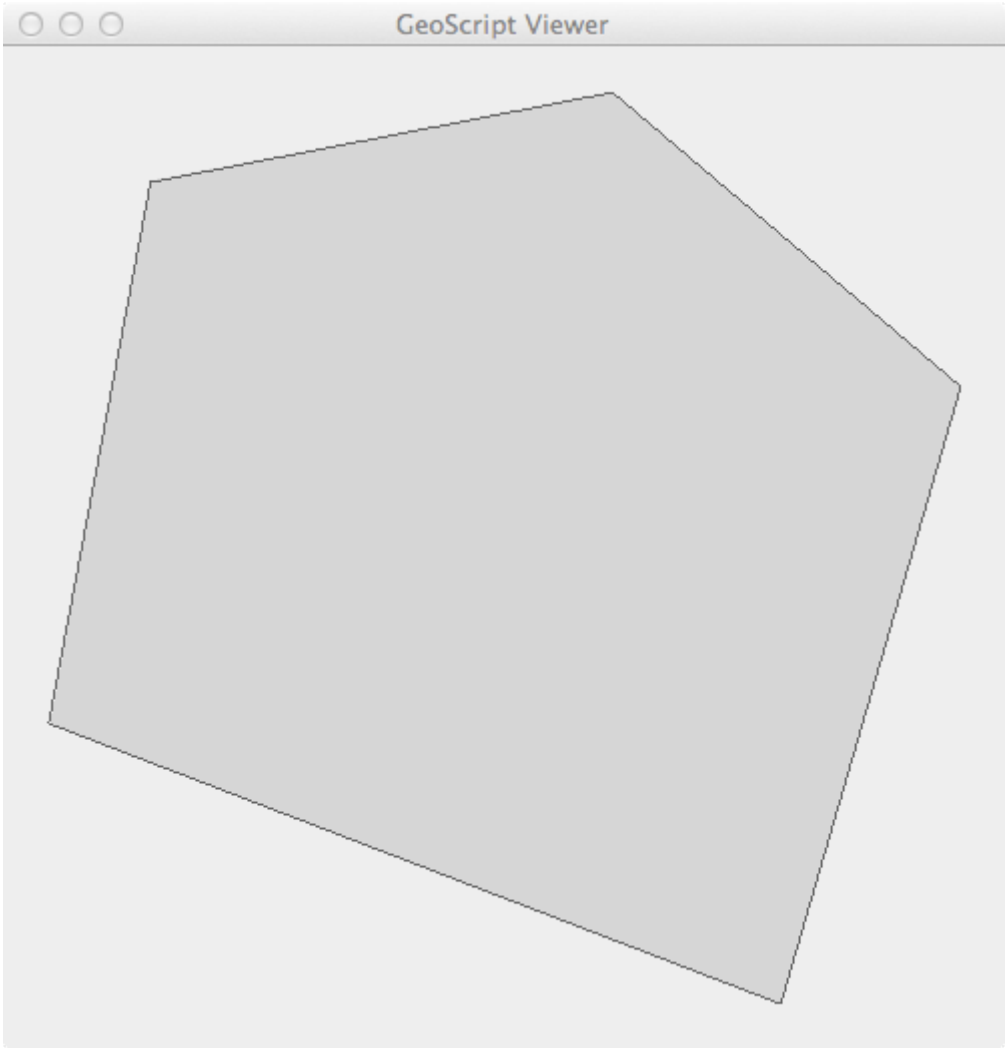
Viewer Recipes

The Viewer classes are in the **geoscript.viewer** package.

Drawing geometries

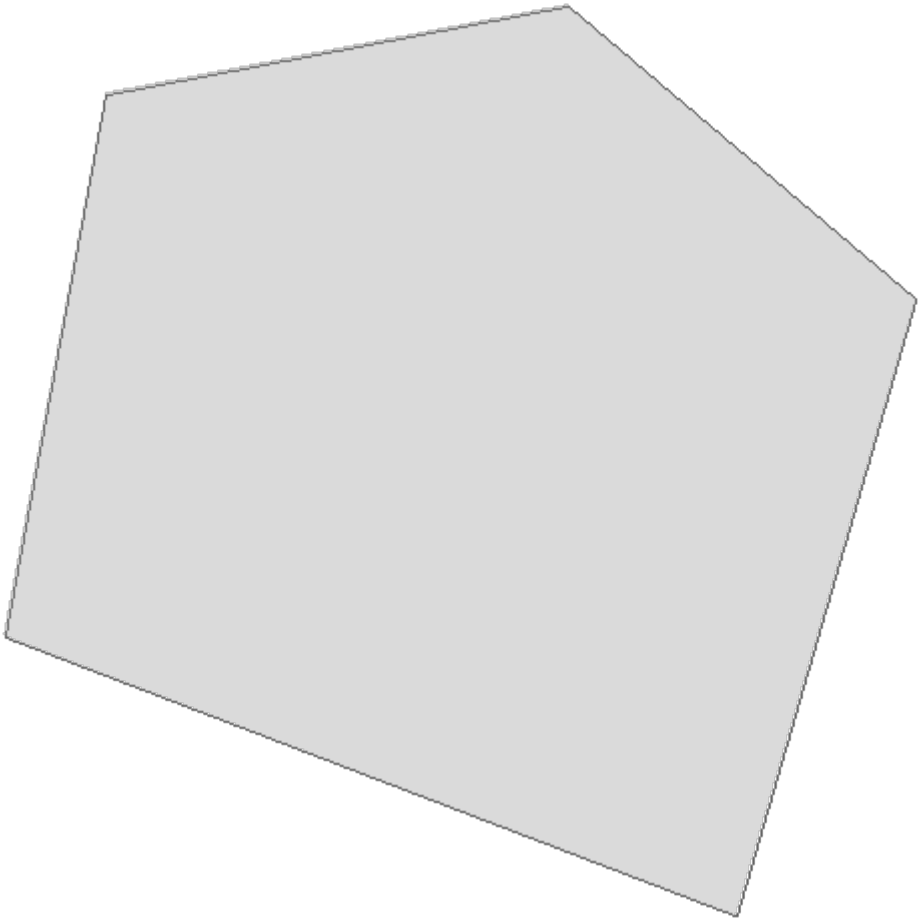
Draw a geometry in a simple GUI

```
Polygon polygon = new Polygon([[
       [-101.35986328125, 47.754097979680026],
       [-101.5576171875, 46.93526088057719],
       [-100.12939453125, 46.51351558059737],
       [-99.77783203125, 47.44294999517949],
       [-100.45898437499999, 47.88688085106901],
       [-101.35986328125, 47.754097979680026]
]])
Viewer.draw(polygon)
```



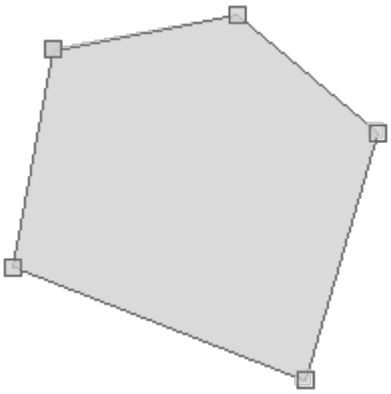
Draw a geometry to an image

```
Polygon polygon = new Polygon([[
       [-101.35986328125, 47.754097979680026],
       [-101.5576171875, 46.93526088057719],
       [-100.12939453125, 46.51351558059737],
       [-99.77783203125, 47.44294999517949],
       [-100.45898437499999, 47.88688085106901],
       [-101.35986328125, 47.754097979680026]
]])
BufferedImage image = Viewer.drawToImage(polygon)
```



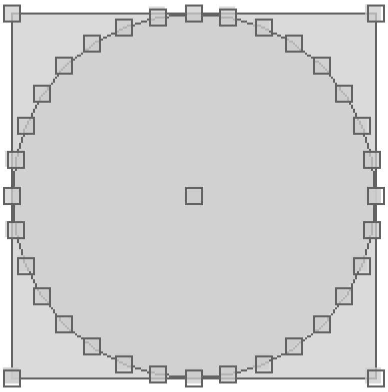
Draw a geometry to an image with options

```
Polygon polygon = new Polygon([[
       [-101.35986328125, 47.754097979680026],
       [-101.5576171875, 46.93526088057719],
       [-100.12939453125, 46.51351558059737],
       [-99.77783203125, 47.44294999517949],
       [-100.45898437499999, 47.88688085106901],
       [-101.35986328125, 47.754097979680026]
]])
BufferedImage image = Viewer.drawToImage(
        polygon,
        size: [200,200],
        drawCoords: true,
        fillCoords: true,
        fillPolys: true
)
```



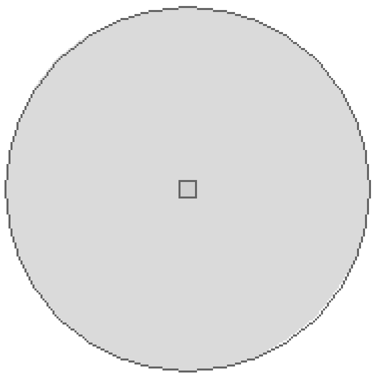
Draw a List of geometries to an image

```
Point point = new Point(-123.11, 47.23)
Geometry buffer = point.buffer(4)
Geometry bounds = buffer.bounds.geometry
BufferedImage image = Viewer.drawToImage(
        [bounds, buffer, point],
        size: [200,200],
        drawCoords: true,
        fillCoords: true,
        fillPolys: true
)
```



Draw a List of Geometries to a File

```
Point point = new Point(-123.11, 47.23)
Geometry buffer = point.buffer(4)
File file = new File("geometry.png")
Viewer.drawToFile([buffer, point], file, size: [200,200])
```



Draw a Geometry to a Base64 Encoded String

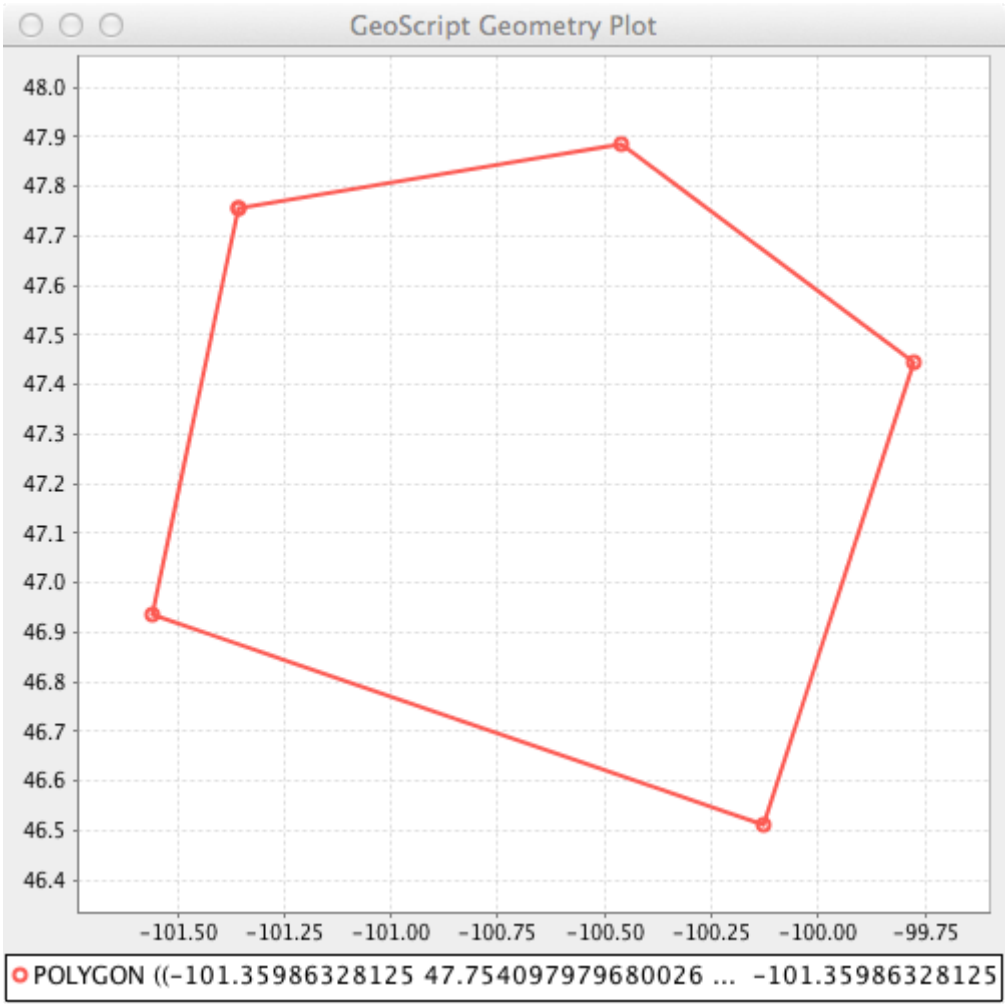
```
Polygon polygon = new Polygon([[
        [-101.35986328125, 47.754097979680026],
        [-101.5576171875, 46.93526088057719],
        [-100.12939453125, 46.51351558059737],
        [-99.77783203125, 47.44294999517949],
        [-100.45898437499999, 47.88688085106901],
        [-101.35986328125, 47.754097979680026]
]])
String base64EncodedString = Viewer.drawToBase64EncodedString(polygon)
println base64EncodedString
```


```
image/png;base64,iVBORw0KGgoAAAANSUhEUgAAAfQAAAH0CAYAAADL1t+KAAAK70lEQVR42u3cQQrryLJFU
c9VA/UMNCUbNRLcsLCRlKnIiLVhwWv81qX+PURa...
```

Plotting geometries

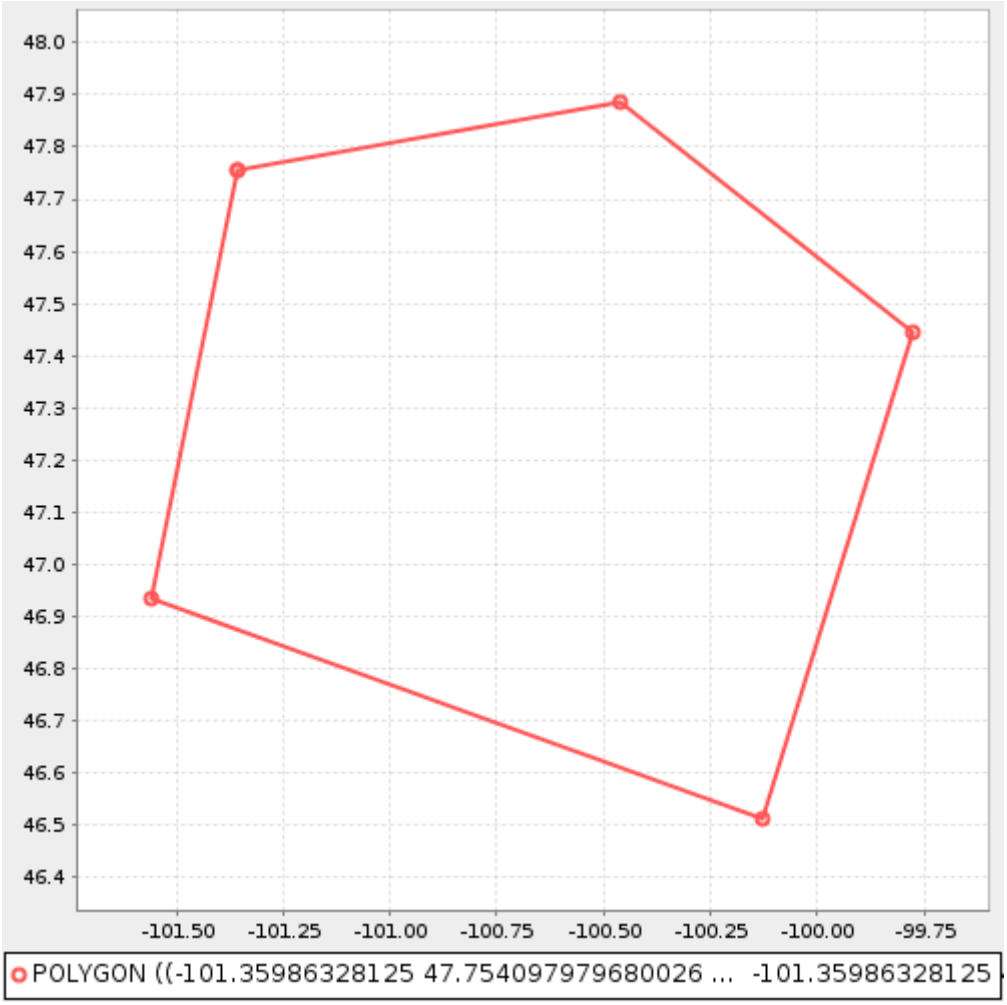
Plot a geometry in a simple GUI

```
Polygon polygon = new Polygon([[
        [-101.35986328125, 47.754097979680026],
        [-101.5576171875, 46.93526088057719],
        [-100.12939453125, 46.51351558059737],
        [-99.77783203125, 47.44294999517949],
        [-100.45898437499999, 47.88688085106901],
        [-101.35986328125, 47.754097979680026]
]])
Viewer.plot(polygon)
```



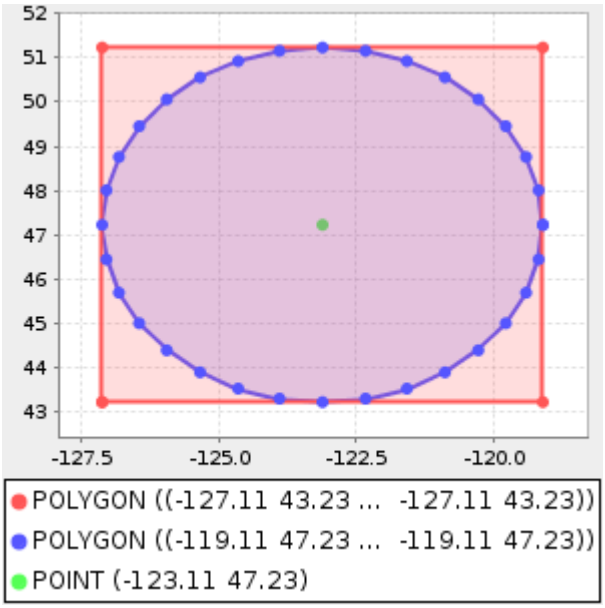
Plot a Geometry to an image

```
Polygon polygon = new Polygon([[
       [-101.35986328125, 47.754097979680026],
       [-101.5576171875, 46.93526088057719],
       [-100.12939453125, 46.51351558059737],
       [-99.77783203125, 47.44294999517949],
       [-100.45898437499999, 47.88688085106901],
       [-101.35986328125, 47.754097979680026]
]])
BufferedImage image = Viewer.plotToImage(polygon)
```



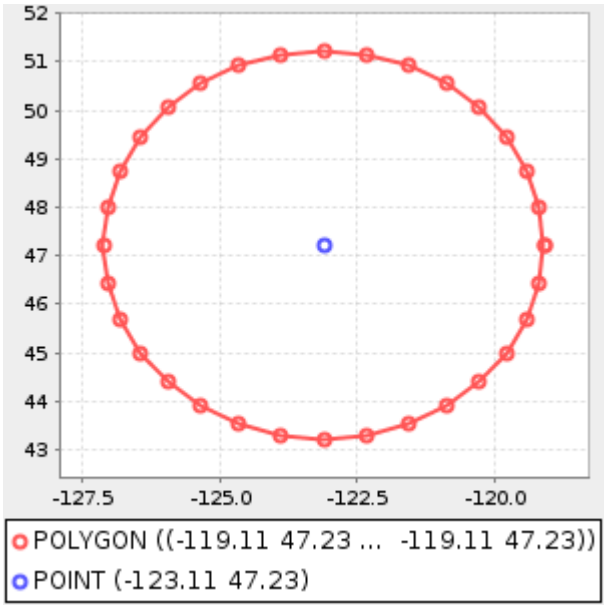
Plot a List of Geometries to an image

```
Point point = new Point(-123.11, 47.23)
Geometry buffer = point.buffer(4)
Geometry bounds = buffer.bounds.geometry
BufferedImage image = Viewer.plotToImage(
        [bounds, buffer, point],
        size: [300,300],
        drawCoords: true,
        fillCoords: true,
        fillPolys: true
)
```



Plot a Geometry to a File

```
Point point = new Point(-123.11, 47.23)
Geometry buffer = point.buffer(4)
File file = new File("geometry.png")
Viewer.plotToFile([buffer, point], file, size: [300,300])
```


52
51
50
49
48
47
46
45
44
43
-127.5
-125.0
-122.5
-120.0
POLYGON ((-119.11 47.23 ... -119.11 47.23))
POINT (-123.11 47.23)