

WPS Demo Build

1、确定toop:states边界

WPS request builder

Step by step WPS request builder.

Choose process

gs:Bounds

Computes the bounding box of the input features. (WPS DescribeProcess)

Process inputs

features* - FeatureCollection

Input feature collection

VECTOR_LAYER

topp:states

Process outputs

bounds* - ReferencedEnvelope

Bounding box of input features

☒ Generate

Authentication

☐ Authenticate (will run the request as anonymous otherwise)

[Execute process](#) [Generate XML from process inputs/outputs](#)

-124.73142200000001 24.955967-66.969849 49.371735

```
<?xml version="1.0" encoding="UTF-8"?><wps:Execute version="1.0.0" service="WPS"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.opengis.net/wps/1.0.0" xmlns:wfs="http://www.opengis.net/wfs"
xmlns:wps="http://www.opengis.net/wps/1.0.0"
xmlns:ows="http://www.opengis.net/ows/1.1"
xmlns:gml="http://www.opengis.net/gml" xmlns:ogc="http://www.opengis.net/ogc"
xmlns:wcs="http://www.opengis.net/wcs/1.1.1"
xmlns:xlink="http://www.w3.org/1999/xlink"
xsi:schemaLocation="http://www.opengis.net/wps/1.0.0
http://schemas.opengis.net/wps/1.0.0/wpsAll.xsd">
  <ows:Identifier>gs:Bounds</ows:Identifier>
  <wps>DataInputs>
    <wps:Input>
      <ows:Identifier>features</ows:Identifier>
      <wps:Reference mimeType="text/xml" xlink:href="http://geoserver/wfs"
method="POST">
        <wps:Body>
          <wfs:GetFeature service="WFS" version="1.0.0" outputFormat="GML2"
xmlns:topp="http://www.openplans.org/topp">
```

```

        <wfs:Query typeName="topp:states"/>
      </wfs:GetFeature>
    </wps:Body>
  </wps:Reference>
</wps:Input>
</wps:DataInputs>
<wps:ResponseForm>
  <wps:RawDataOutput>
    <ows:Identifier>bounds</ows:Identifier>
  </wps:RawDataOutput>
</wps:ResponseForm>
</wps:Execute>

```

```

<?xml version="1.0" encoding="UTF-8"?>
<ows:BoundingBox xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns:ows="http://www.opengis.net/ows/1.1" crs="EPSG:4326">
  <ows:LowerCorner>-124.73142200000001 24.955967</ows:LowerCorner>
  <ows:UpperCorner>-66.969849 49.371735</ows:UpperCorner>
</ows:BoundingBox>

```

2、重新投影Geoserver上的图层

WPS request builder

Step by step WPS request builder.

Choose process

vec:Reproject ▼

Reprojects features into a supplied coordinate reference system. Can also force a feature collection to have a g

Process inputs

features* - SimpleFeatureCollection

The feature collection that will be reprojected

VECTOR_LAYER ▼ tiger:giant_polygon ▼

forcedCRS - CoordinateReferenceSystem

Coordinate reference system to use for input feature collection (overrides native one)

EPSG:4326 查找... EPSG:WGS 84...

targetCRS - CoordinateReferenceSystem

Target coordinate reference system to use for reprojection

EPSG:2326 查找... EPSG:Hong Kong 1980 Grid System...

Process outputs

result* - SimpleFeatureCollection

Input feature collection

☒ Generate application/json ▼

Authentication

☐ Authenticate (will run the request as anonymous otherwise)

Execute process

Generate XML from process inputs/outputs

```

{"type": "FeatureCollection", "crs": {"type": "name", "properties": {"name": "EPSG:2326"}}, "features": [{"type": "Feature", "geometry": {"type": "MultiPolygon", "coordinates": [[[[[836496.1844, -1.16514017382E7], [836368.3267, 8352802.7341], [836368.3267, 8352802.7341], [836496.1844, -1.16514017382E7], [836496.1844, -1.16514017382E7]]]]], "properties": {"id": "giant_polygon.1"}]}]}

```

```

<?xml version="1.0" encoding="UTF-8"?><wps:Execute version="1.0.0" service="WPS"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.opengis.net/wps/1.0.0" xmlns:wfs="http://www.opengis.net/wfs"
xmlns:wps="http://www.opengis.net/wps/1.0.0"
xmlns:ows="http://www.opengis.net/ows/1.1"
xmlns:gml="http://www.opengis.net/gml" xmlns:ogc="http://www.opengis.net/ogc"
xmlns:wcs="http://www.opengis.net/wcs/1.1.1"
xmlns:xlink="http://www.w3.org/1999/xlink"
xsi:schemaLocation="http://www.opengis.net/wps/1.0.0
http://schemas.opengis.net/wps/1.0.0/wpsAll.xsd">
  <ows:Identifier>vec:Reproject</ows:Identifier>
  <wps>DataInputs>
    <wps:Input>
      <ows:Identifier>features</ows:Identifier>
      <wps:Reference mimeType="text/xml" xlink:href="http://geoserver/wfs"
method="POST">
        <wps:Body>
          <wfs:GetFeature service="WFS" version="1.0.0" outputFormat="GML2"
xmlns:tiger="http://www.census.gov">
            <wfs:Query typeName="tiger:giant_polygon"/>
          </wfs:GetFeature>
        </wps:Body>
      </wps:Reference>
    </wps:Input>
    <wps:Input>
      <ows:Identifier>forcedCRS</ows:Identifier>
      <wps>Data>
        <wps:LiteralData>EPSG:4326</wps:LiteralData>
      </wps>Data>
    </wps:Input>
    <wps:Input>
      <ows:Identifier>targetCRS</ows:Identifier>
      <wps>Data>
        <wps:LiteralData>EPSG:2326</wps:LiteralData>
      </wps>Data>
    </wps:Input>
  </wps>DataInputs>
  <wps:ResponseForm>
    <wps:RawDataOutput mimeType="application/json">
      <ows:Identifier>result</ows:Identifier>
    </wps:RawDataOutput>
  </wps:ResponseForm>
</wps:Execute>

```

```
{
```

```

"type": "FeatureCollection",
"crs": {
  "type": "name",
  "properties": {
    "name": "EPSG:2326"
  }
},
"features": [
  {
    "type": "Feature",
    "geometry": {
      "type": "MultiPolygon",
      "coordinates": [
        [
          [
            [
              836496.1844,
              -11651401.7382
            ],
            [
              836368.3267,
              8352802.7341
            ],
            [
              836368.3267,
              8352802.7341
            ],
            [
              836496.1844,
              -11651401.7382
            ],
            [
              836496.1844,
              -11651401.7382
            ]
          ]
        ]
      ]
    },
    "properties": {},
    "id": "giant_polygon.1"
  }
]
}

```

3、JTF: Buffer

Step by step WPS request builder.

Choose process

JTS:buffer

Returns a polygonal geometry representing the input geometry enlarged by a given distance around its exterior. ([WPS DescribeProcess](#))

Process inputs

geom* - Geometry

Input geometry

TEXT text/xml; subtype=gml/3.1.1

```
<gml:LineString xmlns:gml="http://www.opengis.net/gml">
  <gml:posList>0.0 0.0 10.0 0.0 10.0 10.0</gml:posList>
</gml:LineString>
```

distance* - Double

Distance to buffer the input geometry, in the units of the geometry

2

quadrantSegments - Integer

Number determining the style and smoothness of buffer corners. Positive numbers create round corners with that number of segments per quarter-circle, 0 creates flat corners.

capStyle - BufferCapStyle

Style for the buffer end caps. Values are: Round - rounded ends (default), Flat - flat ends; Square - square ends.

Square

```
{"type": "Polygon", "coordinates": [[[8, 2], [8, 10], [8, 12], [12, 12], [12, 0.0],
[11.9616, -0.3902], [11.8478, -0.7654], [11.6629, -1.1111], [11.4142, -1.4142],
[11.1111, -1.6629], [10.7654, -1.8478], [10.3902, -1.9616], [10, -2], [0.0, -2], [-2, -2],
[-2, 2], [8, 2]]]}
```

```
<?xml version="1.0" encoding="UTF-8"?><wps:Execute version="1.0.0" service="WPS"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.opengis.net/wps/1.0.0" xmlns:wfs="http://www.opengis.net/wfs"
xmlns:wps="http://www.opengis.net/wps/1.0.0"
xmlns:ows="http://www.opengis.net/ows/1.1"
xmlns:gml="http://www.opengis.net/gml" xmlns:ogc="http://www.opengis.net/ogc"
xmlns:wcs="http://www.opengis.net/wcs/1.1.1"
xmlns:xlink="http://www.w3.org/1999/xlink"
xsi:schemaLocation="http://www.opengis.net/wps/1.0.0
http://schemas.opengis.net/wps/1.0.0/wpsAll.xsd">
  <ows:Identifier>JTS:buffer</ows:Identifier>
  <wps>DataInputs>
    <wps:Input>
      <ows:Identifier>geom</ows:Identifier>
      <wps>Data>
        <wps:ComplexData mimeType="text/xml; subtype=gml/3.1.1">
          <gml:LineString xmlns:gml="http://www.opengis.net/gml">
            <gml:posList>0.0 0.0 10.0 0.0 10.0 10.0</gml:posList>
          </gml:LineString>
```

```

        </wps:ComplexData>
    </wps:Data>
</wps:Input>
<wps:Input>
    <ows:Identifier>distance</ows:Identifier>
    <wps:Data>
        <wps:LiteralData>2</wps:LiteralData>
    </wps:Data>
</wps:Input>
<wps:Input>
    <ows:Identifier>capStyle</ows:Identifier>
    <wps:Data>
        <wps:LiteralData>Square</wps:LiteralData>
    </wps:Data>
</wps:Input>
</wps>DataInputs>
<wps:ResponseForm>
    <wps:RawDataOutput mimeType="application/json">
        <ows:Identifier>result</ows:Identifier>
    </wps:RawDataOutput>
</wps:ResponseForm>
</wps:Execute>

```

```

{
  "type": "Polygon",
  "coordinates": [
    [
      [
        8,
        2
      ],
      [
        8,
        10
      ],
      [
        8,
        12
      ],
      [
        12,
        12
      ],
      [
        12,
        0
      ],
      [
        11.9616,
        -0.3902
      ],
      [
        11.8478,
        -0.7654
      ],
      [
        11.6629,

```

```
        -1.1111
      ],
      [
        11.4142,
        -1.4142
      ],
      [
        11.1111,
        -1.6629
      ],
      [
        10.7654,
        -1.8478
      ],
      [
        10.3902,
        -1.9616
      ],
      [
        10,
        -2
      ],
      [
        0,
        -2
      ],
      [
        -2,
        -2
      ],
      [
        -2,
        2
      ],
      [
        8,
        2
      ]
    ]
  ]
}
```

JTF: geometryType

WPS request builder

Step by step WPS request builder.

Choose process

JTS:geometryType

Returns the name of a geometry's type. Values are one of POINT, LINESTRING, POLYGON, MULTIPOINT, MULTILINESTRING, MULTIPOLYGON, GEOMETRYCOLLECTION. ([WPS DescribeProcess](#))

Process inputs

geom* - Geometry

Input geometry

TEXT text/xml; subtype=gml/3.1.1

```
<gml:LineString xmlns:gml="http://www.opengis.net/gml">
  <gml:posList>0.0 0.0 10.0 0.0 10.0 10.0</gml:posList>
</gml:LineString>
```



Process outputs

result* - String

The name of the geometry type

☒ Generate

Authentication

☐ Authenticate (will run the request as anonymous otherwise)

LineString

```
<?xml version="1.0" encoding="UTF-8"?><wps:Execute version="1.0.0" service="WPS"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.opengis.net/wps/1.0.0" xmlns:wfs="http://www.opengis.net/wfs"
xmlns:wps="http://www.opengis.net/wps/1.0.0"
xmlns:ows="http://www.opengis.net/ows/1.1"
xmlns:gml="http://www.opengis.net/gml" xmlns:ogc="http://www.opengis.net/ogc"
xmlns:wcs="http://www.opengis.net/wcs/1.1.1"
xmlns:xlink="http://www.w3.org/1999/xlink"
xsi:schemaLocation="http://www.opengis.net/wps/1.0.0
http://schemas.opengis.net/wps/1.0.0/wpsAll.xsd">
  <ows:Identifier>JTS:geometryType</ows:Identifier>
  <wps>DataInputs>
    <wps:Input>
      <ows:Identifier>geom</ows:Identifier>
      <wps>Data>
        <wps:ComplexData mimeType="text/xml; subtype=gml/3.1.1">
          <gml:LineString xmlns:gml="http://www.opengis.net/gml">
            <gml:posList>0.0 0.0 10.0 0.0 10.0 10.0</gml:posList>
          </gml:LineString>
```



```
</wps:ComplexData>
</wps:Data>
</wps:Input>
</wps:DataInputs>
<wps:ResponseForm>
  <wps:RawDataOutput>
    <ows:Identifier>result</ows:Identifier>
  </wps:RawDataOutput>
</wps:ResponseForm>
</wps:Execute>
```

JTS: area

WPS request builder

Step by step WPS request builder.

Choose process

JTS:area

Returns the area of a geometry, in the units of the geometry. Assumes a Cartesian plane, so this process is only recommended for non-geographic CRSes. ([WPS DescribeProcess](#))

Process inputs

geom* - Geometry

Input geometry

TEXT text/xml; subtype=gml/3.1.1

```
<gml:Polygon xmlns:gml="http://www.opengis.net/gml">
  <gml:exterior>
    <gml:LinearRing>
      <gml:posList>-180 -90 -180 90 180 90 180 -90 -180 -90</gml:posList>
    </gml:LinearRing>
  </gml:exterior>
</gml:Polygon>
```

Process outputs

result* - double

Area of the input geometry

☒ Generate

Authentication

☐ Authenticate (will run the request as anonymous otherwise)

64800.0

JTS: boundary

WPS request builder

Step by step WPS request builder.

Choose process

JTS:boundary

Returns a geometry boundary. For polygons, returns a linear ring or multi-linestring equal to the boundary of the polygon(s). For linestrings, returns a multipoint equal to the endpoints of the linestring. For points, returns an empty geometry collection. ([WPS DescribeProcess](#))

Process inputs

geom* - Geometry

Input geometry

TEXT text/xml; subtype=gml/3.1.1

```
<gml:Polygon xmlns:gml="http://www.opengis.net/gml">
  <gml:exterior>
    <gml:LinearRing>
      <gml:posList>-180 -90 -180 90 180 90 180 -90 -180 -90</gml:posList>
    </gml:LinearRing>
  </gml:exterior>
</gml:Polygon>
```

Process outputs

result* - Geometry

Boundary of the input geometry

☒ Generate application/json

```
{"type": "LineString", "coordinates": [[[-180, -90], [-180, 90], [180, 90], [180, -90], [-180, -90]]]}
```

```
<?xml version="1.0" encoding="UTF-8"?><wps:Execute version="1.0.0" service="WPS"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.opengis.net/wps/1.0.0" xmlns:wfs="http://www.opengis.net/wfs"
xmlns:wps="http://www.opengis.net/wps/1.0.0"
xmlns:ows="http://www.opengis.net/ows/1.1"
xmlns:gml="http://www.opengis.net/gml" xmlns:ogc="http://www.opengis.net/ogc"
xmlns:wcs="http://www.opengis.net/wcs/1.1.1"
xmlns:xlink="http://www.w3.org/1999/xlink"
xsi:schemaLocation="http://www.opengis.net/wps/1.0.0
http://schemas.opengis.net/wps/1.0.0/wpsAll.xsd">
  <ows:Identifier>JTS:boundary</ows:Identifier>
  <wps>DataInputs>
    <wps:Input>
      <ows:Identifier>geom</ows:Identifier>
      <wps>Data>
        <wps:ComplexData mimeType="text/xml; subtype=gml/3.1.1">
          <gml:Polygon xmlns:gml="http://www.opengis.net/gml">
            <gml:exterior>
              <gml:LinearRing>
                <gml:posList>-180 -90 -180 90 180 90 180 -90 -180 -90</gml:posList>
              </gml:LinearRing>
            </gml:exterior>
          </gml:Polygon>
        </wps:ComplexData>
      </wps>Data>
    </wps:Input>
```

```
</wps:DataInputs>
<wps:ResponseForm>
  <wps:RawDataOutput mimeType="application/json">
    <ows:Identifier>result</ows:Identifier>
  </wps:RawDataOutput>
</wps:ResponseForm>
</wps:Execute>
```

```
{
  "type": "LineString",
  "coordinates": [
    [
      -180,
      -90
    ],
    [
      -180,
      90
    ],
    [
      180,
      90
    ],
    [
      180,
      -90
    ],
    [
      -180,
      -90
    ]
  ]
}
```

JTS: centroid

WPS request builder

Step by step WPS request builder.

Choose process

JTS:centroid

Returns the geometric centroid of a geometry. Output is a single point. The centroid point may be located outside the geometry. ([WPS DescribeProcess](#))

Process inputs

geom* - Geometry

Input geometry

TEXT text/xml; subtype=gml/3.1.1

```
<gml:Polygon xmlns:gml="http://www.opengis.net/gml">
  <gml:exterior>
    <gml:LinearRing>
      <gml:posList>-180 -90 -180 90 180 90 180 -90 -180 -90</gml:posList>
    </gml:LinearRing>
  </gml:exterior>
</gml:Polygon>
```

Process outputs

result* - Geometry

Centroid of the input geometry

☒ Generate application/json

Authentication

☐ Authenticate (will run the request as anonymous otherwise)

```
{"type": "Point", "coordinates": [-0.0, -0.0]}
```

```
<?xml version="1.0" encoding="UTF-8"?><wps:Execute version="1.0.0" service="WPS"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.opengis.net/wps/1.0.0" xmlns:wfs="http://www.opengis.net/wfs"
xmlns:wps="http://www.opengis.net/wps/1.0.0"
xmlns:ows="http://www.opengis.net/ows/1.1"
xmlns:gml="http://www.opengis.net/gml" xmlns:ogc="http://www.opengis.net/ogc"
xmlns:wcs="http://www.opengis.net/wcs/1.1.1"
xmlns:xlink="http://www.w3.org/1999/xlink"
xsi:schemaLocation="http://www.opengis.net/wps/1.0.0
http://schemas.opengis.net/wps/1.0.0/wpsAll.xsd">
  <ows:Identifier>JTS:centroid</ows:Identifier>
  <wps>DataInputs>
    <wps:Input>
      <ows:Identifier>geom</ows:Identifier>
      <wps>Data>
        <wps:ComplexData mimeType="text/xml; subtype=gml/3.1.1">
          <gml:Polygon xmlns:gml="http://www.opengis.net/gml">
            <gml:exterior>
              <gml:LinearRing>
                <gml:posList>-180 -90 -180 90 180 90 180 -90 -180 -90</gml:posList>
              </gml:LinearRing>
            </gml:exterior>
```

```

</gml:Polygon>

    </wps:ComplexData>
  </wps>Data>
</wps:Input>
</wps>DataInputs>
<wps:ResponseForm>
  <wps:RawDataOutput mimeType="application/json">
    <ows:Identifier>result</ows:Identifier>
  </wps:RawDataOutput>
</wps:ResponseForm>
</wps:Execute>

```

```

{
  "type": "Point",
  "coordinates": [
    0,
    0
  ]
}

```

JTS: contain

Step by step WPS request builder.

Choose process

JTS:contains

Tests if no points of the second geometry lie in the exterior of the first geometry and at least one point of the interior of second geometry lies in the interior of first geometry. ([WPS DescribeProcess](#))

Process inputs

a* - Geometry

First input geometry

TEXT text/xml; subtype=gml/3.1.1

```

<gml:Polygon xmlns:gml="http://www.opengis.net/gml">
  <gml:exterior>
    <gml:LinearRing>
      <gml:posList>-180 -90 -180 90 180 90 180 -90 -180 -90</gml:posList>
    </gml:LinearRing>
  </gml:exterior>
</gml:Polygon>

```

b* - Geometry

Second input geometry, tested to be contained in first geometry

TEXT text/xml; subtype=gml/3.1.1

```

<gml:Point xmlns:gml="http://www.opengis.net/gml">
  <gml:pos>-74.01083751 40.70754684</gml:pos>
</gml:Point>

```



true

```

<?xml version="1.0" encoding="UTF-8"?><wps:Execute version="1.0.0" service="WPS"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.opengis.net/wps/1.0.0" xmlns:wfs="http://www.opengis.net/wfs"
xmlns:wps="http://www.opengis.net/wps/1.0.0"
xmlns:ows="http://www.opengis.net/ows/1.1"
xmlns:gml="http://www.opengis.net/gml" xmlns:ogc="http://www.opengis.net/ogc"
xmlns:wcs="http://www.opengis.net/wcs/1.1.1"
xmlns:xlink="http://www.w3.org/1999/xlink"
xsi:schemaLocation="http://www.opengis.net/wps/1.0.0
http://schemas.opengis.net/wps/1.0.0/wpsAll.xsd">
  <ows:Identifier>JTS:contains</ows:Identifier>
  <wps>DataInputs>
    <wps:Input>
      <ows:Identifier>a</ows:Identifier>
      <wps>Data>
        <wps:ComplexData mimeType="text/xml; subtype=gml/3.1.1">
          <gml:Polygon xmlns:gml="http://www.opengis.net/gml">
<gml:exterior>
<gml:LinearRing>
<gml:posList>-180 -90 -180 90 180 90 180 -90 -180 -90</gml:posList>
</gml:LinearRing>
</gml:exterior>
</gml:Polygon>

          </wps:ComplexData>
        </wps>Data>
      </wps:Input>
    <wps:Input>
      <ows:Identifier>b</ows:Identifier>
      <wps>Data>
        <wps:ComplexData mimeType="text/xml; subtype=gml/3.1.1">
          <gml:Point xmlns:gml="http://www.opengis.net/gml">
<gml:pos>-74.01083751 40.70754684</gml:pos>
</gml:Point>

          </wps:ComplexData>
        </wps>Data>
      </wps:Input>
    </wps>DataInputs>
    <wps:ResponseForm>
      <wps:RawDataOutput>
        <ows:Identifier>result</ows:Identifier>
      </wps:RawDataOutput>
    </wps:ResponseForm>
  </wps:Execute>

```

JTS: convert

Step by step WPS request builder.

Choose process

JTS:convexHull ▾

Returns the smallest convex polygon that contains the entire input geometry. ([WPS DescribeProcess](#))

Process inputs

geom* - Geometry

Input geometry

TEXT ▾ text/xml; subtype=gml/3.1.1 ▾

```
<gml:Polygon xmlns:gml="http://www.opengis.net/gml">
  <gml:exterior>
    <gml:LinearRing>
      <gml:posList>-180 -90 -180 90 180 90 180 -90 -180 -90</gml:posList>
    </gml:LinearRing>
  </gml:exterior>
</gml:Polygon>
```



Process outputs

result* - Geometry

Convex hull of input geometry

☒ Generate application/json ▾

Authentication

☐ Authenticate (will run the request as anonymous otherwise)

Execute process

Generate XML from process inputs/outputs

```
{"type": "Polygon", "coordinates": [[[-180, -90], [-180, 90], [180, 90], [180, -90], [-180, -90]]]}
```

```
<?xml version="1.0" encoding="UTF-8"?><wps:Execute version="1.0.0" service="WPS"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.opengis.net/wps/1.0.0" xmlns:wfs="http://www.opengis.net/wfs"
xmlns:wps="http://www.opengis.net/wps/1.0.0"
xmlns:ows="http://www.opengis.net/ows/1.1"
xmlns:gml="http://www.opengis.net/gml" xmlns:ogc="http://www.opengis.net/ogc"
xmlns:wcs="http://www.opengis.net/wcs/1.1.1"
xmlns:xlink="http://www.w3.org/1999/xlink"
xsi:schemaLocation="http://www.opengis.net/wps/1.0.0
http://schemas.opengis.net/wps/1.0.0/wpsAll.xsd">
  <ows:Identifier>JTS:convexHull</ows:Identifier>
  <wps>DataInputs>
    <wps:Input>
      <ows:Identifier>geom</ows:Identifier>
      <wps>Data>
```

```

        <wps:ComplexData mimeType="text/xml; subtype=gml/3.1.1">
            <gml:Polygon xmlns:gml="http://www.opengis.net/gml">
                <gml:exterior>
                    <gml:LinearRing>
                        <gml:posList>-180 -90 -180 90 180 90 180 -90 -180 -90</gml:posList>
                    </gml:LinearRing>
                </gml:exterior>
            </gml:Polygon>

        </wps:ComplexData>
    </wps>Data>
</wps:Input>
</wps>DataInputs>
<wps:ResponseForm>
    <wps:RawDataOutput mimeType="application/json">
        <ows:Identifier>result</ows:Identifier>
    </wps:RawDataOutput>
</wps:ResponseForm>
</wps:Execute>

```

```

{
  "type": "Polygon",
  "coordinates": [
    [
      [
        -180,
        -90
      ],
      [
        -180,
        90
      ],
      [
        180,
        90
      ],
      [
        180,
        -90
      ],
      [
        -180,
        -90
      ]
    ]
  ]
}

```

JTF: crosses

Choose process

JTS:crosses

Tests if two geometries have some, but not all, interior points in common. ([WPS DescribeProcess](#))

Process inputs

a* - Geometry

First input geometry

TEXT text/xml; subtype=gml/3.1.1

```
<gml:Polygon xmlns:gml="http://www.opengis.net/gml">
  <gml:exterior>
    <gml:LinearRing>
      <gml:posList>-180 -90 -180 90 180 90 180 -90 -180 -90</gml:posList>
    </gml:LinearRing>
  </gml:exterior>
</gml:Polygon>
```

b* - Geometry

Second input geometry

TEXT text/xml; subtype=gml/3.1.1

```
<gml:Polygon xmlns:gml="http://www.opengis.net/gml">
  <gml:exterior>
    <gml:LinearRing>
      <gml:posList>-73.996035 40.730647 -73.996449 40.72999 -73.997356 40.730437 -73.998047
40.730834 -73.99876 40.731166 -73.999559 40.73158 -73.999079 40.732188 -73.998557
40.732795 -73.996937 40.731984 -73.99549 40.731304 -73.996035 40.730647</gml:posList>
    </gml:LinearRing>
  </gml:exterior>
</gml:Polygon>
```



false

```
<?xml version="1.0" encoding="UTF-8"?><wps:Execute version="1.0.0" service="WPS"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.opengis.net/wps/1.0.0" xmlns:wfs="http://www.opengis.net/wfs"
xmlns:wps="http://www.opengis.net/wps/1.0.0"
xmlns:ows="http://www.opengis.net/ows/1.1"
xmlns:gml="http://www.opengis.net/gml" xmlns:ogc="http://www.opengis.net/ogc"
xmlns:wcs="http://www.opengis.net/wcs/1.1.1"
xmlns:xlink="http://www.w3.org/1999/xlink"
xsi:schemaLocation="http://www.opengis.net/wps/1.0.0
http://schemas.opengis.net/wps/1.0.0/wpsAll.xsd">
  <ows:Identifier>JTS:crosses</ows:Identifier>
  <wps>DataInputs>
    <wps:Input>
      <ows:Identifier>a</ows:Identifier>
      <wps>Data>
        <wps:ComplexData mimeType="text/xml; subtype=gml/3.1.1">
          <gml:Polygon xmlns:gml="http://www.opengis.net/gml">
            <gml:exterior>
```

```

<gml:LinearRing>
<gml:posList>-180 -90 -180 90 180 90 180 -90 -180 -90</gml:posList>
</gml:LinearRing>
</gml:exterior>
</gml:Polygon>

    </wps:ComplexData>
  </wps>Data>
</wps:Input>
<wps:Input>
  <ows:Identifier>b</ows:Identifier>
  <wps>Data>
    <wps:ComplexData mimeType="text/xml; subtype=gml/3.1.1">
      <gml:Polygon xmlns:gml="http://www.opengis.net/gml">
<gml:exterior>
<gml:LinearRing>
<gml:posList>-73.996035 40.730647 -73.996449 40.72999 -73.997356 40.730437
-73.998047 40.730834 -73.99876 40.731166 -73.999559 40.73158 -73.999079
40.732188 -73.998557 40.732795 -73.996937 40.731984 -73.99549 40.731304
-73.996035 40.730647</gml:posList>
</gml:LinearRing>
</gml:exterior>
</gml:Polygon>

      </wps:ComplexData>
    </wps>Data>
  </wps:Input>
</wps:DataInputs>
<wps:ResponseForm>
  <wps:RawDataOutput>
    <ows:Identifier>result</ows:Identifier>
  </wps:RawDataOutput>
</wps:ResponseForm>
</wps:Execute>

```