

# Working with OGC WFS Services

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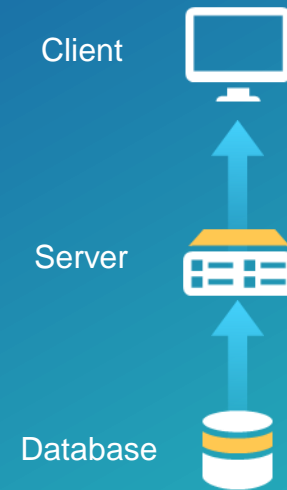
# Open Geospatial Consortium (OGC)

- International industry consortium
- Develop publicly available interface standards
- [www.opengeospatial.org](http://www.opengeospatial.org)



# Web Feature Services (WFS)

- Serving data as vector features
- Uses GML
- WFS specification



# Web Feature Services (WFS)

Two encodings:

- XML (HTTP POST or SOAP)
- Key/value pairs (HTTP GET)

POST

```
<GetCapabilities
  xmlns="http://www.opengis.net/wfs/2.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.opengis.net/wfs/2.0 http://schemas.opengis.net/wfs/2.0/wfs.xsd"
  service="WFS"
  version="2.0.0"
/>
```

GET

<http://sampleserver6.arcgisonline.com/arcgis/services/SampleWorldCities/MapServer/WFSServer?request=GetCapabilities&service=WFS&version=2.0.0>

# Web Feature Services (WFS)

- GetCapabilities
- DescribeFeatureType
- GetFeature



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  - Editing:
    - Create
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  - Editing:
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    - Update
- Versions supported:
  - 1.0.0
  - 1.1.0
  - 2.0.0

# WFS vs. other service types

WMS





# WFS vs. other service types

WMS



Esri Feature Service



# WFS vs. other service types

WMS



Esri Feature Service



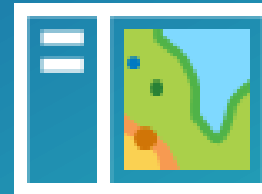
Why use a WFS service?

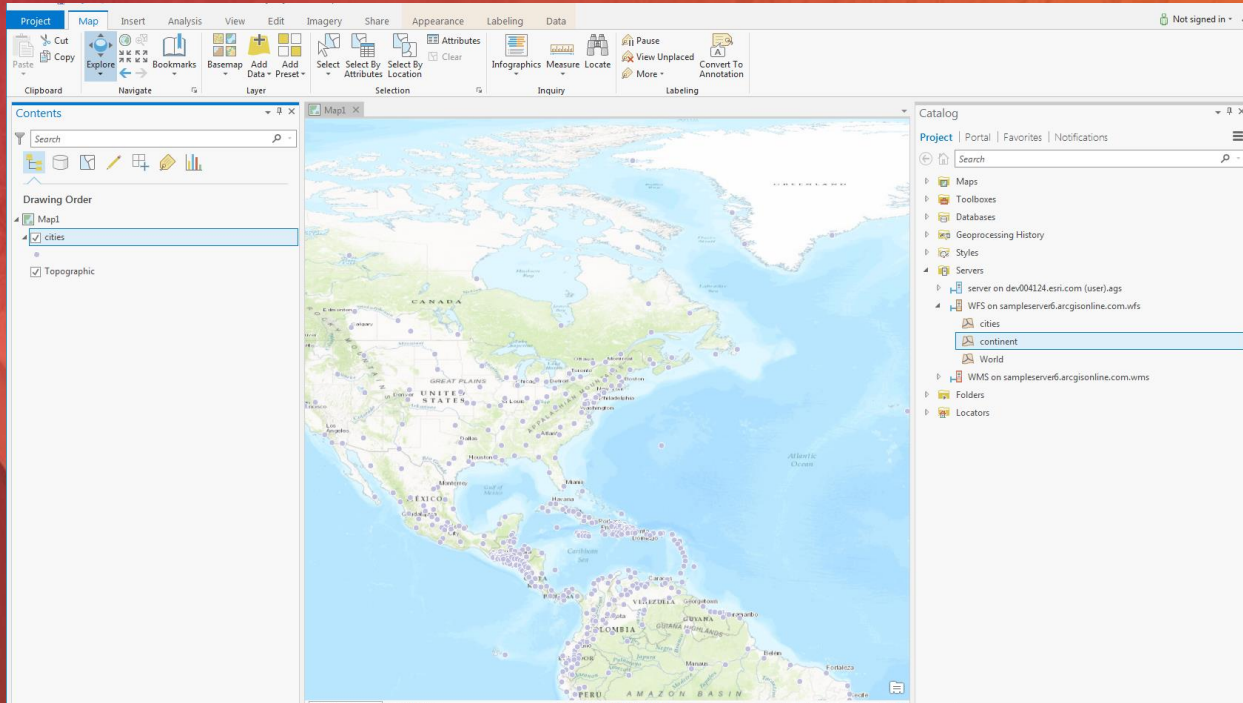
# Create a WFS service

- Create from a map (WFS Map Service)
- Create from a hosted feature layer (hosted WFS Map Service)
- Create from an enterprise geodatabase (WFS Geodata Service)
  - This is being deprecated

# WFS clients

- Data Interoperability Extension in ArcMap
- ArcGIS Online/Portal Map Viewer
- \*NEW\* ArcGIS Pro





# WFS in ArcGIS

Creating a service  
Consuming a service



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