WEB Map Service (WMS)

This tutorial provides a practical introduction to OGC Web Map Service (WMS) Interface standard.

Goals

- Understand what WMS can be used for

- Understand WMS requests and best practices

Web Map Service (WMS)

The latest version of WMS is 1.3.0 [#ogc-06-042].

A WMS Server:

- Provides information about what maps a service can produce
- Produces a Map
- Answers queries about content of a Map

WMS Usage

- Produce a Map
- Answer queries about content of the map

WMS Operations

- GetCapabilities
- GetMap
- GetFeatureInfo

WMS GetCapabilities Request

Request example:

```
http://ri.opengeospatial.org:8680/degree-wms-130/services?
service=WMS&
version=1.3.0&
request=GetCapabilities
```

Link to getCapabilities

WMS GetCapabilities Response

- How to invoke GetMap
- Types of exceptions
- List of layers

WMS GetMap Request

Request example:

```
http://ri.opengeospatial.org:8680/degree-wms-130/services?
service=WMS&
version=1.3.0&
request=GetMap&
format=image/png&
width=300&
height=300&
crs=EPSG:4326&
layers=cite:BasicPolygons,cite:Forests&
STYLES=default,default
BBOX=-2,-1,2,6&
```

Link to GetMap

WMS GetFeatureInfo Request

Request example:

```
http://ri.opengeospatial.org:8680/degree-wms-130/services?
service=WMS&
version=1.3.0&
request=getfeatureinfo&
format=text/html&
crs=EPSG:4326&
layers=cite:BasicPolygons&
query_layers=cite:BasicPolygons&
BBOX=-2,-1,2,6&
width=300&
height=300&
i=1&
j=1
```

Link to GetFeatureInfo