Web Service using GeoPackage (II)

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Introduction
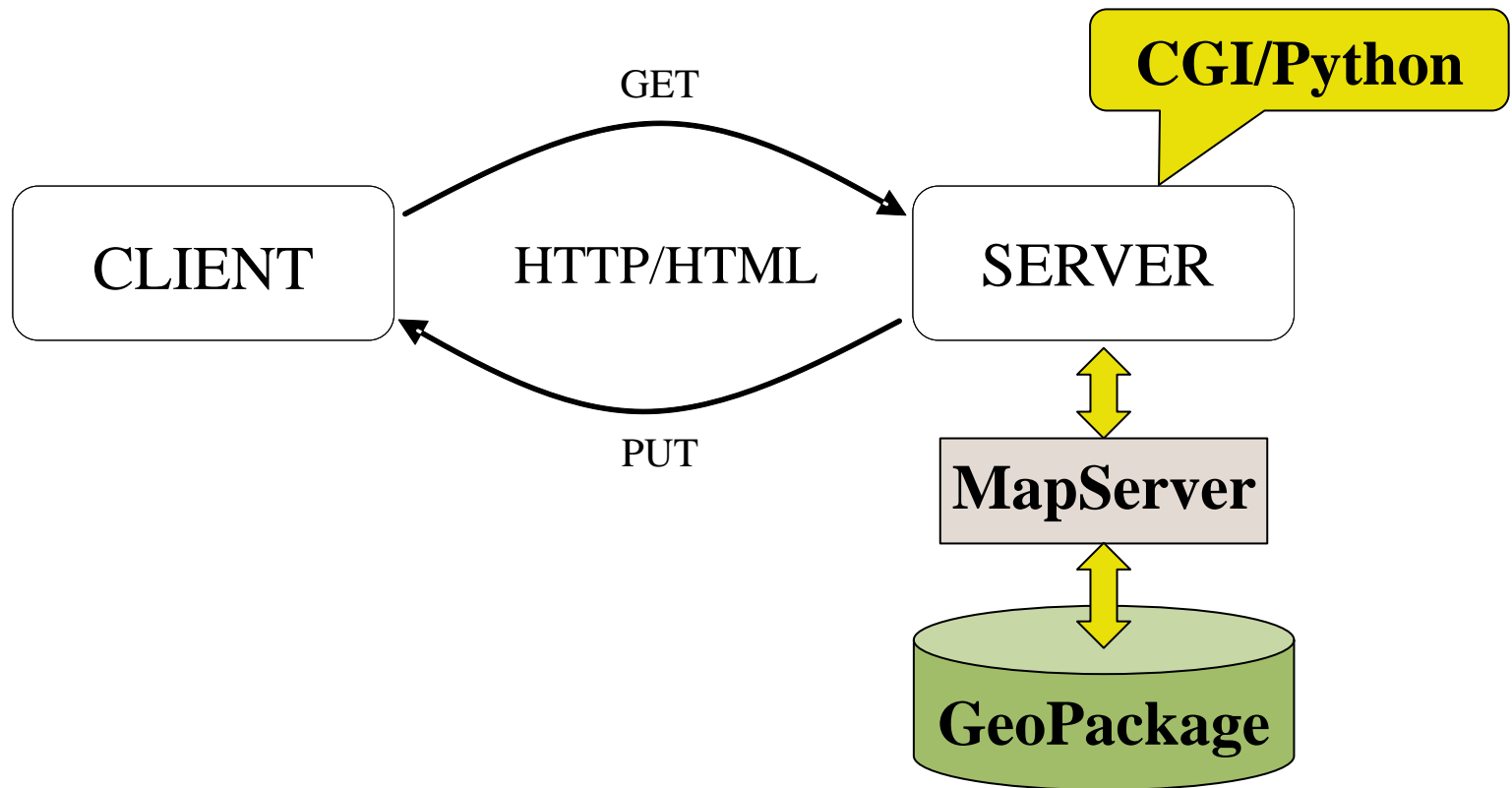
- This presentation is about…

    – Serving the **mapping content** of **GeoPackage** using geospatial web services (WMS)
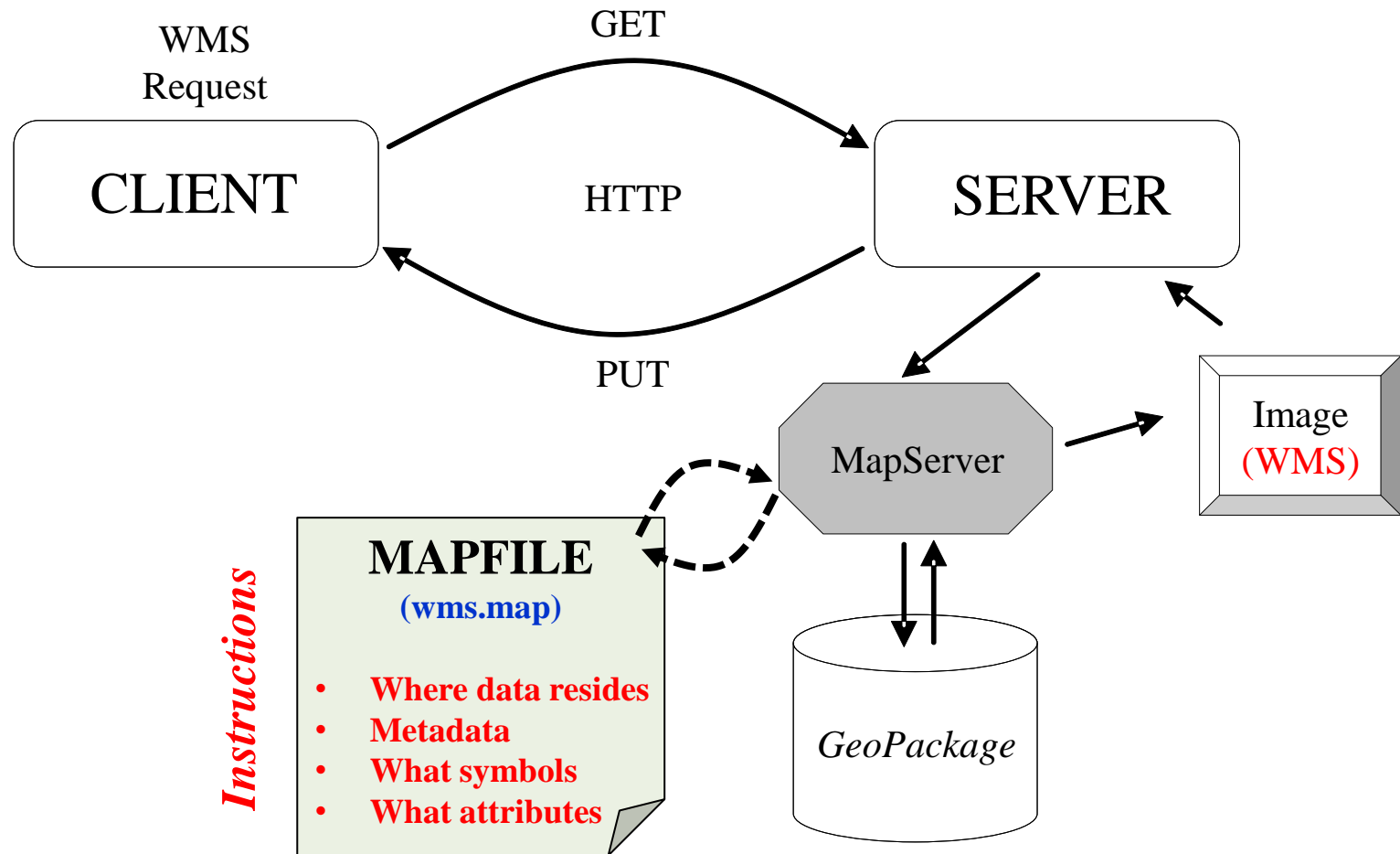
    – Development of a **Web Map Service** using MapServer

Web Service for Mapping…

- GeoPackage in the role of the data repository and MapServer in the role of CGI application…

WMS with MapServer & Mapfile

CLIENT

SERVER

WMS Request

GET

HTTP

PUT

MapServer

Image **(WMS)**

Instructions

MAPFILE

(wms.map)

- **Where data resides**
- **Metadata**
- **What symbols**
- **What attributes**

GeoPackage

4

WMS using GeoPackage

- Mapfile: (1/2)

http://gaia.gge.unb.ca:8080/gge5403/labs/5/Fredericton_wms_GPKG.map

WMS using GeoPackage

- Mapfile: (2/2)

  http://gaia.gge.unb.ca:8080/gge5403/labs/5/Fredericton_wms_GPKG.map

```
LAYER
  NAME "street"
  TYPE LINE

  CONNECTIONTYPE OGR
  CONNECTION "C:/ms4w/Apache/htdocs/gge5403/labs/5/canvec_210412_258053.gpkg"
  DATA "road_segment_1"
  METADATA
    'wms_title' 'Street Centerline'
  END
  STATUS ON
  PROJECTION
      'init=epsg:4617'
  END
CLASS
    NAME 'Trails'
    STYLE
      SYMBOL 0
      SIZE 3
     COLOR 146 146 146
    END
  END
 END

END
```

WMS using GeoPackage

- Example Requests:

  http://gaia.gge.unb.ca:8080/gge5403/labs/5/Requests.txt

http://gaia.gge.unb.ca:8080/cgi-bin/mapserv.exe?

map=/ms4w/Apache/htdocs/gge5403/labs/5/Fredericton_wms_GPKG.map&

SERVICE=WMS&VERSION=1.3.0&

REQUEST=**GetCapabilities**

http://gaia.gge.unb.ca:8080/cgi-bin/mapserv.exe?

map=/ms4w/Apache/htdocs/gge5403/labs/5/Fredericton_wms_GPKG.map&

SERVICE=WMS&VERSION=1.1.1&

REQUEST=**GetMap**&LAYERS=street&

BBOX=-66.76,45.84,-66.55,46.05&

STYLES=&SRS=EPSG:4617&

WIDTH=800&HEIGHT=800&

FORMAT=image/png

WMS using GeoPackage