

Térképszerverek harca

Egy (újabb) nyíltforrású projekt kezdete

Gelencsér Gergő





MapServer

open source web mapping

1996, University of Minnesota

MIT license

C/C++, Apache

PROJ, GDAL

Windows, Linux, MacOS

 **MapServer 8.0.1**  976  357  128
on Apr 21, 2023



GeoServer

2003, The Open Planning Project

GNU General Public License

Java, Jetty

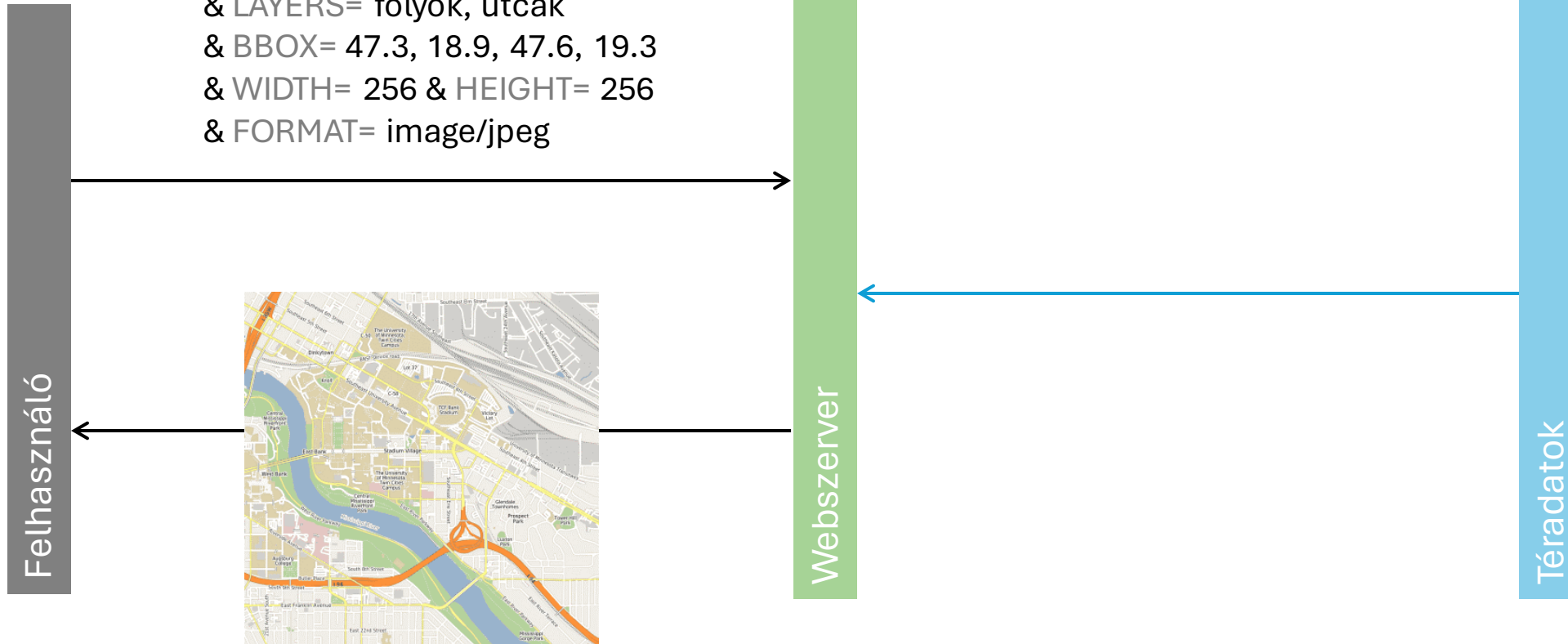
GeoTools

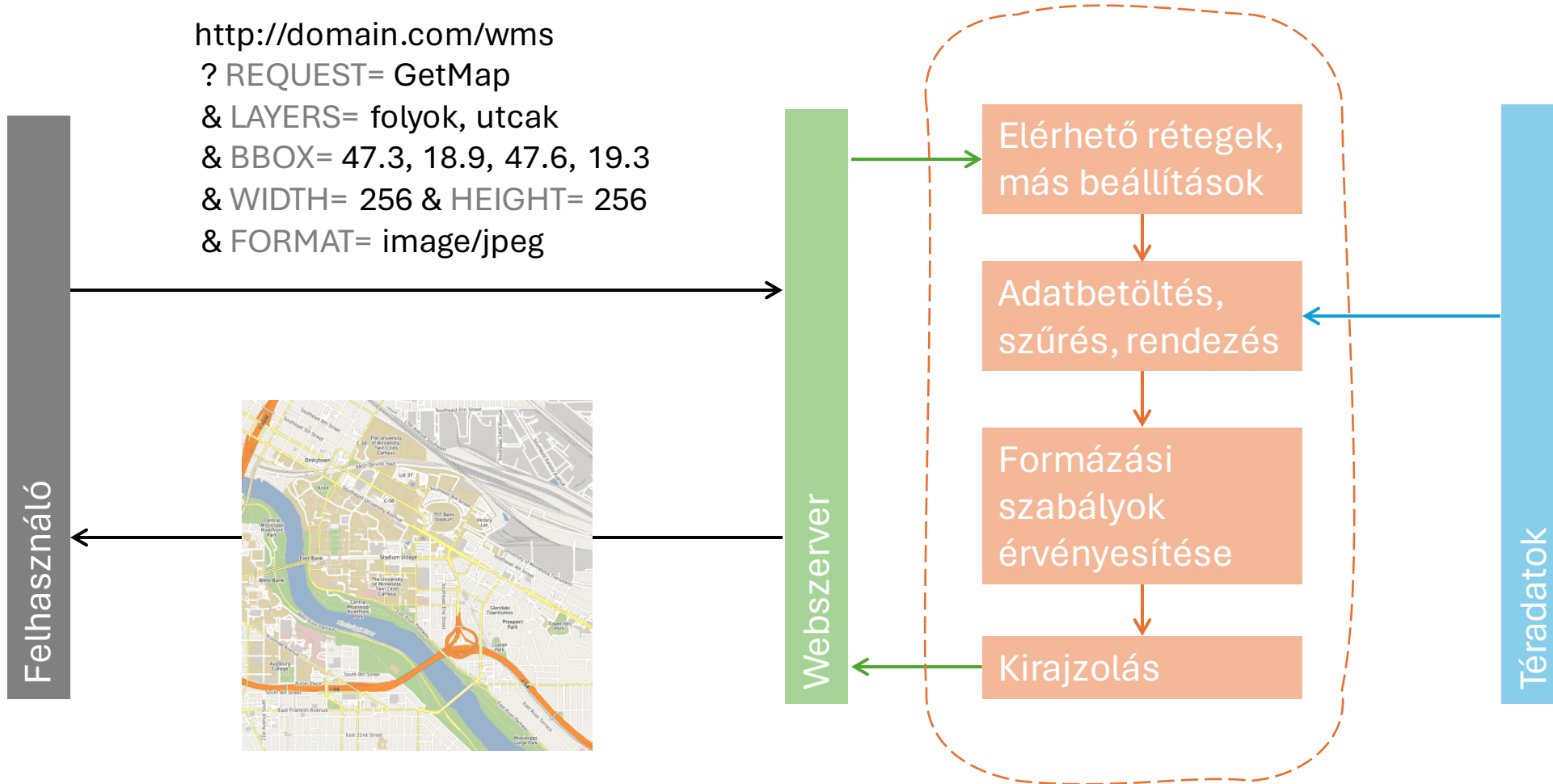
Windows, Linux, MacOS

 **GeoServer 2.25.1**  3.6k  2.1k  338
3 days ago

WMS, WFS, ...

<http://domain.com/wms>
? REQUEST= GetMap
& LAYERS= folyok, utcak
& BBOX= 47.3, 18.9, 47.6, 19.3
& WIDTH= 256 & HEIGHT= 256
& FORMAT= image/jpeg









-
- Teljesítmény
 - Erőforrás igény
 - Funkcionalitás
 - Kiterjeszthetőség
 - Felhasználói felület



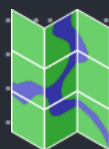
Stress testing `host.docker.internal:8080/geoserver/tiger/ows?SERVICE=WMS&VERSION=1.1.1&REQUEST=GetMap&FORMAT=image%2Fpng&TRANSPARENT=true&STYLES&LAYERS=tiger%3Atiger_roads&SRS=EPSG%3A4326&WIDTH=600&HEIGHT=600&BBBOX=-73.99231910705566%2C40.75369834899902%2C-73.9665699005127%2C40.77944755554199` 500 concurrent requests for 10 seconds

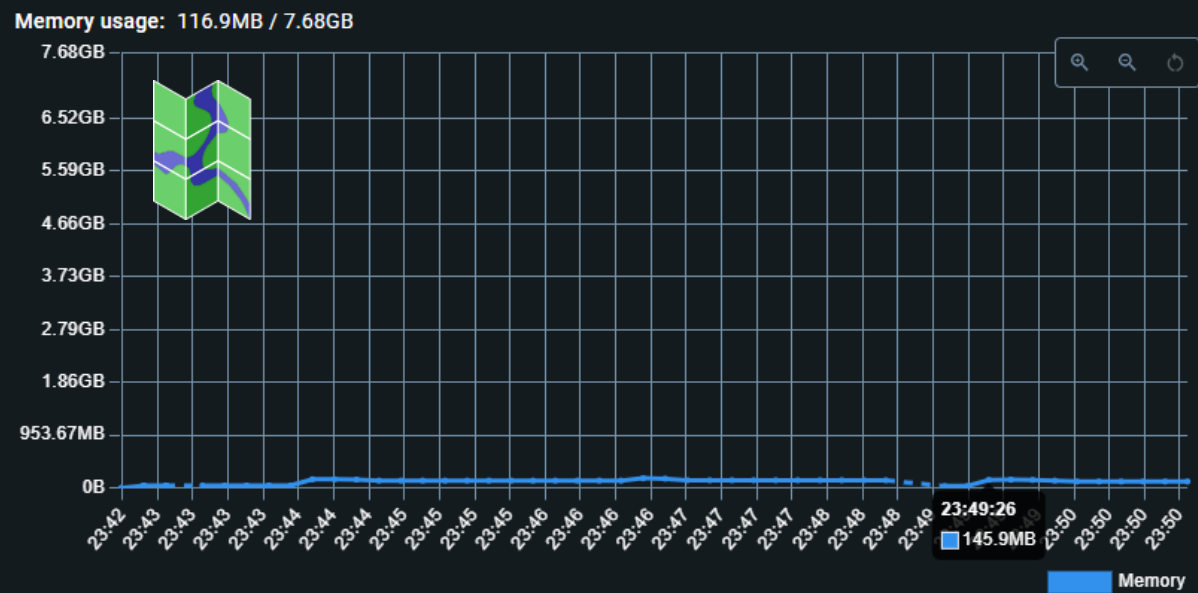
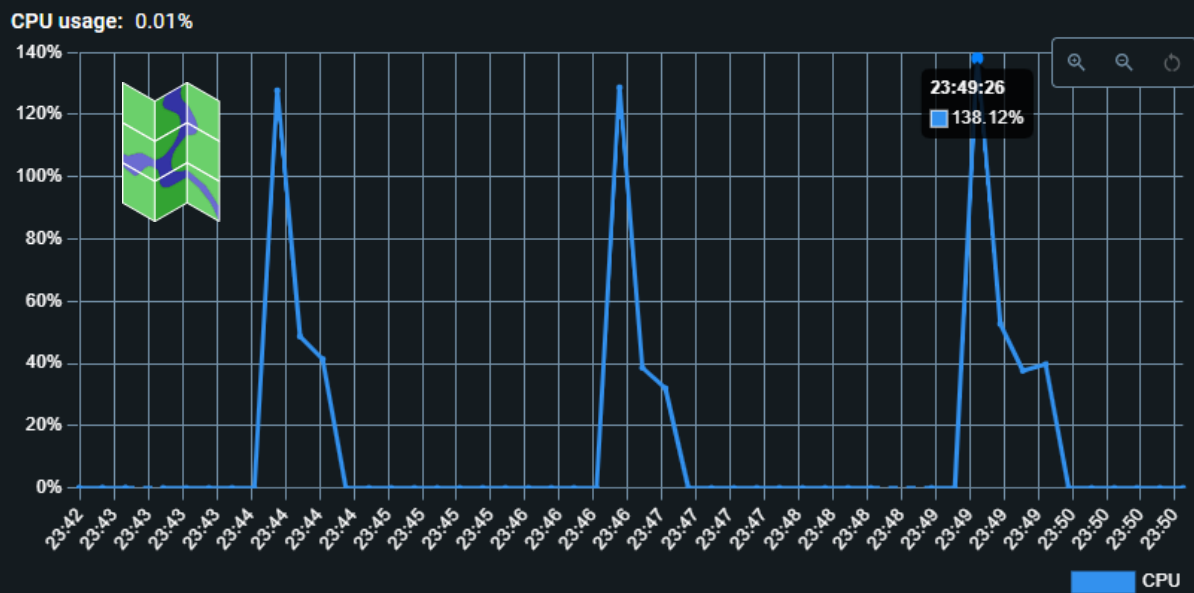
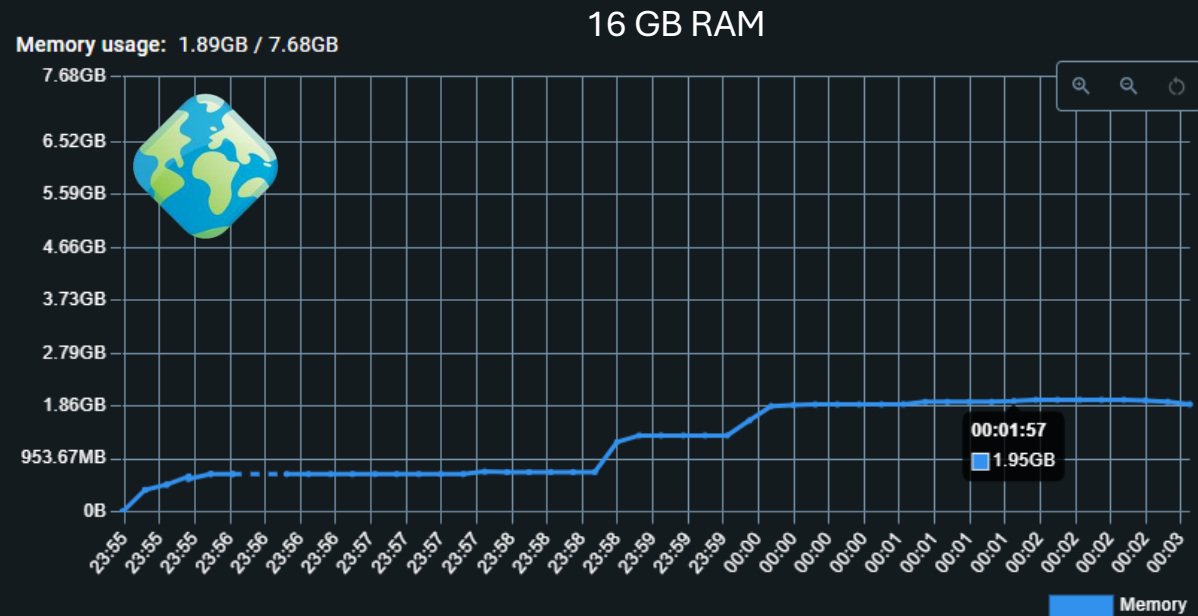
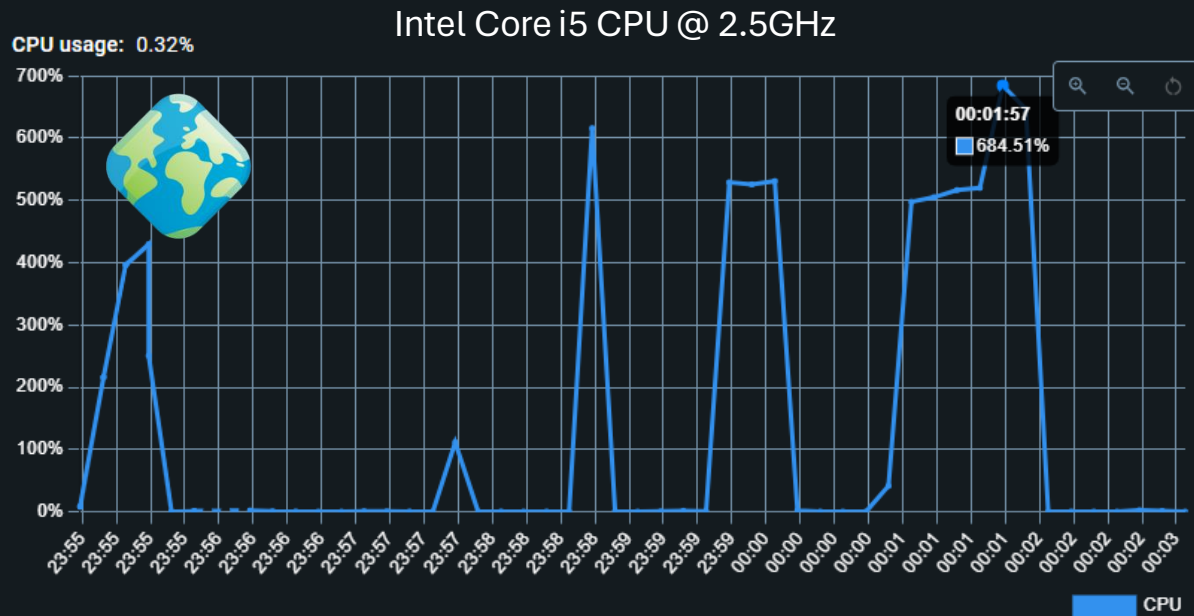
```
Result -----
Test Duration ..... 28.93 s
Test Concurrency ..... 500
Requests Count ..... 27.03 reqs/s 782 requests
Success Rate ..... 84.1 %
DNS Lookup Duration ..... 100.168.05.234 22.04 ms
TLS Handshake Duration ..... 0.00 ms
Request Duration ..... 14756.97 ms
- Upload 0.0 % ..... 0.00 MB/req 0.01 MB/s 0.10 ms
- TTFB 98.6 % - including server processing time ..... 14550.49 ms
- Download 0.8 % ..... 0.01 MB/req 6.47 MB/s 122.40 ms
■ Critical ■ Poor ■ Ok ■ Excellent
```



Stress testing `host.docker.internal:80/mapserver/tiger/ows?SERVICE=WMS&VERSION=1.1.1&REQUEST=GetMap&FORMAT=image%2Fpng&TRANSPARENT=true&STYLES&LAYERS=tiger%3Atiger_roads&SRS=EPSG%3A4326&WIDTH=600&HEIGHT=600&BBBOX=-73.99231910705566%2C40.75369834899902%2C-73.9665699005127%2C40.77944755554199` 500 concurrent requests for 10 seconds

```
Result -----
Test Duration ..... 40.00 s
Test Concurrency ..... 500
Requests Count ..... 16 reqs/s 640 requests
Success Rate ..... 100.0 %
DNS Lookup Duration ..... 192.168.05.234 22.04 ms
TLS Handshake Duration ..... 0.00 ms
Request Duration ..... 16651.14 ms
- Upload 0.0 % ..... 0.00 MB/req 0.01 MB/s 0.06 ms
- TTFB 99.9 % - including server processing time ..... 16640.20 ms
- Download 0.1 % ..... 0.00 MB/req 1.83 MB/s 11.49 ms
■ Critical ■ Poor ■ Ok ■ Excellent
```





Felhasználó

http://domain.com/wms
? REQUEST= GetMap
& LAYERS= folyok, utcak
& BBOX= 47.3, 18.9, 47.6, 19.3
& WIDTH= 256 & HEIGHT= 256
& FORMAT= image/jpeg



Webszerver

Elérhető rétegek,
más beállítások

Adatbetöltés,
szűrés, rendezés

Formázási
szabályok
érvényesítése

Kirajzolás

Téradatok

fastCGI



-
- Teljesítmény
 - Erőforrás igény
 - Funkcionalitás
 - Kiterjeszthetőség
 - Felhasználói felület

About & Status

-  Server Status
-  GeoServer Logs
-  Contact Information
-  About GeoServer

Data

-  Layer Preview
-  Workspaces
-  Stores
-  Layers
-  Layer Groups
-  Styles

Services

-  WMS
-  WMTS
-  WFS
-  WCS

Settings

-  Global
-  Image Processing
-  Raster Access

Tile Caching

Welcome

GeoServer Web Service, admin access to 8 workspaces, with 28 layers.

Designed for interoperability, GeoServer publishes data from any major spatial data source using open standards. For more information visit [OSGeo](#).

24 Layers	+ Add new layer
4 Layer groups	+ Add new layer group
10 Stores	+ Add new store
8 Workspaces	+ Add new workspace

 The master password for this server has not been changed from the default. It is **highly** recommended that you change it now. [Change it](#)

 The administrator password for this server has not been changed from the default. It is **highly** recommended that you change it now. [Change it](#)

 Strong cryptography available

GeoServer Web Map Service

A compliant implementation of WMS plus most of the SLD extension (dynamic styling). Can also generate PDF, SVG, KML, GeoRSS

WMS	WMS
1.3.0	1.1.1

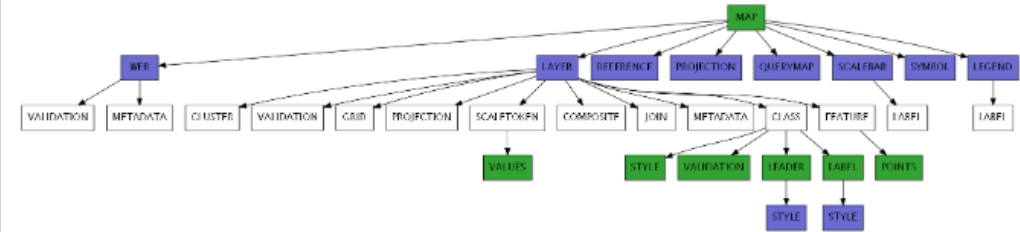
```

minta.map
9  EXTENT -180 -90 180 90 # World
10
11 OUTPUTFORMAT
12   NAME png
13   DRIVER "GD/PNG"
14   MIMETYPE "image/png"
15   IMAGEMODE RGB
16   EXTENSION "png"
17 END
18
19 # start of layer definitions
20
21 LAYER
22   NAME "legifelvetel"
23   TYPE RASTER
24   DATA "data/legifelvetel_2024.tif"
25   STATUS ON
26 END
27
28 LAYER
29   NAME "fol yok"
30   TYPE LINE
31   DATA "data/rivers.shp"
32   CLASSITEM 'name'
33   CLASS
34     NAME "Nílus"
35     EXPRESSION /Níle/
36     COLOR 0 0 255
37   END

```

MAP

Note: The map object is started with the word **MAP**, and ended with the word **END**.



ANGLE [double]

Angle, given in degrees, to rotate the map. Default is 0, and must be in the range -360 to 360. The rendered map will rotate in a clockwise direction. The following are important notes:

- Requires a **PROJECTION** object specified at the MAP level and for each **LAYER** object (even if all layers are in the same projection).
- Requires **MapScript** ([SWIG](#), [PHP MapScript](#)). Does not work with **CGI** mode.
- If using the **LABEL** object's **ANGLE** or the **LAYER** object's **LABELANGLEITEM** parameters as well, these parameters are relative to the map's orientation (i.e. they are computed after the **MAP** object's **ANGLE**). For example, if you have specified an **ANGLE** for the map of 45, and then have a layer **LABELANGLEITEM** value of 45, the resulting label will not appear rotated (because the resulting map is rotated clockwise 45 degrees and the label is rotated counter-clockwise 45 degrees). Note that a missing **ANGLE** or a value set to 0 means that map rotation is ignored. (so if wanting to have a zero relative angle relative to the map rotation, use an almost zero value like 0.0001)
- Starting with MapServer 7.2, if using the **STYLE** . **ANGLE** parameter of a punctual symbol, that parameter is relative to the map's orientation (i.e. it is computed after the **MAP** object's **ANGLE**). For example, if you have specified an **ANGLE** for the map of 45, and then have a symbol **ANGLE** value of 45, the resulting label will not appear rotated (because the resulting map is rotated clockwise 45 degrees and the label is rotated counter-clockwise 45 degrees). Note that a missing **ANGLE** or a value set to 0 means that map rotation is ignored. (so if wanting to have a zero relative angle relative to the map rotation, use an almost zero value like 0.0001)
- More information can be found on the MapRotation [Wiki Page](#).

CONFIG [key] [value]

This can be used to specify several values at run-time, for both MapServer and GDAL/OGR libraries. Developers: values will be passed on to `CPLSetConfigOption()`. Details on GDAL/OGR options are found in their associated driver documentation pages ([GDAL/OGR](#)). The following options are available specifically for MapServer:

CGI_CONTEXT_URL [value]

This **CONFIG** parameter can be used to enable loading a map context from a URL. See the [Map Context HowTo](#) for more info.

MS_ENCRYPTION_KEY [filename]

This **CONFIG** parameter can be used to specify an encryption key that is used with MapServer's [msencrypt utility](#).

MS_ERRORFILE [filename]

This **CONFIG** parameter can be used to write MapServer errors to a file (as of MapServer 5.0). With MapServer 5.x, a full path (absolute reference) is required, including the filename. Starting with MapServer 6.0, a filename with relative path can be passed via this **CONFIG** directive, in which case the filename is relative to the mapfile location. Note that setting **MS_ERRORFILE** via an environment

...az arányok



MapAdmin

Egy a MapServer köré épített API és webes felhasználói felület a Mapfileok kezeléséhez.

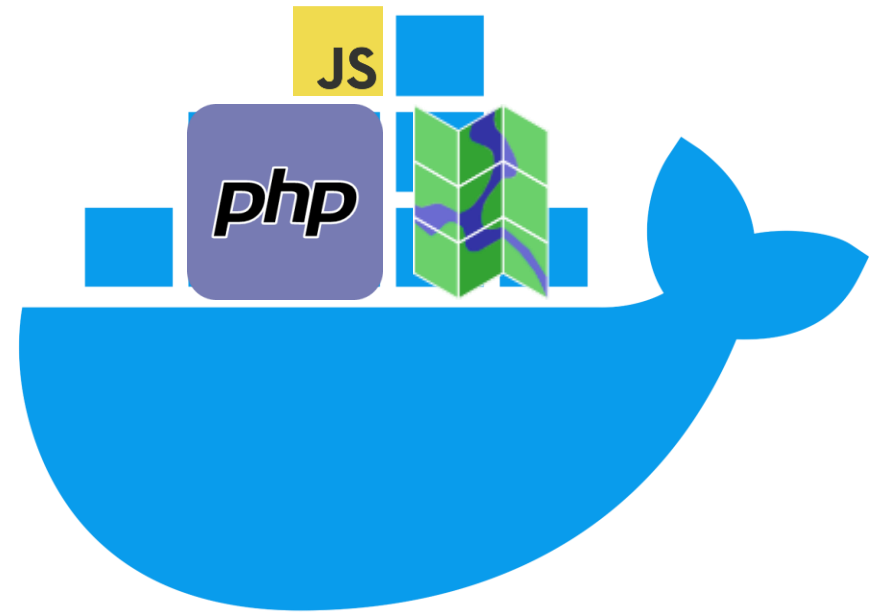
Inspiráció:

- [Jonathan Beliën - MapFile Generator](#)
- [Juan Luis Rodríguez Ponce - MapServer Rest API](#)
- [Seth G. - Mappyfile](#)



- MapAdmin Web kliens
- MapAdmin REST API
- Dockerfile

Apache/nginx + MapServer + MapCache



Data

 Workspaces Sources Styles Groups Layers

Caching

 Gridsets Caches

System

 Services Security Status Docs Logs

Services

General

WMS

WFS

WCS

WMTS

TMS

Metadata

Title

GeoServer Web Map Service

Abstract

A compliant implementation of WMS plus most of the SLD extension (dynamic styling). Can also generate PDF, SVG, KML, GeoRSS

Fees

NONE

Access constraints

NONE

Keywords

WFS,WMS,GEOSERVER

Online resource

http://geoserver.org

Contact information

Contact name

Organization

Position

Email

Merre tovább?

QGIS server
tapasztalatok

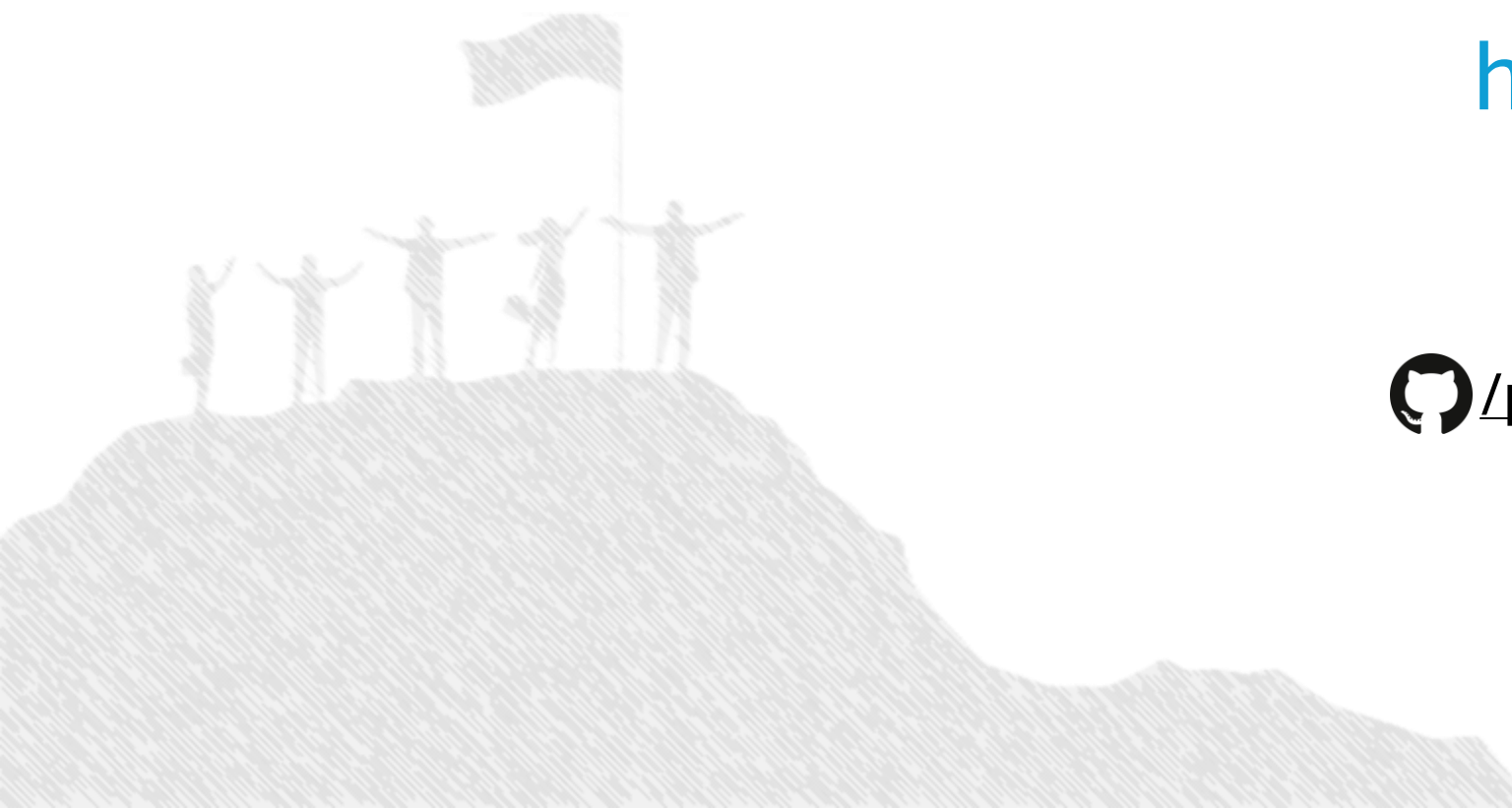
PHP / Python API

SLD / CLASS

MS4W, OSGeo4W
támogatás

GeoServer kompatibilitás
mennyire fontos?

Workspace = Mapfile ?

A faint, stylized illustration in the bottom left corner shows a group of five people standing on a mountain peak, raising their arms in celebration. A flag is flying from a pole on the peak. The entire illustration is rendered in a light gray, textured style.

CSATLAKOZZ,

ha Te is szeretnél
a részese lenni!

 [/programmerg/MapAdmin](https://github.com/programmerg/MapAdmin)