



**Herramientas C/S**

Unidad II

# Herramientas Cliente/servidor

Samuel Mesa

[samuelfmesa@gmail.com](mailto:samuelfmesa@gmail.com)



**CIAF - IGAC**

**Curso de Fundamentos de IDE**

**2017**

# Herramientas

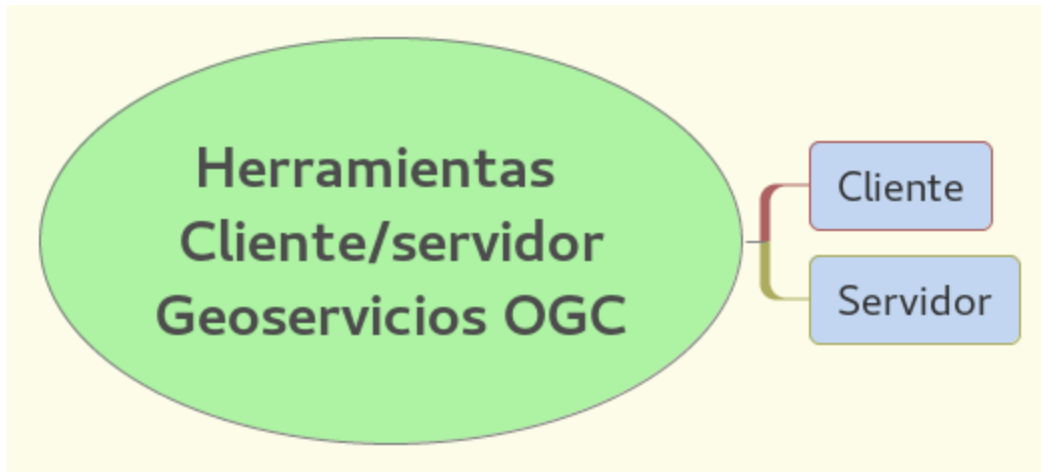
## Cliente/servidor

### Geoservicios OGC

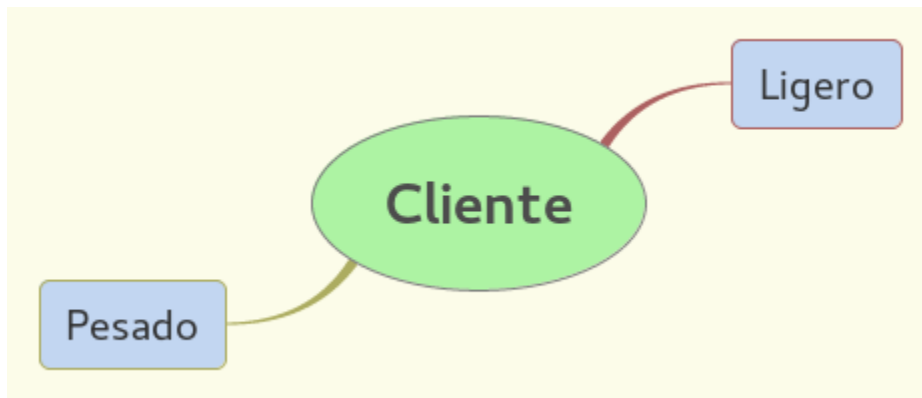
Herramientas Cliente/servidor Geoservicios OGC.....	1
1. Cliente.....	4
1.1. Ligeros.....	4
1.1.1. FOSS .....	4
1.1.1.1. OpenLayers .....	5
1.1.1.2. Leaflet.....	5
1.1.1.3. GeoExt.....	5
1.1.1.4. CatalogConnector.....	5
1.1.1.4.1. CSW.....	6
1.1.1.4.1.1. v2.0.1.....	6
1.1.1.4.1.2. v2.0.2.....	6
1.1.1.5. eXcat OpenGIS CSW.....	6
1.1.1.5.1. CSW.....	6
1.1.1.5.1.1. v2.0.1.....	7
1.1.1.5.1.2. v2.0.2.....	7
1.1.1.6. BeeldBlad.....	7
1.1.1.6.1. WMS .....	7
1.1.2. Privativos.....	7
1.2. Pesados.....	7
1.2.1. FOSS .....	8
1.2.1.1. QGIS.....	8
1.2.1.1.1. WMS .....	9
1.2.1.1.2. WMTS.....	9
1.2.1.1.3. WFS .....	9
1.2.1.1.4. WCS.....	9
1.2.1.2. gvSIG.....	9
1.2.1.2.1. WMS .....	10
1.2.1.2.2. WMTS.....	10
1.2.1.2.3. WFS .....	10
1.2.1.2.4. WCS.....	10
1.2.1.3. Kosmo SAIG.....	10
1.2.1.4. uDig.....	10
1.2.1.5. OpenJump .....	10
1.2.1.6. owsLib.....	10
1.2.1.6.1. WMS .....	10
1.2.1.6.1.1. v1.1.1.....	11
1.2.1.6.2. WMTS.....	11

1.2.1.6.2.1. v1.0.0.....	11
1.2.1.6.3. WFS.....	11
1.2.1.6.3.1. v1.0.0.....	11
1.2.1.6.3.2. v1.1.0.....	11
1.2.1.6.3.3. v2.0.0.....	11
1.2.1.6.4. WCS.....	12
1.2.1.6.4.1. v1.0.0.....	12
1.2.1.6.4.2. v1.1.0.....	12
1.2.1.6.5. SOS.....	12
1.2.1.6.5.1. v1.0.0.....	12
1.2.1.6.5.2. v2.0.0.....	12
1.2.1.6.6. CSW.....	12
1.2.1.6.6.1. v2.0.2.....	13
1.2.1.6.7. WPS.....	13
1.2.1.6.7.1. v1.0.0.....	13
1.2.2. Privativo.....	13
1.2.2.1. ArcGIS Desktop.....	13
1.2.2.1.1. WMS.....	14
1.2.2.1.2. WFS.....	14
1.2.2.2. Google Earth.....	14
1.2.2.3. GAIA.....	14
2. Servidor.....	14
2.1. FOSS.....	14
2.1.1. Mapserver.....	15
2.1.1.1. WMS.....	16
2.1.1.2. WFS.....	16
2.1.1.3. WCS.....	16
2.1.2. MapCache.....	16
2.1.2.1. WMTS.....	16
2.1.3. TinyOWS.....	16
2.1.3.1. WFS-T.....	17
2.1.4. QGIS Map Server.....	17
2.1.4.1. WMS.....	17
2.1.4.1.1. v1.3.0.....	17
2.1.4.2. WFS.....	17
2.1.5. Geoserver.....	17
2.1.5.1. WMS.....	18
2.1.5.2. WFS.....	18
2.1.5.3. WCS.....	18
2.1.6. Geowebcache.....	18
2.1.6.1. WMTS.....	18
2.1.7. Deegree.....	18
2.1.7.1. WMS.....	19

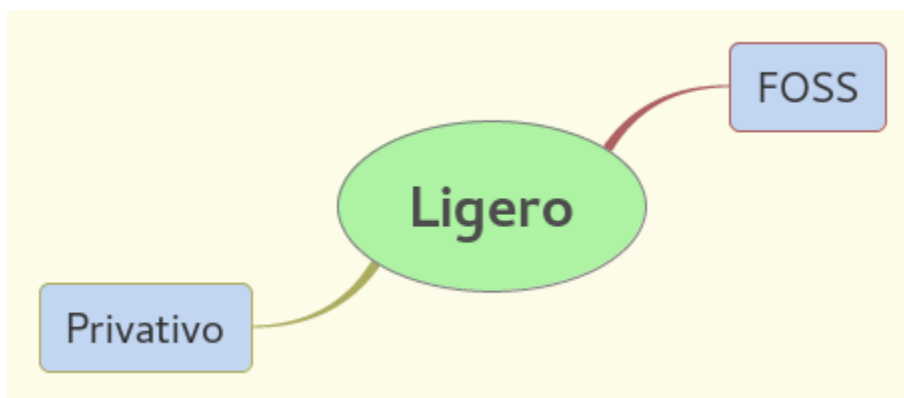
2.1.7.2.	WMTS.....	19
2.1.7.3.	WFS.....	19
2.1.7.4.	WCS.....	19
2.1.8.	OrbisGIS Server * .....	19
2.1.8.1.	WMS .....	19
2.1.9.	GeoNetwork Opensource .....	19
2.1.10.	MapGuide Open .....	19
2.1.11.	MapProxy.....	19
2.1.12.	pyCSW.....	19
2.1.12.1.	CSW.....	20
2.1.13.	pyWPS .....	20
2.1.13.1.	CSW.....	20
2.1.14.	Zoo-Project.....	20
2.1.14.1.	WPS.....	21
	Mapserver Suite(Mapserver, MapCache, TinyOWS).....	21
	Proyecto en fase beta de desarrollo(OrbisGIS Server *).....	21
2.2.	Privativo .....	21
2.2.1.	ArcGIS Server.....	21
2.2.1.1.	WMS .....	21
2.2.1.2.	WMTS.....	21
2.2.1.3.	WFS .....	21



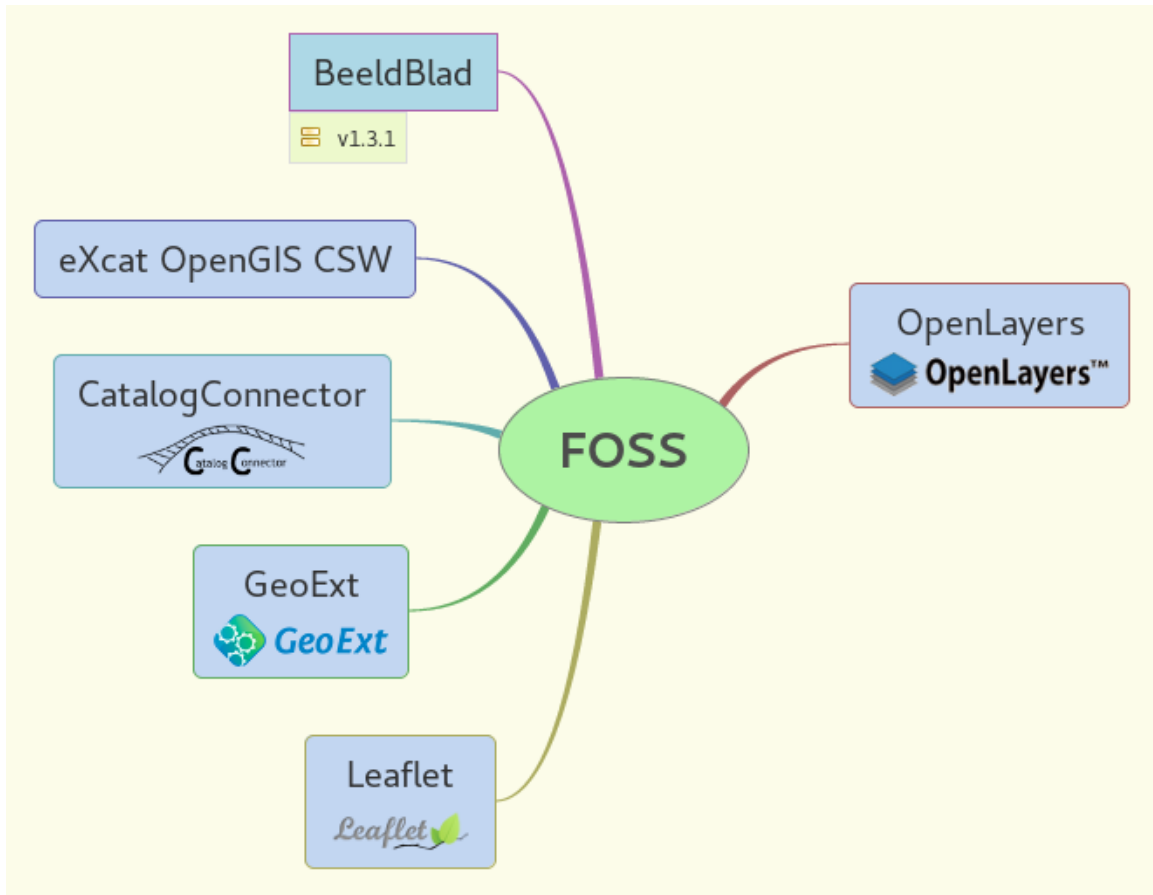
## 1. Cliente



### 1.1. Ligero



#### 1.1.1. FOSS



1.1.1.1. OpenLayers



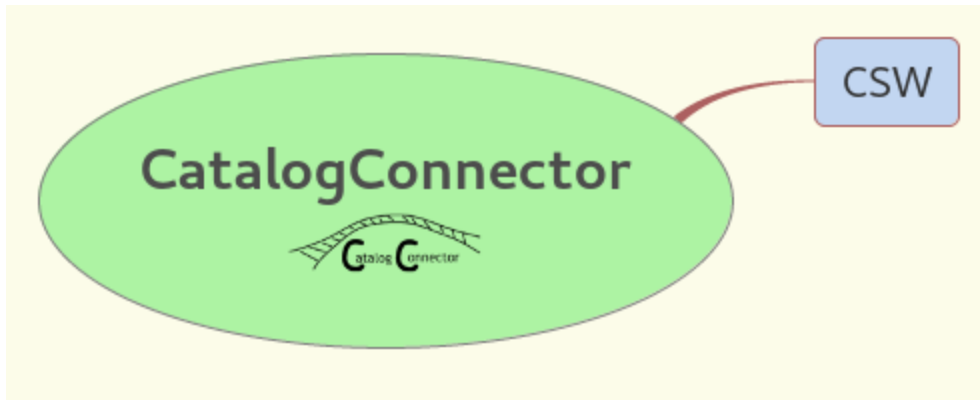
1.1.1.2. Leaflet



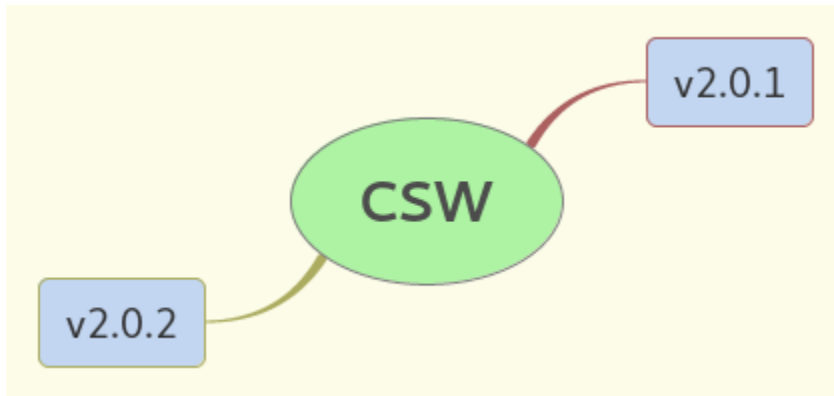
1.1.1.3. GeoExt



1.1.1.4. CatalogConnector



#### 1.1.1.4.1. CSW



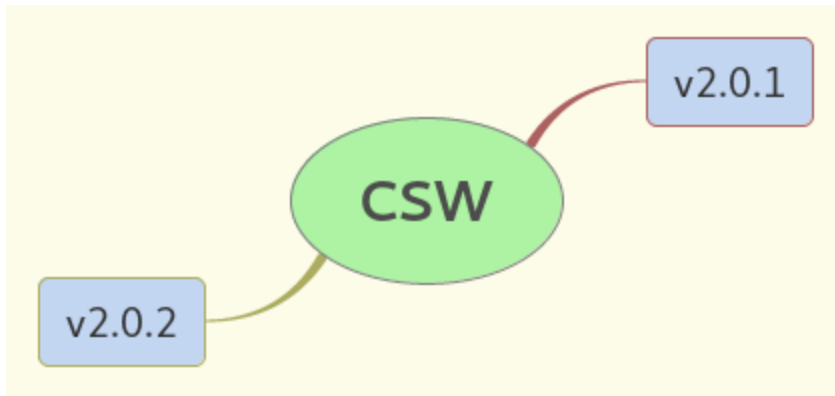
##### 1.1.1.4.1.1. v2.0.1

##### 1.1.1.4.1.2. v2.0.2

#### 1.1.1.5. eXcat OpenGIS CSW



##### 1.1.1.5.1. CSW

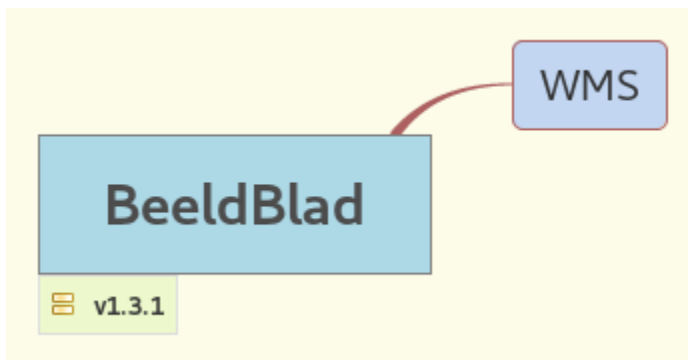


**1.1.1.5.1.1. v2.0.1**

**1.1.1.5.1.2. v2.0.2**

**1.1.1.6. BeeldBlad**

v1.3.1

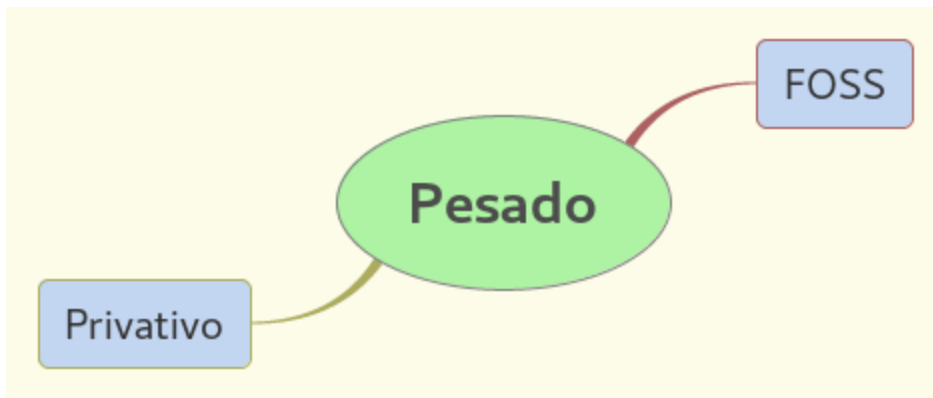


**1.1.1.6.1. WMS**

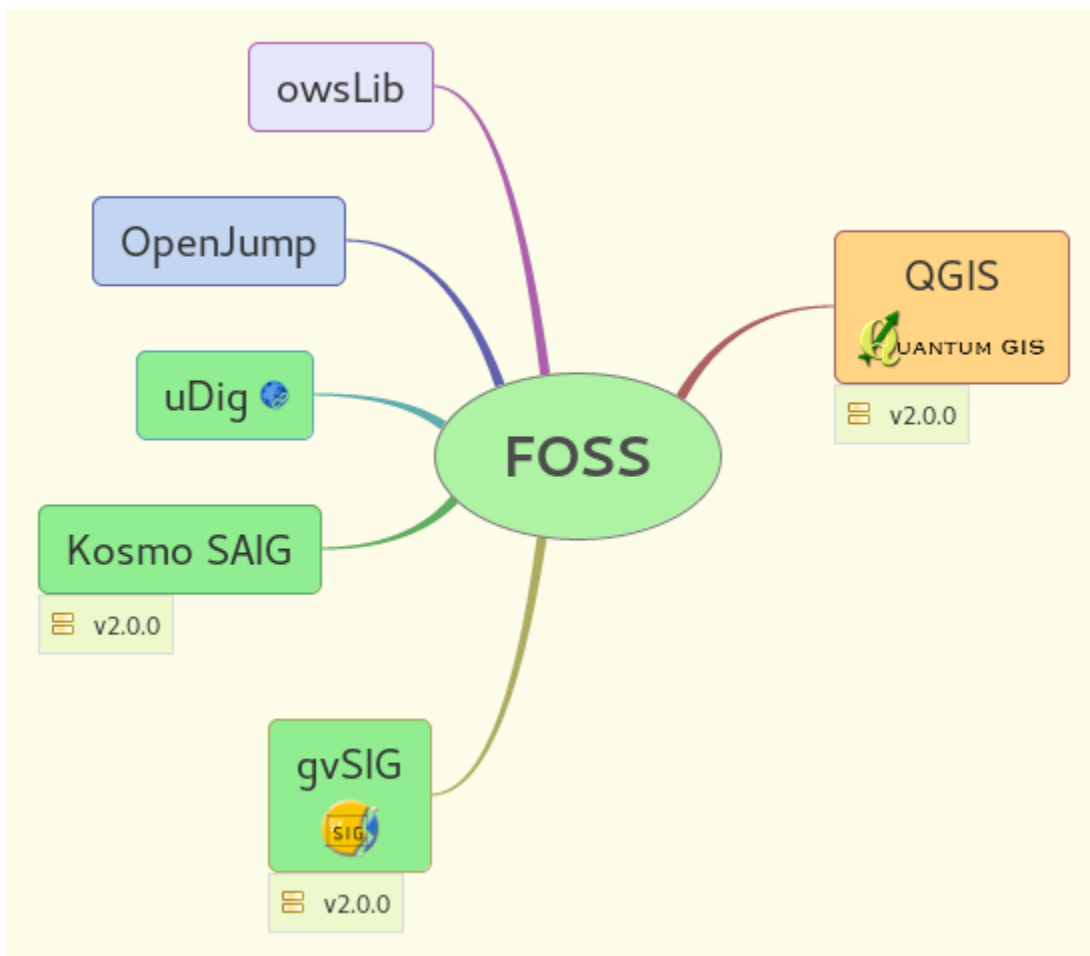
**1.1.2. Privativo**

**1.2. Pesado**



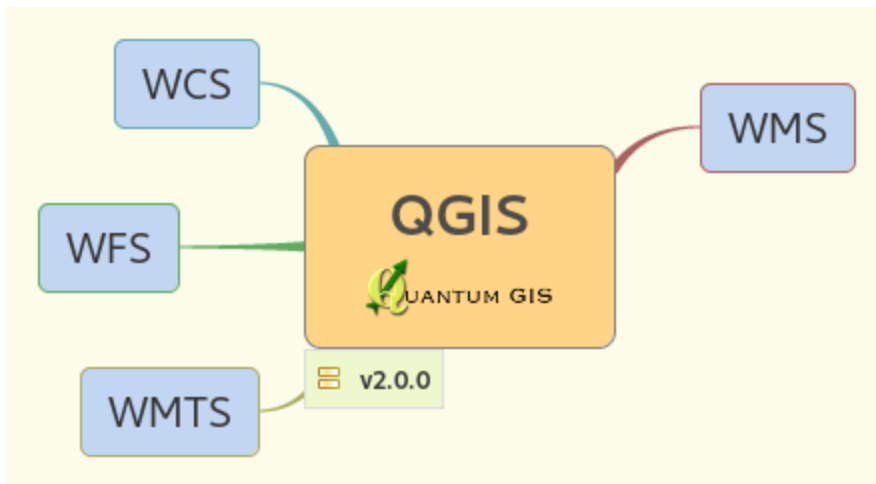


### 1.2.1. FOSS



#### 1.2.1.1. QGIS

v2.0.0



**1.2.1.1.1. WMS**

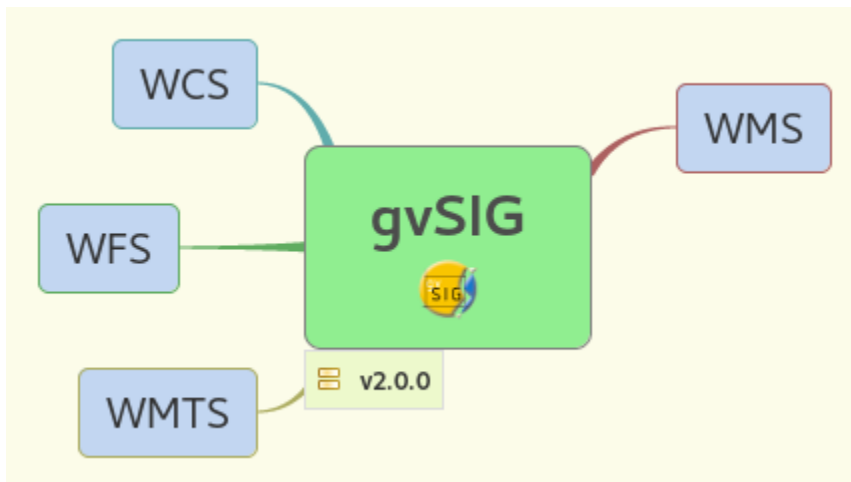
**1.2.1.1.2. WMTS**

**1.2.1.1.3. WFS**

**1.2.1.1.4. WCS**

**1.2.1.2. gvSIG**

v2.0.0



1.2.1.2.1. WMS

1.2.1.2.2. WMTS

1.2.1.2.3. WFS

1.2.1.2.4. WCS

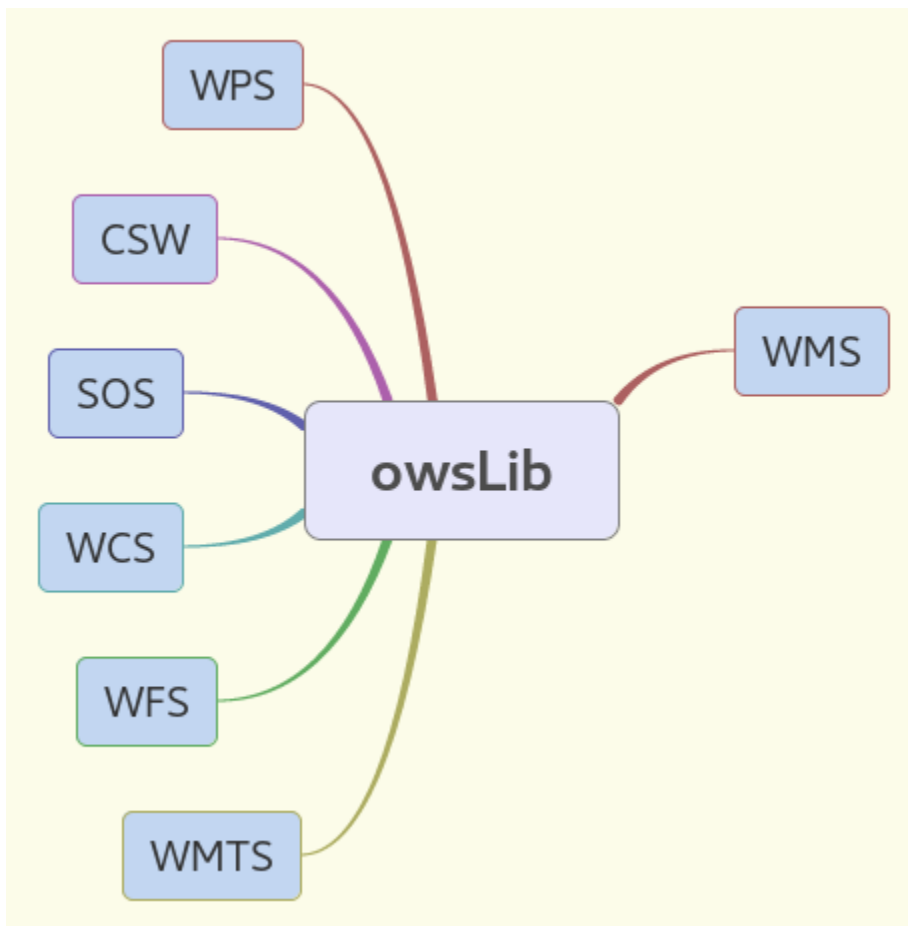
1.2.1.3. Kosmo SAIG

v2.0.0

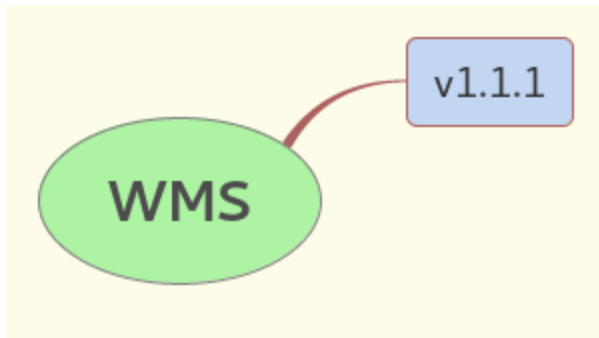
1.2.1.4. [uDig](#)

1.2.1.5. OpenJump

1.2.1.6. owsLib

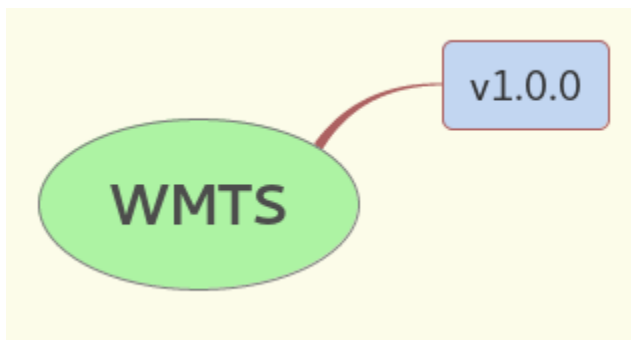


1.2.1.6.1. WMS



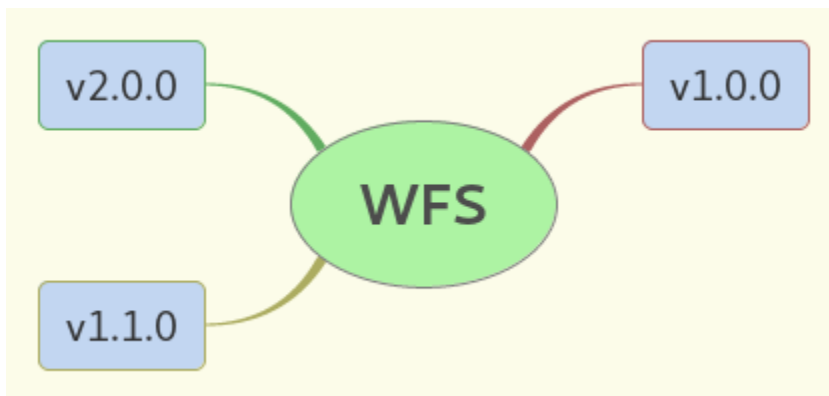
**1.2.1.6.1.1. v1.1.1**

**1.2.1.6.2. WMTS**



**1.2.1.6.2.1. v1.0.0**

**1.2.1.6.3. WFS**

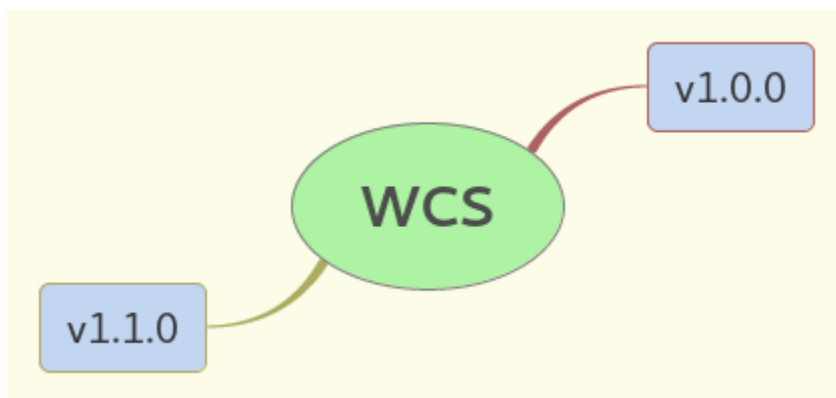


**1.2.1.6.3.1. v1.0.0**

**1.2.1.6.3.2. v1.1.0**

**1.2.1.6.3.3. v2.0.0**

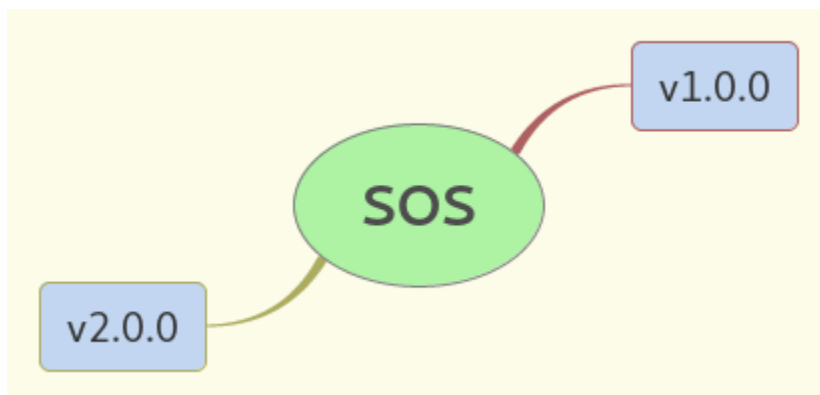
#### 1.2.1.6.4. WCS



##### 1.2.1.6.4.1. v1.0.0

##### 1.2.1.6.4.2. v1.1.0

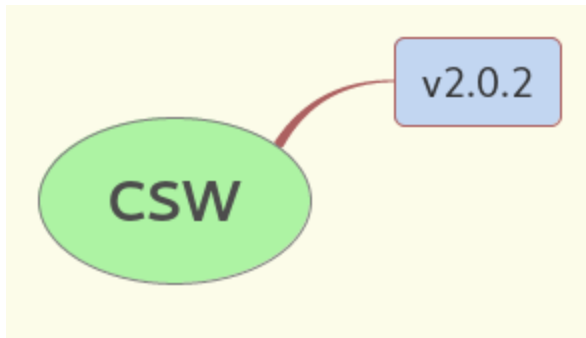
#### 1.2.1.6.5. SOS



##### 1.2.1.6.5.1. v1.0.0

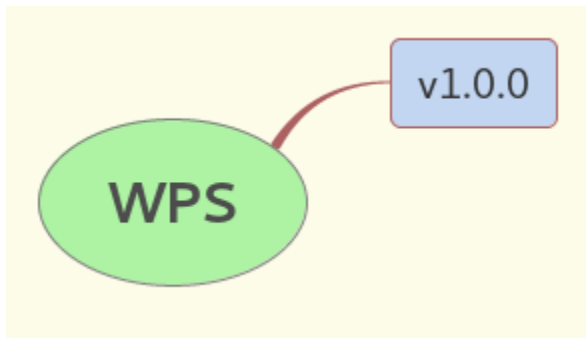
##### 1.2.1.6.5.2. v2.0.0

#### 1.2.1.6.6. CSW



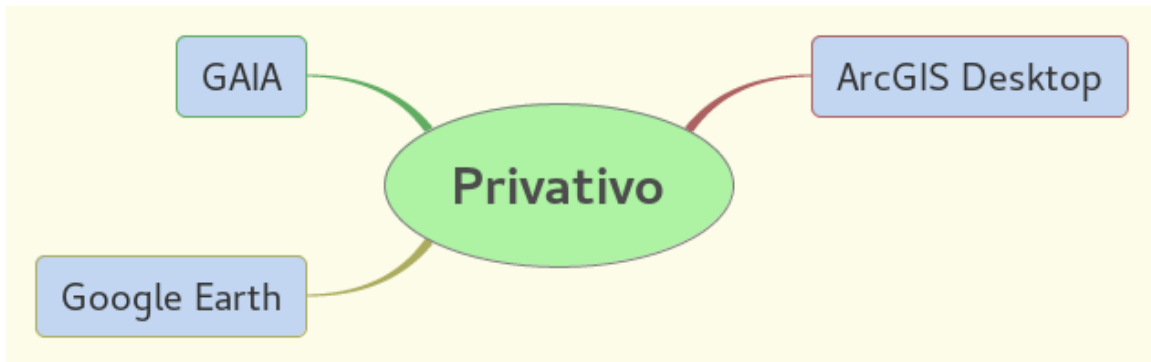
**1.2.1.6.6.1. v2.0.2**

**1.2.1.6.7. WPS**



**1.2.1.6.7.1. v1.0.0**

**1.2.2. Privativo**



**1.2.2.1. ArcGIS Desktop**



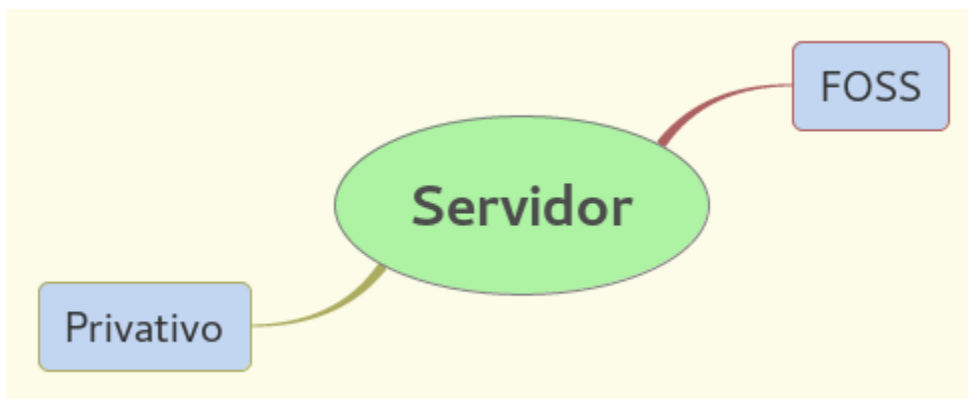
**1.2.2.1.1. WMS**

**1.2.2.1.2. WFS**

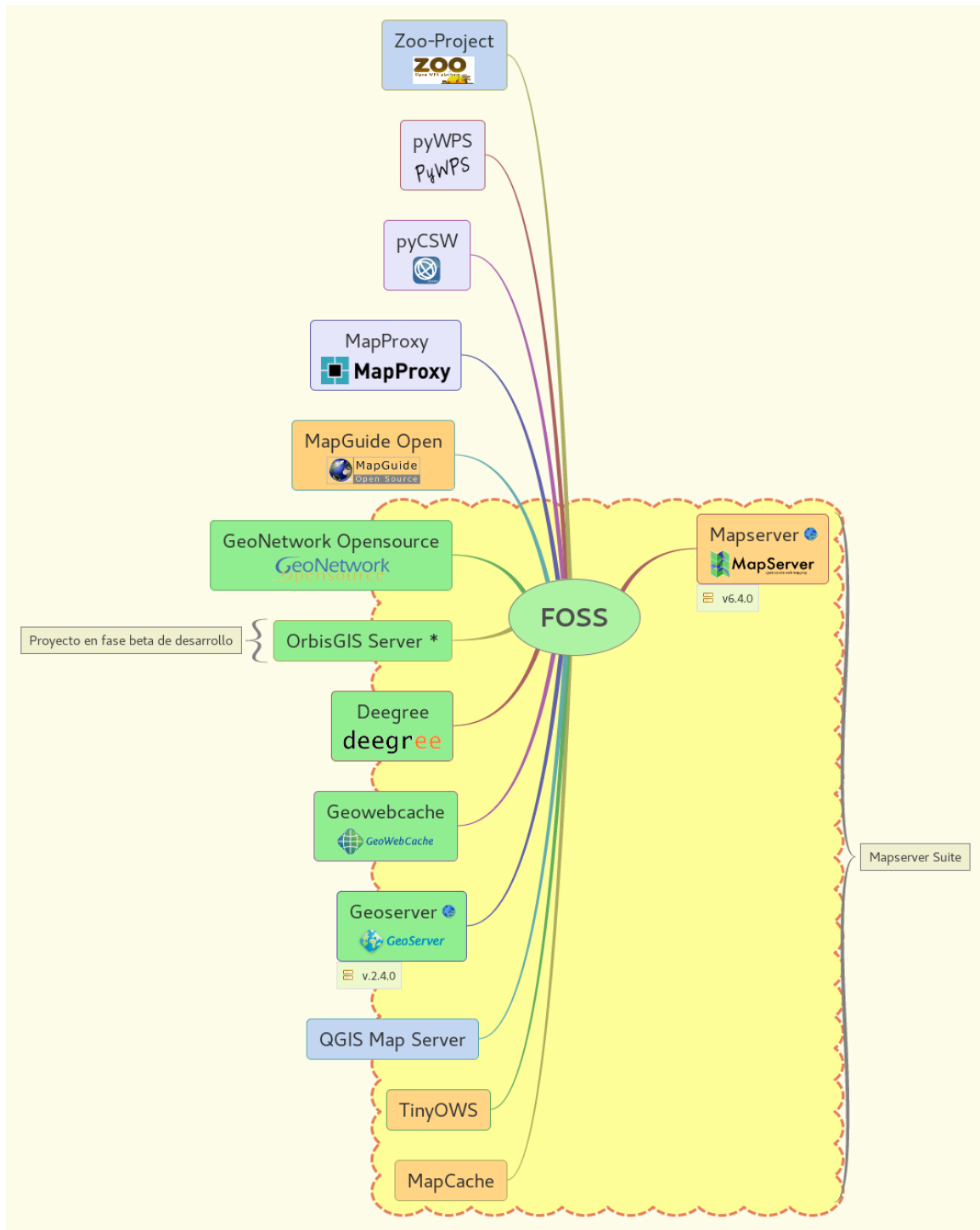
**1.2.2.2. Google Earth**

**1.2.2.3. GAIA**

## **2. Servidor**



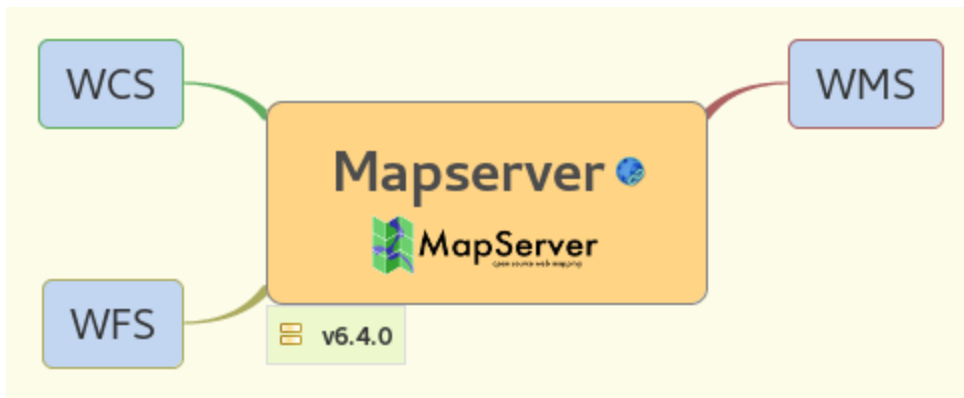
**2.1. FOSS**



### 2.1.1. [Mapserver](#)

v6.4.0



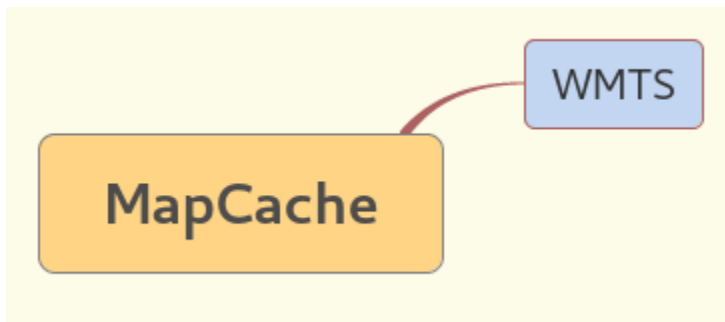


**2.1.1.1. WMS**

**2.1.1.2. WFS**

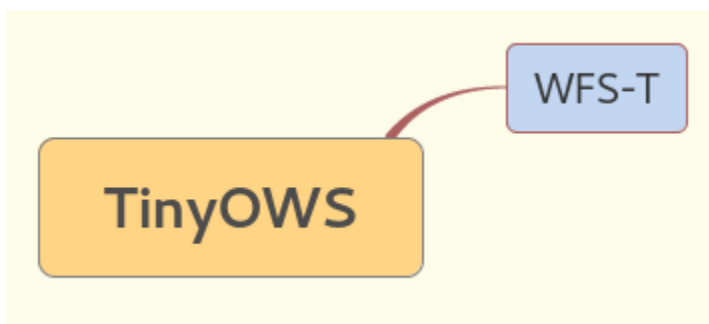
**2.1.1.3. WCS**

**2.1.2. MapCache**



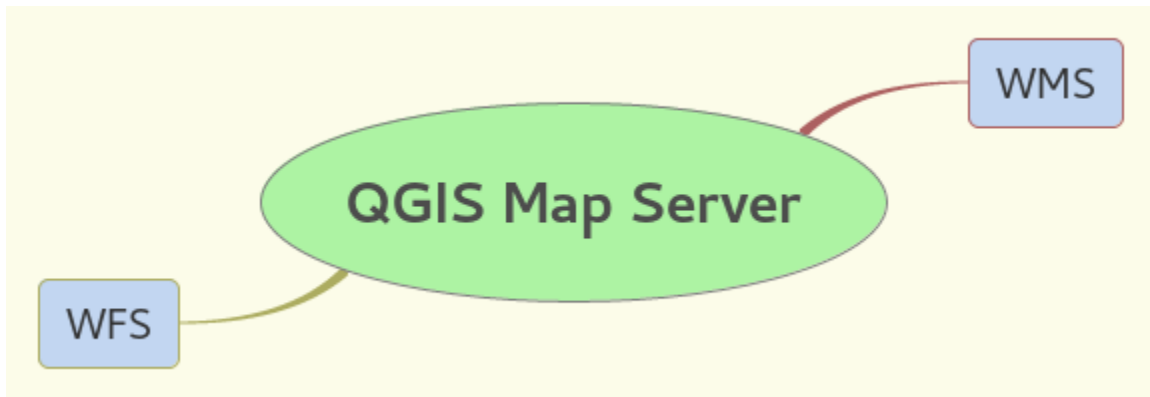
**2.1.2.1. WMTS**

**2.1.3. TinyOWS**

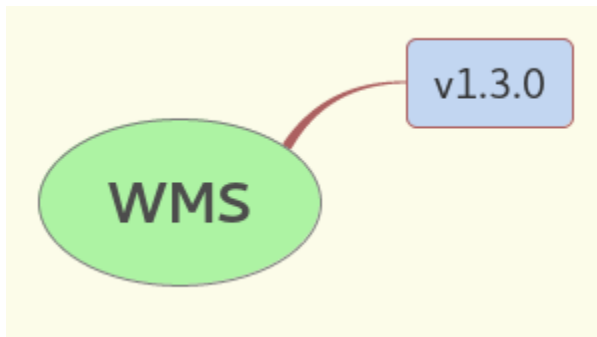


### 2.1.3.1. WFS-T

## 2.1.4. QGIS Map Server



### 2.1.4.1. WMS



#### 2.1.4.1.1. v1.3.0

### 2.1.4.2. WFS

## 2.1.5. [Geoserver](#)

v.2.4.0



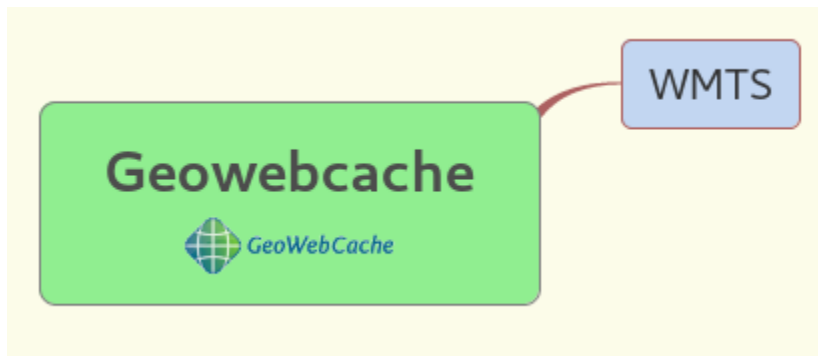


2.1.5.1. WMS

2.1.5.2. WFS

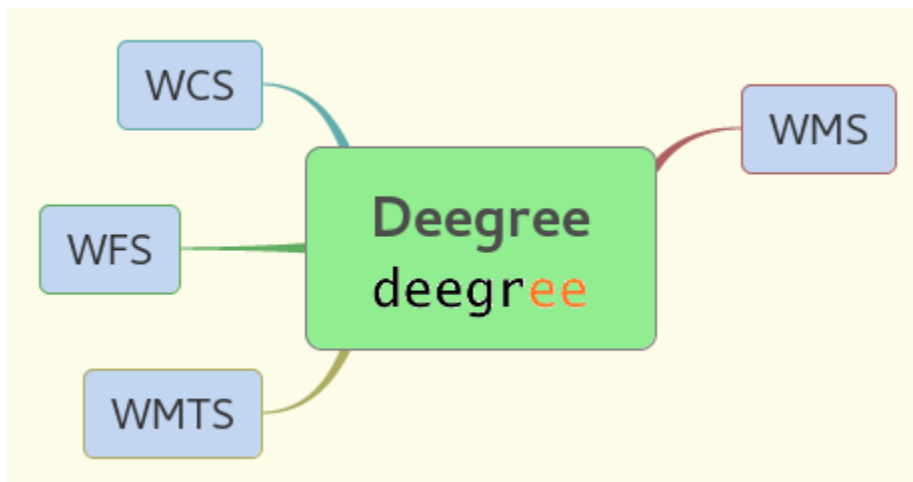
2.1.5.3. WCS

2.1.6. Geowebcache



2.1.6.1. WMTS

2.1.7. Deegree



deegree

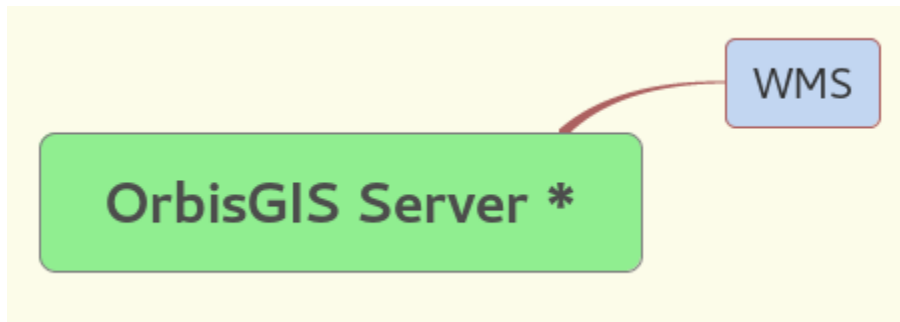
**2.1.7.1. WMS**

**2.1.7.2. WMTS**

**2.1.7.3. WFS**

**2.1.7.4. WCS**

**2.1.8. OrbisGIS Server \***



**2.1.8.1. WMS**

**2.1.9. GeoNetwork Opensource**



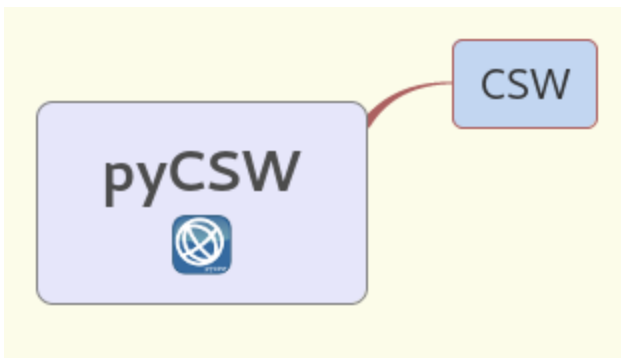
**2.1.10. MapGuide Open**



**2.1.11. MapProxy**

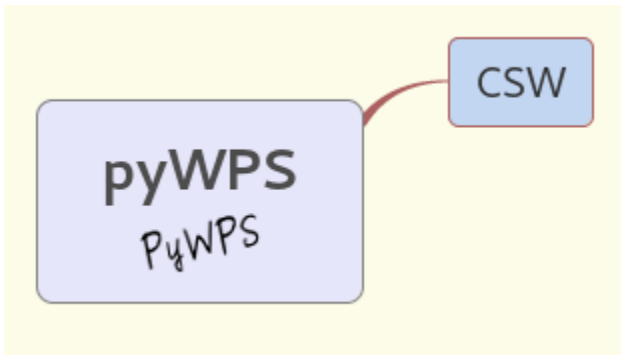


**2.1.12. pyCSW**



### 2.1.12.1. CSW

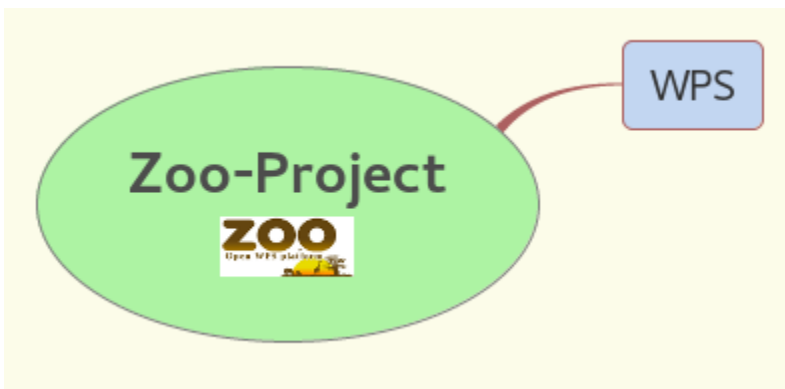
### 2.1.13. pyWPS



PyWPS

### 2.1.13.1. CSW

### 2.1.14. Zoo-Project



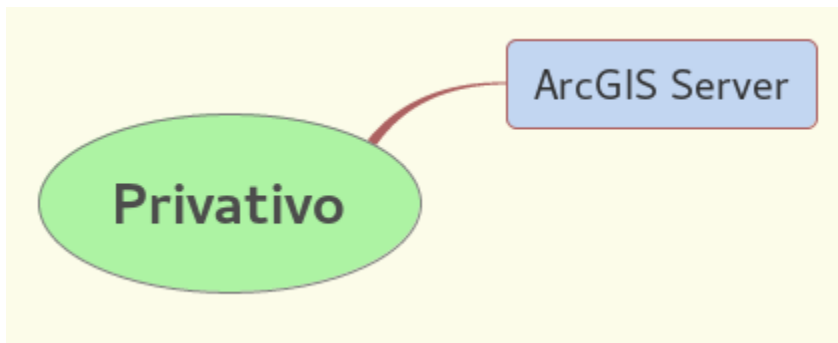


#### 2.1.14.1. WPS

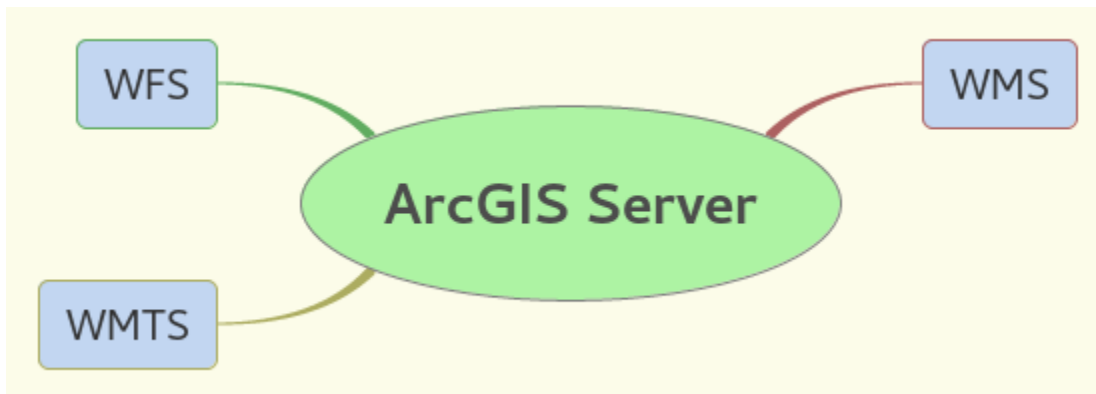
Mapserver Suite([Mapserver](#), [MapCache](#), [TinyOWS](#))

Proyecto en fase beta de desarrollo([OrbisGIS Server \\*](#))

### 2.2. Privativo



#### 2.2.1. ArcGIS Server



##### 2.2.1.1. WMS

##### 2.2.1.2. WMTS

##### 2.2.1.3. WFS