

Oslandia Team

FOSS4G FR 2014 – Paris

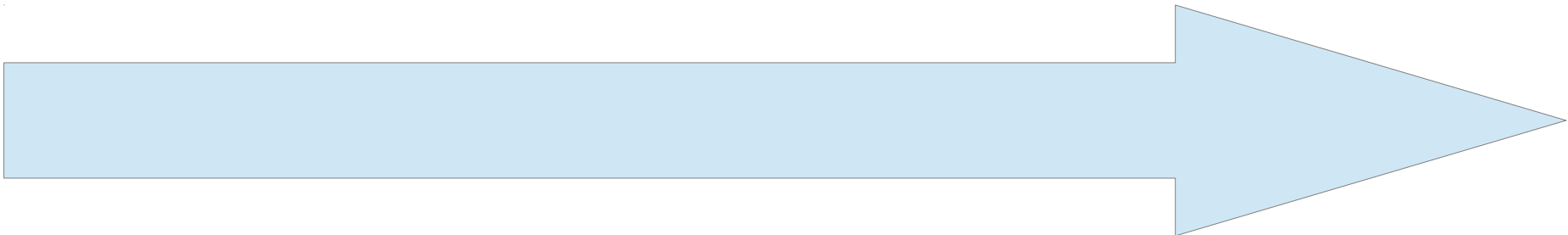
E-PLU Project



Direccte
ÎLE-DE-FRANCE

Direction régionale des entreprises,
de la concurrence, de la consommation,
du travail et de l'emploi

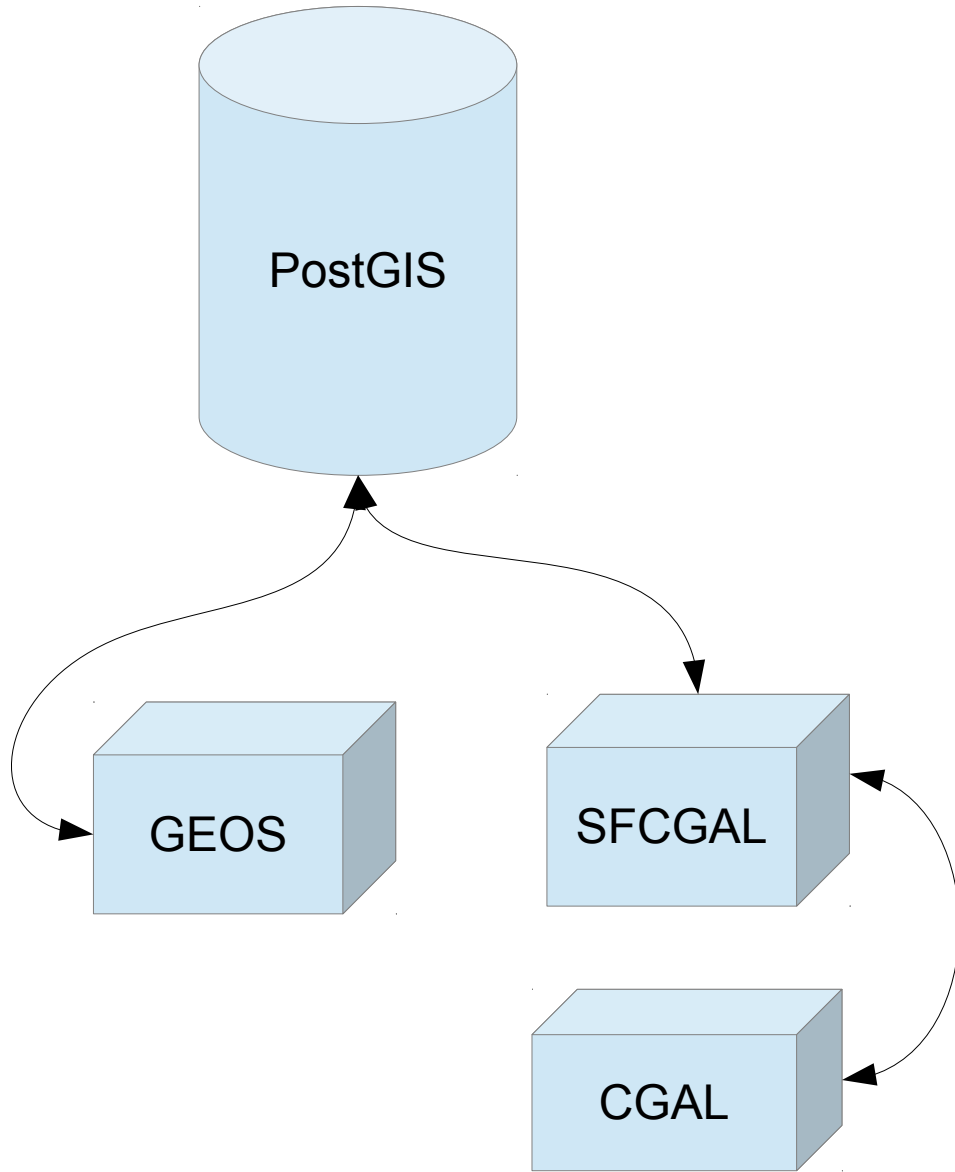




2010

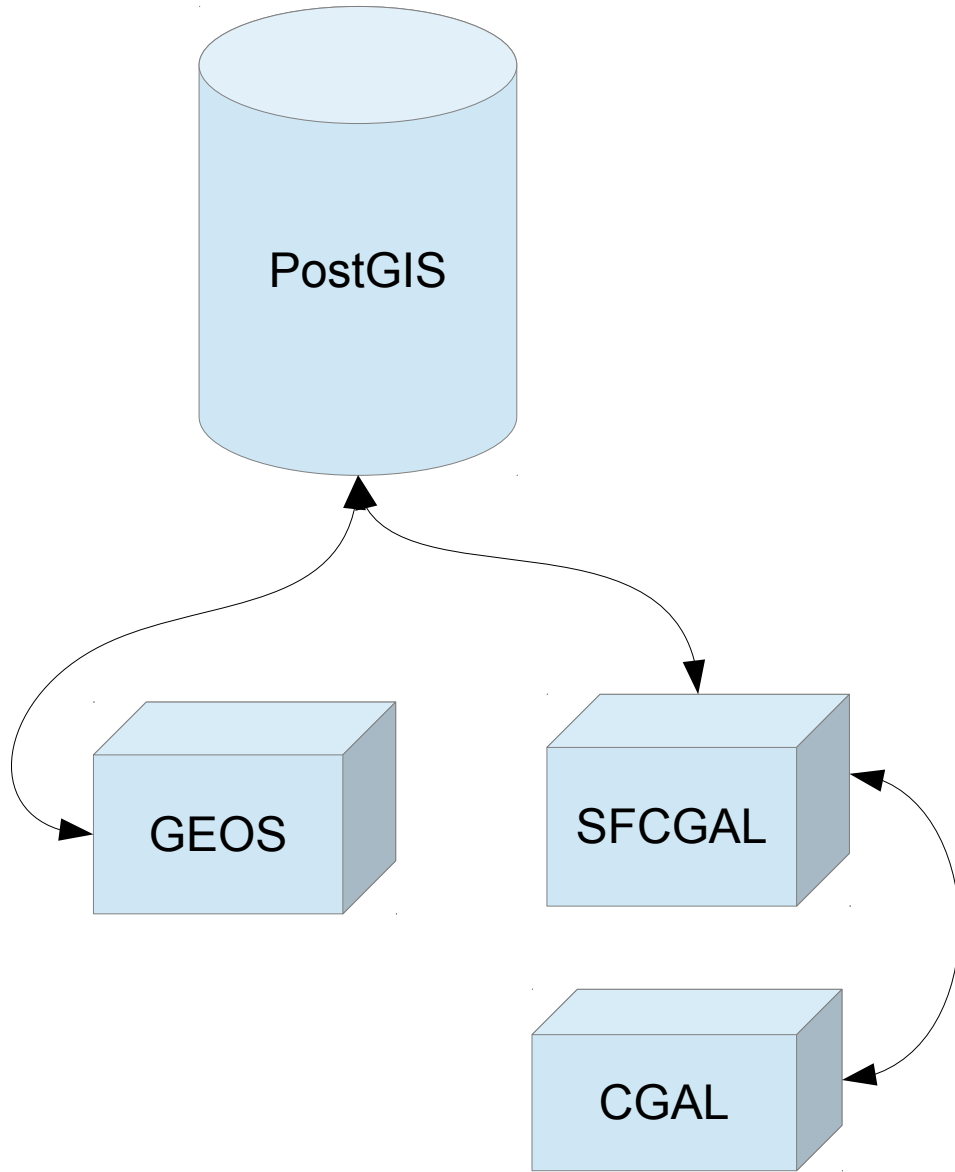
2013

2015





CGAL



ST_3DIntersection

ST_Tessellate

ST_3DArea

ST_Extrude

ST_ForceLHR

ST_Orientation

ST_MinkowskiSum

ST_StraightSkeleton



SFCGAL functions

ST_3DIntersection

ST_Tessellate

ST_3DArea

ST_Extrude

ST_ForceLHR

ST_Orientation

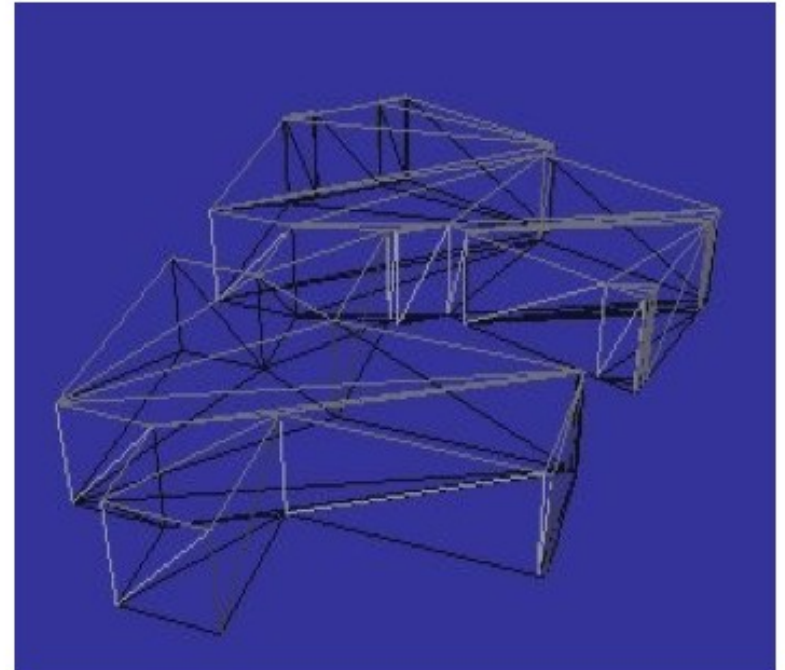
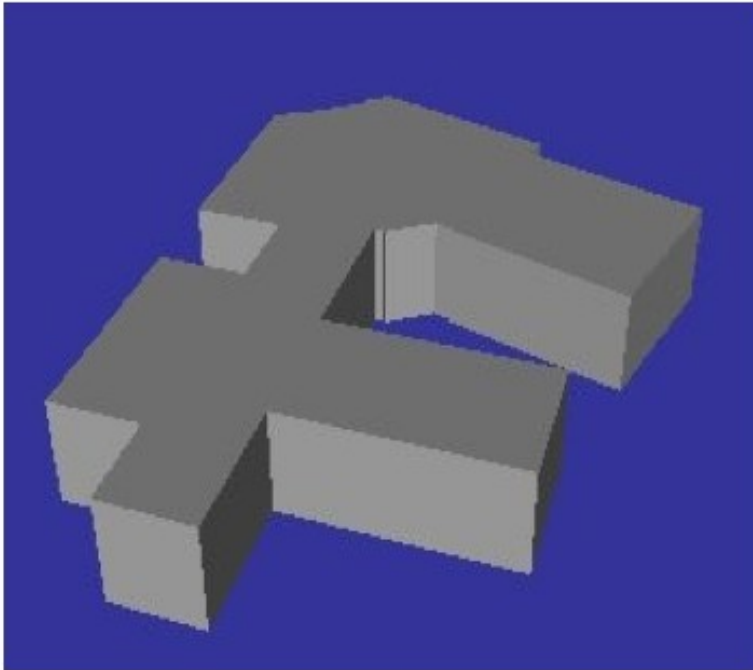
ST_MinkowskiSum

ST_StraightSkeleton

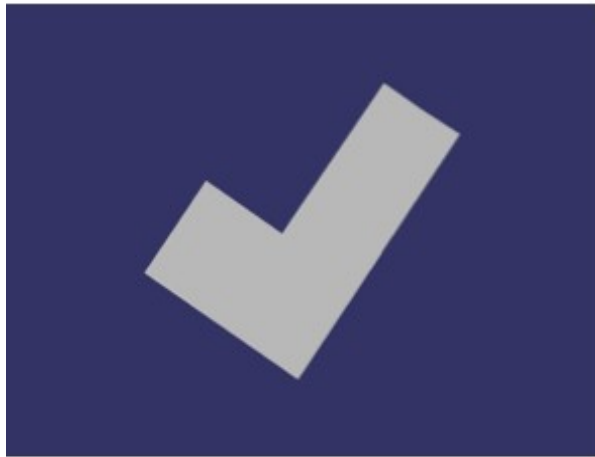


SFCGAL functions

ST_Tessellate



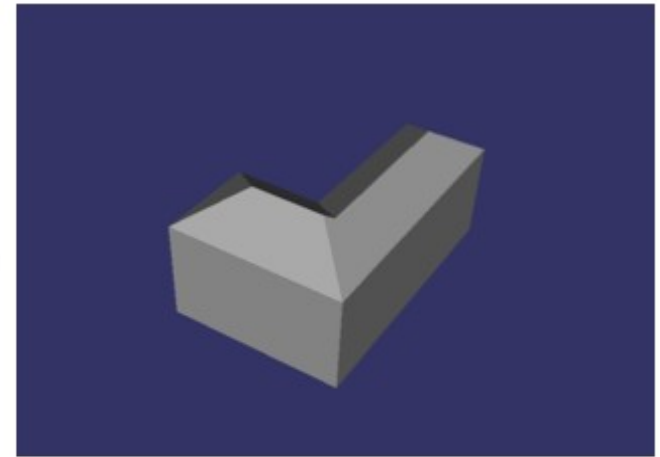
ST_StraightSkeleton



2D Building
Footprint



Straight Skeleton



Extrusion
& roof computation

ST_Intersects

ST_3DIntersects

ST_Intersection

ST_Area

ST_Distance

ST_3DDistance



Both GEOS & SFCGAL

```
SET postgis.backend = 'geos' ;
```

```
SET postgis.backend = 'sfcgal' ;
```

Tests de regression PostGIS

OK

GardenTest PostGIS

OK

Géométries 3D invalides

OK

Large communauté

en cours

Performances SFCGAL similaires à celles de GEOS
pour la 2D (avec le gain de la précision arbitraire)

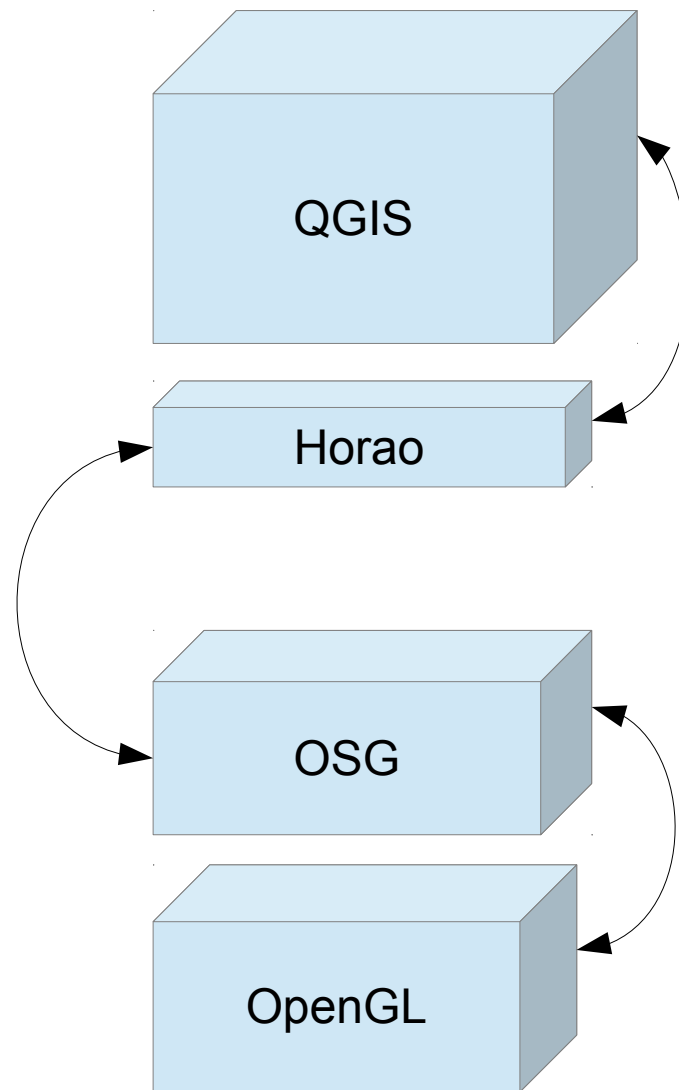
Performances SFCGAL similaires à celles de GEOS pour la 2D (avec le gain de la précision arbitraire)

Mais certains traitements 3D peuvent prendre du temps

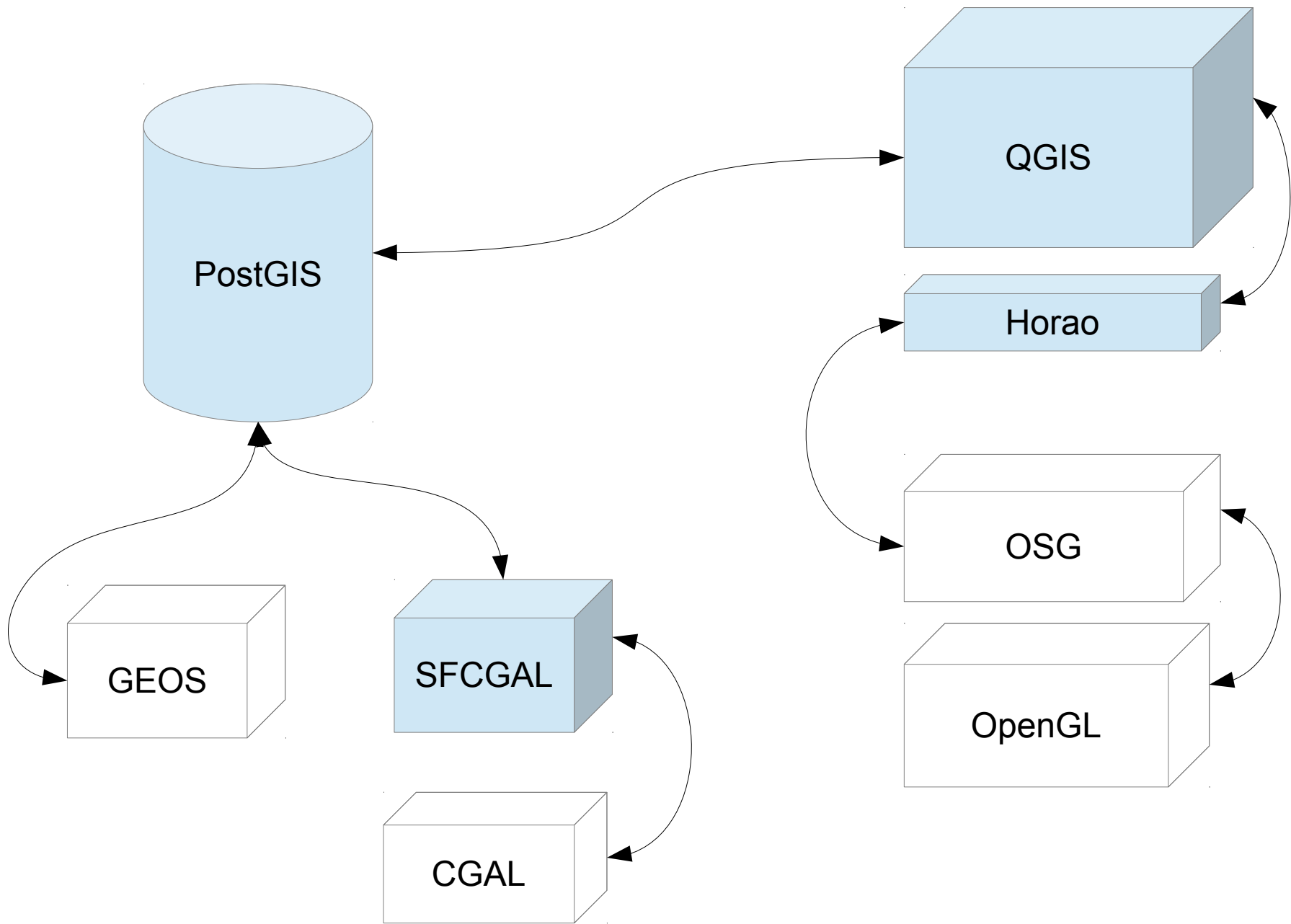
ISO 19107:2013

ISO 19125:2013

ὄραω



<https://vimeo.com/74869530>



PostGIS www.postgis.org

SFCGAL www.sfcgal.org

Horao www.horao.net

QGIS www.qgis.org



2010

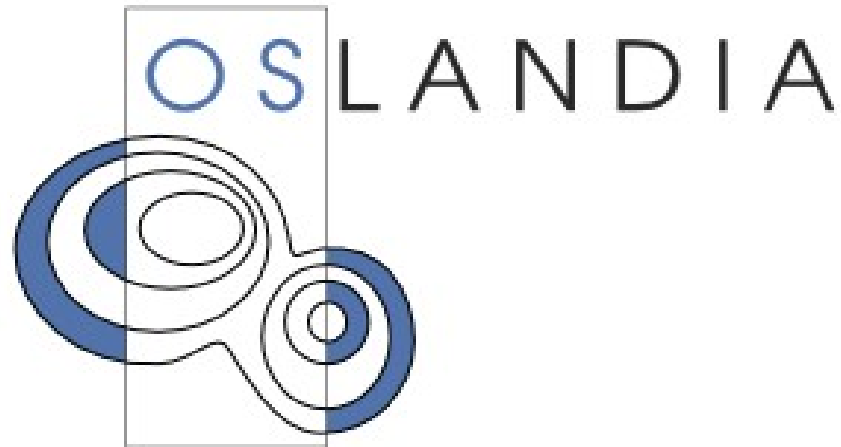
2013

2015

9:DIM 3D

WebGL

Textures



www.oslandia.com

<https://github.com/Oslandia/presentations>

<https://github.com/Oslandia/Workshops>