

# geOrchestra: A Free, Modular and Interoperable Spatial Data Infrastructure for INSPIRE

Geospatial World Forum, Lisbon, May 26th

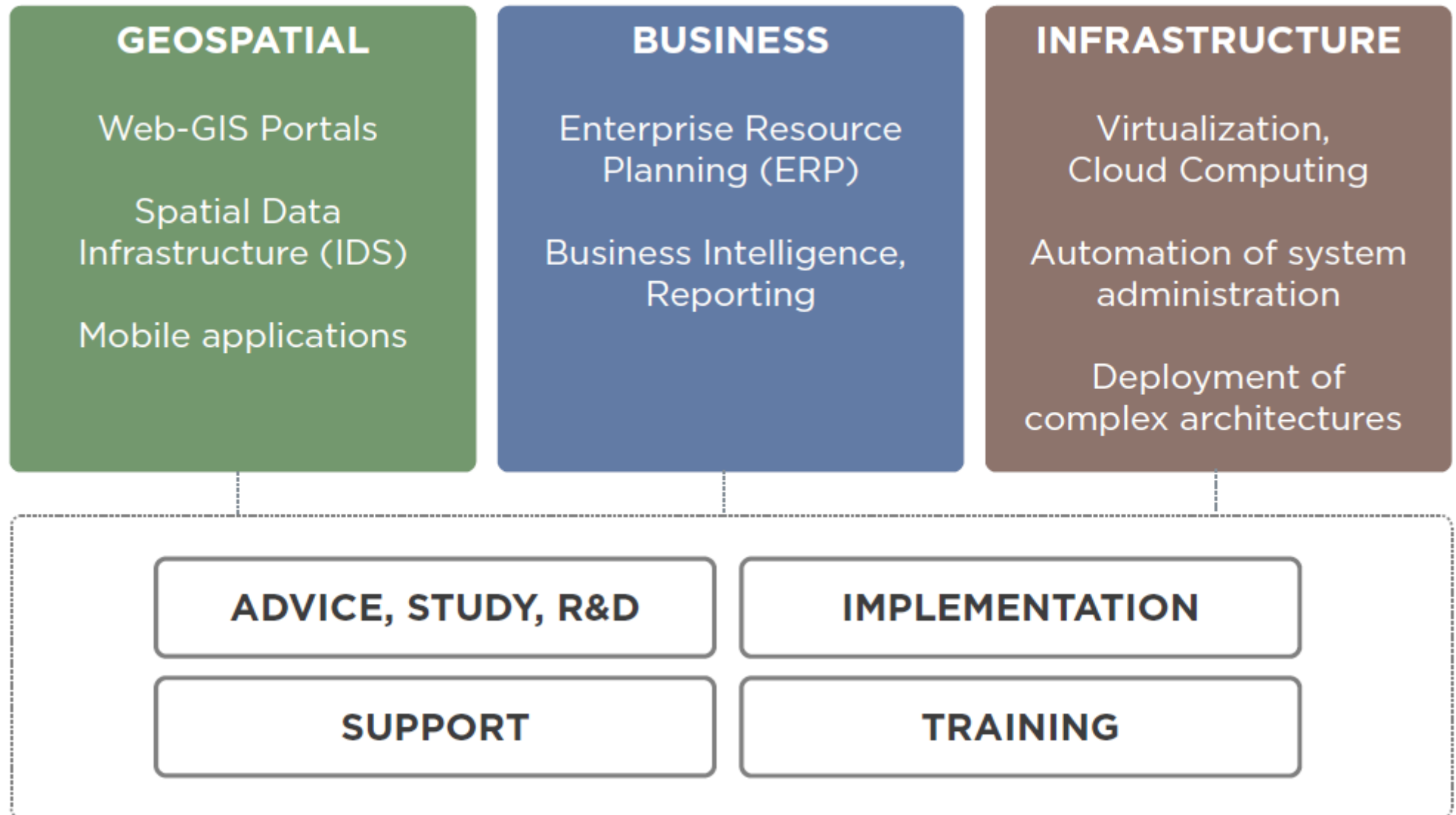
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# Camptocamp: 3 Departments



# The geOrchestra SDI

geOcom2014  
Clermont-Ferrand, France June 19/20 2014

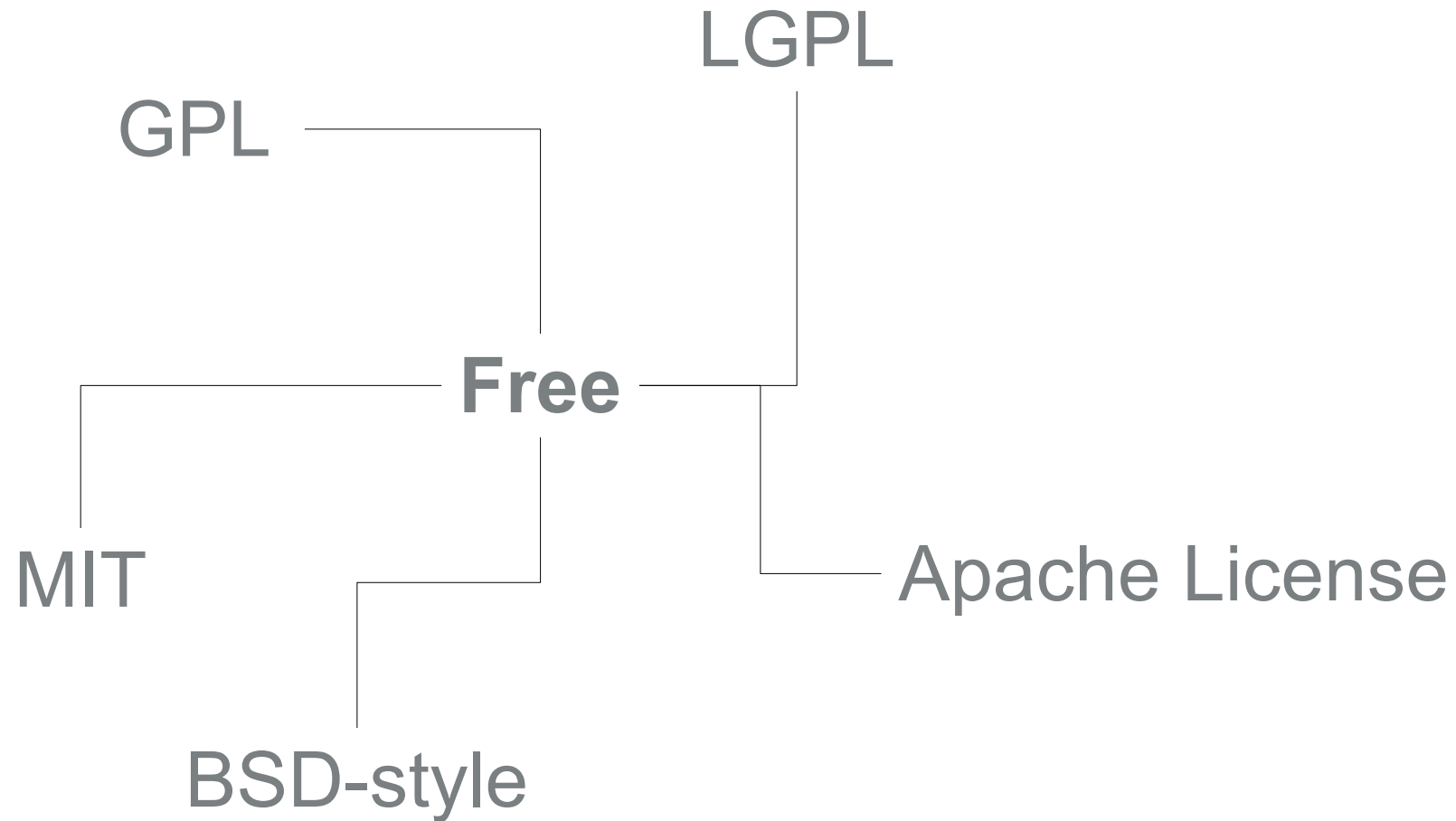


# The geOrchestra SDI

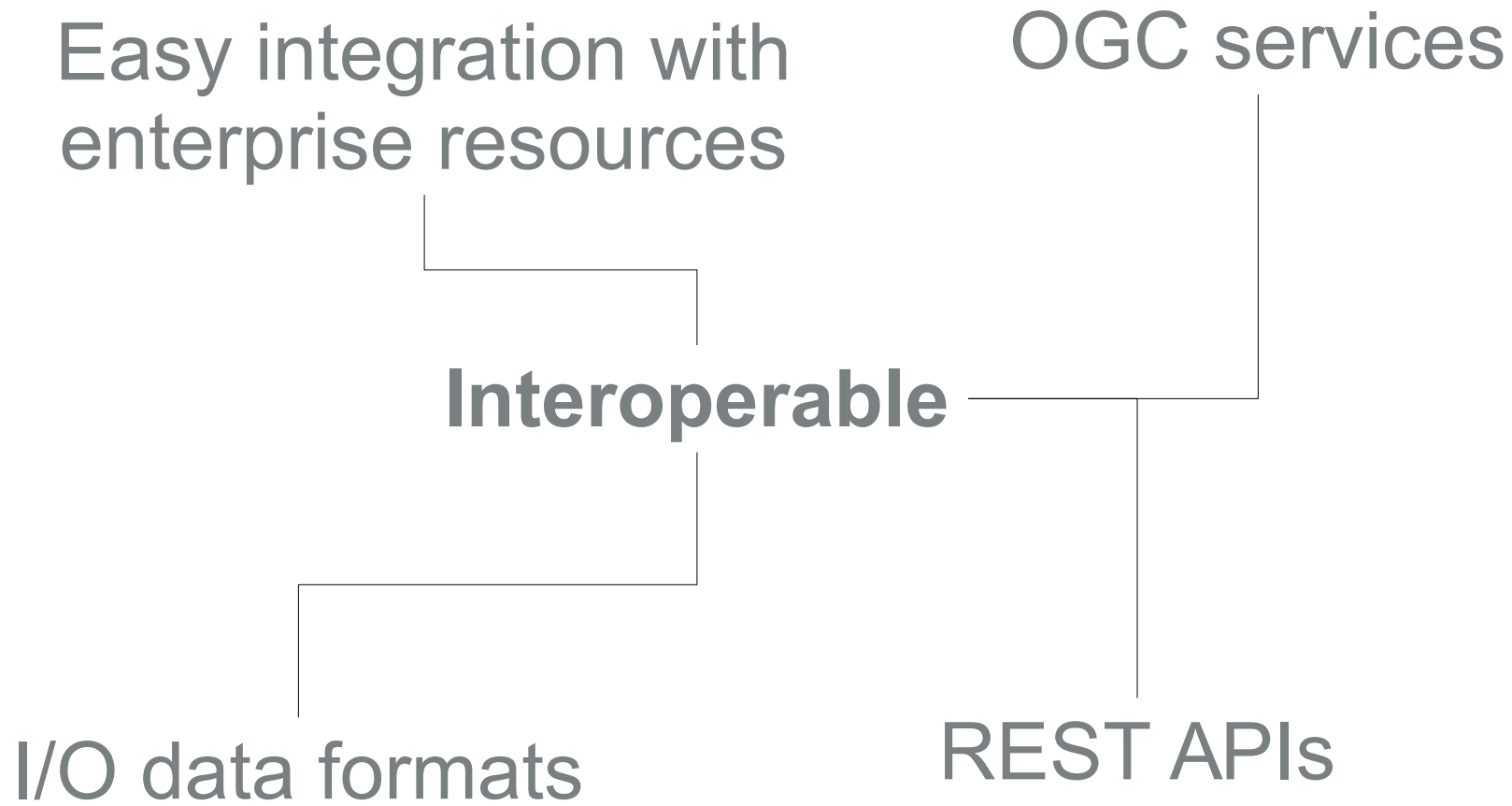
- Bundles together GeoServer and GeoNetwork
- Custom authentication system built on top of CAS Single Sign On and security proxy
- Optional modules such as a advanced viewer and data editor, an extractor, and a users/groups admin console



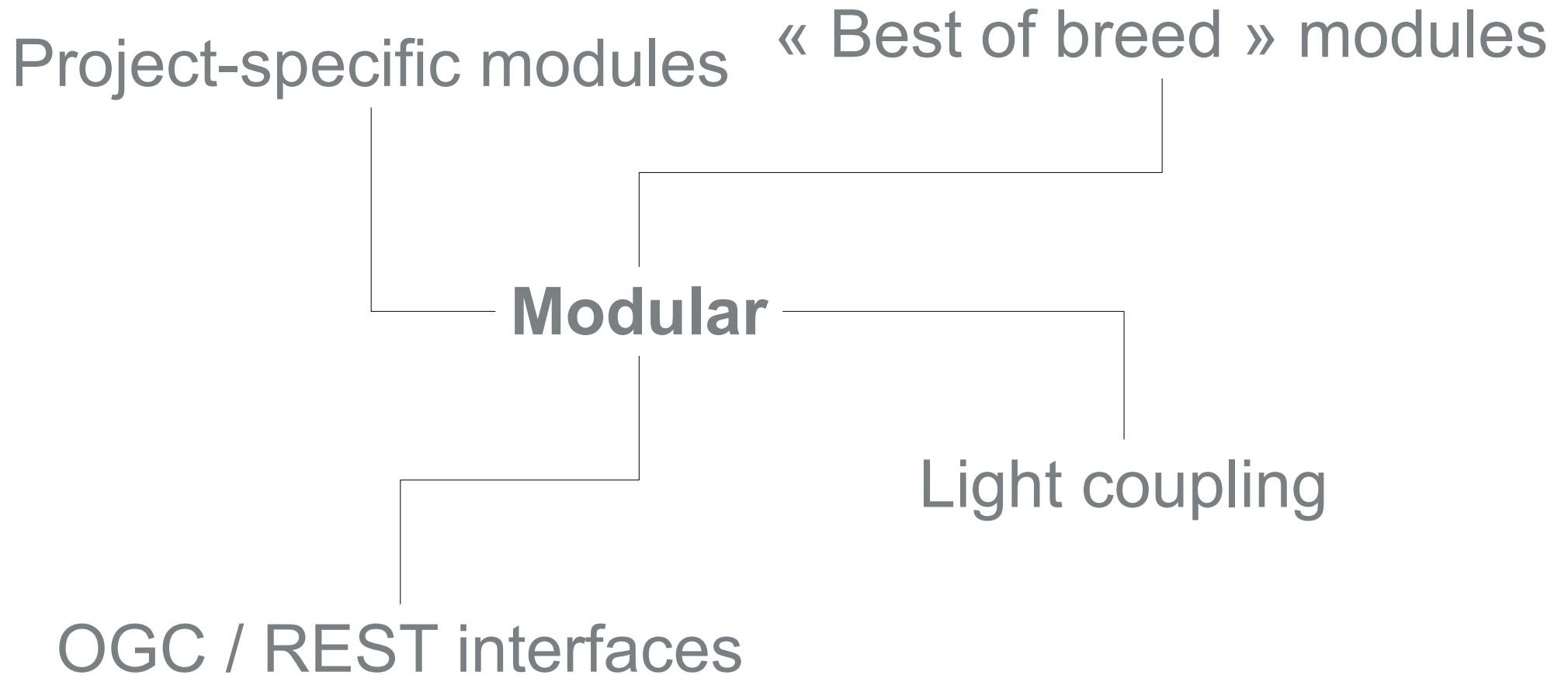
# The geOrchestra SDI



# The geOrchestra SDI

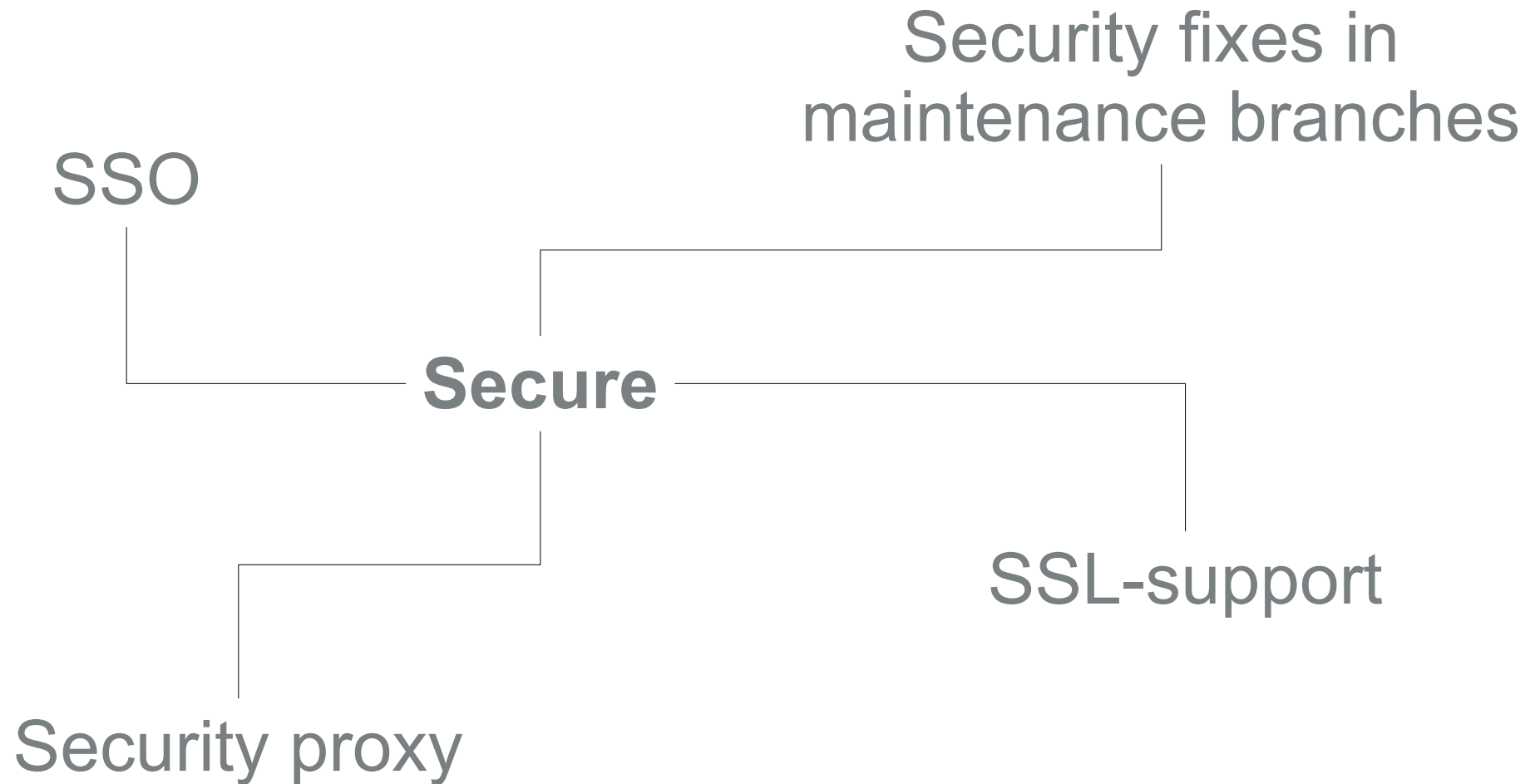


# The geOrchestra SDI





# The geOrchestra SDI



# Community



Regions

Private sector

R&D

States

Cities

# Community

- Project Steering Committee
- Mailing lists
- IRC
- GitHub - <https://github.com/georchestra>
- Demo - <https://sdi.georchestra.org>
- Website – <http://www.georchestra.org>



# UI Catalog

The image displays three overlapping screenshots of web-based geographic information systems (GIS) and data portals.

- Top Left: CIGAL l'Alsace à la carte**
  - Navigation: ACCUEIL, LE RÉSEAU CIGAL, LES PROJETS, ACCÈS AUX DONNÉES, LES RESSOURCES.
  - Search: RECHERCHER (with magnifying glass icon).
  - Results: "DONNÉES: SIGRS\_GISOR\_DP\_2014" (Etat d'avancement des documents de planification du Rhin Supérieur) and "DONNÉES: SIGRS\_GISOR\_ECOLES\_BILINGUES\_2014" (Etablissements scolaires d'enseignement bilingue français-allemand).
- Top Right: Géoparc Picardie**
  - Navigation: RÉSEAU, ACTUALITÉS, RESSOURCES, GROUPES, se connecter.
  - User: JACON Frédéric.
  - Search: "Compiègne - Destination générale des sols à l'horizon 2020".
  - Content: "Destination générale des sols à l'horizon 2020" with a map and text: "Agence d'urbanisme et de développement de la vallée de l'Oise - Oise-la-Vallée".
- Bottom: PIGMA Plateforme d'Information Géographique Mutualisée en Aquitaine**
  - Navigation: Accueil, Présentation, Animation/Accompagnement, Pôles métiers, Cartographie, Catalogue, GIP ATGeRI.
  - Search: "Landes : Pays Adour Chalosse Tursan - CLC 2006 - Actions".
  - Text: "Inventaire biophysique de l'occupation des sols en 2006 en 44 postes. CORINE Land Cover est une base de données d'occupation des sols. Ce projet est piloté par l'Agence Européenne pour l'Environnement. En France, cette base couvre le territoire métropolitain. Le SOeS du Meeddat (ex-Ifen) est chargé d'en assurer la production, la maintenance et..."
  - Metadata: "OCCUPATION ET USAGE DU SOL, OPENDATA, OCCUPATION DES TERRES, LANDES, ENVIRONNEMENT (ENVIRONNEMENT NATUREL, ENVIRONNEMENT ANTHROPIQUE), AGRICULTURE, SOLS, AQUITAINE, 2006, 40, PAYS ADOUR CHALOSSE TURSAN, OPEN DATA, DONNÉES OUVERTES, TERRITOIRES DE PROJETS, PAYS, CONTRATS DE PAYS, EPCI, COMMUNES, IMAGERIE/BASEMAPSEARTHCOVER".
  - Actions: PDF, Liens.
  - Source: Meeddat, CGDD, SOeS, European Environment Agency, Conseil Régional d'Aquitaine.



# UI Viewer

geOrchestra

catalogue

viewer

services

login

The screenshot displays the geOrchestra viewer interface. The main map shows a geographical area of Brittany, France, with various administrative regions labeled, including BIZIEN, GUINDY, JAUDY, LEFF, ISLET, FLORA, GUYOULT, COUESNON, OISANCE, HAUT-COUESNON, TRIEUX, TRIEUX AMONT, GOUET, URNE, GOUESSANT, EVRON, ARGUENON, RANCE, HAUT-BLAVET, VILAIN, BLAVET, SCORFF, EVEL, and LOCH. A 'Add layers from a ...' dialog box is open, showing the 'OGC server' tab. The dialog includes fields for 'Service type' (WMS selected), 'Choose a server' (Agrocampus Ouest - french research center), and '... or enter its address' (http://geowww.agrocampus-ouest.fr/geoserver/wms). Below these fields, a list of available layers is shown, including 'Assolement en 2013 a Kervidy', 'Bretagne : Bassins Versants de l'étude CSEB', and 'Bretagne : Carte des sols'. The 'Available layers' panel on the right side of the interface lists several layers with checkboxes and zoom controls, such as 'geOrchestra SDI instances', 'Bretagne : Concentration et flux d'azote ...', 'Bretagne : Bassins Versants de l'étude C...', 'Assolement en 2013 a Kervidy', and 'Altitude: color and shaded relief'. The bottom of the interface shows a scale bar (1:1 091 958, 20 km), coordinate information (WGS 84, Lon = -3.37497, Lat = 48.18156), and a 'Go to:' field.

# UI Extractor

## Extractor

Configure the general parameters for your extraction using the panel on the right (deployed with 'Parameters by default').

You will then be able to launch the extraction with a click on the button called 'Extract the selected layers'.

If you want to precise specific extraction parameters for one layer, select it in the tree above.

## Extraction parameters applied by default to all cart layers

Output projection:

EPSG:4326 - WGS84

Raster output format:

GeoTiff

Raster resolution (m/pixel):

0.2

Vector output format:

Shapefile

Bounding box (in degrees, SRS = EPSG:4326)

90	180
-180	Modify the bounding box
-90	

## Configuration

Recenter

Your extraction cart

Default parameters

OGC Layers

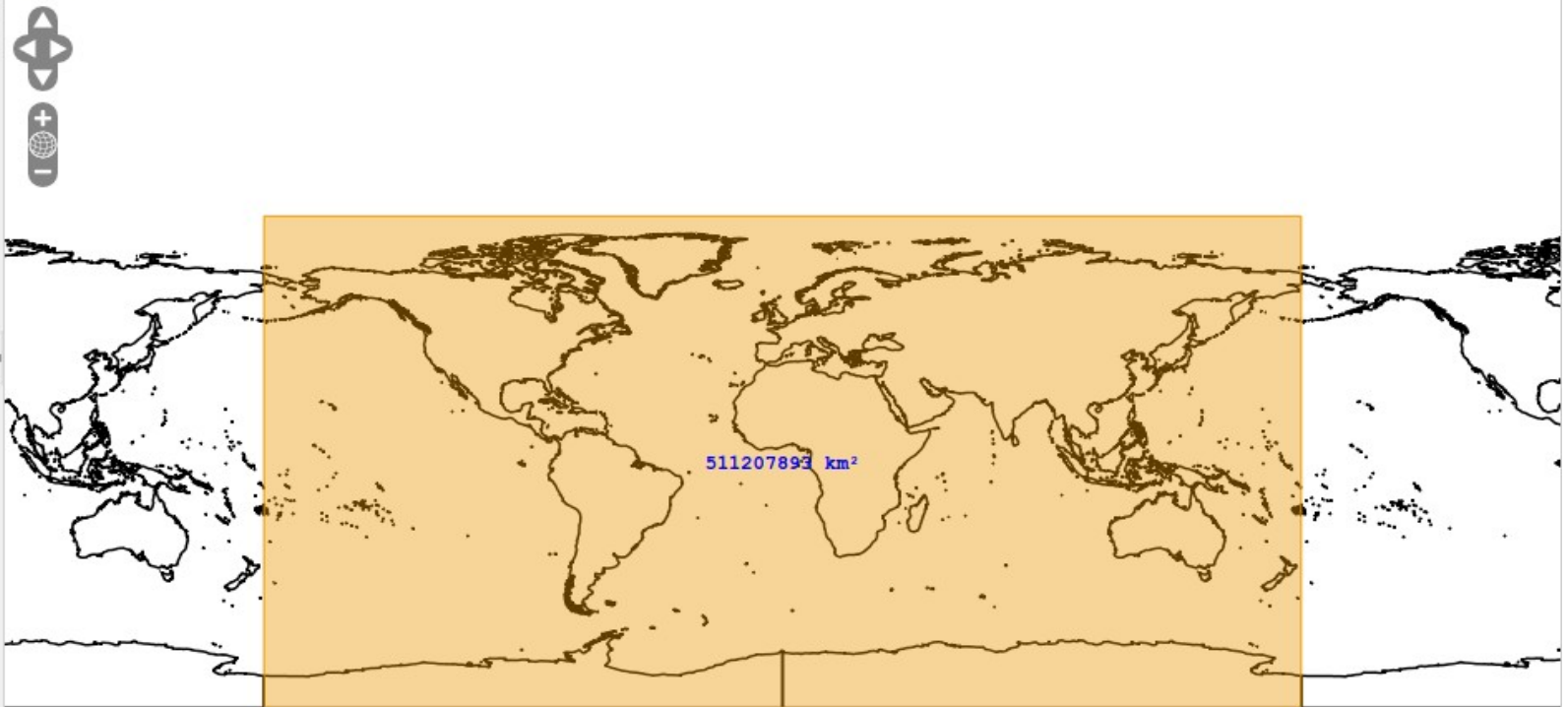
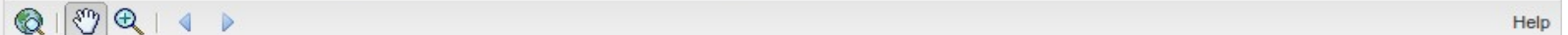
GSHHS\_I\_L2

OGC services

Example layers

- administrable vector layer
- Altitude : color and shaded relief
- Altitude : digital elevation model
- Altitude : shaded relief
- armoires
- boundaries : administrative areas (GAI)
- boundaries : shorelines (GSHSS)
- Countries
- Earth at night 2012
- editable vector layer
- forbiddenVectorLayer
- geOrchestra SDI instances
- GSHHS\_I\_L2
- menhir
- menhirs
- Ocean Bottom
- OpenStreetMap : amenities
- OpenStreetMap : roads
- Origin of the sdi.georchestra.org HTTP
- ortho
- ortho2test
- osm\_admin
- osm aeroways

Extract the selected layers



5000 km

EPSG:4326: -258.47385 / 171.30736 1 : 228 709 582

# UI GeoServer

[catalogue](#)[viewer](#)[extractor](#)[services](#)[fvanderbiest](#) | [logout](#)

## GeoServer

Bienvenue

Ce service GeoServer appartient à [geOrchestra](#).

47 Couches	<a href="#">Ajouter une couche</a>
19 Entrepôts	<a href="#">Ajouter un entrepôt</a>
15 Espaces de travail	<a href="#">Créer un espace de travail</a>

Aucune cryptographie forte n'est disponible, l'installation de fichiers jar avec une politique non restreinte est recommandée

La versions de cette instance GeoServer est **2.5.4**. Pour de plus amples informations, veuillez contacter le [responsable du service](#).

### Capacités du service

CSW	2.0.2
W3DS	0.4.0
WCS	1.0.0
	1.1.0
	1.1.1
	1.1
	2.0.1
WFS	1.0.0
	1.1.0
	2.0.0
WMS	1.1.1
	1.3.0
WPS	1.0.0
TMS	1.0.0
WMS-C	1.1.1
WMTS	1.0.0

### Serveur

- État du service
- Logs GeoServer
- Information sur le point de contact
- À propos de GeoServer

### Données

- Prévisualisation de la couche
- Espaces de travail
- Entrepôts
- Couches
- Agrégations de couches
- Styles

### Services

- W3DS
- CSW
- WCS
- WFS
- WMS
- WPS

### Settings

- Globale
- JAI
- accès à une couverture

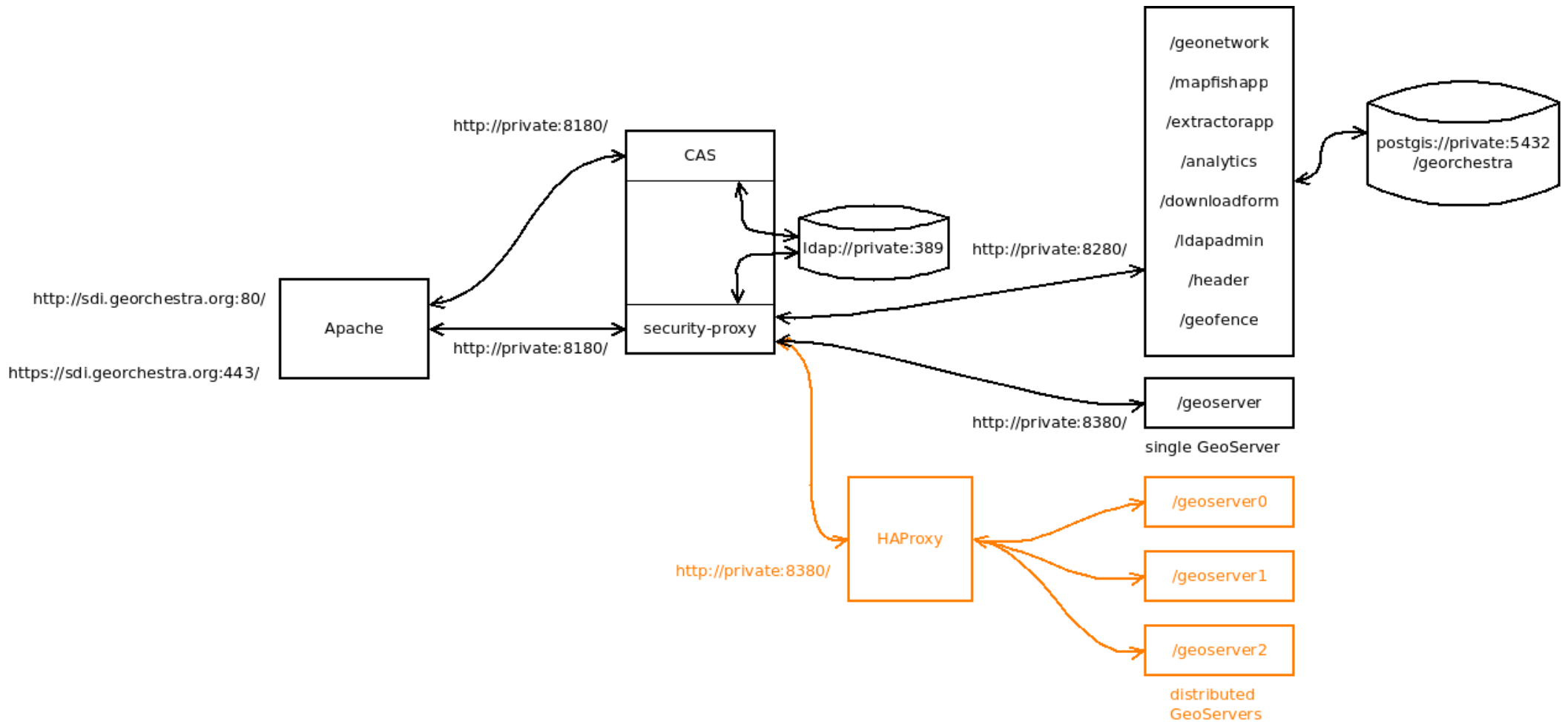
### Cache de tuiles

- Couches cachées
- Paramètres GeoWebCache
- Grilles de tuilage
- Espace en disque

### Sécurité

- Settings
- Authentification
- Mots de passe
- Utilisateurs, Groupes et

# Architecture





# INSPIRE support

- GeoServer INSPIRE extension
- GeoNetwork INSPIRE features
- Manual configuration



# Unique features

- 6 months-based release cycle
- Maintenance branches
- (soon) rpm, deb packages
- Docker containers for dev / demo
- Puppet, Ansible recipes for IT automation



# Unique features

- i18n
- GeoFence integration
- Accounts + groups management UI
- Advanced viewer + in-browser WFS-T editor
- Viewer addons
- Easy « Metadata on maps » creation
- Advanced extractor



# Thank you for your attention



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Frédéric Jacon

<http://www.georchestra.org/>

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to camp 

camp **to** camp

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