

Reunión GTIDEE

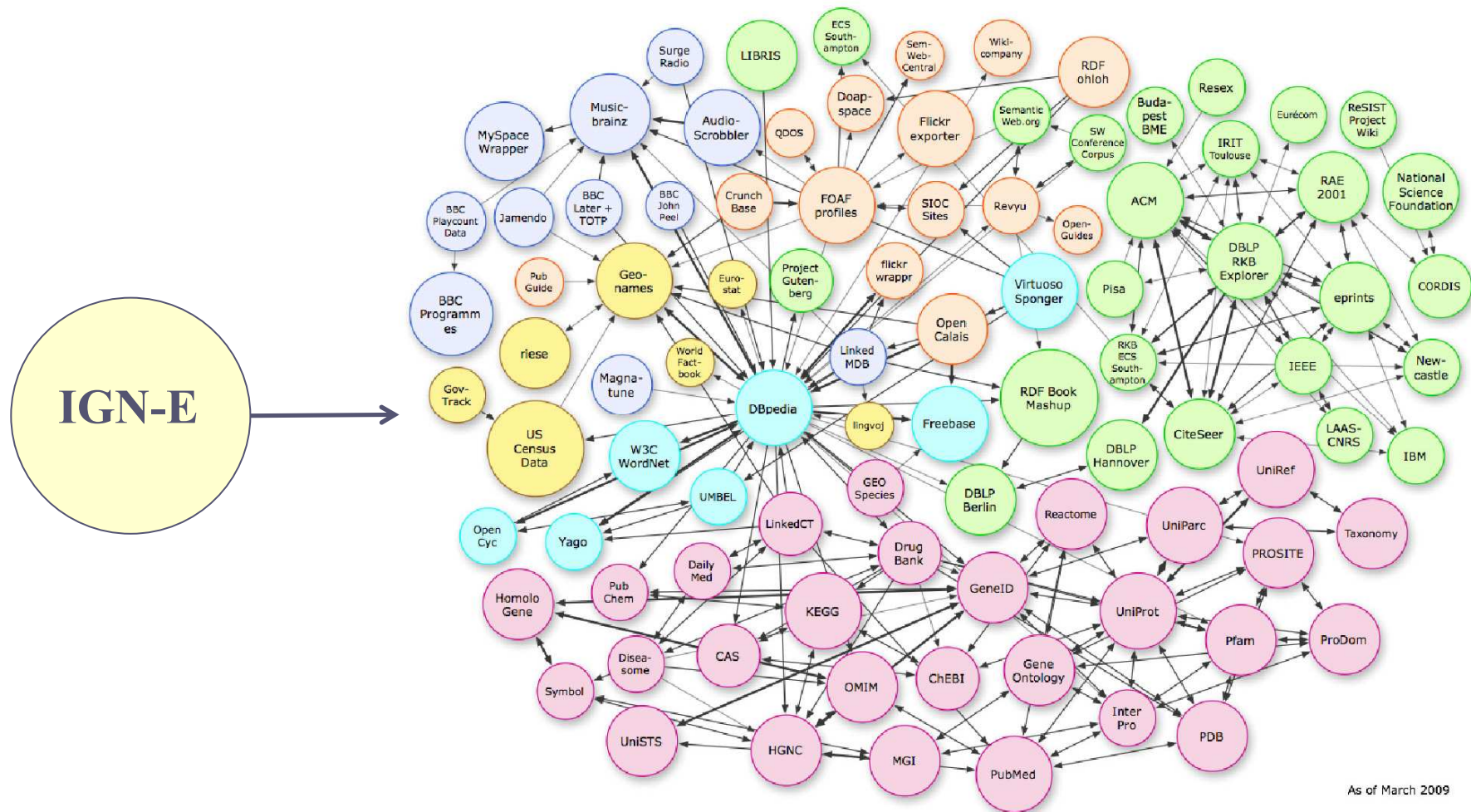


GeoLinked Data

Luis M. Vilches Blázquez



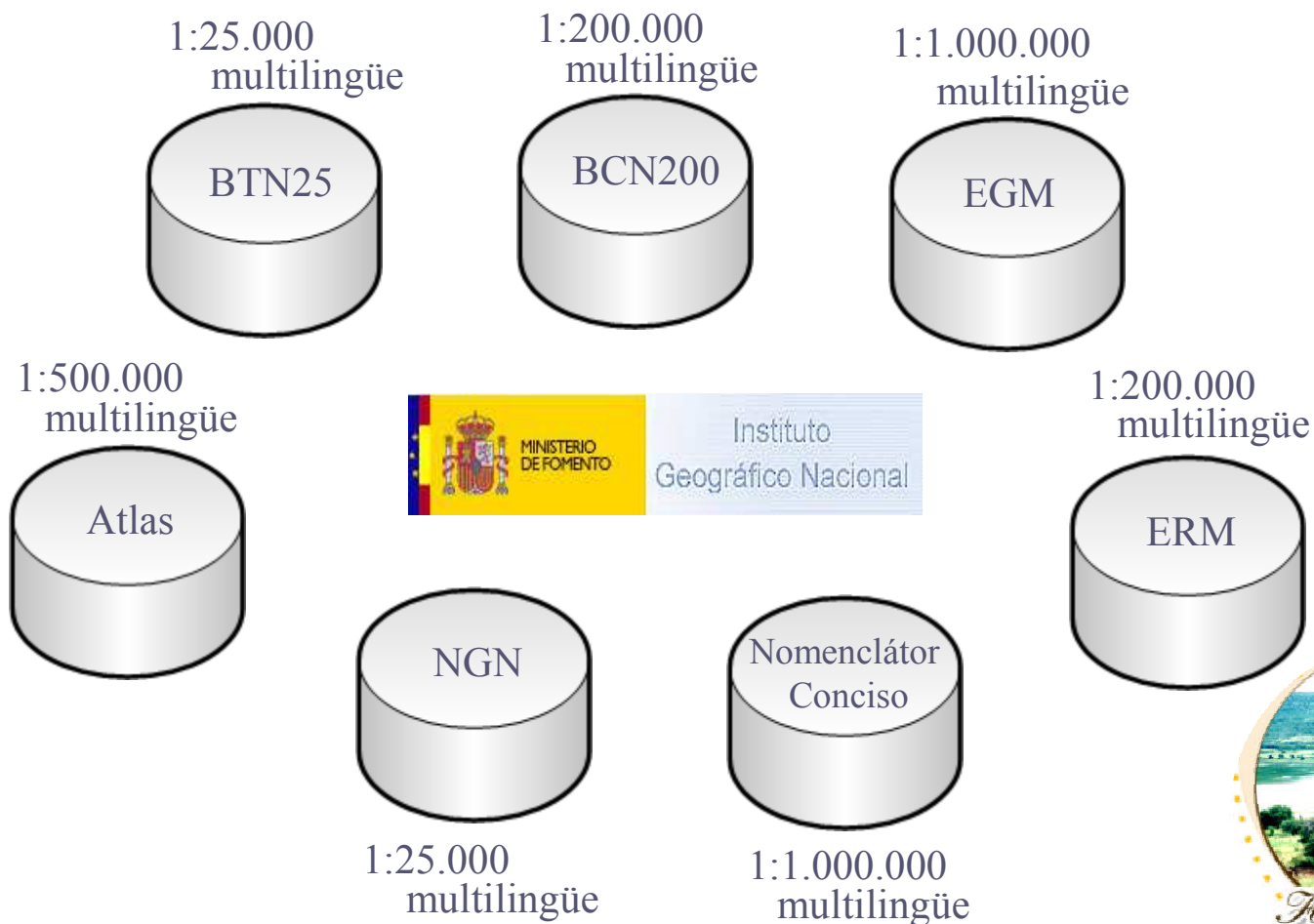
IGN se integra en *Linked Open Data*



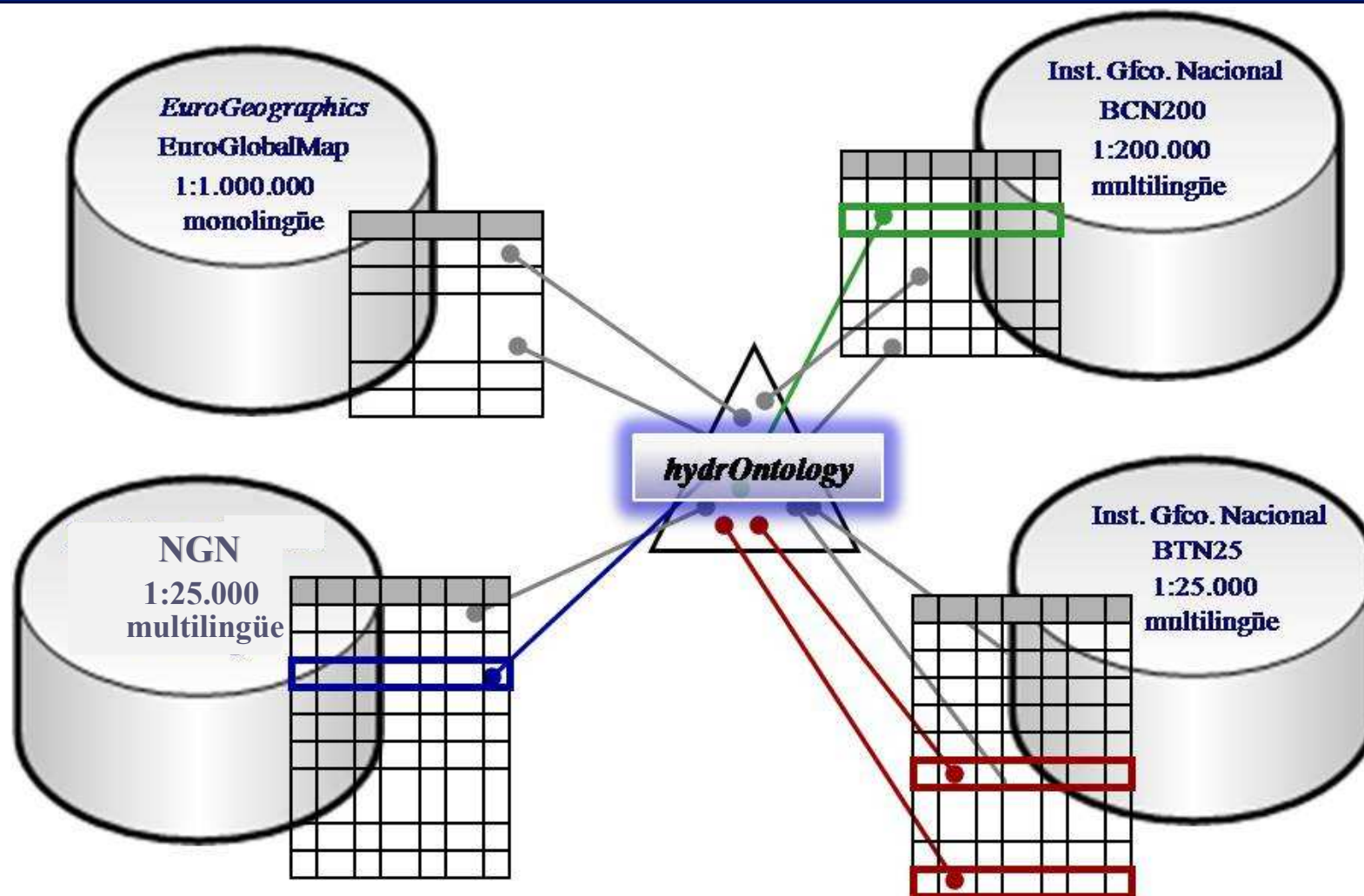
- Es un esfuerzo de la comunidad para:
 - Publicar conjuntos de datos abiertos en la Web.
 - Conectar “cosas” entre diferentes conjuntos de datos.
- Principios:
 - URIs <http://geolinkeddata/hidrografia/BTN25/RíoEbro>
 - RDF
 - HTTP

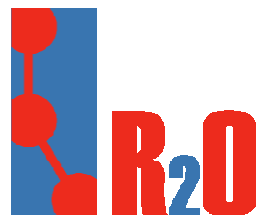


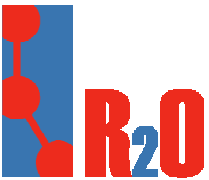
Bases de datos

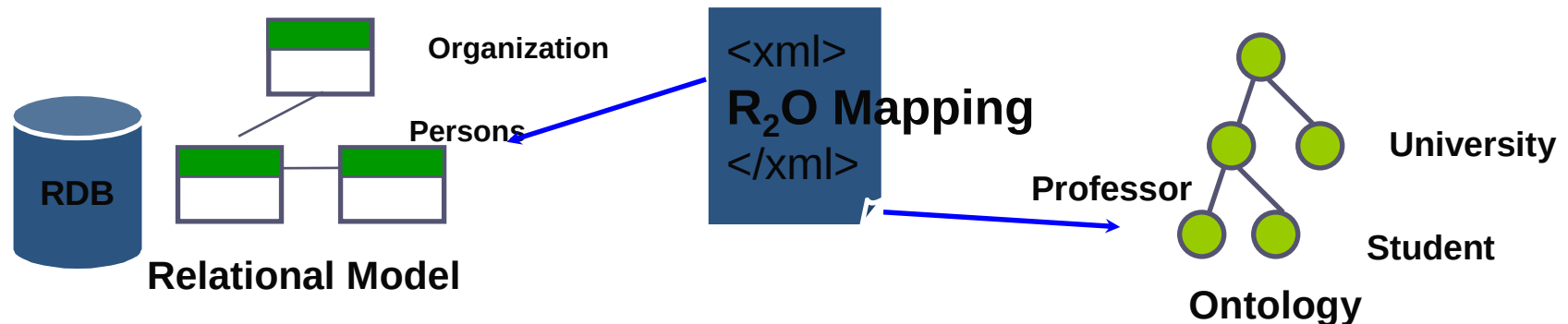


hydrOntology & Bases de Datos

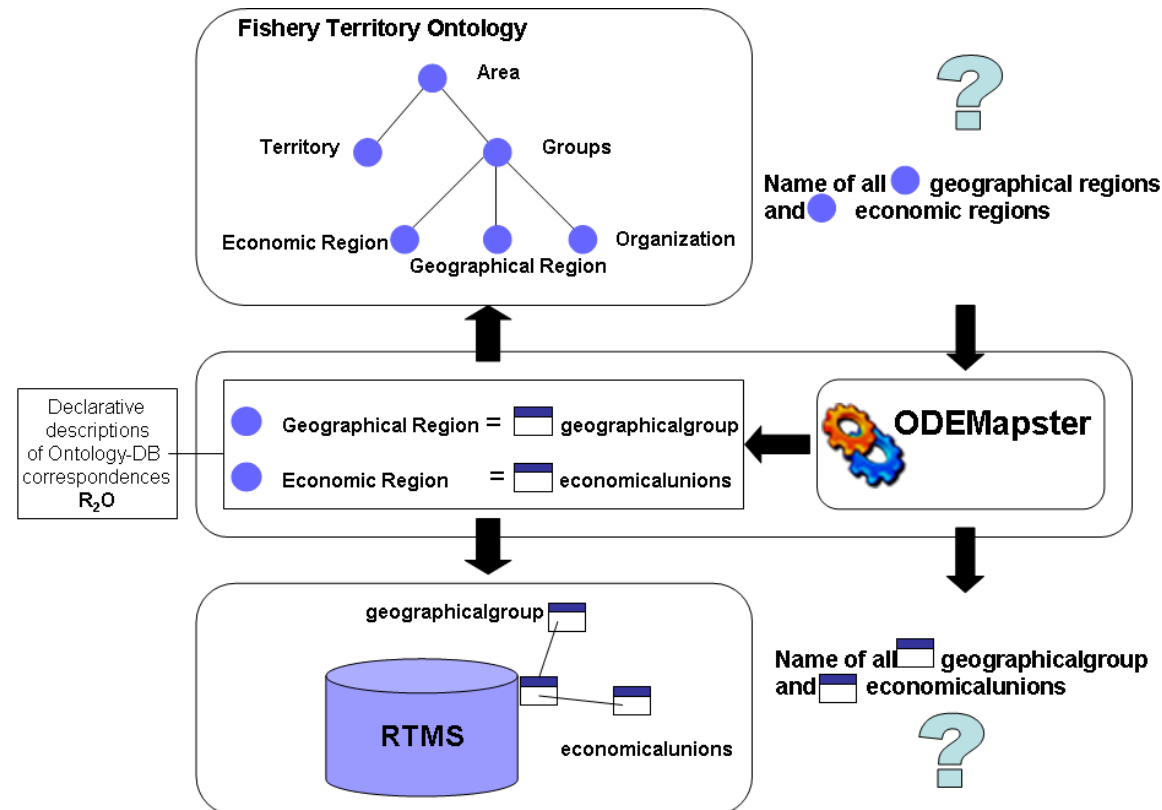




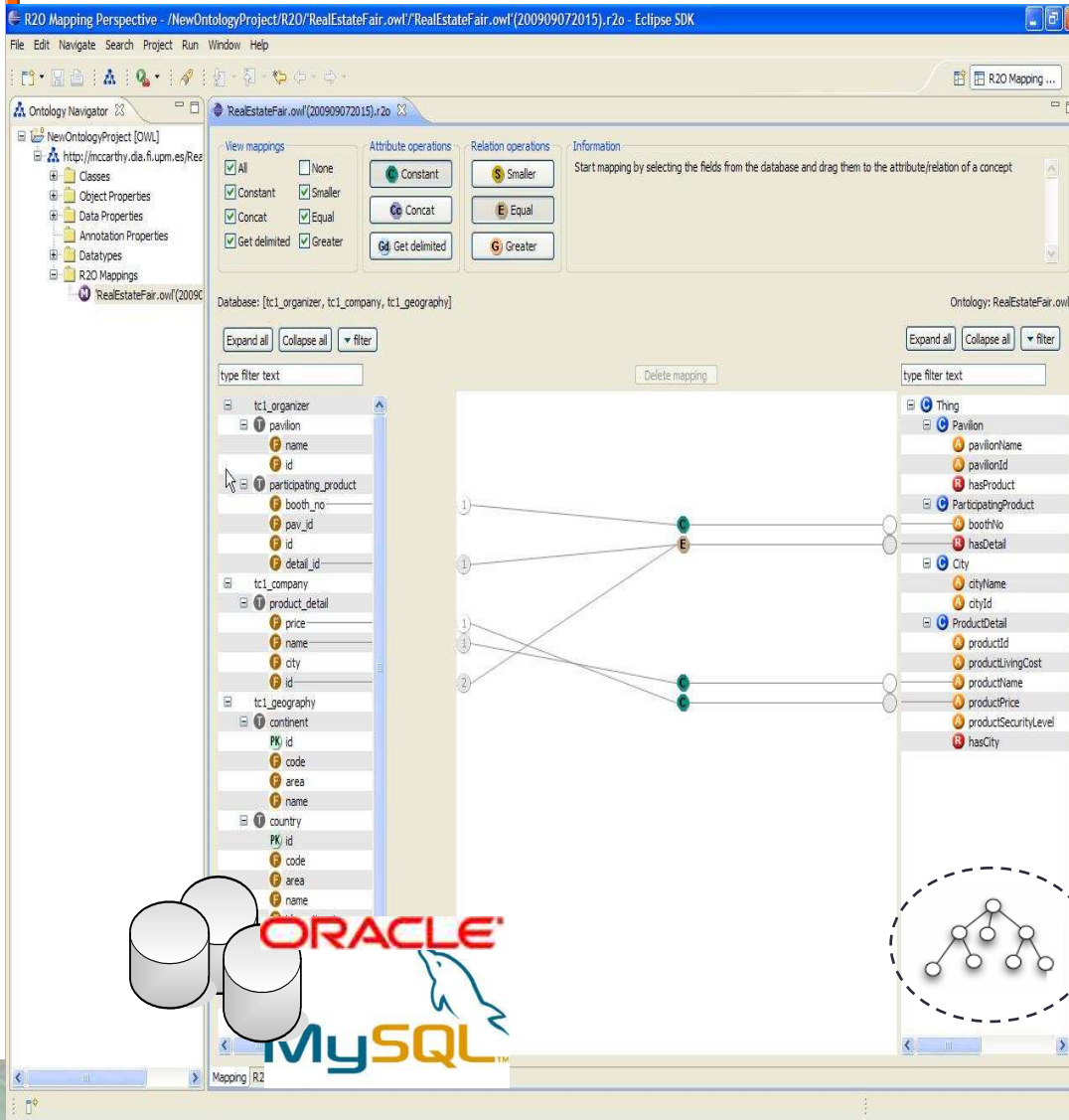
-  es un lenguaje declarativo que describe *mappings* entre los esquemas de bases de datos relaciones y ontologías.



-  es un motor de inferencia encargado de explotar los *mappings* R₂O establecidos y generar conjuntos de datos RDF.



Mapping Design

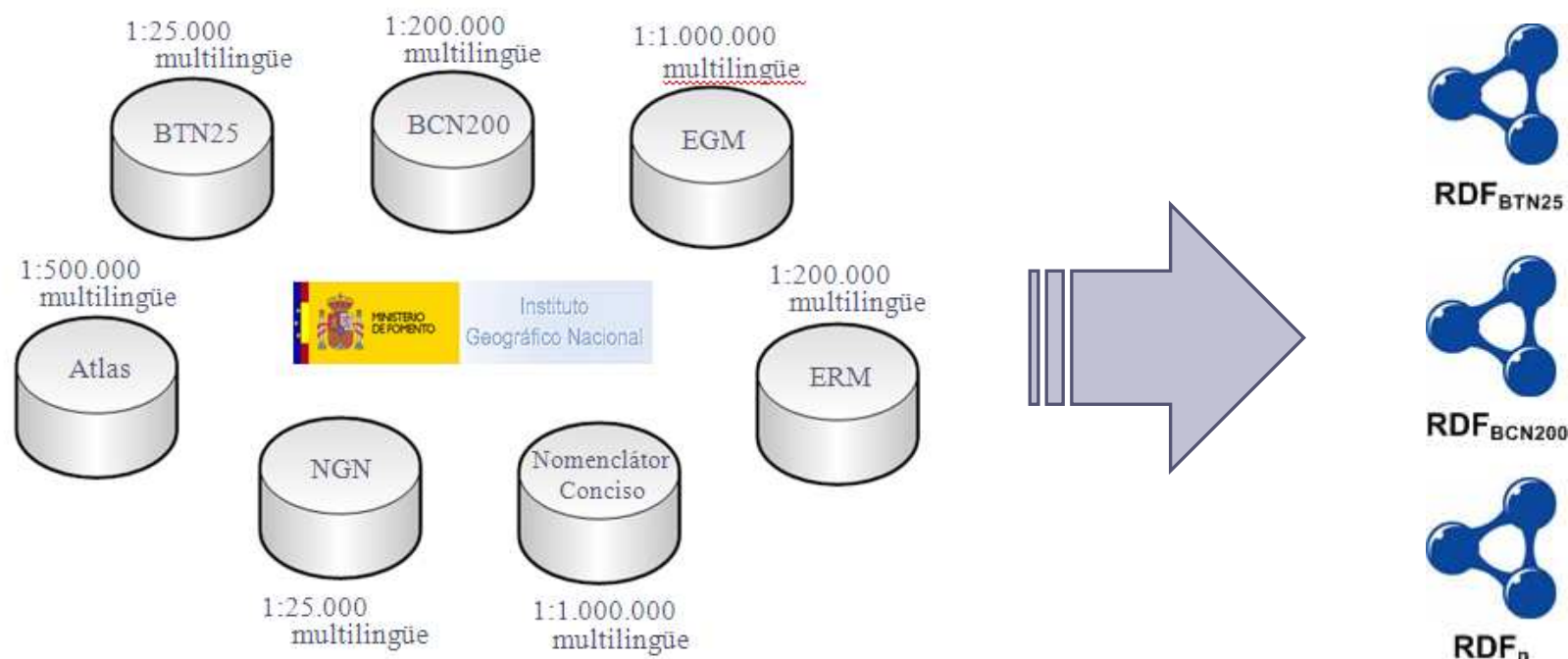


3 Mapping Creation Steps

- Load Ontology
- Load Database(s)
- Create mapping

2 Usage Modes

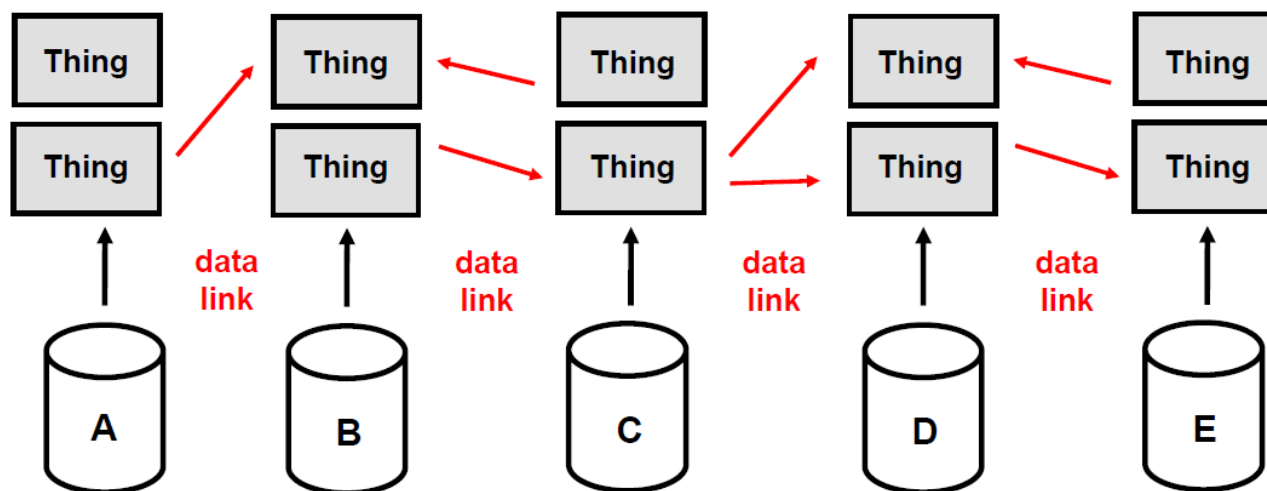
- Online mode (run time query execution)
- Offline mode (materialized RDF dump)



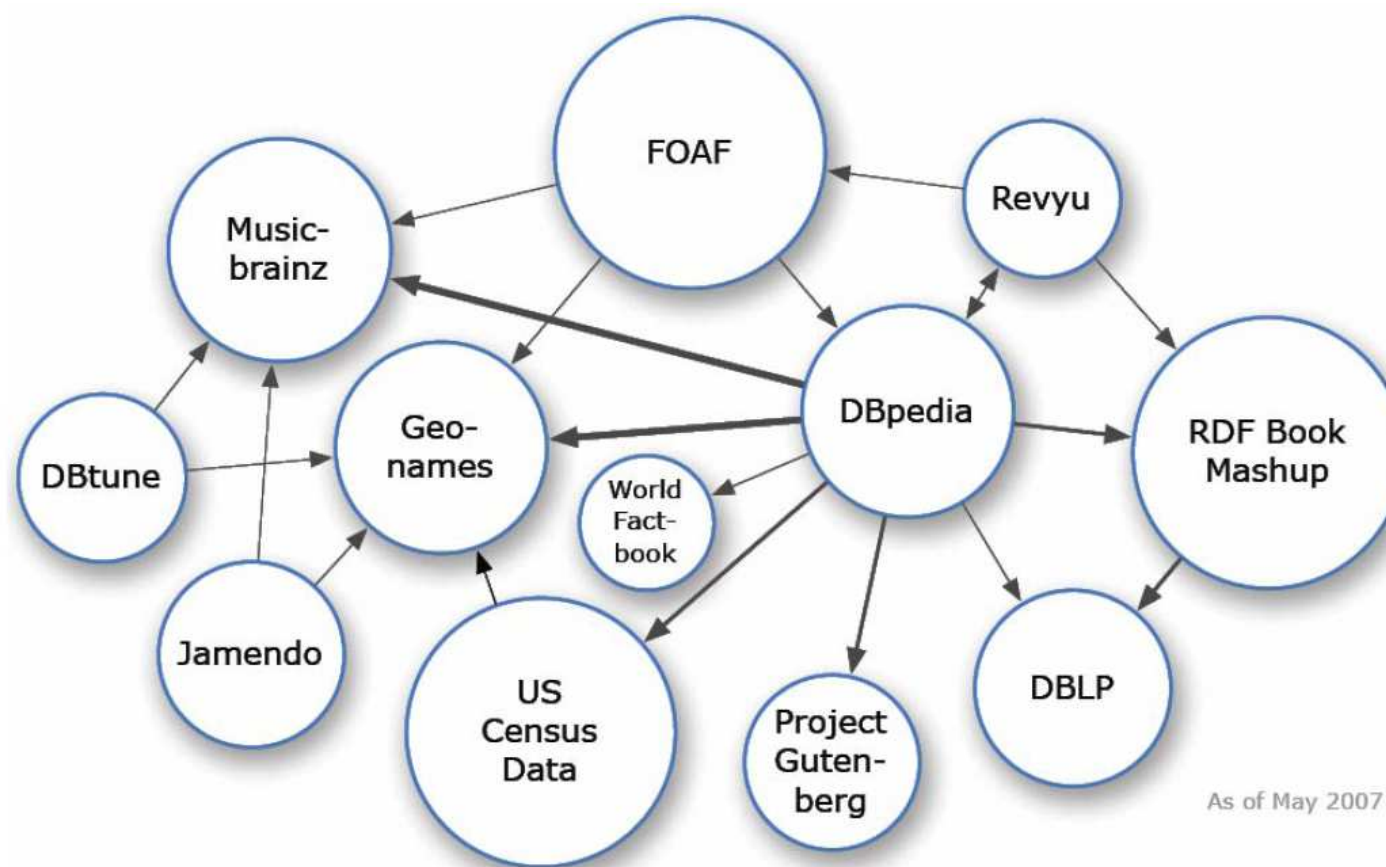


■ Community effort to

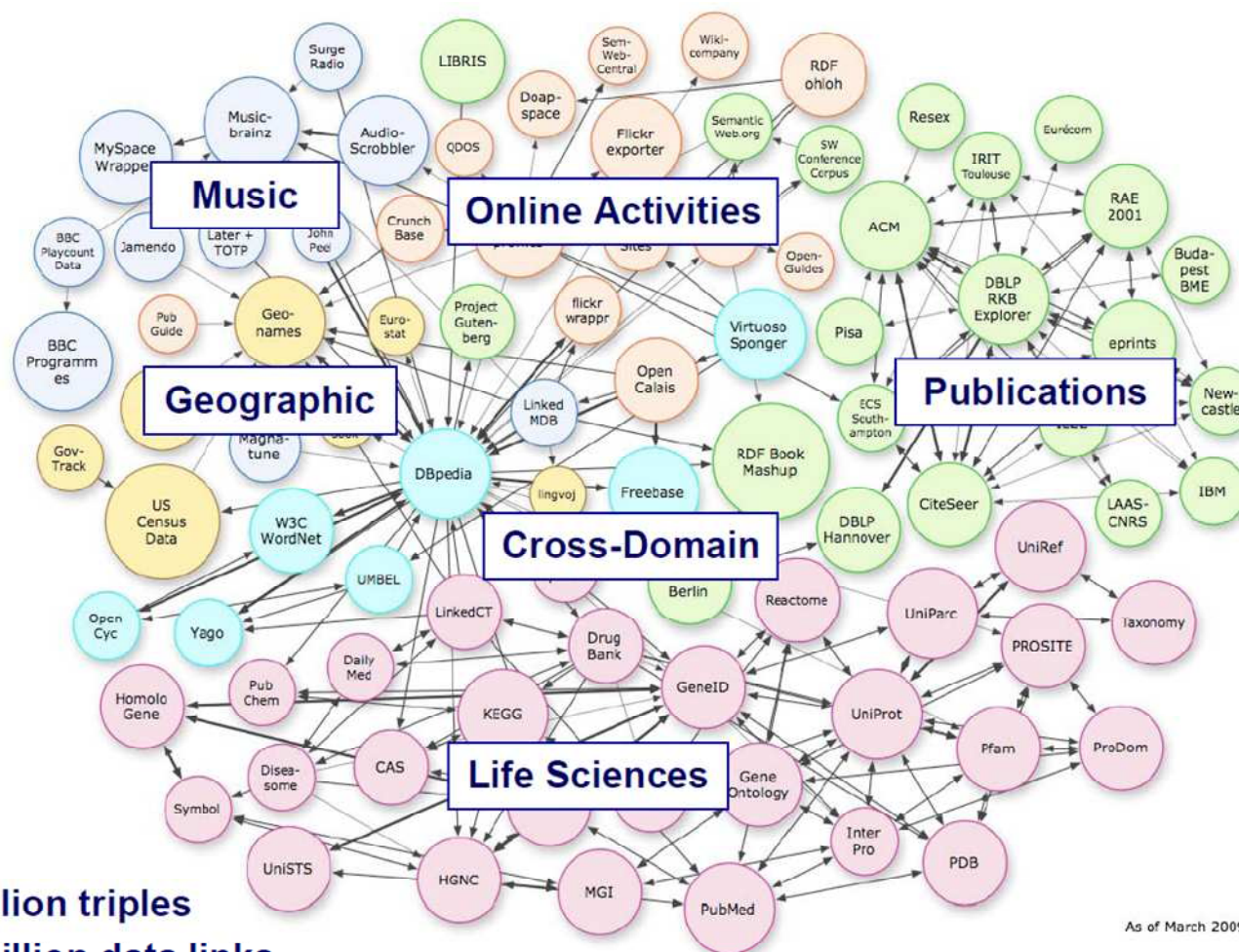
- publish existing open license datasets as Linked Data on the Web
- interlink things between different data sources



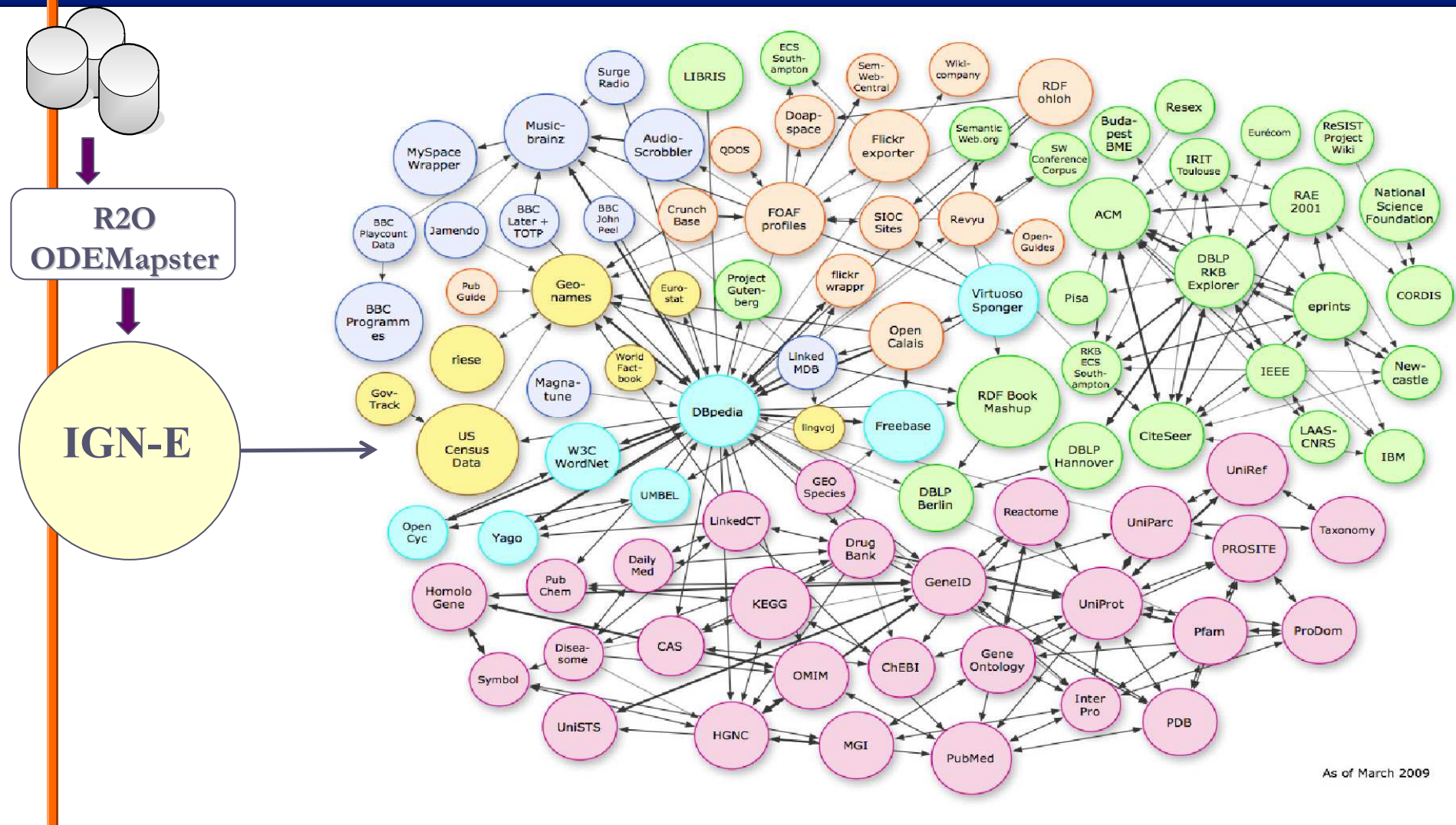
Burbujas iniciales LOD



Burbujas actuales LOD



IGN se une a la nube de LOD



DEMO

OpenLink Virtuoso SPARQL Query

This query page is designed to help you test OpenLink Virtuoso SPARQL protocol endpoint.

Consult the [Virtuoso Wiki page](#) describing the service or the [Online Virtuoso Documentation](#) section [RDF Database and SPARQL](#).

There is also a rich Web based user interface with sample queries. In order to use it you must install the iSPARQL package (isparql_dav.vad).

Query

Default Graph URI

Security restrictions of this server do not allow you to retrieve remote RDF data. DBA may wish to grant "SPARQL_SPONGE" privilege to "SPARQL" account to remove the restriction. In order to do this, please perform the following steps:

1. Go to the Virtuoso Administration Conductor i.e. <http://localhost:8890/conductor>
2. Login as dba user
3. Go to System Admin->User Accounts->Roles
4. Click the link "Edit" for "SPARQL_SPONGE"
5. Select from the list of available user/groups "SPARQL" and click the ">>" button so to add it to the right-positioned list.
6. Click the button "Update"
7. Access again the sparql endpoint in order to be able to retrieve remote data.

Querytext

```
SELECT * WHERE {{?x rdf:type <http://geolinkeddata.es/ontology/Rio>} UNION {?x rdf:type <http://geolinkeddata.es/ontology/Embalse> }}
```

Display Results As:



Rigorous check of the query

Execution timeout, in milliseconds, values less than 1000 are ignored

http://geolinkddata.es/resource/RioAraquil
http://geolinkddata.es/resource/RioTirã³n
http://geolinkddata.es/resource/RioTinto
http://geolinkddata.es/resource/RioUbagua
http://geolinkddata.es/resource/RioLã©rez
http://geolinkddata.es/resource/RioTormes
http://geolinkddata.es/resource/RiodelasYeguas
http://geolinkddata.es/resource/RioGuadalemar
http://geolinkddata.es/resource/RioOdiel
http://geolinkddata.es/resource/RioAboã±o
http://geolinkddata.es/resource/EmbalsedeEscuriza
http://geolinkddata.es/resource/EmbalsedeSerena
http://geolinkddata.es/resource/EmbalsedeJavierrelatre
http://geolinkddata.es/resource/EmbalsedeValparaã±o
http://geolinkddata.es/resource/EmbalsedeCalanda
http://geolinkddata.es/resource/EmbalsedeRosarito
http://geolinkddata.es/resource/EmbalsedeContreras
http://geolinkddata.es/resource/EmbalsedeTorreLã©guila



http://geolinkeddata.es/resource/RioMacas	RioManzanas
http://geolinkeddata.es/resource/RioCastroLaboreiro	UNK
http://geolinkeddata.es/resource/RioCastroLaboreiro	UNK
http://geolinkeddata.es/resource/RioMinho	RioMiño
http://geolinkeddata.es/resource/RioMinho	RioMiño
http://geolinkeddata.es/resource/RioDouro	RioDuero
http://geolinkeddata.es/resource/RioDouro	RioDuero
http://geolinkeddata.es/resource/RioTejo	RioTajo
http://geolinkeddata.es/resource/RioTejo	RioTajo
http://geolinkeddata.es/resource/RioSever	RioSever
http://geolinkeddata.es/resource/RioSever	RioSever
http://geolinkeddata.es/resource/RioRabaÃ§al	RioPentes
http://geolinkeddata.es/resource/RioRabaÃ§al	RioPentes
http://geolinkeddata.es/resource/RioChanÃ§a	RiveradeChanza
http://geolinkeddata.es/resource/RioChanÃ§a	RiveradeChanza
http://geolinkeddata.es/resource/RioCaia	RioCaya
http://geolinkeddata.es/resource/RioCaia	RioCaya



http://geolinkeddata.es/resource/LagunadeSalicor	0.0319619845016305
http://geolinkeddata.es/resource/LagunaSalada	0.0303621248540128
http://geolinkeddata.es/resource/LagunaSalada	0.0303621248540128
http://geolinkeddata.es/resource/LagunadeTomilla	0.0458568889436359
http://geolinkeddata.es/resource/LagunadeTomilla	0.0458568889436359
http://geolinkeddata.es/resource/LagunadelHuerto	0.0272860916113935
http://geolinkeddata.es/resource/LagunadelHuerto	0.0272860916113935
http://geolinkeddata.es/resource/LagunadeEscoplillo	0.043770193102229
http://geolinkeddata.es/resource/LagunadeEscoplillo	0.043770193102229
http://geolinkeddata.es/resource/LagunaCuencaCerrada	0.0313455366546343
http://geolinkeddata.es/resource/LagunaCuencaCerrada	0.0313455366546343
http://geolinkeddata.es/resource/LagunadeTaray	0.0750617804822851
http://geolinkeddata.es/resource/LagunadeTaray	0.0750617804822851
http://geolinkeddata.es/resource/LagunadeCucharas	0.0461120191541664
http://geolinkeddata.es/resource/LagunadeCucharas	0.0461120191541664
http://geolinkeddata.es/resource/LagunadelaAlbardiosa	0.0304717580230437
http://geolinkeddata.es/resource/LagunadelaAlbardiosa	0.0304717580230437
http://geolinkeddata.es/resource/LagunadeMoguer	0.0190216850602929
http://geolinkeddata.es/resource/LagunadeMoguer	0.0190216850602929
http://geolinkeddata.es/resource/LagunadeMedina	0.0415046823355

RioNarcea at GeoLinkedData.es

<http://upm.alexdeleon.name:8080/geolinkeddata/resource/RioNarcea>



Property	Value
?:idioma_alternativo	■ N_A
?:idioma	■ SPA
?:longitud	■ 0.0116850353800814 ■ 0.0596447486961729 ■ 0.10308485965346 ■ 0.137670870608697 ■ 0.194367211250675 ■ 0.546768360528125
?:nombre_alternativo	■ N_A ■ UNK
rdf:type	■ < http://geolinkeddata.es/ontology/Rio >

Metadata

```
<http://upm.alexdeleon.name:8080/geolinkeddata/data/RioNarcea>
rdf:type      <http://www.w3.org/2004/03/trix/rdg-1/Graph>
foaf:primaryTopic <http://upm.alexdeleon.name:8080/geolinkeddata/resource/RioNarcea>
foaf:topic    <http://upm.alexdeleon.name:8080/geolinkeddata/data/RioNarcea>
prv:createdBy Anon_0 (more)
```

[expand all](#)

_EBRO at ign.org

http://mccarthy.dia.fi.upm.es/ign/resource/11_EBRO



Property	Value
?nameEs	■ EBRO (xsd:string)
?tiene	■ <http://mccarthy.dia.fi.upm.es/ign/resource/103_Riba_roja> ■ <http://mccarthy.dia.fi.upm.es/ign/resource/54_Ebro> ■ <http://mccarthy.dia.fi.upm.es/ign/resource/86_Mequinzenza>
rdf:type	■ < http://mccarthy.dia.fi.upm.es/ign/resource/Rio >

This page shows information obtained from the SPARQL endpoint at <http://mccarthy.dia.fi.upm.es:8890/sparql>.

[As N3](#) | [As RDF/XML](#) | [Browse in Disco](#) | [Browse in Tabulator](#) | [Browse in OpenLink Browser](#)

_Mequinenza at ign.org

http://mccarthy.dia.fi.upm.es/ign/resource/86_Mequinenza

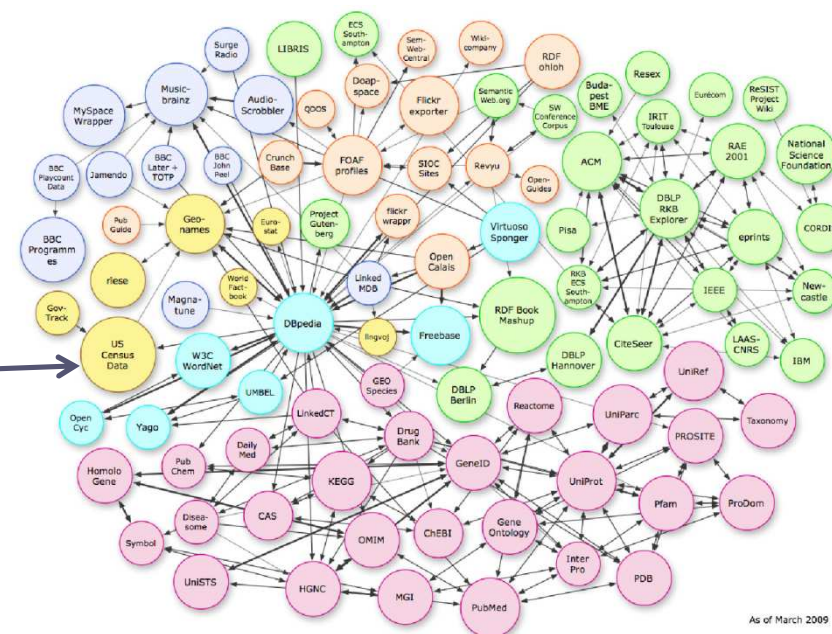
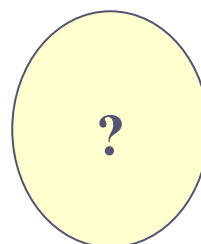


Property	Value
?nameEs	■ Mequinenza (xsd:string)
is ?tiene of	■ < http://mccarthy.dia.fi.upm.es/ign/resource/11_EBRO >
rdf:type	■ < http://mccarthy.dia.fi.upm.es/ign/resource/Embalse >

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Reunión GTIDEE



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Gracias por vuestra atención

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