Linked Open Data

Obrir i enllaçar les nostres dades per a noves funcionalitats als catàlegs

Intensiu de Col·leccions Digitals: intercanvi d'experiències expertes en el desenvolupament de col·leccions digitals (2a edició)

Jordi Pallarès Llorens

Linked Open Data

Obrir i enllaçar les NOSTRES dades per a noves funcionalitats

a qualsevol APLICACIÓ

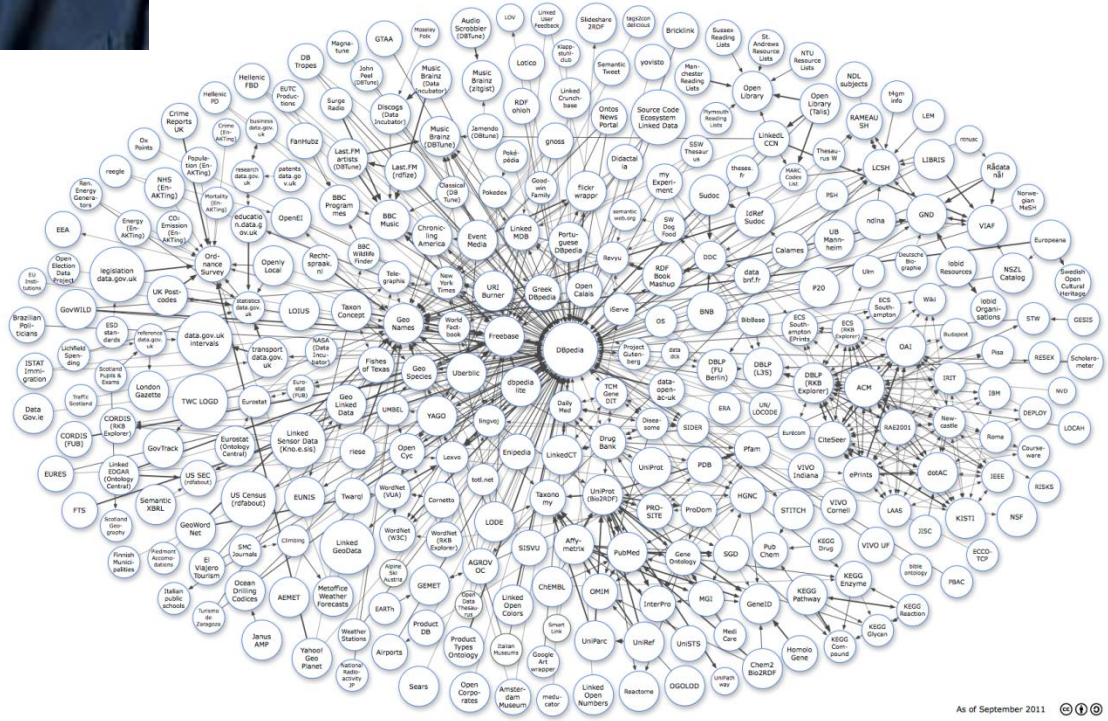
Esquema

- Des d'on? fins a on?
- Que volem aconseguir
- On estem
- Com podem treballar
- Feina a fer i conclusions

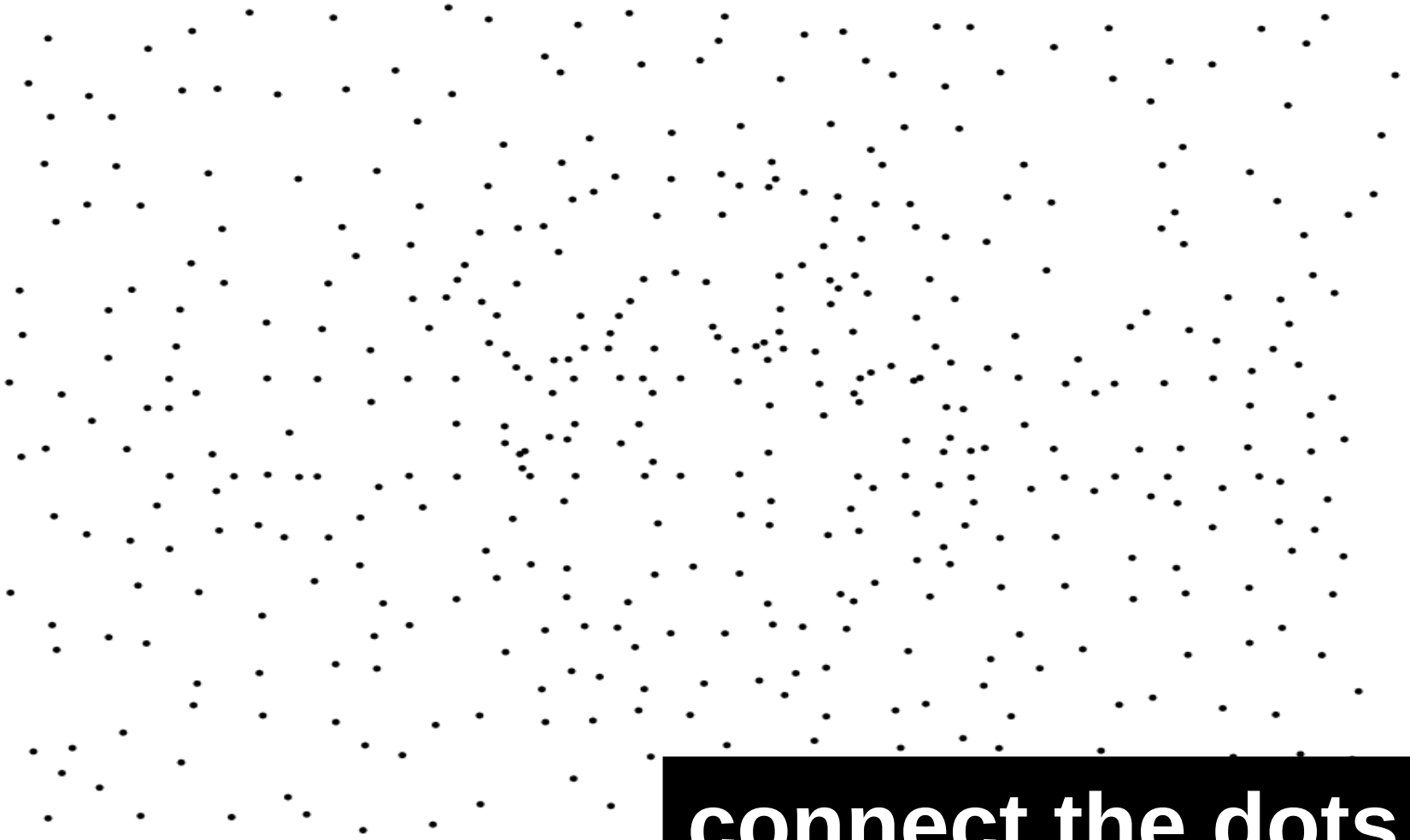
Des d'on? -> fins a on?

W3C®

W3C Semantic Web



Des d'on? -> fins a on?



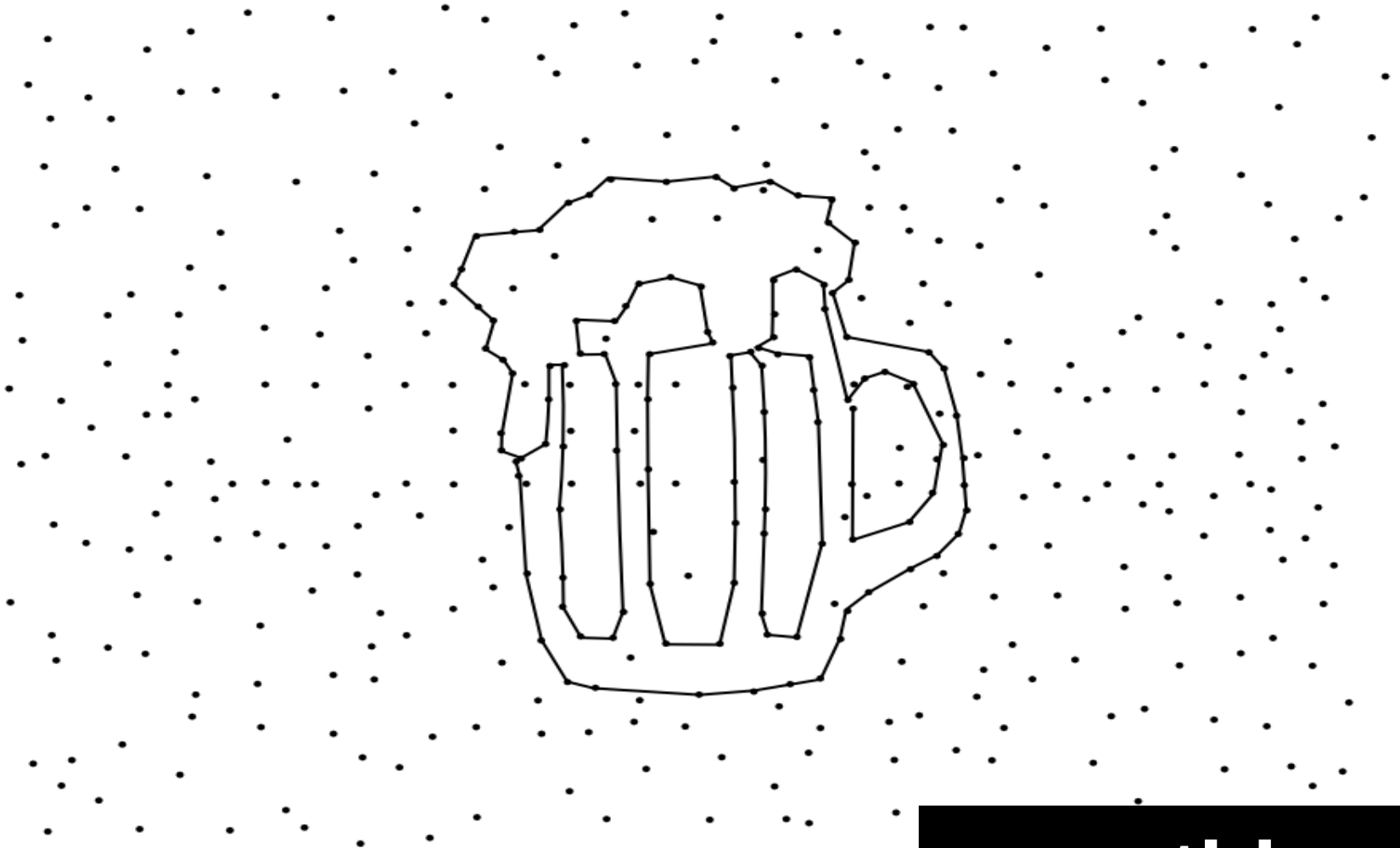
connect the dots

Linkinglibrarydata – ELAG 2011
Jindřich Mynarz

Des d'on? -> fins a on?

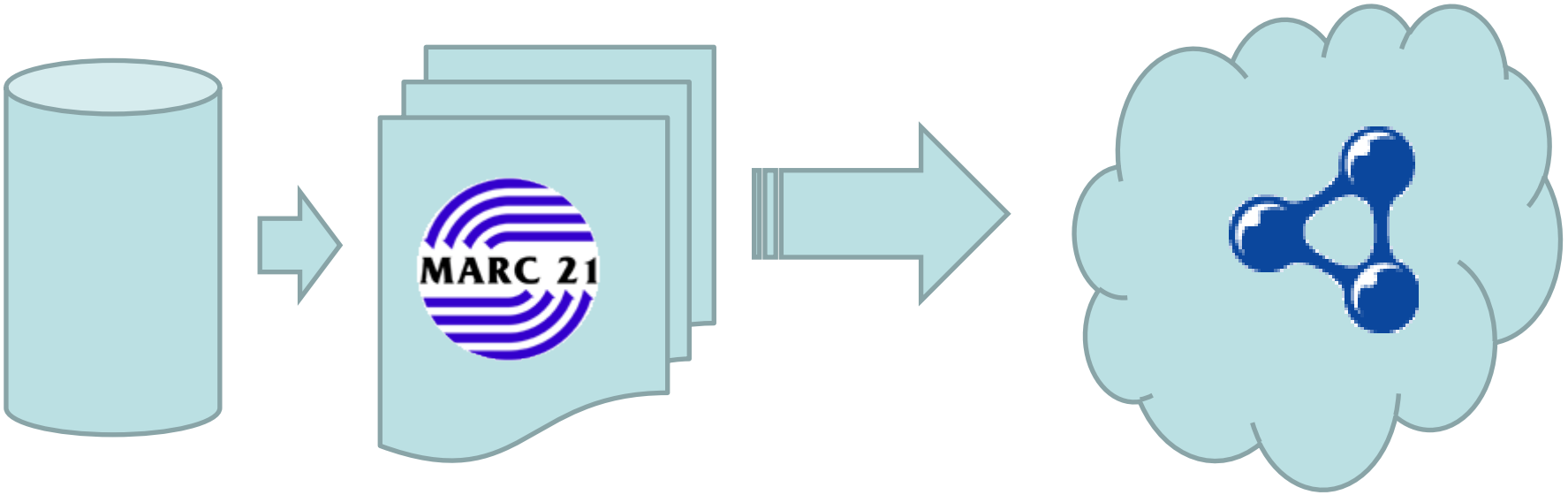
get this

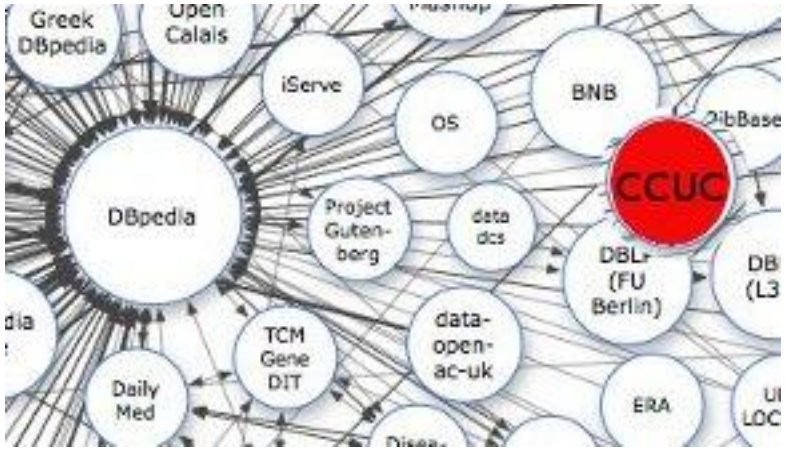
Desde on? -> fins a on?



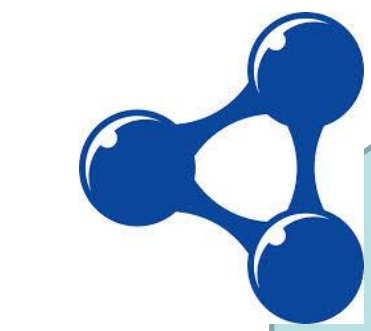
or this

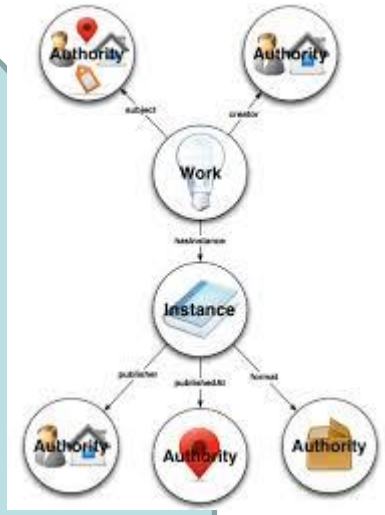
Des d'on? -> fins a on?– visió general





Des d'on? -> fins a on?

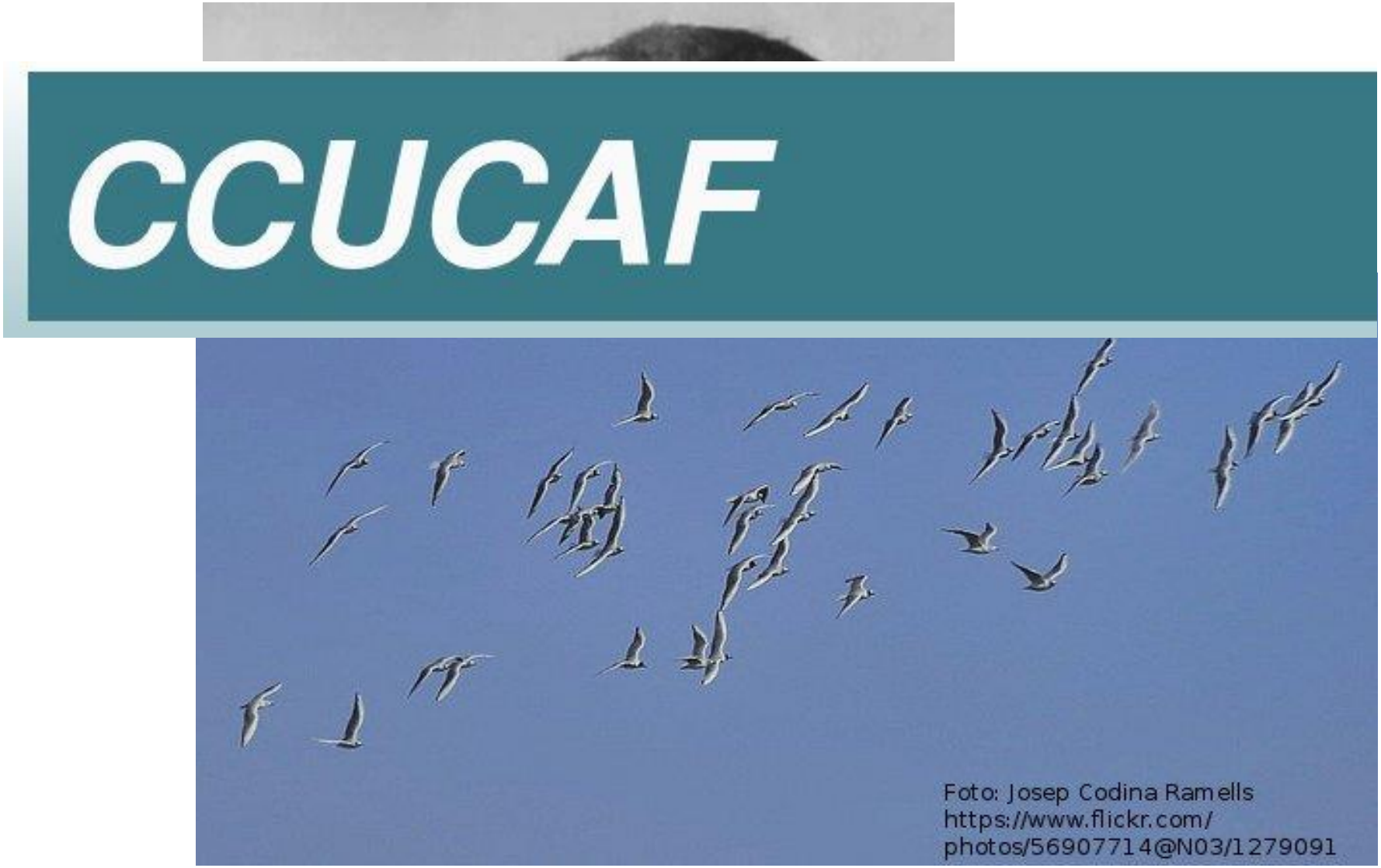




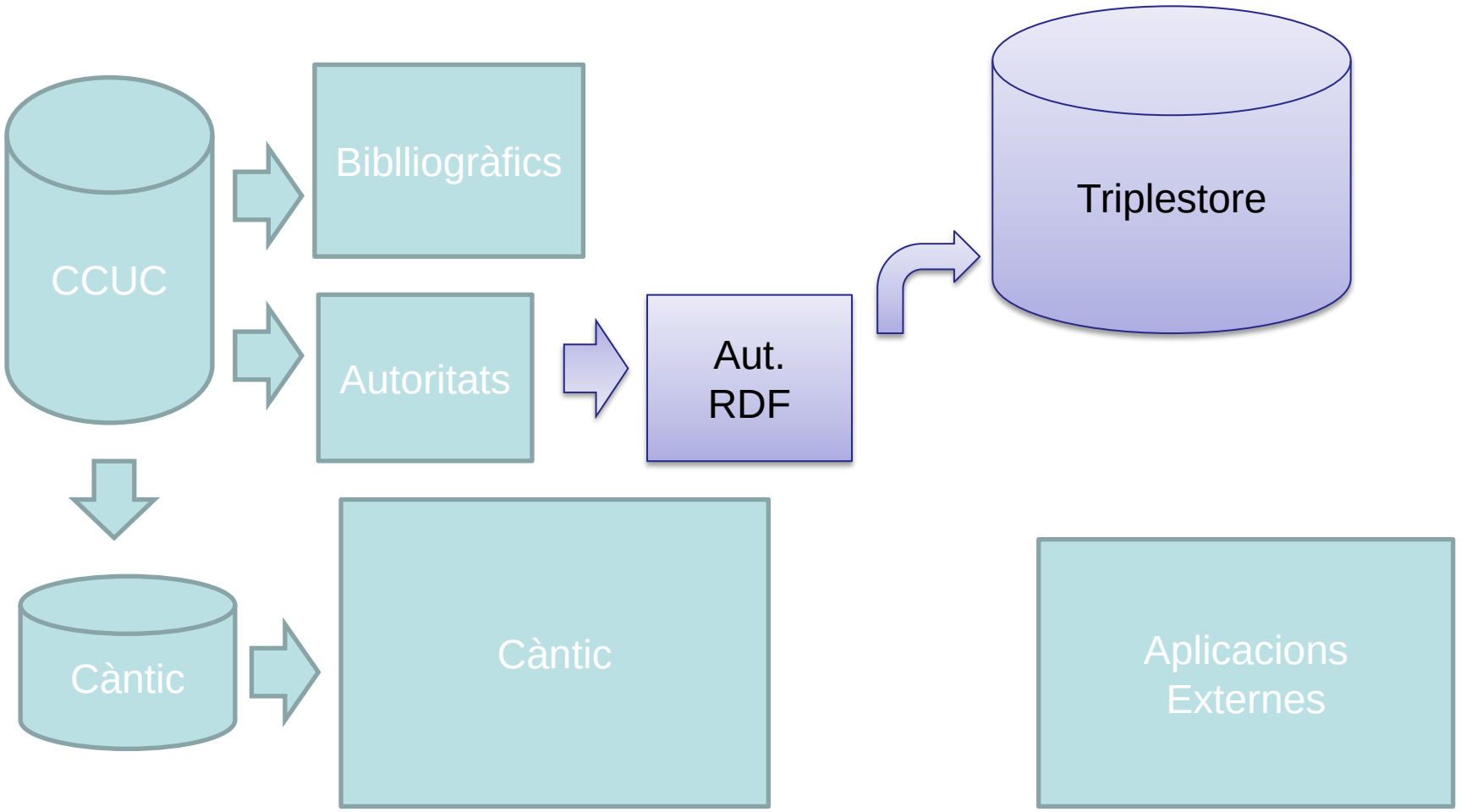
Desde on? -> fins a on?

Rurik Greenall – Elag 2013

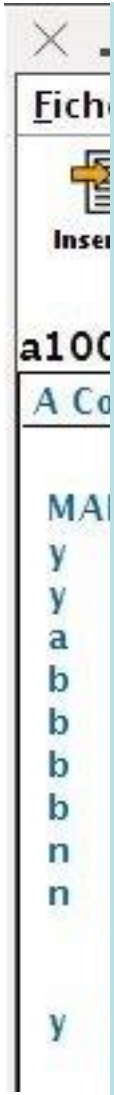
CCUC-AF (beta test)



Que volem aconseguir – Dades del CCUC



Format RDF



```
<record>
  <leader>00708nz  a2200181n  4500</leader>
  <controlfield tag="001">.a10035254</controlfield>
  <controlfield tag="003">ES-BaCBU</controlfield>
  <controlfield tag="008">100318 ||acznnaabn          |a aaa      </controlfield>
  <datafield tag="040" ind1=" " ind2=" ">
    <subfield code="a">ES-BaBC</subfield>
    <subfield code="b">cat</subfield>
    <subfield code="c">ES-BaBC</subfield>
  </datafield>
  <datafield tag="100" ind1="1" ind2=" ">
    <subfield code="a">Abad, Ángel,</subfield>
    <subfield code="d">1936-</subfield>
  </datafield>
  <datafield tag="400" ind1="1" ind2=" ">
    <subfield code="a">Abad, Á.</subfield>
    <subfield code="q">(Ángel),</subfield>
    <subfield code="d">1936-</subfield>
  </datafield>
```

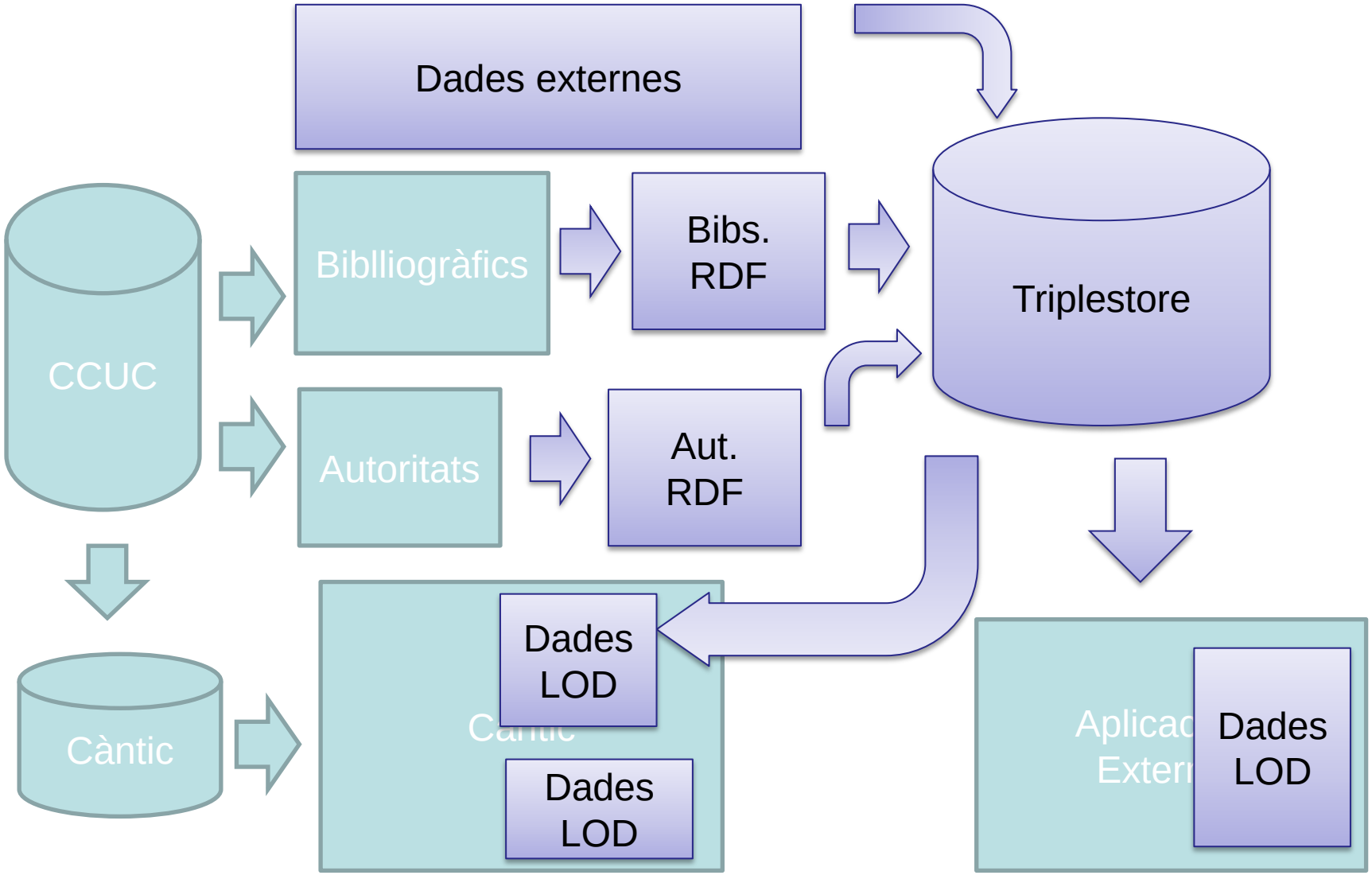
Format RDF

```
<?xml version="1.0" encoding="utf-8"?>
<rdf:RDF
    xmlns:rdf=http://www.w3.org/1999/02/22-rdf-syntax-ns#
    xmlns:void=http://rdfs.org/ns/void
    xmlns:owl=http://www.w3.org/2002/07/owl/
    xmlns:foaf=http://xmlns.com/foaf/0.1/
    xmlns:skos=http://www.w3.org/2004/02/skos/core#
    xmlns:skosxl=http://www.w3.org/2008/05/skos-xl#
    xmlns:rdaGr2=http://rdvocab.info/ElementsGr2/
    xmlns:rdfs=http://www.w3.org/2000/01/rdf-schema#
    xmlns:rdaEnt=http://rdvocab.info/uri/schema/FRBRentitiesRDA/
    xmlns:dbpedia-owl=http://dbpedia.org/ontology/
>
```

Format RDF

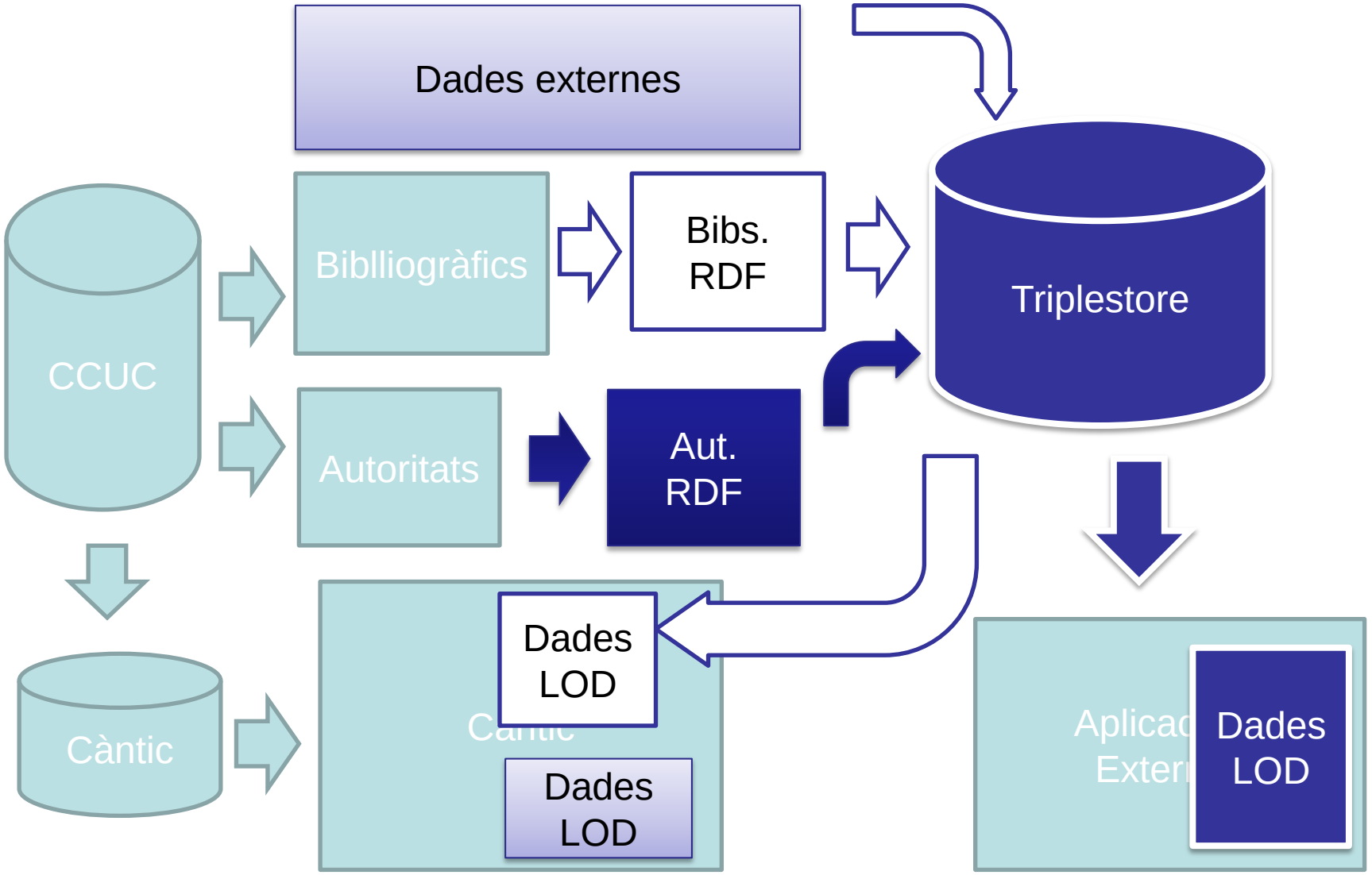
```
<foaf:Document rdf:about="http://arties.cbuc.cat/openccuc/a10035254/">
  <void:inDataset rdf:resource="http://arties.cbuc.cat/openccuc/data"/>
  <foaf:primaryTopic rdf:resource="http://arties.cbuc.cat/openccuc/a10035254/"/>
</foaf:Document>
<rdf:Description rdf:about="http://arties.cbuc.cat/openccuc/a10035254/">
  <rdf:type rdf:resource="http://xmlns.com/foaf/0.1/Person"/>
  <rdf:type rdf:resource="http://rdvocab.info/uri/schema/FRBRentitiesRDA/Person"/>
  <skos:prefLabel>Abad, Ángel, 1936-</skos:prefLabel>
  <foaf:name>Abad, Ángel, 1936-</foaf:name>
  <foaf:name>Abad, Á.(Ángel), 1936-</foaf:name>
  <foaf:name>Abad Silvestre, Ángel,  1936-</foaf:name>
  <foaf:name>Abad, Ángel</foaf:name>
  <foaf:name>Abad, Á.</foaf:name>
  <dbpedia-owl:birthYear>1936</dbpedia-owl:birthYear>
  <owl:sameAs rdf:resource="http://cantic.bnc.cat/registres/CUCId/a10035254"/>
  <owl:sameAs rdf:resource="http://viaf.org/viaf/29618965"/>
  <owl:sameAs rdf:resource="http://id.loc.gov/authorities/names/nb2002024766"/>
  <dbpedia-owl:viafId>29618965</dbpedia-owl:viafId>
</rdf:Description>
```

Que volem aconseguir – Dades del CCUC



Que volem aconseguir – Dades del CCUC

On estem


Dades externes
CCUC
Biblliogràfics
Bibs.
RDF
Triplestore
Autoritats
Aut.
RDF
Dades
LOD
Càntic
Dades
LOD
Aplicac
Exter
Dades
LOD

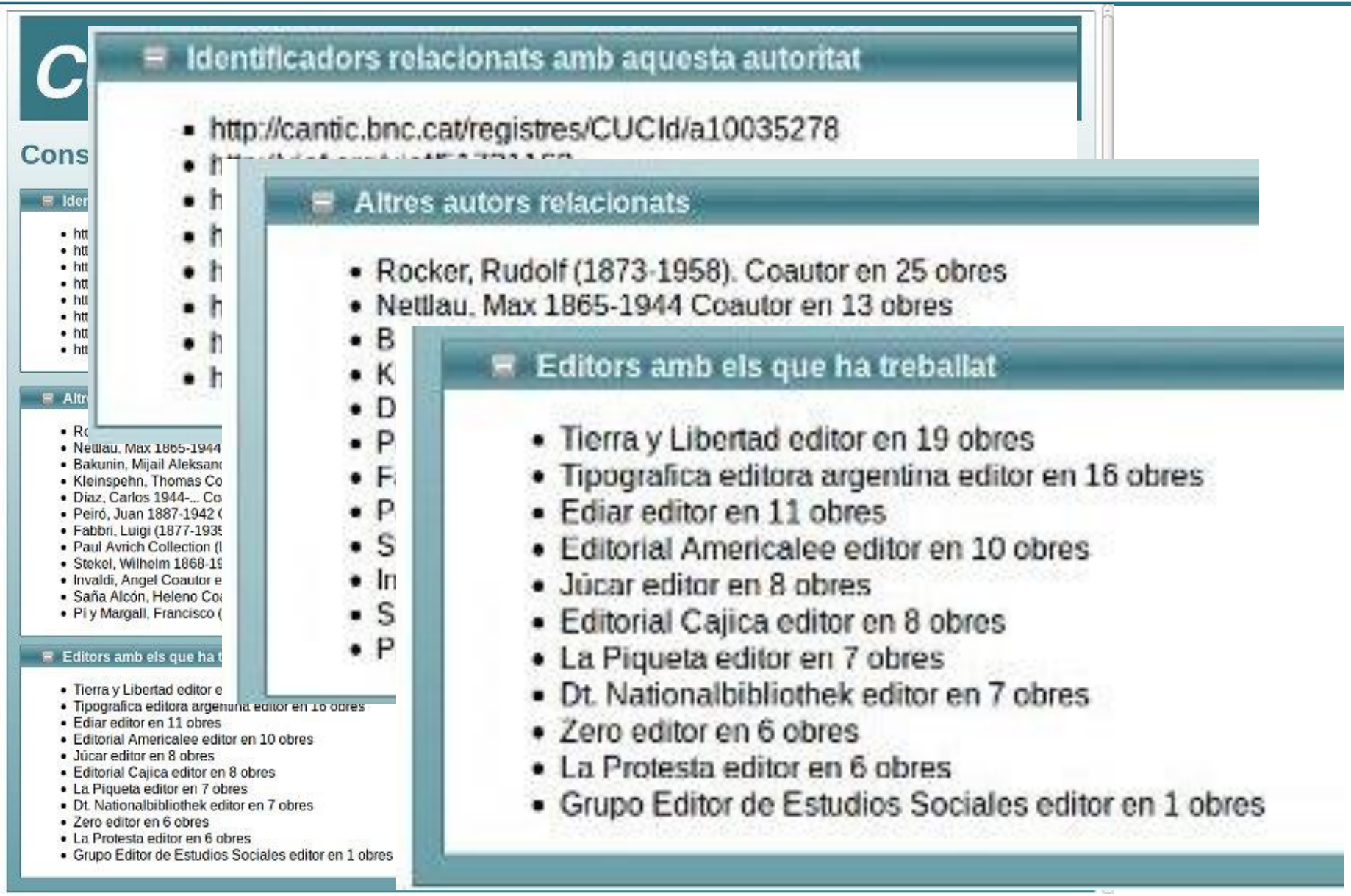
Com podem treballar amb el CCUCAF - SPARQL

```
PREFIX foaf:  <http://xmlns.com/foaf/0.1/>
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX rdaGr2: <http://rdvocab.info/ElementsGr2/>

SEL
WH
  ?s
}
```

```
PREFIX dcterms: <http://purl.org/dc/terms/>
PREFIX movie: <http://data.linkedmdb.org/resource/movie/>

SELECT ?id ?filmTitle ?actorName WHERE {
  VALUES ?filmTitle { "The Matrix" }
  SERVICE <http://data.linkedmdb.org/sparql> {
    ?film a movie:film ;
          movie:filmid ?id ;
          dcterms:title ?filmTitle ;
          movie:actor [
            a movie:actor ;
            movie:actor_name ?actorName ].
  }
}
```

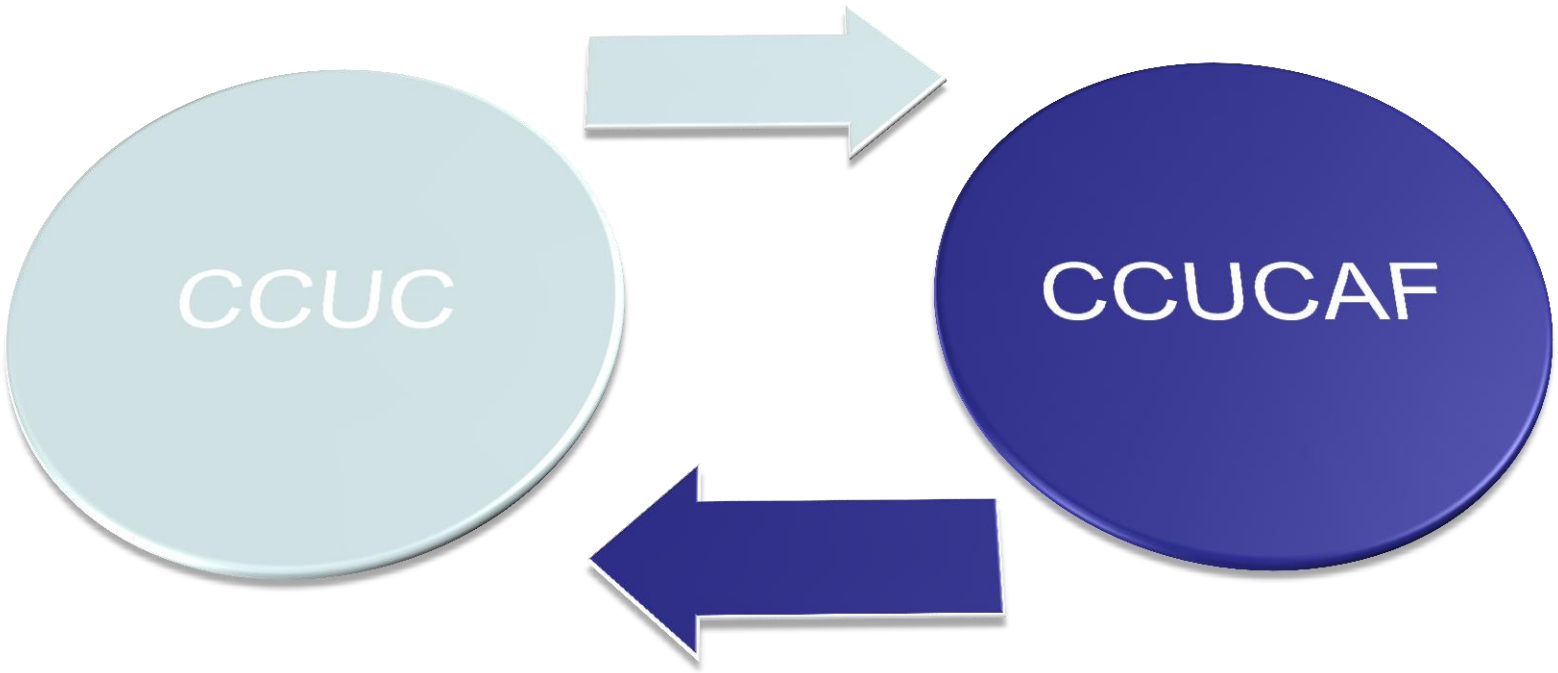
ns#>

Ampliar informacions

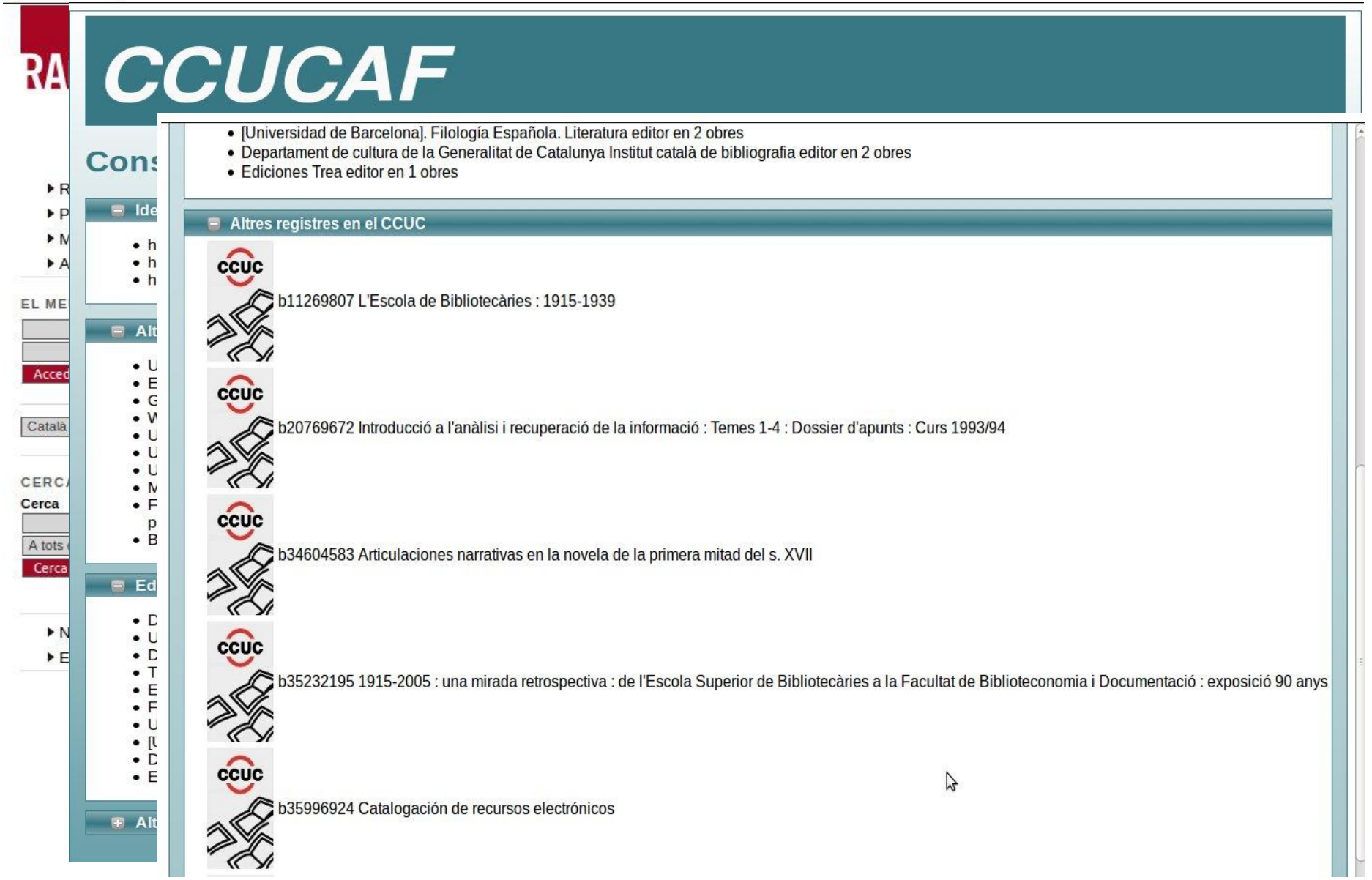


Ampliar informacions

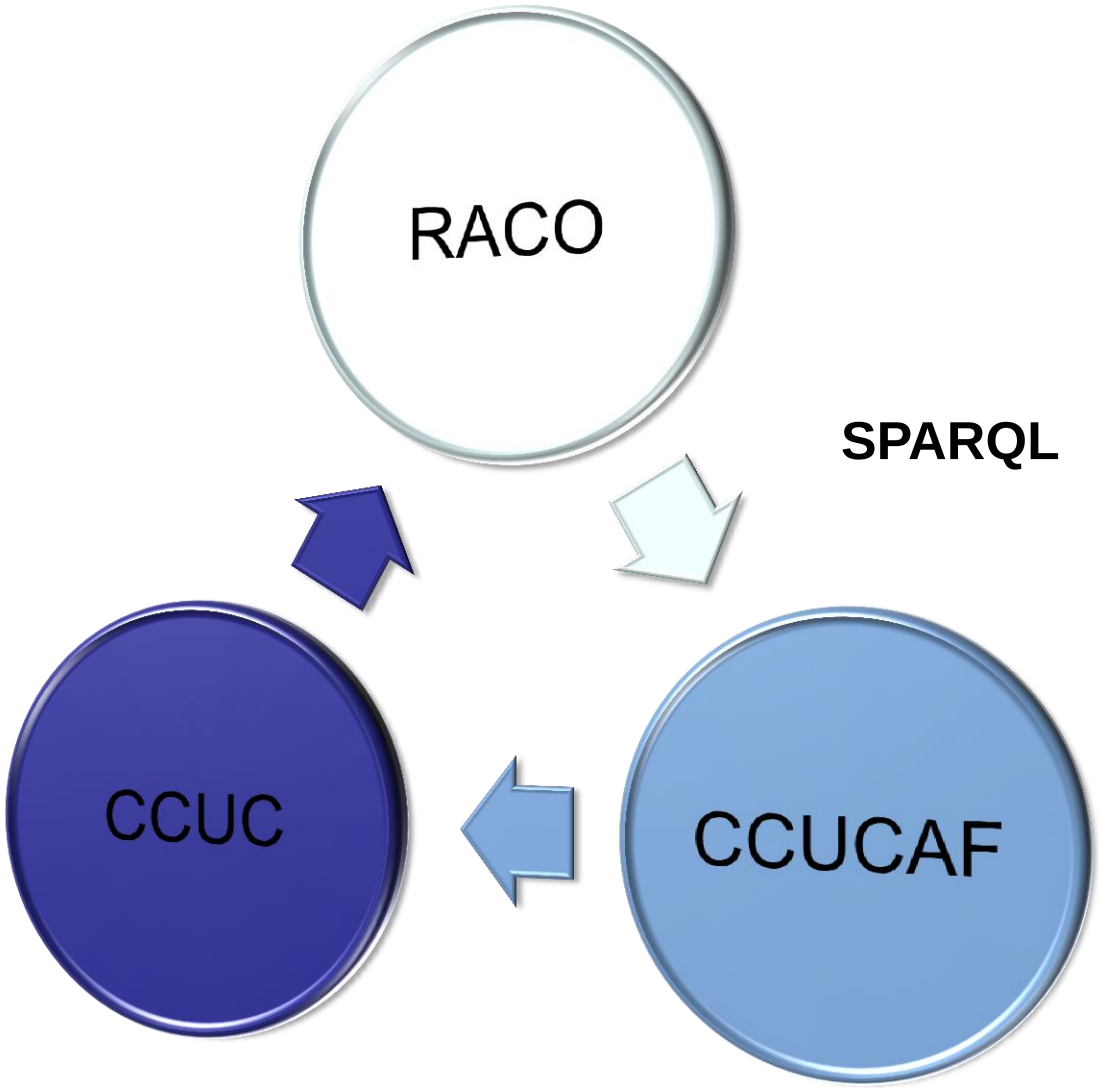
SPARQL



Ampliar els resultats amb dades NOSTRES i LLIGADES



Ampliar els resultats amb dades NOSTRES i LLIGADES



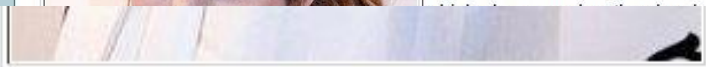
Resultats nostres ampliats i relligats

CCUCAF

Consulta a diferents endpoints

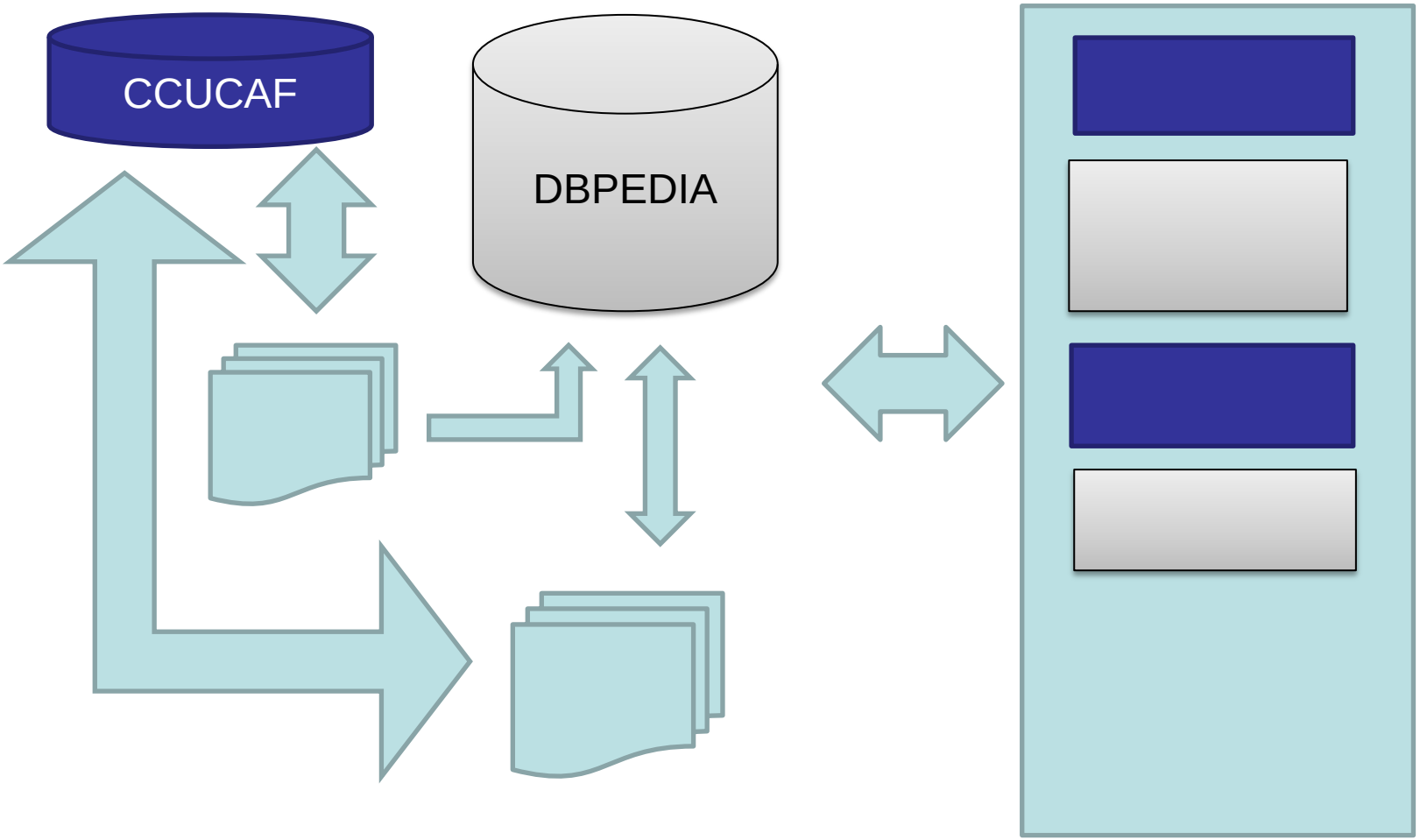
Roberts, Emma, 1991-

Dades de la biografia	
	Emma Rose Roberts (born February 10, 1991) is an American actress, model and singer. She rose to prominence with her role as Addie Singer in the Nickelodeon television series Unfabulous. She subsequently released her debut album,

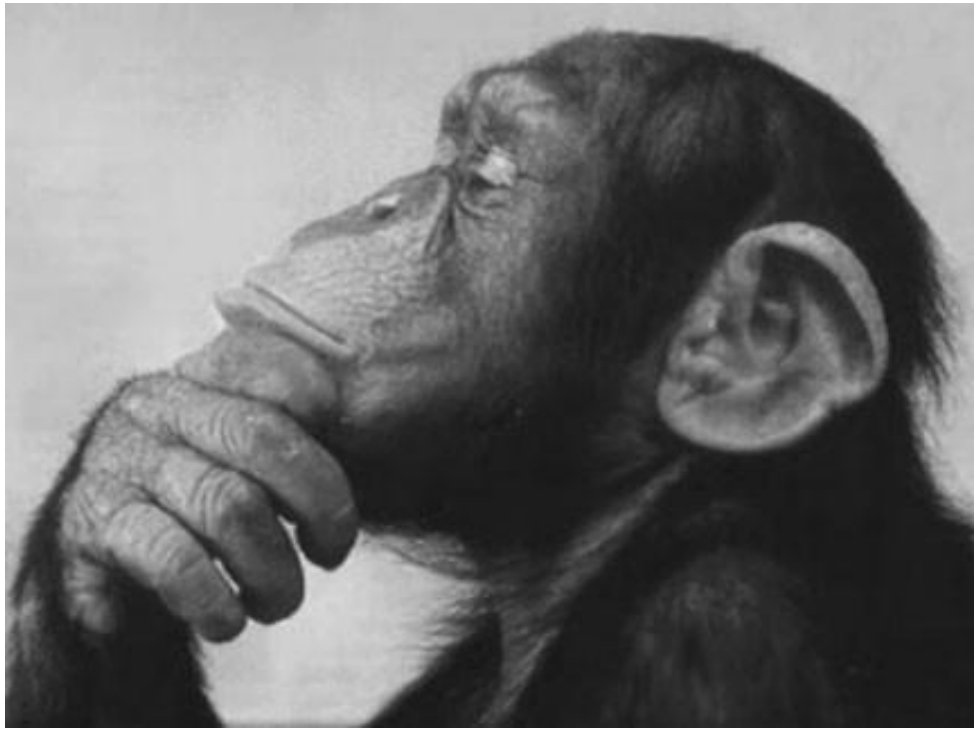


Familiars	
http://dbpedia.org/resource/Julia_Roberts	http://arties.cbuc.cat/openccuc/a10920985/
http://dbpedia.org/resource/Eric_Roberts	

Resultats nostres ampliats i relligats



Feina a fer i conclusions



✓ Projecte:

- Estabilitzar i millorar tècnicament el que tenim.
- Afegir més dades
  - Internes (bibliogràfics, etc)
  - Externes (Consorciats, dades externes, etc…)
  - Afegir lligams entre elles
- Dissenyar i crear aplicacions per a explotar les nostres dades.

✓ Tecnologia

- Tecnologia molt potent, propera i estandaritzada.
- Possibilitat de poder oferir als nostres usuaris eines de gran impacte visual i també molt útils de cerques ad-hoc.
- Poder oferir les nostres dades a tot el món i que les aprofitin per a que els hi donin més visibilitat amb les seves aplicacions.

THANK
YOU
GRACIAS
ARIGATO
SHUKURIA
DANKSCHEEN
BÏYAN
SHUKRIA
TINGKI
YAQHANYELAY
TASHAKKUR ATU
SUKSAMA
EKHMET
GRAZIE
MEHRBANI
PALDIES
BOLZÏN
MERCI
GOZAIMASHITA
EFCHARISTO
JUSPAXAR
KOMAPSUMNIDA
MAAKE
SPASSIBO
SNACHALHUYA
NUHUN
CHALTU
WABEEJA
MAITEKA
YUSPAGARÀTAM
HUI
GUI
HATUR
UNALCHÉESH
SPASIBO
DENKAUJA
NENACHALHYA
MERSI
ATTO
ANIHA
DHANYABAAD
SANCO
MERASTAWHY
GAEJTHO
LAH
AGUYJE
FAKAAUE
TAVTAPUCH
MEDAWAGSE
BAIIKA
EKOJU
SIKOMO
MAKETAI
MINMONCHAR