



**Open EFG workshop on data quality and semantic interoperability issues
in European film archives, Frankfurt am Main, 30 May 2011**

VIRTUAL

14,5 millions clusters



INTERNATIONAL

21 authority files from 18 institutions

18,4 millions name records processed

AUTHORITY FILE

Names of persons and of corporate bodies

Geographical names : being examined

Works : plan for the future

-  Library of Congress/NACO
-  Deutsche Nationalbibliothek
-  Bibliothèque nationale de France
-  National Library of Australia
-  National Library of the Czech Republic
-  Bibliotheca Alexandrina (Egypt)
-  Getty Research Institute
-  National Library of Israel
-  Istituto Centrale per il Catalogo Unico (Italy)
-  Biblioteca Nacional de Portugal
-  Biblioteca Nacional de España
-  National Library of Sweden
-  Swiss National Library
-  Vatican Library
-  NUKAT Center (Poland)
-  Library and Archives Canada
-  National Széchényi Library (Hungary)
-  RERO (Switzerland)



VIAF OBJECTIVES

- Share authority data around the world
- Reduce cataloguing costs
- Simplify authority control internationally
- Provide authority data in form, language and script users want
- Provide linked data services

VIAF : HOW DOES IT WORK ?

STEP 1:

**each partner should provide
its authority file *and*
its bibliographic file**

Relationship between authority and bibliographic file

{ BnF
catalogue
général

Authority record
In UNIMARC/A

001FRBNF120131556

200 | \$7ba0yba0y\$8frefre\$91\$aAverroès\$f1126-1198

700 | \$7ba0yba0a\$8freaara\$90\$aIbn Rušd\$bMuh. ammad ibn Ah. mad Abū al-
Walīd\$f1126-1198

700 | \$7ba0yfa0y\$8freaara\$90\$aالوليد\$بن أحمد بن محمد بن رشيد\$f1126-1198

{ BnF
catalogue
général

Bibliographic record
In UNIMARC/B

2001 \$aAverroes' commentary on Plato's republic ...

700 | \$312013155\$aAverroès\$f1126-1198\$4070

VIAF : HOW DOES IT WORK ?

STEP 2 :

mining each bibliographic record
to **create a derived authority record**
for each entity appearing as a contributor

MINING THE BIBLIOGRAPHIC RECORD

- **Authors & contributors**
- **Title**
- **Publisher & ISBN**
- **Material type**
- **Place and date of publication**
- **Language of the resource (if applicable)**
- **Classification numbers**
- **Identifier of the record**

CREATE THE DERIVED AUTHORITY RECORD

- **Creation of local fields (9XX) to store data from bibliographic record**
- **All text is normalized**
- **Publication date is by decade**
- **Subject grouped into broad subject areas**
- **Co-author**
- **Material type is coded**

Authority record

```
00505cz a2200157n 450
0 1 oca01144962
1 5 19880921165012.4
2 8 840702n| acannaab| |n aaa |||
3 10 $a n 88090379
4 40 $a DLC $c DLC $d DLC
5 100 1 $a Leigh, Mitch, $d 1928-
6 670 $a the man of la mancha, c1966: $b t.p.
(Mitch Leigh)
```

Example of a derived authority record

Derived authority

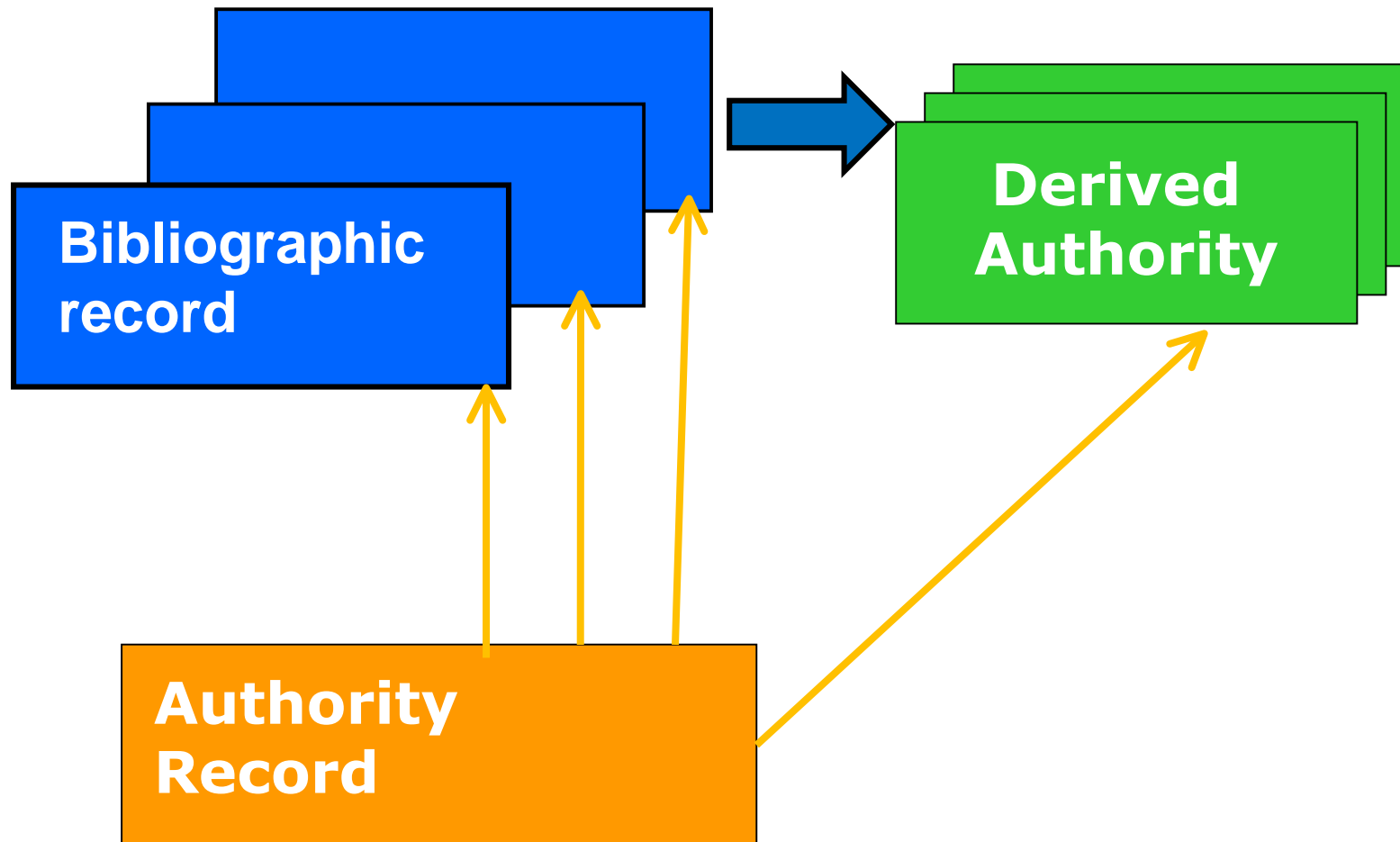
```
00505cz a2200157n 450
0 1 oca01144962
1 5 19880921165012.4
2 8 840702n| acannaab| |n aaa |||
3 10 $a n 88090379
4 40 $a DLC $c DLC $d DLC
5 100 1 $a Leigh, Mitch, $d 1928-
6 670 $a the man of la mancha, c1966: $b t.p. (Mitch Leigh)

6 903 $a 88030979
7 910 14 $a the man of la
mancha
8 921 $a matrix publ co
9 922 $a oru
10 930 $a mitch leigh
11 940 $a eng
12 942 $a 234
13 943 $a 196x
14 944 $a cm
15 950 1 $a darian, joe $d
1928-
```

Bibliographic record

```
LDR 00638ncm a22002057a 450
1 5773347
5 19960820101947.4
8 960815s1965 oruuua n eng
10 $a 96753638
040 $a DLC $c DLC
019 $a 17706440
020 $c $2.95
028 22 $a 48418 $b Matrix Publ. Co.
045 2 $b d198006 $b d198007
048 $b va01 $b ve01 $a ka01
050 00 $a M1258 $b .L
100 1 $a Leigh, Mitch, $d 1928-
245 14 $a The man of La Mancha / $c by Mitch Leigh & Joe Darion;
arr. By Roland Barrett & Alan Keown.
260 $a Springfield, OR : $b Matrix Publ. Co., $c c1965.
300 $a 1 score (16 p.) ; $c 18 x 27 cm.
500 $a Brief record.
650 0 $a Musicals $x Excerpts.
600 10 $a Leigh, Mitch $x Musical settings.
700 1 $a Darion, Joe.
```

CREATION OF DERIVED AUTHORITY RECORDS



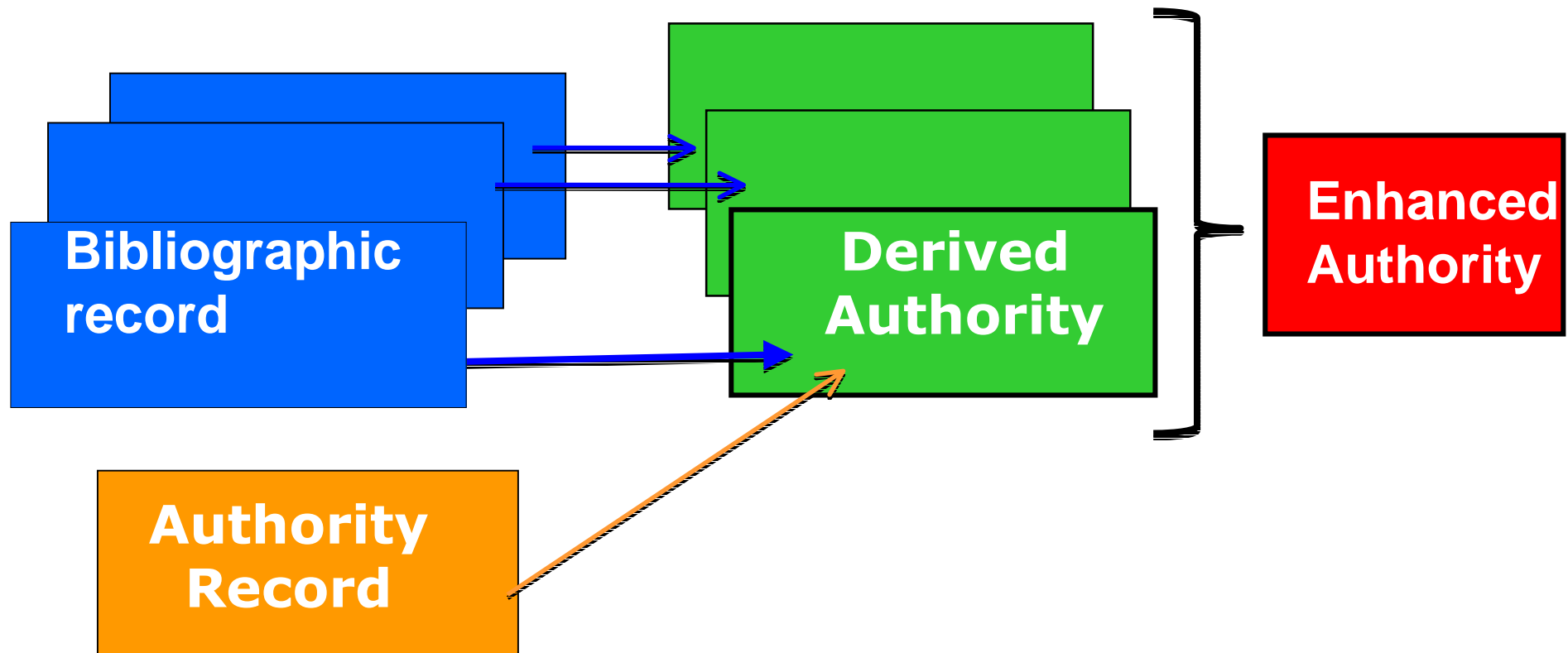
VIAF : HOW DOES IT WORK ?

STEP 3:

combination of all the derived authority records created for a given entity

to build **an enhanced authority record** for this entity

CREATION OF AN ENHANCED AUTHORITY RECORD

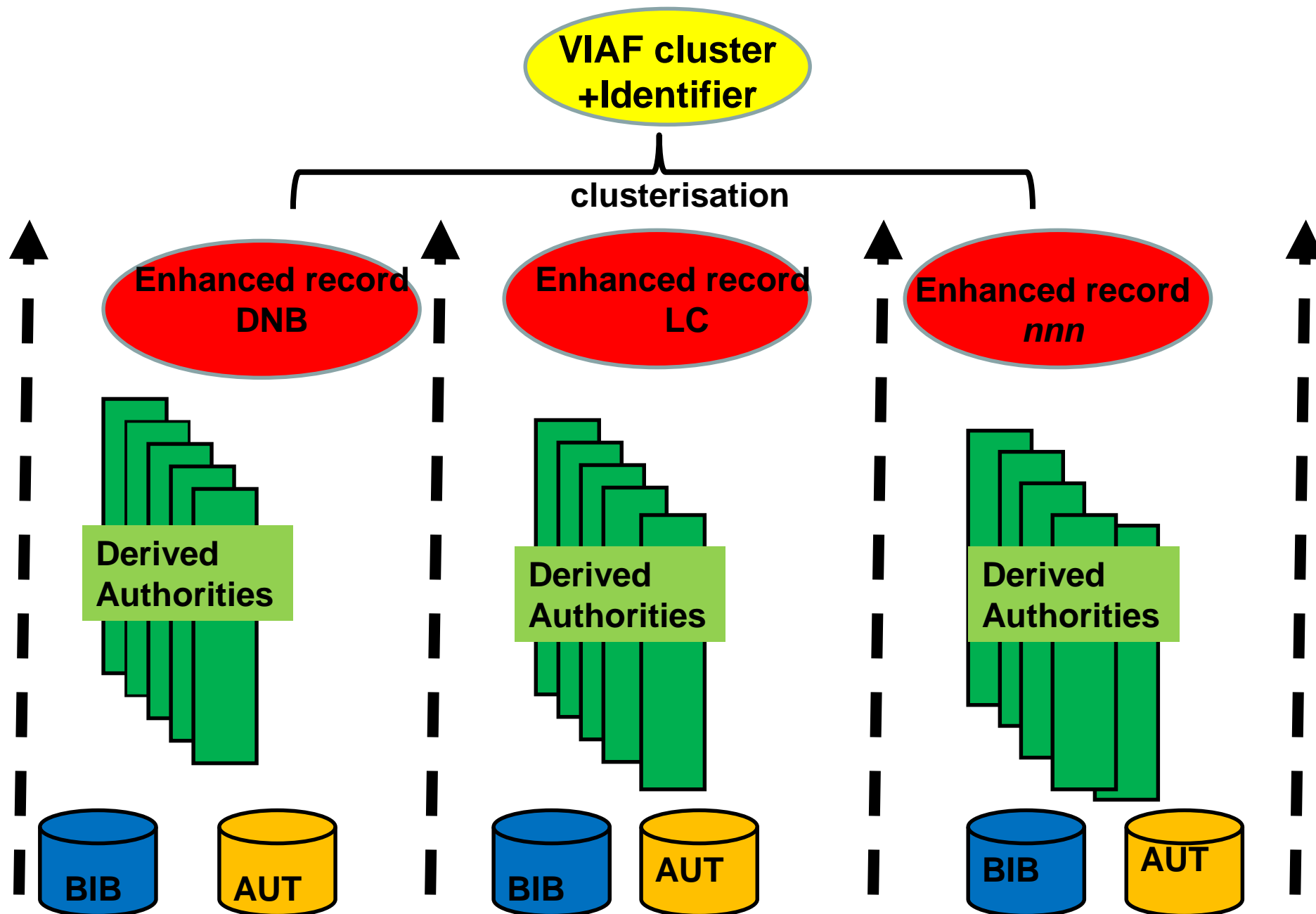


VIAF : HOW DOES IT WORK ?

STEP 4:

The enhanced authority records created from each partner file for a same entity are clustered to form the **VIAF record**

THE VIAF CLUSTER



<http://www.viaf.org>

hosted by



Search

Select Field: Select Index: Search Terms:

- Cervantes Saavedra, Miguel de 1547-1616
- Cervantes de Haro, fl. 1908-193-
- Cervantes, Ignacio, 1847-1905
- Cervantes de Salazar, Francisco, ca. 1514-ca. 1575
- Cervantes, Alberto 1923-2001
- Cervantes B., Francisco J. (Francisco Javier Cervantes Bello)
- Cervantes-Cota, Jorge Luis
- Cervantes Sánchez-Rodrigo, Carlos J
- Cervantes, Enrique A
- Cervantes, María Antonieta

VIAF: The Virtual International Authority File

VIAF, implemented and hosted by OCLC, is joint project of library authority files by matching and linking widely-use

s. The project's goal is to lower the cost and increase the utility

Participating institutions are:

- National Library of Australia
- National Library of the Czech Republic
- Bibliotheca Alexandrina (Egypt)
- Bibliothèque nationale de France
- Deutsche Nationalbibliothek
- Getty Research Institute
- National Library of Israel
- Istituto Centrale per il Catalogo Unico (Italy)
- Biblioteca Nacional de Portugal
- Biblioteca Nacional de España
- National Library of Sweden
- Swiss National Library
- Library of Congress/NACO
- Vatican Library
- NUKAT Center (Poland)
- Library and Archives Canada
- National Széchényi Library (Hungary)
- RERO (Switzerland)
- Russian State Library-test

The search box at the top of this page searches a merged view of VIAF derived from the name authority and related bibliographic data of the participating libraries.

More information can be found at the [OCLC Research VIAF Project page](#).

Search

Select Field:

All Names

Select Index:







All VIAF

Search Terms:

Cervantes Saavedra, Miguel de 1547 1616

Search

1 heading found for *Cervantes Saavedra, Miguel de 1547 1616*

Name	Sample Title
<p>1 Cervantes Saavedra, Miguel de 1547-1616 </p>	<p>El ingenioso hidalgo Don Quijote de la Mancha</p>
<p>Cervantes Saavedra, Miguel de </p>	<p>El ingenioso hidalgo Don Quijote de la Mancha</p>
<p>Cervantes, Miguel de, 1547-1616 </p>	<p>El ingenioso hidalgo Don Quijote de la Mancha</p>
<p>СЕРВАНТЕС СААВЕДРА, МИГЕЛЬ ДЕ, 1547-1616 </p>	<p>El ingenioso hidalgo Don Quixote de la Mancha.</p>
<p>1547-1616 סרוונטס, מיגל דה </p>	<p>דון קישוט.</p>
<p>1616-1547 م. ثباتس ساavedra, ميغل دي </p>	<p>Don Quijote de la Mancha.</p>

Search

Select Field:

All Names

Select Index:

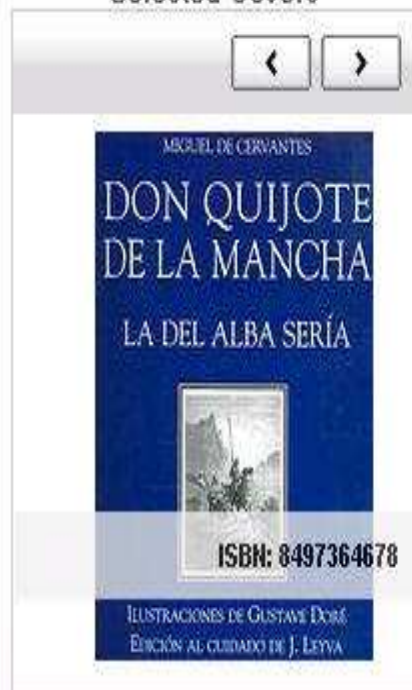
All VIAF

Search Terms:

Cervantes Saavedra, Miguel de 1547 1616

Search

Selected Covers



Cervantes Saavedra, Miguel de 1547-1616

Cervantes Saavedra, Miguel de

Cervantes, Miguel de, 1547-1616

СЕРВАНТЕС СААВЕДРА, МИГЕЛЬ ДЕ, 1547-1616









1547-1616, מִיגֵל דֵה, סרוונטס

ثريانتس سابدرا، ميغل دي، 1616-1547 م

VIAF ID: 17220427

Preferred Forms

Cervantes

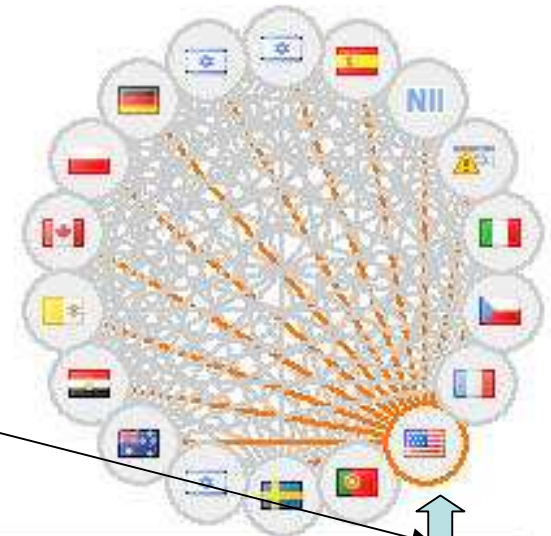
-  [100 1a Cervantes Saavedra, Miguel de, id 1547-1616](#) 
-  [200 1a Cervantes, ib Miguel de, if 1547-1616](#) 
-  [100 1a Cervantes Saavedra, Miguel de, id 1547-1616](#) 
-  [200 1a Cervantes Saavedra ib Miguel de if 1547-1616](#) 
-  [100 1a Cervantes Saavedra, Miguel de, id 1547-1616](#) 
-  [200 1a Cervantes Saavedra ib , Miguel : de](#) 
-  [100 1a Cervantes Saavedra, Miguel de](#) 
-  [100 1a Cervantes Saavedra, Miguel de id 1547-1616](#) 
-  [100 1a Cervantes Saavedra, Miguel de id 1547-1616](#) 
-  [100 1a СЕРВАНТЕС СААВЕДРА, МИГЕЛЬ ДЕ, id 1547-1616](#) 
-  [100 1a Cervantes Saavedra, Miguel de, id 1547-1616](#) 
-  [100 1a Cervantes Saavedra, Miguel de id 1547-1616](#) 
-  [100 1a Cervantes Saavedra, Miguel de id \(1547-1616\).](#) 
-  [100 1a Cervantes Saavedra, Miguel de, id 1547-1616](#) 
-  [100 1a Cervantes Saavedra, Miguel de, id 1547-1616](#) 
-  [100 1a Cervantes Saavedra, Miguel de, id 1547-1616](#) 
-  [100 1a Cervantes Saavedra, Miguel de, id 1547-1616](#) 
-  [100 1a Cervantes Saavedra, Miguel de, id 1547-1616](#) 



Preferred Forms

Cervantes

-  [100 1a Cervantes Saavedra, Miguel de, 1d 1547-1616](#) 
-  [200 1a Cervantes, 1b Miguel de, 1f 1547-1616](#) 
-  [100 1a Cervantes Saavedra, Miguel de, 1d 1547-1616](#) 
-  [200 1a Cervantes Saavedra 1b Miguel de 1f 1547-1616](#) 
-  [100 1a Cervantes Saavedra, Miguel de, 1d 1547-1616](#) 
-  [200 1a Cervantes Saavedra 1b , Miguel : de](#) 
-  [100 1a Cervantes Saavedra, Miguel de](#) 
-  [100 1a Cervantes Saavedra, Miguel de 1d 1547-1616](#) 
-  [100 1a Cervantes Saavedra, Miguel de 1d 1547-1616](#) 
-  [100 1a СЕРВАНТЕС СААВЕДРА, МИГЕЛЬ ДЕ, 1d](#) 
-  [100 1a Cervantes Saavedra, Miguel de, 1d 1547-1616](#) 
-  [100 1a Cervantes Saavedra, Miguel de 1d 1547-1616](#) 
-  [100 1a Cervantes Saavedra, Miguel de 1d \(1547-1616\)](#) 
-  [100 1a Cervantes Saavedra, Miguel de, 1d 1547-1616](#) 
-  [100 1a Cervantes Saavedra, Miguel de, 1d 1547-1616](#) 
-  [100 1a מִיגֵל דֵּה סַאָוֵדְרָה מִיגֵל דֵּה 1d 1547-1616](#) 
-  [100 1a Cervantes Saavedra, Miguel de, 1d 1547-1616](#) 
-  [100 1a סַאָוֵדְרָה מִיגֵל דֵּה 1d 1547-1616](#) 




Library of Congress/NACO
LC|n 79100233










Cervantes

+ 400's: Alternate Name Forms (128)

- 500's: Related Names (1)

500 1 _ ða Cervantes Saavedra, Miguel de, ðd 1547-1616 

- Selected Titles

1. El ingenioso hidalgo Don Quijote de la Mancha (480) 
2. Don Quijote de la Mancha. (292) 
3. Novelas ejemplares. (228) 
4. El ingenioso hidalgo Don Quijote de la Mancha (171) 
5. Entremeses (147) 
6. El ingenioso hidalgo Don Quixote de la Mancha. (113) 
7. Don Quichotte de la Manche (112) 
8. L'ingénieux hidalgo Don Quichotte de la Manche. (103) 
9. Don Quijote (102) 
10. Don Quixote de la Mancha (94) 

+ Countries of Publication (120)

+ Publication Statistics

+ Selected Publishers (13)

About

Personal Information

Gender: Male

Nationality:

ES - Spain 

Language:

spa - Spanish 

External Links

[Wikipedia - Miguel de Cervantes](#)

[WorldCat Identities](#)

The VIAF record in RDF :

a common vocabulary and syntax

```
<?xml:version="1.0" encoding="UTF-8"?>
  <rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
    xmlns:owl="http://www.w3.org/2002/07/owl#"
    xmlns:viaf="http://viaf.org/ontology/1.1/#"
    xmlns:foaf="http://xmlns.com/foaf/0.1/"
    xmlns:skosxl="http://www.w3.org/2008/05/skos-xl#"
    xmlns:skos="http://www.w3.org/2004/02/skos/core#"
    xmlns:rdaGr2="http://RDVocab.info/ElementsGr2/"
    xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#"
    xmlns:rdaEnt="http://RDVocab.info/uri/schema/FRBREntitiesRDA/"
    xml:base="http://viaf.org">
    _<rdf:Description rdf:about="http://viaf.org/viaf/17220427">
      <rdf:type rdf:resource="http://xmlns.com/foaf/0.1/Person"/>
      <rdf:type
        rdf:resource="http://RDVocab.info/uri/schema/FRBREntitiesRDA/Person"/>
      <foaf:name>Cervantes-Saavedra, Miguel-I del ·1547-1616</foaf:name>
      <foaf:name>Cervantes-Saavedra, Miguel-de</foaf:name>
      ◦ <foaf:name>Cervantes, Miguel-de, ·1547-1616</foaf:name>
      ◦ <foaf:name>Сервантес-Сааведра, Мигель-Де, ·1547-1616</foaf:name>
      ◦ <foaf:name>1547-1616, מיגל דל סאָוועדרא, מִיגֵל דֵל סַאָוַעֲדְרָא</foaf:name>
      ◦ <foaf:name>م ·1616-1547, ثريانتس ساايدرا، ميغل دى،</foaf:name>
      ◦ <foaf:name>Cervántes, Miguel-de ·1547-1616</foaf:name>¶
```

Cervantes in RDF

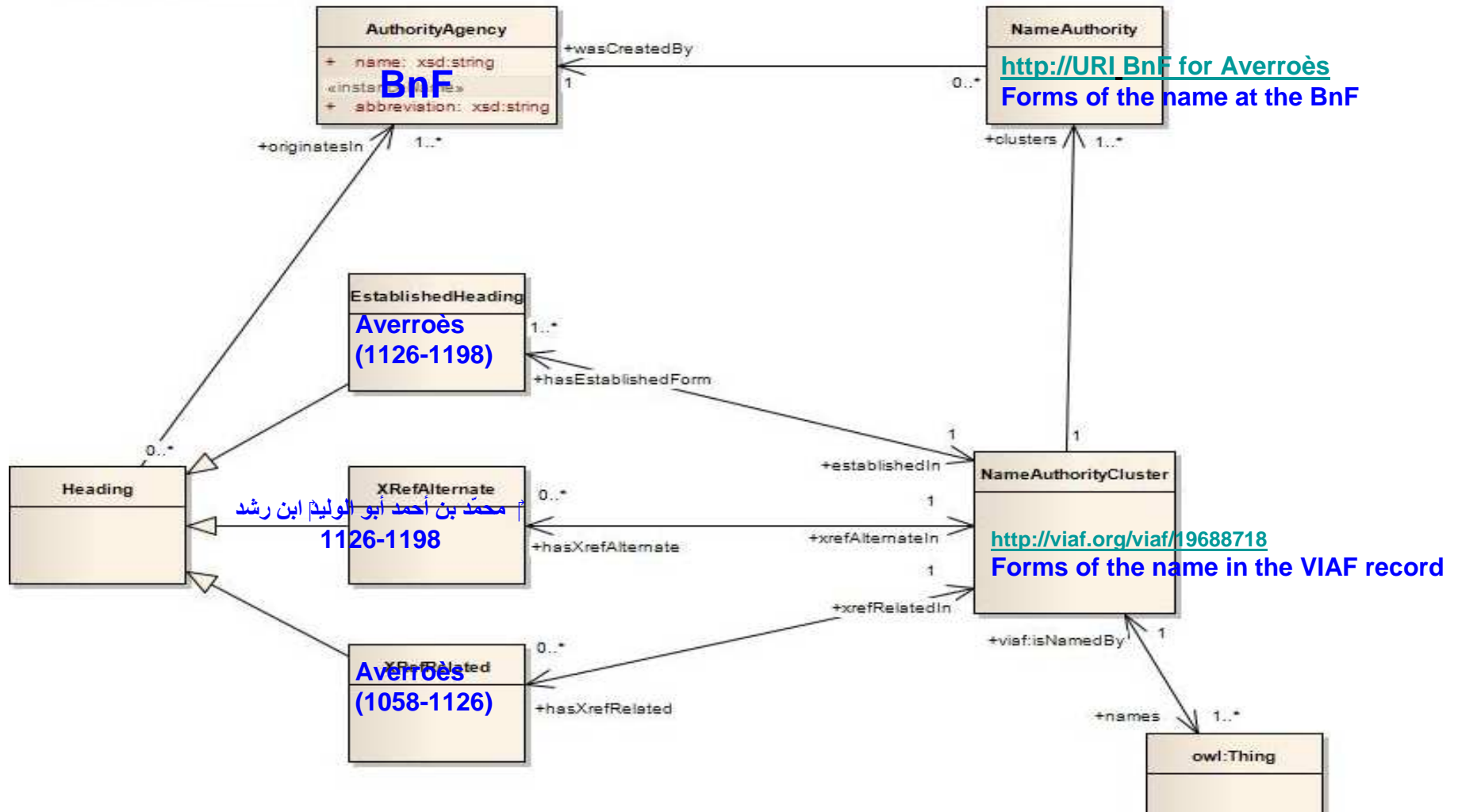
VIAF : what are the uses ?

VIAF AND THE SEMANTIC WEB

VIAF ONTOLOGY

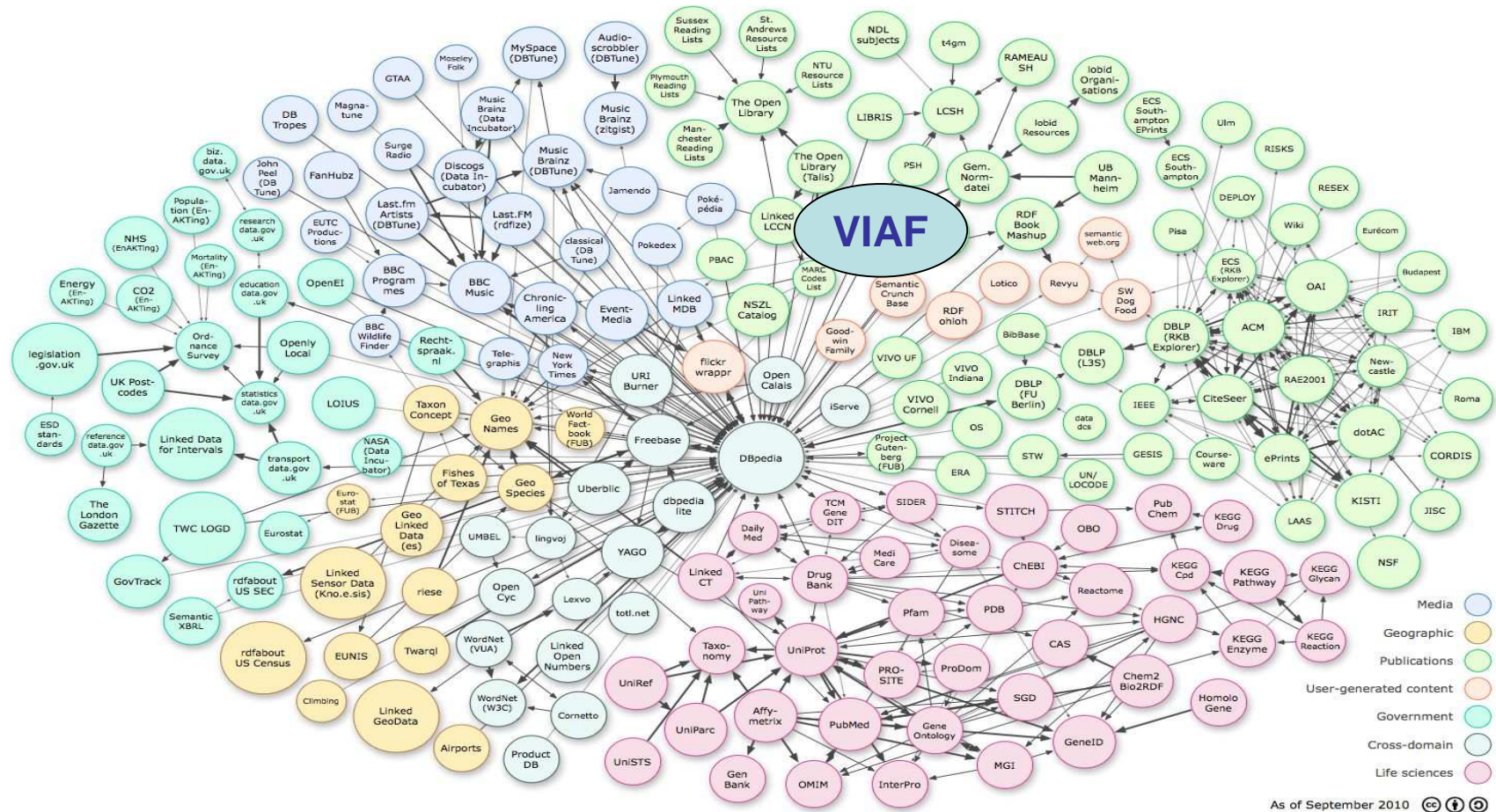
Example: Averroes in RDF

Name: viaf.owl
 Package: http://viaf.org/ontology/1.1/
 Version: 1.1
 Author: OCLC Research



VIAF AND THE SEMANTIC WEB

in the cloud of the *linked data*



USAGES OF VIAF

- ✓ **A reference tool for cataloguers**
- ✓ **Play a role in the initialisation of the ISNI data base (ISO 27729)**
- ✓ **Play a role in the European project ARROW (identifiers of stakeholders)**
- ✓ **Dump in RDF are available for use in the linked data world**
- ✓ **etc.**

NEXT STEPS FOR VIAF

- Better searching
- More “Linked data”
 - Related persons as in WorldCat Identities, Wikipedia, etc.
- Participants beyond libraries
 - Rights management agencies, Publishers
 - Museums, Archives
- More name types
 - Corporate and Family names
 - Uniform titles
 - Geographic names

CONCLUSION

- « Trust » is an important notion in the architecture of the Semantic Web
- The quality of the library authority data is generally recognized
- The authority work should be encouraged to offer valuable source data