FranceArchives: A portal for French archives

Élodie Thieblin, Fabien Amarger, Katia Saurfelt, Mathilde Daugas



SWIB23, Berlin, September 13, 2023

FranceArchives



FranceArchives : key informations



Fran	nceAr	chives
PORTAIL	NATIONAL	DES ARCHIVES

SEARCH IN THE NAME BASE 역 ARCHIVES MANAGEMENT 유 MENU =



- Online since March 2017
- Managed by the French Ministry of Culture
- For a wide audience (researchers, genealogists, archivists...)
- Various partners: national and local archives, university archives, public archival institutions and private archival institutions



FranceArchives : key informations

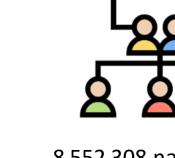


137 content providers



82 590 findingaids and 21 357 059 components

loglab



8 552 308 names in the base de noms



RÉPUBLIQUE FRANÇAISE

XML-EAD, XML-EAC, Pdf, csv OAI-PMH / manual upload



About 270 000 visitors per month

Aggregation requires Harmonisation

- Format harmonisation:
 - Input: EAD, Dublin Core, particular CSV formats, etc.
 - Mapping them to the Database Schema
- Authority harmonisation
 - Input: Documents' Indexes
 - Authority Management



Authorities Management



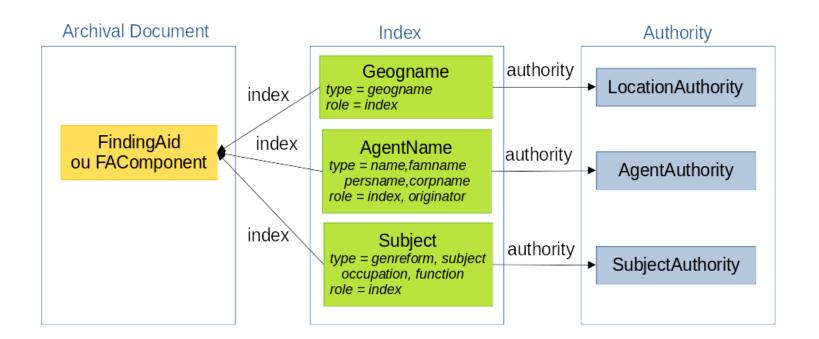
From Indexes to Authorities

Linking FindingAid indexes to 3 types of authorities:

- Locations
- Agents (Person, Organisation, ...)

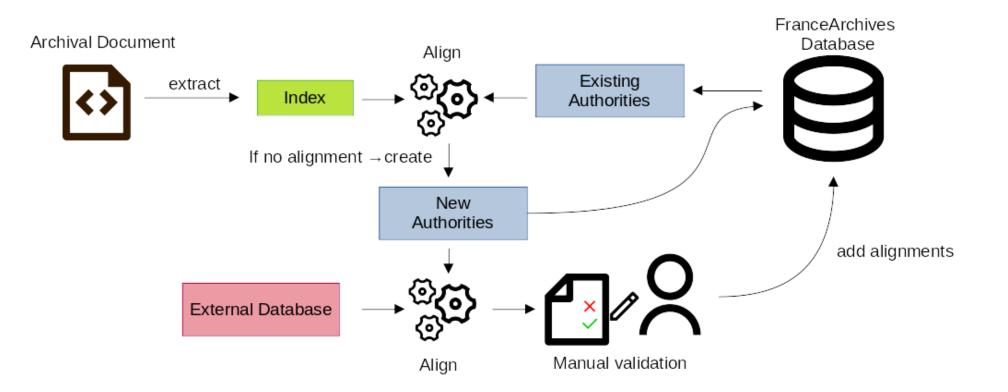
- Subjects

Unique identifiers





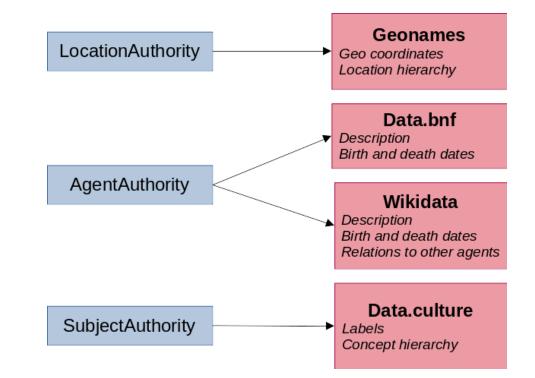
Authority workflow





External Reference Mapping

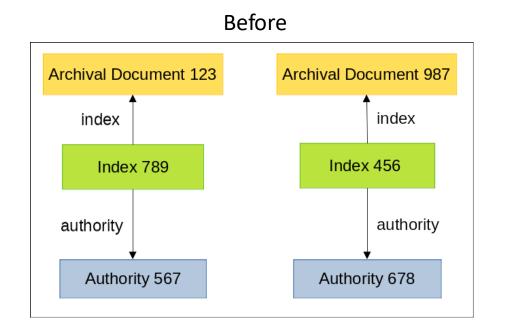
- Alignment to external reference databases
- Information retrieval from the new sources
- **Periodical update** of the retrieved information

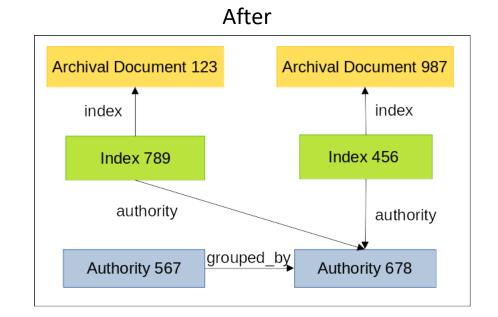




Authorities Grouping

When two authorities represent the same real-world entity: they are grouped (manual operation)



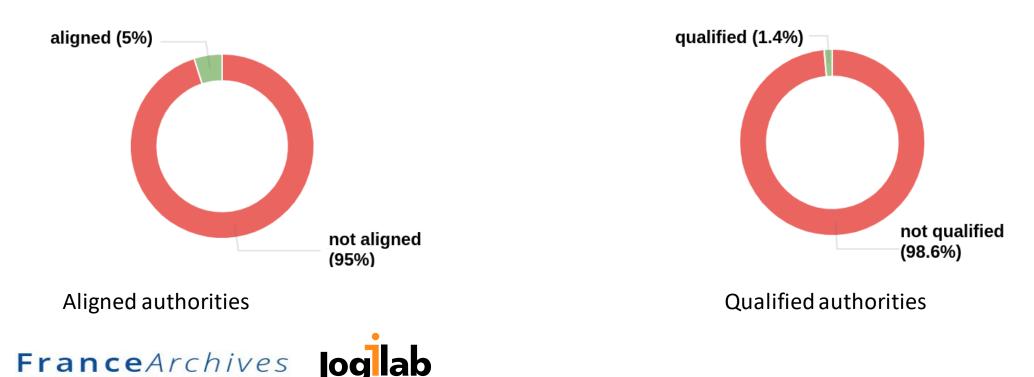




Authorities

- Agent Authorities: 3 729 074 (aligned: 29 556 qualified: 24 541)
- Location Authorities: 641 916 (aligned: 189 879 qualified: 34 426)
- Subject Authorities: 198 542 (aligned: 6 403 qualified: 2 737)

RÉPUBLIQUE FRANÇAISE



Exporting the data



Records In Context - Ontology

- Based on Records In Context Conceptual Model
- Created and promoted by the <u>International Council on Archives</u>
- Good coverage of EAD (archives) and EAC-CPF (authorities) standards
- Similar translation performed by the National Archives of France
- Other projects and tools implement this ontology
- Good support for ontology usage (documentation, direct contact)

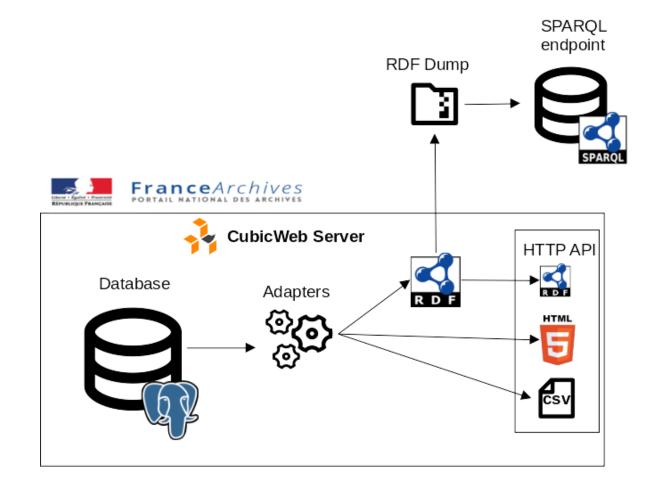


International Council on Archives Conseil International des Archives



RDF Export Workflow

- Adapters to transform database entities
- Content negociation on-the-fly
- Dump generated every 6 months
- SPARQL endpoint from the dump





Access to RDF data

- Content negociation : HTTP Response
- Button from the entity's page to download in the formats: xml, ttl, nt, n3 et jsonId, calculated on the spot.
- <u>RDF Dump</u> generated every 6 months.
- <u>SPARQL Endpoint</u> updated every 6 months.
- Classic SPARQL interrogation tool : Yasgui.
- User-friendly SPARQL interrogation tool : <u>Sparnatural</u>.



Conclusion and Perspectives



Conclusion

- Archival documents searchable by all
- Quality indexation
- LOD compliant data
- Large-scale RDF data management





Perspectives

- Exporting authorities links to the external databases:
 - Data.bnf
 - Wikidata
 - Persée
- Extend the retrieved data from external databases to allow more queries
- Extend the RDF translation to other documents (personal records, etc.)
- Optimize the workflow for larger data
- Follow RIC-O's evolutions



Thank you !

elodie.thieblin@logilab.fr

mathilde.daugas@culture.gouv.fr



Annex



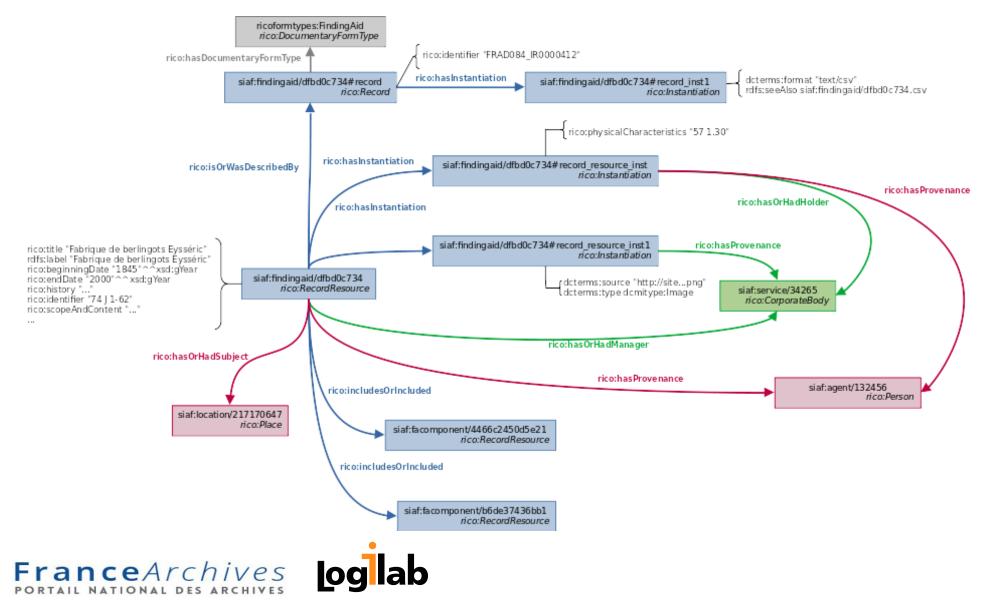
RIC-O

Other candidate ontologies

- OAD (Ontology for Archival Description)
- Locah
 - Not maintained
- The National Archives vocabulary (TNA) and the Digital Records Infrastructure vocabulary (DRI)
 - Not on the LOV
 - Not extensive enough



RIC-O



Liberté • Égalité • Fraternité

RÉPUBLIQUE FRANÇAISE

A look back at the implementation steps

- 2018-: processing of agent, location and subject authorities ;
- June-november 2020: study to adopt the best process ;
- November 2021: order & realization in 18 months
 - $\,\circ\,$ January 2022: qualification of authorities.
 - $\,\circ\,$ January-June 2022: conversion in RDF.
 - o July-August 2022: installation of Virtuoso and 1st conversion (279 millions of triplets).
 - January 2023: 2nd conversion in RDF (316 millions de triplets).
 - February-May 2023: implementation of Sparnatural.
 - July 2023: persistant storage, process of conversion (about 2.5 days) & ingress on Virtuoso (about 6h) and generation of the RDF archive.
 - May 2023: 3^e conversion (385 millions of triplets):
 - ✓ 274 millions linked to qualified authorities
 - ✓ 109 millions with no link
- Cost (only RDF linked tasks) : about 88 000€ TTC or 10% of the total.



Sparnatural

Locations subject of archival documents linked to the finding aid « Fabrique de berlingot Eysséric » -

