

# Actors & competences cartography (v1.4)

## (v1.4)

### [4CH European project](#)

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# 4CH European project

## Competence Centre for the Conservation of Cultural Heritage

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A European reference for transnational and interdisciplinary networking in the preservation of Cultural Heritage.

A Competence Centre able to work with a network of national, regional, and local Cultural Institutions, providing them with advice, support, and services to benefit from the opportunities offered by new ICT technologies.

# 4CH consortium (1)



## 4CH consortium (2)



## 4CH consortium (3)

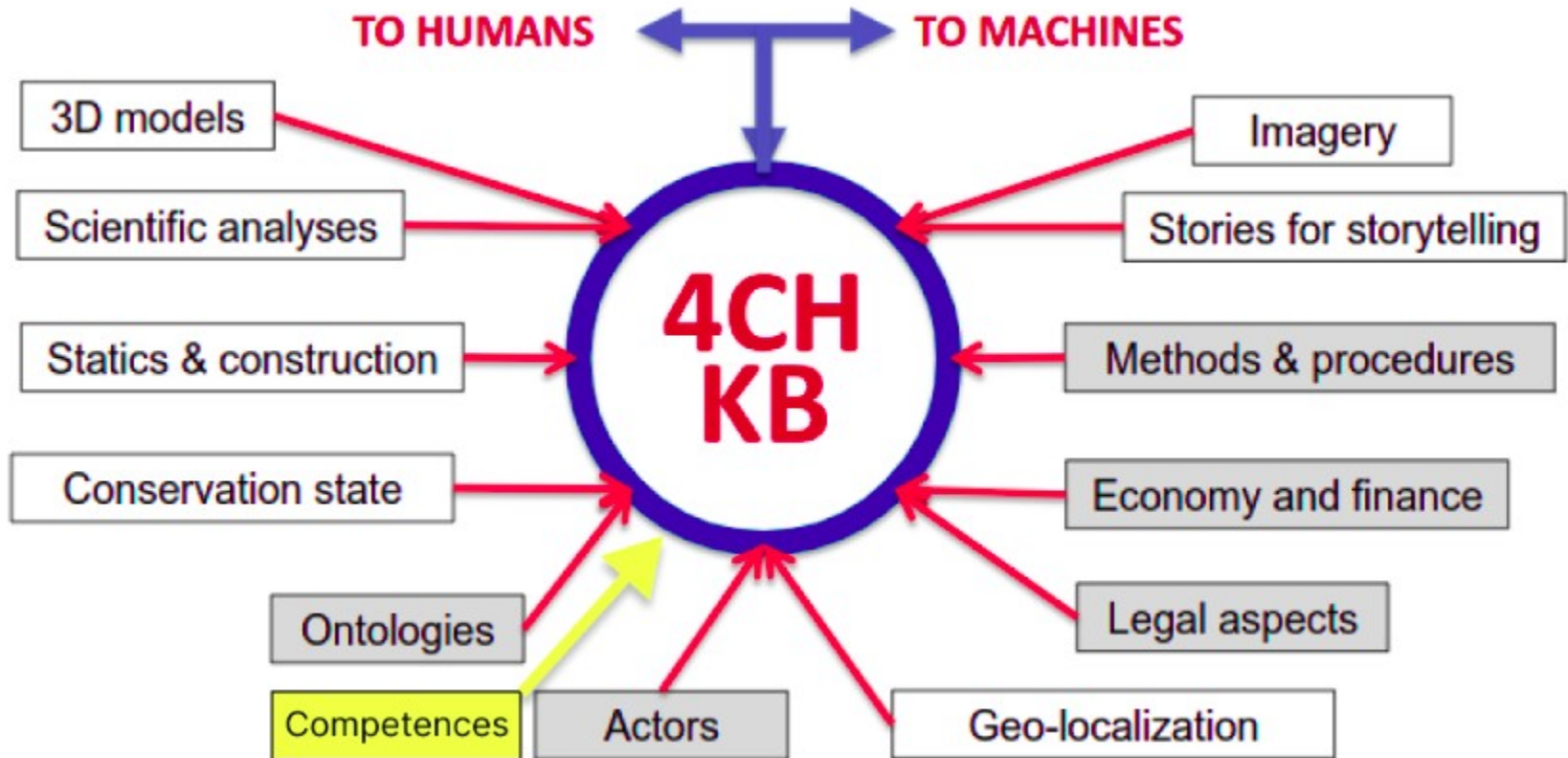


## Principles for a knowledge base

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- a distributed graph
- link to external informations
- using standard ontology (CIDOC-CRM / EDM (Europeana))
- both human & machine can access to the KB
- no massive data transfert
- data will reside at data owner
- processing/apps can be made at the edge of the cloud (not centralised)

# 4CH Knowledge Base (KB)



## French team

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- Université de Tours (B. Markhoff, Y. Duthé)
- CNRS (O. Marlet, X. Rodier)

### **Advisory board**

- Olivier Baude (IR\* Huma-Num)
- Catherine Cullen (United Cities and Local Governments)
- Sylvie Le Clech (Ministry of Culture),
- Marie-Véronique Leroy (Ministry of Culture)



# Involvement

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By participating to “Work Packages” (WP), on the KB and its implementation (distributed knowledge graph)

**Proposal:** a semantic and distributed architecture to store actors and competences data.

# Issues

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- No way to find easily skills in cultural heritage domain
- Most of the time, this is done through a network of human knowledge, and you can miss out on relevant resources.
- Existing data is not semantized, not interoperable, and outdated.
- Attempts at centralized platforms lock up data and struggle to protect personal data.
- In the end, the data is not maintained over time.

## Solution : une base de connaissance partagée

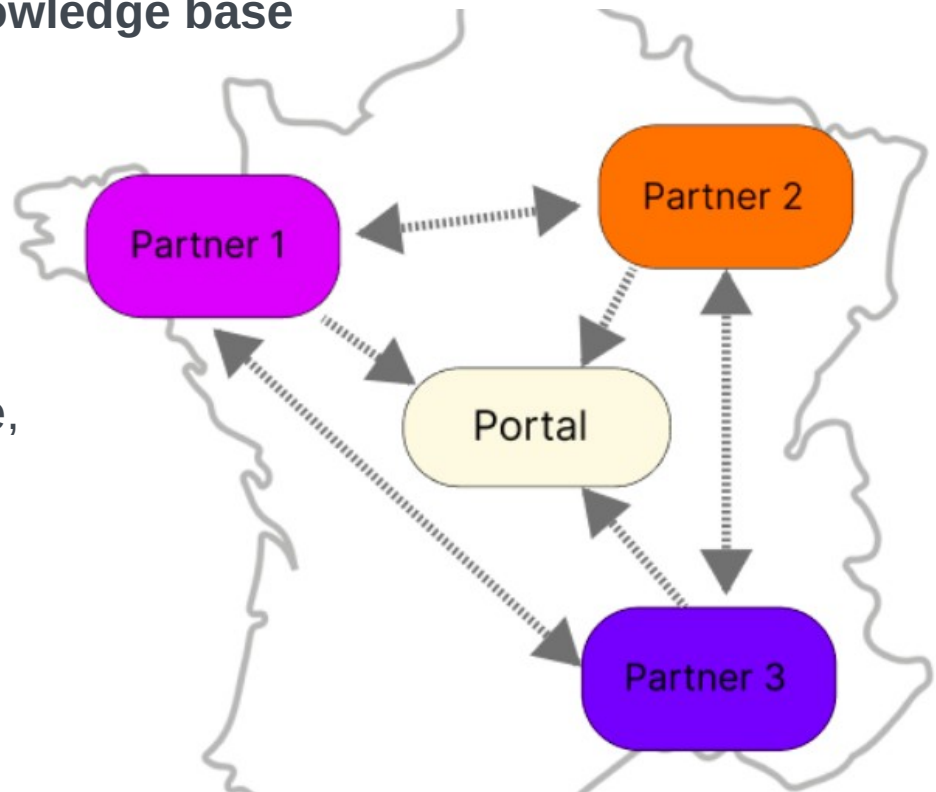
We propose a **distributed architecture** based on **semantic & standardized** servers.

A **digital common**, a **shared knowledge base**  
a **shared gouvernance**

Each partner is **responsible**  
**for there data**

If data is maintained at the source,  
**it remains up to date**

Portal “harvests” these data and  
aggregates them



## Expected benefits

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- To provide in a digital platform, to all cultural heritage partners, a “**who knows/holds/does what?**”
- To allow each actor to :
  - **express and expose** his competences
  - **find competences** more easily
- To network actors in order to develop **coherent national responses**

## How to implement the solution?

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- By **involving the partners** in the reflections upstream, and in the feeding of their data.
- By using **existing data sources** of these partners, so as not to duplicate information.
- By organizing a **shared governance** and **meeting times**
- By developing a technical infrastructure that adapts to the **heterogeneity of existing systems**.

## Flexibility through standards

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Each partner will be free to choose...  
“as long as we share the same standards”.

- to **modelize/store** the data
- to **provide/access** the data

Some of these standards are already used by the  
**Huma-Num MASA consortium.**

## Technical solution

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The proposed technical solution is a set of interconnected servers using **SOLID** proposed by the W3C

For more informations on SOLID, you can consult [this other SOLID presentation](#)

## Deliverables

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Like the 4CH project, **the aim is not to provide a functional map containing all the competences** in the field of cultural heritage.

Instead, we wish to provide, into **a portal, a technical and documentary base** allowing each partner to be supported in the development of their own semantic and distributed server, which will then be connected to the general cartography.

Thus, the data (actors, skills, professions, tools, etc.) **will be provided and maintained by each partner.**



## Portal content

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- A **white paper** (summary of exchanges with partners and thinking in progress)
- The **documentation of the ontology** and advices on the choice of additional vocabularies.
- An **web application** allowing to display and to query actors and competences from **3 or 4 data servers** representing relevant examples in the field of cultural heritage
- **Tutorials** to install and deploy a partner's data server or web application

# Project plan

	April	May	June	July	August	September	October	November
Animation communication	Meetings			White paper			Tutorials	
Demonstrator	Data server				Web application			Deployment
Development		SOLID	SemApps	Portal		GDPR	Authentication	UX
Lookout	4CH	4CH / SOLID	Ontologies / Referentials			GDPR	Authentication	
Presentation	MSH (PPT)	Consortium MASA (PPT)	Consortium 4CH (PPT)	Partners (PPT)		MSH (Démo)	Consortium 4CH (Demo)	Partners (Démo)
Production Data servers								Partner 1 Integration
Production Web Application								Partner 1 Integration

Thanks !

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# Thank you!



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