

Why SousLeSens ?

Claude Fauconnet

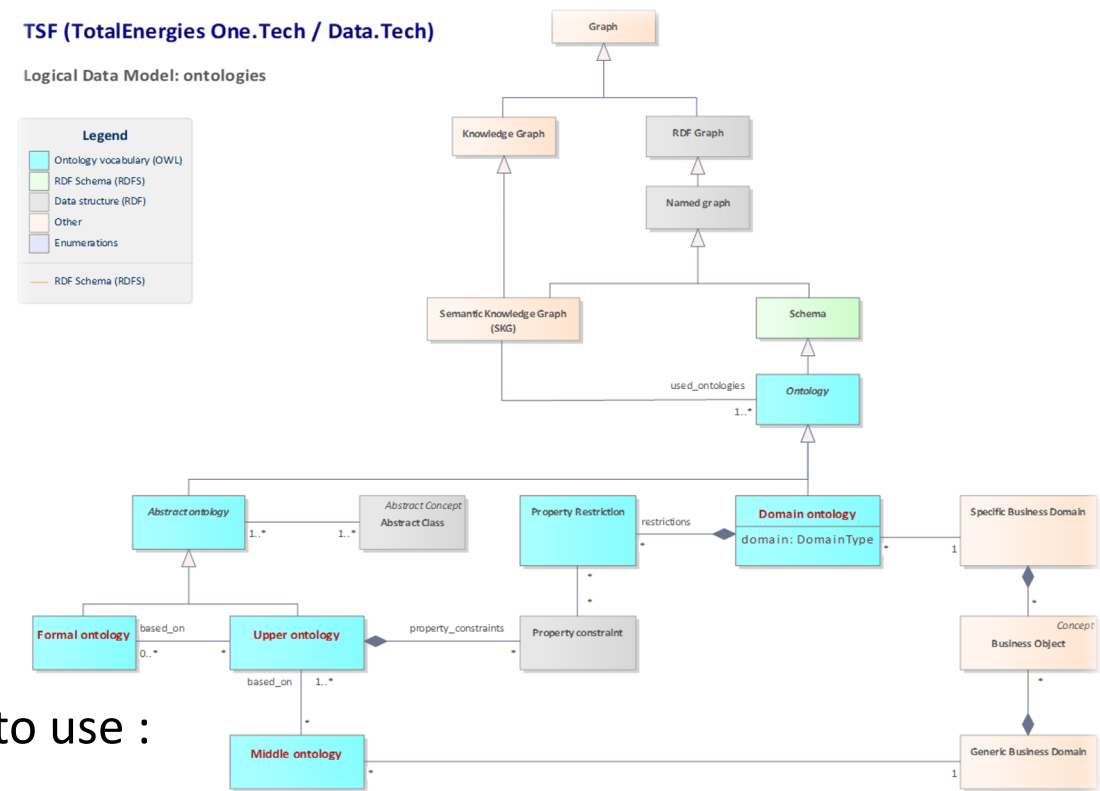
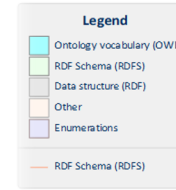
Why SousLeSens ?

Why SousLeSens ?

- ✓ Knowledge graphs (KG) become a core concept for Industry
- ✓ KG's needs to be semantized->backed by ontologies ->SKG's
- ✓ Ontologies and SKG's have to become every day tools easy to use :
 - ✓ Build rigourous domain/application ontologies based on reference ontologies
 - ✓ Convert tabular data into SKG's (build correct mappings is a tricky task)
 - ✓ Easy use of SKG's: API's , exploration, reasoning...

TSF (TotalEnergies One.Tech / Data.Tech)

Logical Data Model: ontologies



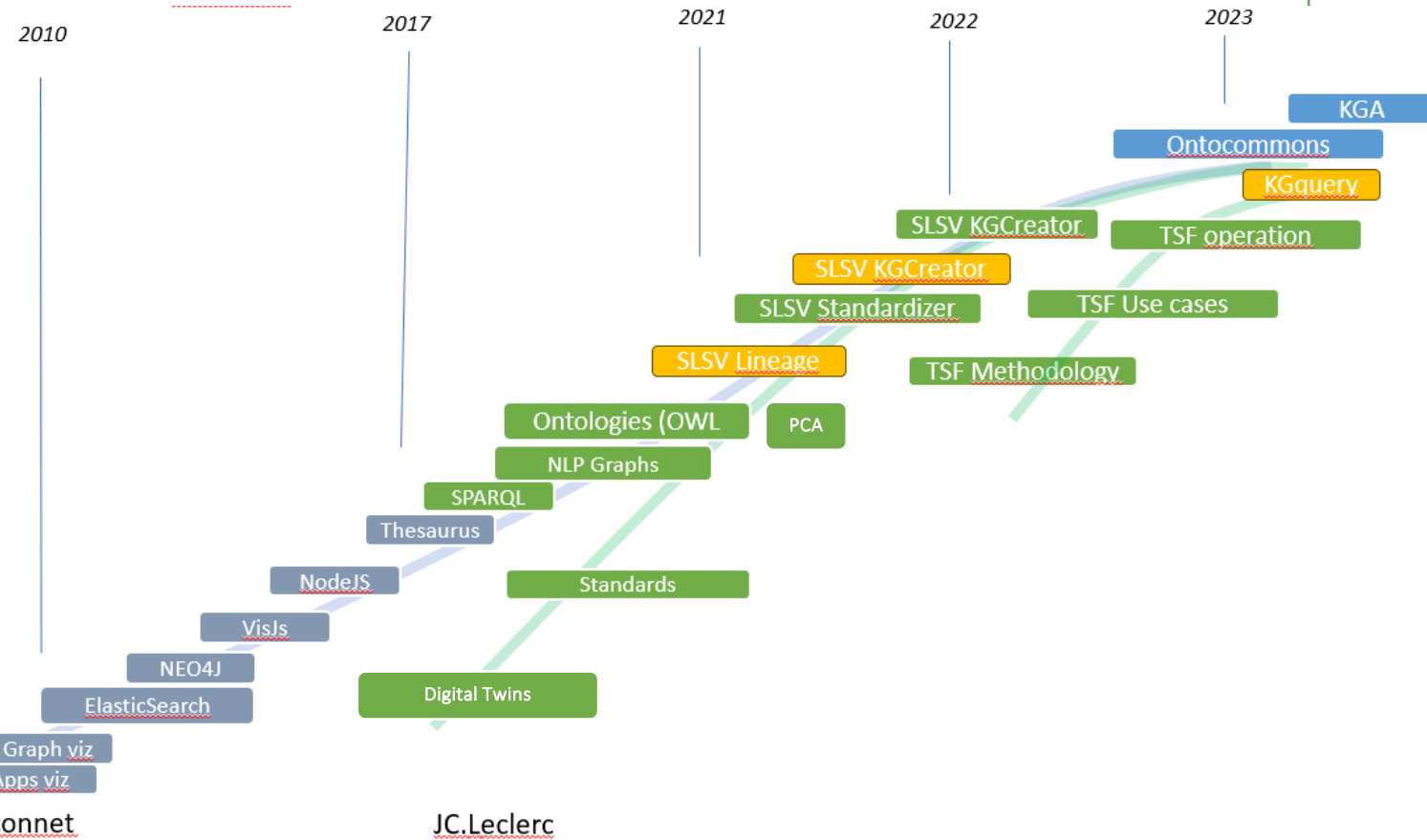
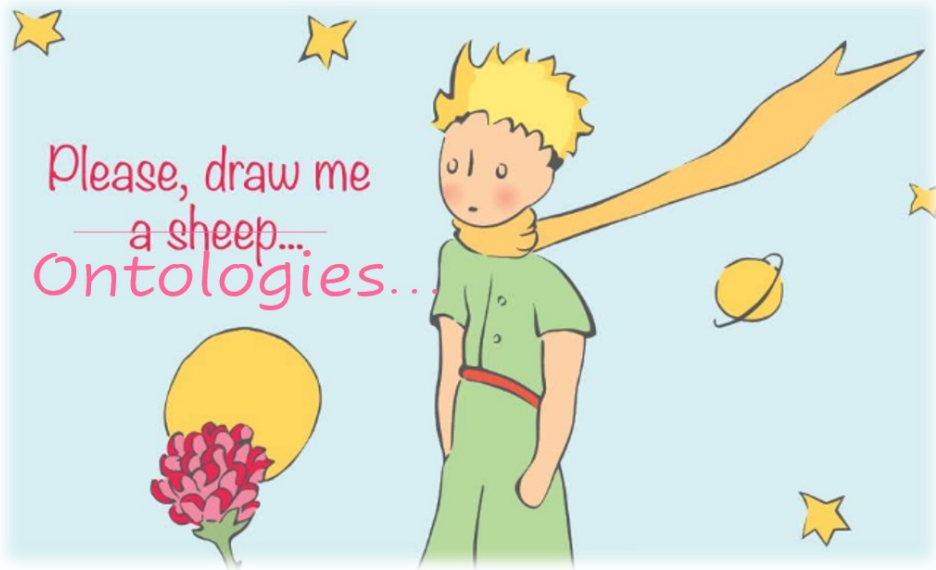
In short : you cannot ask any industrial actor to use Protege

SousLeSens is an open source (license MIT) that ambition to fill the lack of such capabilities

Background : SousLeSens is born under gold★ experience

A **synthesis/naturalist** professional experience (O&G geosciences) dealing every day with :

- ✓ Mining multiple heterogeneous and complex data
- ✓ Facing **Life Cycle dimension** and evolutive aspects of things
- ✓ Grabing complexity by spatial visualization (cartography)
- ✓ Committed by Interoperability



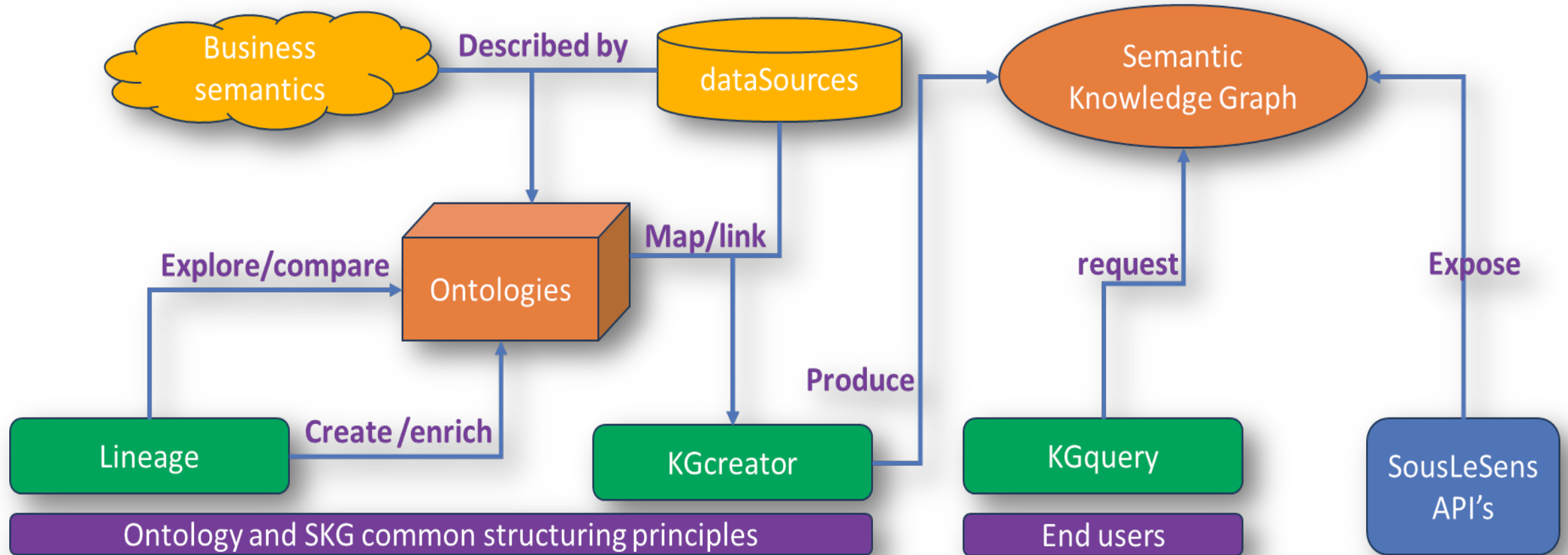
petroleum geoscientist (synthesis)

IT project Mgr and developer

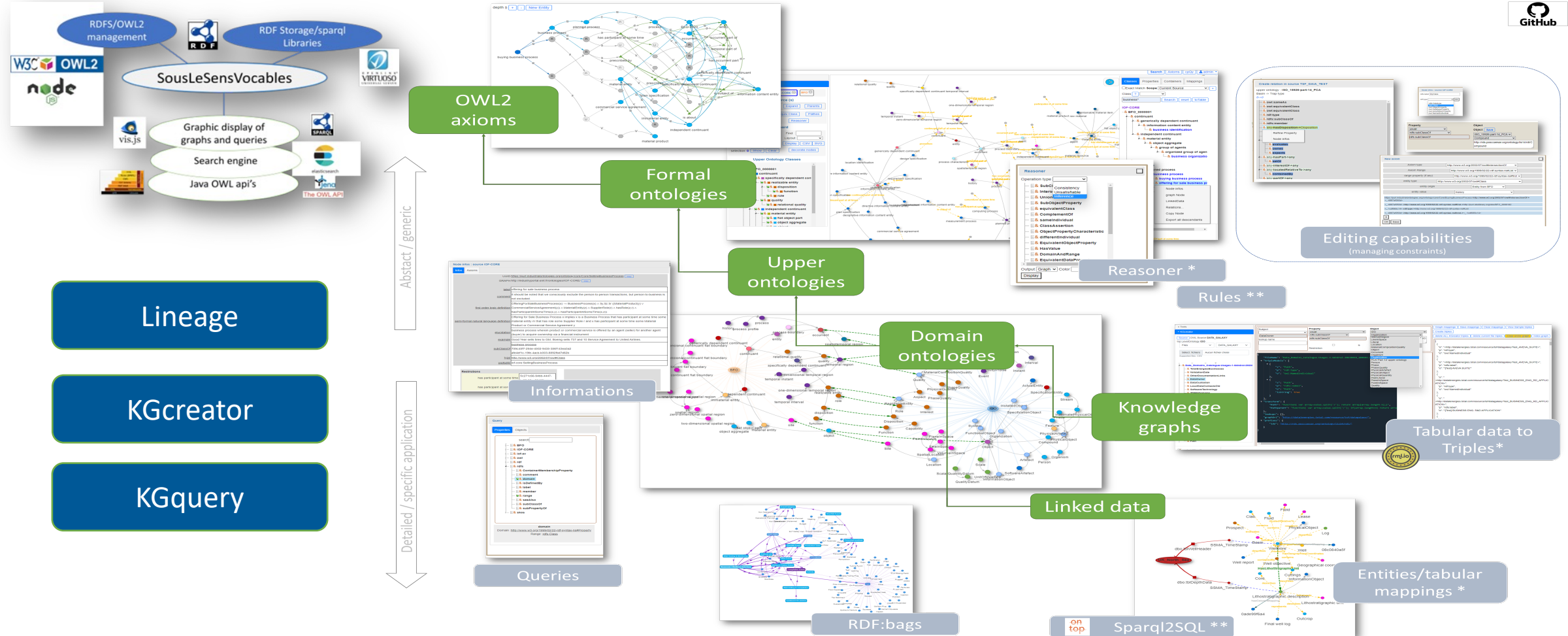
C.Fauconnet

JC.Leclerc

SousLeSens Methodology and workflow



SousLeSens Architecture and tools



Abstract / generic
Detailed / specific application

Lineage
KGcreator
KGquery

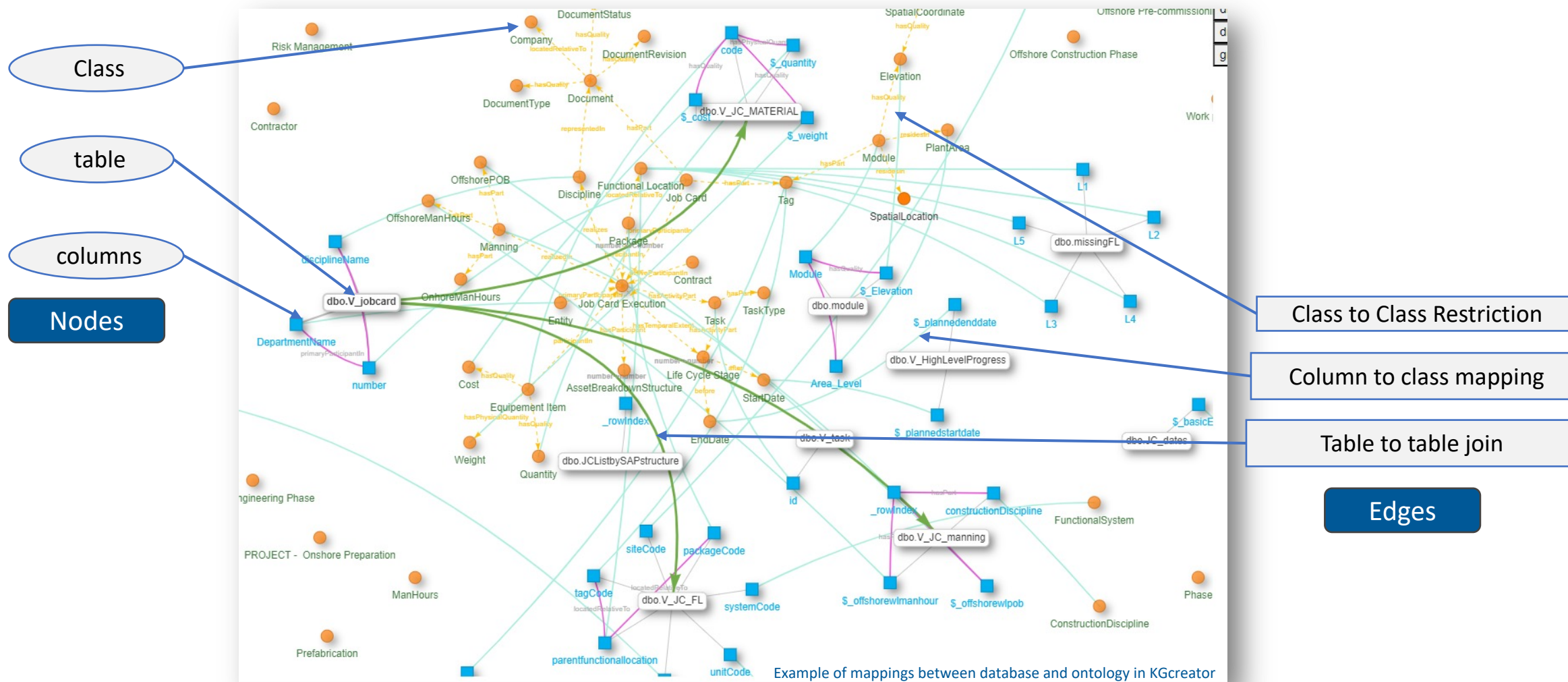
Souslesens Web App	Vizualisation & display	Graphic interaction	Constraints mgt	Sparql generation	Java APIs JOWL	SousLeSens API's
Souslesens backend	Sources mgt	Users & profiles Mgt	Proxies	Logic		
Search engine	Triplestore					

Visual control while building mappings @SousLeSens

Advanced Graph visualization is mandatory to embrace complexity :

- Graphs are poorly **understandable** using tabular representation
- Graphic interaction authorizes **random mining** and **interpretation**

Visualization is not an output,
it is part of the graph process



SousLeSens Ambition and roadmap

✓ Short term :

✓ Upgrade as part of KGA toolbox

- ✓ Simplify and improve UX/UI for specific user profiles
- ✓ Online modular version (SaaS) accessible to members
- ✓ Write narrative documents and tutorials/trainings

✓ Longer term :

- ✓ Enrich functional perimeter : FOL, Axioms, virtual Queries, interoperability
- ✓ Progressive reengineering of code to conform last IT development standards
- ✓ Extensive compliance with KGA methodology and tools

Thank you !

Claude Fauconnet
SousLeSens
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