Navigating the Semantic Model: a CIDOC CRM Browser

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- **Internal use**
  - Usually: open the CIDOC CRM Document (PDF, Word), search for entity/property number/name, search in scope notes, identify properties, domain, range, check inheritance, go through relationships, follow paths …

- **Reply to common questions**
  - "Which are the properties of a given class?" (Domain)
  - "Where a given property goes from here?" (Range)
  - "Which are the inherited properties of a given class?"
  - "Which paths connect class A with class B in the model?"
  - "Which steps should I follow to go from A to B in a meaningful way"?
  - "Which paths should I use for rendering the concept of …?"
  - Classes' Scope Notes

- **Viewer/Browser Assistant**
  - To provide a quick focus on what you have in mind
  - To assist in building CIDOC CRM valid statements
- Inspired by SYNERGY "Mapping Suggester" component
- To exploring and (hopefully) provide a better knowledge of the model
- Mapping Memory Manager
  - Sequential mapping
  - "Build" paths in mind before apply
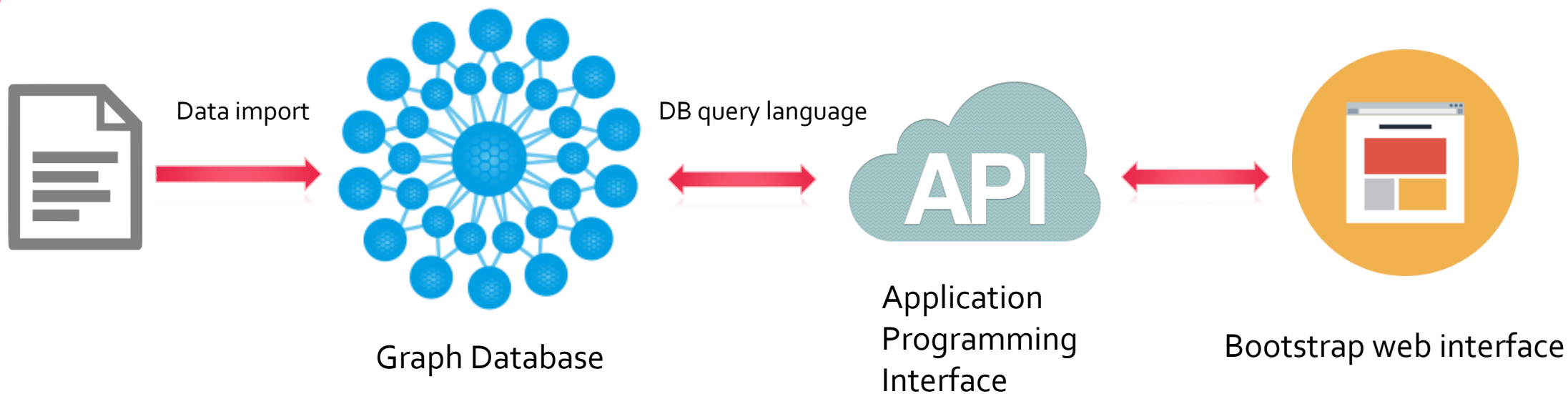 - Starting and ending points

CIDOC-CRM Browser

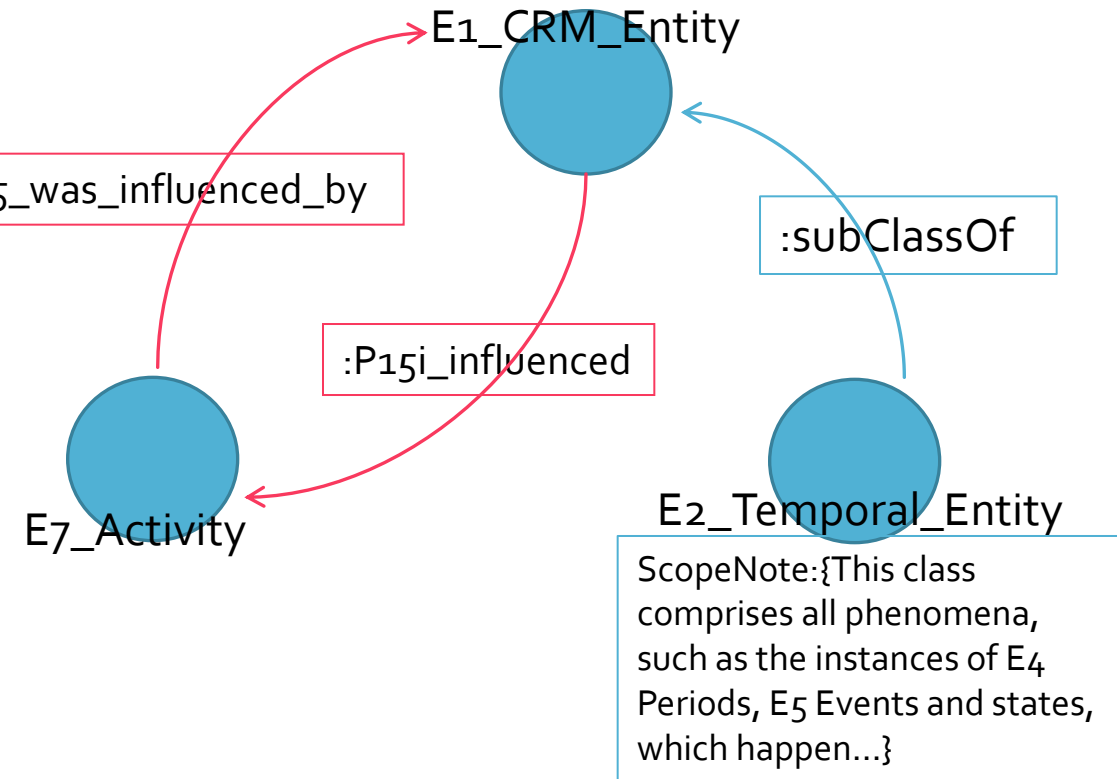CIDOC CRM, version 6.2, encoded in RDFS
cidoc_crm_v6.2-draft-2015August.rdfs

CIDOC CRM Mapping Assistant
navigation web interface
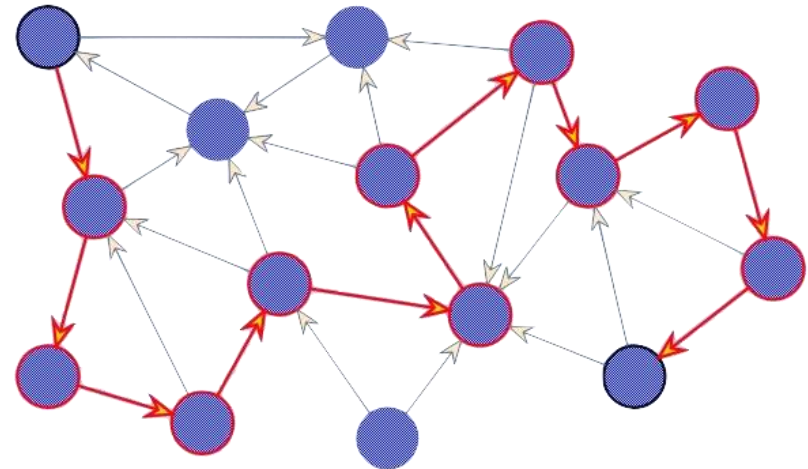
CIDOC-CRM Browser: technologies

Data import

DB query language

Graph Database

Application Programming Interface

Bootstrap web interface

Graph Database Model

E1_CRM_Entity

:P15_was_influenced_by

:subClassOf

:P15i_influenced

- Everything is stored in form of either an edge, a node or an attribute.
- Each node and edge can have any number of attributes.
- Both the nodes and edges can be labelled.
- Labels can be used to narrow searches.

E7_Activity

E2_Temporal_Entity

ScopeNote:{This class comprises all phenomena, such as the instances of E4 Periods, E5 Events and states, which happen...}

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Query connected data

Customizable parameters:

- Max path length

- Direct or indirect path

- Specific intermediate node

Live demo

- **Properties**
  - "What are domain and range of a given property?"
  - "By which classes a given property is inherited?"
  - "Which paths a given property is involved in?"
  - Refine the path according with properties
  - Properties' Scope Notes

- Integrate into 3M and SYNERGY for mapping operations

- Possibility to upload extensions (CRMsci, CRMarchaeo)

- Agnostic interface: to be used with other ontologies

Thank you

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