

Linked Data Based Enterprise Data Integration



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Outline

- 1) Why Linked Data based data integration
- 2) Linked Data integration with PoolParty
- 3) Use cases
- 4) Diggin` deeper... Live Demo
- 5) Discussion



Why Linked Data based data integration

Different views on same objects



This is our
Topseller!



Marketing

This will
never work
properly!



Production

Scattered data pools



Marketing

Production

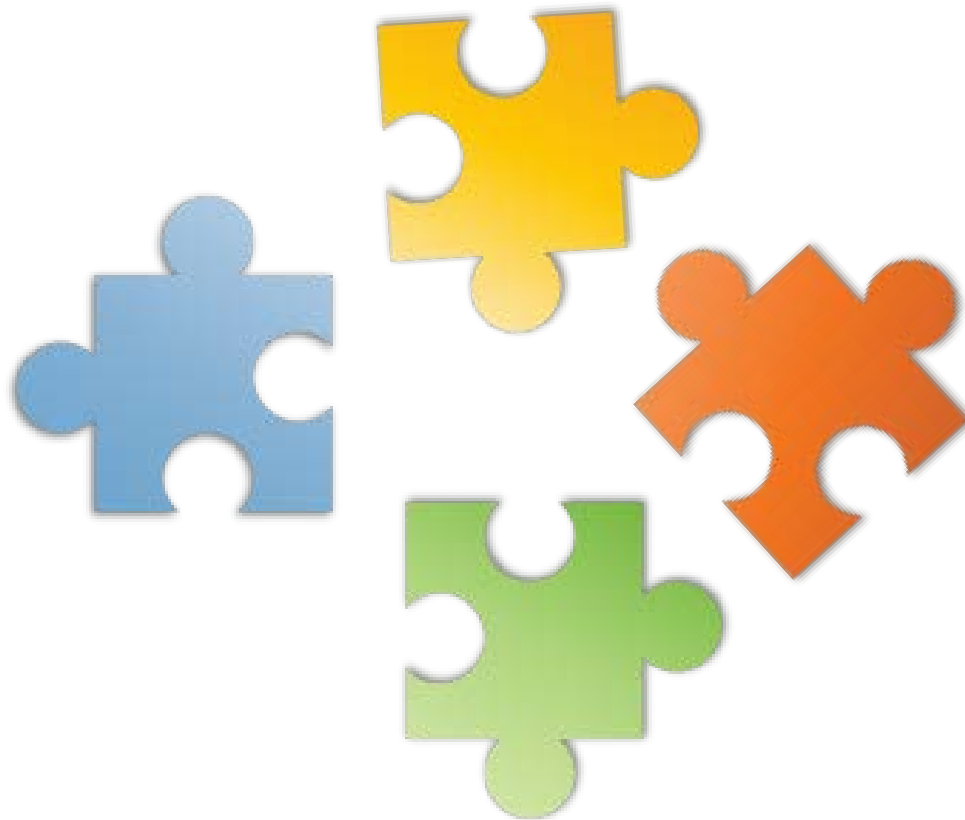


Quality Assurance

Diverse data structures



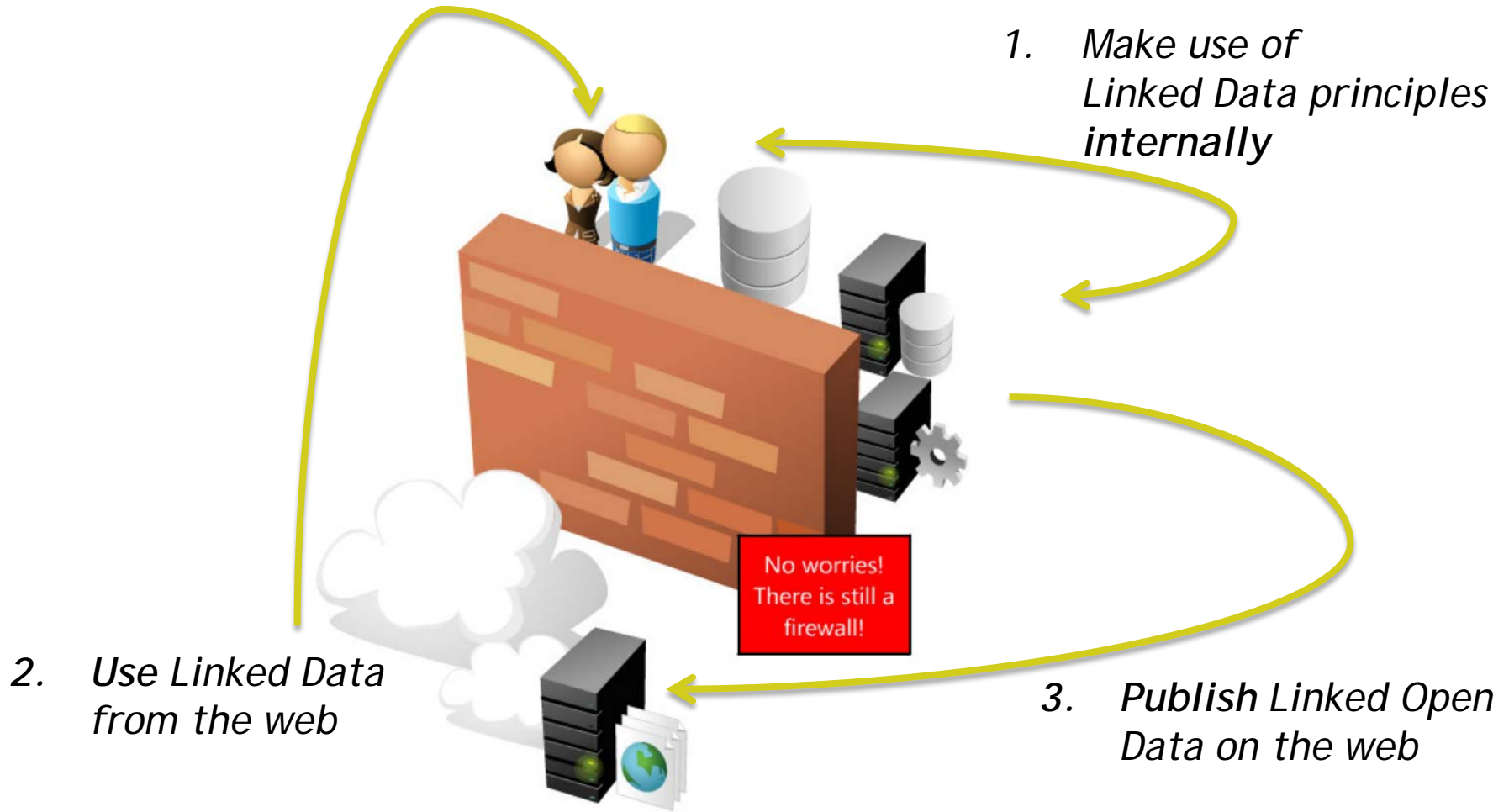
Semantics on different value levels





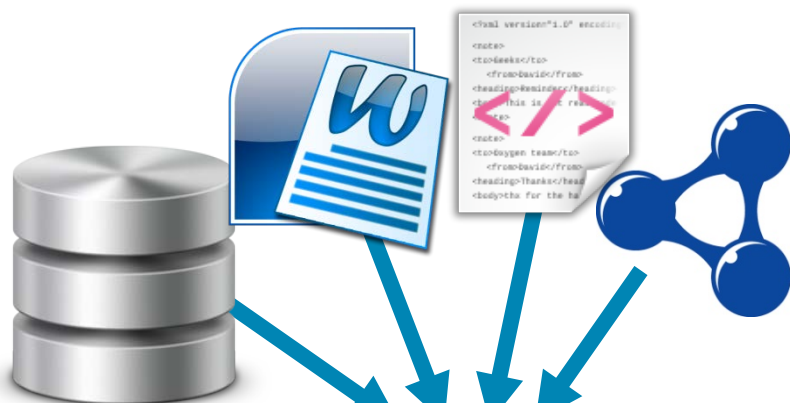
Linked Data integration with PoolParty

3 ways for Linked Data integration





Architecture



search index

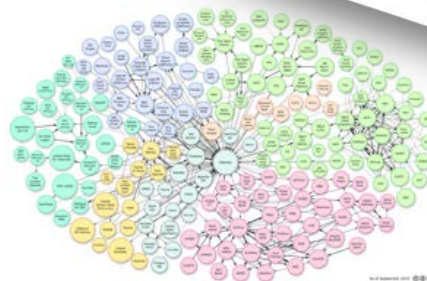


mapping



publish

enrich



Built on Linked Data principles

PoolParty Semantic Web

[html](#)[RDF/XML](#)[TriX](#)[Wiki](#)

Narrower Concept

- http://vocabulary.semantic-web.at/PoolPartySemanticWeb/linked_data_alignment

RDF Type

- <http://www.w3.org/2004/02/skos/core#Concept>
- <http://dbpedia.org/class/yago/Buzzwords>

Close Matching Concepts

- http://dbpedia.org/resource/Linked_Data

Related Concept

- http://vocabulary.semantic-web.at/PoolPartySemanticWeb/search_engine_optimisation
- http://vocabulary.semantic-web.at/PoolPartySemanticWeb/PoolParty_Thesaurus_Manager

Preferred Label

- linked data publishing (en)
- Linked Data Publikation (de)

Narrower Concept (Transitive)

- http://vocabulary.semantic-web.at/PoolPartySemanticWeb/linked_data_alignment

<http://xmlns.com/foaf/0.1/page>

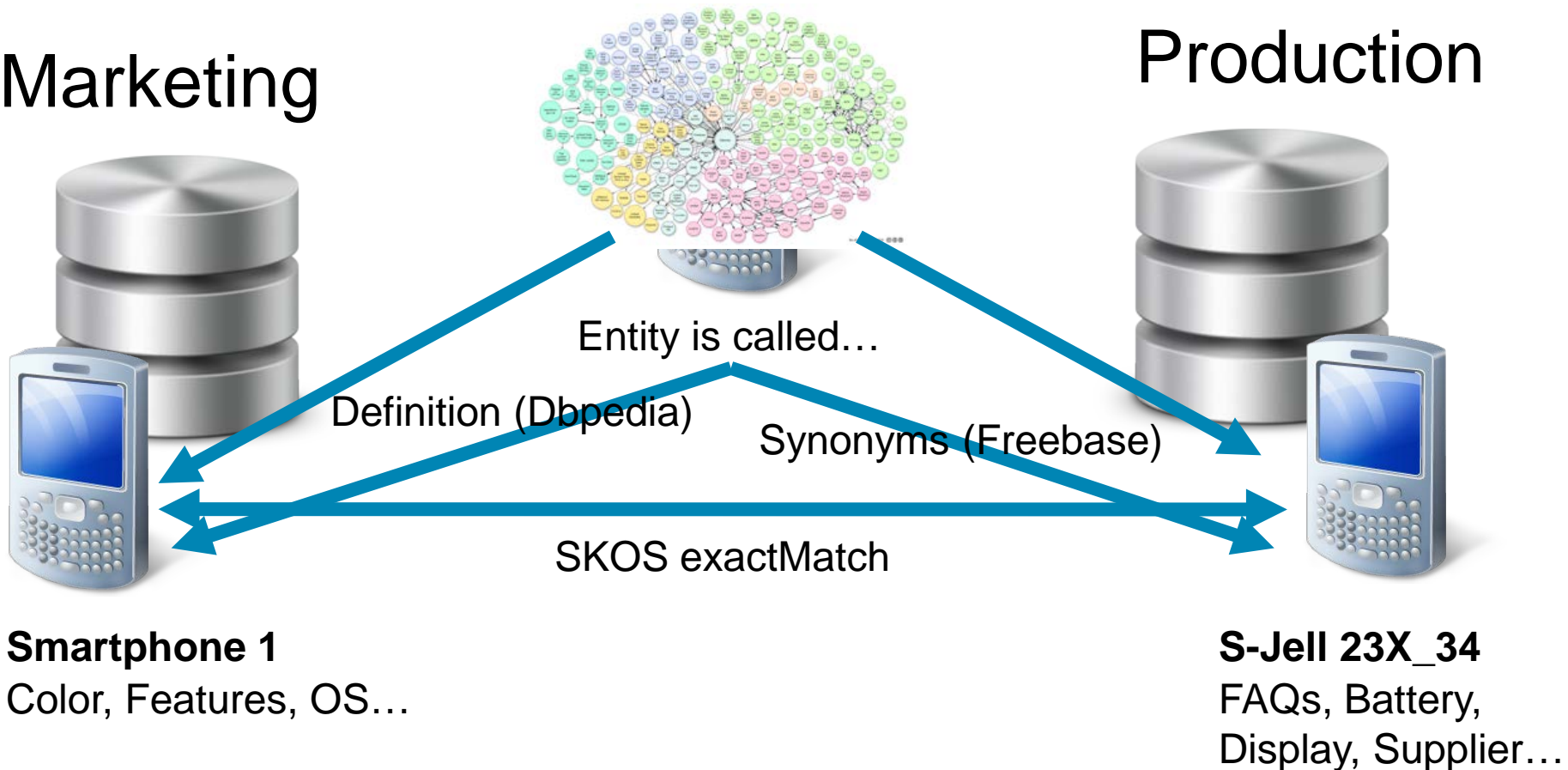
- http://en.wikipedia.org/wiki/Linked_Data

Definitions

Example – Linking concepts

Marketing

Production



Indexing and mapping

concepts

- Rich metadata in a standardized, extensible format (SKOS / RDF)
- Central metadata repository
- Thesaurus is managed with PoolParty
- Document metadata is mapped to concepts in the thesaurus
- Semantic information improves search experience



Indexing and Mapping

mapping

Document

Title: Document Title
 Created: 2010-03-15
 M_Countries: Austria
 M_Vendors: Atlassian, Apache
 Abstract: ...

PoolParty Project



Concept Scheme

Concepts

Concept Scheme

Concepts



Indexing and Mapping

mapping

Document

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PoolParty Project

- Regions**
 - Africa (4)
 - Americas (4)
 - Antarctica (0)
 - Asia (5)
 - Europe (4)
 - Oceania (4)
- Technologies and Vendors**
 - Apache (6)
 - Atlassian (2)
 - Autonomy (3)
 - Connectbeam (1)
 - Dow Jones (1)
 - Endeca (1)
 - Exalead (3)
 - Facebook (1)

Concept Scheme

Concepts

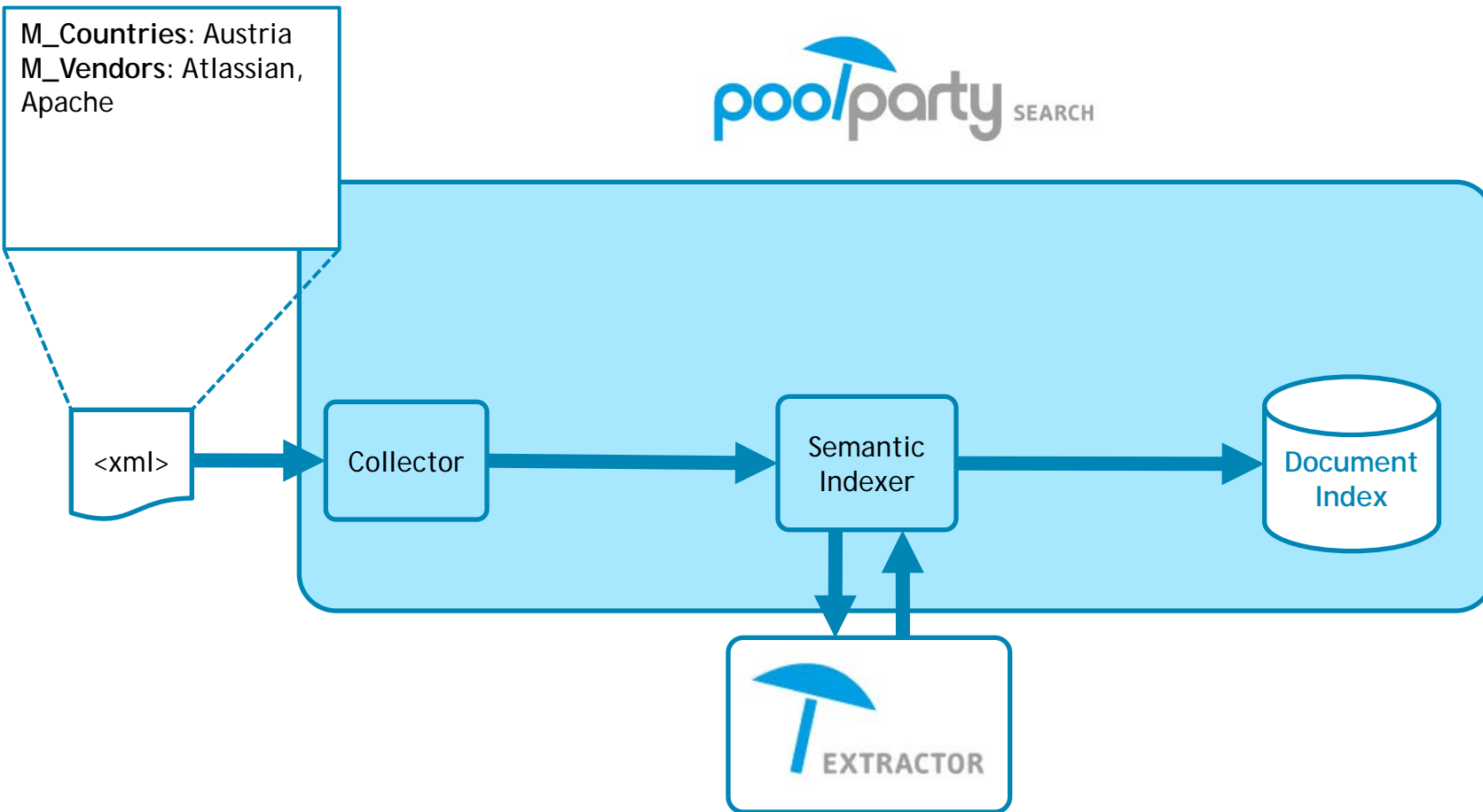
Concept Scheme

Concepts



Indexing and Mapping

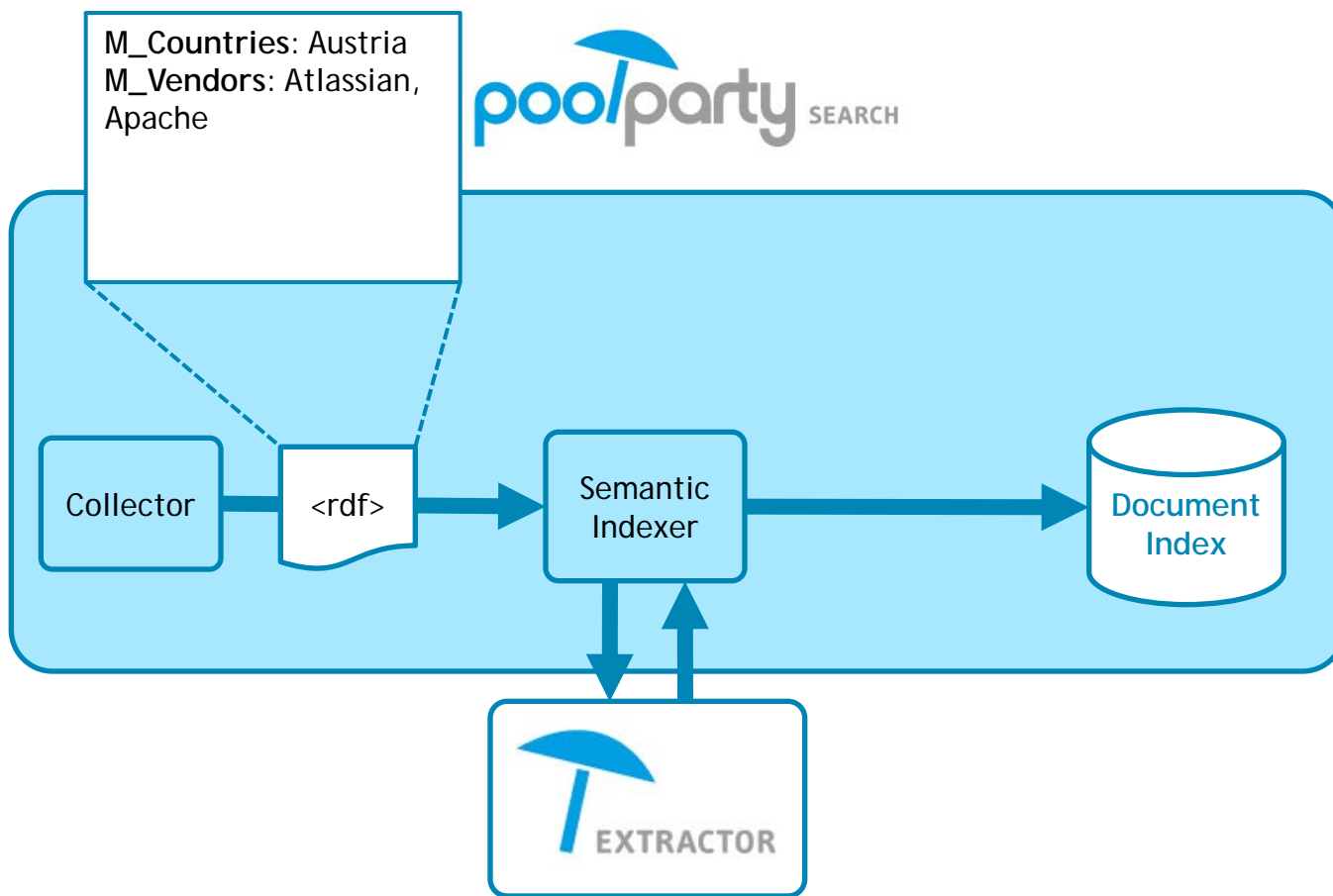
process



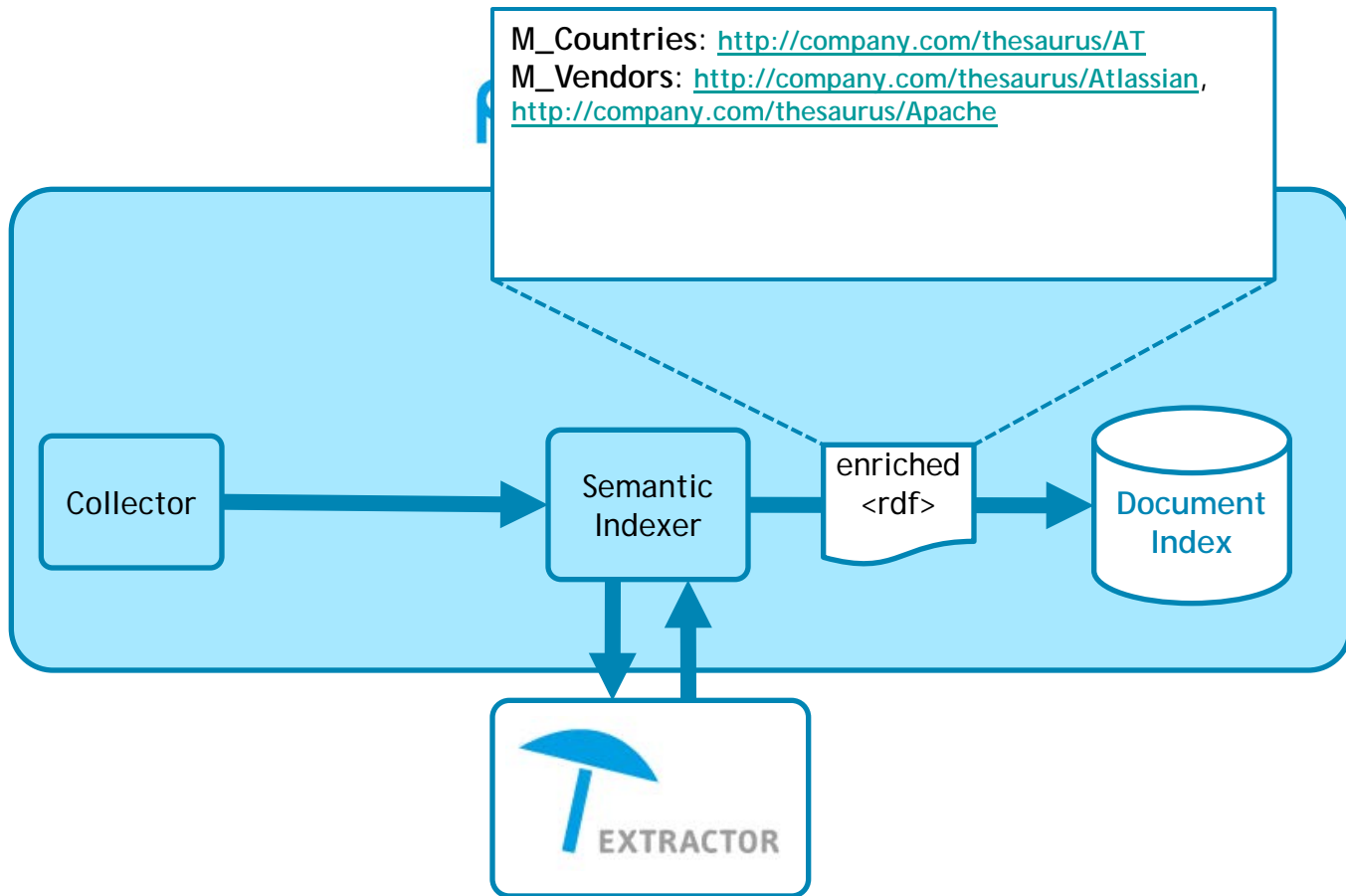


Indexing and Mapping

process

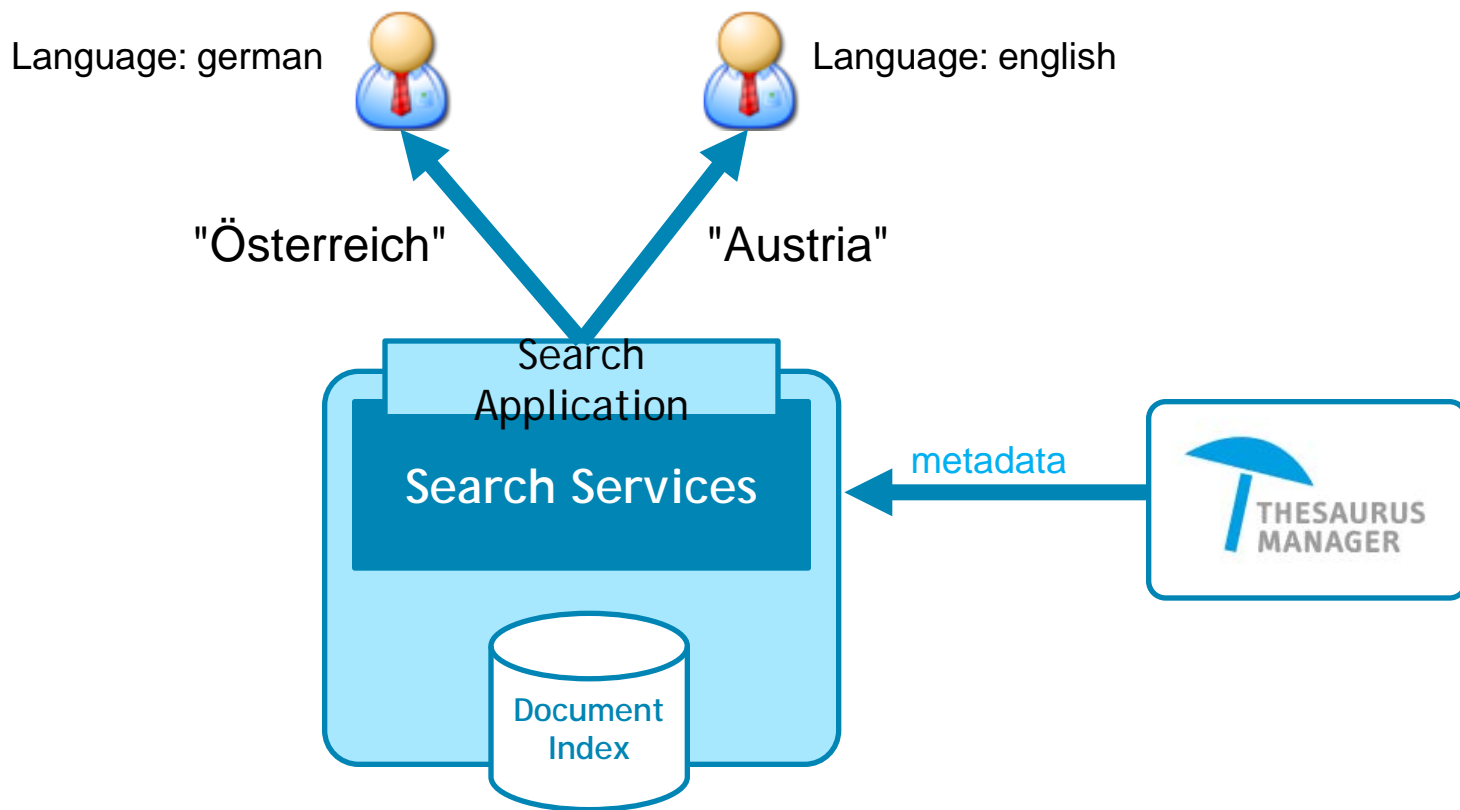


Indexing and Mapping process



Indexing and Mapping

localized metadata





Use cases



Examples

Similar Documents Recommender

Facetted Browsing

Multilingual Search

Tag Recommendations

Corporate thesauri

Semantic Search Engines

Autocomplete functions

Customers

Credit Suisse, British Museum, Roche, Telekom Austria, Education Services Australia, REEEP, Staatliche Museen zu Berlin, University of Vienna, Geological Survey of Austria, Biogen Idec, University of Glasgow, Centre for Ecology & Hydrology

Diggin` deeper...

Note for the program committee:

At that stage we will show a live demo with two thesauri (Marketing and Q&A)...
how departments can work on the same topic (Smartphone 1 und Smartphone 1 6GS)
from different perspectives.

... concepts with exactMatch can keep different metadata

... enriching data from the LOD cloud

See also tutorial on <http://youtu.be/UDSOy3YvZ58>

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