Interoperability through Linked Data

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L ENTRYSCAPE



På Svenska



Search data About us Community

CHER STA

Q

Search and explore data from Sweden

Search

Data & APIs Explore datasets and APIs

<u>Concepts</u> Explore concepts and terminologies

<u>Specifications</u> Explore specifications of information and data models

Publication of data requires structure

How do we make datasets discoverable?



How do we access datasets?



How do we understand the datasets' content?







DCAT-AP: Linked Entities



How do we make data understandable?

Alt 1: Description

We describe directly in the metadata how the data can be understood and worked with

Alt 2: Documentation

We point to documents or web sites describing the data

Alt 3: Specification



- Well thought out information
- May consist of several parts
 - Text aimed at people
 - Schemas for validation
 - Examples

0 ...

How do we refer to specifications in a consistent way?







Start / Search specifications

Data & APIs	Concepts	Specifications	
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Search specifications

Search

The page updates automatically when you apply filters

Theme 🗸 🔤

Organization 👻

36 results





Q

Manage concepts in terminologies

"named collection of concepts that have a common theme and are jointly managed"

Synonyms: taxonomy, vocabulary, (ontology)



Need for concepts and terminologies

- Common vocabulary for communication
- Transparent data models
 - System integration
 - Interoperability between organisations
- Categorization
- Improved findability









Start / Search concepts

Data & APIs Concepts Specifications

Search concepts

Search

The page updates automatically when you apply filters

Terminologies 🔻

5644 results





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Connecting the dots







Example

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Linked Data makes everything possible

Unique identification of entities

HTTP for access

Interoperable format RDF

Relationships between entities

Metadata with semantics





Beyond datasets to more general entities







Tourism in Sweden - beyond datasets to more general entities





How do we use search engines?





Where does the information come from?

"@context": "http://schema.org", "@type": "Restaurant", "address": { "@type": "PostalAddress", "addressLocality": "Örebro", "addressRegion": "Örebro län", "postalCode": "70211", "streetAddress": "Kungsgatan 14"

"aggregateRating": { "@type": "AggregateRating", "ratingValue": "3.7", "reviewCount": "41"

"name": "Restaurang Clarion Hotel", "openingHours": ["Mo-Th 17:00-22:00", "Fr-Sa 16:00-22:00"

"priceRange": "\$\$\$", "servesCuisine": ["Swedish", "Mediterranean"

"telephone": "(+46) 19-6706707", "url": "https://www.nordicchoicehotels.se/ho tell/sverige/orebro/clarion-hotel-orebr

o/featured-amenities/restaurang/"











schema.org

A common standard for expressing properties about things on the web

Well rooted in the tourism industry

Relations from thing and "no things"





Example - a museum







Relations and reuse







Access all entities from one API







Swedish tourism - a part of the knowledge graph







Open discussion







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