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A hierarchical one-to-one mapping solution for semantic interoperability

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Introduction (I)



- Our context
 - R&D in the area of Spatial Data Infrastructures
 - Special interest in search services
 - Developing turnkey products
 - Including Web applications and portals
 - More than 30 people in our R&D Laboratory
 - > We need internal support
 - Including our own Web applications and portals

Introduction (II)

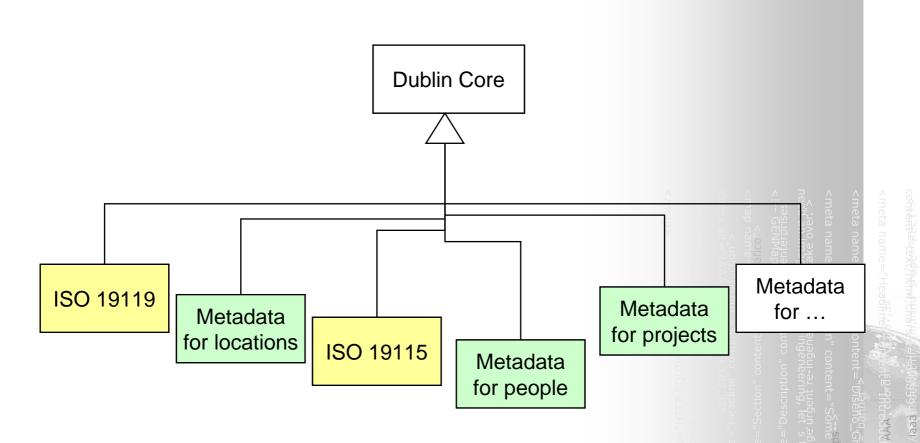


- The problem
 - Heterogeneous sources of information to be searched and provided
 - Geographic data, locations, services, ...
 - Papers, people, projects, ...
 - It is necessary to develop technology for searching:
 - Geographic data, locations, services, papers, people, projects, ...
- Our approach
 - Metadata for all
 - Using the "same" metadata standard
 - To develop a unique technology for searching

... is it easy?

Our approach





Standard Crosswalks

DC Application Profiles

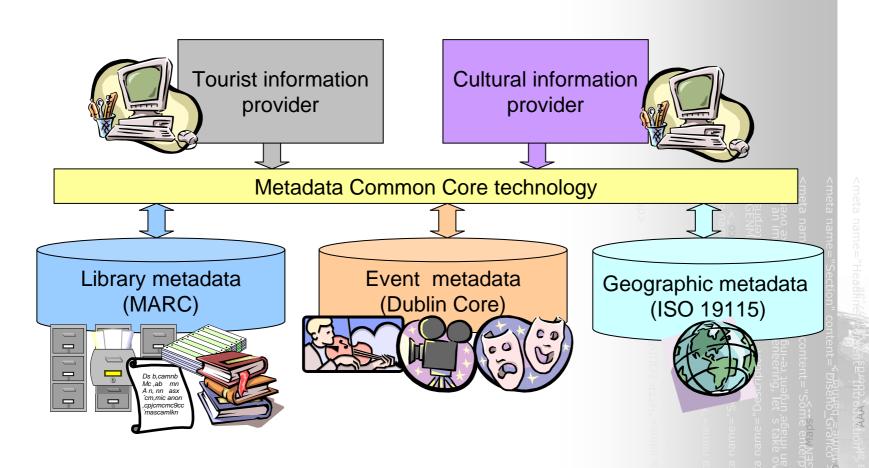
Advantadges (I)



- To enable a single search interface across heterogeneous metadata schemas
- □ To enable the integration or merging of descriptions which are based on complementary but possibly overlapping metadata schemas or standards
- □ To enable different views of the one underlying and complete metadata schema, depending on the user's interest, perspective or requirements

Advantages (II)





Putting the solution to work



- CatMDEdit
 - Open Source metadata creation tool
- CatServer
 - Metadata retrieval kernel
- ia3Catalog
 - Metadata search services
- Turnkey products
 - Gazetteers, Geographic Metadata Catalogs, Geographic Services Catalogs, ...

Conclusions



- Metadata Common Core approach
 - Dublin Core
- A unique technology for searching
- Used in industrial products



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Thanks for your attention

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