

OMG Ontology SIG

Topic Maps Metamodel

http://www.isotopicmaps.org

slide 1



OMG Ontology SIG

- Working with UML to define Ontology Definition Metamodel
- There is going to be an ODM standard that can be used to define ontology languages
- The SIG wants to use this to define ontology languages for
 - topic maps
 - OWL
 - RDF/S
 - SCL



Background

- Graham and I received an email from Lewis Hart 2004-03-02
- Lewis wanted to start from the TMDM to create a starting point for the ODM example
- He asked us a number of questions by email and produced a number of example drafts
- Having created the final proposal he came back saying, "actually, shouldn't we just have a single UML model of this?"
- So, what we are discussing here is
 - whether we want to do a UML model of TMDM with them, and
 - how to do it



OMG Ontology SIG requirements

- The model must be an OMG MOF Version 2 model
- The constraints on the model must be expressed in OCL
- Deadline for new submission is 2004-10-11
- May be other constraints imposed by ODM as well, don't know

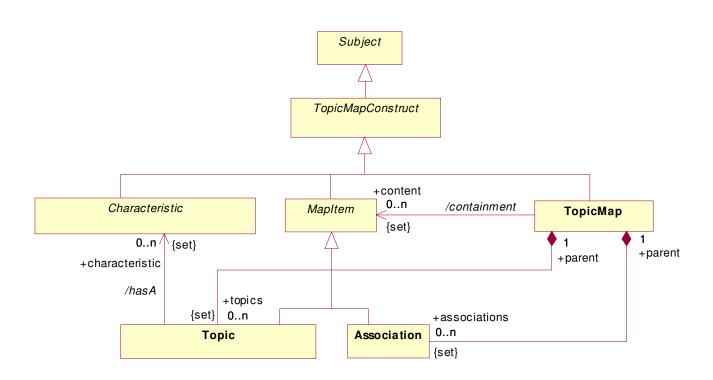


Proposed approach

- ISO SC34 WG3 and OMG Ontology SIG create a collaborative effort to create a new UML model of TMDM
- The finalized model
 - goes into TMDM, diagrams replacing existing ones, OCL going into a non-normative annex,
 - becomes the OMG Ontology SIGs metamodel for TMs

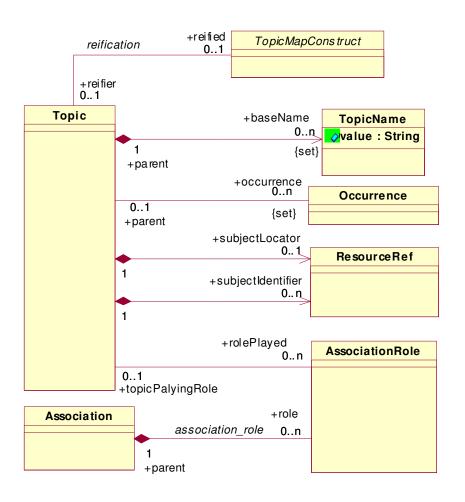


Topic Map Constructs



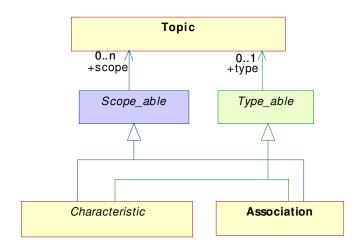


Topics



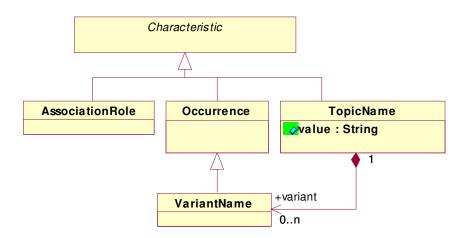


Scope and type



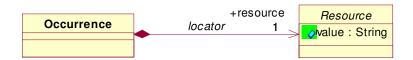


Characteristics



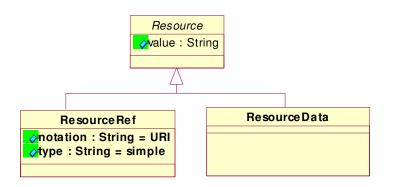


Occurrence





Resources





Core published subjects

topic: Topic

class-instance : Topic

sort : Topic

association: Topic

class : Topic

superclass : Topic

superclass-subclass: Topic

display: Topic

occurrence : Topic

instance: Topic

subclass : Topic