
Open Ontology Repository

The Future of Ontology Metadata?

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OMV – Ontology Metadata Vocabulary

- OMV is an OWL ontology that provides a vocabulary of terms and definitions for describing ontologies.
- Scope
 - Structural metadata
 - Descriptive metadata
 - Administrative metadata

Extensions to OMV?

- Current users of OMV are happy with the current OMV and there are no plans for significant extensions.
- OMV was designed to support ontology reusability and sharability following use cases in
 - *E. Paslaru Bontas, M. Mochol, and R. Tolksdorf. Case Studies on Ontology Reuse. In Proceedings of the IKNOW05 International Conference on Knowledge Management, 2005.*
 - *T. Russ, A. Valente, R. MacGregor, and W. Swartout. Practical Experiences in Trading Off Ontology Usability and Reusability. In Proc. of the Knowledge Acquisition Workshop (KAW99), 1999.*
 - *M. Uschold, M. Healy, K. Williamson, P. Clark, and S. Woods. Ontology Reuse and Application. In Proc. of the Int. Conf. on Formal Ontology and Information Systems FOIS98, 1998.*

and OMV has been able to support these use cases.

Questions for OOR

Why do we believe that extensions to OOR are needed?

- What use cases do we have in OOR to motivate such extensions?
- Has anyone in OOR used OMV? If so, what issues have they encountered?

COLORE

The emphasis in COLORE is on the metatheoretic *relationships* between ontologies within the repository.

- Conservative extension
- Nonconservative extension
- Relative interpretation
- Faithful interpretation
- Definable equivalence
- Reducibility

Modularity

How can we specify that an ontology is composed of a set of modules within the repository?

- In COLORE, we have the notion of a hierarchy, in which theories are ordered by nonconservative extension, and the notion of repository, in which hierarchies are ordered by reducibility.

Ontology Types

- OMV supports the following types of ontologies:
 - Upper level
 - Core
 - Domain
 - Task
 - Application
- Are these sufficient for OOR?
- Do we need more formal foundations for the distinctions between these types?

Summary

- OOR needs to provide use cases that motivate specific proposals to extend OMV.
- Further exploration:
 - Ontology merging / alignment
 - Versioning