

**Ontology Summit 2011**

**Track B**

**Extrinsic Aspects of Ontology  
Evaluation**

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# Mission Statement



The intent is to explore, clarify, and identify gaps, practical and theoretical, in the of evaluation of ontology from a systems perspective using the paradigm of blackbox evaluation.

- Extrinsic aspects of ontology evaluation includes subjective factors, measures or metrics, and the range of values of quantifiable attributes.
- In a systems context evaluations are derived from examination of inputs or stimuli (to the blackbox) and the outputs or externally measurable attributes or behaviors, where those behaviors are controlled or influenced by an ontology.
- The ontology in question may be fully embedded/encapsulated within an entity or system, or may be externally accessible (and potentially shared) among multiple entities or systems.
- The separation of system or entity behaviors which are not governed by an ontology must be accounted for in any ontology evaluation process.

# Extrinsic Aspects



- interoperability among ontologies
- requirements and their verification
- how metrics can be derived from requirements
- how 'good' requirements relevant to ontology can be crafted
- fitness for purpose
- query performance
- relevant relational database evaluation methods, metrics and techniques
- differences in evaluation among an ontology and instance data
- how evaluation metrics can be derived from examination of test inputs or stimuli
- how evaluations can be used to revise requirements
- how evaluations can be used to correct an ontology

# Blackbox Boundaries

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Where are the boundaries of the ‘blackbox’?

- User level
- System level
- Sub-System level
- Component level