

DAML Rules Phase II

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Announcing...

Phase II of DAML Rules effort

- Time has come for agreement & push on rules in DAML
 - As a KR to layer above DAML+OIL/OWL
 - For use in DAML-S, DAML-Sec, application scenarios
 - W3C thinking hard about rules now
- RuleML as point of departure?
 - Already has connections to DAML+OIL. \exists early versions of:
 - Description Logic Programs KR theory: expressive intersection, expressive combination of LP with DL
 - DAML+OIL syntax for RuleML (\exists direct RDF syntax too)
 - Applications experience of RuleML, e.g., in Services

Overview of RuleML

- RuleML Initiative (2000--)
 - Dozens of institutions, researchers; esp in US, EU
 - Mission: Enable semantic exchange of rules/facts between most commercially important rule systems
 - Standards specification: 1st version 2001; fairly stable now
 - A number of tools and demo applications
 - Successful Workshop on Rules at ISWC was mostly about RuleML / LP
 - Can itself use a “home” institutionally.
- Initial Core: Horn Logic Programs KR
- ...Webized (in markup)... and with expressive extensions

Overview of RuleML, Continued

- Fully Declarative KR (not simply Prolog!)
 - Well-established logic with model theory
 - Available algorithms and implementations
 - Close connection to relational DB's; core SQL is Horn LP
- Intent: Abstract graph syntax
 - First encoded in XML, then RDF, then DAML+OIL
- Expressive Extensions incrementally
 - Non-monotonicity: Negation as failure; Courteous
 - Procedural Attachments: actions/effecting, tests/sensing
 - Events cf. OPS5/Event-Condition-Action

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Action Plans

- Look for setting up of mailing list on Rules for DAMLers
- Please get involved
 - YOUR suggestions and feedback
 - Think about where you can use rules
 - Build tools, use tools
 - Get more educated about rules and RuleML, tools
 - Look soon for info pointers via mailing list, DAML website
 - Can start with <http://www.mit.edu/~bgrosof> and <http://www.dfki.de/ruleml>
- DAML-EU Joint Committee focus
- Coordinate with W3C (and possibly Oasis too)
- Contacts: Benjamin Grosf, Mike Dean