Graphically Authoring OWL Ontologies in Microsoft Visio

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e6tOWL Authoring Tool

- A Visio Add-in diagramming tool designed for graphically authoring OWL ontologies.
- Developed internally at Semantic Arts to support client projects and ontology training.
- Designed to complement existing IDE-based ontology editors.
- Uses a diagramming convention aimed at enabling non-ontologist SMEs to validate OWL ontologies.
- Supports the development of large, complex enterprise ontologies.
Features

• Drag and drop stencil-based ontology development.
• Implemented as an Add-In to Visio, a familiar Microsoft Office application.
• Simple and compact diagramming conventions.
• Generates OWL2-compliant RDF/XML directly from the diagram.
• Automated diagram layout helper functionality.
• Helper tools for managing large, complex, multi-page diagrams.
• Support for reusable ontology design patterns.
• Basic integration with the Pellet inference engine.
Our Typical Ontology Tool Set

- Visio 2007
- e6Tools Add-In
- e6tOWL Template

Ontology authoring and RDF/OWL generation

The authoring tool is one-way only; it does not yet generate diagrams from OWL.

RDF/XML File

- Pellint
  RDF/OWL syntax checking
  Performance optimization

- Textpad
  RDF/OWL syntax highlighting

- Protégé
  Pellet 2.0 Plug-In
  Fact++ Plug-In
  Hermit Plug-In

XML syntax checking. OWL DL inference and consistency checking.

- TopBraid Composer
  SPARQL and ontology-based application development
The design goal of the diagramming notation was for it to be sufficiently intuitive to allow the review of ontologies with subject matter experts after only ten minutes of training in the conventions.
Diagramming Notation

Each construct typically has two or more alternative representations that can be selected for clarity and compactness.
Further Information

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