Semantic Technology Training

Course Length: 3 days (9am to 4pm daily)
Maximum Course Enrollment: 15

This hands-on course is tailored for subject matter experts who have been tasked with developing a semantic vocabulary and supporting ontology work. By the end of the course participants will be able to answer their managers' inevitable questions:

- *What* is a "semantic vocabulary"?
- *What* is an "ontology"?
- *Who* benefits from implementing an ontology?
- *How* is a semantic vocabulary developed?
- *How* does TopBraid support our work?

This course is designed for individuals tasked with managing information assets from "behind the scenes": end-users rely on you to make sure up-to-date information is easily available and accessible. The class provides both a general background in semantic technology as well as technical instruction on TopQuadrant's TopBraid tool. The course content and approach will be customized for the client's environment and how its work integrates with USAF and DoD direction.

Although there is a modest amount of "lecture" material, the course is designed around numerous hands-on labs throughout the three days. Previous offerings by this team elicited course-evaluation comments such as: *"at first I couldn't imagine spending even one day on stuff like this, but now I wish it were longer"* and course was *"consistently engaging and fun: I highly recommend this class."*

Course Outline

Day 1

The Big Picture: Why Are We Here?
Introduction to TopBraid
Some (Unavoidable) Jargon
 What Is "Semantics"?
 What Is a "Semantic Vocabulary"?
 What Is an "Ontology"?
Syntax ≠ Semantics
 Data Elements Are Not Enough!
Classes and Properties
On Triples
The Iterative Process

Day 2

Ambiguity
Accuracy Metrics
 Precision and Recall
Putting It All Together
TopBraid Fundamentals
 Show the "Graph" as the desired endpoint – how do we get here?
 Form View – describe sections of this window
 Review Properties and Classes
 What are they?
 How do they differ from one another?
 Adding
 Editing
 Deleting
 Use of "CamelCase"

Day 3

Show Property and Class Forms
 Comment & Label
 Domain & Range
 Customized Descriptors
Building Triples
Graphs
Instances
Importing Excel documents
Exporting Files
Building an Ontology from scratch
Strengths and Weaknesses of the Tool
Things to Watch Out For

Review & Wrap-up

Each student will receive a printed copy of the course slides.

The customer/sponsor provides classroom facilities to include tables and seating for up to 15 students, computer projector and screen, whiteboards and markers for lab work groups and a podium or instructor station. Customer also provides laptop workstations and TopBraid tool for students.

Maximum class size: 15   (The method of instruction and labs require 6 students minimum)

Fee: $14,000 plus any travel expenses