

1. TopSAIL™ -- TopQuadrant's Semantic Application Integrated Lifecycle

TopSAIL™ is TopQuadrant's lifecycle methodology for developing semantic solutions. This model is divided into seven phases that are summarized in the following table:

Phase	Description
1. Engagement Start-up	<ul style="list-style-type: none"> Review client agreement, scope of services, level of effort, deliverables, and schedule commitments Conduct client engagement start-up meeting, meet key personnel, review mutual expectations, and document any refinements in a finalized project workplan & schedule. Plan engagement; tailor processes, methods, resources, materials, and schedule of deliverables as mutually agreed with client.
2. Semantic Technology Briefing & Training	<ul style="list-style-type: none"> Conduct TopMIND™ semantic technology briefings & trainings. TopQuadrant and Professor Jim Hendler (U. OF MD, pioneer of the Semantic Web) designed these programs. The curriculum features: <ul style="list-style-type: none"> case studies and success stories standards and strategic direction products and vendors state-of-the-art knowledge and experience interactive participation, exploration and evaluation. Tailor different programs to meet the needs of executives, managers and 'change agents', technologists and implementers.
3. Solution Envisioning & Conceptual Design	<ul style="list-style-type: none"> Assess current business situation; explore business needs and specify solution capabilities that will deliver results. Create a business case and perform tradeoff analysis. Develop a solution roadmap and high level implementation plan. Define technical strategy and identify major building blocks of the solution architecture.
4. Architecture and System Design	<ul style="list-style-type: none"> Develop solution architecture for integrating a semantic infrastructure with other technical components of the overall solution such as web application servers, databases, document management systems, web services, XML-feeds and legacy systems. Establish ontology architecture and modeling guidelines.
5. Development & Implementation	<ul style="list-style-type: none"> Construct and integrate solution functionality. Build and populate ontology models. Test and validate solution.
6. Solution Deployment and Maintenance	<ul style="list-style-type: none"> Deploy solution. Cut-over to production. Establish maintenance and support processes for the solution. Make fixes and enhancements as necessary. Fine-tune ontologies and system performance.
7. Engagement Wrap-up	<ul style="list-style-type: none"> Evaluate the solution as-built and deployed. Prepare final report that summarizes project accomplishments, lessons learned, and recommendations for next steps.

2. Roles and Competencies Supporting TopSAIL™.

TopQuadrant's semantic solutions consulting practice provides professional services to support customer needs throughout the engagement lifecycle: from discovery to solution concept to solution deployment.

Semantic solutions require specific expertise in the following roles:

- **Project Manager** – Plans, coordinates, and administers client engagements; serves as principal point of contact, with primary responsibilities for work assignments, schedules, deliverables, earned value and client reporting.
- **Principal Consultant** – Provides senior-level business, technology, and management problem-solving and solution expertise, including industry, process, application, and domain-specific knowledge.
- **Solution Envisioner / Architect** – Brings in-depth experience in facilitating solution discovery and envisioning processes that explore business needs and specify solution capabilities to deliver results; understands the capabilities, applicability, strength and limitations of semantic technologies. Broad knowledge of semantic products and vendors.
- **Semantic Technologist** – Supports solution envisioning and development engagements with extensive knowledge and experience in the evaluation, selection and design of available semantic technology options to deliver business capabilities and solutions. Serves as a senior subject matter technical expert on semantic technologies, standards and tools.
- **IT Architect** – Provides expertise in integrating semantic technologies with the enterprise systems and infrastructure. Has thorough knowledge of platform technologies such as web services, J2EE and .NET.
- **Knowledge Engineer/Ontology Modeler** – Brings extensive experience using modeling techniques and methodologies. Leads knowledge acquisition sessions. Understands formal logic, set theory and semantic standards such as RDF and OWL. Comprehensive knowledge of select ontology development and deployment platforms. Collaborates with domain experts.
- **Semantic Solutions Developer** – Brings excellent web development skills, experience with XML and RDF parsers. Constructs and optimizes queries against semantic data stores. Ability to configure, administer and develop in specific semantic platforms. Semantic user interface and composite application development skills.
- **Project / Research Assistant** – Expertise in project administration, communications formats, graphics and technical documentation.