



# SEMANTIC WEB APPLICATIONS FOR NATIONAL SECURITY CONFERENCE ON APRIL 7 - 8, 2005

## Overview

The DARPA Agent Markup Language (DAML) Program in the DARPA Information Exploitation Office (IXO), in cooperation with the Federal CIO Council's Semantic Interoperability Community of Practice (SICoP), is sponsoring a Semantic Web Applications for National Security (SWANS) Conference to be held April 7-8, 2005 at the Hyatt Regency Crystal City in Arlington Virginia. The purpose of the meeting is to raise awareness and enhance the ability of Military and Government technology decision-makers to capitalize on the emergence of the Semantic Web. One of the key objectives of this meeting is to foster additional pilot and implementation projects using OWL and RDF technologies.

## Agenda

A powerful group of technical and operationally oriented speakers and tutorial leaders will participate in the SWANS Conference, with keynote addresses delivered by:

### Mr. Tim Berners-Lee

(Director, World Wide Web Consortium)

### Mr. John M. Gilligan

(CIO, U.S. Air Force)

### Mr. Steven I. Cooper

(CIO, Department of Homeland Security)

### Mr. Gary L. Winkler

(Director, Enterprise Integration, CIO/G6)

Find out the current status of Semantic Web technology progress by DARPA, W3C, and key Government technology leadership. View a wide range of demonstrations by researchers and key Government and academic early adopters to illustrate the power of using Semantic Web technologies in pilot programs to address National Security needs.

Participate in a tutorial session for those wanting to gain more detailed information on Semantic Web technologies. Attend the Trade Show where vendors who are employing Semantic Web technologies will demonstrate their capabilities. Sign up for a pilot program advice session with a Semantic Web expert to discuss technical and programmatic aspects of developing pilot projects utilizing RDF and OWL technologies.

## April 7:

DARPA Kickoff

Keynotes

—Mr. Tim Berners-Lee, W3C

—Mr. John Gilligan, USAF CIO

Semantic Web Resources

Luncheon Speaker

—Prof. Jim Hendler, U. Md

Demo Intros

Pilot Program Elements

—Pilot Experience Panel

Evening Demos of Early Adopters

## April 8:

DARPA Introduction

Keynotes

—Mr. Steve Cooper, DHS CIO

—Mr. Gary Winkler, Principal Director,  
Enterprise Integration, US Army CIO

Business Use Case

—Mr. Mills Davis, Top Quadrant

Remainder of Day, Three Simultaneous Activities

—Trade Show

—Tutorials

—Pilot Program Consultations



## **Trade Show**

The Trade Show provides a forum for vendors employing Semantic Web technologies to demonstrate their capabilities to a select audience of government personnel who are involved in National Security areas. More than 25 exhibitors are expected. The Trade Show will feature two categories of Semantic Web capabilities. The first category is commercial off-the-shelf (COTS) products that are mature and commercially available for use or in use in the Government marketplace. The second product category includes fairly well developed research capabilities or systems that are mature enough to be expected to result in near term capabilities, commercial products or products in use in the Government marketplace.

## **Pilot Program Advice**

The Pilot Program Advice Sessions are for Government individuals and their selected technical support personnel to meet with Semantic Web experts to discuss technical and programmatic aspects of developing pilot projects utilizing RDF and OWL technologies. The advisors are government and contractor personnel with extensive experience in semantic web program management, technical leadership, and resource development.

## **Tutorials**

Three tutorials will be provided during the SWANS Conference for those wanting to gain more detailed information on Semantic Web technologies. Tutorials will be presented on the subjects of ontologies and semantic web services, as well as tools needed to create, manage and employ the technologies that will help realize the potential of the semantic web.

### **Ontologies**

This session will introduce ontologies by providing a definition and showing a spectrum of types of

ontologies in use today. It will discuss the benefit and impact that can be obtained from ontology-empowered applications. People considering planning for semantic web application generation, deployment, maintenance, and evolution may benefit from the tutorial.

### **Semantic Web Tools**

A wide range of open source and commercial tools are now available to support the development of Semantic Web applications. This tutorial will describe and demonstrate a number of these, including tools for ontology creation, reading and writing content, validation, reasoning, storage, query, and database integration. A guided tour of the open source software repository SemWebCentral.org will be conducted.

### **Semantic Web Services:**

Promise, Progress, and Challenges - The potential of the Semantic Web goes well beyond its applications to information discovery and querying. In particular, it encompasses the automation of Web-based activities and Web-accessible devices as well. This presentation will explain the concepts embodied in Semantic Web Services, show how it ties in with developing industry standards, and illustrate its use with examples. A perspective will be given on the status of work in this field, tools under development to support its use, and next steps towards realizing its promise.

## **General Information**

Detailed information about the SWANS Conference, including on-line registration, is available at <https://www.schafertmd.com/swans/index.html>.