# Semantic Web Applications for National Security (SWANS = successor to SWMU) February 8/9 2005



DAML PI Meeting November 30, 2004

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#### **Outline**



- Objective of SWANS
- SWANS Agenda
  - Keynotes
  - Resources
  - Demo's

- Tutorials
- Pilot ProgramConsultation
- Trade Show

- Invitees
  - Target Audience
  - Trade Show
- Relevance to PI's
- Schedule of Key Events



# **SWANS 05 Objectives**



- SWANS Objective Engage National Security technical managers and those who influence them (operational authorities, consultants and advisers) to initiate or invigorate pilot projects using OWL/RDF and Semantic Web tools
  - Enthuse with high-level influential keynote speakers
  - Describe technology innovations
  - Show successful projects
  - Provide opportunity to view broad range of technology innovations through Trade Show
  - Provide tutorials for more detail information transfer
  - Provide Pilot Program Consultation opportunity for one-onone discussions with key Semantic Web authorities



## **Agenda Overview**



#### February 8

- DARPA Kickoff
- Keynotes
  - Tim Berners-Lee
  - Jim Gilligan, USAF CIO
- Semantic Web Resources
- Luncheon Speaker
  - Jim Hendler
- Demo Intros
- Pilot Program Elements
  - Pilot Experience Panel
- Evening Demo's of National Security Early Adopters

#### February 9

- DARPA Introduction
- Keynotes
  - Steve Cooper, DHS CIO
  - Gary Winkler, Principal Director, Enterprise Integration, US Army CIO
- Business Use Case

Remainder of Day,

3 Simultaneous Activities

| Trade<br>Show | Tutorials | Pilot Program Consultations |
|---------------|-----------|-----------------------------|
| SHOW          |           | Consultations               |





## **SWANS 05 Target Audience**

#### Invitation List/Audience

- Senior National Security (DOD/DHS/Intel Community) who are either in a role of influencing or managing technical innovation projects in information technologies
- Last SWMU -100 attendees: ~50 Government employees, ~50 technical support
- Expanded using selected individuals from CIO Council's Semantic Interoperability Community of Practice (SICoP) list
  - May have several hundred attendees
  - Broader than National Security interests, but with interest in Semantic Web use in Government applications



#### **SWANS 05 Invitation List**



- Sample Invitee Organizations include:
  - -Army: Army Aviation Applied Technology Directorate, Army Center for Army Lessons Learned, Army G-3, Army Research Lab, Battle Command Battle Lab, CECOM
  - -Air Force: ESC Hanscom, Air Force Communications Center, Scott AFB, AF Rome Lab, AF Studies and Analysis Agency, Air Force Doctrine Center, Air Mobility Command.
  - -Navy: CNO, NAVAIR, Naval Air Warfare Center Aircraft Division, NAVEODTECHDIV, Naval Postgraduate School, Naval Research Laboratory, Naval Undersea Warfare Center, Naval Warfare Development Command, NAVNETWARCOM, NRL, Office Of Naval Research,
  - Marine Corps: Marine Corps Combat Dev Center, Marine Corps Intelligence
     Agency
  - -Joint: DMSO/IMC, DIA, DISA, DTIC, DTRA, FBIS, Joint Warfare Analysis Center, Joint Staff J3/7/J9, JFCOM/Joint Experimentation, Joint Center for Lessons Learned, JWFC Doctrine Support, OASD (C3I)/KM, ROK-US Combined Forces Command, Korea, USCINCPAC, USTRANSCOM
  - -Other Government: CIA, NGA, NSA, NASA, NSF, EPA, GSA, ...



#### **SWANS Trade Show**



- Process: Selection of candidates based two-page papers describing the proposed technology to be demonstrated
- Two types of Semantic Web capabilities sought.
  - COTS products that are mature
  - Fairly well developed research capabilities or systems that are mature enough to be expected to result in near term capabilities
- Proposals to be submitted by December 1, 2004 in order to be considered.
  - Only products using W3C OWL Web Ontology Language (as opposed to compatibility only with previous semantic language versions, such as DAML or DAML+OIL).
- Selections/Invitations to participate are expected to be made by December 12, 2004.
- Financial Responsibility: Participants will not be compensated for participation, i.e., it is a "pay as you go"
  - The Government will provide for space and access to the Web



# SWANS 05 Trade Show Participation



- Invitees included Network Inference, Tucana Technologies, Unicorn, IntelliDimension, Stanford Medical Informatics, HP Labs, Sandpiper, Semaview, Ontoprise, Ontology Works, Semagix, Engenium, Semantic Research, Software AG, BT Exact, Mark Logic (formerly Cerisent)
- Others solicited in SWANS Heads Up invitation to DAML PI's 15 November



#### **Feedback Process**



- Audience feedback
  - Potential problems RDF/OWL might tackle
  - SWANS will get back to questioner with a point of contact (Government or researcher, author's choice)
- Researcher feedback
  - Identification of transition targets
- Trade Show vendor feedback
  - Potential added pilot projects SWANS might assist in facilitating



### **Pilot Program Consultation**



- Intended for Government individuals & selected tech support to meet with Semantic Web program management and experts for advice regarding potential pilot program development.
- Scheduled simultaneously with the Trade Show and the Tutorials on Day 2 (about 11 AM on).
- Consultation sessions limited to 20 minutes each.
- Sign up during on-line registration first come, first serve.
- Only one session with a specific consultant per Government organization group. Three people or less per session.



# Pilot Program Consultation "Consultants"



- "Consultant" roles a range of capabilities. Summary resumes posted reflect expertise/relevant experience to guide those signing up
  - Management
    - Mark Greaves, DARPA
    - Rick Morris, Office of US Army CIO
    - Mike Daconta, Office of DHS CIO
    - Murray Burke, SET Associates
  - Pilot Program Technical Leadership
    - Ralph Hodgson, Top Quadrant
    - Joe Rockmore, Cyladian
    - Jim Hendler, University of Maryland
  - Semantic Web Resources
    - Mike Dean, BBN
    - Deborah McGuinness, Stanford University
    - David Martin, SRI



#### **SWANS** Relevance to Pl's

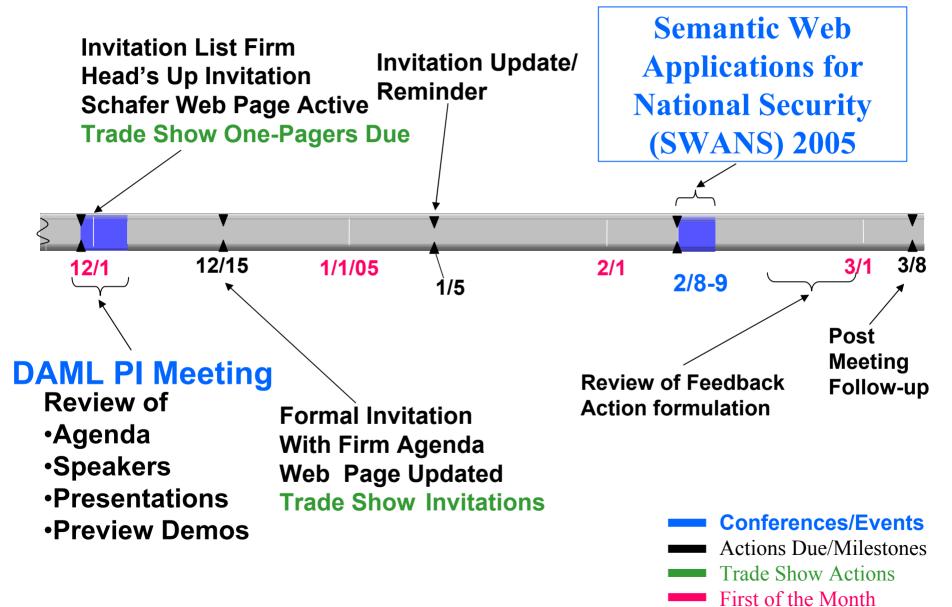


- Key Demos (Government sponsored mature pilots)
  - Day One Demos, all National Security applications focus, most chosen/confirmed.
- Trade show as a venue for displaying prepilot research
  - Not primarily for research, intended to be product oriented.
  - Selected research and consulting organizations may be included if compelling.



#### **SWANS Key Events**







#### **Points of Contact**



- Overall Coordination
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