W3C Incubator Activity

• Rapid start of work in an Incubator Group (XG)
• Lightweight process, initiated by W3C Members
• Rapid finish to produce an XG Report in under one year
• Smooth transition to the W3C Recommendation Track, if desired and approved
• Use of W3C infrastructure (mailing lists, communications tools, Web site) and consensus-building within W3C culture.
# W3C Semantic Sensor Network Incubator Group

<table>
<thead>
<tr>
<th>End date</th>
<th>2 March 2010</th>
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<tbody>
<tr>
<td>Confidentiality</td>
<td>Proceedings are public</td>
</tr>
<tr>
<td>Initial Chairs</td>
<td>Amit Parashar, Amit Sheth and Kerry Taylor</td>
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<tr>
<td><strong>Initiating Members</strong></td>
<td><strong>CSIRO</strong>&lt;br&gt;<strong>Wright State</strong>&lt;br&gt;<strong>OGC</strong></td>
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<tr>
<td>Usual Meeting Schedule</td>
<td>Teleconferences: Every week&lt;br&gt;Face-to-face: Once Annually</td>
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W3C Semantic Sensor Network Incubator Group

• Started March 1, 2009

• Develop **best practices** for harmonizing OGC Sensor Web Enablement (SWE) Technologies with sensor and sensor network ontologies.

• Begin the formal process of **developing ontologies** that define the capabilities of sensors and sensor networks
Best Practices

Semantic Mark up

1. Define mapping of concepts in SWE to concepts in SSN-XG Ontology
2. Define syntax/structure of semantic annotations in SWE
3. Define translation algorithms to convert annotated-SWE to RDF
We have identified sensor ontologies

.. from these we will build, merge, copy, squash etc...

Available at MMI Device Ontology Working Group

http://tinyurl.com/sensor-onts

http://marinemetadata.org/community/teams/ontdevices
Semantic Sensor Network Ontology, Michael Compton and Holger Neuhaus (CSIRO Australia)
Device Ontology MMI
OntoSensor - U of Memphis - Center for Advance Sensor
OOSTethys Model
CESN Ontology - CESN at UMass Boston
SWAMO Sensor Platform - Al Underbrink's
Criteria to assess existing ontologies

- Primary purpose/target
- Status
- Key concept
- Range of subject matter
- Level of sophistication
- Adoption
- Incorporation Concepts
Main Participants

- Kno.e.sis Center: Cory Henson, Amit Sheth
- CSIRO: Michael Compton, Amit Parashar, Kerry Taylor and Laurent Lefort
- CSIRO: Holger Neuhaus and Michael Compton
- UPM Ontological Engineering Group: Oscar Corcho
- IAM Group, University of Southampton: Kevin R. Page
- CTIC Foundation: Rodrigo García, Víctor Peláez
- Institute for Geoinformatics at the University of Münster: Krzysztof Janowicz
- MBARI / Marine Metadata interoperability Project: John Graybeal
- SURA / Oceans IE: Luis Bermudez
- Others....
Face to Face Meeting

24th of October 2009
before the ISWC at
Washington DC
You are very welcome to Participate

Goggle search terms: ssn w3c

Wiki: http://www.w3.org/2005/Incubator/ssn/wiki

Charter: http://www.w3.org/2005/Incubator/ssn/charter

Current Co-Chairs

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Kerry Taylor: Kerry.Taylor@csiro.au

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