How SMW Is Used at BBN

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Semantic MediaWiki Conference Spring 2011
Arlington, Virginia
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Welcome!

• BBN is pleased to host SMWCon Spring 2011
• Staff available to help
  – Suzanne Collier
  – Mike Dean
  – Gaia Eirich
  – Ian Emmons
  – Art Marineau
  – Dorene Ryder
Outline

• BBN Background
• 6 examples of using SMW+
• Personal Perspective
BBN Overview

• Advanced technology R&D firm specializing in Information, Computer, and Physical Sciences
• Founded 1948
• 750 employees
• Principal offices in Cambridge, MA and the Washington, DC area
• DARPA is our biggest customer
• Acquired by Raytheon in 2009
Semantic Web @ BBN

From defining standards to operational integration.  
Over a decade of leadership experience.

- **Foundational**: Contributing to standards and technologies
  - Integration and Transition contractor for DARPA Agent Markup Language
  - Member of W3C RDF Core, WebOnt, and RIF Working Groups
  - Currently developing SILK rule language
  - Book: *Semantic Web Programming*: Wiley 2009
  - Hosted ISWC 2009
  - Host and maintain [http://semwebcentral.org](http://semwebcentral.org)
  - Tools: Interactive Disambiguation GUI, Asio™ federated query, Parliament™ storage

- **Applications**: Addressing real-world, operational challenges
  - Geospatial semantics
  - Data integration
  - Disambiguation
  - Analysis
  - Visualization
DARPA Seedling (2008)

- Investigate use of SMW+ for crowdsourcing
- Experiment
  - Had RPI undergraduates watch clips from Survivor reality TV show, annotate using SMW+, and answer questions
- Discussed by Jie Bao at SMWCon Spring 2010
- Results inconclusive
- Non-trivial effort to install and synchronize MW, SMW, SMW+ layers
ISWC 2009 Web Site

- Custom HTML home page – SMW+ used for everything else
- Great for distributed updates
  - Big improvement over ISWC 2003 (HTML) and ISWC 2008 (WordPress)
- Little use of semantics 😞
  - Companion [data.semanticweb.org](http://data.semanticweb.org) site already established
Department Wiki, Take 1

- 2009 reorganization motivated creating a new Wiki
  - Had been using TWiki
  - Small window of opportunity
- Showstopper
  - Lack of support for page-specific attachments
Coordinate software development activities in this Vulcan-sponsored project
Password-protected
Limited use of categories, properties, and queries
  People, Meetings, Deliverables, etc.
Wikipedia style isn’t a natural fit
  Significant time curating home page links
  Users don’t search
Recent upgrade to SMW+ 1.5.2 on new server was uneventful
  Ontoprise Deployment Framework worked well
Customer Relationship Management

- Action item from department offsite
- Internal demonstration using SMW+
  - Customers and past performance data
- Needs
  - Templates
  - Some pattern/mechanism for tracking changes over time, e.g.
    Property:Former Program Manager
    • Might use Semantic Internal Objects or Type:Record
  - Extend information available on customer web sites and LinkedIn.com
- New site launched by Business Development staff
  - WordPress maintained by admins, librarians
- Some discussions on merging
Late 2010 reorganization provided a second opportunity to switch

Used commercial SMW+
  - Support for attachments
  - Provided templates were helpful and attractive
  - VMware distribution seemed to fit well with use of Xen on new servers

Developed our own ontology

Still sluggish despite some VM optimizations
  - Mixed response even from Semantic Web developers

Looking for a good calendar
BBN Person

BBN Details

Start Date: 1-1-2011
Current Position: Program Manager
Business Unit: KnowledgeEngineeringGroup
Manager:
Manages:

Projects
R2641 Response 1, SMW Configuration 1

Relationship holder detail
ExternalOrganization  ContactForPursuit  ExternalPOC
SMW Pursuit  John Smith

Other Relationships
User: Scollier knows:
User: DoreneRyder, User: Dreed

Categories: User | Person | BBNPerson

Suzanne Collier
First name: Suzanne
Last name: Collier
Email: scollier@bbn.com
Affiliation: BBN
Phone: 703-284-1311

Active Tasks (3)
Add new task

Task 1
Related to: User: Scollier, SMW Configuration 1
Ends: 28 January 2011,
Completed: 0%

Task 2
Related to: SMW Configuration 1, User: Scollier
Ends: unknown,
Completed: 0%

Task 3
Related to: COBRA 1, User: Scollier
Ends: unknown,
Completed: 2%

Upcoming Events (0)
Add new event

• none
Business Pursuit

SMW Pursuit

Summary of Pursuit

Status: Active
Capture Manager: Dorene Ryder
Client: BBN Technologies

Contact Details

BBN Relationship Holder: Scollier
External POC: John Smith

Important Dates

6 May 2011 BAA Due

Responses

Create a Response

Solicitation Details

Solicitation Number: 1234
Solicitation Type: BAA
Solicitation Homepage: http://bbn.com
Vision: Connecting BBN Information
Personal Perspectives

• Remain excited about SMW
  – Most promising tool for user annotations
• Great for existing MW users
  – Intellipedia still seems like a golden opportunity
• Glad to see an active developer and user community
• Look forward to the rest of the conference