Linking Data between Data Portals, Faceted Browsing Services, and Content Management Systems

Tetherless World Constellation website, http://tw.rpi.edu, is created within an environment, as are some of our research projects. By writing three separate Drupal modules for creating and editing semantic content, one for displaying the semantic content, and one for managing our semantic information for documents (Publications, presentations, chapters, journal entries, and more), we provide services for their Solar Terrestrial Community. Included in this is the Tetherless World RDF2HTML technology, which is also available for the data access portal VSTO (Virtual Solar Terrestrial Observatory – http://www.vsto.org).

VSTO 3.0 – http://www.vsto.org, is being developed as a simple user interface to services, outside of any content management system. RDF2HTML will provide the visualization of semantic content related to the discovery of data within the portal.

TWC collaborates with many different scientific communities, such as the CEDAR Atmospheric Regions (CEDAR – http://cedarweb.hao.ucar.edu). CEDA will provide services for their Solar Terrestrial Community. Included in this is the Tetherless World RDF2HTML technology, which is also available for the data access portal VSTO (Virtual Solar Terrestrial Observatory – http://www.vsto.org).

Semantic content may be displayed in a varying number of Content Management System (CMS) using our semantic technologies in RDF2HTML.

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Glossary:
RDF – Resource Description Framework
RDFS – Resource Description Framework Schema
OWL – Web Ontology Language
XSL – Extensible Stylesheet Language
EXT – Extensible Stylesheet Transformations
CMS – Content Management System
RDFa – Resource Description Framework in HTML
XSLT – Extensible Stylesheet Transformations Language
ARQL – Application Rule Query Language
ARQ – Application Rule Query Language