Towards Well Described Web Services [1]

Submitted by rduerr on Wed, 2015-04-15 16:12   Thursday, July 16, 2015 - 15:30 to 17:00

Event: Summer Meeting 2015 [2]
Session Type: Breakout [3]
Expertise Level: Beginner [4]
Collaboration Area: Discovery [5]
Documentation [6]
Information Technology and Interoperability [7]
Products and Services [8]
Semantic Web [9]

Abstract/Agenda:

In this era of the "data deluge" the amount of data available on the web is increasing rapdily, yet users still report that simply finding and accessing the data they need is both difficult and time consuming. Many data providers are trying to alleviate this problem by advertising and/or making their data holdings available via a variety of web services (OpenSearch, OAI-PMH, OGC W*S, OPeNDAP, etc.) as well as through traditional portals, ftp sites, etc. However, at this point, implementation of these "standards" vary dramatically from provider to provider, best practices generally do not exist, and simply discovering that the services exist may be difficult as they are often buried deep within the dark or hidden web. All of these factors (and probably more) contribute to making true data discoverability and interoperability an ongoing problem for researchers, especially for those researchers wishing to automate discovery or access to data. This session will provide a brief overview of the issues (with examples), but will primarily focus on assessing a number of proposed solutions to these problems and developing a path for moving the community forward.

Notes:

On Web Services:

* Scientific needs and data standardization need to go hand in hand; data should be machine-consumable as well as human consumable

* Add small components of semantic meaning; "micro-formats" -- implement in XML

* SOAP/REST - SOAP is easier to implement this in, REST is more common

* Many web services are "sockets" and this can be problematic

Current state of world:

* Tools such as OpenSearch found very few complient resources on the web.

* atomic tags are needed to find these components in a web resource. For example, "description", "title", "subtitle" etc.

* Data discoverability seems to be a real issue for machines, and also difficult for humans

Future Needs:

* What can ESIP do to help promote best practices in standardization?

* Many people in this session seem very divided on how to implement standarization; constraining the expressivity of the web makes it easier to search, but harder to interact with.

* We did not find even one site that could be considered to perfectly comply (?)

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Teaser: Towards self-describing web services
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