Government Linked Data

Sandro Hawke, W3C
eGovernment Activity Lead
sandro@w3.org @sandhawke

W3C AC Meeting
March 22, 2010
The Opportunity (and Problem)

Governments are starting to release their data!

http://www.flickr.com/photos/jwbonez/2574930097
We start with US: data.gov

Welcome to Data.gov

The purpose of Data.gov is to increase public access to high value, machine readable datasets generated by the Executive Branch of the Federal Government. Although the initial launch of Data.gov provides a limited portion of the rich variety of federal datasets presently available, we invite you to actively participate in shaping the future of Data.gov by suggesting additional datasets and site enhancements to provide seamless access and use of your Federal data. Visit today with us, but come back often. With your help, Data.gov will continue to grow and change in the weeks, months, and years ahead. For more information, view our How to Use Data.gov guide.

Data.gov Blog  March 15, 2010

Data.gov's Future: You’re Talking, and We’re Listening

by Linda Travers and Sanjeev Bhagowalia
Open Government at HHS

HHS is committed to providing open access to its data and information, building public-private partnerships, enhancing communication with its senior leadership, and expanding overall opportunities for citizens’ involvement and interaction.

How Do I Use Data Sets?

Two types of data sets are available. Downloads are open-format data sets presented in csv, xml or other downloadable formats. Interactive data sets can be manipulated on the Web. You may search by keyword, HHS Agency and/or type. New data sets are being...
Some Recent Examples

Dept. Interior
  Natural Resource Volunteer Opportunities
  Federal National Recreation Sites

Dept. Agriculture
  MyPyramid Food Raw Data
  Census of Agriculture Race, Ethnicity and Gender

Dept. Transportation
  Child Passenger Safety Ease of Use Ratings
  Tire Quality Grading System (4200 Ratings)
Welcome to the Massachusetts Open Data Initiative Wiki Space. Please note that we expect to update this content regularly with data as it becomes available. As of today much of the Commonwealth’s data is available via web query interfaces - links are provided within the Data Catalog. For questions or concerns about the data please email: opendata@massmail.state.ma.us, or follow us on Twitter: @MassData. Please visit our homepage, http://mass.gov/data, for more information.

Massachusetts Open Data Initiative

The Massachusetts Open Data Initiative is working to make public data available and accessible to the citizens of the Commonwealth. Our Data Catalog is an inventory of public data in the Commonwealth of Massachusetts.

Recent posts on Twitter from twitter.com/MassData

- MassData: Join us, @MassDOTdev & @MITX for the Open Data event on Wednesday http://bit.ly/9TUDPN #gov20 #opendata #opengov #mbta MassData: Join us, @MassDOTdev & @MITX for the Open Data event on...
+ New Zealand, The Netherlands, France, Sweden, Spain, Austria, Denmark, ...
It's XML, CSV, XLS, and KML

...from a million governments!
So how do you integrate this?
Third Party Translations

The Data-gov Wiki

About the Data-gov Wiki

We are investigating open government datasets using semantic web technologies. Currently, we are translating such datasets into RDF, getting them linked to the linked data cloud, and developing interesting applications and demos on linked government data.

Announcement (7)

- ANN: data-gov session at TED (10 February 2010, Deborah McGuinness hosts a conversation at TED 2010 on data.gov Friday Feb 12, 2010 4pm pacific time at TED Dome)

more ...

Demos (23)

Demo: Facts about Transportation Energy

- Description: Facts about Transportation Energy
- Live Demo(s): [1]
- Dataset(s): Dataset 402, Dataset 10029
- Technology Used: RDF, SPARQL, Google Visualization API, Google Visualization Motion Chart

more...

Document (22)

- Current Issues in data.gov (15 July 2009. Not all datasets in

Quick Links

- Data.gov Catalog - List of datasets from data.gov
- Issues - Issues in gov data
- Demos - applications using the published gov data.
- RSS - recently updated gov data.
- data-gov-wiki Source Code - our code are open

Dataset Statistics

- data.gov hosts 1784 datasets contributed by 85 US government agencies, including 1286 Raw Data Catalog and 495 Tool Catalog
- There are currently 150 translated RDF datasets
- contributing 463082586 table entries
- contributing 5227433743 triples.
- contributing 8207 properties.
- more ...

Recently Updated Datasets

Unlocking innovation
Working with UK Public Sector information and data

Advised by Sir Tim Berners-Lee and Professor Nigel Shadbolt and others, government is opening up data for reuse. This site seeks to give a way into the wealth of government data and is under constant development. We want to work with you to make it better.

We’re very aware that there are more people like you outside of government who have the skills and abilities to make wonderful things out of public data. These are our first steps in building a collaborative relationship with you.

Latest news:
- Read about our latest site changes
- find out how the data.gov.uk team has been getting involved with the community
- listen to a Podcast on setting up data.gov.uk

Search Data
Enter keyword(s)
e.g. education, NHS, crime, transport, environment

Search
Powered by: CKAN

Browse for Data
List all datasets
By Public Body
Common tags
Design Patterns

- URIs (using 303s, /TR/cooluris)
  - http://{sector}.data.gov.uk/id/{concept}
  - http://{sector}.data.gov.uk/doc/{concept}

- Versioning
  - Maintaining historical data
  - Named graphs

- Provenance
  - Where data came from
  - How it's been handled
Access For Developers

- Linked Data API
  - Maintain your RDF database
  - Expose it via RDF GET
  - Expose it via SPARQL
  - Expose it via RESTful APIs (JSON/XML)
  - Expose it via Web Pages

- Linked Data is cost effective solution
It's possible, with the right technology.