

## Improved Access to EPA Information: Before and After with Web 2.0

Brand Niemann  
Senior Enterprise Architect, US EPA,  
and Co-chair, Federal SOA CoP and Federal SICoP  
February 22, 2008

1

## Preface

- Response to Kol Peterson's 'Great Success Email' requesting suggestions from Web 2.0 Team for next phase.
  - February 20, 2008, Web 2.0 Workgroup Phase 1 Complete!!!
- Suggestions at the Collaboration Technology Community of Practice Inaugural Meeting to CIO Mollie O'Neill and those in attendance.
  - February 19, 2008, National Academy of Public Administration, Washington, DC.
- Supports my work on Web 2.0 (and Web 3.0) for EPA Enterprise, Information, and Data Architectures.
  - In collaboration with EPA Enterprise Architect, John Sullivan, EPA Information Architect, Susan Fagan, and EPA Data Architect, Kevin Kirby.

2

## Brief History

Date	Name	Web 2.0
November 1, 2007	The New New Internet Conference	KZO Networks Videocast (1) (next slide for URLs)
November 8, 2007 (2)	EPA Web 2.0 Work Group Launch	Use Wiki and Write Whitepaper (2)
November 14-16, 2008 (3)	OEI National Conference	Puget Sound Information Challenge Wiki (3)
November 15-16, 2008	Sustainable Water Resources Roundtable	Used Wiki (4)
January 9-10, 2008	Earth Science Information Partners Conference	Used Wikis (5)
February 4, 2008	Government Computer News, Web 2.0 the EPA Way	CIO's Business Needs (6)
February 12-14, 2008	EPA Web Workgroup Training Conference and TRI National Meeting	Web 2.0 Whitepaper and Sessions (Great Success!) (7)

3

## Brief History

- (1) <http://www.tnni07.thenewnewinternet.com/>
- (2) [http://thefedweb.us/epaweb20/index.php?title=Main\\_Page](http://thefedweb.us/epaweb20/index.php?title=Main_Page)
- (3) <http://www.epa.gov/oei/proceedings/2007/proceedings.htm> and <http://pugetsound.epageo.org/>
- (4) [http://semanticcommunity.wik.is/Sustainable\\_Water\\_Resource\\_s\\_Roundtable](http://semanticcommunity.wik.is/Sustainable_Water_Resource_s_Roundtable)
- (5) <http://www.esipfed.org/events/> and [http://semanticcommunity.wik.is/Federation\\_of\\_Earth\\_Science\\_Information\\_Partners](http://semanticcommunity.wik.is/Federation_of_Earth_Science_Information_Partners)
- (6) [http://www.gcn.com/print/27\\_3/45741-1.html](http://www.gcn.com/print/27_3/45741-1.html)
- (7) EPA WWG Conference on EPA Intranet at <https://shield.epa.gov/intranet/webgroup/meetings/02-08/index.html> and TRI National Meeting at <http://www.ecos.org/section/projects/?id=2571>

4

## Broader Context

- A New Enterprise Information Architecture and Data Management Strategy for the U.S. EPA and the Federal Government: [Online Book](#) and Hard Copy Book (to be published in 2008):
  - Part 12: Improved Access to EPA Information: Before and After with Web 2.0.
    - Post EPA Web Work Group Training Conference and EPA Web 2.0 Team Work on Whitepaper.
      - **NOTE: The paper is the printable Wiki content itself and the Wiki content is a mashup!**
  - Part 11: Our Space - Connecting Web 2.0, Enterprise Mashups, SOA, and the Semantic Web for Government 2.0 (Making It Easier to Do!).
    - 5th SOA for E-Government Conference, April 30-May 1st at MITRE Conference Center, McLean, VA. Free and open to all!

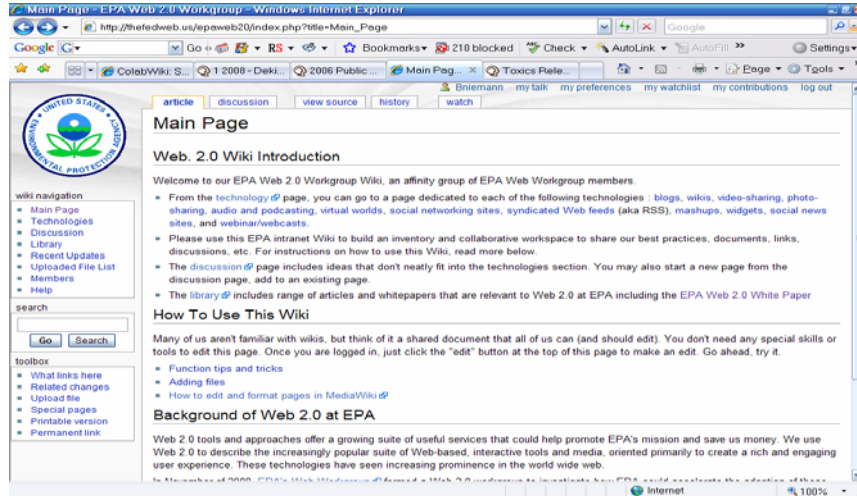
5

## Before and After Examples

Name	Before	After
EPA Web 2.0 Whitepaper	Written and Edited in Wiki	Published in Wiki
OEI National Conference	Web Site	Wiki
Puget Sound Information Challenge	Compiled in Wiki	Published in Wiki
CIO's Business Needs	Press and Slides	Demonstrated in Wiki
EPA Web Workgroup Training Conference	Intranet Web site	Wiki
TRI National Meeting	Web site	Wiki
TRI 2006 Public Data Release	Web Site (HTML and PDF)	Wiki (fully digital and Web accessible)

6

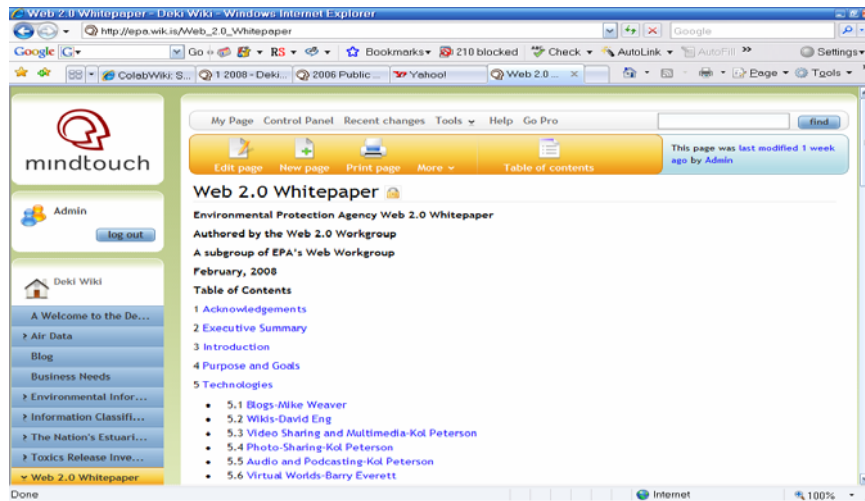
## EPA Web 2.0 Whitepaper: Before



<http://thefedweb.us/epaweb20/images/9/99/Web20whitepaper.pdf>

7

## EPA Web 2.0 Whitepaper: After



[http://epa.wikis/Web\\_2\\_0\\_Whitepaper](http://epa.wikis/Web_2_0_Whitepaper)

8

## OEI National Conference: Before

The screenshot shows the EPA's Environmental Information Symposium 2007 website. The page is titled "EPA's Environmental Information Symposium 2007" and "Final Proceedings". It lists the schedule for Tuesday, November 13, 2007, and Wednesday, November 14, 2007. The schedule includes meetings such as the EPA National Library Network Annual Meeting, EPA Quality and Information Council (QIC), Quality Technology Subcommittee (QTS) Meeting, and Exchange Network Grant Coordinators Meeting.

**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**Environmental Information Symposium 2007**

**EPA's Environmental Information Symposium 2007**

**Final Proceedings**

You will need Adobe Acrobat Reader, available as a free download, to view some of the files on this page. See [EPA's PDF page](#) to learn more about PDF, and for a link to the free Acrobat Reader.

**Tuesday, November 13, 2007**

- 8:30am - 5:00pm EPA National Library Network Annual Meeting (by invitation)
- 2:30pm - 5:30pm EPA Quality and Information Council (QIC), Quality Technology Subcommittee (QTS) Meeting (by invitation)

**Wednesday, November 14, 2007**

- 8:00am - 12:00pm EPA National Library Network Annual Meeting (by invitation)
- 8:30am - 11:30am EPA Quality and Information Council (QIC), Quality Technology Subcommittee (QTS) Meeting (by invitation)
- 3:00pm - 5:30pm Exchange Network Grant Coordinators Meeting (by invitation)

<http://www.epa.gov/oei/proceedings/2007/proceedings.htm>

9

## OEI National Conference: After

The screenshot shows the EPA's Environmental Information Symposium 2007 website on a Deki Wiki platform. The page is titled "2007 Environmental Information Symposium" and "Final Proceedings (December 14, 2007)". It lists the schedule for Tuesday, November 13, 2007, and Wednesday, November 14, 2007. The schedule includes meetings such as the EPA National Library Network Annual Meeting, EPA Quality and Information Council (QIC), Quality Technology Subcommittee (QTS) Meeting, Exchange Network Grant Coordinators Meeting, and Training Sessions.

**mindtouch**

My Page Control Panel Recent changes Tools Help Go Pro

Edit page New page Print page More Table of contents

This page was last modified 5 days ago by Admin

**2007 Environmental Information Symposium**

**Final Proceedings (December 14, 2007):**

**Tuesday, November 13, 2007:**

- 8:30am - 5:00pm EPA National Library Network Annual Meeting (by invitation).
- 2:30pm - 5:30pm EPA Quality and Information Council (QIC), Quality Technology Subcommittee (QTS) Meeting (by invitation).

**Wednesday, November 14, 2007:**

- 8:00 am - 12:00pm EPA National Library Network Annual Meeting (by invitation).
- 8:30 am - 11:30 am EPA Quality and Information Council (QIC), Quality Technology Subcommittee (QTS) Meeting (by invitation).
- 3:00 pm - 5:30 pm Exchange Network Grant Coordinators Meeting (by invitation).
- 8:00 am - 9:00 am Training Sessions:
  - Training Session 1: Disaster Recovery Planning.
  - Training Session 2: Developing To EPA's Architecture: Leveraging the Enterprise Tools.
  - Training Session 15: Section 508 Basics for Providing Access.
  - Training Session 4: Information Resources Management (IRM) Jump Start Program, National Defense University.
  - Training Session 12: What is the Enterprise Customer Service Solution (ECSS)?
- 9:00 am - 10:00 am Training Sessions:

[http://epa.wik.is/Environmental\\_Information/2007\\_Environmental\\_Information\\_Symposium](http://epa.wik.is/Environmental_Information/2007_Environmental_Information_Symposium)

10

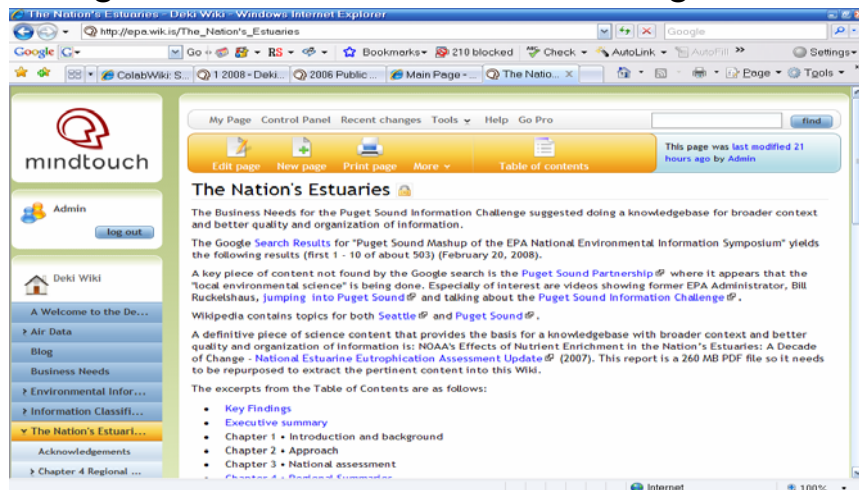
# Puget Sound Information Challenge: Before



<http://pugetsound.epageo.org/>

11

# Puget Sound Information Challenge: After



[http://epa.wik.is/The\\_Nation's\\_Estuaries](http://epa.wik.is/The_Nation's_Estuaries)

12

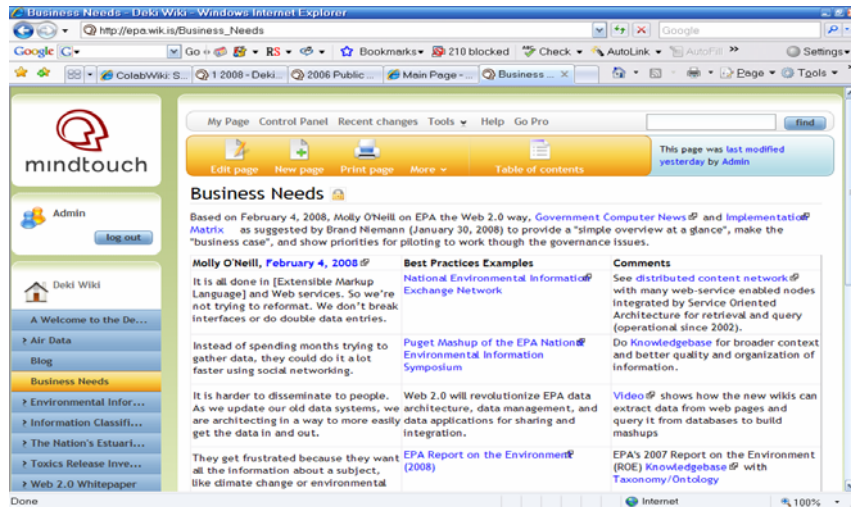
# CIO's Business Needs: Before



[http://www.gcn.com/print/27\\_3/45741-1.html](http://www.gcn.com/print/27_3/45741-1.html)

13

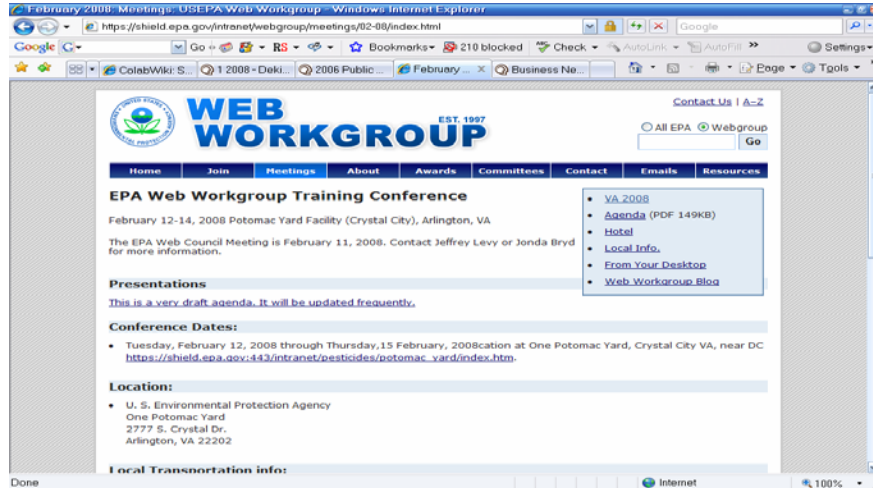
# CIO's Business Needs: After



[http://epa.wik.is/Business\\_Needs](http://epa.wik.is/Business_Needs)

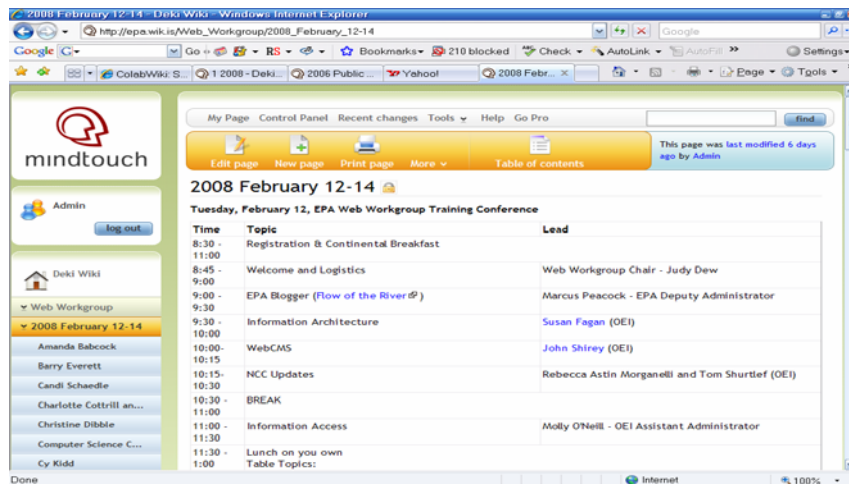
14

## EPA Web Workgroup Training Conference: Before



<https://shield.epa.gov/intranet/webgroup/meetings/02-08/index.html>  
[https://shield.epa.gov/intranet/webgroup/meetings/02-08/master\\_agenda.pdf](https://shield.epa.gov/intranet/webgroup/meetings/02-08/master_agenda.pdf) 15

## EPA Web Workgroup Training Conference: After



[http://epa.wikis/Web\\_Workgroup/2008\\_February\\_12-14](http://epa.wikis/Web_Workgroup/2008_February_12-14)

16



## TRI National Meeting: Before

The screenshot shows a web browser window displaying the ECOS website. The page title is "Environmental Council of the States: Events". The main content area features a navigation menu with "HOME", "COMMITTEES", "STATES", "POLICY", "PROJECTS", "PUBLICATIONS", "EVENTS", and "NEWS". Below the menu, there is a section for "EVENTS" with a sub-section for "2008 TRI NATIONAL TRAINING CONFERENCE". The event details include the dates "February 12, 2008 - February 14, 2008", a description of the conference, and the sponsor "ECOS and EPA". The venue is listed as "Crowne Plaza National Airport, Arlington VA".

<http://www.ecos.org/section/events/?id=2919>

17

## TRI National Meeting: After

The screenshot shows a web browser window displaying a Doki Wiki page. The page title is "2008 TRI National Training Conference". The page content includes the location "Crowne Plaza Hotel, National Airport, 1400 Crystal Drive, Arlington, VA 22202" and a detailed schedule for "DAY 1 - TUESDAY, FEBRUARY 12, 2008, Plenary - Arlington Ballroom". The schedule lists activities such as "Registration and Refreshments", "Demonstrations", "Welcome - Opening Remarks", and "KEYNOTE SPEAKERS".

[http://epa.wikis/Toxics\\_Release\\_Inventory/2008 TRI National Training Conference](http://epa.wikis/Toxics_Release_Inventory/2008_TRI_National_Training_Conference)

18

## TRI 2006 Public Data Release: Before

The screenshot shows a web browser window displaying the EPA's website for the 2006 TRI Public Data Release. The page title is "2006 TRI Public Data Release" and the URL is <http://www.epa.gov/tri/tridata/tri06/index.htm>. The page content includes a navigation menu on the left, a search bar, and a main text area with a heading "2006 TRI Public Data Release". The text states: "EPA released the 2006 TRI Data on February 21st, 2008. This page provides an overview of the 2006 TRI data and relevant TRI information (including analysis, tables, charts, maps, etc.) To fully understand the TRI data, we recommend that you read all of the materials." Below this text is a list of links: "What is the Toxics Release Inventory (TRI) and what do the data show for 2006?", "What materials are available for the Public Data Release?", "How can I obtain the full data set for my state?", "What about facility data errors?", "Are online tools available?", and "What other information should I consider when using TRI data to assess releases in my neighborhood?".

<http://www.epa.gov/tri/tridata/tri06/index.htm>

19

## TRI 2006 Public Data Release: After

The screenshot shows a web browser window displaying the EPA Wiki page for the 2006 Public Data Release. The page title is "2006 Public Data Release" and the URL is [http://epa.wikis/Toxics\\_Release\\_Inventory/2006\\_Public\\_Data\\_Release](http://epa.wikis/Toxics_Release_Inventory/2006_Public_Data_Release). The page content includes a navigation menu on the left, a search bar, and a main text area with a heading "2006 Public Data Release". The text states: "EPA released the 2006 TRI Data on February 21st, 2008, on a Web page that provides an overview of the 2006 TRI data and relevant TRI information (including analysis, tables, charts, maps, etc.). To fully understand the TRI data, they recommend that you read all of the materials." Below this text is a list of links: "Toxics Release Inventory (TRI) Program Fact Sheet", "2006 PDR Brochure (quick overview of TRI data for this year and general trends over the past several years)", "2006 PDR Key Findings (this section provides a detailed look at the key findings on 2006 TRI data)", and "Section A - Data Charts".

[http://epa.wikis/Toxics\\_Release\\_Inventory/2006\\_Public\\_Data\\_Release](http://epa.wikis/Toxics_Release_Inventory/2006_Public_Data_Release)

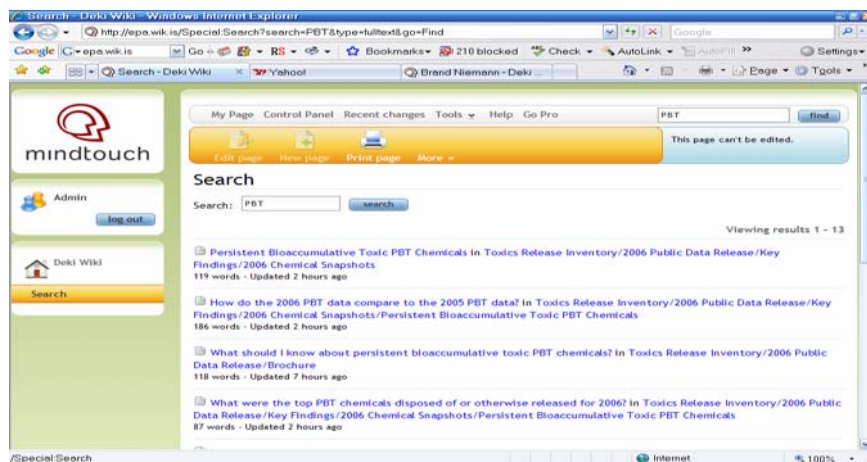
20

# Google-Wikipedia Effect

- Google has briefed EPA on the Federal Sitemaps Initiative and EPA Webmasters will be doing their Sitemap files this year.
- Google gives preference to Wikis, Blogs, etc. because of their dynamic and interesting content.
- We have taken advantage of this to improve search results and thus access to environmental information. Improved public access has implications for the Enterprise Architecture of back-end systems.
- Conversion of PDF files to full digital access and file descriptions of file attachments also improves information access.
- Try our CIO's search example from the TRI National Meeting Dialogue (e.g. find the definition of PBT). See next slide.
- Web 2.0 provides both improved public access and web content and records management in support of Enterprise, Information, and Data Architecture business goals.

21

# Google-Wikipedia Effect



22

# Improved Access to EPA and Interagency Information: Before and After with Web 2.0 – Part 2

Brand Niemann  
Senior Enterprise Architect, US EPA,  
and Co-chair, Federal SOA CoP and Federal SICoP  
March 8, 2008

1

## Preface

- Suggestions at the EPA Web Workgroup Conference, February 12-14, 2008, and some specific examples of how I think we should organize ourselves to migrate the most important EPA content in the following steps:
  - 1. Assure the new EPA Wiki and Blog infrastructure is scalable and robust enough for a large number of users doing serious content migration.
  - 2. Organized those doing content migration according to the EPA Information Architecture that Susan and her group have developed and are working to implement.
  - 3. Report the results and lessons learned at the 6-month conferences and interim meetings in between.

2

## Brief History

Date	Name	Web 2.0
November 1, 2007	The New New Internet Conference	KZO Networks Videocast (1) (next slide for URLs)
November 8, 2007 (2)	EPA Web 2.0 Work Group Launch	Use Wiki and Write Whitepaper (2)
November 14-16, 2008 (3)	OEI National Conference	Puget Sound Information Challenge Wiki (3)
November 15-16, 2008	Sustainable Water Resources Roundtable	Used Wiki (4)
January 9-10, 2008	Earth Science Information Partners Conference	Used Wikis (5)
February 4, 2008	Government Computer News, Web 2.0 the EPA Way	CIO's Business Needs (6)
February 12-14, 2008	EPA Web Workgroup Training Conference and TRI National Meeting	Web 2.0 Whitepaper and Sessions (Great Success!) (7)

3

## Brief History

- (1) <http://www.tnni07.thenewnewinternet.com/>
- (2) [http://thefedweb.us/epaweb20/index.php?title=Main\\_Page](http://thefedweb.us/epaweb20/index.php?title=Main_Page)
- (3) <http://www.epa.gov/oei/proceedings/2007/proceedings.htm> and <http://pugetsound.epageo.org/>
- (4) [http://semanticcommunity.wik.is/Sustainable\\_Water\\_Resource\\_s\\_Roundtable](http://semanticcommunity.wik.is/Sustainable_Water_Resource_s_Roundtable)
- (5) <http://www.esipfed.org/events/> and [http://semanticcommunity.wik.is/Federation\\_of\\_Earth\\_Science\\_Information\\_Partners](http://semanticcommunity.wik.is/Federation_of_Earth_Science_Information_Partners)
- (6) [http://www.gcn.com/print/27\\_3/45741-1.html](http://www.gcn.com/print/27_3/45741-1.html)
- (7) EPA WWG Conference on EPA Intranet at <https://shield.epa.gov/intranet/webgroup/meetings/02-08/index.html> and TRI National Meeting at <http://www.ecos.org/section/projects/?id=2571>

4

## Broader Context

- A New Enterprise Information Architecture and Data Management Strategy for the U.S. EPA and the Federal Government: [Online Book](#) and Hard Copy Book (to be published in 2008):
  - Part 12: Improved Access to EPA Information: Before and After with Web 2.0.
    - Post EPA Web Work Group Training Conference and EPA Web 2.0 Team Work on Whitepaper.
      - **NOTE: The paper is the printable Wiki content itself and the Wiki content is a mashup!**
  - Part 11: Our Space - Connecting Web 2.0, Enterprise Mashups, SOA, and the Semantic Web for Government 2.0 (Making It Easier to Do!).
    - 5th SOA for E-Government Conference, April 30-May 1st at MITRE Conference Center, McLean, VA. Free and open to all!

5

## Before and After Examples: Part 1

Name	Before	After
EPA Web 2.0 Whitepaper	Written and Edited in Wiki	Published in Wiki
OEI National Conference	Web Site	Wiki
Puget Sound Information Challenge	Compiled in Wiki	Published in Wiki
CIO's Business Needs	Press and Slides	Demonstrated in Wiki
EPA Web Workgroup Training Conference	Intranet Web site	Wiki
TRI National Meeting	Web site	Wiki
TRI 2006 Public Data Release	Web Site (HTML and PDF)	Wiki (fully digital and Web accessible)

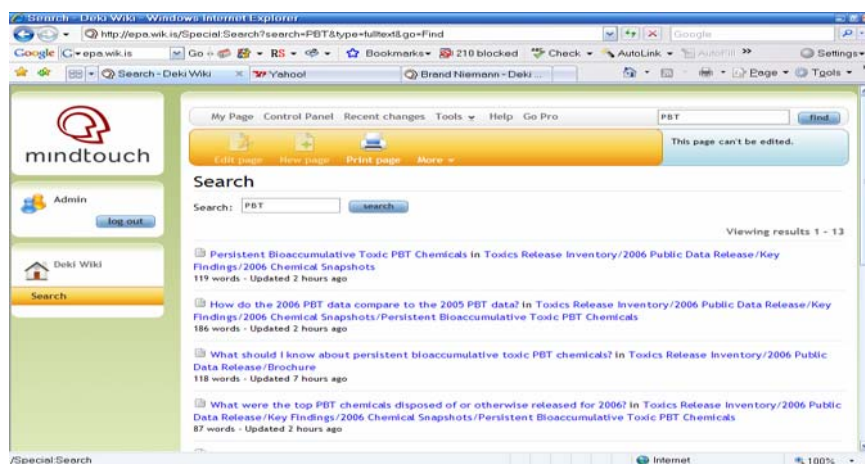
6

# Google-Wikipedia Effect

- Google has briefed EPA on the Federal Sitemaps Initiative and EPA Webmasters will be doing their Sitemap files this year.
- Google gives preference to Wikis, Blogs, etc. because of their dynamic and interesting content.
- We have taken advantage of this to improve search results and thus access to environmental information. Improved public access has implications for the Enterprise Architecture of back-end systems.
- Conversion of PDF files to full digital access and file descriptions of file attachments also improves information access.
- Try our CIO's search example from the TRI National Meeting Dialogue (e.g. find the definition of PBT). See next slide.
- Web 2.0 provides both improved public access and web content and records management in support of Enterprise, Information, and Data Architecture business goals.

7

# Google-Wikipedia Effect



8

## Before and After Examples: Part 2

Name	Before	After
EPA Science Forum	Web Site (2007)	Web 2.0 Wiki
EPA Metadata Community of Interest	Systems of Registries Web Databases	Enterprise Web 2.0 Wiki Databases (fully digital and Web accessible)
FESIP* Climate Change	Web Site and Wiki	Web 2.0 Wiki
NIH Wiki Fair	Wiki	Web 2.0 Wiki
SICoP	Wiki	Web 2.0 Wiki
SOA CoP	Wiki	Web 2.0 Wiki
Semanticcommunity. Net	Web Site (web-services.gov)	Web 2.0 Wiki

\* Federation of Earth Science Information Partners

9

## EPA Science Forum: Before

The screenshot shows a web browser window displaying the EPA Science Forum website. The browser's address bar shows the URL <http://www.epa.gov/ncct/forum/>. The website header includes the EPA logo and the text 'National Center for Computational Toxicology' and 'U.S. ENVIRONMENTAL PROTECTION AGENCY'. The main heading is '2007 International Science Forum on Computational Toxicology'. Below this, there is a graphic of a DNA double helix with the text 'COMPUTATIONAL TOXICOLOGY'. The text below the graphic states: 'May 21-23, 2007 U.S. EPA Main Facility Research Triangle Park, NC'. A sidebar on the right contains a section titled '2007 CompTox Forum' with a list of dates: 'Monday, May 21', 'Tuesday, May 22', and 'Wednesday, May 23'. Below this is a 'Forum Agenda' section with links for 'Poster Presentations', 'Descriptions and Objectives of the Platform Sessions', 'Frequently Asked Questions', and 'Contact Us'. The bottom of the browser window shows the status bar with 'Internet' and '100%' zoom.

<http://www.epa.gov/ncct/forum/>

10



## EPA Science Forum: After

My Page Control Panel Recent changes Tools Help Go Pro

Science Forum 2007

Contents:

- Frequently Asked Questions (Science Forum and Computational Toxicology and NCCT)
- A State of the Science Mini-Review
- Forum Recaps: May 21, May 22, and May 23
- Plenary Sessions, Concurrent Sessions, and Poster Presentations
- Description and Objectives of the Platform Sessions

DAY 1 - Monday, May 21, 2007

Time	Opening Events
10:00 AM	Registration Desk Opens (Rotunda)
1:15 PM	Welcoming Remarks - Robert Kavlock, U.S. EPA/ORD/NCCT (Auditorium)
1:30 PM	Opening Address - George Gray, Assistant Administrator for Research and Development and EPA Science Advisor, U.S. EPA

Session I: Plenary Session (Auditorium)

Time	Virtual Tissues - The Next Big Step for Computational Biology, Toxicology and Risk Assessment
	Description and Objectives of the Platform Sessions

David Corley, Pacific Northwest National Laboratory and Rory Conolly, U.S. EPA/ORD/NCCT

[http://epa.wik.is/Science/Science\\_Forum\\_2007](http://epa.wik.is/Science/Science_Forum_2007)

11

## EPA Metadata COI: Before

- Data Architecture Team Hosts Metadata Management Community of Interest Kick-off:
  - OTO's Data Architecture Team initiated and hosted a kick-off meeting for a Community of Interest (COI) focused on creating and managing metadata at an enterprise level for the Agency. Attendees included: data system managers, segment architects, developers, and stakeholders representing a broad cross-section of EPA, including OARM, OCFO, OEI, ORD, OSWER, OW and Region 5. The purpose of the COI is to offer guidance and input into the development of an enterprise Metadata Management Strategy for the Agency. This Community will effectively shape the metadata chapter of the Enterprise Data Management Framework being undertaken by the Data Architecture Team. The group agreed that it should continue as a COI that provides technical advice as to how metadata is captured and documented in existing metadata repositories while leveraging existing Enterprise tools such as the EDR, READ, ECMS and EIMS. If interested in participating in this community, please contact Kevin Kirby by phone or email.
    - OTO Weekly Report, February 11 –15, 2008.

12

## EPA Metadata COI: After

This is a pilot Web 2.0 Wiki for EPA Metadata: Helping people use EPA data to collaborate and built applications. Our initial objective is to see if this Web 2.0 Wiki can be useful in bringing about collaboration across the Metadata Management Functions Matrix, Teams-Tasks Matrix, and Data Architecture Documents. A longer range goal would be to see if this Web 2.0 Wiki could be used as an Enterprise Metadata Management and Application Development Tool (e.g. data and metadata mashups).

**Most Recent Briefing:** Wednesday, March 12, 2008, EPA CIO and Deputy CIO (see [Blog](#))

**Data Architect:** Kevin Kirby, [kirby.kevin@epa.gov](mailto:kirby.kevin@epa.gov)

**Wikimaster:** Brand Niemann, [niemann.brand@epa.gov](mailto:niemann.brand@epa.gov)

Note: Everything except this page requires a login at this time.

Topic	Purpose	Lead Person
Blog	Log of key activities and events	Brand Niemann
Data Architecture Subcommittee	Core.gov for useful information	Brand Niemann
DAMA Symposium and Wiltshire Metadata Conference	Learn what others are doing	Kevin Kirby
Data Architecture Documents	Get comments and suggestions	Brand Niemann
Functions Matrix	Dashboard for management	Kevin Kirby
Teams-Task Matrix	Dashboard for management	Kevin Kirby

<http://epametadata.wik.is/> (password required to see)

13

## GEOSS/Climate Change: Before

Meeting Program (session descriptions, poster abstracts, speaker bios)

**Pre-meeting Activities** [edit]

January 8, 2008

- 1-5 p.m. Strategic Planning Working Group
- 5:30-7 p.m. Executive Committee and Foundation Board Meeting
- 7-9 p.m. Executive Committee and Foundation Board dinner at Finn and Porter (hotel restaurant)

**NOTE:** We are having difficulty with some of the presentations provided by our speakers. We are attempting to get new files for some that are not being viewed properly. Stay tuned.

**January 9, 2008** [edit]

Time	Session	Location
7:30-	Registration	Pre-function area
9:00-9:15	Welcome, Charles Hutchinson, ESIP Federation President	Capital CD
9:15-10:45	NOAA Climate Presentations, Chester Koblinsky, Director, NOAA Climate Program Office, <i>Climate Information Services</i> (confirmed) and Thomas Karl, Director, NOAA/National Climatic Data Center, <i>Assessing Climate Change: Speed Bumps in the Process</i> (confirmed)	Capital CD
10:45-11:15	Break	Pre-function area
11:15-12:00	Jack Kaye, Associate Director for Research, Earth Science Division, NASA Science Mission Directorate, <i>Update on NASA's Earth Science</i> (confirmed)	Capital CD
12:00-1:30	Lunch with Speaker, Bernen Moore, Director, Institute for the Study of Earth, Oceans, and Space, University of New Hampshire, <i>Global Climate Change: A Faustian Bargain – Yet Grounded in Science</i> (confirmed)	Capital A
1:30-3:30	Breakout Sessions-Day 1	TBA
3:30-3:45	Break	Pre-function area
3:45-5:45	Breakout Sessions-Day 1	Capital C, Capital D, Private Dining

[http://wiki.esipfed.org/index.php/January\\_9-10,\\_2008,\\_ESIP\\_Federation\\_Meeting,\\_Washington,\\_DC#Poster\\_Session\\_and\\_Reception](http://wiki.esipfed.org/index.php/January_9-10,_2008,_ESIP_Federation_Meeting,_Washington,_DC#Poster_Session_and_Reception)

14

## GEOSS/Climate Change: After

The screenshot shows a web browser window displaying a page from the Semantic Community. The page title is "The Changing Climate: Making Earth Science Relevant Again in Light of Global Warming". The page content includes a navigation menu on the left, a main text area with introductory paragraphs, and a table of events for January 9, 2008.

January 9, 2008		
Time	Session(s)	Location
7:30	Registration	Pre-function Area
9:00-9:15	Welcome, Charles Hutchinson, ESIP Federation President	Capital CD
9:15-10:45	Chester Koblinksky, NOAA Climate Program Office, Climate Information Services and Thomas Karl, NOAA/National Climatic Data Center, Assessing Climate Change: Speed Bumps in the	Capital CD

[http://epa.wik.is/Climate\\_Change/The\\_Changing\\_Climate%3a\\_Making\\_Earth\\_Science\\_Relevant\\_Again\\_in\\_Light\\_of\\_Global\\_Warming](http://epa.wik.is/Climate_Change/The_Changing_Climate%3a_Making_Earth_Science_Relevant_Again_in_Light_of_Global_Warming)

15

## NIH Wiki Fair: Before

The screenshot shows a web browser window displaying a page titled "NIH Wiki Fair 2007 02 28". The page content includes a navigation menu, a logo for USA Services, and a list of event details.

- When: Wednesday February 28, 2007, from 8:00 am till 4:00 pm
- Where: Lister Hill Center Auditorium, Building 38A, on the NIH Campus in Bethesda, MD. [Medical Center Metro Station](#)
- NIH Wiki Fair Organizing Committee:
  - Co-chairs: Dr. Olga Brazhnik (brazhnik at nih.gov) and Dr. Peter Lyster (lysterpe at nigrms.nih.gov).
  - Committee members: Tatiana Khramkova (OD/OER/ORIS), Dr. Vivien Bonazzi (NHGRD), Dan Wendling (NLM), Kathryn Dudley (OD/ORS/NIH Library)
- Registration is CLOSED NOW: See [Videocast](#) or [Podcast](#): search for NIH Wiki Fair in past events or find by date. Use [Videocast/FiringGuide](#) to find the presentations interesting to you
- [File Repository](#)

**Agenda** ([Print Version in Word](#))

- 8 am - Registration and Coffee
- 8:30 - 8:45am Introductions
  - [Dr. Olga Brazhnik, NIH/CIT](#)

[http://colab.cim3.net/cgi-bin/wiki.pl?NIHWikiFair\\_2007\\_02\\_28](http://colab.cim3.net/cgi-bin/wiki.pl?NIHWikiFair_2007_02_28)

16

## NIH Wiki Fair: After

The screenshot shows a Microsoft Internet Explorer browser window displaying the NIH Wiki Fair page on the Semantic Community wiki. The browser's address bar shows the URL: [http://semanticcommunity.wik.is/Best\\_Practices/NIH\\_Wiki\\_Fair](http://semanticcommunity.wik.is/Best_Practices/NIH_Wiki_Fair). The page features a navigation menu with options like 'My Page', 'Control Panel', 'Recent changes', 'Tools', and 'Help'. The main content area includes the following information:

- When:** Wednesday February 28, 2007, from 8:00 am till 4:00 pm
- Where:** Lister Hill Center Auditorium, Building 38A, on the NIH Campus in Bethesda, MD, *Medical Center Metro Station*
- NIH Wiki Fair Organizing Committee:**
  - Co-chairs:** Dr. Olga Brazhnik (brazhnik at nih.gov) and Dr. Peter Lyster (lysterpe at nigrms.nih.gov).
  - Committee members:** Tatiana Khrankova (OD/OER/ORIS), Dr. Vivien Bonazzi (NHGRI), Dan Wendling (NLM), Kathryn Dudley (OD/ORIS/NIH Library)
- Registration:** is CLOSED NOW: See [Videocast](#) or [Podcast](#): search for NIH Wiki Fair in past events or find by date. Use [Videocast Timing Guide](#) to find the presentations interesting to you.
- Agenda:**
  - 8 am - Registration and Coffee
  - 8:30 - 8:45am Introductions
    - Dr. Olga Brazhnik, NIH/CIT
      - Welcome
    - Dr. Jack Jones, NIH CIO, Acting
    - Dr. John Whitmarsh, NIGMS

[http://semanticcommunity.wik.is/Best\\_Practices/NIH\\_Wiki\\_Fair](http://semanticcommunity.wik.is/Best_Practices/NIH_Wiki_Fair)

17

## SICoP: Before

The screenshot shows a Windows Internet Explorer browser window displaying the SICoP Special Conference page on the Colab Wiki. The browser's address bar shows the URL: [http://colab.cim3.net/cgi-bin/wiki.pl?action=browse&id=SICoPSpecialConference\\_2007\\_02\\_06&revis](http://colab.cim3.net/cgi-bin/wiki.pl?action=browse&id=SICoPSpecialConference_2007_02_06&revis). The page features a navigation menu with options like 'WikihomePage', 'RecentChanges', and 'Page Index'. The main content area includes the following information:

- SICoP Special Conference: Building DRM 3.0 and Web 3.0 for Managing Context Across Multiple Documents and Organizations**
- Next SICoP Special Conference 2:** Building Knowledgebases for Cross-Domain Semantic Interoperability, April 25, 2007
- Special Recognitions**
- Post Conference Comments**
- Date:** February 6, 2007
- Time:** 8:25 a.m. - 3:05 p.m.
- Place:** CSC, 3170 Fairview Park Drive, Falls Church, VA, Executive Conference Center. Free Parking close by or a short cab ride from the Dunn Loring Metro Station.
- Registration:** CLOSED. LIMIT REACHED.
- Accommodations:** Marriott Fairview Park
- Remote Access:** Dial-in Number: (XXX) XXX-XXXX and Access Code: XXXXXX (33 Callers and a Total of 1783 Minutes)
- Demonstration in Afternoon:** GoTo Meeting with Meeting ID: XXX-XXX-XXX. Semantic Wiki: [URL](#)
- Contacts:** Lucian Russell, [LucianRussell@verizon.net](mailto:LucianRussell@verizon.net) or [LucianRuss@aol.com](mailto:LucianRuss@aol.com), and BrandNiemann, [niemann.brand@epa.gov](mailto:niemann.brand@epa.gov)
- File Repository**
- Background** (See especially new [CIOC Strategic Plan](#))
- Organizers:** Lucian Russell, Author of the [Guidance for Data Context and Data](#)

[http://colab.cim3.net/cgi-bin/wiki.pl?SICoPSpecialConference\\_2007\\_02\\_06](http://colab.cim3.net/cgi-bin/wiki.pl?SICoPSpecialConference_2007_02_06)

18

## SICoP: After

The screenshot shows a web browser window displaying the SICoP wiki page. The browser's address bar shows the URL: [http://semanticscommunity.wik.is/Federal\\_Semantic\\_Interoperability\\_Community\\_of\\_Practice](http://semanticscommunity.wik.is/Federal_Semantic_Interoperability_Community_of_Practice). The page features a navigation menu with options like 'My Page', 'Control Panel', and 'Recent changes'. The main content area is titled 'Federal Semantic Interoperability Community of Practice' and includes a 'Charter' section, a 'Work Group Status' section, and a 'Chronology' section. The 'Chronology' section lists several activities, including 'White Papers for the Federal CIO Council's Best Practices Committee' and 'February 16, 2005: Introducing Semantic Technologies and the Vision of the Semantic Web'. The page also includes a sidebar with a 'mindtouch' logo and a 'Deki Wiki' navigation menu.

[http://semanticscommunity.wik.is/Federal\\_Semantic\\_Interoperability\\_Community\\_of\\_Practice](http://semanticscommunity.wik.is/Federal_Semantic_Interoperability_Community_of_Practice)

19

## SOA CoP: Before

The screenshot shows a web browser window displaying the SOAforEGovernment 2007 10 0102 wiki page. The browser's address bar shows the URL: [http://colab.cim3.net/cgi-bin/wiki.pl?SOAforEGovernment\\_2007\\_10\\_0102](http://colab.cim3.net/cgi-bin/wiki.pl?SOAforEGovernment_2007_10_0102). The page features a navigation menu with options like 'WikiHomePage', 'RecentChanges', and 'Page Index'. The main content area is titled 'SOAforEGovernment 2007 10 0102' and includes a 'USA Services' logo, a 'Fourth Service Oriented Architecture for E-Government Conference' announcement, and a 'Your Visited Pages' section. The 'Your Visited Pages' section lists several pages, including 'SOAforEGovernment 2007 10 0102', 'SOAforEGovernment 2006 05 2224', and 'See Demo'. The page also includes a 'View Backlinks' section and a 'Wiki Search' section.

[http://colab.cim3.net/cgi-bin/wiki.pl?SOAforEGovernment\\_2007\\_10\\_0102](http://colab.cim3.net/cgi-bin/wiki.pl?SOAforEGovernment_2007_10_0102)

20

## SOA CoP: After

The screenshot shows the 'Federal SOA Community of Practice' page. The sidebar on the left includes a 'mindtouch' logo, an 'Admin' section with a 'log out' button, and a 'Deki Wiki' section with links to 'A Welcome to Deki...', 'Adaptable Computing...', 'Best Practices', 'DoD Community of In...', 'EPA Web 2.0 Team', 'Federal Chief Archit...', 'Federal Semantic Int...', 'Federal SOA Commun...', and 'Conferences'. The main content area has a 'My Page' control panel and a search bar. Below this is a navigation bar with 'Edit page', 'New page', 'Print page', 'More', and 'Table of contents'. The page title is 'Federal SOA Community of Practice'. The 'Mission Statement' describes the CoP as an open community for government and commercial organizations. The 'Demonstrations' section lists goals like providing concrete examples and confidence. The 'Activities' section includes a table:

Date	Conference	Demo Phase
October 1-2, 2008	Sixth	6
April 30-May 1, 2008	Fifth	5
October 1-2, 2007	Fourth	4# TBC
May 1-2, 2007	Third# TBC	3# TBC

[http://semanticcommunity.wik.is/Federal\\_SOA\\_Community\\_of\\_Practice](http://semanticcommunity.wik.is/Federal_SOA_Community_of_Practice)

21

## Semanticcommunity. Net: Before

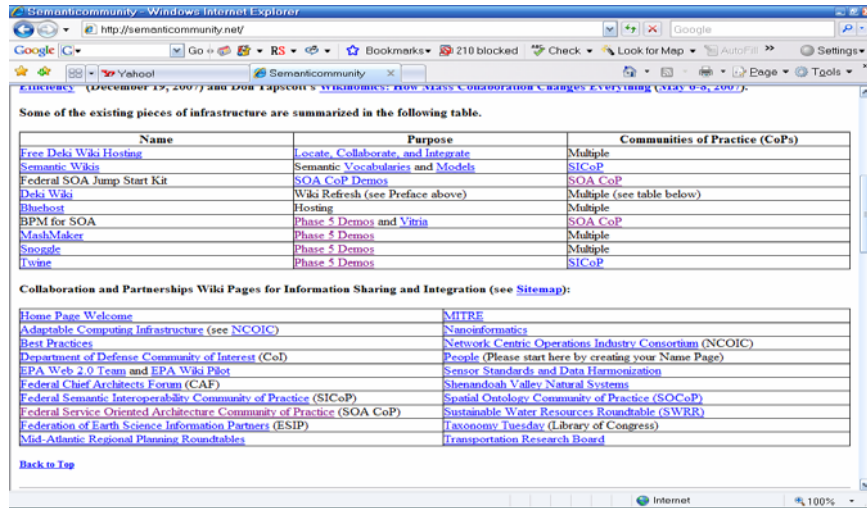
The screenshot shows the Semanticcommunity.net website. The title is 'Information Sharing of Trusted Reference Knowledge in a Dynamic Knowledge Repository'. Below the title are links for 'Searches: Basic, Preferences, Expert, Advanced, and Example of Field Searching'. The 'Contents' section lists various topics like 'History, Semantic Wiki Pilots, Semantic Technologies & Interoperability, Enterprise Architecture, Data Architecture XML, EPA, EPA Region 4, Environmental Health, and Webmaster'. The 'Semanticcommunity.net: Community Infrastructure Sandbox for 2008' section is followed by two columns of links:

Knowledgebases for the Government Domain:	Collaborations:
<p>1. January 2008:</p> <p>Semanticcommunity.net: Community Infrastructure Sandbox for 2008</p> <p>Water Budgets, Foundations for Effective Water-Resources and Environmental Management Knowledgebase Pilot for the Water Cycle - Drought Ontology (being incorporated into the SWEET Ontology) with the Noreis - a smart semantic search tool, and High-Resolution Drought Forecasting System</p> <p>Planet Sound Mashup of the EPA National Environmental Information Symposium Knowledgebase</p>	<p>January 7, 2008, SOA CoP Demo 5 Conference Call</p> <p>January 9-10, 2008, Federation of Earth Science Information Partners Meeting: The Changing Climate: Making Earth Science Relevant Again in Light of Global Warming, Washington, DC. A New Enterprise Information Architecture and Data Management Strategy for the U.S. Government Part 10: Web 2.0 for Earth Science Collaboration for Information Access Paper and Slides. Also see Water Cycle Ontology for Water Cluster Breakout Session</p> <p>January 15, 2008, Net-Ready Sensor Standards Harmonization WG Meeting at NIST. A New Enterprise Data Management Strategy for the U.S. Government - Part 8: Emergency Management and Sensors Paper and Slides. New collaboration with the Semantic Sensor Web, Amit Sheth, LexisNexis Ohio Eminent Scholar, Wright State University. See Sensor Data Management: Short and Long</p>

<http://web-services.gov/>

22

## Semanticcommunity. Net: After



<http://semanticcommunity.net/>

23

## Part 3 – In Process

- More EPA Metadata and Data for Improved Access and Reuse
- EPA Science Forum 2008
- Various Gov 2.0 Initiatives
- Semantic Technology Conference 2008
- Repository of Knowledgebases
- NCOIC SCOPE Version 1.0
- More Best Practices

24

## Improved Access to EPA and Interagency Information: Before and After with Web 2.0 – Part 3

Brand Niemann  
Senior Enterprise Architect, US EPA,  
and Co-chair, Federal SOA CoP and Federal SICoP  
March 21, 2008

1

### Brief History

Date	Name	Web 2.0
November 1, 2007	The New New Internet Conference	KZO Networks Videocast (1) (next slide for URLs)
November 8, 2007 (2)	EPA Web 2.0 Work Group Launch	Use Wiki and Write Whitepaper (2)
November 14-16, 2008 (3)	OEI National Conference	Puget Sound Information Challenge Wiki (3)
November 15-16, 2008	Sustainable Water Resources Roundtable	Used Wiki (4)
January 9-10, 2008	Earth Science Information Partners Conference	Used Wikis (5)
February 4, 2008	Government Computer News, Web 2.0 the EPA Way	CIO's Business Needs (6)
February 12-14, 2008	EPA Web Workgroup Training Conference and TRI National Meeting	Web 2.0 Whitepaper and Sessions (Great Success!) (7)

2



## Brief History

- (1) <http://www.tnni07.thenewnewinternet.com/>
- (2) [http://thefedweb.us/epaweb20/index.php?title=Main\\_Page](http://thefedweb.us/epaweb20/index.php?title=Main_Page)
- (3) <http://www.epa.gov/oei/proceedings/2007/proceedings.htm> and <http://pugetsound.epageo.org/>
- (4) [http://semanticcommunity.wik.is/Sustainable\\_Water\\_Resource\\_s\\_Roundtable](http://semanticcommunity.wik.is/Sustainable_Water_Resource_s_Roundtable)
- (5) <http://www.esipfed.org/events/> and [http://semanticcommunity.wik.is/Federation\\_of\\_Earth\\_Science\\_Information\\_Partners](http://semanticcommunity.wik.is/Federation_of_Earth_Science_Information_Partners)
- (6) [http://www.gcn.com/print/27\\_3/45741-1.html](http://www.gcn.com/print/27_3/45741-1.html)
- (7) EPA WWG Conference on EPA Intranet at <https://shield.epa.gov/intranet/webgroup/meetings/02-08/index.html> and TRI National Meeting at <http://www.ecos.org/section/projects/?id=2571>

3

## Broader Context

- A New Enterprise Information Architecture and Data Management Strategy for the U.S. EPA and the Federal Government: [Online Book](#) and Hard Copy Book (to be published in 2008):
  - Part 12: Improved Access to EPA Information: Before and After with Web 2.0.
    - Post EPA Web Work Group Training Conference and EPA Web 2.0 Team Work on Whitepaper.
      - **NOTE: The paper is the printable Wiki content itself and the Wiki content is a mashup!**
  - Part 11: Our Space - Connecting Web 2.0, Enterprise Mashups, SOA, and the Semantic Web for Government 2.0 (Making It Easier to Do!).
    - 5th SOA for E-Government Conference, April 30-May 1st at MITRE Conference Center, McLean, VA. Free and open to all!

4

## Broader Context

- A New Enterprise Information Architecture and Data Management Strategy for the U.S. EPA and the Federal Government: [Online Book](#) and Hard Copy Book (to be published in 2008):
  - Part 14: The New Language of Business: SOA for Infrastructure Flexibility and Web 2.0 for Collaboration in A New Enterprise Information Architecture and Data Management Strategy for the U.S. Government.
    - May 12-14, 2008, 3rd Annual Web Services Security & SOA Conference & Expo, Baltimore Convention Center.
    - June 25-26, 2008, Business Process Management Conference, Service Oriented Architecture Conference and/or Business Architecture Conference, Brainstorm Group, Washington, DC. Invited Presentation.
    - See Before and After with Web 2.0: Part 3 (these slides).

5

## Before and After Examples: Part 1

Name	Before	After
EPA Web 2.0 Whitepaper	Written and Edited in Wiki	Published in Wiki
OEI National Conference	Web Site	Wiki
Puget Sound Information Challenge	Compiled in Wiki	Published in Wiki
CIO's Business Needs	Press and Slides	Demonstrated in Wiki
EPA Web Workgroup Training Conference	Intranet Web site	Wiki
TRI National Meeting	Web site	Wiki
TRI 2006 Public Data Release	Web Site (HTML and PDF)	Wiki (fully digital and Web accessible)

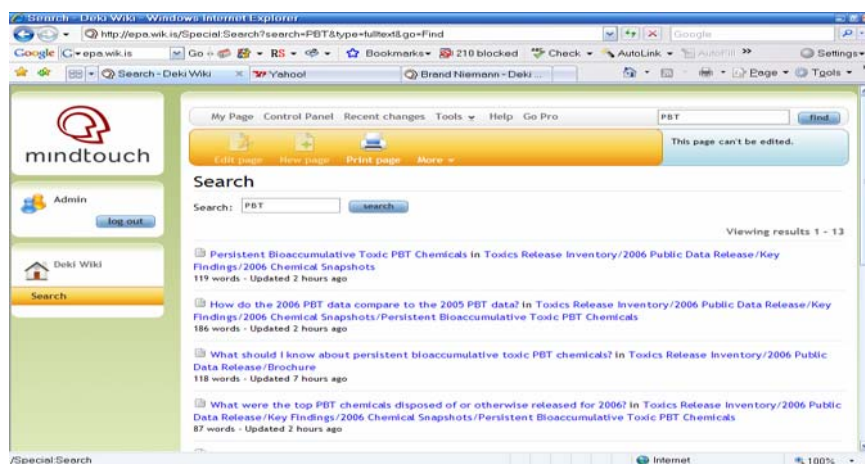
6

# Google-Wikipedia Effect

- Google has briefed EPA on the Federal Sitemaps Initiative and EPA Webmasters will be doing their Sitemap files this year.
- Google gives preference to Wikis, Blogs, etc. because of their dynamic and interesting content.
- We have taken advantage of this to improve search results and thus access to environmental information. Improved public access has implications for the Enterprise Architecture of back-end systems.
- Conversion of PDF files to full digital access and file descriptions of file attachments also improves information access.
- Try our CIO's search example from the TRI National Meeting Dialogue (e.g. find the definition of PBT). See next slide.
- Web 2.0 provides both improved public access and web content and records management in support of Enterprise, Information, and Data Architecture business goals.

7

# Google-Wikipedia Effect



8

## Before and After Examples: Part 2

Name	Before	After
EPA Science Forum	Web Site (2007)	Web 2.0 Wiki
EPA Metadata Community of Interest	Systems of Registries Web Databases	Enterprise Web 2.0 Wiki Databases (fully digital and Web accessible)
FESIP* Climate Change	Web Site and Wiki	Web 2.0 Wiki
NIH Wiki Fair	Wiki	Web 2.0 Wiki
SICoP	Wiki	Web 2.0 Wiki
SOA CoP	Wiki	Web 2.0 Wiki
Semanticcommunity. Net	Web Site (web-services.gov)	Web 2.0 Wiki

\* Federation of Earth Science Information Partners

9

## Compliments

- Stumbled across while pulling together my ideas as a the keynote speaker for LexisNexis during Library Week in early April to federal librarians/information professionals. Great resource <http://semanticcommunity.wik.is/>.
- Have bookmarked in for my talk <http://del.icio.us/khuffman/2008LexisNexisLibraryWeek>.
- Thank you!
- Karen Huffman
- Manager, Knowledge Initiatives
- Libraries & Information Services
- National Geographic Society

10

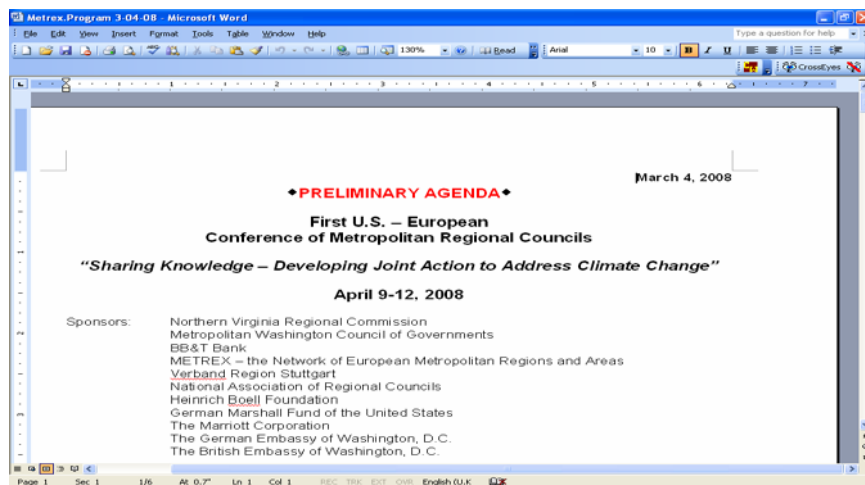
## Before and After Examples: Part 3

Name	Before	After
Metrex (1)	Email File Attachment	Web 2.0 Wiki
EPA Metadata	Core.gov	Web 2.5 Wiki for Data & Metadata
NCIOC SCOPE V1.0	Word Document & PDF	Web 2.0 Wiki
Energy Community	Semantic Wiki	Web 2.0 Wiki
NAPA Gov 2.0 Collaboration Project	Web 1.5 Wiki	Web 2.0 Wiki
Spatial Ontology Community of Practice	Semantic Wiki	Web 2.0 Wiki
HealthIT	Web Site	Web 2.0 Wiki

(1) First U.S. – European Conference of Metropolitan Regional Councils

11

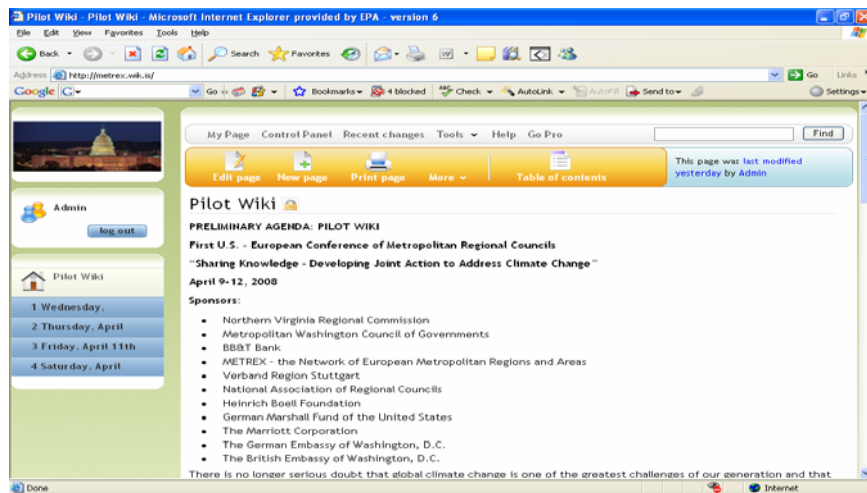
## Metrex: Before



Email Attachment

12

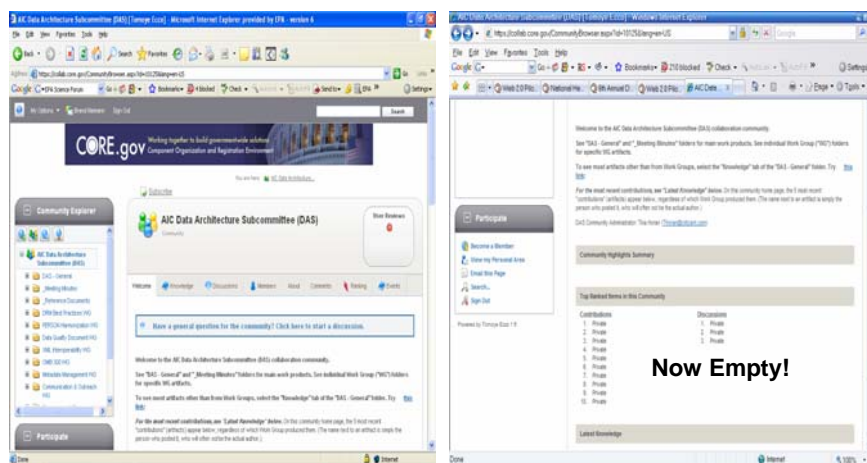
# Metrex: After



<http://metrex.wik.is/>

13

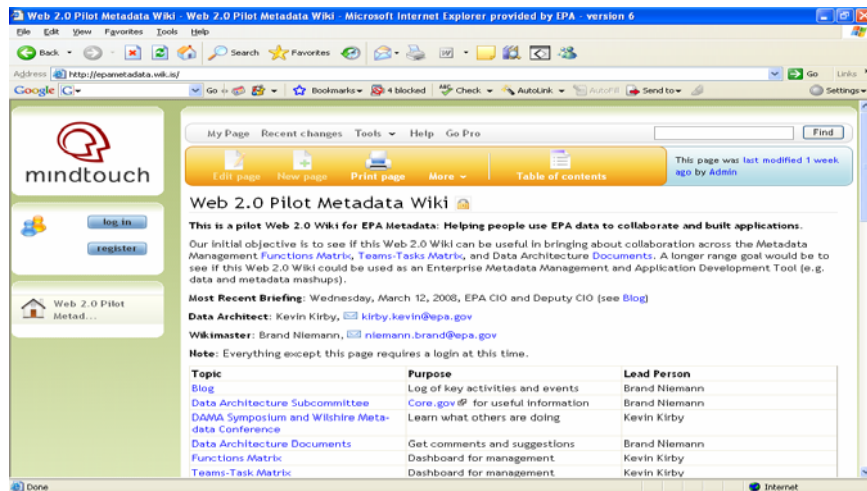
# EPA Metadata: Before



<http://collab.core.gov/CommunityBrowser.aspx?id=10125&lang=en-US>

Note: Government Employees or Government Sponsorship and Password required. 14

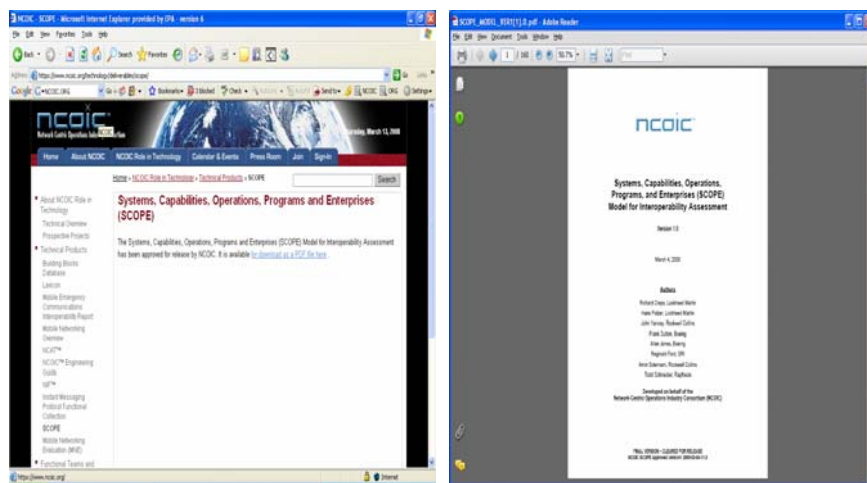
# EPA Metadata: After



<http://epametadata.wik.is/>

15

# NCOIC SCOPE Version 1: Before

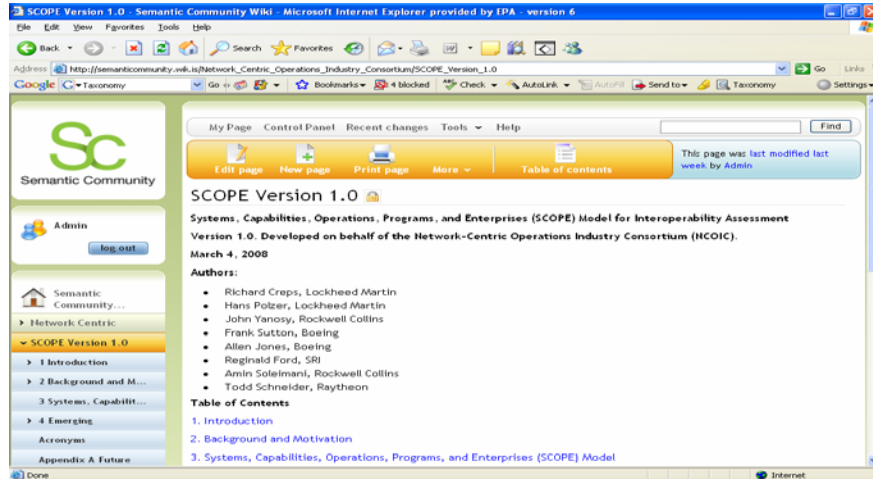


<https://www.ncoic.org/technology/deliverables/scope/>

PDF-160 pages

16

# NCOIC SCOPE Version 1: After



[http://semanticcommunity.wik.is/Network\\_Centric\\_Operations\\_Industry\\_Consortium/SCOPE\\_Version\\_1.0](http://semanticcommunity.wik.is/Network_Centric_Operations_Industry_Consortium/SCOPE_Version_1.0)

17

# Energy Community: Before

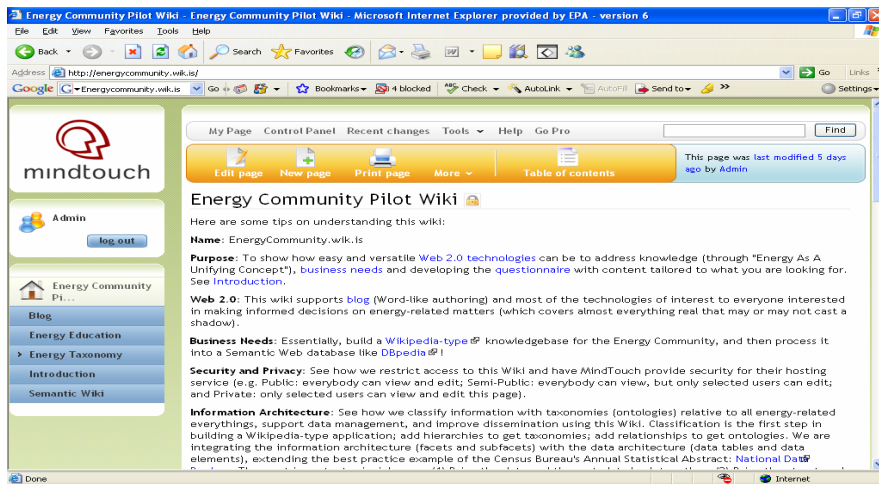


<http://www.visualknowledge.com/wiki/energy>

18



# Energy Community: After



<http://energycommunity.wik.is/>

19

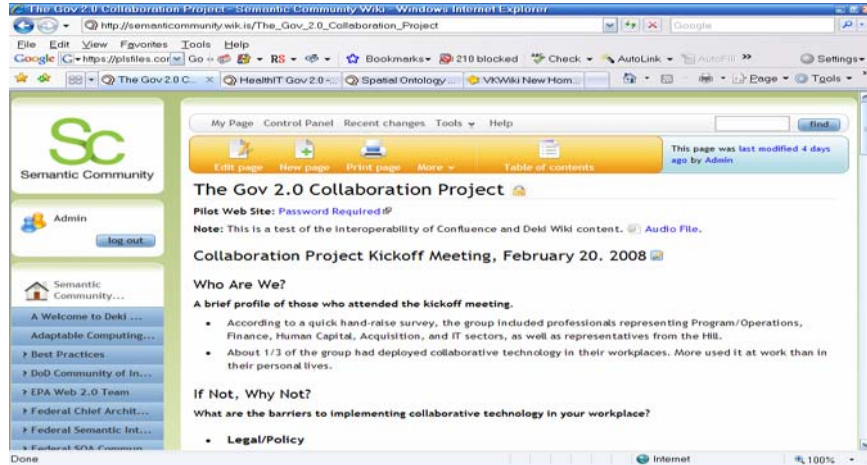
# NAPA Gov 2.0 Collaboration Project: Before



<http://www.wikigov.us/display/collab/Home>

20

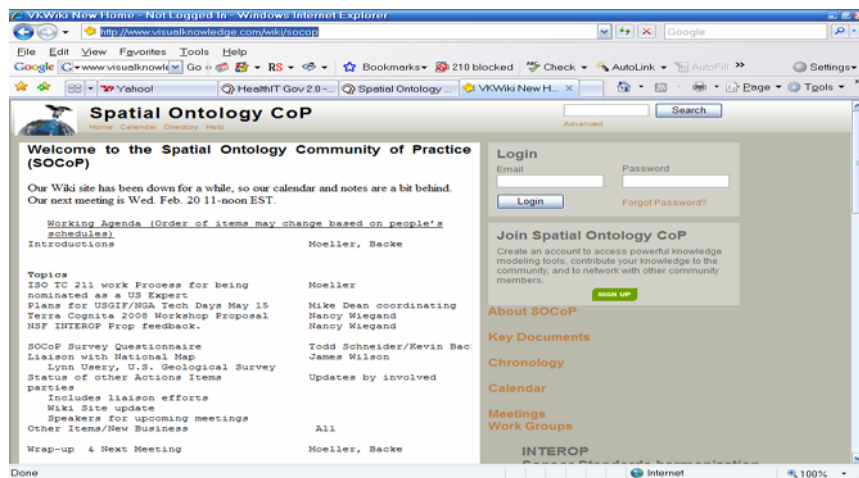
## NAPA Gov 2.0 Collaboration Project: After



[http://semanticcommunity.wik.is/The\\_Gov\\_2.0\\_Collaboration\\_Project](http://semanticcommunity.wik.is/The_Gov_2.0_Collaboration_Project)

21

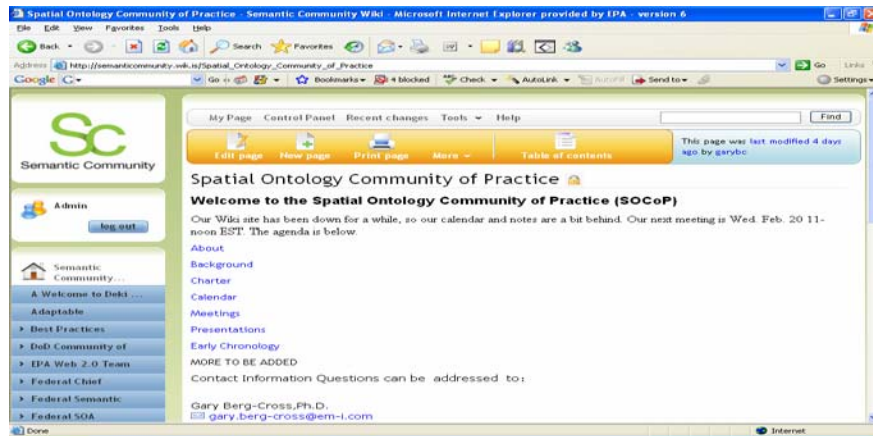
## Spatial Ontology Community of Practice: Before



<http://www.visualknowledge.com/wiki/socop>

22

# Spatial Ontology Community of Practice: After



[http://semanticcommunity.wikis/Spatial\\_Ontology\\_Community\\_of\\_Practice](http://semanticcommunity.wikis/Spatial_Ontology_Community_of_Practice)

23

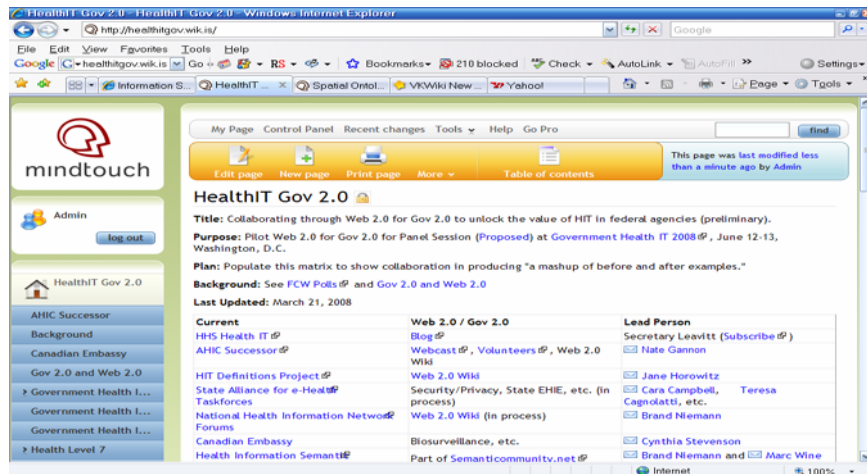
# Health IT: Before



<http://www.hhs.gov/healthit/healthnetwork/forums/>

24

# Health IT: After



<http://healthitgov.wik.is/>

25

## Part 4 – In Process

- Report on the Environment 2008
- EPA Science Forum 2008
- Semantic Technology Conference 2008
- Repository of Knowledgebases
- More Best Practices: fully digital so there are limitless opportunities for reuse.
- Etc.

26