



NATIONAL INSTITUTES OF HEALTH
enterpriseARCHITECTURE

Introduction to Wiki Technology

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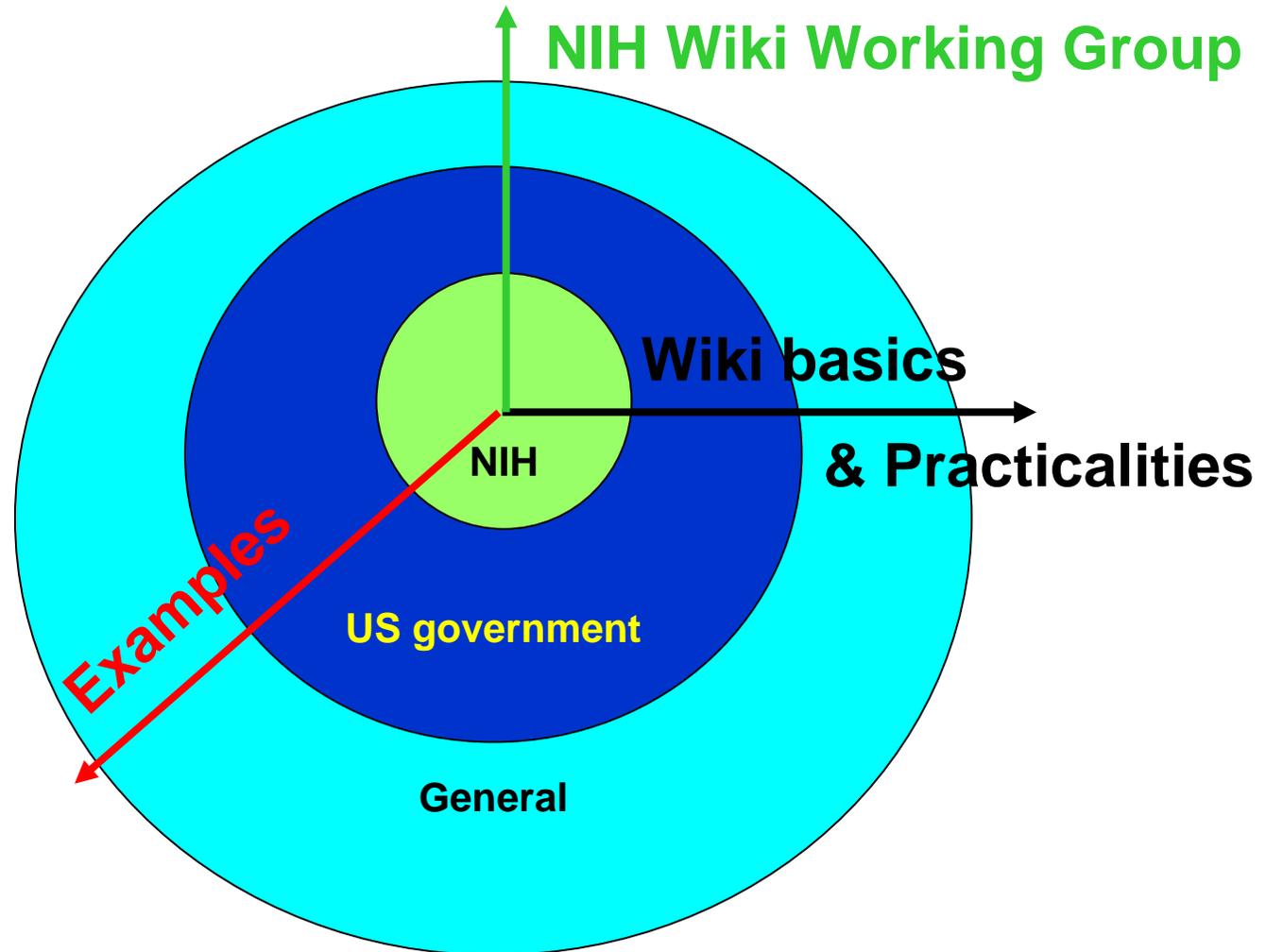
Office of the Chief IT Architect, NIH

December 7, 2006





Presentation map





Outline

- Wiki basics
- NIH Wiki Working Group
- Examples of wikis, their goals, and achievements
- Wikis at other federal agencies
- Potential risks
- Practicalities & lessons learned

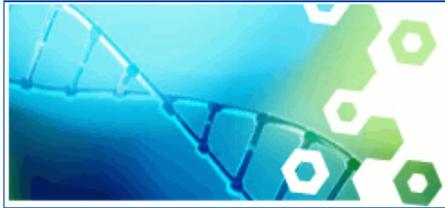




What is Wiki?

- Wiki is short for “wiki wiki”, meaning “quick” or “fast” in Hawaiian.
- Wiki is a type of website that allows users to add, remove, or modify all content very quickly and easily, sometimes without the need for registration. The use of these capabilities by various groups of users can be controlled through configuration.





NIH Wiki Working Group

- Commissioned by the Office of the Chief IT Architect
- Reviewed existing wiki sites; federal and agency specific governance guidelines; and wiki best practices
- Performed NIH wiki user survey & market research analysis
- Identified & analyzed potential risks
- Developed high level recommendations for wiki use and implementation at NIH





NIH Wiki Working Group

Final Report

https://my.nih.gov/portal/server.pt/gateway/PTARGS_0_1400809_1718_608_1540_43/http%3B/collabpp.cit.nih.gov%3B11930/collab/do/project/overview;jsessionid=CDBAF2BC2492D696FF57AE83CC3960FC?projID=566#

or Portal → My Communities → NIH Enterprise Architecture → Community Projects → Collaboration Domain Team → **WikiWorkingGroup_FinalReport.doc**





Examples: Wikipedia.org

- Multilingual, Web-based free content encyclopedia project
- Written collaboratively by volunteers
- More than 5 million articles in 250 languages (>1.4 million in English)
- Open to everybody for viewing and editing
- ***Nature***: Wikipedia is as accurate in covering scientific topics as Encyclopedia Britannica (written by 4000 experts)



Edit View Favorites Tools Help

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Address: <http://www.wikipedia.org/> Go

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WIKIPEDIA

English

The Free Encyclopedia

1 508 000+ articles

Deutsch

Die freie Enzyklopädie

503 000+ Artikel

Français

L'encyclopédie libre

401 000+ articles

Polski

Wolna encyklopedia

319 000+ haseł

日本語

フリー百科事典

293 000+ 記事



Nederlands

De vrije encyclopedie

243 000+ artikelen

Italiano

L'enciclopedia libera

218 000+ voci

Português

A enciclopédia livre

200 000+ artigos

Svenska

Den fria encyklopedin

196 000+ artiklar

Español

La enciclopedia libre

174 000+ artículos

search • suche • rechercher • szukaj • 検索 • zoeken • ricerca • busca • sök • buscar • поиск

English >



WIKIPEDIA The Free Encyclopedia

navigation

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toolbox

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7 July 2005 London bombings

From Wikipedia, the free encyclopedia

The **7 July 2005 London bombings** were a series of coordinated bomb blasts that struck [London's public transport system](#) during the morning [rush hour](#). At 8:50 a.m. (BST, UTC+1), three [bombs](#) exploded within 50 seconds of each other on three [London Underground](#) trains. A fourth bomb exploded on a [bus](#) nearly an hour later at 9:47 a.m. in [Tavistock Square](#). The bombings killed 52 commuters and the four suicide bombers, as well as causing a severe, day-long disruption of the city's transport and mobile [telecommunications](#) infrastructure.

Contents [hide]

- 1 The incidents
 - 1.1 Attacks on the Underground
 - 1.2 Attack on a double-decker bus
 - 1.3 Context
 - 1.4 Initial reports
 - 1.5 Incidents of 21st July
 - 1.6 Casualties
 - 1.7 Memorial event
- 2 Investigation
 - 2.1 Initial results
 - 2.2 Suicide bombings

7 July 2005 London bombings



Emergency services surround the wreckage of the number 30 bus in Tavistock Square.

Location [London, United Kingdom](#)

Target(s) [London Underground](#) and a double-decker bus

Date [7 July 2005](#)

8:50 am – 9:47 am (UTC+1)

7 July 2005 London bombings - History - Wikipedia, the free encyclopedia - Microsoft Internet Explorer provided by KIR

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Address http://en.wikipedia.org/w/index.php?title=7_July_2005_London_bombings&dir=prev&action=history Go Links

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- (cur) (last) 09:41, 7 July 2005 DarkHorizon (Talk | contribs) *(mainline services affected)*
- (cur) (last) 09:41, 7 July 2005 Rich Farnbrough (Talk | contribs) **m** *(Wikify dates.)*
- (cur) (last) 09:39, 7 July 2005 Henrygb (Talk | contribs) *(more)*
- (cur) (last) 09:38, 7 July 2005 Morwen (Talk | contribs) *(looking more like terrorists)*
- (cur) (last) 09:37, 7 July 2005 Rich Farnbrough (Talk | contribs) **m**
- (cur) (last) 09:37, 7 July 2005 222.153.37.150 (Talk) *(→External links)*
- (cur) (last) 09:37, 7 July 2005 222.153.37.150 (Talk) *(→External links)*
- (cur) (last) 09:37, 7 July 2005 Merovingian (Talk | contribs) **m** *(wording)*
- (cur) (last) 09:36, 7 July 2005 Morwen (Talk | contribs)
- (cur) (last) 09:35, 7 July 2005 84.176.202.137 (Talk)
- (cur) (last) 09:32, 7 July 2005 Morwen (Talk | contribs) **m** *(London Underground power surge incident moved to London Underground explosions)*
- (cur) (last) 09:30, 7 July 2005 Merovingian (Talk | contribs) **m** *(→External link)*
- (cur) (last) 09:29, 7 July 2005 Morwen (Talk | contribs) *(+fr again)*
- (cur) (last) 09:28, 7 July 2005 Morwen (Talk | contribs)
- (cur) (last) 09:28, 7 July 2005 Vberger (Talk | contribs) **m** *(+fr)*
- (cur) (last) 09:21, 7 July 2005 Morwen (Talk | contribs)
- (cur) (last) 09:18, 7 July 2005 Morwen (Talk | contribs) *(start)*

(Latest | Earliest) View (previous 50) (next 50) (20 | 50 | 100 | 250 | 500).

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7 July 2005 London bombings - wikipedia, the free encyclopedia - Microsoft Internet Explorer provided by Nirx

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7 July 2005 London bombings

From Wikipedia, the free encyclopedia

Revision as of 09:18, 7 July 2005 by [Morwen](#) (Talk | contribs)
(diff) ← Older revision | [Current revision](#) (diff) | [Newer revision](#) → (diff)

 **This article documents a current event.**
Information may change rapidly as the event progresses.

On [July 7, 2005](#), explosions or other incidents were reported at various [London Underground](#) stations in central [London](#), specifically [Aldgate](#), [Edgware Road](#), [Kings Cross St Pancras](#), [Old Street](#) and [Russell Square](#) tube station. They have been attributed to [power surges](#).

The stations do not share the same line. The incidents led to the immediate evacuation of many stations and apparently now the entire London Underground network and much of the [City of London](#).

External link

- [BBC article](#)

Category: [Current events](#)

 **WIKIMEDIA** project

This version of the page has been [revised](#).
Besides normal editing, the reason for revision may have been that this version contains factual inaccuracies, vandalism, or material not compatible with the [GFDL](#).

 Powered By **MediaWiki**



Examples of wikis

- London bombings of 2005
 - Between 8:50 and 9:47 am on 7/7/05
 - First online record 9:18 am on 7/7/05
- Hurricane Katrina
 - <http://katrinahelp.info/wiki>



[article](#) [discussion](#) [view source](#) [history](#)



Main Page

[KatrinaHelp](#) | [Mirror](#) | [RitaHelp](#)

Help us stay online!

navigation

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search

toolbox

- [What links here](#)
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Assistance Offered

- Sep 26, 2006 - [Cabinet shop offers help](#)
- Sep 11, 2006 - [Offer of rebuilding assistance](#)

Jobs Offered

- Sep 20, 2006 - Sell fabrics from home
- Aug 28, 2006 - Local Craftsmen/Tradesmen Needed to Rebuild MS Gulf Coast
- Aug 25, 2006 - Dallas TX hiring truck drivers
- Jul 7, 2006 - Tugboat Mates Wanted

[More details ...](#)

Help Needed

- Nov 29, 2006 - Mother of 2 asking for Christmas gifts for children
- Nov 28, 2006 - Family of 5 needs winter clothing and shoes
- Nov 25, 2006 - Mother of 2 Needs Help Building New Home
- Nov 19, 2006 - Single parent wants Christmas for her daughter
- Nov 18, 2006 - MS family needs financial help - Christmas cards welcomed



Examples of wikis

- London bombings of 2005
 - Between 8:50 and 9:47 am on 7/7/05
 - First online record 9:18 am on 7/7/05
- Hurricane Katrina
 - <http://katrinahelp.info/wiki>
- Flu Wiki
 - <http://www.fluwikie.com/>





Examples of wikis

- Collaborative problem solving in public health

Flu Wiki - Main - Flu Wiki - Microsoft Internet Explorer provided by NIH

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Address <http://www.fluwikie.com/#about> Go Links

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view | edit | attach | print | history | links | backlinks

Flu Wiki

fluwiki

Search Site Go

Or Google for site:fluwikie.com AND search word

About Flu Wiki

Main

Where To Start

Flu Wiki in other languages · otros idiomas · diğer diller

[français](#) · [español](#) · [Türkçe](#) · [norsk](#)

Welcome to The Flu Wiki.

[Tour](#) · [Flu Topics](#) · [Explore](#) · [Discuss](#) · [About Flu Wiki](#)

Tip of the Week

[Providing Mass Medical Care with Scarce Resources: A Community Planning Guide](#)

.....

[US-HHS Pandemic Planning Update #3](#)

Internet





Wiki Basics: Terms

- **Wiki** (capitalized) is a concept materialized in **wiki engines** and implemented in **wiki** instances
- There are > 250 different wiki engines
- Wikipedia uses MediaWiki





Wiki basics: MediaWiki Components

- Linux
- Apache server
- MySql DB
- MediaWiki SW
 - <http://www.mediawiki.org>
- User needs only a browser



Organization of NTLM wiki and Wikipedia

- kiwi.cit.nih.gov/ntlm
- Main Page
- Navigation:
 - Help
 - Current Events
- Search
- Toolbox
- Tabs





Wiki Basics: Using a wiki

- Creating a page
- Editing
- Reversing changes
- Special Pages
- Statistics
- Popularity
- Usage





NIH Wiki Working Group

- Wikis foster and support collaboration within and across organizational units and encourage participation in ways that other tools do not, due to the highly interactive and dynamic nature of the tools and the wiki's ability to provide a lightweight, agile collaboration space and user interface.
- Wikis can help create a broader sense of ownership amongst diverse user groups; can enable broader access to expertise; optimize distribution of workloads; shorten timeframes and workflows; and provide more timely and flexible content. Wikis have demonstrated value in federal applications and in business domains.
- Wikis provide a defined set of collaborative functionality out of the box and also accommodate an easily customizable structure through configuration and set up. They present a low burden of entry since they are compatible with NIH's existing technical architecture and since existing guidance and policies can be leveraged.





NIH Wiki Working group

Flexibility of Wiki technology enables a multitude of its uses such as:

- Knowledge repositories
- Project coordination
- Training and education
- Virtual meetings
- Vocabulary development
- Information sharing
- and many others.



Wikis and Blogs

Collaborative Expedition Workshop at NSF

D. Calvin Andrus, Ph.D.

Chief Technology Officer
Center for Mission Innovation
Central Intelligence Agency

18 July 2006

We Must Adapt to Change

The US National Security Community—and the Intelligence Community within it—is faced with the issue of how to operate in a security environment that, by its nature, is changing rapidly in ways we cannot predict.

A simple answer is that the Intelligence Community, by its nature, must change rapidly in ways we cannot predict.



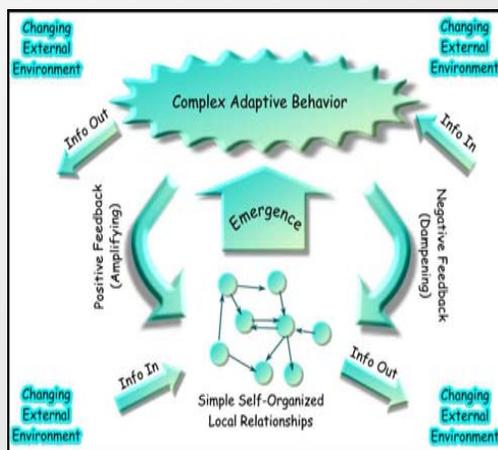
Dr. Andrus also said

- Reorganizing is not the answer because that presumes the past can predict the future.
- In an ant colony, each ant knows a few rules and uses them to react in various situations, ... without looking to the queen for direction or permission.
- Complexity theory
 - states that complex, adaptive group behavior can be built by having individuals follow simple behaviors.
 - Suggests that from intelligence officers who are allowed to share information and act upon it within a simple tradecraft regime will emerge an intelligence community that continuously and dynamically reinvents itself in response to the needs of the national security environment.
- **Post-then-edit publishing model**



It is Time to Grow

- At CIA, we have created nearly 1500 internal blogs in the last 8 months (several dozen are active)
- We have an internal Wiki that has generated about 12,000 pages in just over a year.
- We are just beginning to use the Intellipedia Wiki and Intelink Blogs on JWICS



- Used for
 - note taking,
 - floating/debating trial ideas,
 - broadcast communication
 - drafting papers
 - publishing finished pieces (rarely so far)

http://colab.cim3.net/cgi-bin/wiki.pl?ExpeditionWorkshop/OpenCollaboration_Networking_WikiInformationTechnology_2006_07_18#nid3596

In Conclusion

- Technology is the enabler, not the solution
- The solution is changing the culture to allow intelligence officers to share and act -- with simple rules of engagement
- The ODNI must build an incentive and reward structure for those components that adopt this new model of doing business



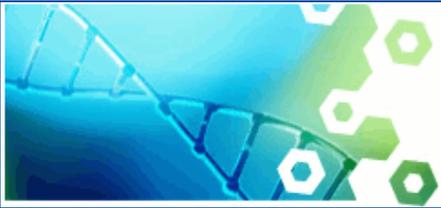
http://colab.cim3.net/cgi-bin/wiki.pl?ExpeditionWorkshop/OpenCollaboration_NetworkingWikiInformationTechnology_2006_07_18#nid3596



Wikis at Other Federal Agencies

- *Internal:* CIA, NASA, DoD, NIST, USGS, etc.
- *Open to the public:*
 - NIST: <http://hcxw2k1.nist.gov/wiki>
 - Berkley lab: <http://rana.lbl.gov/drosophila/wiki>
 - Argonne NL: <http://www-new.mcs.anl.gov/fl/research/accessgrid/wiki/>
 - NASA: <http://oodt.jpl.nasa.gov/wiki>
- *External:*
 - GSA: <http://colab.cim3.net/wiki/>
 - USGS: <http://www.worldwindcentral.com/wiki>





Wikis at NIH

- Small project behind the NIH firewall
 - NTLM: <http://kiwi.cit.nih.gov/ntlm>
- Visible to the public:
 - <http://gforge.nci.nih.gov/plugins/wiki/index.php?id=14&type=g>
- Hosted externally
 - Theoretical and Computational biophysics Group
<http://www.ks.uiuc.edu/Research/namd/wiki/>
 - CRA-NIH Computing Research Challenges in Biomedicine Workshop
<http://www.sci.utah.edu/ncrr/wiki>
 - The National Alliance for Medical Imaging Computing
<http://www.na-mic.org/Wiki>





NIH Wiki Working Group

Identified some potential risks, e.g.:

- Open nature of wikis may degrade the reliability of information and the policy compliance leading to violation of public trust in NIH;
- Lack of common vocabulary may result in inconsistent site structures, inefficient searches, duplication of information ultimately leading to confusion for users;
- Sensitive information and intellectual property require special attention in this open environment.





NIH Wiki Working Group

- Recommended that NIH proceed with the implementation of wikis in the environment where all users have NIH login. This measure creates accountability for information posting and eases wiki auditing and management.
- The best practices for externally accessible wikis require further analysis.





Practicalities

- Choosing a wiki engine
 - www.wikimatrix.org
 - <http://c2.com/cgi/wiki?WikiEngines>
 - http://en.wikipedia.org/wiki/Comparison_of_wiki_software
- NIH: MediaWiki, MoinMoin, TikiWiki, JSPWiki, Confluence, GForge
- Functionality:
 - Page locking
 - Versioning
 - Protection from vandalism & Wiki Wars





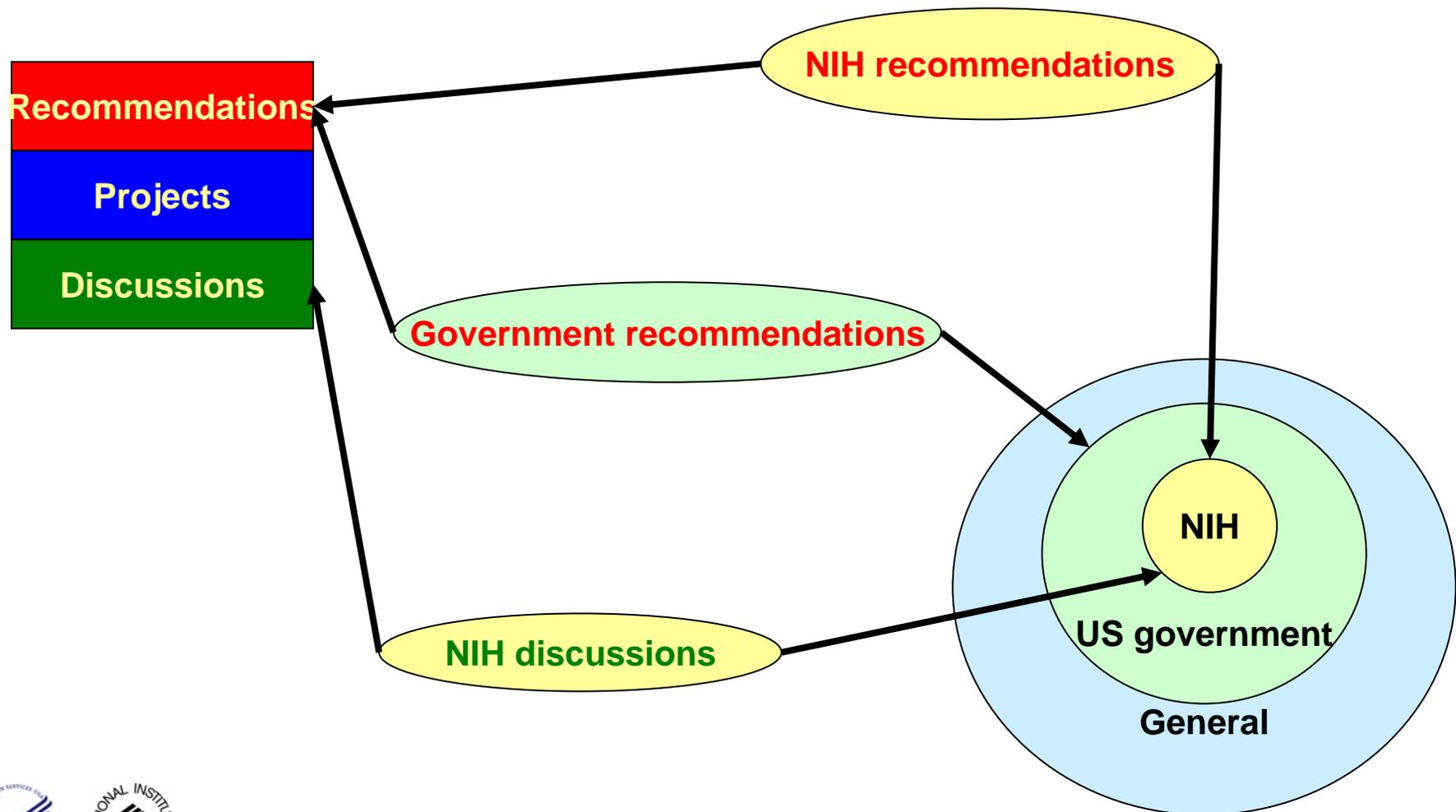
Practicalities: Finding Information

- Efficient searches
- Effective navigation and categorization
- Semantic Wiki





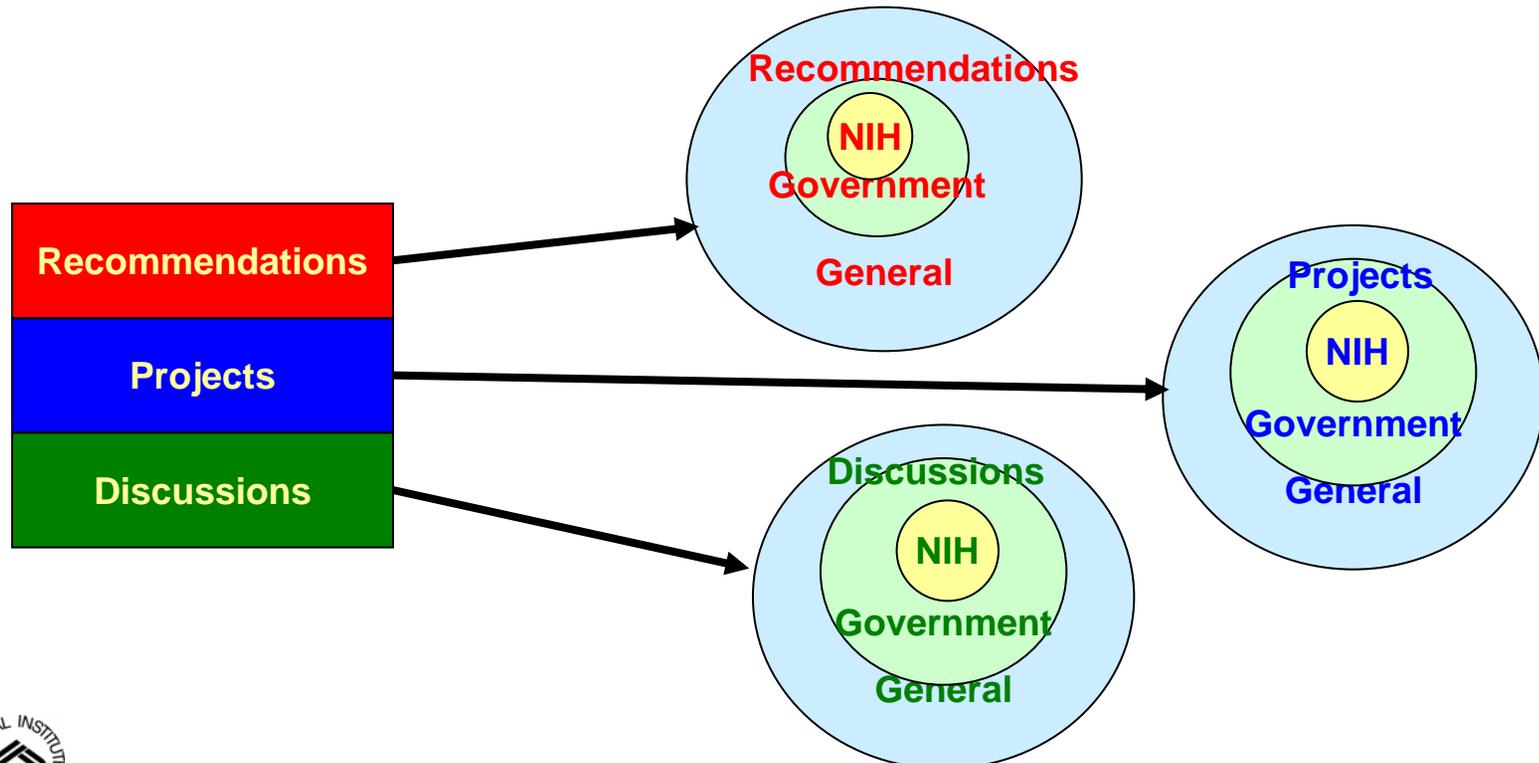
Practicalities: Conceptual Models





Practicalities: Conceptual Models

Upper Categories	NIH	US government	general
Recommendations	NIH recommendations	Government recommendations	General recommendations
Projects	NIH projects	Government projects	General projects
Discussions	NIH <specific> discussions	Government <specific> discussions	General discussions





Practicalities: Designing a viable wiki

- Why (or what for) – Purpose
- What – Type of Information & Granularity
- Where – Scope
- How – Drivers
- Who - Community
- When – Lifecycle





Practicalities: Wiki Basic Principles

- Contribute & collaborate
- Assume good faith
- Fix mistakes yourself
- Propose changes
- Forgive and Forget
- Gather information. Then publish traditionally!





NIH Wiki Working Group

- Will reconvene in January to develop NIH-wide recommendations for wiki use and implementations at NIH.
- Stay tuned...





**The most important
question facing humanity
is, 'Is the universe a
friendly place?'**
- *A. Einstein*





Acknowledgements

- Helen Schmitz, Chief IT Architect (Acting)
- James Sullivan, CIT
- Steve Thornton, CIT
- Richard McKay, CSR
- Jae Lingberg & Denise Antinori (Sapient)
- Dan Wendling, Marie Zeimetz, Peter Lyster & other NIH Wiki enthusiasts





Contact Information

- Web site

<http://EnterpriseArchitecture.nih.gov>

- The NIH Enterprise Architecture Community in the NIH Portal

- Email

EnterpriseArchitecture@mail.nih.gov

- Subscribe to the EA LISTSERV:

http://list.nih.gov/archives/enterprise_architecture.html

