Linked Data: Now What?

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Without Linked Data, no Semantic Web!
Remember 2005?
Is there a Semantic Web beyond FOAF?
httpRange-14: What is the range of the HTTP dereference function? [link to this issue]

TBL's argument the HTTP URIs (without "#") should be understood as referring to documents, not cars.

Request concerning
- HTTP
- URI

Discussion history

Transition history

raised on 25 Mar 2002 by Tim Berners-Lee, on behalf of TAG
accepted on 6 Feb 2003

Background, proposals, threads, notes
- Axioms of Web Architecture, by Tim Berners-Lee
- What do HTTP URIs Identify? by TimBL
- History of Fragment Identifiers by Roy Fielding.
- Moby Dick example and summary from TB.
- Namespace v. Namespace Document is an example of this issue as evidenced by this thread.
- See discussion of information resources
- See discussion of phrase "on the Web" at 22 Jul 2003 teleconference and subsequent threads
- Summary and proposal from NW
- GoodURIs

aared on 15 Jun 2005
The LOD "Cloud" - July 2007
The LOD "Cloud" - August 2007

Diagram showing various entities and their connections, including:
- BBC Later + TOTP
- Sem-Web-Central
- Fresh-meat
- ECS Southampton
- Open-Guides
- Musicbrainz
- DBpedia
- SIOC
- RDF Book Mashup
- DBLP Berlin
- DBLP Hannover
- Project Gutenberg
- Eurostat
- Gov-Track
- World Factbook
- US Census Data
- Revyu

Shared innovation
The LOD "Cloud" - November 2007
The LOD "Cloud" – Feb 2008
The LOD "Cloud" – Sept 2008

As of September 2008
shared innovation
What Worked?
Clarity
Clarity

The TAG provides advice to the community that they may mint "http" URIs for any resource provided that they follow this simple rule for the sake of removing ambiguity:

• If an "http" resource responds to a GET request with a 2xx response, then the resource identified by that URI is an information resource;

• If an "http" resource responds to a GET request with a 303 (See Other) response, then the resource identified by that URI could be any resource;

• If an "http" resource responds to a GET request with a 4xx (error) response, then the nature of the resource is unknown.

http://www.w3.org/2001/tag/issues.html#httpRange-14
Shared Principles/Norms

1. Use URIs as names for things
2. Use HTTP URIs so that people can look up those names.
3. When someone looks up a URI, provide useful information
4. Include links to other URIs, so that they can discover more things.

Berners-Lee (2006)
http://www.w3.org/DesignIssues/LinkedData.html
Action!
What Isn't Working?
Terminological Confusion
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- *Linked Data* is a style of publishing data on the Web
Terminological Confusion

• *Linked Data* is a style of publishing data on the Web
• *Linking Open Data* is a project
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- *Open Data* is complementary but orthogonal to *Linked Data*
Terminological Confusion

- **Linked Data** is a style of publishing data on the Web
- **Linking Open Data** is a project
- **Open Data** is complementary but orthogonal to **Linked Data**
- Let's not put openness on the critical path to Linked Data adoption
Now What?
Fundamental Requirements for uptake of Linked Data

• Data quality, availability, stability

• Clarity re. licensing (i.e. terms of reuse)

• Applications!
The 'Links' in 'Linked Data'

- Relax (for now) about the owl:sameAs issue
- It's only a problem when users tell us it's a problem
- Data quality is the issue
The 'Links' in 'Linked Data'

Depictions of dbpedia:Atonement_(film)
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The 'Killer App' Question
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• Question: “What will be the Linked Data killer app?”
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- Answer: There may not be one. Get over it.
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The Killer App Question

- Question: “What will be the Linked Data killer app?”
- Answer: There may not be one. Get over it.
- Answer: If I knew, I wouldn't tell you.
- Answer: Killer apps are just post-hoc rationalisations
- No more obsessing or speculation allowed, principled analysis only!
Discuss!


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Where do we Focus our Efforts?

- Sustaining innovation

- Disruptive innovation
  - Low-end disruption
  - New-market disruption

(Christensen and Raynor, *The Innovator's Solution*, 2003)
Where do we Focus our Efforts?

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- “If your idea for a product or business appears disruptive to some established companies but might represent a **sustaining** improvement for others, then you should go back to the drawing board.”
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• **Risky business ideas?**
  – A new search engine that exploits structured data
  – A reviewing and rating site that publishes data in RDF
  – A new CMS with Linked Data support
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  – **What can we do less well with Linked Data, but at significantly less cost than with existing approaches?**
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• New-Market Disruption

  – “Compete against non-consumption”

  – “New-market disruptive products are so much more affordable to own and simpler to use that they enable a whole new population of people to begin owning and using the product, and to do so in a more convenient setting.”
Where do we Focus our Efforts?

- **New-Market Disruption**
  - “Compete against non-consumption”
  - “New-market disruptive products are so much more affordable to own and simpler to use that they enable a whole new population of people to begin owning and using the product, and to do so in a more convenient setting.”
  - What can we enable with Linked Data that a large number of people aren't doing right now because it's too hard, expensive or inconvenient?
Let's get to work!