Identifiers
Language ambiguity

dog =
Language ambiguity

dog =

IDa87nn3

IDht4432
Internationalization (i18n)

dog (lang=en)

hund (lang=de)

perro (lang=sp)

chien (lang=fr)

IDa87nn3
1. Unique… within a domain

Bob has account 43729 at Bank of America  111143279
Mary has account 43729 at Chase  222243279
Rules for identifiers

1. Unique... within a domain

Karen has a web site with file index.html

Google has a web site with file index.html
2. Consistent.

Same identifier always identifies the same thing.
Same thing may get more than one identifier – this happens naturally in the creation of metadata. It’s not a huge problem as long as you have a way of saying that:

\[ A = B \]

So that you can bring together the identifiers for the same thing.
Rules for identifiers

3. Persistent.

The identifier does not change.

Smith, John, 1946-2009
4. In a standard format

urn:ISBN:1-46492-149-0

http://id.loc.gov/authorities/names/n89613425
Identifying things in linked data
Four rules of linked data

- Use URIs as names for things
- Use HTTP URIs so that people can look up those names.
- When someone looks up a URI, provide useful information, using the standards (RDF, SPARQL)
- Include links to other URIs, so that they can discover more things.
Uniform Resource Identifier

• An Internet standard

  mailto:John.Doe@example.com

  news:comp.infosystems.www.servers.unix

  http://www.ietf.org/rfc/rfc2396.txt
Use http URIs

http://id.loc.gov/authorities/names/n50074013


http://www.geonames.org/1735634/
Identifiers should link to useful information

LC Control No.: 48008547
LCCN Permalink: http://lccn.loc.gov/48008547
Type of Material: Book (Print, Microform, Electronic, etc.)
Personal Name: Polo, Marco, 1254-1323?
Uniform Title: English 1948 [from old catalog]
Main Title: The adventures of Marco Polo,
Published/Created: New York, John Day Co., 1948.
Description: p. cm.

CALL NUMBER: G370 .P72 1948a
Identifiers should link to useful information

[Link to Wikipedia article]
**Identifiers should link to useful information**

<table>
<thead>
<tr>
<th>Term Name: title</th>
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</thead>
<tbody>
<tr>
<td><strong>URI:</strong></td>
</tr>
<tr>
<td><strong>Label:</strong></td>
</tr>
<tr>
<td><strong>Definition:</strong></td>
</tr>
</tbody>
</table>
then... link!