

# LOD-LAM

Jenel Farrell - SAA 2011  
Metadata & Digital Object Roundtable

LINKED  
OPEN  
DATA

LIBRARIES  
ARCHIVES  
MUSEUMS

The current web is a  
[web of documents](#)  
intended for [human](#)  
[interpretation](#)



Data is locked in  
closed silos



The **linked data** vision  
is to...

- Move away from the repository-centric mind-set and **open** data silos
- Publish data applications computers can **access & interpret**
- Use “standards” in the form of common **Web technologies**

Making it possible for applications to look up **(meta)data...**

...about things  
books concepts people places  
by looking up their  
names  
[http://dbpedia.org/resource/The\\_Metamorphosis](http://dbpedia.org/resource/The_Metamorphosis)  
on the web

But, to allow  
applications to look  
up metadata in your  
database, we need  
some technology

## Uniform Resource Identifier (URI)

- URI is a string of characters used to identify (UI) a name or resource on the internet
- URIs are more specific than URLs, which name the location of something. URIs are the 'thing'

## Resource Description Framework (RDF)

- In addition to having a unique identifier for your 'thing', you need RDF, which is a model for representing [metadata](#) on the web
- This representation comes in the form of statements, which are called 'triples'
- Triples [define the relationships](#) between things
- Language for describing vocabularies (there are others)
- Way to represent info on the web

## Simple Knowledge Organization System (SKOS)

- A language (built on RDF) for describing **controlled vocabularies**
  - thesauri
  - classification schemes
  - taxonomies
  - subject-heading systems

## SPARQL

- And, of course, a language to query the data
- SPARQL is a query language built on RDF

# DBPedia...

The main objective of DBpedia is to extract structured information from Wikipedia, convert it into RDF, and make it freely available on the Web. In a nutshell, DBpedia is the Semantic Web mirror of Wikipedia.

In a nutshell, the basics of

**LINKED OPEN DATA**



Make your stuff  
available on the web  
(whatever format)  
under an open  
license

Make your data  
available as  
structured data (ex.  
CSV table instead of  
an image scan of a  
table)

Use **non-proprietary formats** (CSV instead of Excel)

Use **URIs to identify things**, so that people can point at your stuff

Link your data to  
other data to provide  
context

Linked data is  
essential to connect  
the semantic web

By linking up data,  
we gain access to  
many more  
databases & discover  
new connections