

## **Interoperability of Datasets and Technology**

# How do we share information about our equipment and facilities?

- Chris Gutteridge University of Southampton
- Melanie King Loughborough University
- Paul Newman Loughborough University
- 18<sup>th</sup> September 2012



## We need answers to the following questions:

- How do we store the data?
- What's the recommended format(s) for sharing?
- How do we share (auto-discovery, push, pull, federation)?
- What tools we have or need to do the above?
- Other considerations e.g. consortia vs public, licensing, the data about the dataset



## **Example 1: Loughborough University**

#### Data stored in:

We use the OS Kit-Catalogue system

#### Sharing format:

Built in RESTful JSON API (RDF/XML/CSV to follow). CSV export available.

#### Sharing mechanism:

- Third party can pull entire data via API
- 2. Or supports federated searching API/items?q=microscope

#### Tools used:

We use the OS Kit-Catalogue system

(DEMO)



## **Example 2: University of Leeds**

Data stored in:

SAP with customised web-based front end.

Sharing format:

XML via SOAP API

Sharing mechanism:

1. Third party (authenticated) can do a federated search of the data Tools used:

SAP and bespoke web-based system



## **Example 3: Bath University**

Data stored in:

Agresso and ATIRA PURE

Sharing format:

XML

Sharing mechanism:

ATIRA web service (RESTful)

Tools used:

**PURE** 



## **Example 4: A.N. Other University**

Data stored in:

Spread sheet / non-integrated asset registers / Access(!)

Sharing format:

CSV / system specific XML etc.

Sharing mechanism:

Import/export, HTML, system specific APIs, FTP, manual file upload ...

Tools used:

Anything and everything!



## **Example 5: University of Southampton**

Data stored in:

Sharepoint lists

**Sharing format:** 

**RDF** 

Sharing mechanism:

Single RDF Document, Individual per-item documents, SPARQL query (standard for a dataset in Southampton Open Data service)

Tools used:

Shareperltopus, RDF-Grinder, XSLT, 4 Store

(DEMO)



## The future: What does the community recommend?

You can store your data in:
...
The formats that enable sharing data are:
...
The mechanisms you could use to share data are:
...
The tools you can use are:
...
(BREAKOUT GROUPS – or group discussion)



### Other considerations:

- Authenticated (e.g. consortia) versus full public access
- What are the options for licensing and their implications?
- What additional data is needed to describe the dataset?
- Might publishers of this data be from outside HE too?
- What other systems might the data need to be interoperable with?

(Final thoughts on the above)