# PIRUS Publisher and Institutional Repository Usage Statistics

# PIRUS2: The Demonstrator

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# The technical challenge:

- Is it possible to capture usage events from various sources and consolidate them to show the overall usage of an article???
- i.e. can we:
  - Gather... usage data and statistics
  - Consolidate...
  - Re-expose... to authorized third parties
- Yes ... mostly!

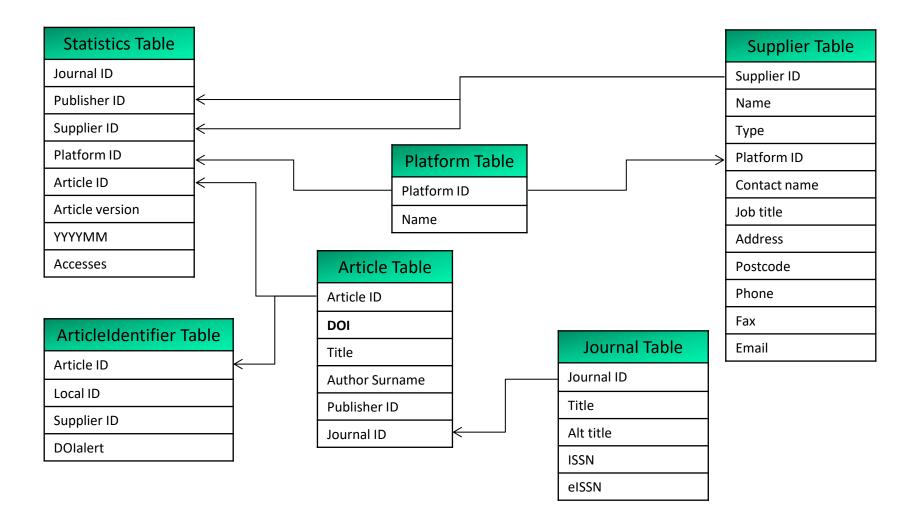
### What the demonstrator isn't:

- It isn't intended to go into production
- It isn't particularly pretty
- It isn't a finished product

### What the demonstrator is:

- A MySQL database
- A set of perl scripts for processing & getting data in
- A web user interface written in php
- A proof of concept
- ... and a playground!

#### PIRUS2 database v0.2



- Publisher statistics
  - All loaded from AR1 (or similar) reports
  - Article and Journal authority, Statistics
  - Reasonably straightforward
- Repository usage data
  - Some loaded
  - Not so straightforward

# Perl scripts to process and load data into db

# Repository usage data

```
138.250.13.22 - - [17/Oct/2010:04:04:44 +0100] "GET /tracker/?url ver=Z39.88-
2004&req id=e02db545fbefd7d19bf24302a57f93ac&req dat=Mozilla%2F5.0+%28compatible
%3B+Googlebot%2F2.1%3B+%2Bhttp%3A%2F%2Fwww.google.com%2Fbot.html%29&rft.artnum=h
ttp%3A%2F%2Fdspace.lib.cranfield.ac.uk%2Fhandle%2F1826%2F3228&svc val fmt=info%3
Aofi%2Ffmt%3Akev%3Amtx%3Adc&svc.format=application%2Fpdf&svc dat=Unknown&rfr id=
dspace.lib.cranfield.ac.uk&url tim=2010-10-17T03%3A04%3A42Z&rft id=
info%3Adoi%3Ahttp%3A%2F%2Fdx.doi.org%2F10.1016%2Fj.istr.2008.10.006 HTTP/1.1"
200 635 "-" "Java/1.6.0 21"
152.78.189.11 - - [20/Feb/2011:04:16:47 +0000] "HEAD /tracker/?url ver=Z39.88-
2004&url tim=2011-02-20T04%3A16%3A45Z&req id=urn%3Aip%3A219.219.127.3
&req dat=Mozilla%2F4.0+(compatible%3B+MSIE+6.0%3B+Windows+NT+5.1%3B+)
&rft.artnum=http%3A%2F%2Feprints.ecs.soton.ac.uk%2Fid%2Feprint%2F8671&svc.format
=application%2Fpdf&rfr id=eprints.ecs.soton.ac.uk&rft.date=2003-12
&rft.aulast=Schwanecke&rft.volume=91
&rft.atitle=Broken+Time+Reversal+of+Light+Interaction+with+Planar+Chiral+Nanostr
uctures HTTP/1.1" 200 - "-" "EPrints 3.2.5 (Stollen) [Born on 2011-01-17]"
```

- Repository usage data
  - Parsed and sorted into Local ID & datetime
  - robots and double clicks eliminated
  - Grouped into monthly accesses per article
  - Equivalent to AR1 from publishers
  - Entries either have
    - DOI
    - Article title/Author surname

- Repository records with DOI
  - Known to the system loaded
  - Unknown to the system queued for further processing

- Repository records without DOI
  - Article title/Author surname
    - Lookup DOI in the local system
    - Lookup DOI in CrossRef
  - Repository records DOI found
    - Known to the system loaded
    - Unknown to the system queued for further processing
  - Repository records no DOI found
    - Queued for further processing

# The php web interface: Demonstration

http://cclibweb-4.dmz.cranfield.ac.uk/pirus2/

#### **Lessons learnt:**

- Where there's a DOI to be found, consolidation is easily achievable
- Where there isn't, need some other reliable identifier(s)
- Publishers
  - If you don't allocate DOIs please do!
- Repositories
  - Quality of metadata matters!
  - If a DOI exists for an article catalogue it!
  - Typos, errors, missing metadata cause headaches!
- Publishers and Repositories
  - Sort out versioning and peer-review status metadata!

# Next steps

- Update the db with queued repository records where we've found a DOI and that DOI is new to the system
- Give further consideration to and play with a records where there isn't a DOI
  - 'Bucket' of identifiers?
  - CCH to mint its own?
  - Come up with some recommendations

# Thank you for listening!

For more information:

http://www.cranfieldlibrary.cranfield.ac.uk/pirus2/