Institutional Repository Usage Statistics

IRUS-UK: Overview and update
10 March 2014
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Jo Alcock, Evidence Base
IRUS-UK: Jisc perspective

Balviar Notay, Jisc
Background

- Jisc began work in repository usage statistics area in 2009 – with requirements gathering and feasibility testing (PIRUS)
- Now we are building and in process of delivering a national shared service for usage stats
- Recognised a growing need to measure usage - as the repository infrastructure grew. (now 200 repositories approx)
- Library usage statistics – such as Journal usage statistics Portal JUSP and Library Analytics and Metrics Project LAMP
- Parallel work with OpenAIRE
Importance of Usage Stats

- Capturing impact
- Part of the growing metrics infrastructure - which includes citation and altmetrics
- Supports management reporting, wider business intelligence gathering and benchmarking
- Gives JISC, other infrastructure providers and funders) a nation-wide picture of the overall use of UK repositories (demonstrate value and impact)
- Could also potentially act as an intermediary between UK repositories and other agencies – supply usage stats to OpenAIRE
Sustainability

Jisc is planning the sustainability of IRUS in the context of a number of co-ordinated repository shared services.

- Repository and Shared Services Projects (RSSP) – addressing sustainability (financial, technical, operational and organisational aspects)
- 2 year funding
- Also working to improve the quality and consistency of metadata and vocabularies in repositories - RIOXX Metadata Application Profile and Vocabularies for Open Access (V4OA)
- Build scalable infrastructure - interoperate with RIM and RDM
IRUS-UK: status update

Ross Macintyre, Mimas
Funded by Jisc – two years

Project Team Members:
- Mimas, The University of Manchester – Project & Service Management & Host
- Cranfield University – Development
- Evidence Base, Birmingham City University – User Engagement & Evaluation

Outcome of PIRUS2 (Publisher and Institution Repository Usage Statistics)
- [http://www.cranfieldlibrary.cranfield.ac.uk/pirus2/](http://www.cranfieldlibrary.cranfield.ac.uk/pirus2/)
- Aimed to develop a global standard to enable the recording, reporting and consolidation of online usage statistics for individual journal articles hosted by IRs, Publishers and others
- Proved it was *technically feasible*, but (initially) easier without ‘P’

IRUS-UK: Institutional Repository Usage Statistics – UK
- Enable UK IRs to share/expose usage statistics based on a global standard – COUNTER
IRUS-UK: Current status

- Production-strength service infrastructure

- Tracker code: Dspace & Eprints, Functional specification for Fedora

- Collecting raw usage data from UK IRs for all item types within (54) repositories
  - Downloads not record views

- Processing those raw data into COUNTER-compliant statistics
  - Making available to the originating repositories for their own use
  - Providing an aggregated picture of the use of items in UK repositories

- Published ‘Item Types’ Report classifying types of items downloaded

- COUNTER PIRUS Code of Practice published

- Evaluation, dissemination and community engagement
Overview of IRUS-UK portal and reports

Paul Needham, Cranfield University
IRUS-UK: gathering data

- Push: ‘Tracker’ code
  - Whenever a download occurs a repository ‘pings’ the IRUS-UK server with details about the download
  - Writes metadata to IRUS-UK logs as IR IP + OpenURL Key/Value strings
    - 137.108.145.39
    - url_ver=Z39.88-2004
    - url_tim=2014-02-24T00%3A00%3A18Z
    - req_id=urn%3Aip%3A93.185.248.64
    - req_dat=Mozilla%2F5.0+(Windows+NT+6.1%3B+rv%3A25.0)+Gecko%2F20100101+Firefox%2F25.0
    - rft.artnum=oai%3Aopen.ac.uk.OAI2%3A27747
    - svc_format=application%2Fpdf
    - rfr_id=oro.open.ac.uk
    - svc_dat=http%3A%2F%2Foro.open.ac.uk%2F27747%2F2%2F47c57b0f.pdf

- Patches for Dspace (1.8.x and 3.x) and Plug-in for Eprints (3.2.x and 3.3.x)
IRUS-UK: Tracker for other IR software

- We will have to look at other repository software platforms on a case by case basis

- Fedora
  - Every Fedora repository is a one-off. But some general guidelines are available in Appendix O in the PIRUS2 Final Report, [http://www.projectcounter.org/News/Pirus2_oct2011.pdf](http://www.projectcounter.org/News/Pirus2_oct2011.pdf)
  - University of Hull

- PURE Portals
  - We opened discussions with Atira and we’re hopeful that IRUS-UK Tracker functionality will be available for PURE portals …

- Other platforms
  - We would welcome dialogue with interested vendors & developers - Contact us!
IRUS-UK: processing data

- The existing ingest process has been described in detail in previous webinars and presentations - [http://www.irus.mimas.ac.uk/news/](http://www.irus.mimas.ac.uk/news/)
- The key point is to apply the COUNTER Code of Practice to filter out robots and double clicks
- However the [COUNTER Robot Exclusion list](http://www.irus.mimas.ac.uk/news/) is specified only as a minimum requirement – more can be done
- We’ve added additional filters to
  - Remove more user agents
  - Apply a simple threshold for ‘overactive’ IP addresses
- Substantially better, but we’re still not satisfied - we need a more sophisticated filtering system!
IRUS-UK: enhanced filtering

- We commissioned Information Power to:
  - Analyse raw data we’ve collected since July 2012
  - Test the feasibility of devising a set of algorithms that would ‘dynamically’ identify and filter out unusual usage/robot activity

- A report on that work is available from [http://www.irus.mimas.ac.uk/news/](http://www.irus.mimas.ac.uk/news/)

- Key findings from the work are:
  - Suspicious behaviour can’t necessarily be judged on the basis of one day’s usage records or a month’s.
  - At certain levels of activity machine/non-genuine usage is practically indistinguishable from genuine human activity.

- Going forward:
  - We are testing and experimenting with the new dynamic filtering
  - We will engage with user community
The IRUS-UK portal

Live demonstration
IRUS-UK: Exposing statistics

- We will be expanding The Portal
  - Adding new views and reports
  - Delving deeper into individual repository statistics
  - Improving DOI based views and reporting
  - Incorporating more metadata – Funder and Grant number

- SUSHI Server
  - New SUSHI Service to meet COUNTER Release 4 requirements

- API/Web Service
  - Expanding and enhancing the existing version
  - Usage statistics for incorporation into Repositories
  - Determining further requirements
IRUS-UK: Community engagement and evaluation

Jo Alcock, Evidence Base (Birmingham City University)
IRUS-UK: Community engagement

- Growing number of repositories participating in IRUS-UK – currently 54 repositories

- Communication about progress and new developments via number of different channels:
  - IRUS-UK mailing list
  - @IRUSNEWS Twitter account
  - IRUS-UK newsletter
  - IRUS-UK webinars
  - IRUS-UK presentations at other events

- Gather feedback from participating repositories via surveys and conversations

- Recently established Community Advisory Group to provide feedback to the IRUS-UK project team and to inform future developments
IRUS-UK: user surveys

• New repositories receive an invite to a new joiner’s survey within a few weeks of joining to get their initial feedback, see if they need any support, and hear any suggestions for improvement

• Annual survey collects data from users on the following:
  • Use of repository statistics
  • Value of IRUS-UK
  • Challenges and barriers
  • Benchmarking
  • Usability
  • Guidance/support

• 29 responses to 2014 survey so far (open until end of March)
IRUS-UK: Added value

- 68% reported that IRUS-UK has improved statistical reporting
- 65% reported that IRUS-UK saves time collecting statistics
- 65% reported that IRUS-UK enables reporting previously unable to do
- 83% hope to use IRUS-UK for benchmarking
IRUS-UK: Best feature

- Reliable, authoritative statistics
  - COUNTER compliant statistics
  - Filtering of robots
  - IR1 used for reporting to SCONUL
  - Can repurpose for other reporting mechanisms and different audiences

- Ability to benchmark against others
  - Comparison of download statistics across participating IRs
  - Number (and range across the sector) of participating institutions

- Easy to use
  - Easy to setup and use
  - User friendly way to get stats
  - 96% find the current user interface clear
  - 96% find the current functionality clear to understand
IRUS-UK: Most useful reports

1. Repository statistics
2. Item Report 1 (IR1)
3. ETD Report 1 (ETD1)
4. Search
5. Article DOI statistics
IRUS-UK: General comments

- “Very impressed by the support we received during implementation, and the responsiveness of the team following enquiries. Very keen to be able to demonstrate the reliable, authoritative, standards-based stats and start publicising IRUS-UK internally”

- “To date IRUS has been very useful and we are aiming to make better use of the service.”
IRUS-UK: how to join

- If you are a UK repository:
  - Contact us at irus@mimas.ac.uk to register your interest
  - Answer a few questions on the type of repository you have and the version you are running
  - Get advice from us on what work will be involved depending on your repository type and version
  - Implement any changes advised and then see your usage data instantly in IRUS-UK with no more work from you

“The set up was quick and painless, which is always a delight!”
“Consistent collection of statistics without me having to do it!”
Questions and answers

We will conclude our webinar with a final question and answer session.

Please type your questions in the chat box preceded by the letter Q.
In conclusion

If you have a question that we did not have time to answer, please do email it to irus@mimas.ac.uk and we’ll get back to you shortly.

The recording of the whole webinar will be made available on the IRUS-UK website asap. The PowerPoint presentations will also be made available.

We would value your feedback on this webinar and would be grateful if you could complete a short questionnaire. The URL for the questionnaire will be emailed to you later today or tomorrow.

Please remember to log out of this session by clicking on File and then Exit.

Thanks to everyone for joining. Do keep your eye on the IRUS-UK mailing list for more webinars coming up over the next few months.