



IRUS-UK

Making scholarly statistics count in UK repositories

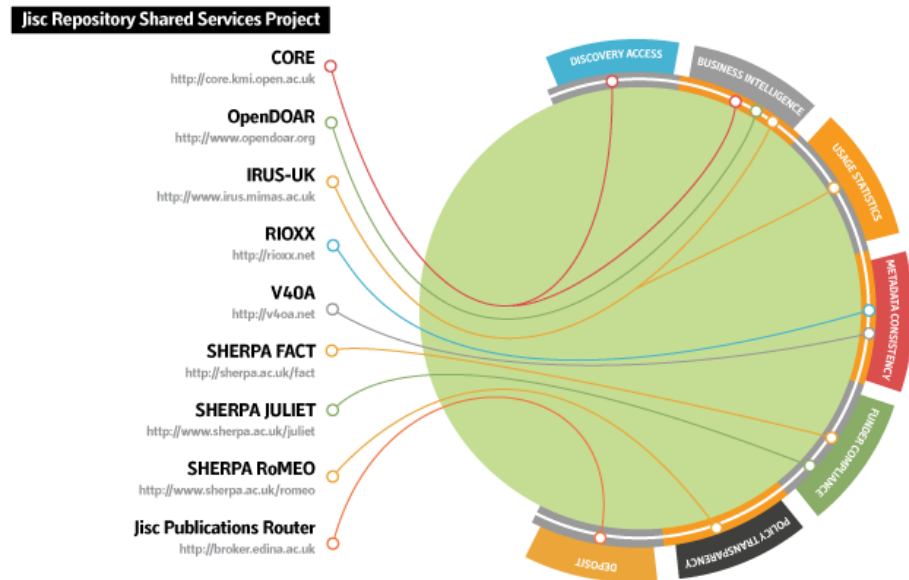
Ross MacIntyre, Mimas

1:AM Altmetrics Conference, September 2014

IRUS-UK

- IRUS-UK: Institutional Repository Usage Statistics – UK
- Project Team Members:
 - Mimas – Project & Service Management & Host
 - Cranfield University - Development
 - Evidence Base, Birmingham City University – User Engagement & Evaluation
- Funded by Jisc

Bringing together key repository services to deliver a connected national infrastructure to support OA

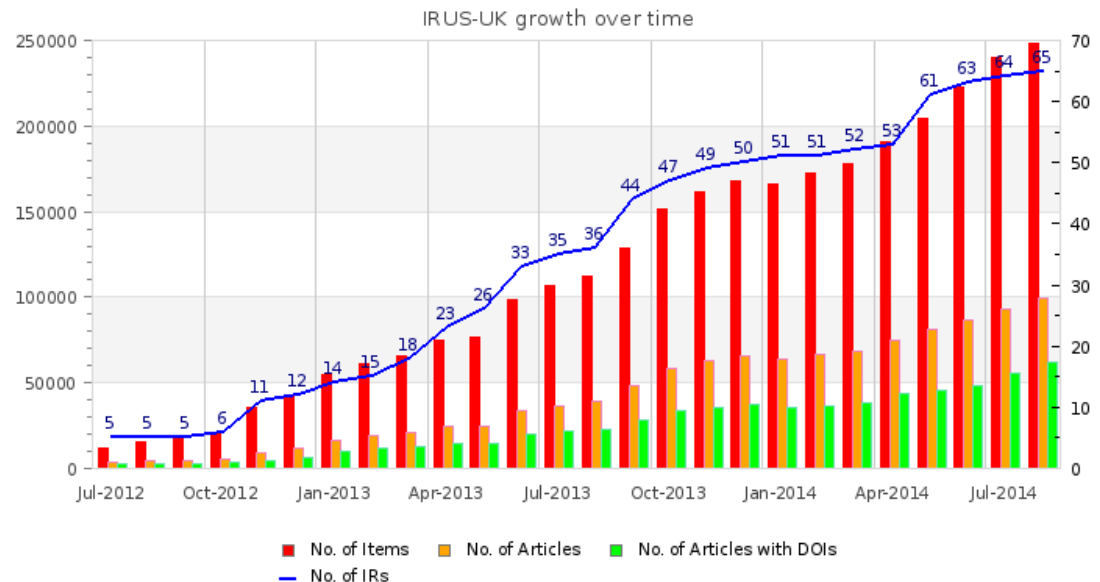


IRUS-UK: background

- PIRUS2 (Publisher and Institutional Repository Usage Statistics)
 - 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’
 - <http://www.cranfieldlibrary.cranfield.ac.uk/pirus2/>
- Main outcomes:
 - IRUS-UK
 - <http://www.irus.mimas.ac.uk/>
 - Release 1 of the COUNTER Code of Practice for Articles
 - <http://www.projectcounter.org/counterarticles.html>

IRUS-UK: aims and objectives

- Provide a national aggregation service, enabling (a growing number of) UK Institutional Repositories to share/expose usage statistics at the individual item level, based on a global standard – COUNTER
 - Collect raw download data from UK IRs for *all item types* within repositories
 - Process those raw data into COUNTER-compliant statistics
- Facilitate comparable, standards-based measurements
- Provide an evidence base for repositories to develop policies and initiatives to help support their objectives
- Provide consistent and comprehensive statistics, presenting opportunities for benchmarking at a national level



IRUS-UK: gathering data

- The method we use to gather raw download data is simple:
 - Whenever a file is downloaded from a participating repository, it sends a message to the IRUS-UK server with some details about the download
- Accomplished by adding a small piece of code to repository software, which employs the ‘Tracker Protocol’
 - <http://www.irus.mimas.ac.uk/help/toolbox/TrackerProtocol-V3-2014-04-22.pdf>
 - Pushes minimal raw download metadata to a third-party server as OpenURL (like) Key/Value strings
 - Patches for DSpace (1.8.x, 3.x, 4.1) and Plug-in for Eprints (3.2-3.3.x)
 - Implementation guidelines for Fedora
- Not in IRUS-UK scope, but also successfully deployed by:
 - OAPEN Library - freely accessible academic books, ARNO software
 - CORE - millions of scholarly articles aggregated from many Open Access repositories

IRUS-UK: processing data

- The ingest process has been described in detail previously, see earlier presentations and webinars, available from the IRUS-UK News page: <http://www.irus.mimas.ac.uk/news/>
- The key point is that we adhere to the processing rules specified in:
 - Release 4 of the COUNTER Code of Practice for e-Resources
 - Release 1 of the COUNTER Code of Practice for Articles
- i.e. we filter out robot accesses and double clicks on the same basis as scholarly publishers
- The COUNTER Robot Exclusion list is specified only as a *minimum requirement*
 - So we've supplemented the COUNTER CoPs by adding additional filters to
 - Remove more user agents
 - Apply a simple threshold for 'overactive' IP addresses
- However, there's still more can be done!

IRUS-UK: robots and unusual usage

- 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/>
- 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.
- Taking this forward
 - We're involved in the recently formed COUNTER Working Group on Robots
 - Devising more sophisticated - but practical - algorithms to filter out 'rogue' usage
 - Outcomes will eventually become incorporated into the COUNTER standard
 - And, of course, adopted by IRUS-UK!

IRUS-UK: Exposing statistics

- Web User Interface - The IRUS-UK Portal
 - Access currently behind Shibboleth authentication/authorisation, though with community agreement we hope to make it openly accessible:
Open Access, Open Data, Open Metrics!
 - The portal offers:
 - a wide range of views – slicing and dicing stats from the IRUS-UK database
 - Reports available for download as CSV/Excel spreadsheet files
 - Altmetric donuts for individual items 😊
- SUSHI service
 - standard client/server web service utilizing a SOAP request/response to retrieve the XML version of COUNTER or COUNTER-like reports
- SUSHI Lite API
 - A new, simpler '21st century' approach, under development by the NISO SUSHI Lite Technical Report Working Group (http://www.niso.org/workrooms/sushi/sushi_lite/)
 - RESTful: uses standard HTTP GET returning JSON
 - Allows retrieval of stats snippets to be embedded into Repository (and other) web pages

IRUS-UK: Overall Summary

The screenshot shows a web browser window displaying the IRUS-UK portal. The browser's address bar shows the URL <http://www.irus.mimas.ac.uk/portal/>. The page features a navigation menu with links for HOME, ABOUT, HELP, PARTICIPANTS, NEWS, and PORTAL. A search bar is visible with the text "RESTful" and a search button. The main content area is titled "IRUS-UK" and includes a sidebar with navigation options such as "Home Search", "Statistics Views", "Metadata Views", and "Statistics Reports". The main content area displays the "Overall Summary as at 22nd Sep 2014" and provides a brief description of the data. A table titled "Headlines at a glance" shows the following data:

Headlines at a glance	
Repositories	67
Items	260,421
Downloads up to Aug-2014	20,165,963
Downloads this month	863,499
Total Downloads	21,029,462

IRUS-UK: Best features (our survey said)

- 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: Value

- An altmetric that no-one else is providing - yet!
- Demonstrates the importance of repositories in disseminating scholarly outputs
- Uniquely positioned to act as an intermediary between UK repositories and other actors:
 - Funders
 - Publishers
 - National shared services
 - Etc.
- 2014 IRUS-UK user survey:
 - 68% reported that IRUS-UK has improved statistical reporting
 - 66% reported that IRUS-UK saves time collecting statistics
 - 66% reported that IRUS-UK enables reporting previously unable to do
 - 83% hope to use IRUS-UK for benchmarking

Contacts & Information

- If you wish to contact IRUS-UK:
 - irus@mimas.ac.uk
 - [@IRUSNEWS](https://twitter.com/IRUSNEWS)
- Project web site:
 - <http://irus.mimas.ac.uk/>

“The set up was quick and painless, which is always a delight!”

“Consistent collection of statistics without me having to do it!”