The International Standard Name Identifier: linking identities – through the supply chain and across domains

Andrew MacEwan, The British Library & ISNI International Agency

Digital Publishing Forum,
University College London, May 2014
Outline

• Overview of ISNI
  – What, who, how
• Relationship to library name authority files
• Diffusion of ISNIs & Linked Data
• Managing identities across multiple domains
• ISNI – some deployment examples
ISO 27729 International Standard Name Identifier
for
Public identities of parties (individuals or organizations)

that create, produce, manage, distribute or feature
in creative contents
including writers, artists, creators, performers, researchers, producers, publishers, aggregators, and more)
• e.g.: ISNI 0000 0001 2133 4104
  – Unique
  – Global
  – Persistent

• Expressed as HTTP URI
  http://isni.org/isni/0000000121334104
Purposes of ISNI

• Act as a bridge-identifier across multiple domains
  – Rights management services, e.g. digital/digitised resources
  – More accurate discovery services spanning all domains
  – Provide an infrastructure for generating links as assertions to support identity management
  – An enabler for Linked Data
ISNI International Agency

THE BRITISH LIBRARY

CENL

Bibliothèque nationale de France

Other members: OCLC, ProQuest, CISAC, IFRRO, SCAPR

ISO 2779:2012 - International Standard Name Identifier

(approved in 2009, published in 2012)

Over 8 million ISNIs assigned

Unique, Persistent, Actionable

soon in RDF, and exposed as LOD
Bridging domains by matching and interconnecting many discrete identity management systems and databases around a common shared identifier

Developed from matching tools created by OCLC to deliver the Virtual International Authority File (VIAF)
Figures

<table>
<thead>
<tr>
<th>Provisional: Possible</th>
<th>580,738</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provisional: Unassigned</td>
<td>9,563,590</td>
</tr>
<tr>
<td>Assigned</td>
<td>8 million</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of data contributors</th>
</tr>
</thead>
<tbody>
<tr>
<td>From VIAF</td>
</tr>
<tr>
<td>Others</td>
</tr>
<tr>
<td>Total (in permanent growth)</td>
</tr>
</tbody>
</table>

Cross links among sources through local IDs

<table>
<thead>
<tr>
<th>Over</th>
<th>15 million</th>
</tr>
</thead>
</table>
ISNI System

- Batch loading – central database
- Online assignment
- Assignment request API
- Enquiry API
- Quality Team
- Member enquiry
- Public database
- End user input
Governance & control infrastructure

ISNI-IA
ISO Registration Authority
(the governing body)

ISNI-AA
Assignment Agency
(manages the central database)

Quality Team
libraries

Member
Registration Agency

Member
Registration Agency

Member
Registration Agency

Member
Registration Agency

Member
Registration Agency

enduser

enduser

enduser

Enduser input
VIAF-ISNI inter	-relation-ship -operability

VIAF → seed database for ISNI

1 Monthly updates

2 matching Assignment

3 Quality control

4 ISNIs

5 Error notifications

6 Reprocessing after notification

VIAF-ISNI Task Force
- Policy on pseudonyms
- Study notification work flows
- Participate in cluster sampling in VIAF and ISNI
- Help define new anomaly detectors, etc
ISNI Assignment Agency

- Processes data algorithmically
- R&D to “get the best of the data”
- Notifications, reports changes to sources
- Centrally managed hub for diffusion of the ISNI
- Sources of all data elements tracked and used in reporting/maintaining integrity of the diffused ISNIs
ISNI Quality Team

- Samples data regularly
  - c. 2% VIAF clusters have mixed identities
  - c. 5% of clusters duplicate
- Makes corrections at cluster level
  - Merges, splits, error notifications
  - Access to cataloguing client / macros
- Makes system recommendations
- Gives approval for single source assignment
- Responds to End User input
ISNI Brings to all its sources...

- ISNIs
- Quality improvement
  - merges, corrections, splits
  - QT, sampling, algorithms
  - End user input
- Links & Diffusion
- Information
  - Common names
  - Unique names
  - New indexes & views
Cross Domain Links

15 million links, 200,000

Roger Dean (musician)

Roger Thornton Dean (born 6 September 1948, Manchester UK) is a poet, writer, musician and academic Hazel Anne Smith.

Music[2]

Dean is a composer, improviser (piano, computers) and performer. He was a founding member of the Youth Orchestra (UK). As bassist, he performed solo at the Wigmore Hall, Berliner Ensemble, London Sinfonietta, Music Projects/London, Spectrum & Company in 1988; and in Australia with the Australian Chamber Orchestra and Sydney Symphony. A number of his works have been written for him.

As keyboardist he has been accompanist for the trumpeter John Walsh, and has also accompanied and performed with many others from Marian McPartland to Eddie Palmieri. He recorded with Hotel Chevalier in 1971 with Oxford English Music and BBC Studio Orchestra and "Waltz" with Florian Frenz.

Notes:

Wikipedia, 5 February 2013: Roger Dean (musician) page (Roger Thornton Dean), born 5 September 1948, Manchester, UK; a British-Australian musician, academic, biochemist and cognitive scientist; composer, improvisor (piano, computers) and performer & formed the British group LYSIS in 1970 which became australLYSIS in 1990 in Australia; he is also a research academic, studying Natural Sciences at Cambridge (BA, 1970) and gained his PhD there in biochemistry (1973)

Google Scholar, 5 February 2013: Profile page (Roger T. Dean, Professor of Sonic Communication, University of Western Sydney; Artistic Director, australLYSIS) http://tinyurl.com/7swcd3f

ORCID identifier http://orcid.org/0000-0002-8859-8302

Sources:

VIAF VIAF VIAF VIAF VIAF VIAF VIAF VIAF BIBSYS BNF DNB LC NLA NTA NUKAT SELIBR SUDOC WKP

ALCS

BLSA

BOWKER

IPDA
Linked Data

- Schema.org
  - Harvested, improves ranking,
- Enriched displays via link navigation
Linked data for content negotiation

isni.org/isni/

These options are available for the ISNI number you supplied

http://www.isni.org/isni/000000121334104
http://www.isni.org/isni/000000121334104.html
http://www.isni.org/isni/000000121334104.xml
http://www.isni.org/isni/000000121334104.rdf
http://www.isni.org/isni/000000121334104/

html is the default
html
xml as per SRU API public = isni-b
rdf as xml response
(trailing slash) this page
Libraries

Trade Sources

Other future cultural heritage sources

Text Rights

Music Rights

Encyclopaedias

Researchers & Professional

cross-domain

bridging-domains
Organisation identifiers

• Ringgold is Registration Agency for organisations
  – Specialises in universities, research organisations, etc.

• Bowker also Registration Agency
  – Specialises in publishers, trade organisations

• 490,000 organisations assigned
  – Not yet diffused to Bowker & Ringgold databases
ORCID and ISNI

- Memorandum of Understanding – Strategic Partnership
  - Signed January 2014
  - API lookup from ORCID to ISNI
  - Working paper on interoperation in progress

- ORCID model is focussed on researcher self-registration and management of their ID

- ISNI is focussed on big datasets and batch assignment
E.g. ISNIs are assigned to articles

- ETOC (Electronic Table of Contents)
- 30 million articles, 90 million names
- 224,882 ISNIs assigned based on existing matching software
- Various data mining techniques are expanding assignments
- Links to ORCID. ProQuest, etc
• LCC Manifesto published April 2014
• 10 targets for the Rights Data network
• 1. A global Party ID “hub”. Rightsholders and “asserters” should be identified with an identifier linked to the ISNI “hub”.

Linked Content Coalition
How can you get involved in ISNI?

- Use the public database for free and use ISNIs in your metadata
- Become a member (800 Euros) (see MA)
  - Enhanced access to whole database
  - One batch load, basic editing
- Become a Registration Agency (2500 Euros depending on size of institution)
  - Ongoing assignments
  - Online ISNI requests
  - Multiple batch loads
Why become an ISNI member?

- ISNI is a global standard for the supply chain
- ISNI enables cross domain links
- The more members the more effective ISNI becomes as a global standard
- More users – more uses
Questions?

• Contact: andrew.macewan@bl.uk
• Contact: info@isni.org
• Visit: http://www.isni.org