

**UNLOCKING LIBRARY DATA FOR  
THE WEB: BIBFRAME, LINKED  
DATA AND THE LIBHUB INITIATIVE**

**WLA 2016**

**PRESENTED BY RICK NEWELL AND COLLEEN BRAZIL**



# WHAT WE WILL COVER

- **WHY LINKED DATA IS IMPORTANT**
- **HOW IT WORKS**
- **THE FUTURE**



**WHY ARE WE DOING THIS?**





# EXPECTATIONS OF LIBRARY WEB VISIBILITY

**“WHEN MY COMMUNITY SEARCHES THE WEB FOR SOMETHING WE HAVE, WE BETTER SHOW UP AS AN OPTION.”**

**- CHUCK GIBSON, DIRECTOR & CEO  
WORTHINGTON PUBLIC LIBRARY**





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Tomorrow's Libraries. Today.

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Libhub Initiative Founder & Sponsor

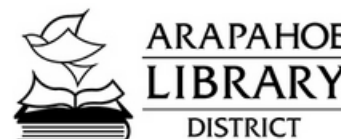
### Institutional and Organizational Partners

The Libhub Initiative is founded on active discussion and transparent exploration. The following institutions and organizations have played very active roles in pushing this agenda and philosophy forward through their involvement and experimentation.



A REVOLUTION OF RANGEVIEW LIBRARIES

Anythink Libraries



Arapahoe Library District



Calgary Public Library



Denver Public Library



Dallas Public Library



Deutsche Nationalbibliothek



Douglas County Libraries



Edmonton Public Library



Hamilton Public Library



[MarcEdit](#)



Multnomah County Library

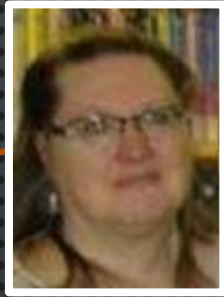
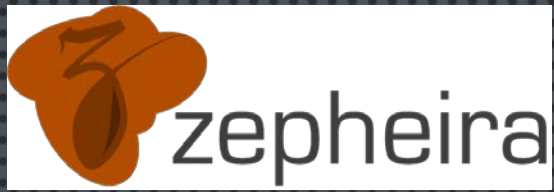


Phoenix Public Library

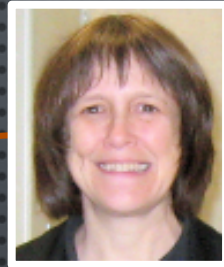


Worthington Public Library





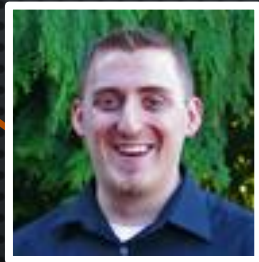
**Diana Clementson**  
Cataloging



**Colleen Brazil**  
Content Access Manager



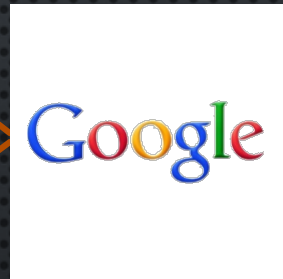
**Mike Longley**  
Web Developer



**Casey Gabehart**  
ILS Manager



**Jacob Thornton**  
Web Developer







Awareness and  
Education

Readiness  
Assessment

Implementation  
and Exploration

[ April/June ]



Awareness and  
Education



Readiness  
Assessment

Implementation  
and Exploration

[ June/July ]





Awareness and  
Education



Readiness  
Assessment

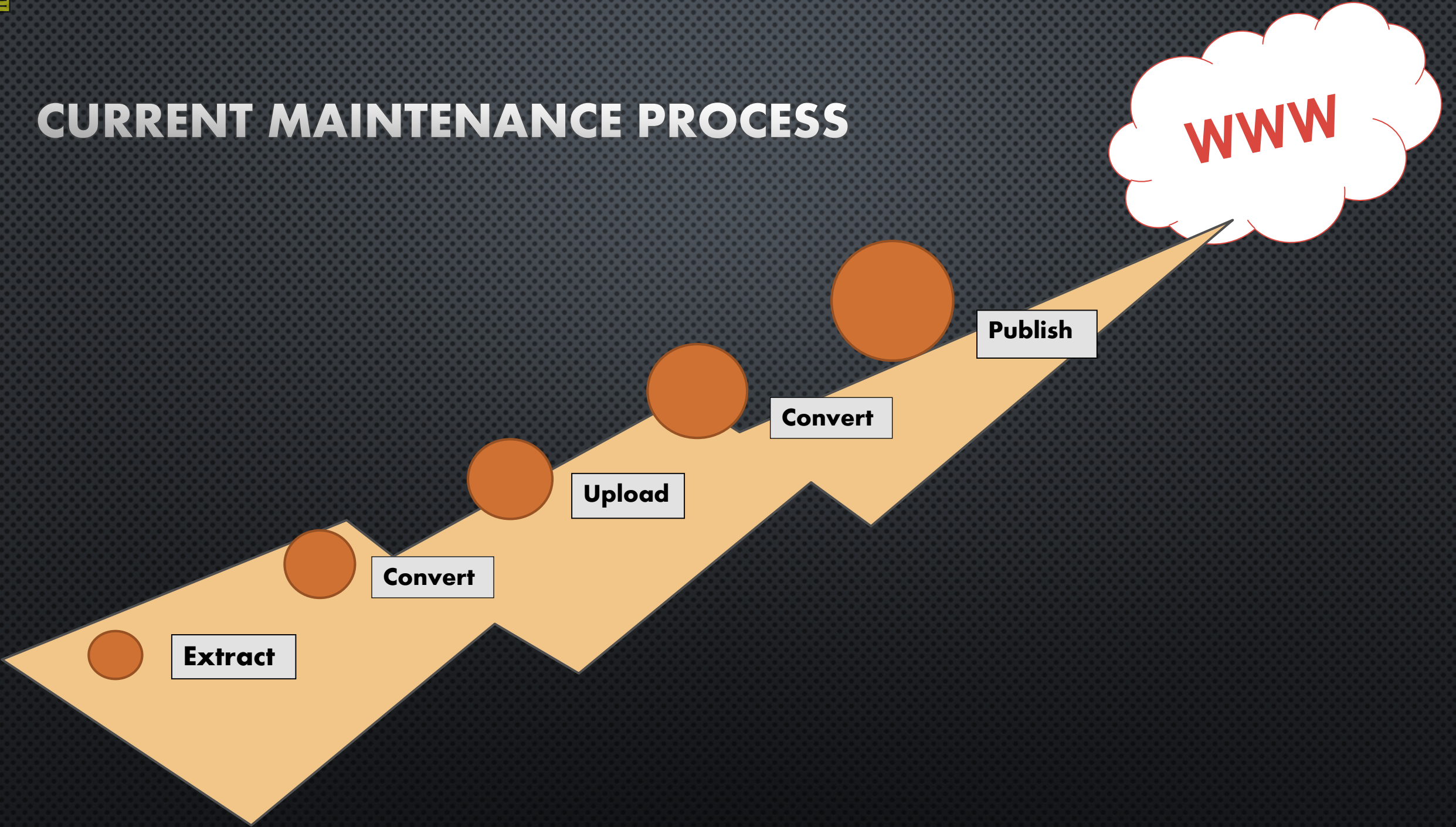


Implementation  
and Exploration





# CURRENT MAINTENANCE PROCESS






# We Publish Linked Data through Local Link Graphs

## link.sno-isle.org is our portal page


Library.Link Network : Sno-Isle Libraries

### Sno-Isle Libraries

**Home Page** <http://www.sno-isle.org>  
**Address** 7312 35th Ave NE, Marysville, WA, 98271-7417, USA  
**Logo** 

Details [Map](#)

### Arlington Library

**Home Page** <http://www.sno-isle.org/locations/arlington/>  
**Address** 135 N Washington Ave, Arlington, WA, 98223-1422, USA  
**Location** 48.193360 -122.118393  
**Hours** Mo, 09:00-20:00  
Tu, 09:00-20:00  
We, 10:00-20:00  
Th, 10:00-20:00  
Fr, 10:00-18:00  
Sa, 09:00-18:00  
Su, 13:00-17:00  
**Image(s)** 

### Brier Library

### Resources

- Agent (38589)
- Collection (28828)
- Concept (277214)
- CopyrightEvent (424)
- Family (357)
- Form (2156)
- Instance (452719)
- Meeting (576)
- Organization (24301)
- Person (227307)
- Place (17389)
- ProviderEvent (137472)
- Temporal (1483)
- Topic (41057)
- Work (398518)

Each "Resource" is published and linked in the Library's Local Link Graph pages.

The data is designed to bring together disparate resources, surface relationships and provide entry paths for the Web into what's available in the library.



# Page 2 of Google Results

Google thumbelina, Hans Christian Andersen: retold by Brian Alderson

Page 2 of about 1,540 results (0.80 seconds)

**KidsBookCircus.com: Thumbelina: Brian Alderson**  
kidsbookcircus.com/book.php?ISBN=9780763620790  
Thumbelina Contributor(s): Alderson, Brian (Retold By), Andersen, Hans Christian, Ibatoulline, Bagram (Illustrator). ISBN: 0763620793 ISBN-13: ...

**The Smallest Tall Tale - The New York Times**  
www.nytimes.com/2010/04/11/.../Jenkins-t.html  
Apr 11, 2010 - Hans Christian Andersen's 1836 "Thumbelina" is the story of a tiny, passive girl, no bigger than your thumb. ... "She had no way of knowing how lovely she was," as Sylvia Long puts it in her retelling. ... Brian Alderson's "Thumbelina" is more of a departure from the original, ... Illustrated by Bagram Ibatoulline.

**Hans Christian Andersen | Kirkus Reviews**  
https://www.kirkusreviews.com/.../hans-christian-anderse...  
by Hans Christian Andersen, retold by Allison Grace MacDonald, illustrated .... by Hans Christian Andersen, adapted by Brian Alderson, illustrated by Bagram Ibatoulline ... THUMBELINA, TINY RUNAWAY BRIDE by Hans Christian Andersen.


**Thumbelina - Sno-Isle Libraries**  
link.sno-isle.org/portal/Thumbelina/SUSyv9Syhv8/  
Thumbelina, Hans Christian Andersen ; retold by Brian Alderson ; illustrated by Bagram Ibatoulline. Type. http://bibfra.me/vocab/lite/Work ...

**Thumbelina / Hans Christian Andersen ; retold by Brian ...**  
mwbooks.ie/.../thumbelina-hans-christian-andersen-retold-by-brian-alder...  
Thumbelina / Hans Christian Andersen ; retold by Brian Alderson ; illustrated by Bagram Ibatoulline. €11.95. Product code: 19944. Availability: In stock. €11.95.

**NEW Thumbelina by Alderson, Brian (RTL); Andersen, Hans ...**  
www.ebay.com/.../Thumbelina...Alderson-Brian...Andersen-Hans-C...  
Luminous illustrations by Bagram Ibatoulline combine with Brian Alderson's ... In a warm, witty retelling accessible to younger children, Hans Christian Andersen's tale of a girl no bigger than a thumb is lavishly illustrated by Bagram Ibatoulline.

**Find in Library - National Library Board**  
www.nlb.gov.sg/newarrivals/item\_holding.aspx?bid...  
Thumbelina / Hans Christian Andersen ; retold by Brian Alderson ; illustrated by Bagram Ibatoulline. Author: Alderson, Brian. Publisher: Somerville, MA ...

**Thumbelina BY Hans Christian Andersen Bagram ... - eBay**  
www.ebay.com.au/.../Thumbelina...Hans-Christian-Andersen-Bagra...  
Thumbelina By Hans Christian Andersen, Bagram Ibatoulline, Brian Alderson in ...  
Thumbelina Alderson, Brian (Retold By) Andersen, Hans Christian/ Ibatoulline, .... tale

Shop for thumbelina, Hans Christi... on Google Sponsored  
 **Thumbelina; Hardcover; Retold by - Brian Alderson**  
\$1.99 - Barnes & Noble

**PAGE 2 OF GOOGLE RESULTS**



# Linked Data Page for a Title - Thumbelina

📍 Libraries are Wonderful!

Taking you to your library catalog in **8**

Take me there now!

No thanks, I'll stay here.



## Thumbelina, Hans Christian Andersen ; retold by Brian Alderson ; illustrated by Bagram Ibatouline

**Title** Thumbelina

**Statement of responsibility** Hans Christian Andersen ; retold by Brian Alderson ; illustrated by Bagram Ibatouline

**Creator** [Alderson, Brian](#)

**Contributor** [Ibatouline, Bagram](#)

**Subject** [Fairy tales](#)

**Language** eng

**Summary** A tiny girl no bigger than a thumb is stolen by a great ugly toad and subsequently has many adventures and makes many animal friends, before finding the perfect mate in a warm and beautiful southern land

**Related** [Tommelise](#)

**Cataloging source** DLC

**Dewey number** [E]

**Illustrations** illustrations

**Index** no index present

**LC call number** PZ8.A36

**LC item number** Th 2009

## 📖 Library Locations

**Arlington Library**  
135 N Washington Ave, Arlington, WA,  
98223-1422, USA

**Brier Library**  
23303 Brier Rd, Brier, WA, 98036-8247, USA

**Camano Island Library**  
848 N. Sunrise Blvd, Camano Island, WA,  
98282-8770, USA

**Clinton Library**  
4781 Deer Lake Rd, Clinton, WA, 98236-0530,  
USA

**Coupeville Library**  
788 NW Alexander St, Coupeville, WA, 98239-  
0745, USA

**Darrington Library**

## 🔗 Context

Work

[Thumbelina](#)

Instance



# Page 1 of Google Results

norman lenfest - Google

https://www.google.com/#q=norman+lenfest

Google norman lenfest Sign in

All News Images Maps Videos More

About 67,700 results (0.59 seconds)

**Norman F Lenfest - Ancestry.com**  
search.ancestry.com/.../sse.dll?...Norman%20F...Lenfe...  
All results for Norman F Lenfest ... Name: Norman Lenfest ...  
Washington. Residence: 1935 - Snohomish, Snohomish, Washington. Residence ...

**Norman Lenfest in the 1940 Census | Ancestry**  
www.ancestry.com/1940.../Norman-Lenfest\_24p693 - Ancestry.com Inc. ▾  
View Norman Lenfest's 1940 US census record to find family members, occupation details & more. Access is free so discover Norman's story today.

**Images for norman lenfest** Report images

More images for norman lenfest

**Norman Lenfest - Title - Sno-Isle Libraries** ←  
catalog.sno-isle.org/polaris/view.aspx?cn=679426 ▾ Sno-Isle Libraries ▾  
Summary: College graduation photograph of Norman Lenfest. Norman, born in Snohomish on July 7, 1894, was the only child of Sylvia Ferguson Lenfest and ...

**Norman F Lenfest (1893 - 1978) - Find A Grave Memorial**  
www.findagrave.com/cgi-bin/fg.cgi?page=gr&GRid... ▾ Find a Grave ▾  
May 26, 2009 - Birth: Jul. 7, 1893. Death: May 12, 1978. Burial: Grand Army of the Republic Cemetery Snohomish Snohomish County Washington, USA

**Norman Lenfest Wilder (1884 - d.) - Genealogy - Geni**  
www.geni.com/people/Norman-Wilder/6000000003714751790 - Geni ▾  
Nov 29, 2014 - Genealogy for Norman Lenfest Wilder (1884 - d.) family tree on Geni, with over 140 million profiles of ancestors and living relatives.

**Norman Lenfest Death Records**  
death-records.mooseroots.com/d/n/Norman-Lenfest ▾  
Find death records for Norman Lenfest. Over 100 million deaths from around the world. Research your ancestors for free in our extensive genealogy databases.

**Norman Lenfest from Snohomish in 1940 Census District 31 ...**  
www.archives.com/1940-census/norman-lenfest-us-49248492



# HOW GOOGLE SEARCH WORKS





**TRANSFORMED  
LIBRARY DATA  
CAN TEACH  
THE WEB**



# FUTURE

TRANSFORM > LINK > PUBLISH > CONSUME



Catalog, Enriched  
and Licensed  
Content



Events, Strategic  
Purpose, Locations,  
Services



Special  
Collections,  
Archives



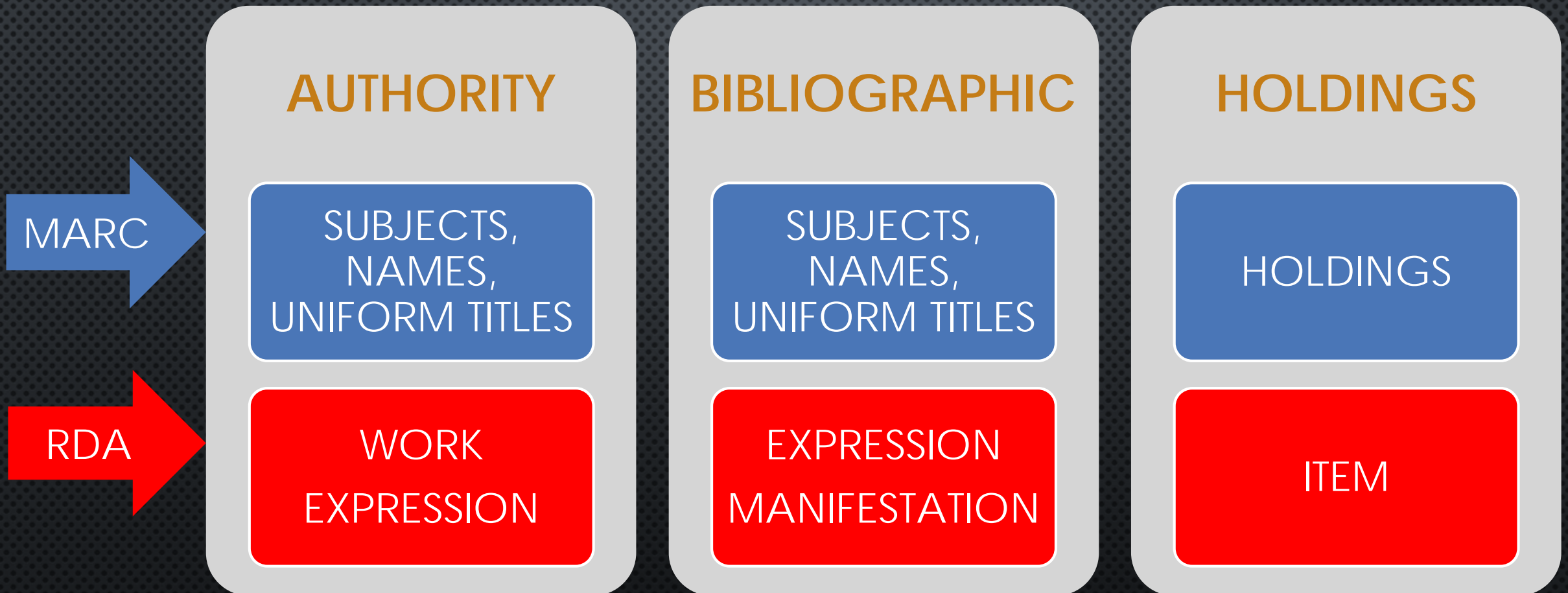
# Libraries Publish Linked Data through Local Link Graphs

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# MARC AND RDA DATA





# HTTP://LINK.SNO-ISLE.ORG/

 Library.Link Network : Sno-Isle Libraries

## Sno-Isle Libraries

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**Logo**



Details

Map

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 Collection (28828)

 Concept (277214)


 CopyrightEvent (424)

 Family (357)

 Form (2156)







 Instance (452719)

 Meeting (576)

 Organization (24301)




# A 'Person Resource' doesn't yet have a Catalog page, but look at what our data can teach the Web...

 Works (369,239)  Persons (184,688)  Collection (33,954)  Place (17,951)  Topic (32,698)  Series (38,913) **677,443**



Library.Link Network : Sno-Isle Libraries

 **Gaiman, Neil**

**Name** Gaiman, Neil

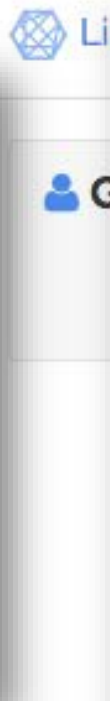
[Show / Hide Supplemental data](#) [Raw data](#)

**Context**

Contributor of

- Shelf life : fantastic stories celebrating bookstores
- Coraline
- A Slip of the Keyboard
- Free Country : a tale of the Children's Crusade
- Stories : all-new tales
- MirrorMask





## Context

### Contributor of

Shelf life celebrating b

Coraline

A Slip of

Free Cou  
Children's C

Stories : a

MirrorM

Songs of  
in honor of J

Unnature

### Creator of

T

N

T

F

B

T  
editio

C

A

### Focus of

Gain

Gain  
manual

Gain

Gain

Gain  
interpre

Gain

### Conservator of

Guardians of the Galaxy, [Vol. 2],  
Angela

### Writer of introduction of

The dream cycle of H.P. Lovecraft :  
dreams of terror and death

and

Chu's first day of school

The truth is a cave in the Black

## Context

### Contributor of

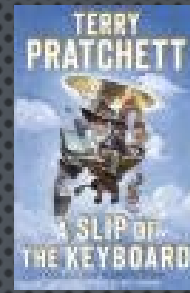
Shelf life : fantastic stories  
celebrating bookstores

ine

of the Keyboard



Contributor of:



+24  
more

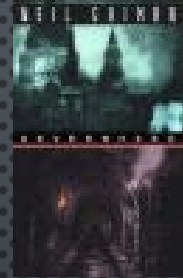
Creator of:

Author of:

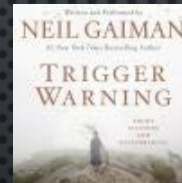
Conservator of:

Narrator of:

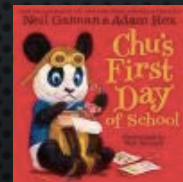
Focus of:



+100  
more

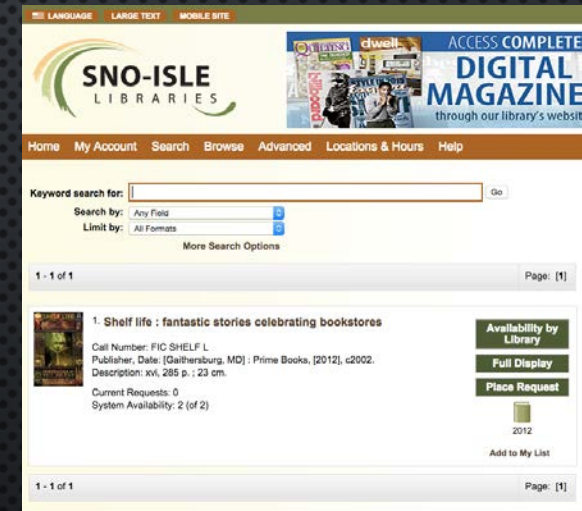


+20  
more



Writer of Introduction of:

All  
connections  
link to library  
resources





# Including Sources and Connections beyond the traditional catalog



## Library Service & Content Providers

Novelist  
OverDrive  
Atlas Systems

## Library Generated & Community Curated Content

Author Event @ Library  
YouTube archive of event  
Special Collections & Archives

## Web Sources

Wikipedia  
Twitter  
Google +  
Facebook

## Authority Services

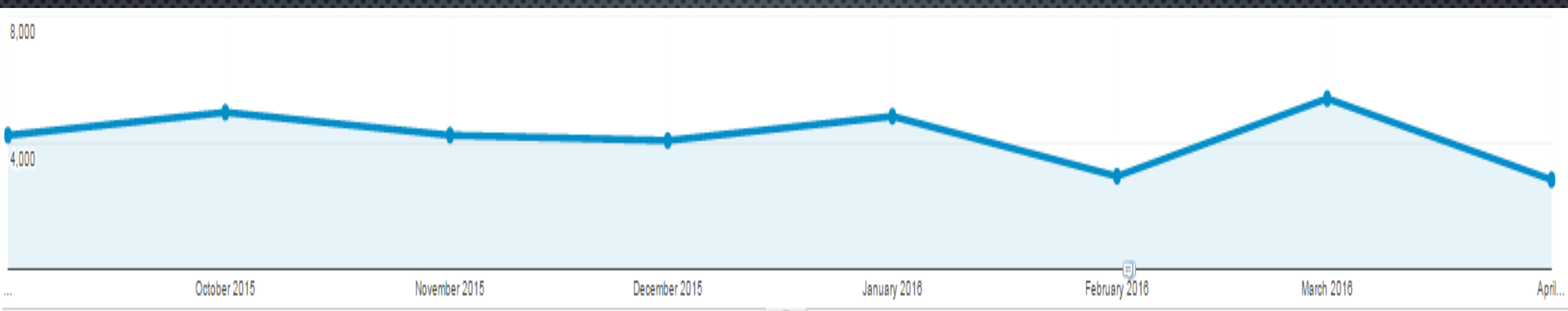
VIAF  
LC  
...



# **WEAVING THE BEST OF LIBRARIES AND THE WEB TOGETHER**

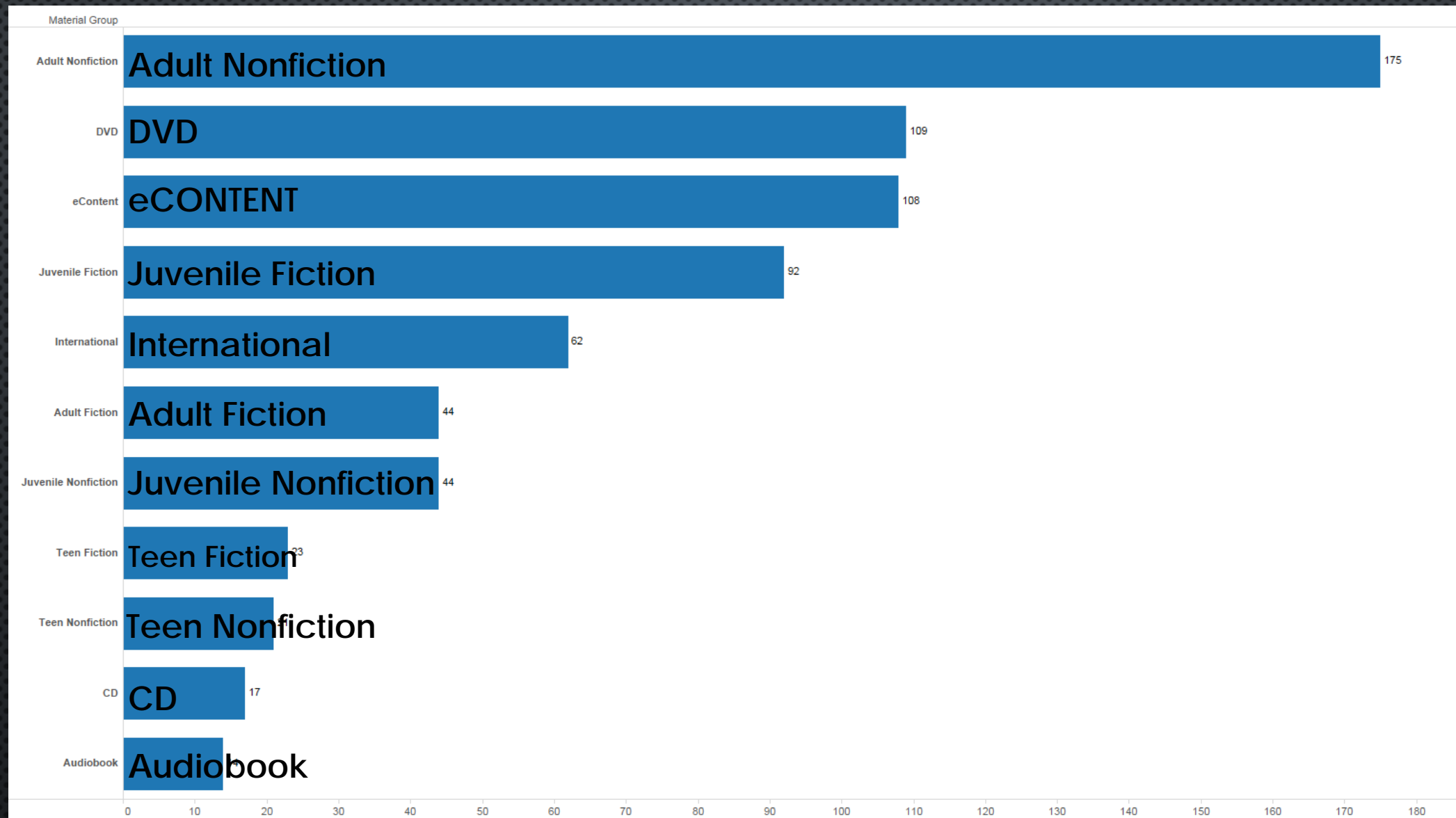
- **THIS ISN'T ABOUT GAMING A SYSTEM**
- **IT'S NOT ABOUT OPTIMIZING TO ANY ONE SERVICE**
- **IT'S ABOUT SPEAKING IN A WAY THE WEB UNDERSTANDS**
- **LEVERAGING THE POWER OF OUR COMMUNITY**
- **AND BENEFITING FROM WHAT ALL THIS ENABLES**





Measuring the amount of referrals from  
[www.google.com](http://www.google.com) > [catalog.sno-isle.org](http://catalog.sno-isle.org)







# GETTING STARTED IS EASY

1. GRAB A BOOKMARK!
2. GO TO [HTTP://ZEPHEIRA.COM/LIBRARYLINKACTIVATION](http://zepheira.com/librarylinkactivation)
3. CLAIM YOUR LINK DOMAIN
4. SET UP YOUR LIBRARY LOCATION INFORMATION



**RICK IS GOING TO TELL YOU MORE  
ABOUT OCLC'S INVOLVEMENT IN LINKED  
DATA**