

# Data standards: what we can learn from the information and library sciences

## Lessons Learned and Future Directions

iDigBio - Leveraging Digitization Practices across Multiple Domains  
6-9 October 2014 - Santa Barbara, CA

Larry Schmidt– University of Wyoming Libraries

# Before Computers

---



- What is this?
- What did it Contain?
- Where are they now?
  
- If you remember them how were they organized?

# Back in the day



<http://loc.gov/pictures/resource/cph.3a09325/>

---

Standards Made It Easier to Migrate  
from a text based system to a computer  
based system.

It is all about helping users find the  
object/information that they are looking  
for.



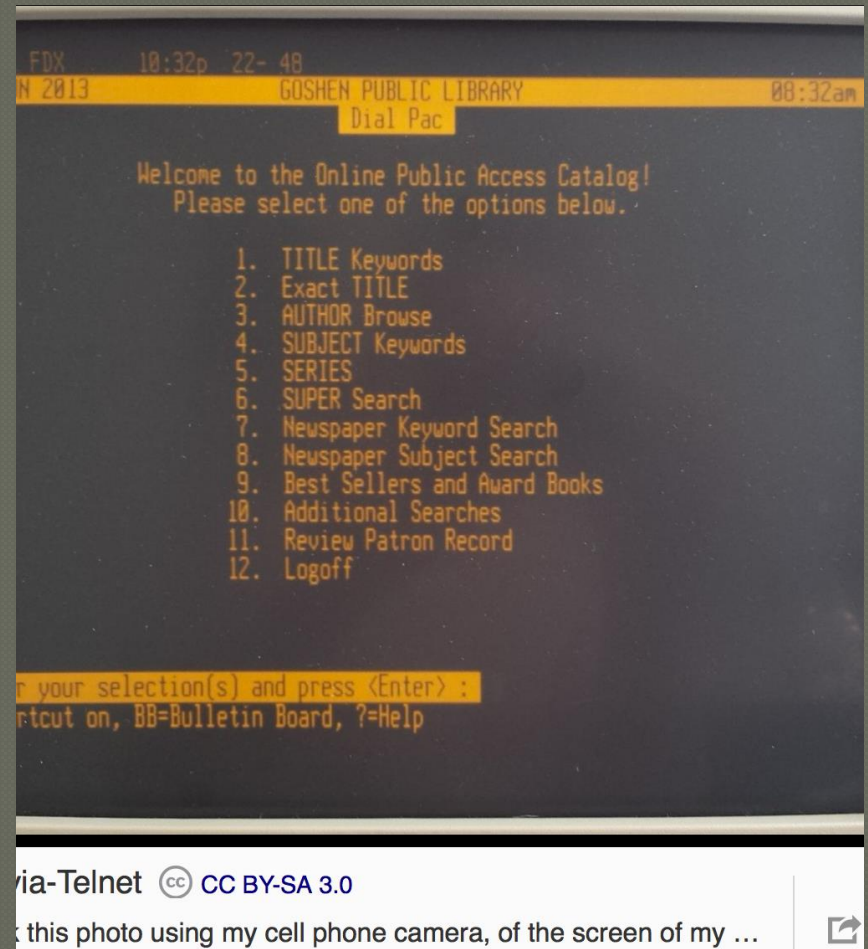
# OPAC – first generation

- Online catalog
- MARC is a standard
- Machine-readable Cataloging Record

- Side note:

- Creative Commons
- <http://creativecommons.org/>

[http://en.wikipedia.org/wiki/Online\\_public\\_access\\_catalog#mediaviewer/File:Dynix-Main-Menu-via-Telnet.jpg](http://en.wikipedia.org/wiki/Online_public_access_catalog#mediaviewer/File:Dynix-Main-Menu-via-Telnet.jpg)



Dynix-Main-Menu-via-Telnet

```

LEADER 00000cam a2200313Ia 4500
001 40965961
005 20040720081032.0
008 990316s1999 enkaf b 001 0 eng d
020 0750609613
035 (OCoLC)ocm40965961
040 EUN|cEUN|dYAM|dUKM|dMUQ|dWYU
049 WYUI
082 04 508.075|221
090 QH61 .C378 1999
090 QH61|b.C378 1999
100 1 Carter, David J.|q(David James),|d1943-
245 10 Care and conservation of natural history collections /
|cDavid Carter, Annette K. Walker.
260 Oxford [England] ;|aBoston :|bButterworth-Heinemann,
|c1999.
300 xxii, 226 p., [16] p. of plates :|bill. (some col.) ;|c26
cm.
440 0 Butterworth-Heinemann series in conservation and museology
500 The Natural History Museum's logo on t.p.
504 Includes bibliographical references and index.
590 Roxanne
590 WYUI
650 0 Natural history|vCatalogs and collections.
650 0 Natural history museums.
650 0 Museum conservation methods.
700 1 Walker, Annette K.,|d1945-
710 2 Natural History Museum (London, England)
935 1306531
994 02|bWYU

```

Machine Readable

Who creates MARC  
records? Why?

*AACR2 Anglo-American  
Cataloguing Rules*

Designed for consistency  
between library catalogs

# Through Library Standards

ONLINE COMPUTER LIBRARY  
CENTER, INC. (OCLC)

WORLD WIDE CATALOG OF  
LIBRARY HOLDINGS



# OCLC

## WorldCat facts and statistics

72,000

Number of libraries represented worldwide

2,181,386,865

Number of holdings

[Watch WorldCat grow »](#)

Every 10  
seconds

How often a record is added

Over 485

Number of languages and  
dialects represented

Every 4  
seconds

How often a request is filled  
through WorldCat Resource  
Sharing

328,920,958

Number of bibliographic records

Every  
second

How often  
WorldCat is  
searched via  
[FirstSearch](#)

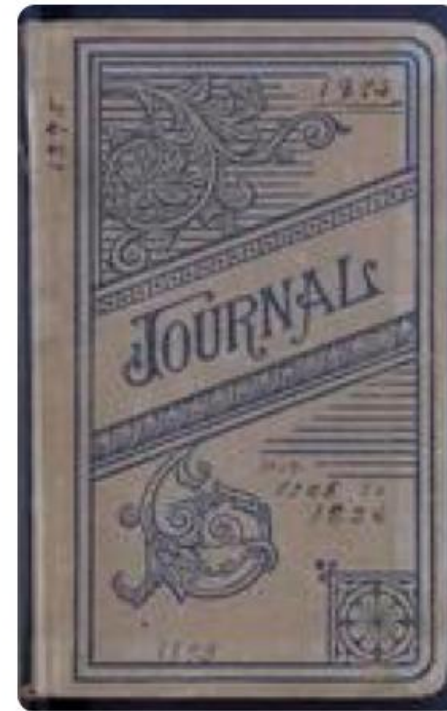
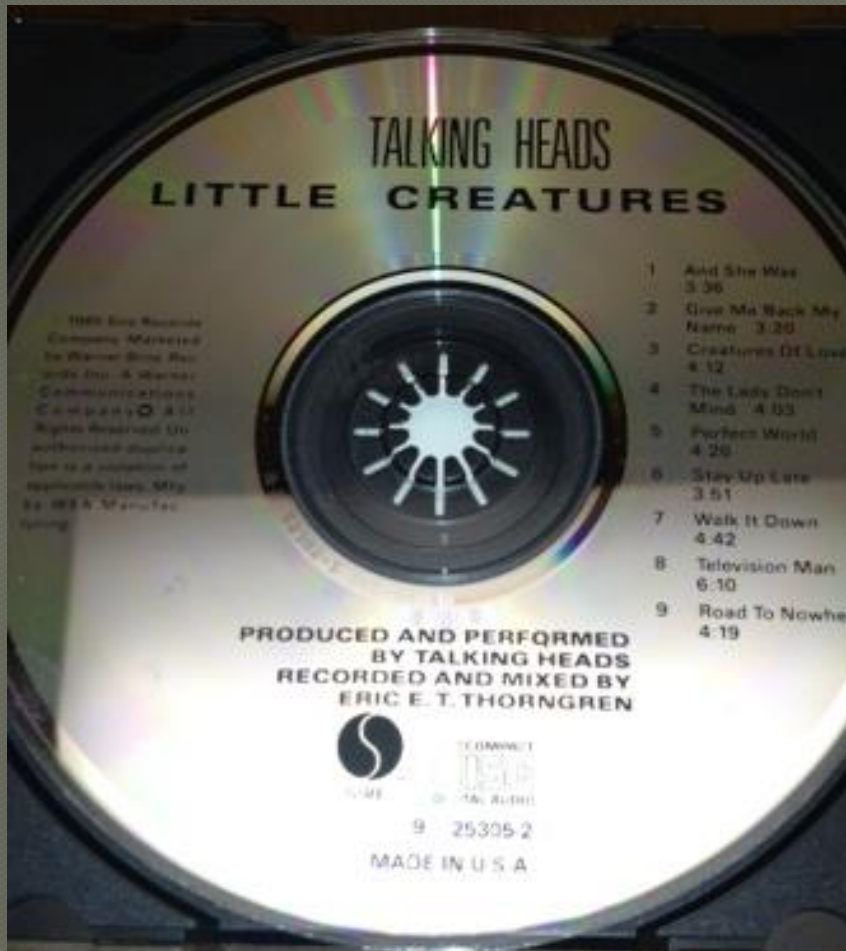
170

Countries and  
territories with  
library holdings in  
WorldCat

[View the list »](#)

Z39.50 is an international standard for communication between computer systems primarily, library and information related systems






# Media types : File types

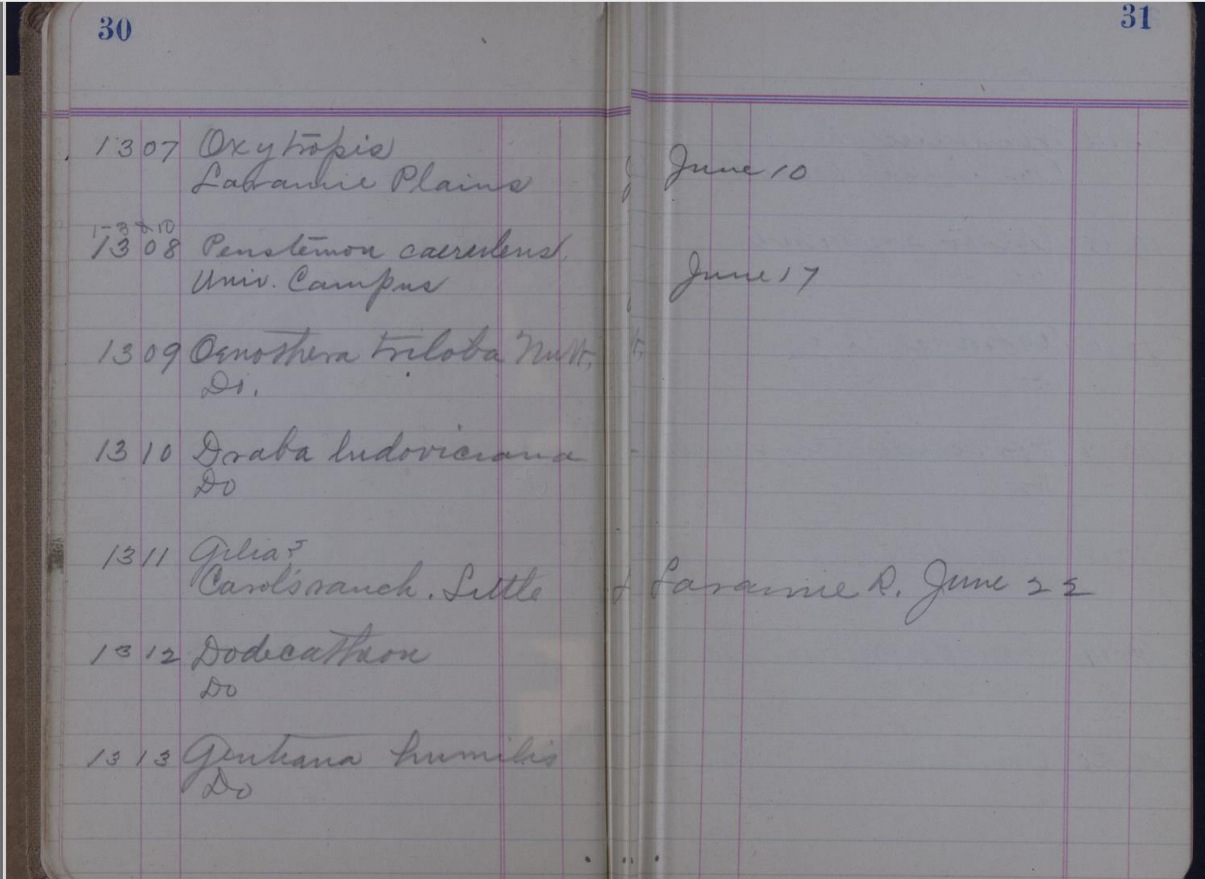


Aven Nelson Collecting Field Book  
1895 Records #1208-#1826



# Now we have digital formats of traditionally print materials

INTERM  [Aven Nelson Collecting Field Book 1895 Records #1208-#1826...](#) Search inside GO   TEXT  



30

1307 *Oxytropis*  
Labadie Plains

1308 *Penstemon caeruleus*  
Univ. Campus

1309 *Oenothera triloba* Nutt.  
Do.

1310 *Graba ludoviciana*  
Do

1311 *Gilia?*  
Carols ranch. Little

1312 *Dodecatheon*  
Do


1313 *Gentiana humilis*  
Do

31

June 10

June 17

Paranville R. June 22



# Traditional library standards are changing to address this



## Abstract & revision notes

---

### Abstract

*Bibliographic Formats and Standards* is a guide to the bibliographic information about records in WorldCat. It provides tagging conventions, input standards, and guidelines for entering information in WorldCat records.

### Revision in progress

The OCLC WorldCat Quality Management Division is revising *Bibliographic Formats and Standards* ([BFAS](#)). We have finished incorporating the changes to BFAS that were part of the OCLC-MARC Updates for 2012 and 2013, which were documented in Technical Bulletins [261](#) and [262](#).

The larger job of revising BFAS in its entirety is ongoing and includes such changes as:

- Updating policies
- Incorporating references to RDA and the Library of Congress-Program for Cooperative Cataloging Policy Statements (LC-PCC PSs)
- Adding and revising examples (RDA and nonRDA)
- Adding links to [Searching WorldCat Indexes](#)

This process of review and revision is a huge undertaking that will happen gradually over time. This means you will see changes occurring throughout BFAS at frequent and irregular intervals (the date of the most recent update appears at the bottom of each page). As a result, there may be periods during which the book is inconsistent. Any such periods will be temporary.

We have brought together on the OCLC [About RDA](#) page links to LC, OCLC, and other documentation about RDA. These include the current [OCLC RDA Policy Statement](#) and a recorded [Webinar](#) that takes an in-depth look at that policy statement. Many cataloging communities (including AV, music, maps, etc.) are working on their own RDA best practices documents and we will be providing links to those as they become available.

Please send any questions or concerns to [AskQC@oclc.org](mailto:AskQC@oclc.org).

# RDA - the new guidelines for bibliographic data - Libraries, Archives and Museums


The LIBRARY of CONGRESS

ASK A LIBRARIAN DIGITAL COLLECTIONS LIBRARY CATALOGS

Search

The Library of Congress > Cataloging, Acquisitions > General, Descriptive Cataloging > RDA

## CATALOGING AND ACQUISITIONS



Search this site

- [Cataloging and Acquisitions Home](#)
- [About the Organization](#)
- [Contact](#)
- [FAQs](#)
- [News](#)

---

- [Acquisitions](#)
- [Resources for Cataloging](#)
- [Catalogs, Authority Records](#)
- [Classification and Shelisting](#)
- [Cooperative Cataloging Programs](#)
- [Descriptive Cataloging](#)
- [Products for Purchase](#)
- [Professional Activities](#)
- [Publications, Reports](#)
- [Subject Headings & Genre/Form Terms](#)

## Resource Description and Access (RDA)

Information and Resources in Preparation for RDA

### News

- [7/7/14: Project to Update Malaysia Authority Records](#)
- [4/22/14: Revision of Core Elements for LC](#) [PDF, 115 KB]
- [4/22/14: LC-PCC PS Updates for April 22, 2014 Release of RDA Toolkit](#)
- [4/22/14: Summary of RDA Updates for April 2014 Update of the RDA Toolkit](#)

[More news »](#)

*Documentos disponibles en español (ACTUALIZADO Mayo de 2013)*

### Documentation

- [Core Elements for LC \(April 22, 2014\)](#) [PDF, 115 KB]
- [Library of Congress-Program for Cooperative Cataloging Policy Statements \(LC-PCC PSs\)](#)
- [Additional Information](#)

### Training

- [RDA: Resource Description and Access Training Materials](#)
- [Webcasts](#)
- [Training Modules for LC](#)
- [Archived Material](#)


### Community

- [Program for Cooperative Cataloging \(PCC\)](#)
- [OCLC Policy Statement on RDA Cataloging](#) <sup>↗</sup>
- [SkyRiver Statement on RDA Support](#) <sup>↗</sup>
- [Joint Steering Committee for Development of RDA \(JSC\)](#) <sup>↗</sup>
- [RDA Toolkit Information from ALA Publishing](#) <sup>↗</sup>
- [Registered RDA Element Sets and Value Vocabularies](#) <sup>↗</sup>
- [Information about Cataloger's Desktop](#)

### U.S. RDA Test Coordinating Committee

- [Implementation Updates \(Final Update, January 4, 2013\)](#)
- [National Libraries RDA Test Archives](#)

# Along with this the MARC record has to change - BIBFRAME

ASK A LIBRARIAN DIGITAL COLLECTIONS LIBRARY CATALOGS Search  GO





The Library of Congress > BIBFRAME

## BIBFRAME

**bf: BIBFRAME**

- Home
- Frequently asked questions
- Webcasts & presentations
- Contact us

**Model & Vocabulary**


- BIBFRAME model
- BIBFRAME vocabulary 
  - Model view 
  - Category view 
  - List view 
- BIBFRAME specifications

**Implementation & Testing**

- BIBFRAME testbed
- Implementation register

**Bibliographic Framework Initiative**

Initiated by the Library of Congress, BIBFRAME provides a foundation for the future of bibliographic description, both on the web, and in the broader networked world. This site presents general information about the project, including presentations, FAQs, and links to working documents. In addition to being a replacement for MARC, BIBFRAME serves as a general model for expressing and connecting bibliographic data. A major focus of the initiative will be to determine a transition path for the MARC 21 formats while preserving a robust data exchange that has supported resource sharing and cataloging cost savings in recent decades.




**General Information**

- Frequently asked questions
- Webcasts and presentations
- Contact us
- Document archive

**Implementation & Testing**


- BIBFRAME testbed
- Implementation register
- BIBFRAME tools and downloads
- Demonstration datasets

**Model & Vocabulary**

- BIBFRAME model
- BIBFRAME vocabulary 
  - Vocabulary description (updated)
  - Terminology & conventions
- BIBFRAME draft specifications
  - BIBFRAME Profiles (new)
  - BIBFRAME Authorities (updated)
  - BIBFRAME Relationships (new)
- Analyses
  - AV Modeling Study (new)
- Use cases
- MARC mapping (coming soon)

**What's New**

**Latest webcast**

BIBFRAME Update Forum at ALA Annual Conference in Las Vegas, Nevada is now available (29 June 2014).  [View webcast](#)

**New Model Analysis Available**

[BIBFRAME AV Modeling Study: Defining a Flexible Model for Description of Audiovisual Resources](#)

**BIBFRAME Editor Now Available**

[Learn more >](#)



# Authority Files

OCLC.org Sign In Create an account

**OCLC** The world's libraries. Connected.™

Worldwide English

Search

Membership Products Support Research News & Events About [Log in to Services](#) [Contact Us](#)

Home Products and Services Cataloging and Metadata Making WorldCat better VIAF

**Making WorldCat better**

External quality programs

Enhance

Expert Community

CIP Upgrading

Duplicate Detection and Resolution

**VIAF**

- History
- Governance
- Contributors
- How to become a contributor

RDA and OCLC

[View VIAF news, events and presentations](#)

## VIAF®

Virtual International Authority File

### At a glance

- A collaborative effort between national libraries and organizations contributing name authority files, furthering access to information
- All authority data for a given entity is linked together into a "super" authority record
- A convenient way for the library community and other agencies to repurpose bibliographic data produced by libraries serving different language communities

The Virtual International Authority File (VIAF) is an international [service](#) designed to provide convenient access to the world's major name authority files. Its creators envision the VIAF as a building block for the Semantic Web to enable switching of the displayed form of names for persons to the preferred language and script of the Web user. VIAF began as a joint project with the Library of Congress (LC), the Deutsche Nationalbibliothek (DNB), the Bibliothèque nationale de France (BNF) and OCLC. It has, over the past decade, become a cooperative effort involving an expanding number of other national libraries and other agencies.

[Learn how to become a contributor](#)

**Recent news**

[VIAF Council elects leadership, discusses annual report](#)  
15 September 2014

Links national and regional level authority files  
\*linking different names for the same person (languages)

# Which brings us to this question. So How can Librarians Help you Today?

---

- ◉ You have your systems for physical objects as do libraries
- ◉ Libraries today are dealing with multiple materials and file types - you are too
- ◉ Linking digital “objects” creates unique problems and libraries have had a head start.

Let's start with



**METADATA**  
Dublin Core® Metadata Initiative  
**INNOVATION**

# Dublin Core

Defines fifteen metadata elements for resource description in a cross-disciplinary information environment.

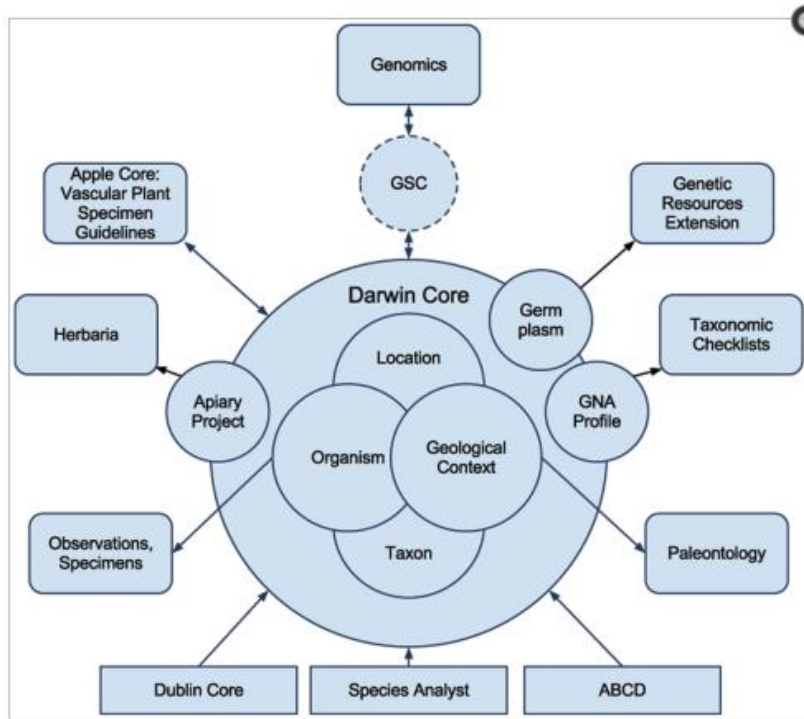
---

## The Dublin Core Metadata Elements 15 Simple Elements

- **Title (Title):**
- **Author or Creator (Creator)**
- **Subject and Keywords (Subject)**
- **Description (Description):**
- **Publisher (Publisher)**
- **Other Contributors (Contributors)**
- **Date (Date)**
- **Resource Type (Type)**
- **Format (Format)**
- **Resource Identifier (Identifier)**
- **Source (Source)**
- **Language (Language)**
- **Relation (Relation)**
- **Coverage (Coverage)**
- **Rights Management (Rights)**

ANSI/NISO Z39.85 - The Dublin Core  
Metadata Element Set

Figure 1



Scope of Darwin Core: The Standard, deriving from previous standards work (e.g., Dublin Core), describes core sets (e.g., organismal, taxonomic) of characteristics of biodiversity, which are applicable in many biological domains (e.g., Paleontology, Botany).

# Modified Dublin Core = Darwin Core

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3253084/figure/pone-0029715-g001/>



So you have already used library methods for your online collections if you use



*Symbiota*

*Promoting  
Bio-Collaboration*



### Main Menu

#### Symbiota Home

- Overview
- Active Data Portals
- Join Existing Portal
- Establish New Portal
- Support
- Help Pages
- Contact Us

#### Specimen Search

- Overview
- Data Interoperability
- Rare Species Protection

#### Floristic Research

- Research Species Lists

## Symbiota Occurrence Data Fields

The Symbiota data schema is strongly aligned to the [Darwin Core](#) data exchange standard. For more details, links to the Darwin Core definitions are supplied for each term. Since portals have the ability to customize the field names found on their data entry form, field names may differ from what is used below.

**Catalog Number:** The unique identifier (primary key) for the specimen record. This field should be used to store the barcode or the accession number (herbaria only). This field is enforced to be unique per collection.

Ex: WIS-L-0123456, ASU0012345, 12345

See Darwin Core's [catalogNumber](#).

Barcodes, ISBN, ISSN, DOI's, catalog numbers

<http://symbiota.org/tiki/tiki-index.php?page=Occurrence+Fields>

# More Standards

---

- Standard identifier registries

- ISBN
- ISSN
- ISRC
- PMID

- Uniform resource locator (URL) & more

- DOI - ISO 26324:2012
- GUID
- ARK
- PURL

**ISSN & ISBN separate identifier for type of media**

**ORCID (Open Researcher and Contributor ID)** the aim is to help with the transition from science to e-science – may be able to include data linked to the researcher as well

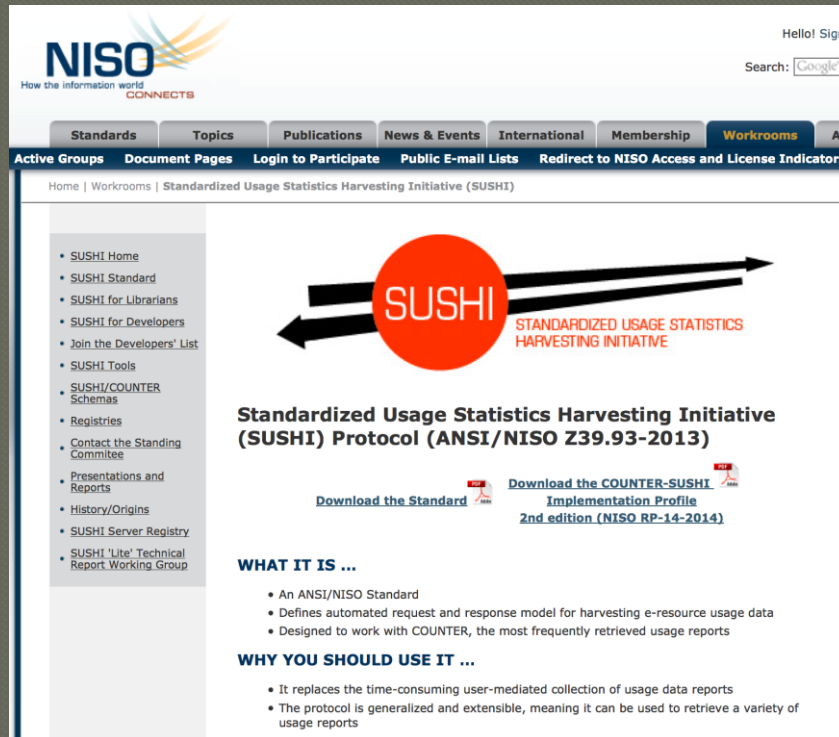
# What is a DOI and why is it important?

---

- It is a character string that is used to identify and object on the web
- Metadata about the object is stored in association to the DOI name
- Includes location where it can be found
- DOI remains fixed but other metadata can change

# Standards help us get to where we want and need to be!

- Usage statistics for library e-resources
  - SUSHI



NISO  
How the information world CONNECTS

Hello! Sign  
Search:

Standards Topics Publications News & Events International Membership Workrooms



Active Groups Document Pages Login to Participate Public E-mail Lists Redirect to NISO Access and License Indicators

Home | Workrooms | Standardized Usage Statistics Harvesting Initiative (SUSHI)

- SUSHI Home
- SUSHI Standard
- SUSHI for Librarians
- SUSHI for Developers
- Join the Developers' List
- SUSHI Tools
- SUSHI/COUNTER Schemas
- Registries
- Contact the Standing Committee
- Presentations and Reports
- History/Origins
- SUSHI Server Registry
- SUSHI 'Lite' Technical Report Working Group

**SUSHI**  
STANDARDIZED USAGE STATISTICS  
HARVESTING INITIATIVE

**Standardized Usage Statistics Harvesting Initiative (SUSHI) Protocol (ANSI/NISO Z39.93-2013)**

[Download the Standard](#)  [Download the COUNTER-SUSHI Implementation Profile 2nd edition \(NISO RP-14-2014\)](#) 

**WHAT IT IS ...**

- An ANSI/NISO Standard
- Defines automated request and response model for harvesting e-resource usage data
- Designed to work with COUNTER, the most frequently retrieved usage reports

**WHY YOU SHOULD USE IT ...**

- It replaces the time-consuming user-mediated collection of usage data reports
- The protocol is generalized and extensible, meaning it can be used to retrieve a variety of usage reports

<http://www.niso.org/workrooms/sushi>



# Standards help us get to where we want and need to be!

---

## ◉ Libraries and link resolvers

- Library access to purchased content through open url linking
- Knowledge base suppliers
- Content providers
  
- Links often did not work and took patrons to content they were asked to pay for

# Standards help us get to where we want and need to be!

University of California  
**CDL**  
California Digital Library

Staff Directory Contact Us

Search  go

October 03, 2014 About CDL Services and Projects Information Gateways Committee

CDL Home > Services and Projects > UC3: University of California Curation Center > EZID

University of California  
Curation Center

Merritt

**EZID**

Web Archiving Service

Data management plans and DMPTool

Consultation Services

Curation Wiki

National and International Initiatives

Blogs, Publications, Presentations and Webinars

About UC3

Contact Us

**EZID (easy-eye-dee) makes it easy to create & manage unique, long-term identifiers**

- create identifiers for anything: texts, data, bones, terms, etc.
- store citation metadata for identifiers in a variety of formats
- update current URL locations so citation links are never broken
- use EZID's [programming interface](#) for automated operation at scale
- choose from a variety of persistent identifiers, including ARKs and DataCite DOIs
- [try out EZID](#) anytime for free.

**EZID services can help you:**

- cite your dataset right now
- get cited by others
- register an ARK or DOI now
- assign ARKs and DOIs to your work
- meet funder requirements for data management plans
- save time and resources while planning for data management

Want more information on any of these services? [Contact us!](#)

Last updated: February 03, 2014  
Document owner: [Joan Starr](#)



HOME | HANDBOOK | **FACTSHEETS** | FAQs |  
RESOURCES | REGISTRATION AGENCIES | NEWS | MEMBERS  
AREA

## Factsheet

### Key Facts on Digital Object identifier System

#### Key concepts and abbreviations

- DOI = Digital Object Identifier
- IDF = International DOI Foundation (operating and governing organisation): <http://www.doi.org/>
- RAs = DOI Registration Agencies (= members of IDF offering the system to customers who wish to assign DOI names)

# But even with URL's, DOI's, GUID's there are still problems

The screenshot shows a search results page from a library database. The search term is "Climatic variability plant phenology". The results are listed in three entries, each with a thumbnail image, a title, author information, journal information, a brief abstract, and a link to the full text online. The first entry is "Responses of Spring Phenology to Climate Change" by Bondeau, Alberte; Böttcher, Kristin; Doktor, Daniele; more... from New Phytologist, 05/2004, Volume 162, Issue 2. The second entry is "Douglas-fir provenance phenology observations" by Vera Lavadinović; Vasilije Isaiev; Ljubinko Rakonjac; more... from Ekologia, 12/2013, Volume 32, Issue 4. The third entry is "Forecasting phenology: from species variability to community patterns" by Diez, Jeffrey M; Ibáñez, Inés; Miller-Rushing, Abraham J; more... from Ecology Letters, 06/2012, Volume 15, Issue 6. Each entry also includes a citation count from the Web of Science.

Article level access through vendor provided databases

- CrossRef
- Digital Object Identifiers DOI's

# We would rather have this

## Research results

Refine or Alter Search

### You Searched for:

Jacobs, Bonnie F. (10/2004). "Eocene dry climate and woodland vegetation in tropical Africa reconstructed from fossil leaves from northern Tanzania". *Palaeogeography, palaeoclimatology, palaeoecology* (0031-0182), 213 (1-2), p. 115.

DOI: 10.1016/j.palaeo.2004.07.007

### Full-Text is available from:

#### Links to Content

Read Article

Journal

#### Coverage Range

01/01/1995 - present

#### Provider / Publisher

ScienceDirect Freedom Collection 2014

## Research results

### You Searched for:

Refine or Alter Search

Bestland, E (02/01/1999). "Geologic framework of the Clarno Unit, John Day Fossil Beds National Monument, central Oregon". *Oregon geology* (0164-3304), 61 (1), p. 3.

Sorry, no full-text was found for this journal.

Additional options for finding full-text:  
Request from other libraries (UW patrons only)...

Through:

Request It

# Not this



# There is full text for this article

The image shows a Google search interface on the left and a mobile browser view of a geology article on the right. The Google search bar contains the text "Geologic framework of the Clarno Unit, John Day Fossil Beds National M". Below the search bar, there are tabs for "Web", "Images", and "Shopping". The search results show "About 1,330 results (0.47 seconds)". A PDF link is visible: "[PDF] Bestland et al 1999 Clarno Unit Geologic framework of the Clarno Unit, John Day Fossil Beds National Monument, central Oregon by EA. Be5f/a/7d7, P".

The mobile browser view shows the URL "blogs.uoregon.edu/g". The page title is "Geologic framework of the Clarno Unit, John Day Fossil Beds National Monument, central Oregon". The authors listed are "By R.A. Nelson<sup>1</sup>, D.E. Hammond<sup>2</sup>, D.L. Blum<sup>3</sup>, M.A. Nye<sup>4</sup>, G.L. Retzlaff<sup>5</sup>, and J. Stone<sup>6</sup>". The article includes an abstract and an introduction section.

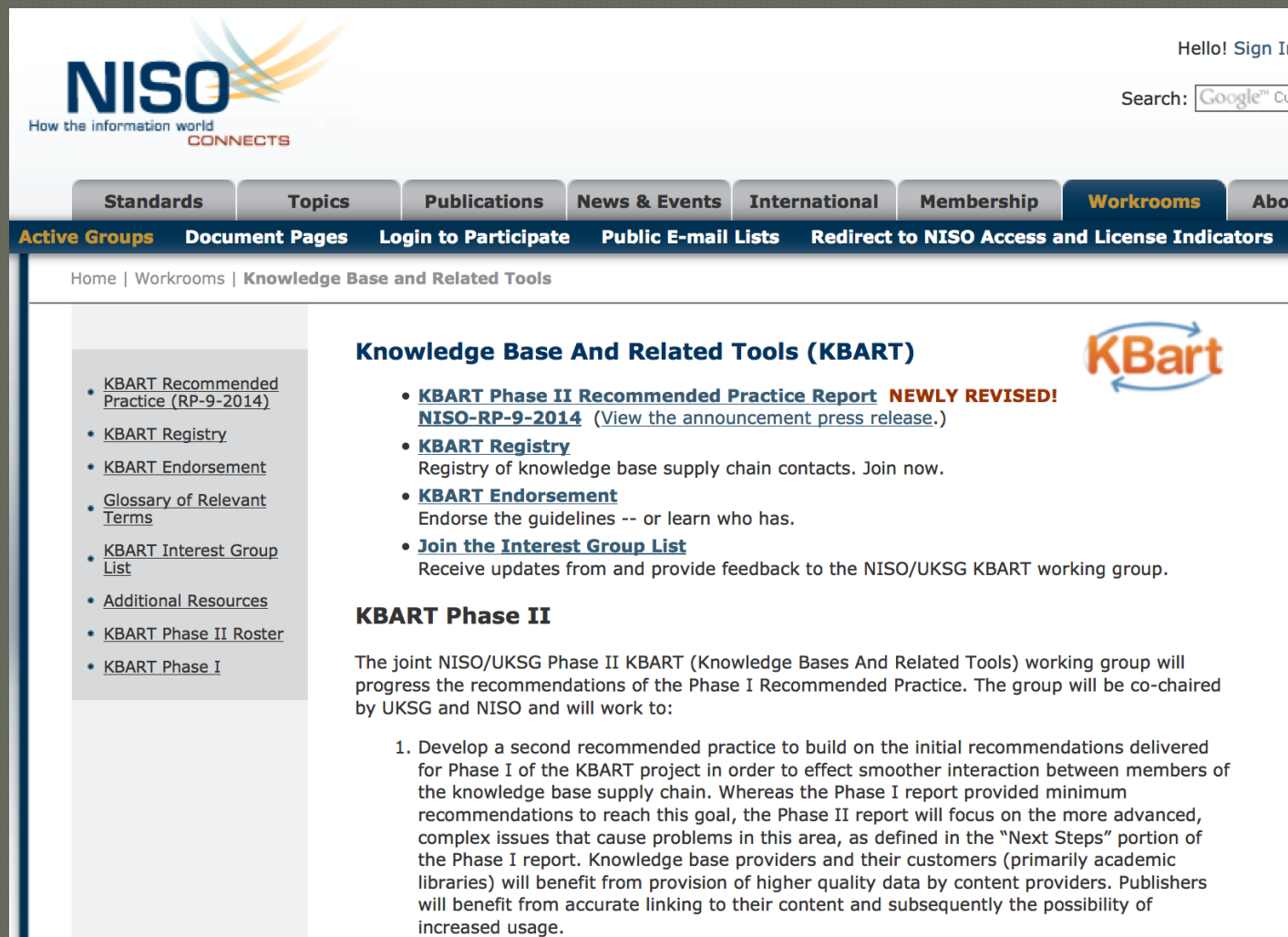
**ABSTRACT**  
Two major geologic events are recorded in the Eocene-Oligocene volcaniclastic tuffs, volcanic flows, and paleosols of the Clarno Unit of the John Day Fossil Beds National Monument. A major plate-tectonic reorganization in the Pacific Northwest at about 40–35 Ma shifted sedimentation from the Clarno volcanic province, represented by Clarno Formation andesitic flows and debris flows, to the Cascade arc, represented by John Day Formation tuffaceous deposits and ash-flow tuffs. Evidence of the second major geologic event comes from paleosols and fossil remains of plants and animals in these two formations and indicates a global paleoclimate change centered around the Eocene-Oligocene boundary. When the tuffs changed from a typical Eocene "tuffaceous" to a more typical Oligocene "tuffaceous" in the Clarno Unit case, the lower part of the Clarno Formation consists of structurally domed diatomite flow conglomerates, andesite flows (PZ 1 + 2), and a diatomite (DZ 1 + 2). The tuffs, which are composed of conglomerates, but have, in addition, heavily cross-bedded conglomerates, volcanic ash beds, a diatomite arenaceous sandstone flow (DZ 3 + 4), and the fossiliferous tuffite "Red Beds." Both units accumulated on volcanic aprons in response to volcanic (pyroclastic sedimentation) and non-volcanic topography including flow of a protruding diatomite dome.

Above the conglomerates are thick but discontinuous and clay-rich claystones of Red Hill, which record a long period of volcanic quiescence (2–5 Myr), clay flowstone aggradation, and long periods of soil formation. The Red Hill paleosols and fossil plants from the Red Hill, which directly underlie the red beds, are evidence of a climate that was subarctic and humid. Chronostratigraphically, the red beds are gray-brown to brown and contain fossils of the Miocene mammal fauna, which have yielded a stratigraphically-determined fossil fauna (Blackburn's Deer, American Badger, and American Badger).

These fossil leaf beds are the earliest Oligocene in age, and date to the type locality of the Bridge Creek flora in the Pacific Northwest.

**INTRODUCTION**  
The scenic high desert of north-central Oregon contains a colorful volcanic and alluvial sequence of Tertiary age (Fig. 1). For the production and appreciation of the geologic and paleontologic resources in this area, three "lands" (Sleeping Ute, Clarno, and Painted Hills) were established in the John Day Fossil Beds National Monument. The units exposed in the National Monument record two important geologic events: (1) The change from Eocene Clarno arc volcanism, represented by the Clarno Formation, to arc-tectonic Cascade arc volcanism and John Day Formation tuffaceous deposition. (2) A dramatic paleoclimate change occurred across the Eocene-Oligocene transition during which conditions changed from a wet Oregon from widespread forest to a semi-arid temperate climate. The magnitude and timing of these events

# KBART – new recommendations



The screenshot shows the NISO website's navigation bar with tabs for Standards, Topics, Publications, News & Events, International, Membership, Workrooms, and About. Below the navigation bar is a dark blue banner with links: Active Groups, Document Pages, Login to Participate, Public E-mail Lists, Redirect to NISO Access and License Indicators. The main content area is titled "Knowledge Base and Related Tools (KBART)" and features a sidebar with a list of links: KBART Recommended Practice (RP-9-2014), KBART Registry, KBART Endorsement, Glossary of Relevant Terms, KBART Interest Group List, Additional Resources, KBART Phase II Roster, and KBART Phase I. The main content area includes a KBART logo, a list of key resources, and a section for KBART Phase II.

How the information world **CONNECTS**

Hello! Sign In


Search:

Standards Topics Publications News & Events International Membership **Workrooms** About

**Active Groups** Document Pages Login to Participate Public E-mail Lists Redirect to NISO Access and License Indicators

Home | Workrooms | Knowledge Base and Related Tools

## Knowledge Base And Related Tools (KBART)



- [KBART Recommended Practice \(RP-9-2014\)](#)
- [KBART Registry](#)
- [KBART Endorsement](#)
- [Glossary of Relevant Terms](#)
- [KBART Interest Group List](#)
- [Additional Resources](#)
- [KBART Phase II Roster](#)
- [KBART Phase I](#)

- **[KBART Phase II Recommended Practice Report](#) **NEWLY REVISED!** [NISO-RP-9-2014](#) (View the announcement press release.)**
- **[KBART Registry](#)**  
Registry of knowledge base supply chain contacts. Join now.
- **[KBART Endorsement](#)**  
Endorse the guidelines -- or learn who has.
- **[Join the Interest Group List](#)**  
Receive updates from and provide feedback to the NISO/UKSG KBART working group.

### KBART Phase II

The joint NISO/UKSG Phase II KBART (Knowledge Bases And Related Tools) working group will progress the recommendations of the Phase I Recommended Practice. The group will be co-chaired by UKSG and NISO and will work to:

1. Develop a second recommended practice to build on the initial recommendations delivered for Phase I of the KBART project in order to effect smoother interaction between members of the knowledge base supply chain. Whereas the Phase I report provided minimum recommendations to reach this goal, the Phase II report will focus on the more advanced, complex issues that cause problems in this area, as defined in the "Next Steps" portion of the Phase I report. Knowledge base providers and their customers (primarily academic libraries) will benefit from provision of higher quality data by content providers. Publishers will benefit from accurate linking to their content and subsequently the possibility of increased usage.

# **KBART – Knowledge Bases and Related Tools**

Libraries and linking to purchased content (articles)

Links often did not work and took patrons to content they were asked to pay for

- Library access to purchased content through open url linking

- Knowledge base suppliers

- Content providers

Lack of clarity on data standards

Updates to knowledge base are not consistent

# KBART - Group Members

---

- ◉ Librarians
- ◉ Publishers
- ◉ Aggregators
- ◉ NISO
- ◉ UKSG
- ◉ OCLC

# Today it takes a team to:

---

- ◉ Build Collections
- ◉ Build Connections
- ◉ Organize
- ◉ Archive
- ◉ Create Access



# More examples

---

- ◉ BHL Biodiversity Heritage Library
  - <http://www.biodiversitylibrary.org/>
- ◉ GBIF – Global Biodiversity Information Facility
  - <http://www.gbif.org/>
- ◉ Linked Data - Sharing data across multiple domains
  - <http://lod-cloud.net/>
- ◉ Schema.org

Effort among search engine providers to promote better linking of WEB content through the use of metadata attributes and HTML markup

---

Libraries are all about storing, organizing, describing and providing access to information in whatever format it arrives in.

- Metadata
- Linking
- Access
- Archive



The work we do will get more complex as we move to new delivery methods and create new collections!

It is only going to get to be more fun!



### Search Results

0 results for *seiuyus*

#### FILTER BY TYPE

- All types
- Taxa
- Images
- Videos
- Sounds
- Articles
- Traits
- Links
- People
- Communities
- Collections
- About EOL

filter

Did you mean: Seiuyus

	Animalia > Scuridae <b>Tamias</b> Chipmunk 替代名稱：Eutamias
	Animalia > Scuridae <b>Tamias dorsalis</b> Cliff chipmunk 替代名稱：Eutamias dorsalis
	Animalia > Scuridae <b>Tamias amoenus</b> Yellow-pine chipmunk 替代名稱：Eutamias amoenus (J. A. Allen, 1890)
	Animalia > Scuridae <b>Tamias minimus</b> Selkirk least chipmunk 替代名稱：Eutamias minimus (Bachman, 1839)
	Animalia > Scuridae <b>Tamias quadrivittatus</b> Organ mountains chipmunk 替代名稱：Eutamias quadrivittatus
	Animalia > Scuridae <b>Tamias sibiricus</b> Siberian chipmunk 替代名稱：Eutamias sibiricus
	Animalia > Scuridae <b>Tamias palmeri</b> Palmer's chipmunk 替代名稱：Eutamias palmeri Merriam 1897
	Animalia > Marmotini Pocock 1923 <b>Tamias (Eutamias) Trouessart, 1880</b> Chipmunk
	Animalia > Marmotini Pocock 1923 <b>Tamias (Neotamias) A. H. Howell, 1929</b> Chipmunk

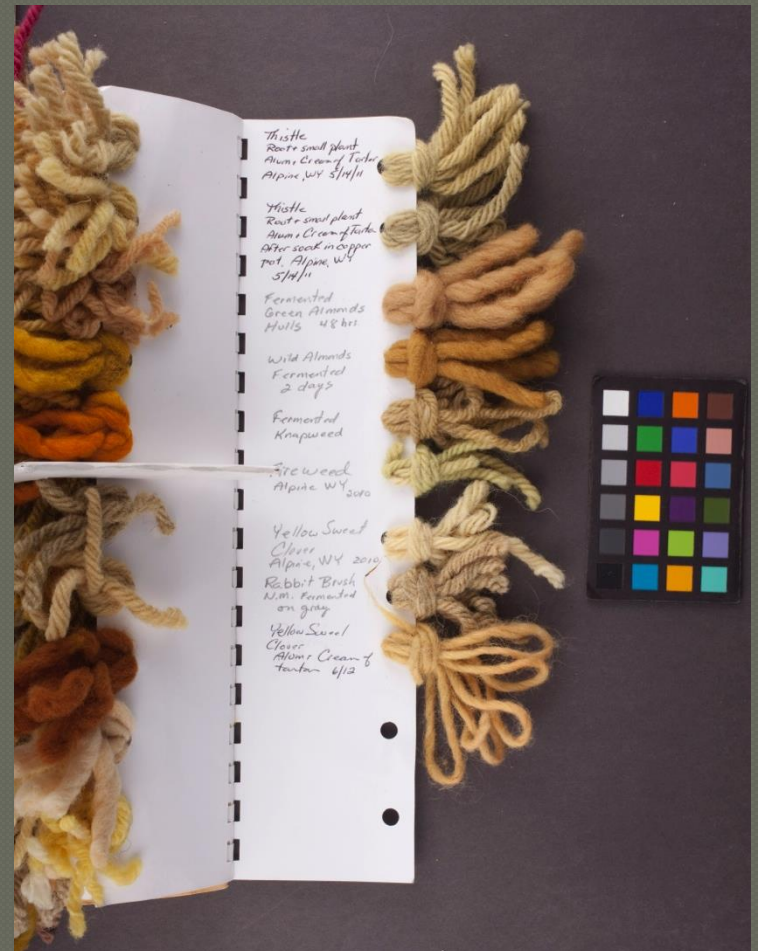
#### ABOUT EOL

- What is EOL?
- What is TraitBank?
- The EOL Blog
- Discover
- Statistics

#### LEARN MORE ABOUT

- Animals
- Mammals
- Birds
- Amphibians
- Reptiles
- Invertebr
- Crustace
- Mollusks
- Insects
- Spiders

# Think about it –



Or consult with a **Librarian**



# Actually it will take a team

---



Thank you