

Bibliographic Standards, MARC21 and Koha

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Bibliographic Record?

- Bibliographic description stored either manually or electronically.
- Information about an item, recorded in a standard format and held in a database. Cards / online catalog.
- Bib record includes call number, author, title, publication information, paging, subject headings, etc.
- Uses Character strings, including a record label, a directory, and a bibliographic data describing one entity.

Bibliographic Record Formats - Why?

Different file formats for exchange of bibliographic data

Exchange formats were developed in parallel with development of computers and other electronic storage devices

Affects economies by reducing the duplication of effort.

Different country and organization developed their own format. But there was no co-ordination between these organizations.

UNESCO, IFLA, ICSU-AB, UNISIST, ISO have taken many steps towards the standardization of Bibliographic exchange format.

Exchange Formats

- Format: a carrier for data between two systems
e.g. two library automation systems
webserver and personal computer
- Format is the set of rules governing the data structure and content?
- ISO 2709: *format for bibliographic information interchange on magnetic tape*
- 3-digit tags for content, described in appropriate MARC, UNIMARC or CCF manual

MARC – MACHiNE READABLE Catalogue?

- **MARC** : **MA**chine-**R**eadable **C**ataloguing record. “Machine-readable” means that one particular type of machine, a computer, can read and interpret the data in the cataloguing record.
- **Cataloguing record**: "Cataloguing record" means a bibliographic record, or the information traditionally shown on a catalogue card.
- **MARC, UNIMARC and CCF** formats which have the common record structure based on the ISO 2709 format
 - 3-digit tags
 - subfields \$a, \$b, \$4
 - indicators of 2 characters

MARC

Machine Readable Cataloguing

- **MARC** standards are a set of digital formats for the description of items catalogued by libraries, such as books.
- American computer scientist **Henriette Avram** developed MARC in the 1960s to create records that could be read by computers and shared among libraries
- USMARC, UKMARC, UNIMARC, CANMARC
- MARC21

CCF: Common Communication Format

- Symposium organised by the UNISIST in 1978 on Bibliographic Exchange Formats
- On recommendations of the Symposium
- UNESCO formed the adhoc group on the establishment of the CCF.
- Published in 1984, second ed. in 1988.
- Users
 - S&T sector
 - Commonly in India
 - UN agencies

MARC: History

- 1950 – LC Plans for MARC
- 1963 – Feasibility Study by LC
MARC Pilot Project, LC - right choice
- 1967 – Experienced by 17 Libraries
MARC I – Restricted to Books
MARC II – Experience of MARC I and
Interest of BNB
- 1967-68 – UKMARC Pilot Project
Format Structure for all type of Materials

Communication Problems?

Lack of International Cataloguing Standards

Lack of International Subject Control Systems

Variety Classification Systems

Language Difficulties.

Character Sets, Codes, Non-Roman Alphabets

Exchange of Bibliographic Records

Various Roles of National Bibliographies / Libraries

More than 30 MARCs reported

Data exchange problems

Conversion programs and their updates

UNIMARC: UNIversal MARC

- Need for international ‘switching’ format
- UNIMARC, by IFLA, 1977
- UNIMARC Handbook, 2nd ed., 1980
- UNIMARC Manual, 1983

- **Users**
 - National libraries for international exchange
 - Certain countries for exchange between national library and others

UNIMARC: Purpose and Scope?

- **Purpose**

- Facilitate the international exchange of bibliographic data in MARC form between national bibliographic agencies.
- UNIMARC - a model for the development of new machine-readable bibliographic formats.

- **Scope**

- Specify the content designators (tags, indicators and subfield codes)
- Covers monographs, serials, cartographic materials, music, sound recordings, graphics, projected and video materials, rare books and electronic resources.

UNIMARC: Solution?

Features 1977 by IFLA

- Co-op effort of 16 Countries
- Implements ISBD
- Multilingual Material
- Material Specification Independent
- Structure Stability – Tags, Indicators, Subfields
- Abriding Format between different MARC Formats
- Independent of Cataloguing Codes
- Accommodates Local / Specific Data

UNIMARC based MARC Formats

SAMARC, Chinese MARC, JAPANMARC, YU-MARC (crotia)

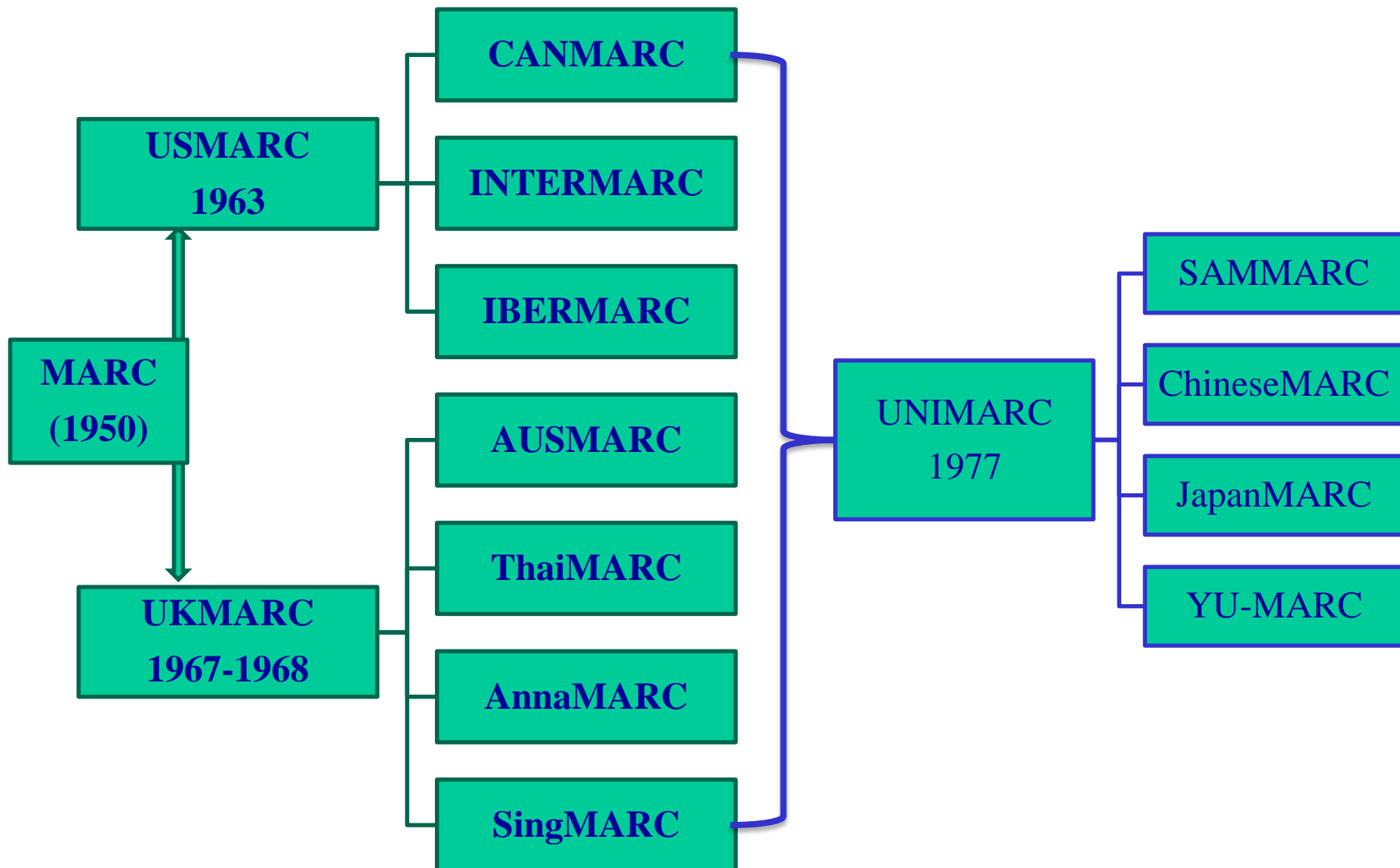
1st Ed – 1977, 2nd Ed – 1980

Scope – Specify tags, indicators, subfiled codes

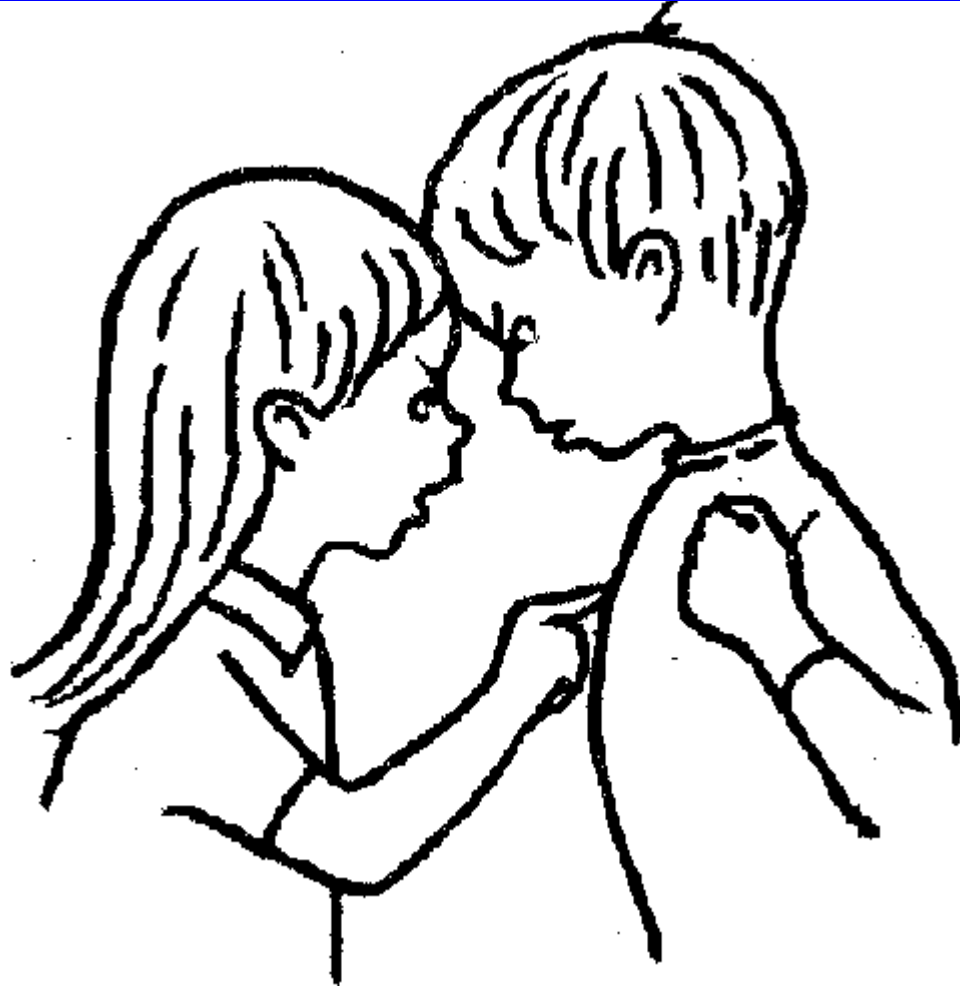
Purpose – Facilitate International Data Exchange

Format X ↔ UNIMARC ↔ Format Y

Summary - History of MARCs



My MARC is the Best?



Towards MARC21

- Usage of Various MARCs

	UKMARC	UNIMARC	USMARC
1986	6	10	7
1992	4	20	11

- LC and BL Meet : on 21 June 1994

- To review principles for harmonization and simplification of USMARC and UKMARC
- To increase the compatibility with ultimate goal to achieve one single MARC

- MARC21

- In 1999 LC and NLC merged USMARC and CANMARC to MARC21
- Published *MARC21 Format for Bibliographic Data*
- MARC21 Documentation maintained by LC

- Current Scenario

- MARC21 available in more than 20 Languages
- Many Countries / Libraries preferred to move to MARC21

MARC21

- Formerly called US MARC
- Marketed as international
- Universality of UNIMARC not satisfactory
- National Library of Canada adopted
- British Library abandoned UKMARC
- Uses the ISO 2709 record structure
- Huge number of records available
- Format not proprietary
- Allows variable length and repeatable fields and subfields

MARC21 Communication Formats

- MARC 21 Format for
 - Bibliographic Data
 - Authority Data
 - Holdings Data
 - Classification Data
 - Community Information

MARC21 Communication Formats

1. Bibliographic Data

2. Holdings Data

- Holdings and locations data for all types of documents

3. Authority Data

- Data elements that identify or control the content and content designation of a record subject to authority control

4. Classification Data

- related to classification numbers and the captions associated with them.

5. Community Information

- information about events, programs, services, etc. which can be integrated into public access catalogs

MARC21 Format for Bibliographic Data

Designed for bibliographic information about

- Printed and manuscript textual materials, computer files, maps, music, continuing resources, visual materials, and mixed materials.
- Commonly includes titles, names, subjects, notes, publication data, and information about the physical description of an item.

MARC21: Material Types

- Books (BK)
- Continuing resources (CR)
- Computer files (CF)
- Maps (MP)
- Music (MU)
- Visual materials (VM)
- Mixed materials (MX)

MARC21 Structure

- MARC21 Formats are standards for the representation and communication of bibliographic and related information in machine readable format.
- It involves
 - Structure
 - Structure of MARC Record is an implementation of national and international standards like ISO 2709 / ANSI Z39.2
 - Content Designation
 - Codes and conventions established to identify explicitly and characterize further the data elements within a record and to support the manipulation of those data
 - Content
 - Data elements identified by standards outside the formats.
 - Ex. AACR, LCSH, NLMC

MARC21: Users

- US and Canadian Libraries
- Australia, Spain, etc.
- Users of library systems which support no other format

MARC21: Commonly used Tags

- **010 tag** marks the **Library of Congress Control Number (LCCN)**
- **020 tag** marks the **International Standard Book Number (ISBN)**
- **100 tag** marks a **personal name main entry** (author)
- **245 tag** marks the **title information** (which includes the title, other title information, and the statement of responsibility)
- **250 tag** marks the **edition****260 tag** marks the **publication information**
- **300 tag** marks the **physical description** (often referred to as the "collation" when describing books)
- **490 tag** marks the **series statement**
- **520 tag** marks the **annotation or summary note**
- **650 tag** marks a **topical subject heading**
- **700 tag** marks a **personal name added entry** (joint author, editor, or illustrator)

AACR2R Catalogue Card

Brenner, Richard J., 1941-

796.334/2

Make the team. Soccer : a heads up guide to super soccer!/Richard J

Brenner . -- 1st ed. -- Boston : Little, Brown, c1990.

127 p. : ill. ; 19 cm.

"A Sports illustrated for kids book."

Summary: Instructions for improving soccer skills. Discusses dribbling, heading, playmaking, defense, conditioning, mental attitude, how to handle problems with coaches, parents, and other players, and the history of soccer.

ISBN 0316107514 : \$12.95

1. Soccer -- Juvenile literature. 2. Soccer. II. Title: Heads up guide to super soccer. II. Title.

Dewey Class no.: 796.334/2 -- dc 20

89-48230

MARC

Areas of AACR2R Catalogue

Brenner, Richard J., 1941-

796.334/2

Make the team. Soccer : a heads up guide to super soccer!/Richard J

Brenner . -- 1st ed. -- Boston : Little, Brown, c1990.

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89-48230

MARC

0XX			
	1XX	250	245
GV943	Brenner, Richard J., 1941-		
.25	Make the team. Soccer : a heads up guide to super soccer!/Richard J		
.B74	Brenner . -- 1st ed. -- Boston : Little, Brown, c1990.	260	
1990	127 p. : ill. ; 19 cm.	3XX	
	"A Sports illustrated for kids book."		5XX
	Summary: Instructions for improving soccer skills. Discusses		
	dribbling, heading, playmaking, defense, conditioning, mental attitude, how to		
	handle problems with coaches, parents, and other players, and the history of		
	soccer.	0XX	
	ISBN 0316107514 : \$12.95		
	1. Soccer -- Juvenile literature. 2. Soccer. I. Title: Heads up guide to		
	super soccer. II. Title.		
	Dewey Class no.: 796.334/2 -- dc 20	0XX	89-48230
			MARC

Mnemonic Catalogue Record

TITLE: Make the team. Soccer : a heads up guide to super soccer! / Richard J. Brenner.

ADDED TITLE: Heads up guide to super soccer

AUTHOR: Brenner, Richard J., 1941-

PUBLISHED: 1st ed. Boston : Little, Brown, c1990.

MATERIAL: 127 p. : ill. ; 19 cm.

NOTE: "A Sports illustrated for kids book."

NOTE: Instructions for improving soccer skills. Discusses dribbling, heading, playmaking, defense, conditioning, mental attitude, how to handle problems with coaches, parents, and other players, and the history of soccer.

SUBJECT: Soccer--Juvenile literature. Soccer.

Copies Available: GV943.25 .B74 1990

MARC21 Record: An Example

Leader 01041cam 2200265 a 4500

Control No. 001 ###89048230

Fixed Data 008 891101s1990 maua j 001 0 eng

LCCN 010 ## \$a ###89048230

ISBN 020 ## \$a 0316107514 : \$c \$12.95

ISBN 020 ## \$a 0316107506(pbk.):\$c \$5.95
(\$6.95Can.)

Cat. Source 040 ## \$a DLC \$c DLC \$d DLC

LC Call No. 050 00 \$a GV943.25 \$b .B74 1990

Dewey No. 082 00 \$a 796.334/2 \$2 20

MARC21 Record: An Example

- ME:Pers Name** 100 1# \$a Brenner, Richard J., \$d 1941-
- Title** 245 10 \$a Make the team. \$p Soccer : \$b a heads up guide to super soccer! / \$c Richard J. Brenner.
- Variant Title** 246 30 \$a Heads up guide to super soccer
- Edition** 250 ## \$a 1st ed.
- Publication** 260 ## \$a Boston : \$b Little, Brown, \$c c1990.
- Phys Desc** 300 ## \$a 127 p. : \$b ill. ; \$c 19 cm.
- Note: General** 500 ## \$a “A Sports illustrated for kids book”.
- Note: Summary** 520 ## \$a Instructions for improving soccer skills. Discusses dribbling, heading, playmaking, defense, conditioning, mental attitude, how to handle problems with coaches, parents, and other players, and the history of soccer.
- Subj: Topical** 650 #0 \$a Soccer \$v Juvenile literature.
- Subj: Topical** 650 #1 \$a Soccer.

AACR2 Catalogue Record: An Example

Brenner, Richard J., 1941-

796.334/2

Make the team. Soccer : a heads up guide to super soccer!/Richard J

Brenner . -- 1st ed. -- Boston : Little, Brown, c1990.

127 p. : ill. ; 19 cm.

"A Sports illustrated for kids book."

Summary: Instructions for improving soccer skills. Discusses dribbling, heading, playmaking, defense, conditioning, mental attitude, how to handle problems with coaches, parents, and other players, and the history of soccer.

ISBN 0316107514 : \$12.95

1. Soccer -- Juvenile literature. 2. Soccer. II. Title: Heads up guide to super soccer. II. Title.

Dewey Class no.: 796.334/2 -- dc 20

89-48230

MARC

ISO 2709 Record: An Example

```
01041cam 2200265 a 45000010020000000003000040002000
50017000240080041000410100024000820200025001060200
04400131040001800175050002400193082001800217100003
20023524500870026724600360035425000120039026000370
04023000029004395000042004685200220005106500033007
30650001200763^###89048230#/AC/r91^DLC^19911106082
810.9^891101s1990####maua###j#####000#0#eng##^##$
a###89048230#/AC/r91^##$a0316107514 :$c$12.95^##$a
0316107506 (pbk.) :$c$5.95 ($6.95 Can.)^##$aDLC$d
LC$dDLC^00$aGV943.25$b.B74 1990^00$a796.334/2$220^
10$aBrenner, Richard J.,$d1941-^10$aMake the team.
$pSoccer :$ba heads up guide to super soccer! /$cR
ichard J. Brenner.^30$aHeads up guide to super soc
cer.^##$alst ed.^##$aBoston :$bLittle, Brown,$cc19
90.^##$a127 p. :$bill. ;$c19 cm.^##$a"A Sports ill
ustrated for kids book."^##$aInstructions for impr
oving soccer skills. Discusses dribbling, heading,
playmaking, defense, conditioning, mental attitud
e, how to handle problems with coaches, parents, a
nd other players, and the history of soccer.^#0$aS
occer$vJuvenile literature.^#1$aSoccer.^\  


```

Leader

Directory

Content

MARC21 Record Structure

– Leader

- Contains coded values and are identified by relative character position
- Define the parameters for processing the record.
- Leader is a fixed in length, 24 Characters, and
- Occurs at the beginning of each MARC record.

– Directory

- Contains the tag, starting location and length of each field within record.
- Length of directory entry is defined in the entry map of Leader/20-23
- In MARC21, length of a directory entry is 12 characters
- It ends with a *field terminator character*.

– Variable Fields

- Data content of a record is divided into variable fields.
- Variable Control Fields - Coded Fields 007 & 008
- Variable Data Fields

MARC21 Terminologies

- **Field:**
 - Each bibliographic record divided into Fields which are subdivided into subfields.
 - E.g. Author, Title, Edition, etc.
- **Subfield:**
 - Most fields contain several related pieces of data.
 - Each type of data within the field is called subfield.
 - E.g. Author Last Name, First Name, Date, etc
- **Tag:**
 - Each Field is represented with a 3 digit number called a “tag”
 - It identifies the field and the kind kind of data that follows.
 - Tag can be Alphabetic or Numeric - Z39.2, MARC21 uses only Numeric Tags
 - Stored in the Directory and not in the field itself
- **Indicator:**
 - Two character positions following the tag.
 - One or both the positions are used. Undefined indicators are blank, i.e. #
- **Subfield Code:**
 - One lowercase letter preceded by delimiter, indicates the type of data that follows it.
- **Delimiter:**
 - A Character used to separate subfields. It can be @, \$, _ or ^ as in WINISIS.

MARC21: Blocks and Divisions

- 0XX** Control information, numbers, codes
- 1XX** Main entries
- 2XX** Titles, edition, imprint
- 3XX** Physical description, etc.
- 4XX** Series statements
- 5XX** Notes
- 6XX** Subject added entries
- 7XX** Added entries other than subject or series
- 8XX** Series added entries (other authoritative forms)
- 9XX** Used for locally-defined uses

MARC21: 0XX

Control Information, Numbers, Codes

- 001 – Control Number
- 003 – Control Number Identifier
- 005 – Date and Time of Latest Transaction
- 006 - Fixed-Length Data Elements - Additional Material Characteristics
- 007 - Physical Description Fixed Field
- 008 - Fixed-Length Data Elements
- 010 - Library Of Congress Control Number (NR)
- 015 - National Bibliography Number (R)
- 020 - International Standard Book Number (R)**
- 022 - International Standard Serial Number (R)**
- 024 - Other Standard Identifier (R)
- 040 - Cataloging Source (NR)
- 082 - Dewey Decimal Classification Number (R)**
- 084 - Other Classification Number (R)

MARC21: 1XX

Main Entry Fields

100 - Main Entry--Personal Name (NR)

100 1#\$aAdams, Henry,\$d1838-1918.

110 - Main Entry--Corporate Name (NR)

110 1#\$aUnited States.\$bCourt of Appeals (2nd Circuit)

111 - Main Entry--Meeting Name (NR)

111 2#\$aParis Peace Conference\$d(1919-1920)

130 - Main Entry--Uniform Title (NR)

130 0#\$aBible.\$lEnglish.\$sAuthorized.\$kSelections.\$f1970.

MARC21: 20X – 24X

Title and Related information Block

- 210 - Abbreviated Title (R)
- 222 - Key Title (R)
- 240 - Uniform Title (NR)
- 242 - Translation Of Title By Cataloging Agency (R)
- 243 - Collective Uniform Title (NR)
- 245 - Title Statement (NR)**
- 246 - Varying Form Of Title (R)
- 247 - Former Title (R)

245: MARC21 Sub-Fields and Indicators

245 - TITLE STATEMENT (NR)

Indicators

First - Title added entry

0 - No added entry

1 - Added entry

Second - Nonfiling characters

0-9 - Number of nonfiling characters

Subfield Codes

\$a - Title (NR)

\$c - Statement of responsibility, etc. (NR)

\$g - Bulk dates (NR)

\$k - Form (R)

\$n - Number of part/section of a work (R)

\$p - Name of part/section of a work (R)

\$b - Remainder of title (NR)

\$f - Inclusive dates (NR)

\$h - Medium (NR)

\$s - Version (NR)

MARC21: Tags, Sub-Fields and Indicators

245 03 \$a Le Bureau**\$h**[filmstrip] =**\$b**La Oficina = Das Büro.

245 00 \$a Hamlet ;**\$b**Romeo and Juliette ; Othello...

245 00 \$a Oklahoma**\$h**[sound recording] ;**\$b**Carousel ; South Pacific...

245 00 \$a Map of Nelson, Richmond, Motueka :**\$b**scale 1:20000.

245 15 \$a The "winter mind" :**\$b**William Bonk and American letters
/**\$c**Burt Kimmelman.

245 00 \$a Love from Joy :**\$b**letters from a farmer's wife. **\$n**Part
III,**\$p**1987-1995, At the bungalow.

MARC21: 25X – 28X

Edition, Imprint, Etc. Fields

- 250 - Edition Statement (NR)**
- 254 - Musical Presentation Statement (NR)
- 255 - Cartographic Mathematical Data (R)
- 256 - Computer File Characteristics (NR)
- 257 - Country Of Producing Entity For Archival Films (NR)\
- 258 - Philatelic Issue Data (R)
- 260 - Publication, Distribution, Etc. (Imprint) (R)**
- 263 - Projected Publication Date (NR)
- 264 - Production, Publication, Distribution, Manufacture, and Copyright Notice (R)
- 270 - Address (R)

MARC21: 3XX

Physical Description, Etc.

300 - Physical Description (R)

- 306 - Playing Time (NR)
- 307 - Hours, etc. (R)
- 310 - Current Publication Frequency (NR)
- 321 - Former Publication Frequency (R)
- 336 - Content Type (R)
- 337 - Media Type (R)
- 338 - Carrier Type (R)
- 340 - Physical Medium (R)
- 342 - Geospatial Reference Data (R)
- 343 - Planar Coordinate Data (R)
- 344 - Sound Characteristics (R)
- 345 - Projection Characteristics of Moving Image (R)
- 346 - Video Characteristics (R)
- 347 - Digital File Characteristics (R)
- 348 - Format of Notated Music (R)
- 351 - Organization and Arrangement of Materials (R)
- 352 - Digital Graphic Representation (R)

355 - Security Classification Control (R)

357 - Originator Dissemination Control (NR)

362 - Dates of Publication and/or Sequential Designation (R)

- 363 - Normalized Date and Sequential Designation (R)
- 365 - Trade Price (R)
- 366 - Trade Availability Information (R)
- 370 - Associated Place (R)
- 377 - Associated Language (R)
- 380 - Form of Work (R)
- 381 - Other Distinguishing Characteristics of Work or Expression (R)
- 382 - Medium of Performance (R)
- 383 - Numeric Designation of Musical Work (R)
- 384 - Key (NR)
- 385 - Audience Characteristics (R)
- 386 - Creator/Contributor Characteristics (R)
- 388 - Time Period of Creation (R)

MARC21: 490 / 8XX

Series Statement / Series Added Entries

490 - Series Statement (R)

800 - Series Added Entry - Personal Name (R)

810 - Series Added Entry - Corporate Name (R)

811 - Series Added Entry - Meeting Name (R)

830 - Series Added Entry - Uniform Title (R)

MARC21: 5XX

- 500 - General Note (R)**
- 501 - With Note (R)
- 502 - Dissertation Note (R)
- 504 - Bibliography, Etc. Note (R)**
- 505 - Formatted Contents Note (R)
- 506 - Restrictions On Access Note (R)
- 510 - Citation/references Note (R)
- 520 - Summary, Etc. (R)**
- 521 - Target Audience Note (R)
- 525 - Supplement Note (R)
- 538 - System Details Note (R)
- 546 - Language Note (R)
- 567 - Methodology Note (R)
- 580 - Linking Entry Complexity Note (R)
- 59x - Local Notes

MARC21:6XX

Subject Access Entries

600 - Subject Added Entry - Personal Name (R)

610 - Subject Added Entry - Corporate Name (R)

611 - Subject Added Entry - Meeting Name (R)

630 - Subject Added Entry - Uniform Title (R)

650 - Subject Added Entry - Topical Term (R)

647 - Subject Added Entry - Named Event (R)

648 - Subject Added Entry - Chronological Term (R)

651 - Subject Added Entry - Geographic Name (R)

653 - Index Term - Uncontrolled (R)

654 - Subject Added Entry - Faceted Topical Terms (R)

655 - Index Term - Genre/Form (R)

656 - Index Term - Occupation (R)

657 - Index Term - Function (R)

658 - Index Term - Curriculum Objective (R)

662 - Subject Added Entry - Hierarchical Place Name (R)

69X - Local Subject Access Fields (R)

MARC21: 70X – 75X

Added Entry Fields

- 700** - Added Entry - Personal Name (R)
- 710** - Added Entry - Corporate Name (R)
- 711** - Added Entry - Meeting Name (R)
- 720** - Added Entry - Uncontrolled Name (R)
- 730** - Added Entry - Uniform Title (R)
- 740** - Added Entry - Uncontrolled Related/Analytical Title (R)
- 751** - Added Entry - Geographic Name (R)
- 752** - Added Entry - Hierarchical Place Name (R)
- 753** - System Details Access to Computer Files (R)
- 754** - Added Entry - Taxonomic Identification (R)
- 758** - Resource Identifier (R)

MARC21: 841 – 88X

Holdings, Alternate Graphics, Etc

850 - Holding Institution

852 - Location (R)

852 ##\$aNational Archives and Records Service\$bGenealogical
Research Recording

856 - Electronic Location and Access (R)







856 4# <http://dspace.gipe.ac.in/xmlui/handle/10973/49054>

856 4# <https://www.loc.gov/marc/umb/>

MARC21: 942

Local Information

942 ? - ADDED ENTRY ELEMENTS (KOHA) 

▲ 2	Source of classification or shelving scheme	Dewey Decimal Classification		
▲ c	Koha [default] item type *	Book		
▲ e	Edition			
▲ h	Classification part			
▲ i	Item part			
▲ k	Call number prefix			
▲ m	Call number suffix			
▲ n	Suppress in OPAC			

MARC21: 952

Copy Specific Information

0 - Withdrawn status

1 - Lost status

2 - Source of classification or shelving scheme

3 - Materials specified (bound volume or other part)

4 - Damaged status

5 - Use restrictions

7 - Not for loan

8 - Collection code

a - Permanent location

b - Current location

c - Shelving location

d - Date acquired

e - Source of acquisition

f - Coded location qualifier

g - Cost, normal purchase price

h - Serial Enumeration / chronology

j - Shelving control number

o - Full call number

p - Barcode

t - Copy number

u - Uniform Resource Identifier

v - Cost, replacement price

w - Price effective from

x - Non-public note

y - Koha item type

z - Public note

MARC21 in Koha

A navigation menu for Koha with 14 items arranged in two columns. Each item consists of an icon and a text label. The items are: Circulation (up/down arrows), Patrons (person icon), Advanced search (magnifying glass), Lists (bookshelf icon), Course reserves (book icon), Authorities (document icon), ILL requests (document with arrows), Cataloging (tag icon), Serials (document with lines), Acquisitions (gift icon), Reports (pie chart icon), Tools (wrench icon), Koha administration (gears icon), and About Koha (Koha logo icon).

Three buttons in a row: 'Advanced editor' with a pencil icon, 'New record' with a plus icon and a dropdown arrow, and 'New from Z39.50/SRU' with a magnifying glass icon and a dropdown arrow.

MARC21 in Koha

The image shows a screenshot of the Koha library system interface. At the top, there are three buttons: 'Advanced editor' (with a pencil icon), '+ New record' (with a plus icon), and 'New from Z39.50/SRU' (with a magnifying glass icon). The 'New from Z39.50/SRU' button is open, displaying a dropdown menu with the following options: Default framework, Acquisitions, Article, Audio Cassettes, CDs, Books, Booklets, Workbooks, CD-ROMs, DVD-ROMs, General Online Resources, DVDs, VHS, Fast Add Framework, library tool, Models, Rare Books, and Serials.

Koha: Z39.50 Search

Z39.50/SRU search

ISBN:

ISSN:

Title:

Author:

Subject heading:

Keyword (any):

LC call number:

Control no.:

Dewey:

Standard ID:

 [Clear search form](#)

Search targets

Select all | Clear all

- LIBRARY OF CONGRESS
- MAINE INFONET
- METROPOLITAN MUSEUM OF ART
- MILWAUKEE PUBLIC LIBRARY
- NEW YORK UNIVERSITY LIBRARIES
- NHUPAC
- NJ INSTITUTE OF TECHNOLOGY
- OHIOLINK
- OREGON STATE UNIVERSITY
- PUBCAT
- SEATTLE PUBLIC LIBRARY
- SOCIAL LAW LIBRARY
- TEXAS A AND M

Koha: Z39.50 Search

Server ↕	Title ↕	Author ↕	Date ↕	Edition ↕	ISBN	LCCN	Actions
LIBRARY OF CONGRESS	Access to East European and Eurasian culture :		2007		9780789033956 (alkpaper) 078903395X (alkpaper) 9780789033963 (pbk:alkpaper) 0789033968 (pbk:alkpaper)	2007026939	Actions ▾
LIBRARY OF CONGRESS	Cataloging and managing film and video collections :	Higgins, Colin,			9780838912997 (paper)	2014040988	Actions ▾
LIBRARY OF CONGRESS	Cataloging with AACR2 & MARC21 :	Fritz, Deborah A.	2004	2nd ed.	0838908845	2004006535	Actions ▾
LIBRARY OF CONGRESS	MARC21 Character Set Bibliographic Test Record: Closing Curly Bracket.		2000				<ul style="list-style-type: none">  MARC preview  Card preview  Import

Koha: Add MARC Record

0 1 2 3 4 5 6 7 8 9

210 ? - ABBREVIATED TITLE  

222 ? - KEY TITLE  

240 ? - UNIFORM TITLE 

243 ? - COLLECTIVE UNIFORM TITLE 

245 ? 1 0 - TITLE STATEMENT 

 a Title *

Cataloging with AACR2 & MARC21 :

 b Remainder of title

for books, electronic resources, sound recordings, videorecordings, and serials /

 c Statement of responsibility, etc

Deborah A. Fritz

 h Medium

246 ? - VARYING FORM OF TITLE  

247 ? - FORMER TITLE  

250 ? - EDITION STATEMENT 

 a Edition statement

2nd ed.

Koha: Z39.50 Search: MARC View

Koha > Z39.50 Search Results - Mozilla Firefox

http://localhost:8001/cgi-bin/koha/cataloguing/z3950_search.pl

LIBRARY OF CONGRESS	Saf	010	exj08 2010-07-21 to BCCD
	Mat	020	a 2009278414
		020	a9780538449571 (pbk.)
		020	a0538449578 (pbk.)
LIBRARY OF CONGRESS	151	035	a(0CoLC)ocn227170351
	mar	040	aIBS
			cIBS
			dBAKER
			dYDXCP
			dDLC
		042	alccopycat
LIBRARY OF CONGRESS	18th	050 00	aHF5381
	4 -		b.A13 2009
		245 04	aThe 16 career clusters :
			ba project-based orientation.
LIBRARY OF CONGRESS	194	246 3	aSixteen career clusters
	feat	260	aMason, OH :
	che		bSouth-Western Cengage Learning,
			cc2009.
LIBRARY OF CONGRESS	197	300	aiv, 188 p. :
			bill ;
			c28 cm.
LIBRARY OF CONGRESS	197	505 0	aMarketing, sales & service -- Business, management & administrat
	Mex	650 0	aOccupations
	indu		vProblems, exercises, etc.
		650 0	aVocational interests
			vProblems, exercises, etc.
LIBRARY OF CONGRESS	197	650 0	aProfessions
	com		vProblems, exercises, etc.
	inde	650 0	aVocational guidance
			vProblems, exercises, etc.
LIBRARY OF CONGRESS	198	650 0	aVocational guidance
	edu		vProblems, exercises, etc.
	info		
LIBRARY OF CONGRESS	198		
	educa		
	tion		
	genera		

http://localhost:8001/cgi-bin/koha/catalogue/showmarc.pl?importid=882

Koha: Z39.50 Search: Card View

Koha > Z39.50 Search Results - Mozilla Firefox

http://localhost:8001/cgi-bin/koha/cataloguing/z3950_search.pl

Results

Server	Title	Author	Date	Edition	ISBN	LCCN	Preview
LIBRARY OF CONGRESS	1,000 terms in solid waste management /		1992			93162771	MARC Card Import
LIBRARY OF CONGRESS	10 management lessons for host governments coordinating post-disaster reconstruction / by the Executing Agency for Rehabilitation and Reconstruction (BRR) of Aceh-Nias, 2005-2009.						MARC Card Import
LIBRARY OF CONGRESS	Ten management lessons for host governments coordinating post-disaster reconstruction Banda Aceh, Indonesia : BRR NAD-Nias, [2009?]						MARC Card Import
LIBRARY OF CONGRESS	xi, 81 p. : col. ill., col. maps ; 26 cm.						MARC Card Import
LIBRARY OF CONGRESS	1. Disaster relief--Government policy--Indonesia. 2. Natural disasters--Government policy--Indonesia. 3. Disaster relief--Government policy. 4. Natural disasters--Government policy. #81272LCCN: 20093-23996						MARC Card Import
LIBRARY OF CONGRESS							MARC Card Import
LIBRARY OF CONGRESS							MARC Card Import

http://localhost:8001/cgi-bin/koha/catalogue/showmarc.pl?viewas=card&importid=872

Koha: MARC21 Fields

Koha > Cataloging > Add MARC Record - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://localhost:8001/cgi-bin/koha/cataloguing/addbiblio.pl?biblionumber=0& Google

Cyberoam Koha > Cataloging > Add M... Koha > Cataloging > Add M...

0 1 2 3 4 5 6 7 8 9

000 ? - LEADER -
01180cam a22002774a 4500

001 ? - CONTROL NUMBER -
16081272

005 ? - DATE AND TIME OF LATEST TRANSACTION -

006 ? - FIXED-LENGTH DATA ELEMENTS--ADDITIONAL MATERIAL CHARACTERISTICS--GENERAL INFORMATION + -

007 ? - PHYSICAL DESCRIPTION FIXED FIELD--GENERAL INFORMATION + -

008 ? - FIXED-LENGTH DATA ELEMENTS--GENERAL INFORMATION -
100202s2009 io ab f000 0 eng

010 ? - LIBRARY OF CONGRESS CONTROL NUMBER -
a LC control number 2009323996

020 ? - ISBN + -

024 ? - OTHER STANDARD IDENTIFIER + -

037 ? - PUBLICATION, DISTRIBUTION DETAILS--SOURCE OF ACQUISITION + -

040 ? - CATALOGING SOURCE -

041 ? - LANGUAGE CODE + -

042 ? - AUTHENTICATION CODE -
a Authentication code lcode

043 ? - GEOGRAPHIC AREA CODE -
a Geographic area code a-io--

050 ? - LIBRARY OF CONGRESS CALL NUMBER + -
a Classification number HV555.15
b Item number A13 2009

074 ? - GPO ITEM NUMBER + -

082 ? - DEWEY DECIMAL CLASSIFICATION NUMBER + -

084 ? - OTHER CLASSIFICATION NUMBER + -
a Classification number
b Item number
z Author Mark 0

086 ? - GOVERNMENT DOCUMENT CLASSIFICATION NUMBER + -

Done

Koha: MARC21 Fields

The screenshot displays the Koha cataloging interface for adding a new bibliographic record. The browser address bar shows the URL: `http://localhost:8001/cgi-bin/koha/cataloguing/addbiblio.pl?biblionumber=0&`. The interface includes a menu bar (File, Edit, View, History, Bookmarks, Tools, Help) and a toolbar with navigation icons. The main content area is titled "Koha > Cataloging > Add M..." and contains a list of MARC21 fields with their respective input boxes:

- 020 ?** - INTERNATIONAL STANDARD BOOK NUMBER +-
 - a** International Standard Book Number: 9781849712217 (hardback)
- 020 ?** - INTERNATIONAL STANDARD BOOK NUMBER +-
 - a** International Standard Book Number: 9781849712224 (pbk.)
- 022 ?** - INTERNATIONAL STANDARD SERIAL NUMBER +-
- 024 ?** - OTHER STANDARD IDENTIFIER +-
- 027 ?** - STANDARD TECHNICAL REPORT NUMBER +-
- 028 ?** - PUBLISHER NUMBER +-
- 035 ?** - SYSTEM CONTROL NUMBER +-
 - a** System control number: (DNAL)1064488
- 037 ?** - SOURCE OF ACQUISITION +-
- 040 ?** - CATALOGING SOURCE -
 - a** Original cataloging agency: DNAL/DLC
 - c** Transcribing agency *: DLC
 - d** Modifying agency: DLC
 - b** Language of cataloging: [Empty]
 - e** Description conventions: [Empty]
- 041 ?** - LANGUAGE CODE +-

Koha: MARC21 Fields

Koha > Cataloging > Add MARC Record - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://localhost:8001/cgi-bin/koha/cataloguing/addbiblio.pl?biblionumber=0&

Most Visited Getting Started Latest Headlines

Cyberoam Koha > Cataloging > Add M... Koha > Cataloging > Add M...

▲ a Geographic area code f-----

045 ? - TIME PERIOD OF CONTENT -

047 ? - FORM OF MUSICAL COMPOSITION CODE + -

048 ? - NUMBER OF MUSICAL INSTRUMENTS OR VOICES CODE + -

050 ? - LIBRARY OF CONGRESS CALL NUMBER + -

▲ a Classification number SB123.34.A35

▲ b Item number E26 2011

070 ? - NATIONAL AGRICULTURAL LIBRARY CALL NUMBER + -

▲ a Classification number SB123.34.A35

▲ b Item number E28 2011

074 ? - GPO ITEM NUMBER + -

082 ? - DEWEY DECIMAL CLASSIFICATION NUMBER + -

▲ a Classification number 338.1/62096

▲ 2 Edition number 22

084 ? - OTHER CLASSIFICATION NUMBER + -

▲ a Classification number

086 ? - GOVERNMENT DOCUMENT CLASSIFICATION NUMBER + -

Done

Koha: MARC21 Fields

The screenshot shows the Koha cataloging interface in Mozilla Firefox. The browser address bar displays the URL: `http://localhost:8001/cgi-bin/koha/cataloguing/addbiblio.pl?`. The page title is "Koha > Cataloging > Add MARC Record - Mozilla Firefox". The interface includes a menu bar (File, Edit, View, History, Bookmarks, Tools, Help) and a toolbar with navigation buttons. The main content area displays a list of MARC21 fields with checkboxes and input boxes. The fields are numbered 0 through 9 at the top. The visible fields are:

- 210 ?** - ABBREVIATED TITLE +-
222 ? - KEY TITLE +-
240 ? - UNIFORM TITLE -
243 ? - COLLECTIVE UNIFORM TITLE -
245 ? - TITLE STATEMENT -
 - a** Title *
 - b** Remainder of title
 - c** Statement of responsibility, etc
 - h** Medium
- 246 ?** - VARYING FORM OF TITLE +-
247 ? - FORMER TITLE +-
250 ? - EDITION STATEMENT -
 - a** Edition statement
- 260 ?** - PUBLICATION, DISTRIBUTION, ETC. (IMPRINT) +-
 - a** Place of publication, distribution, etc
 - a** Place of publication, distribution, etc
 - b** Name of publisher, distributor, etc
 - c** Date of publication, distribution, etc

Koha: MARC21 Fields

The screenshot shows the Koha web interface for adding a MARC record. The browser window title is "Koha > Cataloging > Add MARC Record - Mozilla Firefox". The address bar shows the URL "http://localhost:8001/cgi-bin/koha/cataloguing/addbiblio.pl?". The page title is "Add MARC Record".

At the top, there are navigation links: "Circulation", "Patrons", "Search", "Cart", and "More". The user is logged in as "kohaadmin" and can "Log Out".

The main content area is titled "Add MARC Record" and includes a "Save" button, a "Z39.50 Search" button, and a "Change framework: Default" dropdown menu. Below this is a row of tabs numbered 0 through 9, with tab 3 selected.

The selected tab (3) contains the following fields:

- 300 ?** - PHYSICAL DESCRIPTION + -
 - a** Extent: x, 141 p. ;
 - c** Dimensions: 24 cm.
- 306 ?** - PLAYING TIME -
- 310 ?** - CURRENT PUBLICATION FREQUENCY -
- 362 ?** - DATES OF PUBLICATION AND/OR SEQUENTIAL DESIGNATION + -
- 365 ?** - TRADE PRICE + -
- 366 ?** - TRADE AVAILABILITY INFORMATION + -

The status bar at the bottom of the browser window shows "Done".

Koha: MARC21 Fields

Koha > Cataloging > Add MARC Record - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://localhost:8001/cgi-bin/koha/cataloguing/addbiblio.pl? ☆

Most Visited Getting Started Latest Headlines

Cyberoam Koha > Cataloging > Add M... Koha > Cataloging > Add M...

Circulation Patrons Search Cart More Gokhale Institute of Politics and Economics (Set) | kohaadmin (Log Out) | [?]

Home > Cataloging > Add MARC Record

Add MARC Record

Save Z39.50 Search Change framework: Default

0 1 2 3 4 5 6 7 8 9

500 ? - GENERAL NOTE +-
501 ? - WITH NOTE +-
504 ? - BIBLIOGRAPHY, ETC. NOTE +-
▲ a Bibliography, etc Includes bibliographical references and index.
505 ? - FORMATTED CONTENTS NOTE +-
508 ? - CREATION/PRODUCTION CREDITS NOTE +-
511 ? - PARTICIPANT OR PERFORMER NOTE +-
Done

Koha: MARC21 Fields

The screenshot shows the Koha cataloging interface in Mozilla Firefox. The browser address bar displays `http://localhost:8001/cgi-bin/koha/cataloguing/addbiblio.pl?`. The interface shows four MARC21 records, each with a 650 field and several subdivisions. The records are as follows:

Field	Subdivision	Value
650 ? [] [0] - SUBJECT ADDED ENTRY--TOPICAL TERM + -	a	Topical term or geographic name as entry element: Crops
	x	General subdivision: Germplasm resources
	x	General subdivision: Economic aspects
	z	Geographic subdivision: Africa
	v	Form subdivision: Case studies.
650 ? [] [0] - SUBJECT ADDED ENTRY--TOPICAL TERM + -	a	Topical term or geographic name as entry element: Agrobiodiversity
	x	General subdivision: Economic aspects
	z	Geographic subdivision: Africa
	v	Form subdivision: Case studies.
650 ? [] [0] - SUBJECT ADDED ENTRY--TOPICAL TERM + -	a	Topical term or geographic name as entry element: Plant varieties
	x	General subdivision: Economic aspects
	z	Geographic subdivision: Africa
	v	Form subdivision: Case studies.
650 ? [] [0] - SUBJECT ADDED ENTRY--TOPICAL TERM + -	a	Topical term or geographic name as entry element: Germplasm resources conservation
	x	General subdivision: Economic aspects
	z	Geographic subdivision: Africa
	v	Form subdivision: Case studies.
651 ? [] [] - SUBJECT ADDED ENTRY--GEOGRAPHIC NAME + -		
653 ? [] [] - INDEX TERM--UNCONTROLLED + -		

Koha: MARC21 Fields

Koha > Cataloging > Add MARC Record - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://localhost:8001/cgi-bin/koha/cataloguing/addbiblio.pl? Google

Cyberoam Koha > Cataloging > Add M... Koha > Cataloging > Add M...

Circulation Patrons Search Cart More Gokhale Institute of Politics and Economics (Set) | kohaadmin (Log Out) | [?]

Home > Cataloging > Add MARC Record

Add MARC Record

Save Z39.50 Search Change framework: Default

0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---

700 ? - ADDED ENTRY--PERSONAL NAME +-
a Personal name Edilegnaw Wale. ...

700 ? - ADDED ENTRY--PERSONAL NAME +-
a Personal name Drucker, Adam G. ...

700 ? - ADDED ENTRY--PERSONAL NAME +-
a Personal name Zander, Kerstin K. ...

710 ? - ADDED ENTRY--CORPORATE NAME +-
711 ? - ADDED ENTRY--MEETING NAME +-

Done

Koha: OPAC Search Results

The screenshot shows a web browser window with the title "Koha Online Catalog > Results of Search for 'kw,wrld: economics' - Mozilla Firefox". The address bar shows the URL "http://localhost:8000/cgi-bin/koha/opac-search.pl?q=e". The search results page displays the Koha logo and a search bar with "Library Catalog" selected and "economics" entered. The search results are filtered by "kw,wrld: economics" and show 8 results. The first three results are listed below.

Welcome, | [Search history \[x \]](#) | [Log Out](#)

Search Library Catalog

[Advanced Search](#) | [Browse by Subject](#) | [Tag Cloud](#)

"kw,wrld: economics" returned 8 results.

Refine your search

- Availability**
[Limit to currently available items.](#)
- Libraries**
[Gokhale Institute of Politics and Economics](#)
- Places**
[India](#)
- Series**
[An Elgar reference c...](#)
[The international li...](#)
- Authors**
[De Bondt, Werner Fra...](#)
[Edilegnaw Wale,](#)
[Garibaldi, Ubaldo,](#)
[Gokhale Institute of...](#)
[Zander, Kerstin K.](#)

Select All **Clear All** **Unhighlight** **Add to:** Relevance
Save **Place Hold**

- 1. [Financial accounting and investment management /](#)**
Publication: Cheltenham, Glos, UK ; | Northampton, MA : Edward Elgar, 2009 . 2 v. : 25 cm.
Date:2009
Availability: **Copies available:** Gokhale Institute of Politics and Economics (1),
Actions: [Save to Lists](#) [Add to Cart](#)
- 2. [Financial accounting and investment management /](#)**
Publication: Cheltenham, Glos, UK ; | Northampton, MA : Edward Elgar, 2009 . 2 v. : 25 cm.
Date:2009
Availability: **Copies available:** Gokhale Institute of Politics and Economics (1),
Actions: [Save to Lists](#) [Add to Cart](#)
- 3. [No wealth but life :](#)**
Publication: New York : Cambridge University Press, 2010 . xi, 244 p. ; 24 cm.
Date:2010
Availability: **Copies available:** Gokhale Institute of Politics and Economics (1),
Actions: [Save to Lists](#) [Add to Cart](#)

Done

Koha: OPAC – Normal View

Koha Online Catalog > Details for: Reflexivity and development economics : - Mozilla Firefox

File Edit View History Delicious Bookmarks Tools Help

Inbox (20) - nanamani@gmail.com - ... x Koha Online Catalog > Details for: Refl... x +

library.gipe.ac.in:8000/cgi-bin/koha/opac-detail.pl?biblionumber=54

Speedbit Search

Most Visited Getting Started Latest Headlines

Recently Bookmarked

Log in to Your Account | Search history [x]

koha Search Library Catalog Go Cart Lists

Advanced Search | Browse by author or subject | Tag Cloud

Normal View MARC View ISBD View

Reflexivity and development economics :

by [Gay, Daniel.](#)

Published by : [Palgrave Macmillan.](#) (Houndmills, Basingstoke, Hampshire ; | New York :)

Physical details: xi, 224 p. : ill. ; 23 cm.

ISBN: 0230220169

Subject(s): [Development economics.](#) | [Vanuatu --Economic policy.](#) | [Singapore --Economic policy.](#)

Year: 2009

Tags from this library:
No tags from this library for this title.

Print
Add to Your Cart
More searches

Save Record:
-- Choose Format -- Go

Holdings (1) Title Notes Comments Amazon Reviews

Item type	Location	Collection	Call Number	Status	Date Due
BOOK Books	Gokhale Institute of Politics and Economics <i>General Stacks</i>	Non Fiction	338.9001	Available	

zotero

Koha: OPAC – MARC View

Koha Online Catalog > MARC Details for Record No. 54 - Mozilla Firefox

File Edit View History Delicious Bookmarks Tools Help

Inbox (20) - nanamani@gmail.com - ... x Koha Online Catalog > MARC Details f... x +

library.gipe.ac.in:8000/cgi-bin/koha/opac-MARCdetail.pl?biblionumber=54

Speedbit Search

Most Visited Getting Started Latest Headlines

Recently Bookmarked

Reflexivity and development economics : (Record no. 54)

000 -LEADER
fixed length 02686cam a2200409 a 4500
control field

001 - CONTROL NUMBER
control field 15948702

005 - DATE AND TIME OF LATEST TRANSACTION
control field 20110503170838.0

008 - FIXED-LENGTH DATA ELEMENTS--GENERAL INFORMATION
fixed length 091016s2009 enka b 001 0 eng
control field

010 ## - LIBRARY OF CONGRESS CONTROL NUMBER
LC control number 2009043978

015 ## - NATIONAL BIBLIOGRAPHY NUMBER
National bibliography number GBA976318
Source bnb

015 ## - NATIONAL BIBLIOGRAPHY NUMBER
National bibliography number 015-34126
Source bnb

016 7# - NATIONAL BIBLIOGRAPHIC AGENCY CONTROL NUMBER
Record control number 015341265
Source Uk

Add to Your Cart
More searches

Save Record:
-- Choose Format -- Go

zotero

MARC21: Reading List

1. The Internationalization of MARC

- Part I The emergence and divergence of MARC. Library Review 44(4) 1995
- Part II Some Marc formats based on USMARC. Library Review 44(6) 1995
- Part III Some MARC formats based on UKMARC : Library Review 44(6) 1995
- Part IV UNIMARC : some formats based on it and some other MARC formats.
Library Review 44(7) 1995

2. Understanding MARC Bibliographic: Machine Readable Cataloguing

<http://lcweb.loc.gov/marc/umb/umbhome.html>

3. MARC21 Concise format for Bibliographic Data : 2001 Concise Edition

<http://lcweb.loc.gov/marc/bibliographic/ecbdhome.html>

4. Bibliographic Formats and Standards / OCLC. 3rd edition

<http://www.oclc.org/bibformats/>



ISO 2709

- ISO 2709 : standard for bibliographic descriptions, entitled Format for Bibliographic Information Interchange on Magnetic Tape.
- Developed in the 1960s by the Library of Congress to encode the information printed on library cards.
- First created as ANSI Standard Z39.2, called Information Interchange Format.
- 1981 version of the standard called Documentation—Format for bibliographic information interchange on magnetic tape.
- Latest edition of that standard is Z39.2-1994
- The ISO standard supersedes Z39.2. As of December 2008 the current standard is ISO 2709:2008.

ISO 2709: Record Structure

LABEL 24 character
DIRECTORY Variable length
DATAFIELDS Variable length
RECORD SEPARATOR 1 character

ENTRY 14 characters
ENTRY 14 characters
ENTRY 14 character
ENTRY 14 character
ENTRY 14 character
FIELD SEPARATOR 1 character

RECORD LENGTH 5 character
RECORD STATUS 1 character
BLANK 1 character
BIBLIOGRAPHIC LEVEL 1 character
BLANK 2 characters
INDICATOR LENGTH 1 character
SUBFIELD IDENTIFIER LENGTH 1 character
BASE ADDRESS OF DATA 5 characters
BLANK 3 characters
LENGTH OF 'LENGTH OF DATAFIELD' IN EACH DIRECTORY ENTRY 1 character
LENGTH OF 'STARTING CHARACTER POSITION IN EACH DIRECTORY ENTRY' 1 character
LENGTH OF 'IMPLIMENTATION-DEFINED' SECTION OF EACH DIRECTORY ENTRY
BLANK 1 character

TAG — 3 characters	LENGTH OF DATAFIELD 4 characters	STARING CHARACTER POSITION 5 characters	SEGMENT IDENTIFIER 1 character	OCCURENCE IDENTIFIER 1 character
--------------------------	-------------------------------------	--------------------------------------------	-----------------------------------	-------------------------------------

INDICATORS 2 characters	SUBFIELD IDENTIFIER 2 character	SUBFIELD Variable	SUBFIELD IDENTIFIER 2 characters	SUBFILED Variable	FIELD SEPARATOR 1 character
----------------------------	------------------------------------	----------------------	-------------------------------------	----------------------	--------------------------------

