

Manual of Library Automation

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MARC Definition

"MARC stands for Machine Readable Cataloging. MARC is simply a standard for recording bibliographic information that was once widely found on catalog cards and putting that information into machine-readable form. MARC is a world standard for the recording of bibliographic information."¹

MarcEdit

MarcEdit is free MARC editing utility which can also be used to convert data from LIMS, delimited tab text, WINSISI ISO to MARC format, developed by Terry Reese,

❖ System Requirements:

- Operating System: Windows 95, 98, ME, NT 4+, 2000, XP.
- RAM: 8 MB (min); 32 MB+ (recommended)
- Disk space: 10 MB (setup); 5 MB (application)
- **Special Requirement:**
Because MarcEdit installs a number of Active X Objects, the user must have administrator permissions to install on Windows NT (NT 4+, 2000, XP)

File Extensions Used by MarcEdit:

MarcEdit associates *.mrc files with the MarcBreaker, *.mrk files with the MarcEditor, and *.mrd files with the save mapping as Save Arguments Template.

Marcedit is available free from:

(<http://oregonstate.edu/~reese/marcedit/html/downloads.html>)

For bugs removal and more information about MarcEdit contact Terry Reese

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http: <http://oregonstate.edu/~reese>

[Conversion of Library Data into MARC Format](#)

If you are not using any type of Library system and it is your desire that your data should also be available at: www.loc.gov/z3950 (Loc Gateway).

Procedure:

If your' Books data is not in computerized form then first of all go the site of loc: <http://catalog.loc.gov>. Select the Basic search.

Search your Library book in the catalog of Loc through title search when you find the same title. Then save this record in Marc format and check the option of Marc Format (Only Save). As shown in this picture.

◀ Previous Next ▶

Save, Print and Email (Help Page)	
Select Format	Print or Save
<input type="radio"/> Text Format (Save, Print or Email) <input checked="" type="radio"/> MARC Format (ONLY Save)	<div style="border: 2px solid black; padding: 5px; display: inline-block;">Print or Save Search Results</div>
<div style="border: 2px solid black; padding: 5px; display: inline-block;">Email Search Results</div>	Enter email address: <input style="width: 150px;" type="text"/>

[Help](#) - [Search](#) - [History](#) - [Headings](#) - [Titles](#) - [Request](#) - [Account](#) - [Databases](#) - [Exit](#)

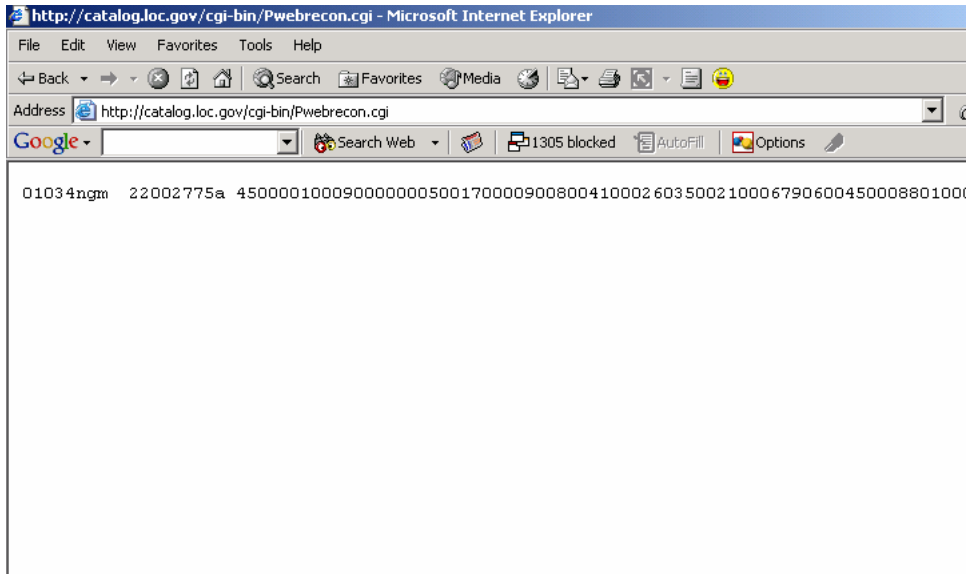


The Library of Congress
URL: [http://www.loc.gov](#)

Catalog/authority record errors?

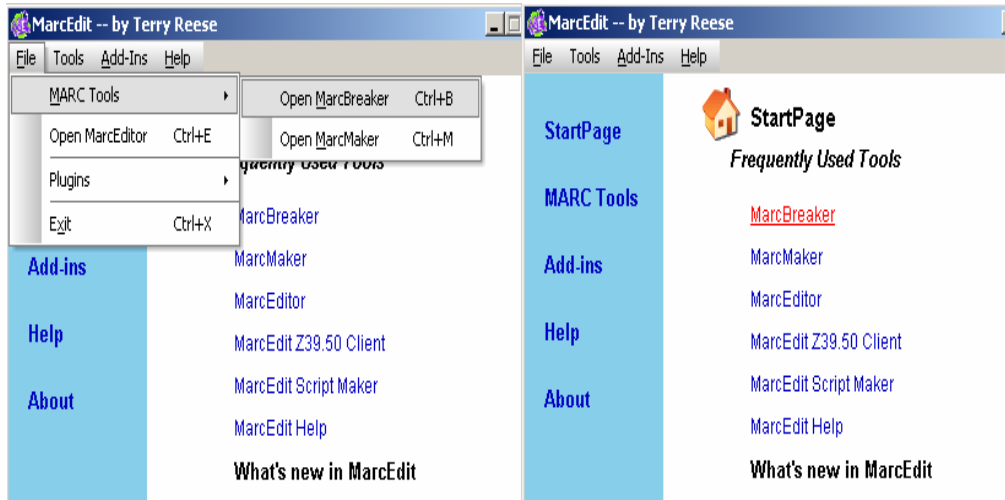
Library of Congress

Clicking on this option will result in the marc record entry of the book as show below.

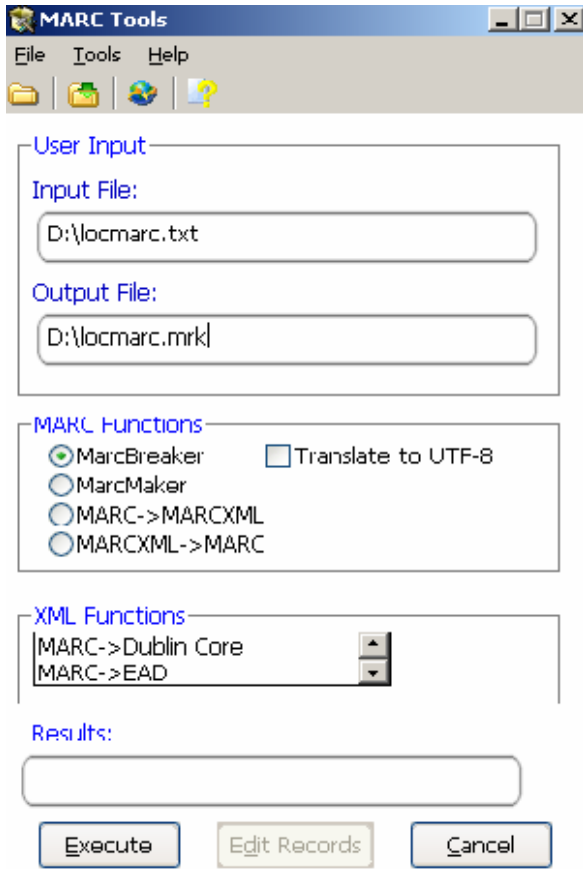


Select (ctrl+a) the record and copy it, open Notepad, paste (ctrl+v) MARC record in notepad and select word wrap from notepad-format menu. You can save multiple MARC records in notepad for further editing with MarcEditor or converting them into LIMS compatible format.

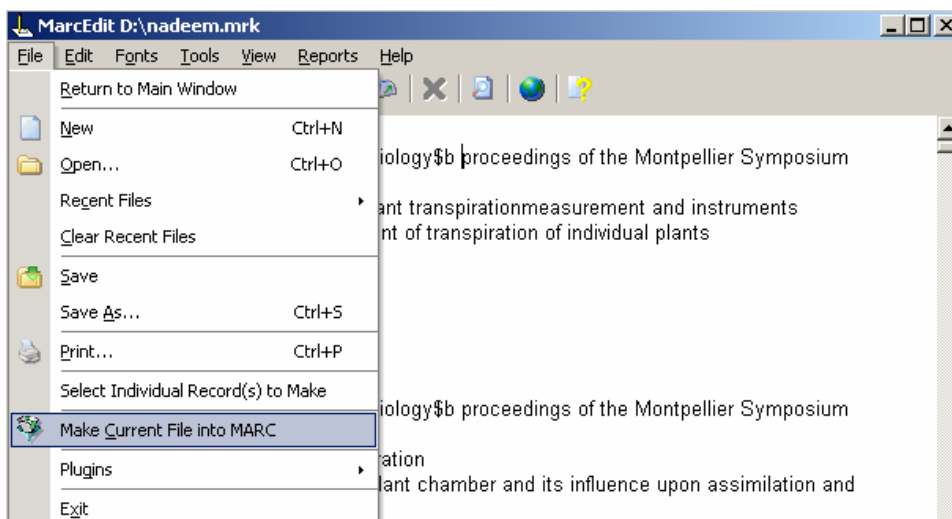
Open MarcBreaker using MarcEdit software home page. This can be done either by using file menu MARC Tools =>open MarcBreaker or selecting from main screen of MarcEdit. See image below.



Following window will appear as result of choosing this option asking about Input File and Output File. Provide your saved marc file (from LOC) path in input and write name of file to be saved in Output File with .mrk extension. Press Execute button.



Open mrk extension file in MarcEditor and make the essential changes in this file and remove the unnecessary sign and symbols from this file and save it. Convert this saved file into the marc Communication format as follows:



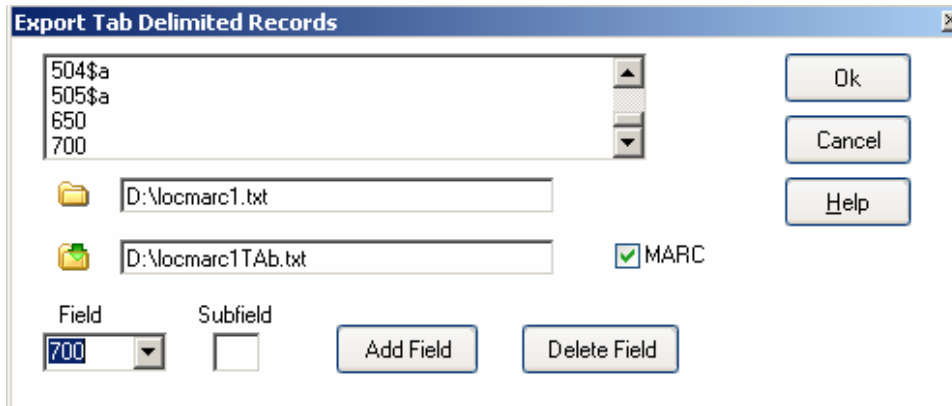
Test your records after running the zebra server and the procedure will be same as it is mentioned in zebra help file.

Conversion of MARC Record into LIMS (MS Access) Compatible Format with MarcEdit

Following MARC tags are required for conversion:

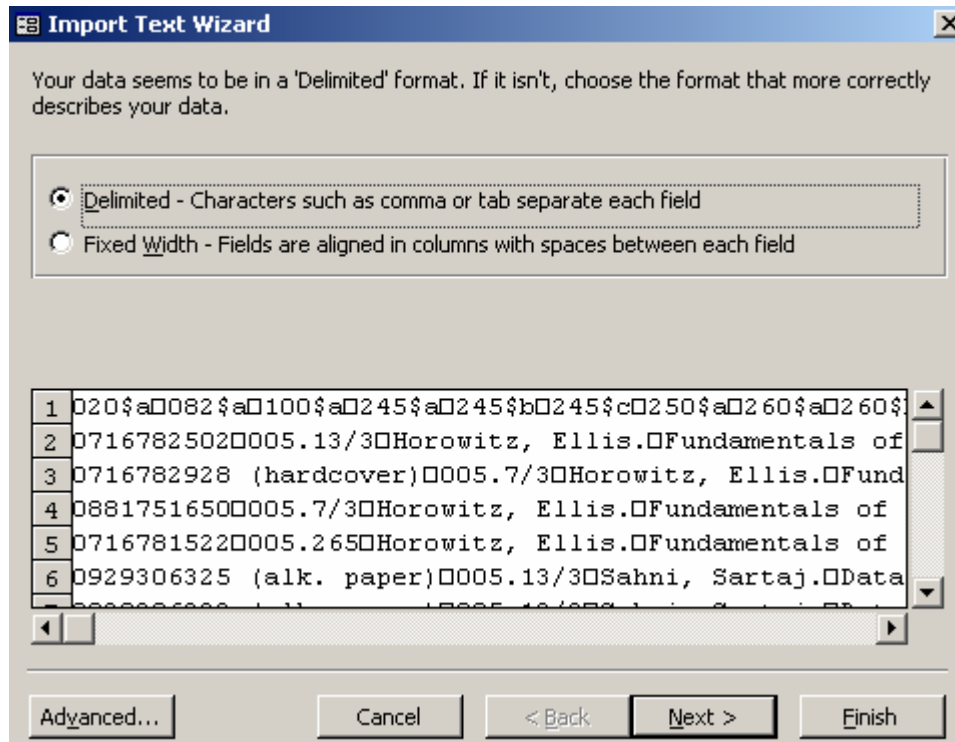
TAG	Subfield
001	
020	a
082	a
100	a
245	a
245	b
245	c
250	a
260	a
260	b
260	c
300	a
440	a
504	a
505	a
650	
700	

MarcEdit Main Menu =>Tools=>Export Tab Delimited Records following windows will appear

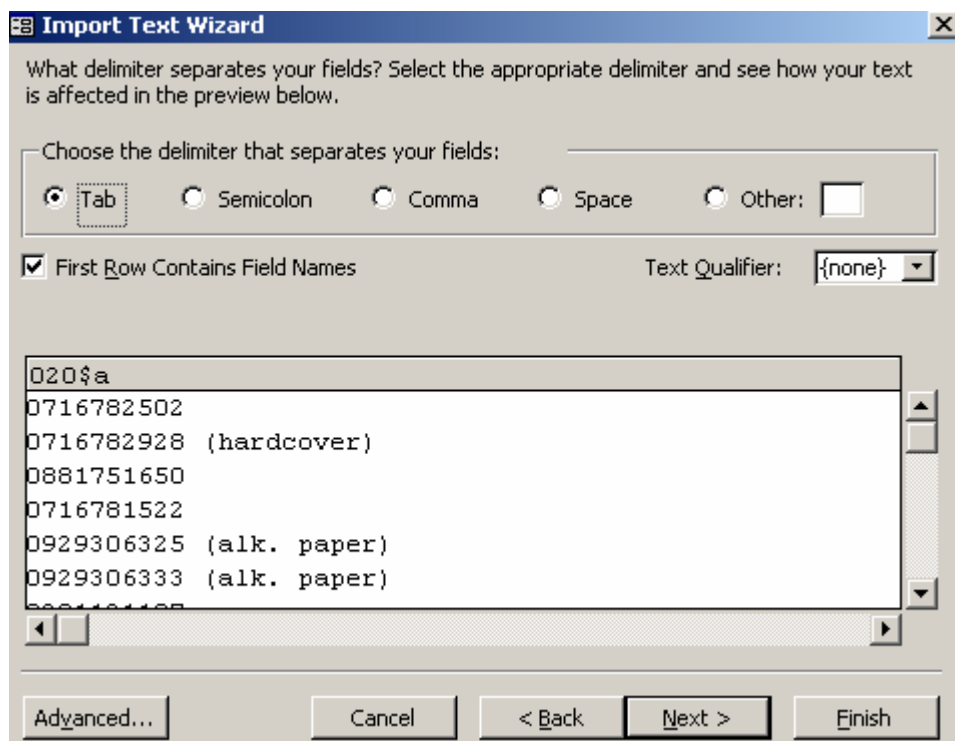


Select MARC file saved from LOC Catalog in first box and name of output file in second box. Add above mentioned tags one by one and press ok, there will be message records "Records have exported successfully" and closes it.

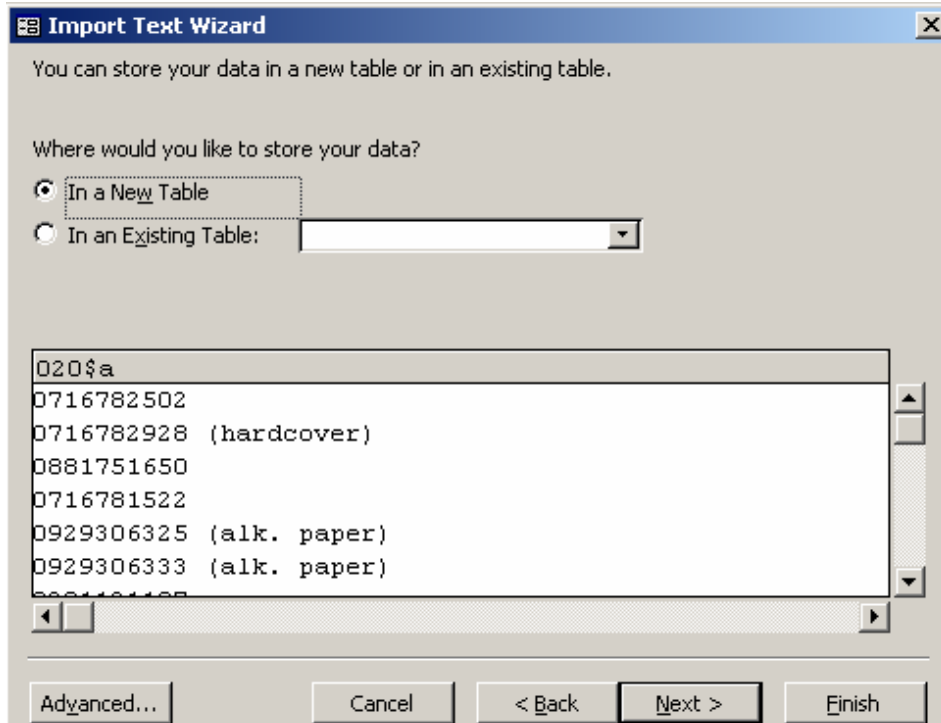
Open marc database in marcnew folder go to File=>Get External Data=>Import and select locmarc1tab.txt. This is Ms Access Database provided on CD.



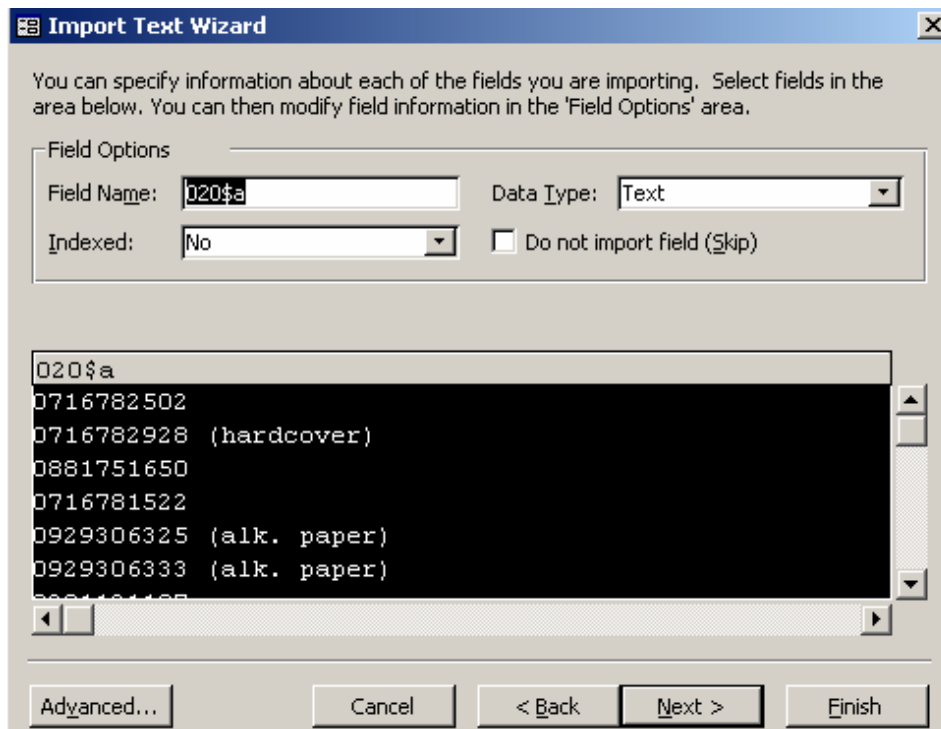
Click Next.

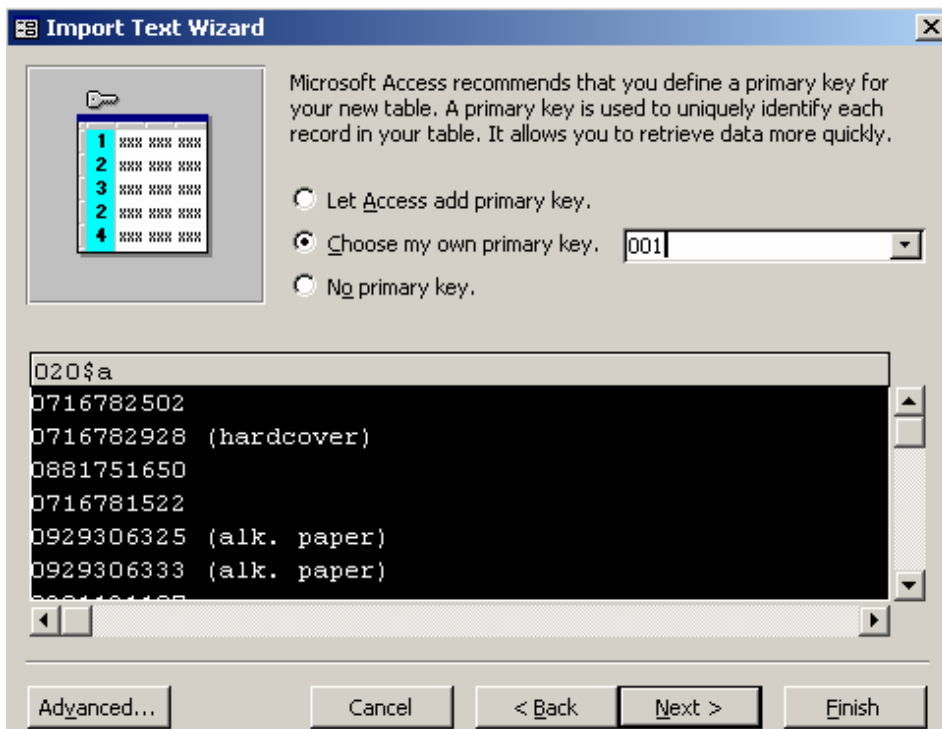


Select tab and First Row Contains Filed Names, and click Next.

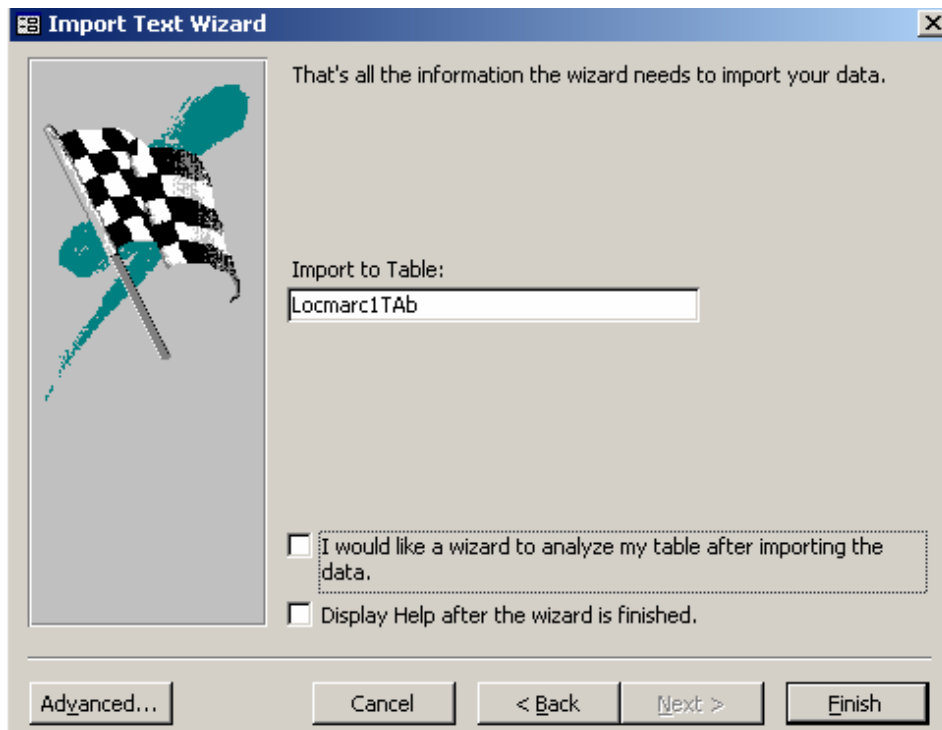


If you are importing first time select in a New Table otherwise select in an Existing Table and select table it is unto you, you can import in New Table every time.





Chose your own primary key, which is 001 and Press Next.



Press Finish.

LIMS to MARC Conversion:

Note: Change the currency sign and year in this way first of all go to the setting then control panel Regional options → go to the option Currency then change the Dollar sign with Rs. And make the changes in year in the same way.

Procedure:

It is advisable to make new database, import sahlib and create table with Make-Table Query.

1. Design 'Make-Table Query' and export table.
2. Conversion of LIMS to MARC through MarcEdit Software.

1. Criteria of Designing "Make Table Query" and Export the table:

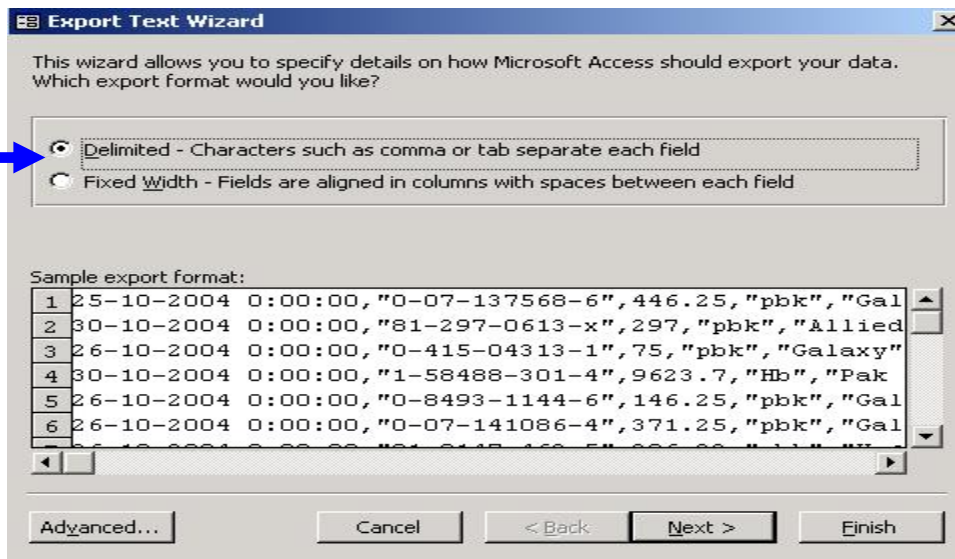
I. First of all design the query in your database → Select object Query → Design View
Add your main table → select the fields according to this sequence.

```
SELECT sahlib.ENTRYDATE, sahlib.ACCNO, [sahlib.ISBN]+ " : " AS ISBN, sahlib.PRICE,
sahlib.BINDING, sahlib.SOURCE, sahlib.DDC_NO, sahlib.AUTH_MARK, sahlib.AUTHOR,
sahlib.TITLE, sahlib.SubTitle, sahlib.STATEOFRESP, sahlib.TYPE, sahlib.EDITION,
[sahlib.place]+ " : " AS Place, [sahlib.publisher]+ " AS Publisher, [sahlib.year]+ "." AS
[YEAR], sahlib.VOLUME, [sahlib.rmnpage]+ " , "+[sahlib.pages]+ "p." AS page,
sahlib.CD_FLOPY, sahlib.SERIES, sahlib.NOTES, sahlib.CONTENTES, sahlib.LANGUAGE,
sahlib.Subject, sahlib.SubAuthor INTO 6k
FROM sahlib
WHERE (((sahlib.ACCNO) Between 6000 And 3001) AND ((sahlib.STATUS) Is Null));
```

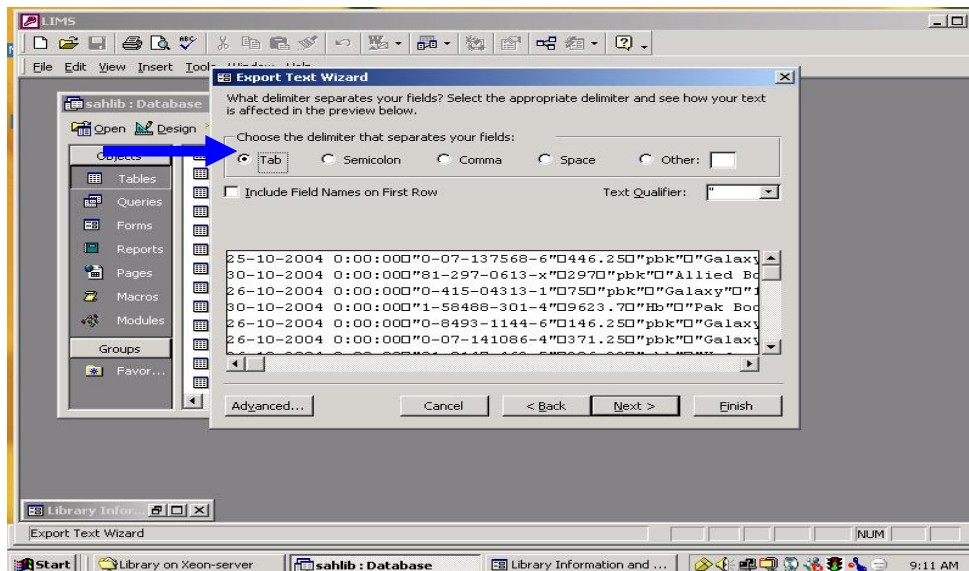
After this right click on empty window select the option of Query Type then click on make table query. Then give the name of table.

Save this table → select it → right clicks on table → Export → Save in any drive as txt files. Export text wizard open.

Export Text Wizard:



Check the option of Delimited –characters such as comma or tab separate each field (which has been shown in the Export text wizard through the sign of arrow). Click on Next then check the option Tab.



Select the option next in this Window then Finish.

[2. Conversion of LIMS to MARC Using MarcEdit Software.](#)

Lims marc.mrd files contents are given below

0--005--0

1--001--0

2-\\-020\$a--0

3-\\-020\$c--0

4-\\-020\$c--0

5-\\-037\$b--0

6-\\-082\$a--0

7-\\-082\$b--0

8-\\-100\$a--0

9-\\-245##\$a--0

10-\\-245##\$b--0

11-\\-245##\$c--0

12-\\-245\$h--0

13-\\-250\$a--0

14-\\-260\$a--0

15-\\-260\$b--0

16-\\-260\$c--0

17-\\-300\$a--0

18-\\-300\$a--0

19-\\-300\$e--0

20-\\-440\$a--0

21-\\-500\$a--0

22-\\-504\$a—0

23-\\-505\$a--0

24-\\-546\$a--0

25-\\-653#0\$a--0

26-\\-700\$b—0

27-\\-850\$--0

28-\\-852\$--0

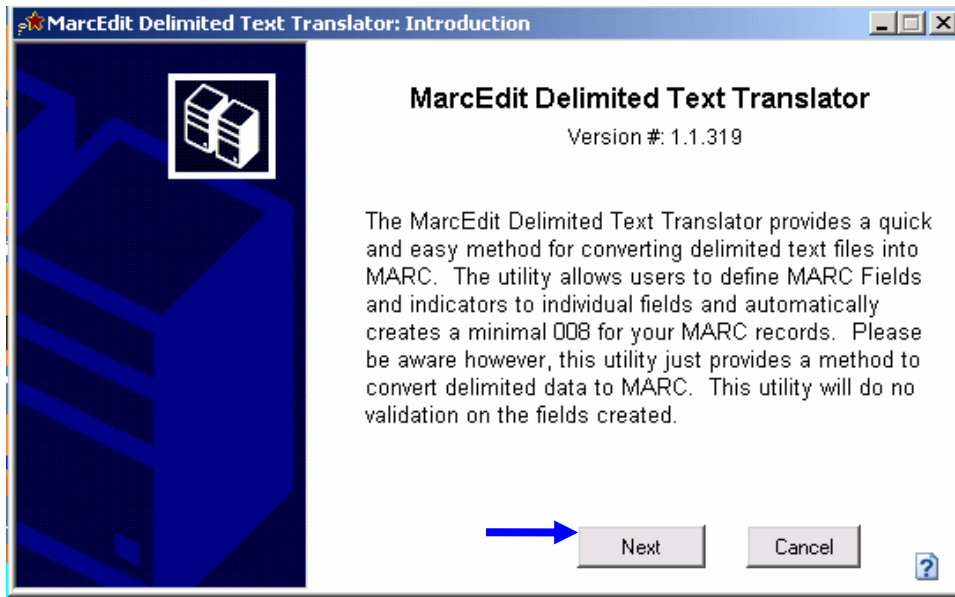
Copy the fields and their tags (as mentioned above) in notepad save the file in this way write the any name of file like "limsmarc.mrd" and save it in MarcEdit folder or copy limsmarc file from marc renew folder into your MarcEdit folder. In above .mrd file 245\$c stands for subtitle while 500\$, 505\$, 850\$, 852\$ stand for general notes, contents, holding Institute and Location (shelf)

Add- INS. Another window will open then click on next then give the saved file path. Next window will open as shown above. Instead of fields selection, giving tags in map to option and apply them, only click on Load template, select the path where you have putted notepad file then open it then All the tags will enter automatically

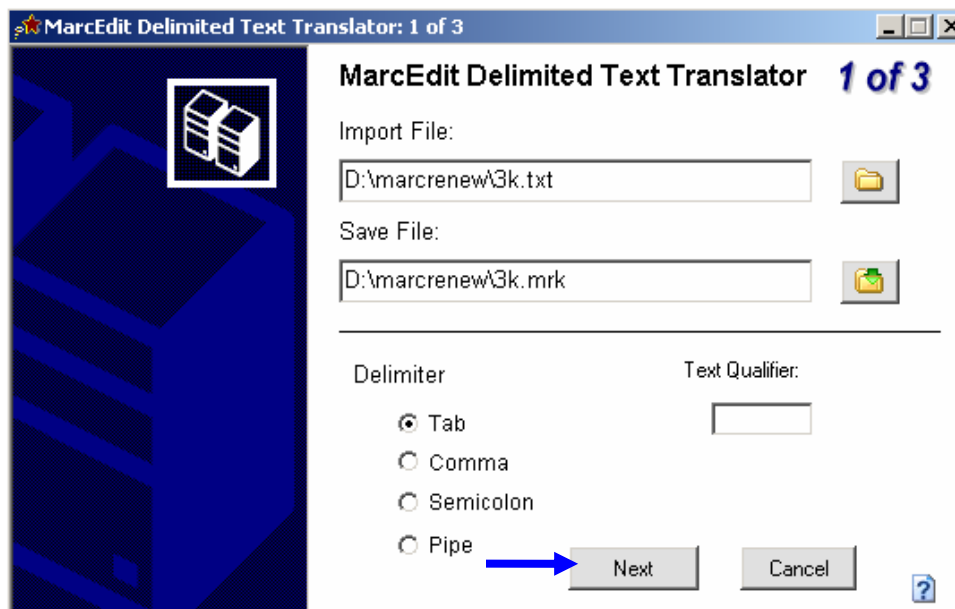
Open MarcEdit software.



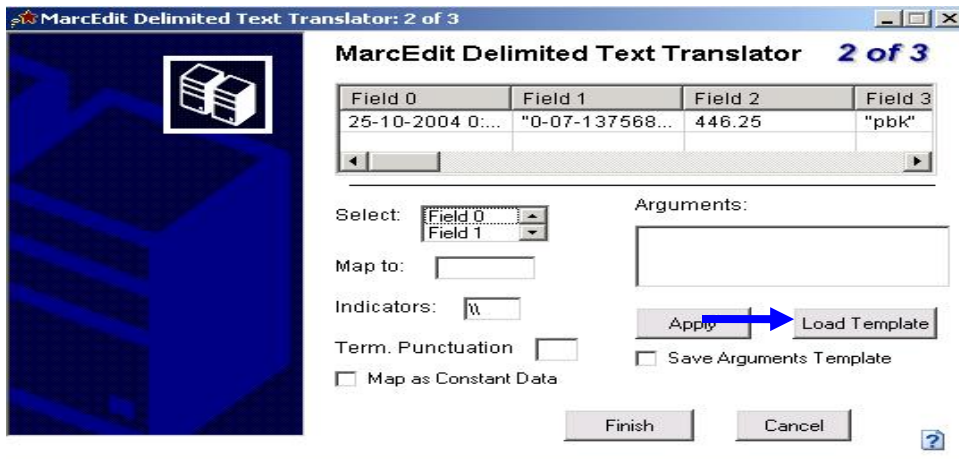
Click on Add-ins → Delimited Text Translator → Click on Next in new Window, see below



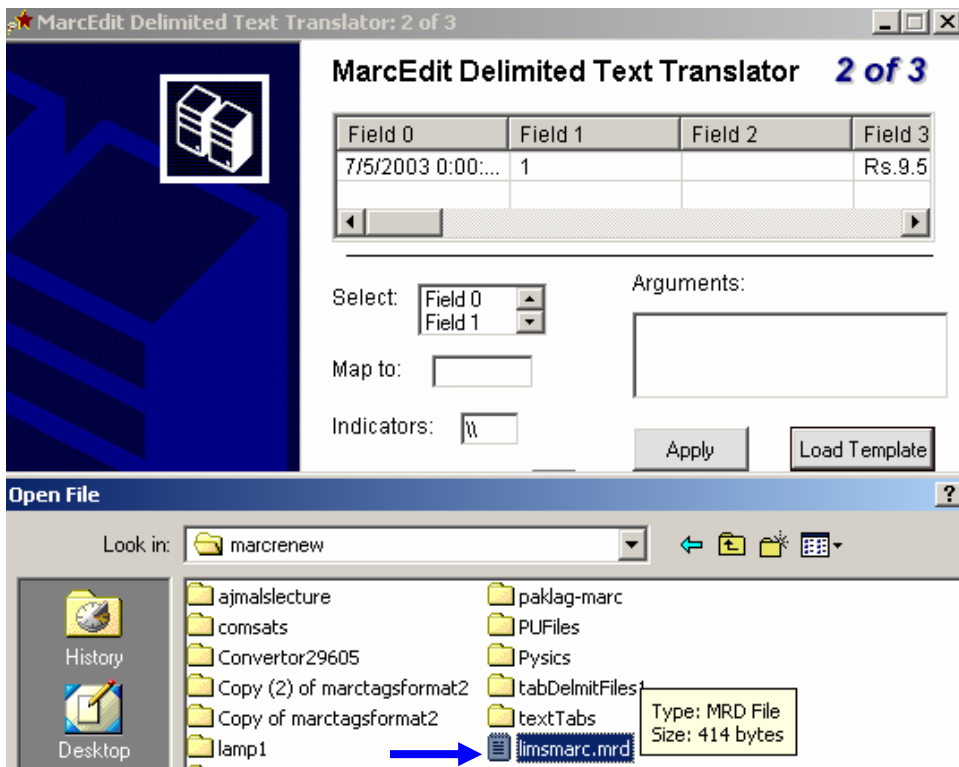
When you click on next, a new window will appear asking you to provide path of file you want to import i.e. marcnew\3k.txt file, which you have exported from LIMS and name of marc file to be saved e.g. marcnew\3k.mrk . See image below.



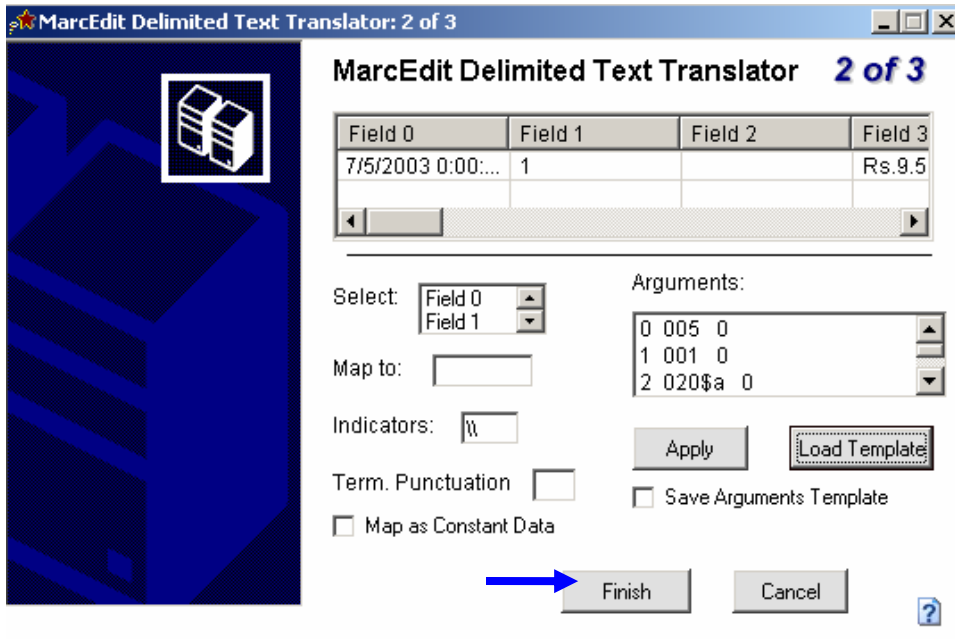
Select Tab as Delimiter and click on next. Click on Load template in new appeared window (Limsmarc.mrd)



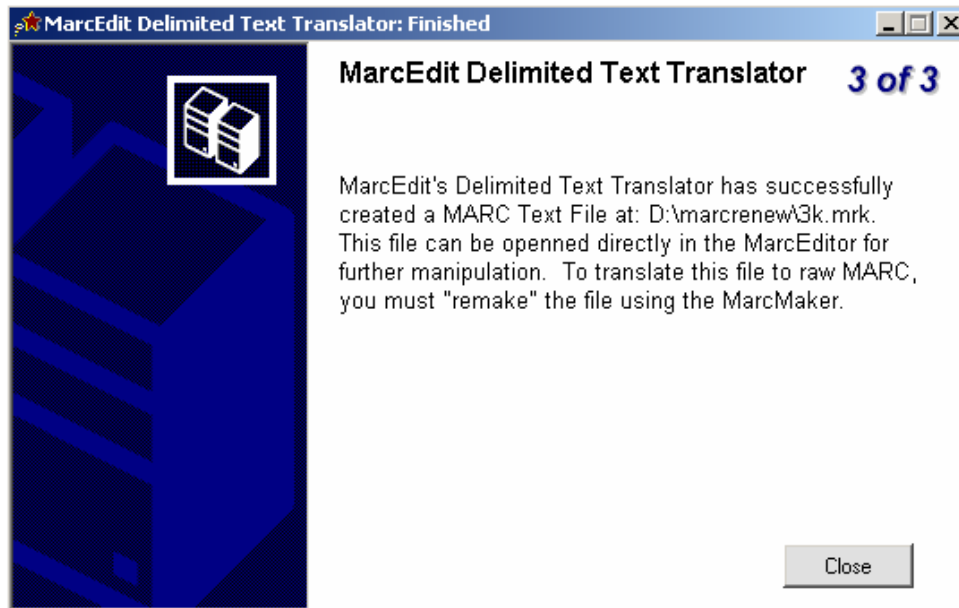
Click Load Template, but first check the Order of your table fields which should be according to marc tags give in limsmarc.mrd file (If you use lims database's maketablequery given in marcnew folder, no need to worry about order of your fields.)



Open limsmarc.mrd



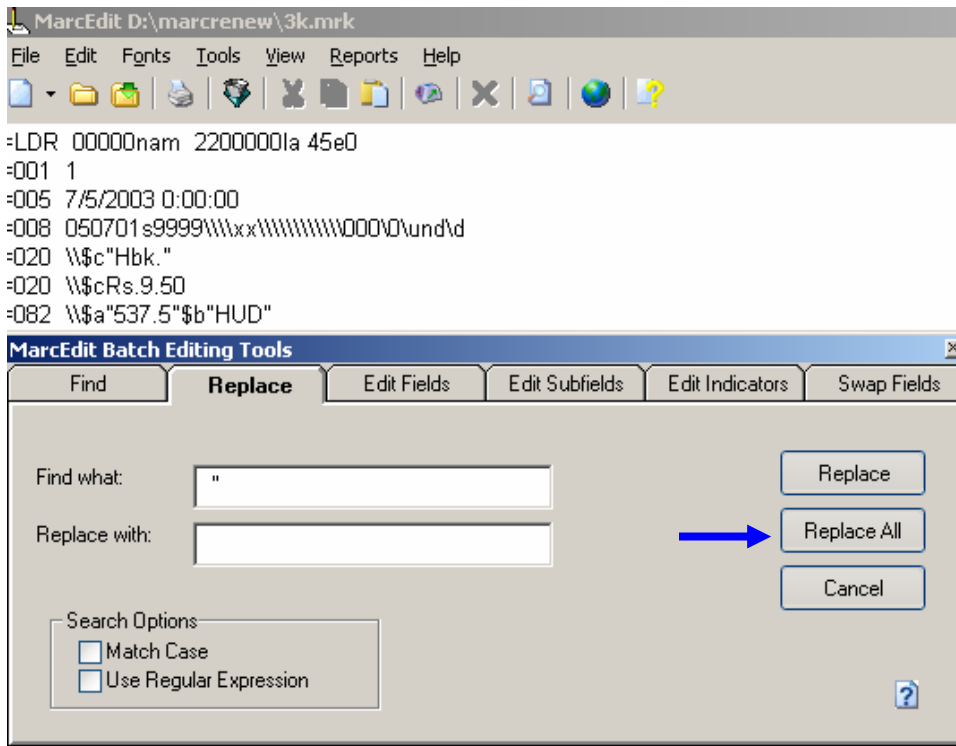
Click Finish Button and follow instructions given below at 3 of 3 and then close.



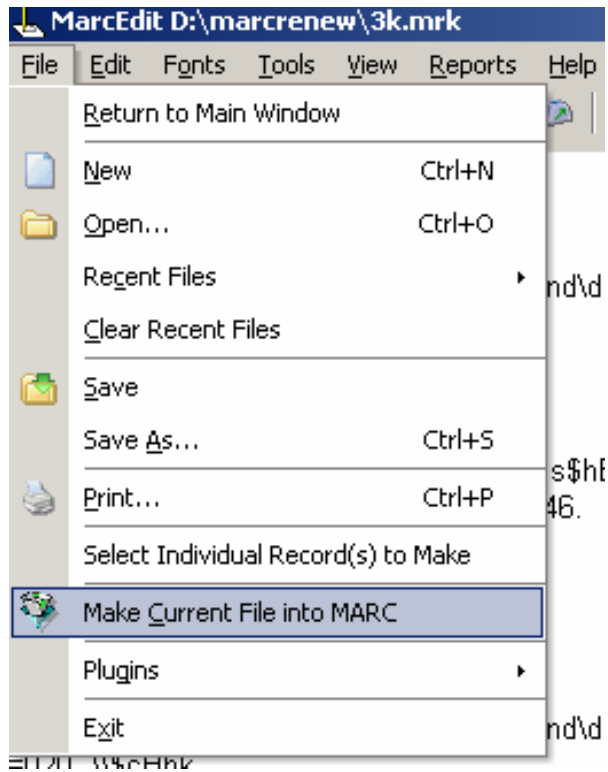
Open your mrk extension file double clicking it or go to the Home page of MarcEdit then click on MarcEditor



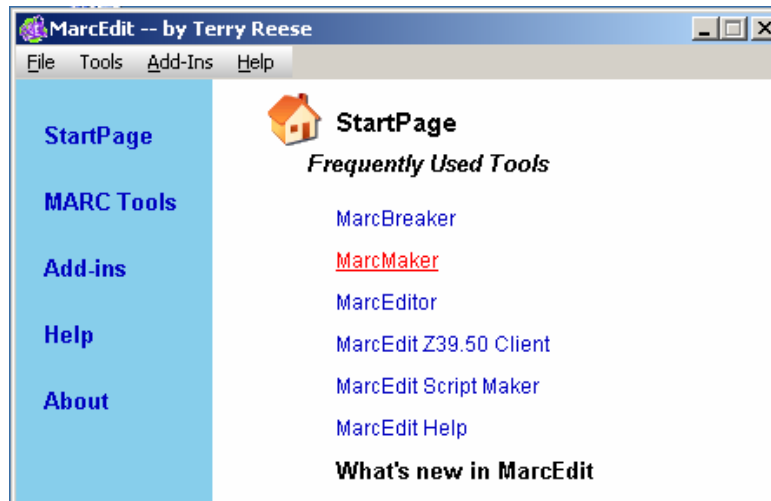
Use file menu to open your saved mrk file in MarcEditor



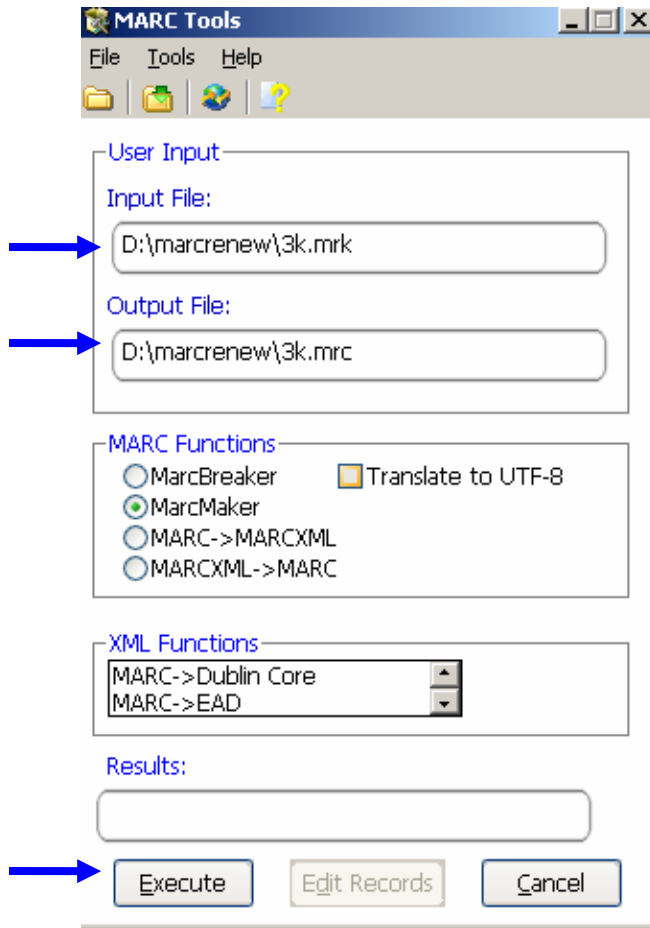
This opened file contain quotation marks ("), which you can remove using replace option in Edit Menu. Write " mark in find what box and keep second text box Replace with, blank and click Replace All button. Press save button on MarcEdit Tool Bar. Here we can add, delete or edit fields or subfields (all options are available in tools). File=>click Make Current File into MARC



Other method is, we can use save all files one by one after removing (") marks or editing and converting these mrk extension files into marc format using marc maker



Give the path of mrk extension saved file in input file and the path in output file according to your will. Extension of saved file should be .mrc and click execute. MarcMaker will show you number of records converted into MARC. See image below.



CDS ISIS to MARC Format Conversion

ISO FILE:

ISO is export file format of WINISIS.

Procedure:

MarcEdit has a few bugs in its wizard which converts data from WINISIS ISO format. You will have to take following precautionary measures.

Delete not required fields for LOC z39.5 Gateway Web OPAC from your FDT(field definition table) of WINISI then prepare ISO file because MarcEdit convert all field tags of ISO file and their data in MARC. These additional fields will be deleted with MarcEditor's "Edit Field Data options"

Prepare ISO=>MARC tag map file which will map ISO tags with MARC tags according to following format: ISO Tags (left side) => MARC Tags on right side

010=>001

100=>250

120=>260

130=>261

140=>262

015=>043

150=>300

160=>301

170=>302

180=>303

190=>440

020=>852

210=>504

220=>653

030=>082

040=>083

050=>100

060=>700

070=>245

080=>246

090=>247

910=>005

940=>020

MarcEdit while converting from ISO to MARC does not add \\\$ and subfield character (\\\$a is must for all fields except 001 and 005 MARC Tags fields) in fields data that starts from numeric values like not bold values given below.

=LDR 00428nam 22002051a 45e0

=001 228682

=082 005.133

=083 \\\$aR\94 S

=100 \\\$aRoyce, Tony

=245 \\\$aStructured cobol

=246 \\\$aan\introduction

=260 \\\$aLondon

=261 \\\$aMacmillan

=262 1992

=504 \\\$a"References": p. 165-166

=653 \\\$aCOBOL (Computer program language)

=005 20001007

=920 \\\$aSMA

=930 \\\$aSMA

=043 \\\$aPU\Library

If you have not used subfields for Imprint (^aplace^bpublisher^cyear) and collation (^apages^b illustration^c dimensions) in WINISIS database and treated them as separate field, then you will have to make these fields as subfield and insert it in their field at appropriate place

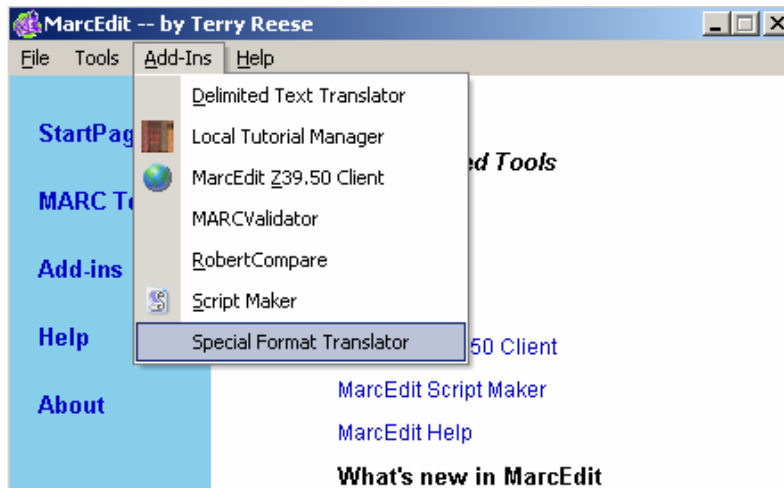
Export in ISO-2709 Format Wizard:

First of all open your main data file in CDS ISIS. Then export this file in any drive. When you will export file this window will be open then you will give the range of records (not more than 3000) in range options and give the separator as shown in subfield separator.

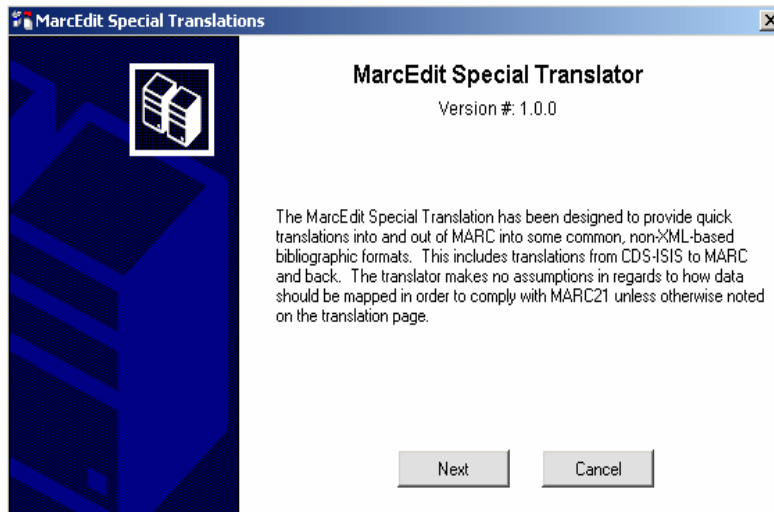
Then click on ok button. After completing the procedure in CDS ISIS then Open the Marc Editor



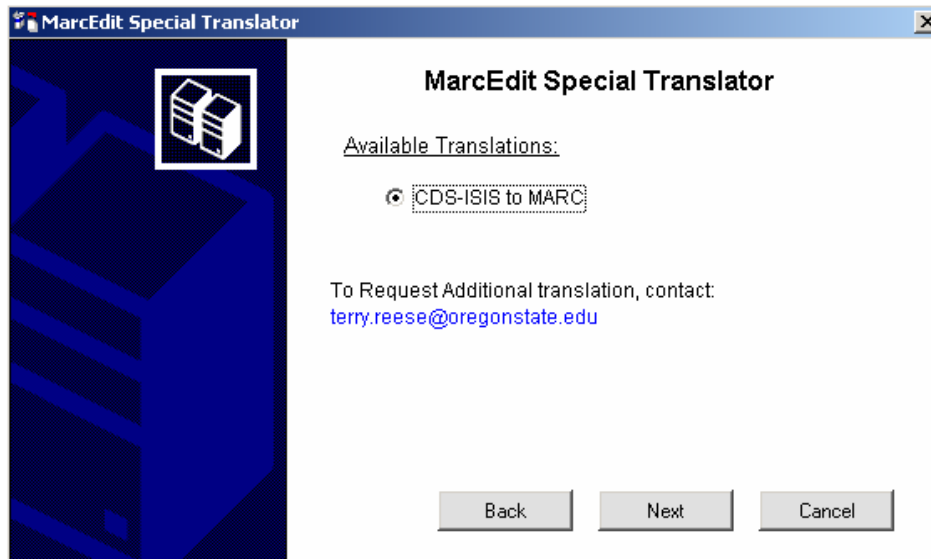
Click on Add-Ins and select the option Special Format Translator.



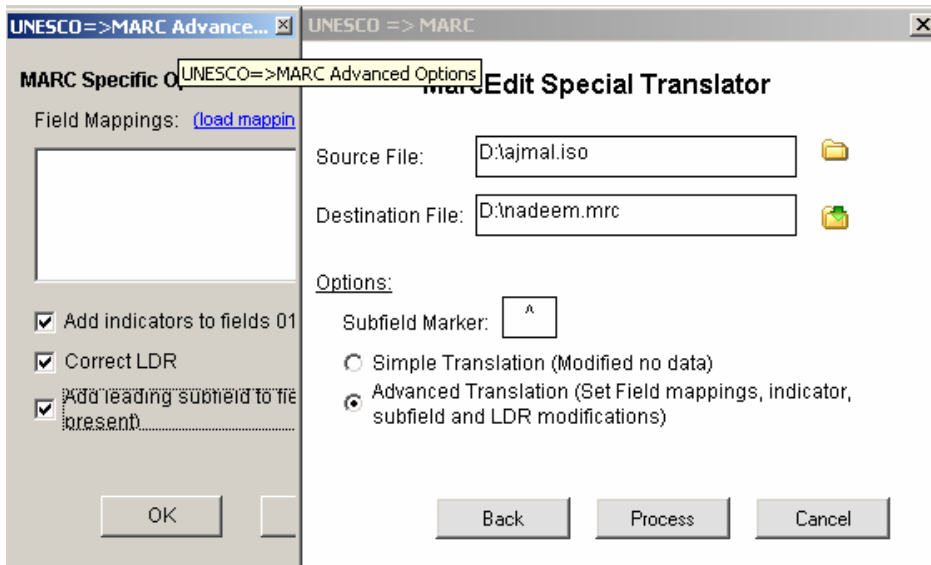
Click on the option (Special Format Translator) another window will be open. Click on Next button.



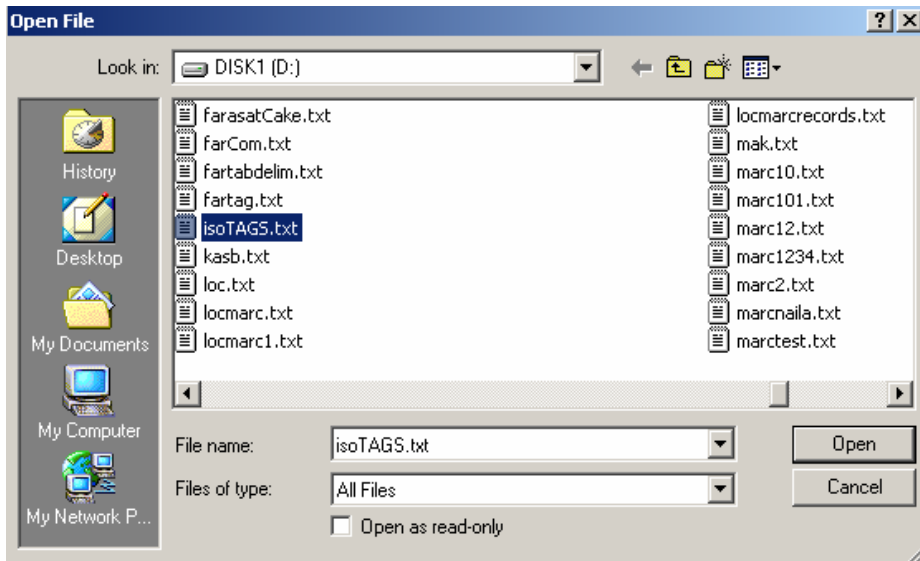
MarcEdit Translation window will appear. Select the option CDS-ISIS to Marc and click on Next button.



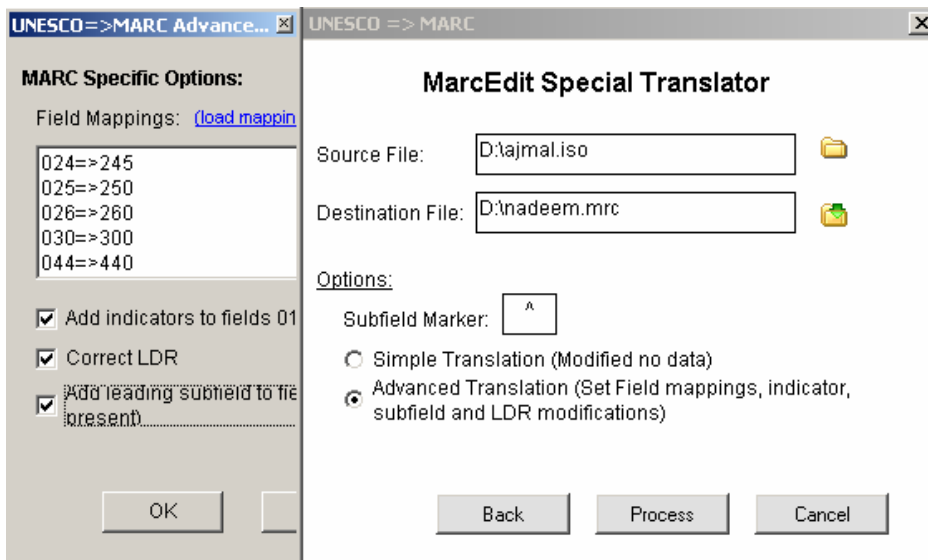
You should give the saved iso file path in new window as shown below. Select advance Translation option. Check all three options as shown in the following window. You can either define mapping of CDS ISIS – MARC tags in space given below Filed Mapping or select text file, where these tags were mapped.



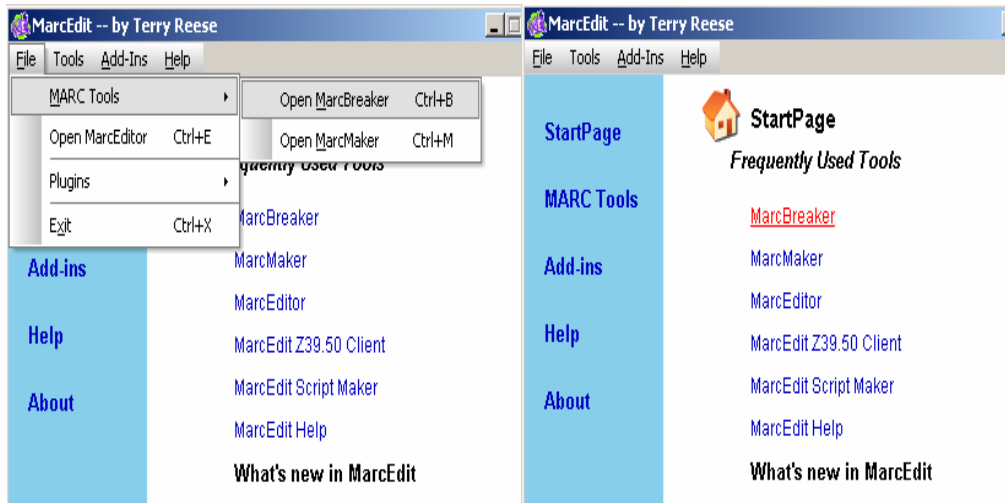
When you click on “load mapping” link, a prompt will appear asking to open your saved mapping tags file. Select yours saved ISO tags file as shown in the Screenshot select the IsoTAGS.txt



CDS ISIS - MARC Mapping Tags will appear in the empty box as shown below.

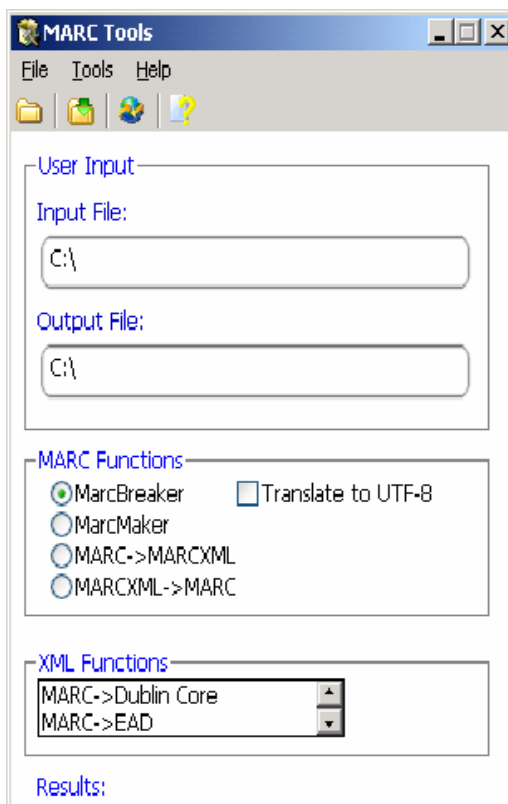


The MARC Tools dialog can be accessed from two locations. The first by selecting the File/MARC Tools option in the menu and the second by selecting the MARC Tools icon on the main screen. See the images below.



When the MARC Tools Dialog opens, you will see the following options:

Input File
 Output File
 Functions
 MarcBreaker
 MarcMaker
 MARC => XML
 MARC => Dublin Core



Input File: The input file represents the source file, or the file that the action is to take place upon. The input file can be set by either:

- Typing the file name into the Input File Dialog.
- Clicking on the Open icon in the tool bar.

Output File: The output file represents the destination file, or the file where the product will be saved. The output file can be set by either:

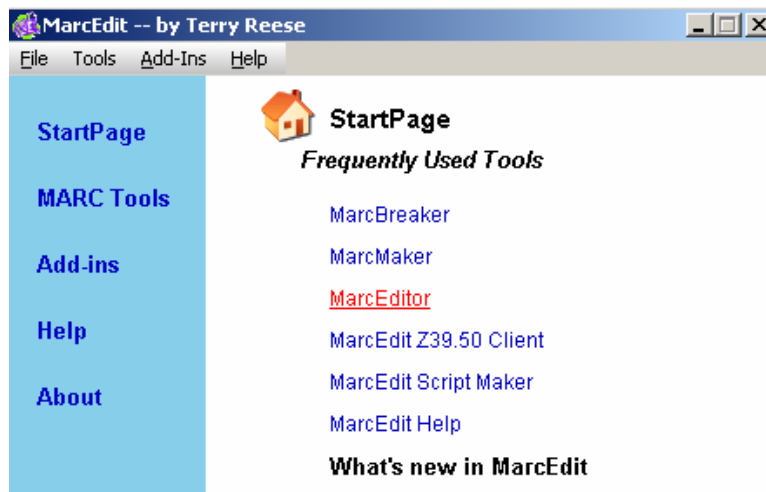
- Typing the file name into the Output File Dialog
- Clicking on the Save icon in the tool bar.

Please note, if an output file of the same name currently exists, MarcEdit will attempt to overwrite it

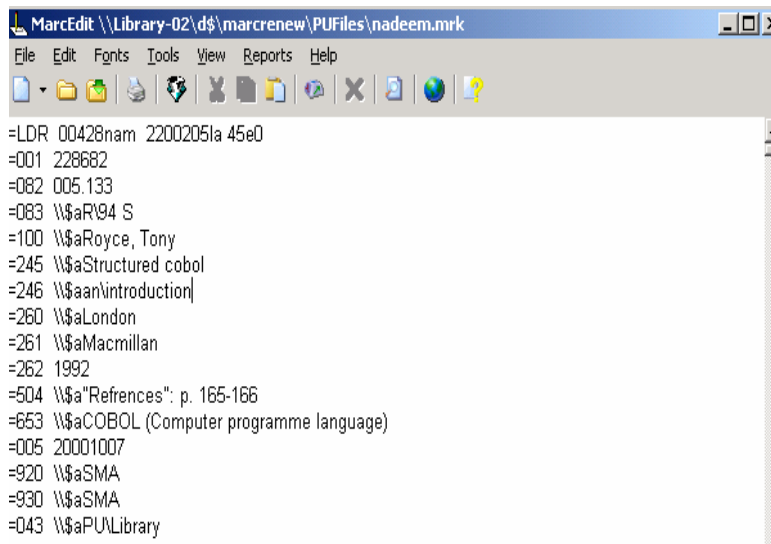
Example

Give Nadeem.mrc path in input file and save Nadeem.mrk as output file. Now execute it.

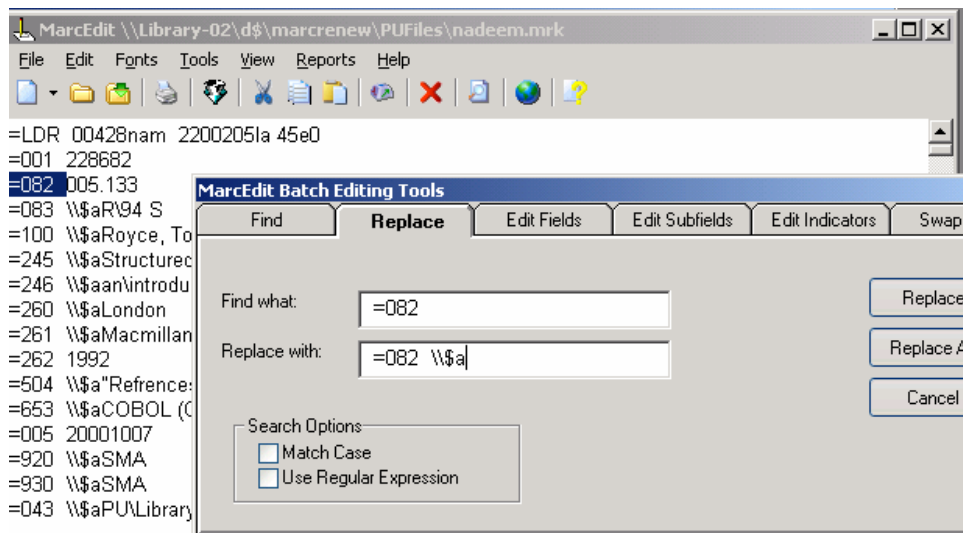
Click on MarcEditor option on the home page of MarcEdit.



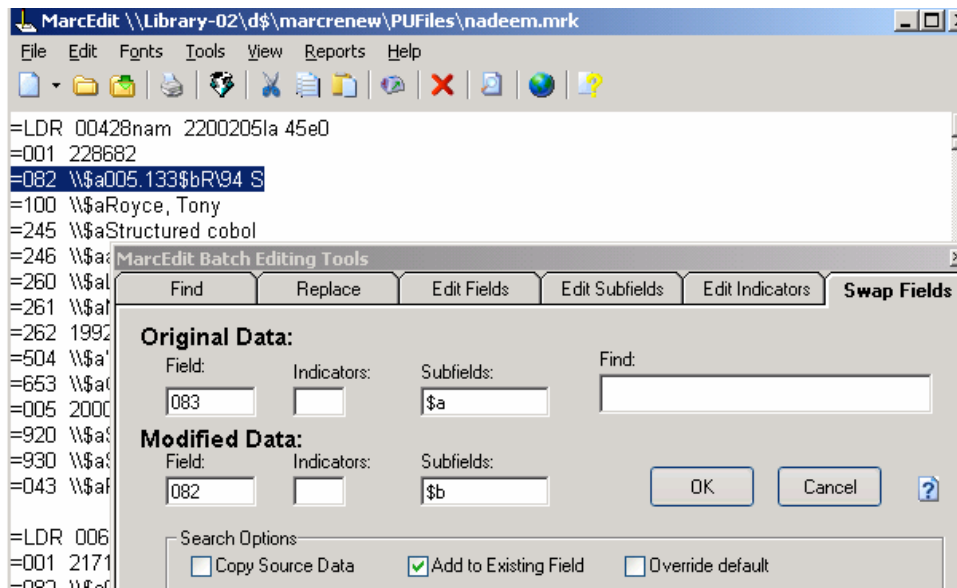
Open your saved file Nadeem.mrk in MarcEditor.



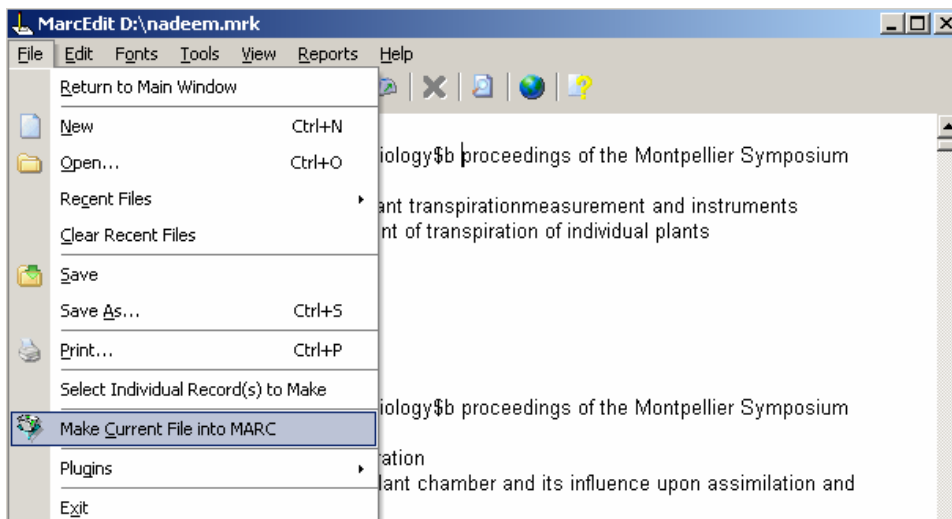
After opening this file remove all the brackets sign like [] {} and <> swap the fields and edit the field and subfields. For example if you want to edit the field 082 then the procedure will be as follows. first of all go to the edit menu then select the option Edit field data then the another window will be open in this window select the option replace then write in find what option =82 and replace with=082\\\$a then select the option Replace all, all the modifications will appear in your open file.



And if you want to swap any field then the procedure will be in this shape as shown in this picture. First of all go to the edit menu then select the option swap field data then write the field which you want to swap with another field and in modified data option give the fields in which you want to convert the original field.



Save the file changes. Click on file menu and select the option Make current file into Marc this option will automatically convert the file in marc communication format. This procedure is shown in the image below.



Test your records after running the zebra server and the procedure will be same as it is mentioned in zebra help.

Zebra Server

Introduction:

Zebra is a high-performance, general-purpose structured text indexing and retrieval engine. It reads records in a variety of input formats (e.g. email, XML, MARC) and provides access to them through a powerful combination of Boolean search expressions and relevance-ranked free-text queries.

Zebra supports large databases (tens of millions of records, tens of gigabytes of data). It allows safe, incremental database updates on live systems. Because Zebra supports the industry-standard information retrieval protocol, Z39.50, you can search Zebra databases using an enormous variety of programs and toolkits, both commercial and free, which understand this protocol. Application libraries are available to allow bespoke clients to be written in Perl, C, C++, Java, Tcl, Visual Basic, Python, PHP and more.²

Zebra is free software, available under the GPL license. It may be used by anyone without charge. If you wish to incorporate Zebra into a commercial software distribution, please contact us about alternative licenses.

Features:

This is an overview of some of Zebra's most important features:
Very large databases: logical files can be automatically partitioned over multiple disks.

Arbitrarily complex records. The internal data format is a structured format conceptually similar to XML or GRS-1, which allows lists, nested structured data elements and variant forms of data. Robust updating - records can be added and deleted "on the fly" without rebuilding the index from scratch. Records can be safely updated even while users are accessing the server. The update procedure is tolerant to crashes or hard interrupts during database updating - data can be reconstructed following a crash.

Configurable to understand many input formats. A system of input filters driven by regular expressions allows most ASCII-based data formats to be easily processed. SGML, XML, ISO2709 (MARC), and raw text are also supported.

Searching supports a powerful combination of Boolean queries as well as relevance-ranking (free-text) queries. Truncation, masking, full regular expression matching and "approximate matching" (e.g. spelling mistakes) are all handled.

Index-only databases: data can be, and usually is, imported into Zebra's own storage, but Zebra can also refer to external files, building and maintaining indexes of "live" collections.

YAZ Client

Introduction:

YAZ is a programmers' toolkit supporting the development of Z39.50/SRW/SRU clients and servers. Z39.50-2003 (version 3) as well as SRW/SRU version 1.1 are supported in both the client and server roles.

The current version of YAZ includes support for the industry standard ZOOM API for Z39.50. This API vastly simplifies the process of writing new clients using YAZ, and it reduces your dependency on any single toolkit.

YAZ can be used by itself to build Z39.50 applications in C. For programmers preferring another language, YAZ has three language bindings to commonly used application development languages. We provide the YAZ++ toolkit for applications in C++, PHP/YAZ for application building in PHP, Simple Server for server applications in Perl, and NET::Z3950 for client applications in Perl. (If you are looking for a Z39.50 toolkit in Java, we recommend that you check out Knowledge Integration's open source offering, JZKit.)

Libraries and vendors can freely download YAZ and its associated toolkits to build their own Z39.50 applications. Alternatively, they can use the consultancy and support services of Index Data to take advantage of our decade of experience building and supporting Z39.50 toolkits and applications.

YAZ has been widely considered the leading toolkit for building Z39.50 clients and servers since its first release in 1995. During a decade of active service, the YAZ toolkit has been battle-hardened in every conceivable type of employment, and grown in its support for even the more esoteric aspects of the Z39.50 and SRW protocols.³

Z39.50 Gateway

Definition:

Z39.50 is a national and international (ISO 23950) standard defining a protocol for computer-to-computer information retrieval. Z39.50 makes it possible for a user in one system to search and retrieve information from other computer systems (that have also implemented Z39.50) without knowing the search syntax that is used by those other systems. Z39.50 was originally approved by the National Information Standards Organization (NISO) in 1988.⁴

Contact details for Zebra & Yaz Help

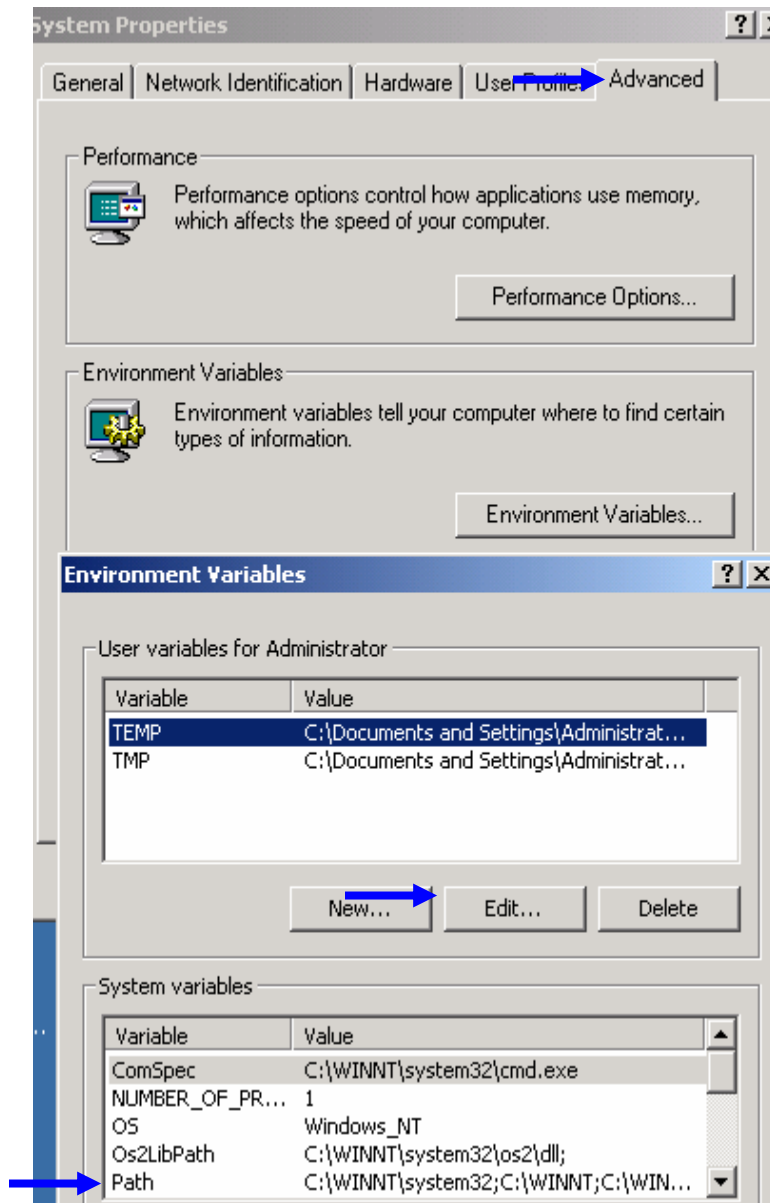
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46 South Lincoln Street
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Phone: +1 603-209-6853

Zebra Server & YAZ Client Configuration:

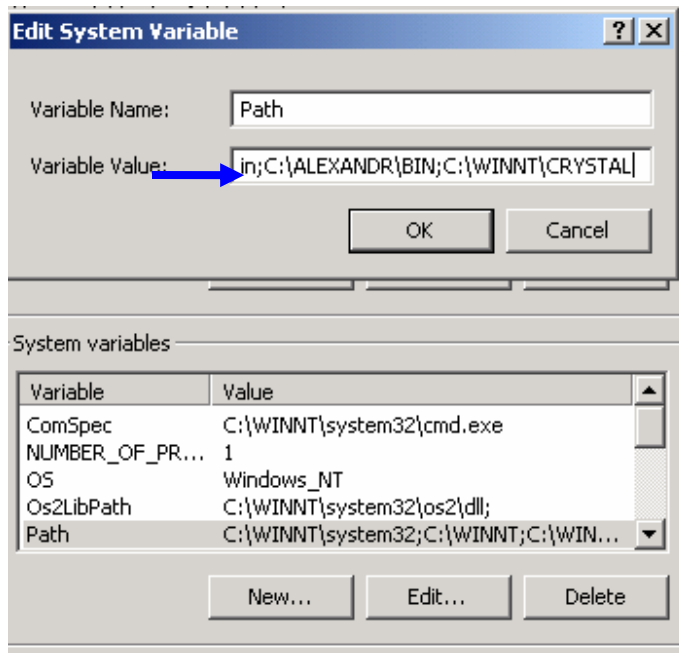
Installation:

Download Zebra Server and YAZ Client for windows from " <http://indexdata.dk/> "and click on .exe files one by one. Follow instructions and click on next button. By default Zebra and YAZ install their folders in Program Files.

1. After installation set the path to the directory "C:\Program Files\Zebra\Bin" and also "C:\Program Files\YAZ\bin".
2. To set path right click on My Computer/Properties on your desktop. Click on Advance and then environment variable.



3. Select Path and click on edit.



4. Paste the following in variable value C:\Program Files\Zebra\Bin;C:\Program Files\YAZ\bin and click ok.
5. Delete file present in records folder. Copy the data file (s) whose format is in USMARC into the directory "C:\Program Files\Zebra\test\usmarc\records"
6. In this scenario you do not need to change the configuration of the server.
7. Now open the command prompt (start-run write here cmd and click ok) and go to the directory "C:\Program Files\Zebra\test\usmarc" and type the following command: "zebraidx update records". This command shall create the indexes of the records that the zebra server will be using.

```

C:\WINNT\system32\cmd.exe
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>cd program files
C:\Program Files>cd zebra
C:\Program Files\Zebra>cd test
C:\Program Files\Zebra\test>cd usmarc
C:\Program Files\Zebra\test\usmarc>zebraidx update records
15:32:25-22/05 [log] Zebra version 1.3.24 $Date: 2005/02/09 16:34:45 $
15:32:25-22/05 [log] zebra_start zebra.cfg
15:32:25-22/05 [log] zebra_register_open rw = 1 useshadow=0 p=00585E58,n=,rp=(none)
15:32:26-22/05 [log] profilePath=../..../tab cwd=C:\Program Files\Zebra\test\usmarc
15:32:26-22/05 [log] updating records
15:32:26-22/05 [log] dir records
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 0
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 366
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 732
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 2101
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 3043
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 4076
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 5076
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 6569
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 7447
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 8238
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 8924
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 9592
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 10480
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 11606
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 13039
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 14369
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 15172
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 15938
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 17262
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 18821
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 19976
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 20891
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 21944
15:32:26-22/05 [log] add grs.marc.usmarc records/sample-marc 22980
15:32:26-22/05 [log] zebra_end_trans
15:32:26-22/05 [log] sorting section 1
15:32:26-22/05 [log] Iterations . . . 921
15:32:26-22/05 [log] Distinct words . . . 594
15:32:26-22/05 [log] Updates . . . 580
15:32:26-22/05 [log] Deletions . . . 0
15:32:26-22/05 [log] Insertions . . . 14
15:32:26-22/05 [log] zebra_register_close p=00585E58
15:32:27-22/05 [log] Records: 24 i/u/d 24/0/0
15:32:27-22/05 [log] zebra_stop
C:\Program Files\Zebra\test\usmarc>

```

8. Now runs the zebra server by typing the command "zebrasrv @:2100". Kindly note that you are in the same directory as mentioned in step 7.
9. Whenever you want to update some records, stop zebra server by pressing CTRL+C simultaneously and just copy marc file (s) zebra\test\usmarc\records folder.
10. As you install, Zebra Server it would not index fields normally required to you, Subject, DDC NO, ACC NO(Local Control etc), you will have to edit following files usmarc.abs as follows(contents of file):

```
# $Id: usmarc.abs,v 1.1 2002/10/22 12:51:09 adam Exp $
```

```
name usmarc
reference USmarc
attset bib1.att
tagset usmarc.tag
```

```
marc usmarc.mar
```

```
esetname B usmarc-b.est
esetname F @
```

```
# Tag 035 subfield mapped to Identifier-standard
elm 035 Identifier-standard -
elm 035/? Identifier-standard -
```

elm 001 Local-number !:w,!:p

elm 020 ISBN -
 elm 020/? ISBN !:w,!:p
 elm 020/?/a ISBN !:w,!:p

elm 082 Dewey-classification -
 elm 082/? Dewey-classification !:w,!:p
 #elm 082/?/a Dewey-classification !:w

All 245 subfields mapped to title (word) and
 # 245 subfield a mapped to tile (phrase).

elm 245 title -
 elm 245/? title !:w
 elm 245/?/a title !:w,!:p

100 mapped to Author-name-personal and Author.

elm 100 Author-name-personal-
 elm 100/? Author-name-personal!:w,!:p,Author:w,Author:p

110 mapped to Author-name-corporate and Author

elm 110 Author-name-corporate -
 elm 110/? Author-name-corporate !:w,!:p,Author:w,Author:p

111 mapped to Author-name-conference and Author

elm 111 Author-name-conference -
 elm 111/? Author-name-conference !:w,!:p,Author:w,Author:p

110 mapped to Author-name-corporate and Author

elm 710 Author-name-corporate -
 elm 710/? Author-name-corporate !:w,!:p,Author:w,Author:p

110 mapped to Author-name-corporate and Author

elm 700 Author-name-personal-
 elm 700/? Author-name-personal!:w,!:p,Author:w,Author:p

Tag 260 subfield a mapped to Place-publication

elm 260 Place-publication -
 elm 260/? Place-publication -
 elm 260/?/a Place-publication !:w
 elm 260/?/b Publisher !:w
 elm 260/?/c Date !:w

#Tag 650, 651 mapped to subject

elm 650 Subject-heading -
 elm 650/? Subject-heading !:w,!:p

elm 651 Subject-heading -
 elm 651/? Subject-heading !:w,!:p

elm 653 Subject-heading -
 elm 653/? Subject-heading !:w,!:p

elm 600		Subject-heading	-
elm 600/?		Subject-heading	! :w,! :p
elm 610		Subject-heading	-
elm 610	<i>/?</i>	Subject-heading	! :w,! :p
elm 611		Subject-heading	-
elm 611	<i>/?</i>	Subject-heading	! :w,! :p
elm 630		Subject-heading	-
elm 630	<i>/?</i>	Subject-heading	! :w,! :p
elm 690		Subject-heading	-
elm 690	<i>/?</i>	Subject-heading	! :w,! :p

11. Be back one step zebra\usmarc\test and delete all *.mf files then go to start =>cmd and run zebraidx as mentioned earlier in help file.
12. You can make many databases and run simultaneously on zebra server just copying and renaming of usmarc folder e.g. "C:\Program Files\Zebra\test\fastnu ". You will have to run zebra on different port zebrasrv @:2200 and likewise you have to run Yaz-client on same port to connect this database.
13. Now open another command prompt (start-run write here cmd and click ok and run the YAZ client by typing the following command "yaz-client localhost:2100".
14. Type "find <keyword>".
15. In case the records are returned type "show 1"

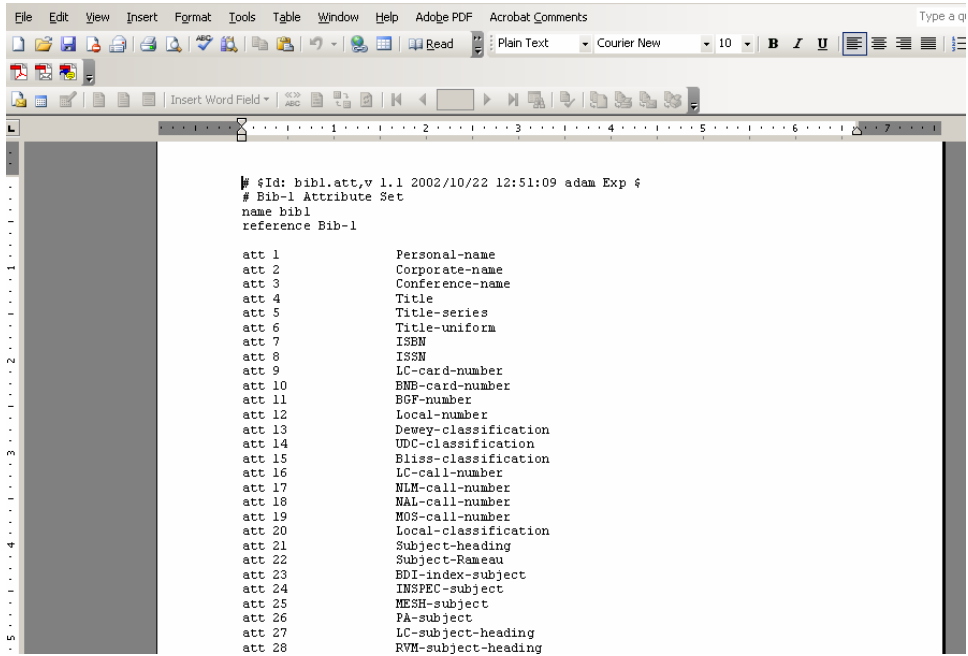
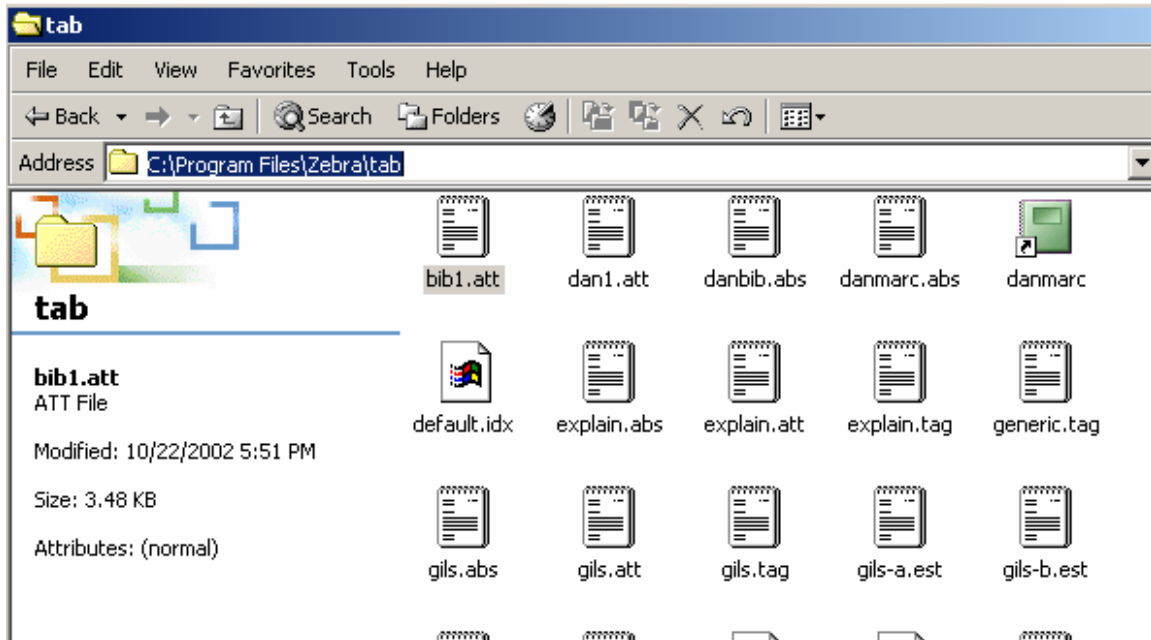
```

C:\WINNT\system32\cmd.exe - yaz-client localhost:2100
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>yaz-client localhost:2100
Connecting...OK.
Sent initrequest.
Connection accepted by v3 target.
ID      : 81
Name    : Zebra Information Server/GFS/YAZ
Version : Zebra 1.3.24/1.47/2.0.34 WIN32 Release
Options : search present delSet triggerResourceCtrl scan sort
medResultSets
Z> find computer
Sent searchRequest.
Received SearchResponse.
Search was a success.
Number of hits: 30, setno 1
SearchResult-1: computer(30)
records returned: 0
Z> show 1
Sent presentRequest (1+1).
Records: 1
[Default]Record type: USmarc
001      11224466
003 DLC
005 0000000000000000.0
008 910710c19910701nju          00010 eng
010      $a 11224466
040      $a DLC $c DLC
050 00 $a 123-xyz
100 10 $a Jack Collins
245 10 $a How to program a computer
260 1 $a Penguin
263      $a 8710
300      $a p. cm.
nextResultSetPosition = 2
Z> _

```

You can search specific field of zebra server through Yaz-client. Type `z>find attr 1=4` for title word find `@attr 1=4 science` find `@attr 1=1003 ajmal` for author `@attr 1=7` for ISBN, `@attr 1=12` for Local no `@attr 1=21` for Subject-heading etc in CMD after running Yaz- Client as mentioned in above steps. You can select attribute number from bib1.att file open it in Ms Word and use attr number from this file bib1.att. This file is located in zebra\tab folder. See image below.



```

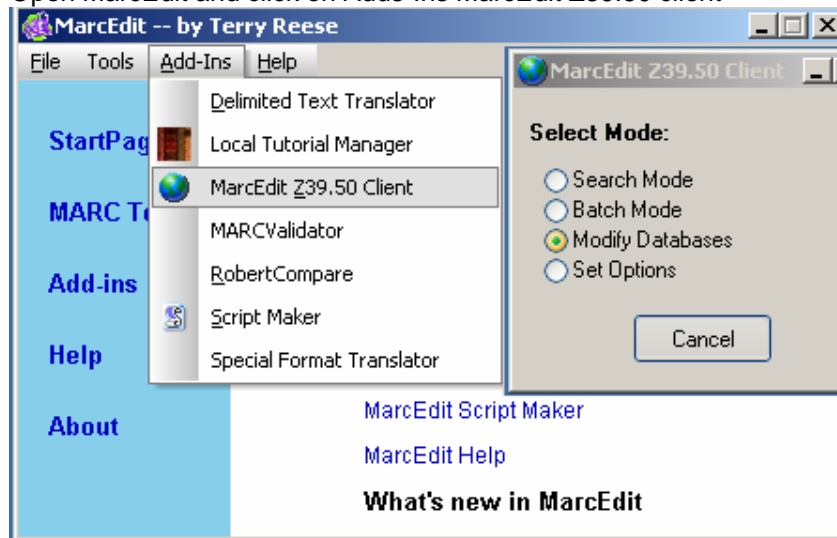
C:\WINNT\system32\cmd.exe - yaz-client localhost:2100
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>yaz-client localhost:2100
Connecting...OK.
Sent initrequest.
Connection accepted by v3 target.
ID      : 81
Name    : Zebra Information Server/GFS/YAZ
Version: Zebra 1.3.24/1.47/2.0.34 WIN32 Release
Options: search present delSet triggerResourceCtrl scan sort extendedServices na
medResultSets
Z> find @attr 1=7 0385062443
Sent searchRequest.
Received SearchResponse.
Search was a success.
Number of hits: 1, setno 1
SearchResult-1: 0385062443(1)
records returned: 0
Z> show 1
Sent presentRequest (1+1).
Records: 1
[Default]Record type: USmarc
001 2197190
005 20050125153542.0
008 731001s1973 nyu 000 1 eng
035 $9 <DLC> 73000011
906 $a 7 $b cbc $c orignew $d 1 $e opcn $f 19 $g y-gencatlg
010 $a 73000011
020 $a 0385062443
040 $a DLC $c DLC $d DLC
050 00 $a PZ3.C67754 $b Be $a PS3505.027967
082 00 $a 813/.5/2
100 1 $a Coleman, Lonnie. $d 1920-
245 10 $a Beulah Land. $c by Lonnie Coleman.
250 $a [1st ed.]
260 $a Garden City, N.Y., $b Doubleday. $c 1973.
300 $a 495 p. $c 25 cm.
350 $a $8.95
984 $a gsl
991 $b c-GenColl $h PZ3.C67754 $i Be $p 00000756726 $t Copy 1 $w BOOKS
nextResultSetPosition = 2

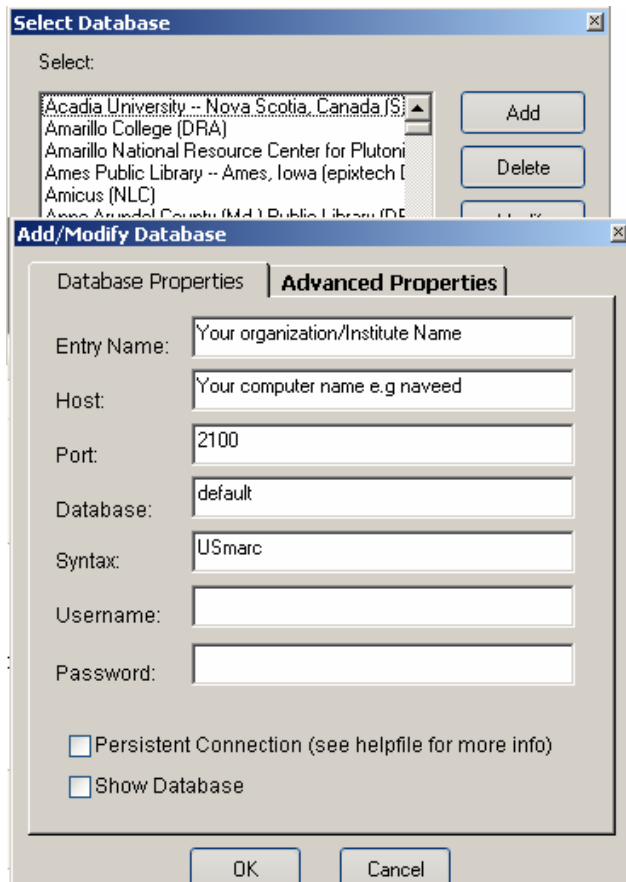
```

Note: Yaz-Client can be accessed and records in your zebra server can be searched using Marcedit z39.50 client.

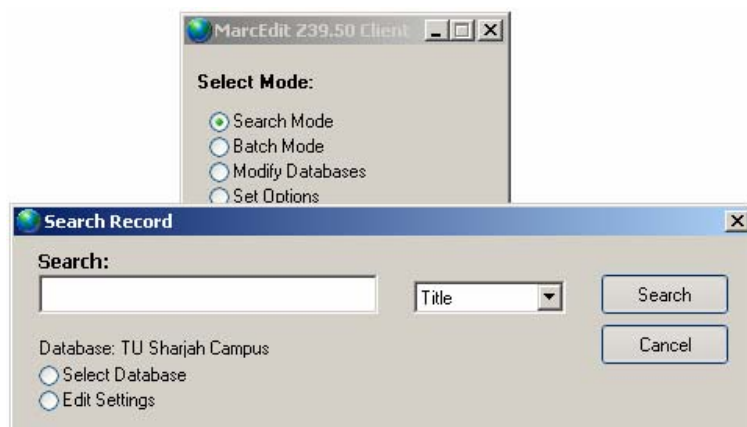
- a) Open MarcEdit and click on Adds-Ins MarcEdit Z39.50 client



- b) Select modify mode as shown in above screenshot.
- c) Click on add tab in new modify database window as shown below



- d) Add following information in Add / Modify database window. (i)Entry Name: Your Institute name (ii) Host: your computer name (iii) Port: 2100 (iv) Database: default.
- e) Your Institute name will be added in list of available databases in Marcedit Z39.50 Client.
- f) You can search your marc records selecting search mode from MarcEdit Z39.50 Client. Just Open Marcedit Z39.50 Client and select search mode.
- g) Type name of institute, which you have added in above steps and select available search options e.g. Author, Title, Subject, ISBN etc.



[Enlisting Your WebOPAC at Library of Congress Z39.50 gateway](http://www.loc.gov/z3950/test.html)

Requirements:

1. Your data in Marc Format
2. Zebra server and YAZ - Client installed on System, which has Live IP
3. Live Or Static IP

After converting your data in Marc format and testing it on your local machine by running Zebra serve and YAZ-Client you are ready to test it at following link:

<http://www.loc.gov/z3950/test.html>

You should provide following information at this test page.

- a) Address = 213.42.224.2 (your Live IP)
- b) Port = 2100
- c) Database Name = default

See Image below.

Test Z39.50 Search Form (Stateless Gateway Software)

First Record to View: Maximum Records to Retrieve:

Address: Port:

Database Name: Record Syntax: Element Set Name:

Enter Term 1:

AND OR AND NOT

Enter Term 2:

AND OR AND NOT

Enter Term 3:

AND OR AND NOT

Enter Term 4:

Contact Persons> > Larry E. Dixon
 ldix@loc.gov
 Network Development and MARC
 Standards Office, LM639
 Library of Congress
 Washington, D.C. 20540-4402
 ldix@loc.gov

Internet:

Telephone: (202) 707-5807
 Fax: (202) 707-0115

Email this information to above mentioned Contact person

Internet address of your Z39.50 server

202.83.174.51 (Live or Static IP)

2. Port number used by your server

2100

3. Database name(s) supported

Default

Name of Organization

**National University of Computer and Emerging Sciences -- Faisal Town, Lahore
Pakistan**

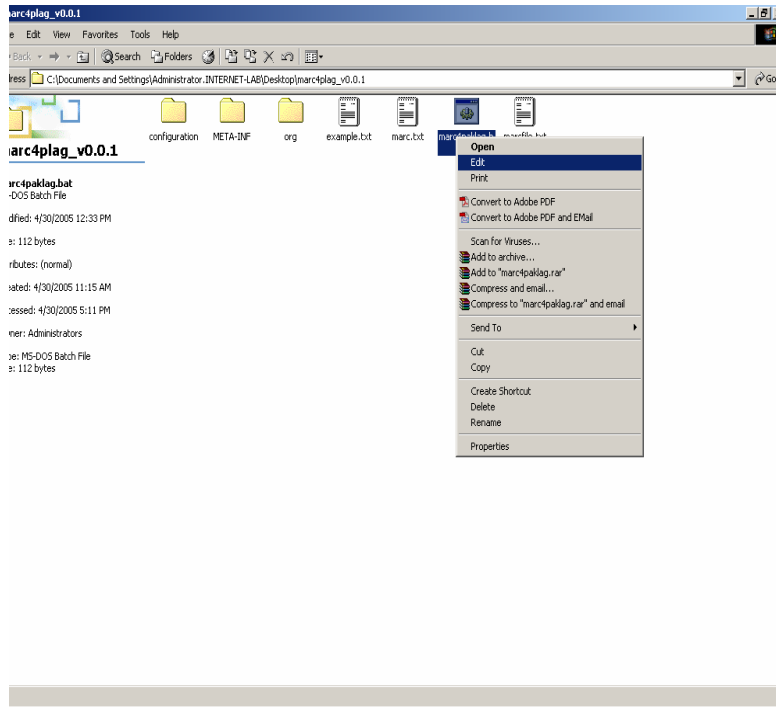
MARC and CDS ISIS to LIMS Conversion

Requirement:

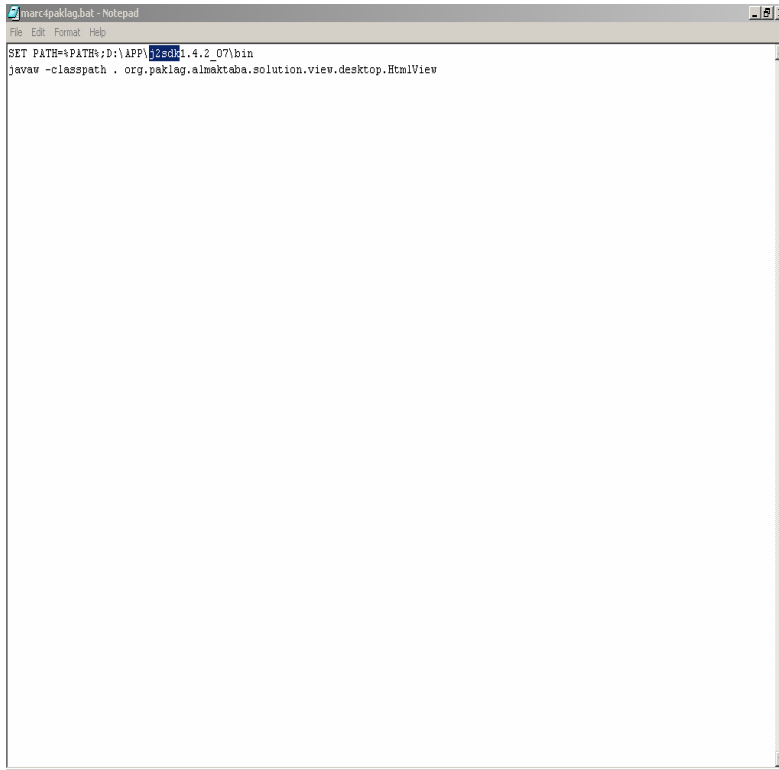
J2SE v 1.4.2_08 JRE" must be installed before running the .bat file It can be downloaded from:
<http://java.sun.com/j2se/1.4.2/download.html>

Procedure:

1. Right Click on marc4pakplag.bat file in marc4pakplag\configuration folder and edit it in notepad.

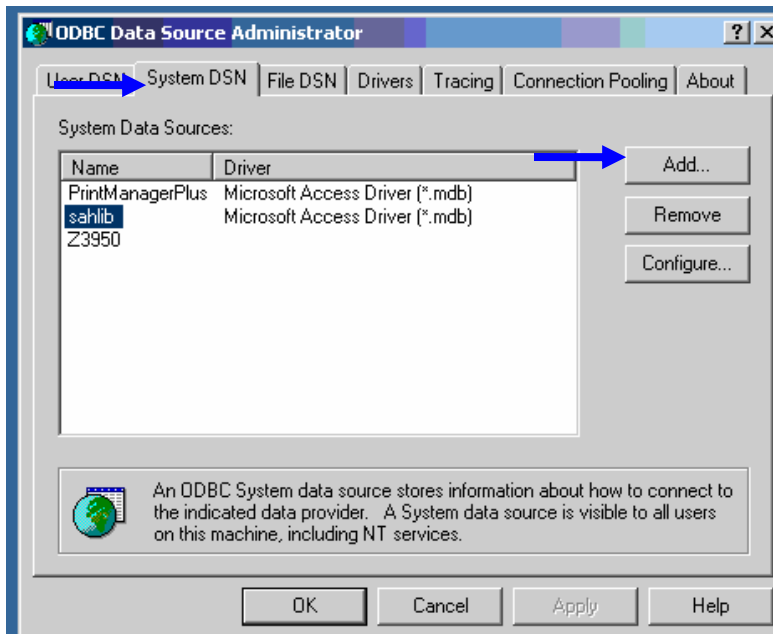


2. Set path to SET PATH=%PATH%;D:\APP\j2sdk1.4.2_07\bin

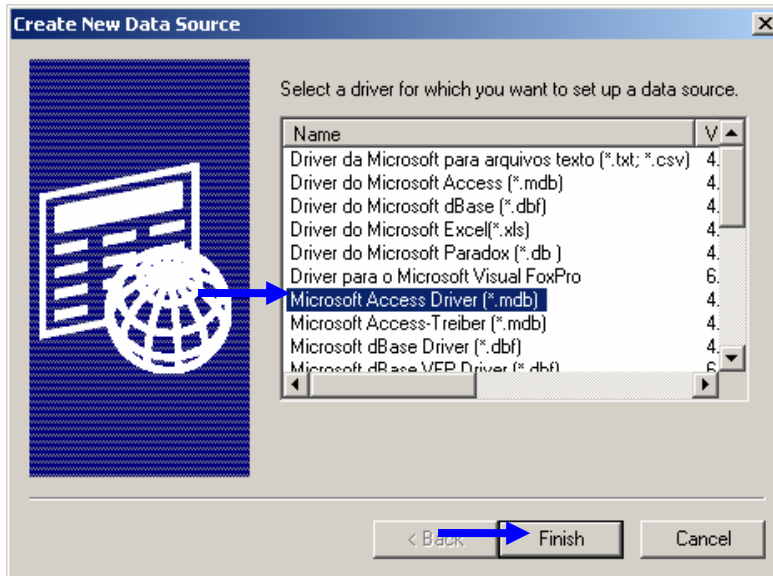


```
marc4paklag.bat - Notepad
File Edit Format Help
SET PATH=%PATH%;D:\APP\j2ee04.4.2_07\bin
javaw -classpath . org.paklag.almaktaba.solution.view.desktop.HtmlView
```

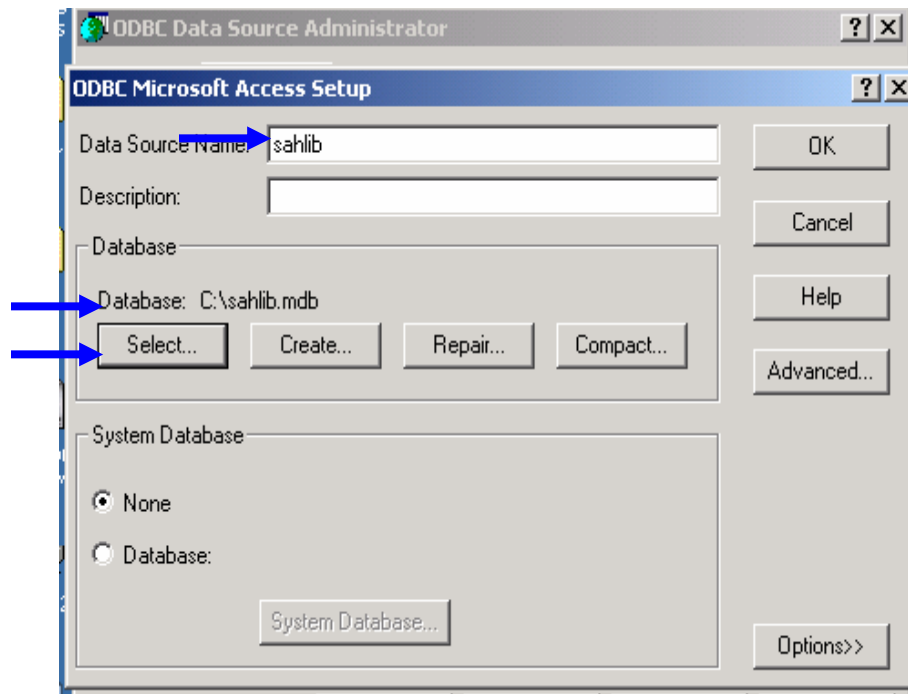
3. Open control panel from my computer on your desktop and Administrative tools then Data Source (ODBC), select System DSN option.



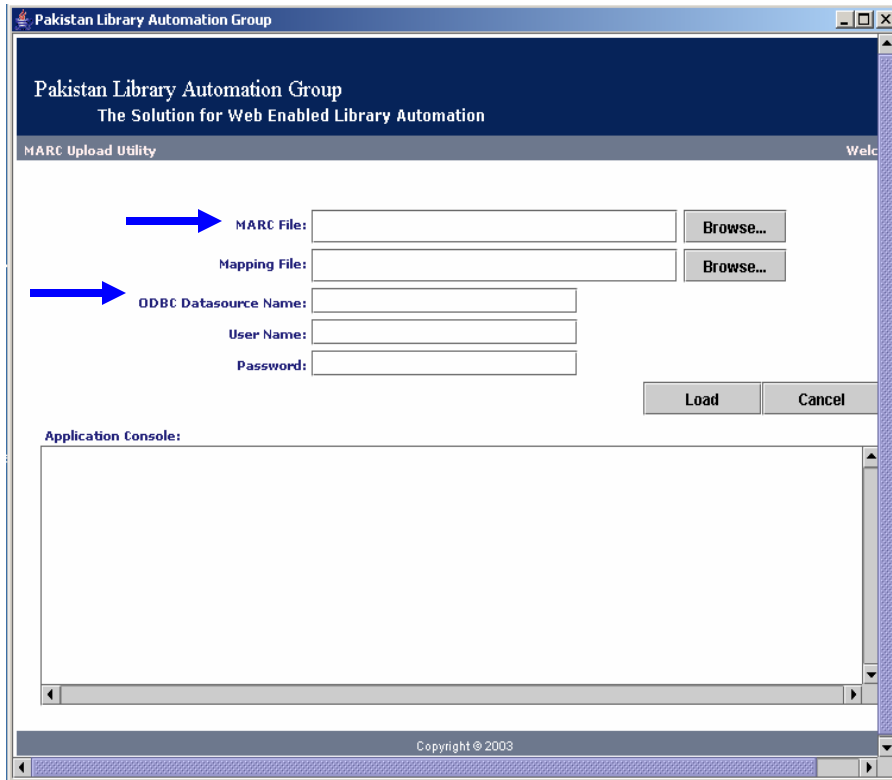
4. Click on Add button and select Microsoft Access Driver (*.mdb) then click on finish.



5. Type sahlib in New Data Source filed and select the hard disk path, where you have LIMS and click OK.



6. Double click on marck4paklag.bat file to run utility.



7. Edit marc.properties file, which is located in paklag-marc\ configuration folder. First property line in this file should have name of table in LIMS where you want to save your records e.g. lims.table = Name of the Table. If you are converting data from Marc format to LIMS you don't have to define mapping. In case of converting data from iso file (CDS ISIS) to LIMS define fields mapping of CDS ISIS & LIMS in iso.properties file.

If a field is set to repeatable it should be defined at end of properties file e.g. lims.repeat.Subject = YES. IT is case sensitive and user must use same case as used in the properties file.

8. Provide path of MARC file, marc.properties file and type "sahlib" in ODBC Database Source Name field and click upload.

MARC Upload Utility

MARC File:

Mapping File:

ODBC Datasource Name:

User Name:

Password:

Application Console:

```

2005-07-02 12:19:227 [INFO ] org.paklag.marc.controller.MarcController Initialising load process ...
2005-07-02 12:19:277 [INFO ] org.paklag.marc.controller.MarcController Loading the property file ...
2005-07-02 12:19:297 [INFO ] org.paklag.marc.controller.MarcController Loading table defined in property file ...
2005-07-02 12:19:327 [INFO ] org.paklag.marc.controller.MarcController Loading columns defined in property file ...
2005-07-02 12:19:357 [INFO ] org.paklag.marc.controller.MarcController Loading the Jdbc-Odbc driver ...
2005-07-02 12:19:387 [INFO ] org.paklag.marc.controller.MarcController Connecting to the database ...
2005-07-02 12:19:477 [INFO ] org.paklag.marc.controller.MarcController Searching the table nadeem in database ...

```

The total numbers of uploaded records are shown at the bottom of Application console space.

All records will be appended in the table that was defined in marc-properties file. One can changes its accession no., price, entry date etc and these records will be appended in the original SAHLIB table using any query or by copy paste.

Note: If you are converting data from ISO to LIMS, provide path of iso.properties file

References:

1. <http://www.loc.gov/marc/umb/um01to06.html#part1>
2. Sebastian Hammer et al. Zebra - User's Guide and Reference
3. www.indexdata.dk/yaz
4. <http://www.loc.gov/z3950/gateway.html#about>

List of most Frequent Used Marc TAGS

Sr.#	Name of Field	Tag	Example
1	Author (personal name main entry)	100	1\$aCook, Robin,\$d1940-
2	Title Statement (which includes the title, other title information, and the statement of responsibility)	245	10\$aHix nix stix pix :\$ba kaleidoscope of talk and events /\$cDavid Llewellyn Burdett.
3	Edition	250	\\\$a1st ed.
4	physical description (often referred to as the "collation" when describing books)	300	\\\$a278 p., [8] p. of plates :\$bill. ;\$c18 cm.
5	ISBN	020	\\\$a0312916787 :\$c{dollar}3.95 (U.S.)
6	DDC #	082	00\$a808.83/1

7	LC Control #	010	\\\$a 78007615
8	Publication Information(Place of Publication etc)	260	\\\$aNew York :\$bPutnam,\$cc1978.
9	Series statement/added entry	440	\0\$aInternational computer science series
10	Bibliography, Etc. Note	504	\\$aIncludes bibliographical references (p. [663]-677) and index.
11	topical subject heading	650	\0\$aSoftware engineering.
12	personal name added entry (joint author, editor, or illustrator)	700	1\\$aShrake, Edwin,\$ejoint author.

Note: List of Full Detailed Marc Tags is available at:

<http://www.itsmarc.com/crs/Bib1468.htm>

Some Important Links

1. <http://www.ubka.uni-karlsruhe.de/hylib/en/kvk.html>
2. <http://www.fcla.edu/>
3. http://www.loc.gov/cgi-bin/zgstart?ACTION=INIT&FORM_HOST_PORT=/prod/www/data/z3950/encybrit.html,z3950.eb.com,210
4. http://www.loc.gov/cgi-bin/zgstart?ACTION=INIT&FORM_HOST_PORT=/prod/www/data/z3950/fcla.html,z3950.fcla.edu,210

Developed by:

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