CIRCULATION CONTROL

A system based on micro - CDS / ISIS software

KAPILA JAYALAL SIRISENA



NATIONAL LIBRARY & DOCUMENTATION SERVICES BOARD

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- FORWORD

Presently CDS ISIS is the most widely used and popular library software in Sri Lanka as well as in most of the developing countries. This is expected to change in the near future and at least the academic and research libraries in these countries are likely to adopt more sophisticated and improved library software in time to come. However, CDS ISIS or its improved versions will hopefully remain in the library field in the foreseeable future, as they are some of the most economical library software packages currently available in the market. Therefore, this publication by Mr Kapila Sirisena, Librarian, Rajarata University, Sri Lanka will be of great assistance to those who use the software as well as to students of library studies seeking a basic knowledge on the subject.

> M S U Amarasiri Director General

October 1999 National Library and Documentation Centre 14, Independence Avenue Colombo 7

PREFACE

Most libraries in Sri Lanka use CDS/ISIS software for the computerisation of their functions. Since this software is basically meant for creating bibliographic databases, these libraries initiate the computerisation process by automating their catalogues. This book contains information on automating Circulation Control which is a tailor - made application of the CDS/ISIS software. Although is it not the most ideal software, it can still serve the desired purpose. For a thorough understanding of the contents of this book the reader should have, as a basic requirement, some knowledge of CDS/ISIS. Since most University and special libraries already use this software for cataloguing, this book will help the reader in understanding the automation of the circulation process.

> K.J. Sirisena Librarian

October 1999 Rajarata University of Sri Lanka Mihinthale

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CHAPTER 1

1.1 INTRODUCTION

Most libraries in Sri Lanka use CDS/ ISIS software for computerisation, CDS/ISIS software is developed and distributed free of charge to libraries by UNESCO. It is available at NARESA (Natural Resources, Energy & Science Authority of Sri Lanka) which is the national distributor of the software.

1.1.1 History of CDS/ISIS

During the period from 1969 to 1971, UNESCO developed a Computerised Documentation System (CDS) to organise its internal document collection process. When transfering hardware from mainframe computers to the IBM model UNESCO faced the problem of converting CDS to suit the new computer. In order to overcome the need to rewrite software programmes it decided to adopt a version of the Integrated Set of Information System (ISIS) software which had been developed by the International Labour Organisation (ILO) in the late 1960 s.

Since the ILO version of ISIS lacked many features available in UNESCO's CDS system, UNESCO spent about eight man years and changed about 80% of the original ISIS to devise the first version of CDS/ISIS programme.

Later UNESCO undertook the development of a mini and micro computer version of the software in order to provide modern information technology to the developing countries.

1.1.2 System Functions

According to the CDS/ISIS Manual the sofware is a computerbased system for information storage, processing and retrieval which is designed for the computerised management of structured non-numerical databases of fixed or variable lengths.

CDS/ISIS is a menu driven system, i.e., the user is always presented with the choice of available commands at any given step, thus making the programme esay to operate.

CDS/ISIS offers eight major services and they can be divided into two groups:

User services

| ISISENT | - | Data entry and record editing |
|-------------|-------|---|
| ISISRET | - | Information retrieval |
| ISISPRT | - | Production of printed outputs |
| ISISINV | - | Inverted file maintenance |
| System serv | vices | |
| ISISDEF | - | Definition of new databases and / or modification of existing databases |
| ISISUTL | - | Miscellaneous system utility functions |
| ISISXCH | - | Facilities for exchanging data with other systems and master file utility functions |
| ISISPAS | - | Advanced processing facilities which allow one to develop his/her own programmes and integrate them |
| | | with CDS/ISIS |

CDS/ISIS is being used widely for Information Retrieval purposes in developed as well as developing countries.

Most libraries in Sri Lanka which favour automating their library functions using CDS/ISIS usually give preference to computerising the cataloguing process.

1.1.3. Circulation control

The micro CDS/ISIS package which is being distributed by UNESCO does not include a module for automated circulation control. However, using its Pascal programming option, Bibliomatics Inc. in Canada has developed ISX/CIRCH a special programme to handle circulation control.

In Sri Lanka no library is using this special programme at present due to several reasons. One major reason is that the disk space of the micro computer is not sufficient to accommodate all the items in an academic or special library with a reasonable large collection. Hence, data entry has to be done via the keyboard which would circulation functions being slower the manual system.

1.2 SYSTEM FILES

1.2.1 Field Definition table (FDT)

| | Field Definition | Гable (FDT) | | | Database : CIR | | |
|-------|--------------------|-------------|--------------------|-----|-----------------|------|--|
| ? Tag | Name | Len | l _. Typ | Rep | Delims/ Pattern | •••• | |
| - 1 | Type of Record | 1 | Р - | | Α | | |
| - 10 | Acc Number | 6 | P | | A 99999 | | |
| - 20 | Author | 30 | X | R | | | |
| - 30 | Title | 200 | х | | | | |
| - 35 | Edition | 15 | х | | | | |
| - 40 | Call Number | 1 | X | | | | |
| - 50 | Book Category | 1 | Р | | А | | |
| - 100 | Membership Number | 5 | P | | P9999 | | |
| - 110 | Name of the Member | 70 | · x | | ab | | |
| - 115 | Local Address | 150 | Х | | | | |
| - 120 | Home Address | 150 | X | | | | |
| - 130 | Telephone | 20 | Х | | | | |
| - 135 | Year of Admission | 5 | Р | : | 99/99 | | |
| - 140 | Category | 2 | Р | | AA | | |
| - 150 | Mem. Expiry Date | 6 | Р | | 999999 | | |
| - 200 | Item Number | 6 | P | | A 99999 | | |
| - 210 | Membership Number | 5 | P | | P9999 | | |
| - 220 | Date Borrowed | Ġ | P | | 999999 | | |
| - 230 | Due Date | 6 | P | | 999999 | | |
| - 240 | Date Returned | 6 | P | | 999999 | | |

1.2.2 Field Select Table (FST)

Database Name: CIR FST for Inverted File

FST name : CIR

| ID | IT | I | Data extraction format |
|-------|----|---|------------------------|
| - 10 | | 0 | vl,v10 |
| - 20 | | 0 | (v20/) |
| - 30 | | 0 | v30 |
| - 100 | | 0 | vl,v100 |
| - 110 | | 0 | v110 ^a |
| - 200 | | 0 | vl,v200 |
| - 210 | | 0 | vl,v210 |
| - 220 | | 0 | "DB" v220 |
| - 230 | | 0 | "DD"v230 |
| | | | |

See Chapter 4 for reformatting FST for exporting book data from already existing cataloguing database.

1.2.3 Display format for CIR database

(a) Cir. pft

mfn(5)mpl,If vl: 'M' then c33, 'MEMBER RECORD'/// c3,v110^b, "v110^a/, c3, Membership Number : "v100,c30" Year of Admission: "v135,c60," Category: "v140,/, c3," Local Address" v115,/c3, "Home Address: "v120,/c3," Tel No: "v130 fi

mpl, if vl: 'B' then c34, 'BOOK RECORD'//, c3.v30,"/by "v20(2,2)+ x ; x, /,c3,"Call Number: "v40,c50," Acc Number : "v10,/ c3 v35,c15,If v 50:'L'then "Book Category : Lending Book" d50 fi,If v50:'O' then" Book Category : Overnight Book" d 50 fi, If v50:'S' then "Book Category: Staff Reference Book" d50 fi fi

mpl, if vl: 'L' then c34, "LOAN RECORD" /// Due date: "v230/ref(1("M" v210), if v140:'MS' then ref(1("L"v100), "Fine: Rs." d230,f(val(&fine(v230)),3,2))fi) //# if a v240) then mpl,ref(1"B" v200), Name of the book: "v30," / by " v20+|;1/, "Acc No.:" v10,/, If v50: 'L' then "Book Category: Lending Book" d50 fi,If v50: 'O' then "Book Category: Overnight Book" d50 fi, If v50: 'S' then "Book Category: Staff Reference Book" d50 fi //, ref(1("L"v10), ref 1("M"v210), if v140:'MS' then "Borrowed by ; Name of the Student: "v110^b," "v110^a else "Borrowed by; Name of the Teacher: "v110^b," "v110^a fi,))) fi fi

RECORDS DISPLAYED BY USING CIR DISPLAY FORMAT (CIR.PFT)

00854

MEMBER RECORD

Miss. Prasadika D.A.R Membership Number: P1684 Year of admission: 93/94 Category: MS Local Address: 80 A, Maitipe 2nd Lane, Karapitiya, Galle. Home Address: 80, Sampath, Hiththatiya, Matara.

3

00855

MEMBER RECORD

Miss De Silva N.C.N.N

Membership Number: P1685 Year of admission: 93/94 Category:MS Local Address: No:3/29 A, Alhenawatta, Kapuhempola, Akmeemana. Home Address: No, 3/29, A, Alhenwatta, Kapuhempola, Akmeemana.

00856

MEMBER RECORD

Prof Wijeratna, D Membership Number: P0001 Category: PA Local Address: Dept. of Anatomy, Faculty of Medicine, Karapitiya.

00857

MEMBER RECORD

Dr. Weerasooriya, T.R. Membership Number: P0002 Category: PA Local Address: Dept. of Anatomy, Faculty of Medicine, Karapitiya.

04292

BOOK RECORD

Lecture notes on Community Medicine Call Number: 614.4F16 Acc. Number: A51673 Book Category: Lending Book

04001

LOAN RECORD

Due Date: 951201

Name of the book: Lecture notes on Community Medicine Acc No: A51673 Pools Catagory Leg ding Pool

Book Category: Lending Book

Borrowed by: Name of the Teacher: Dr. Wijayasiri, W.A.A.

(b) Loan. Pft

Display format for viewing borrowed books

mpl, if vl: 'L' then if a(v240) then "Due date:"v230/ref(1("M"v210)), if v140:'MS' then ref(1("L"v100),

"Fine:Rs." d230,f(val(&fine(v230)),3,2))fi)//#if

a(v240)then mpl,ref(1("B"v200),"Name of the book: "v30,

"/by"v20++;l,/, "Acc No.:" v10,/, If v50:'L' then "Book Category: Lending Book" d50 fi, If v50:'O' then

"Book Category : Overnight Book" d50 fi, If v50: 'S' then "Book Category : Staff Reference Book" d 50 fi //, ref(1("L" v10), ref (1("M"v210), if v140: 'MS' then "Borrowed by ; Name of the Student: " v110^b," "v110^a else "Borrowed by ; Name of the Teacher: "v110^b" "v110^a fi,))) fi fi fi

Note: Books already returned to the library will not be displayed. Remember to enter the date returned in the field "Date returned" in the CIRL work sheet when books are returned. The wordings of the books category may be changed as applicable. For example if you have only two categories of books as Lending and Overnight you may delete if v50: 'S' then "Staff Reference Book" d50 fi.

RECORD DISPLAYED BY USING (LOAN. PFT) LOAN DISPLAY FORMAT

Due date:951201

Name of the book: Lecture notes on Community Medicine Acc No.: A51673 Book Category: Lending Book Borrowed by; Name of the Teacher: Dr. Wijesiri, W.A.A

(c) Due.pft

Display format which could be used for sending overdue notices to the User.

mpl,if vl: 'L' then ref(1"M"v210), mhl,v110^b" "v110^a,/,v115,/// ## 'According to our records the following book/s is /are in your possession and you are hereby requested to return the book/s' immediately /// ## '------',/, 'Senior Assistant Librarian',//##) fi, mpl, if vl: 'L' then if a (v240) then mpl, ref(1("B"v200), v30, "/ by " v20+ l; l,/, "Acc No.:"v10) fi fi

RECORDS DISPLAYED BY USING (DUE.PFT) DUE DISPLAY FORMAT

Dr. Wijesiri, W.A.A. Dept. of Community Medicine, Faculty of Medicine, Karapitiya.

According to our records the following book/s is/are in your possession and you are hereby requested to return the book/s immediately.

Senior Assistant Librarian

Lecture notes on Community Medicine Acc No: A51673

1.2.4 Worksheets for CIR database

CIR Worksheet: This worksheet has 3 pages. This worksheet may be used for entering data on Library Members, Library books or Circulation details. However it would be easy to use separate worksheets for entering member details, book details and loan details. Worksheet CIRM - for entering Member details Worksheet CIRB - for entering Book details Worksheet CIRL - for entering Loan details

(a) CIR worksheet

| BOOK RECORD | | | | | | |
|----------------------------|--|-------------------------|-----------------------------------|------------------------|--|--|
| Acc. Number : _ | Editic |)n | Type of Recor Bo | d: B ook Category: | | |
| Title Call Number | | | | | | |
| M - Modify A- Add field | R-Right just <tab> - Previous</tab> | S- Shift s Re CIR | D- Delete turn Key - Nex /1 | C-Center t X - Exit | | |

| | MEMBE | R RECÓRI |) | |
|----------------------------|--|----------------------|------------------------|-------------------------|
| Membership Num | ber : Year of | Admission : | Туре с | of Record M ategory: |
| Name of Member: | | | | |
| Local Address: | | : * | <u>.</u> | |
| Home Address : | | | | |
| Telephone | · . | | | <u></u> |
| Telephone: | Expiry | / Date of Me | mbership: | ····· |
| M - Modify A- Add field | R-Right just <tab> - Previous</tab> | S- Shift Return K | D- Delete ey - Next | C-Center X - Exit |
| • | C | IR /2 | | |

| LOAN RECORD | | | | |
|----------------|------------------------|------------|-----------|----------|
| Item Number: | | | Type of R | ecord: L |
| Membership Nu | mber : | | | |
| Date Borrowed: | | | | |
| Due Date: | | | | |
| Date Returned: | | | | • • |
| | | | | |
| M - Modify | R-Right just | S- Shift | D- Delete | C-Center |
| A- Add field | <tab> - Previous</tab> | Return Key | y - Next | X - Exit |
| | | CIR/3 | | |

CIRB worksheet

. • .>-- ..

| BOOK RECORD | | | | | |
|-----------------|----------------------|----------|-------------------|-----------------------|--|
| Acc. Number : _ | | Edition | Type of R Book | ecord: B Category: | |
| Author | <u> </u> | | | | |
| Title: | | | | | |
| Call Number | | | | | |
| M - Modify | R-Right just | S- Shift | D- Delete | C-Center | |
| A- Add field | <tab> - Previo</tab> | ous Retu | m Key - Next | X - Exit | |
| CIRB/1 | | | | | |

7

•...

(c) CIRM Worksheet

| | M | EMBER R | ECORD | | | | |
|---------------------|-----------------------|---------------|-------------|-----------|--|--|--|
| // Type of Record M | | | | | | | |
| Membership Nu | mber : Y | ear of Adm | nission : | Category: | | | |
| Name of Membe | er : | | | | | | |
| Local Address: | | | | | | | |
| Home Address : | | | | | | | |
| Telephone: | Exp | iry Date of I | Membership: | | | | |
| M - Modify | R-Right just | S- Shift | D- Delete | C-Center | | | |
| A- Add field | <tab> - Previou</tab> | s Return | Key - Next | X - Exit | | | |
| | | CIRM | /1 | | | | |

(d) CIRL worksheet

| LOAN RECORD | | | | | |
|----------------|-----------------------|----------|-----------------|----------|--|
| Item Number: | | - Ty | pe of Record: L | | |
| Membership Nur | mber : | | | | |
| Date Borrowed: | | . | • | | |
| Due Date: | | | | | |
| Date Returned: | | | | | |
| M - Modify | R-Right just | S- Shift | D- Delete | C-Center | |
| A- Add field | <tab> - Previou</tab> | s Return | Key - Next | X - Exit | |
| | | CIRL/1 | | | |

CHAPTER 2

2.1 FIELD GUIDE

001 Type of record

Alphabetical character to identify the type of Record

4

B - Book Record

M - Member Record

L - Loan Record

010 Accession Number of the book.

This field uses a pattern.

e.g.A 53423 A 00012

Note :- Enter 'A' prior to the number. If the library has accession numbers greater than 9999 and less than 1000000 change the field 10 of the FDT accordingly.

| e.g.:- | | |
|----------------|-------------|---------|
| Tag Name | Len typ Rep | Del/Pat |
| 10 Acc. Number | 7 P | A999999 |

020 Author/ Authors of the book (repeatable)

e.g. Siriwardana, E. S% Silva, W. A.

Follow the same format when entering names of the author/ authors. As this is a repeatable field enter % sign between the name of the authors if the book has more than one author.

Note:contributors to the book such as editor or compiler translator etc are also entered in this field.

030 Title of the book

Enter title of the book as given in the chief source of information.

035 Edition of the book

e.g.:- 5th ed. Asian ed.

Enter the edition of the book as given in the chief source of information

040 Call Number of the book

Enter the call number of the book.

e.g.: 612.5.SAM

9

۰.

- - -

050 Loan category

Enter the Loan category of the book. There can be a number of categories. Identify each category by one letter code.

e.g.: 'L' - Lending 'O' - Overnight 'S' - Staff reference

These may be changed these to suit your system.

100 Membership number.

This is an unique code which identifies the member. As this field follows a pattern the code should be entered according to the, pattern.

. |

```
e.g. P0032
P.3211
```

Note : If the library has to serve more than 9999 users change the FDT accordingly.

| e.g. Tag name | Len | Typ | Rep | Del/Pat | |
|---------------|-----|-----|-----|---------|--|
| | | ~ . | 1 | | |

100 Membership Number 6 P P99999

110 Name of the member

This field has two sub fields. Enter the name of the member as follows.

e.g. ^a Wijesiri, W.A.A ^bDr.

115 Local address.

Maintain uniformity in entering data for this field.

e.g.80 A, Maitipe 2nd Lane, Karapitiya, Galle.

120 Home address.

Follow the same pattern as above.

e.g.: 80, Sampath, Hiththetiya, Matara.

130. Telephone (optional)

Enter the Telephone number.

e.g. 09 34785

135. Year of admission (optional)

For academic institutions this field will be very important. Enter only for student users. As this field follows a pattern 99/99 enter the year of admission accordingly.

e.g. Enter 92/93 for the 1992/1993 batch of students of the University

140. Category of the member

This field follow the pattern 'AA'. Hence a two letter code should be entered to identify the user group.

e.g. MS for Students PA for Academic Staff NA for Non - Academic Staff HC for Hospital Consultants PT for Post - graduate trainees TD for Temporary Demonstrators VL for Visiting Lecturers

This may be changed to suit your library.

150 Expiry date of Membership (optional)

This field follows a pattern '999999'

e.g.: Enter 951210 for 10th December 1995

200 Item number

e.g.: A 51673

This field too follows a pattern 'A99999'. The accession number of the borrowed book should be entered in this field. Use the CIRL work - sheet or page 3 of the CIR work - sheet for entering data into this field

Note:- eg. A51673 If your library books bear accession numbers greater than 99999, change the FDT accordingly.

210 Membership number

This field follows a pattern ' P9999'. Enter the unique membership number which you have assigned previously to all members of your library.

e.g. P0234

220 Date borrowed

This follows a pattern. Enter the date the book was borrowed as follows:

e.g. 951208 for 8th December 1995

230 Due Date

According to the Category of the User, and Category of the Book Borrowed enter the due date too in the same pattern as above.

e.g. 951215 for 15th December 1995

240.Date returned

Enter the date the book was returned in the same pattern as above.

e.g. 951218 for 18th December 1995

CHAPTER 3

3.1 CREATION OF A DATABASE

There are two ways of creating a database: $\frac{1}{2}$

- (1) Copying all files from an already created database.
- (2) Using option (D) from main menu of CDS/ISIS

Option (1)

Copy the CIR database files to DATA subdirectory of ISIS. If you have a diskette which includes all files of CIR database you may copy all files of the diskettes to C:\isis\ Data director by executing the following DOS command

Type

c:\>copy a:*.* c:\isis\data (when the diskette is in 'a' drive) This will copy all files in the diskette in drive A: to isis\data sub - directory of the hard disk.

Option (2)

Use the option (D) [Database definition services] from main menu of the CDS/ISIS programme. Then select option (C) [Define a new database] from Database definition services menu.

Refer CDS/ISIS manual (ISISDEF-Data base Definition services P. 161-170 for more details in defining a new database).

3.2 DATA ENTRY

3.2.1 Record Type

CIR database consists of three kinds of records. It has three worksheets, namely, CIRB, CIRM and CIRL for entering Member data, Book data and Loan data respectively.

The CIR worksheet which has three pages corresponding to the above mentioned worksheets can be used for entering these type of records. However, It is essential that the appropriate worksheet such as CIRM for Member data, CIRB for Book, data etc. is used.

Input membership data first using CIRM worksheet

3.2.2 How to Select a Work-Sheet

When you are in the main menu of the 'CIR' database, select option 'E' - Data entry services' from the EXEI menu (Data entry service menu). If the current worksheet is not CIRM according to the report displayed on the right of the EXEI menu, select option 'W - select another worksheet." When you press 'W' the system will ask "Name of the work - sheet "Type "CIRM" using either lower case or upper case letters. The menu will re - display with CIRM on the current worksheet. For entering books data or loans data type C IRB or CIRL. Once the desired worksheet has been selected, Press 'N' - 'create new record' to enter data.

3.2.3 Entering Book Data

CIR database consists of several types of records. One type is 'Book records' which cover the major portion of the database. If the library has no computerised catalogue, book data can be entered in CIR database. If a catalogue is already available it is not necessary to re-enter data

into CIR database as it is possible to transfer book data from the catalogue database to CIR database. This procedure is discussed in the next chapter.

3.3 HOW TO SELECT A DISPLAY FORMAT

Display formats are used for displaying records on the screen or printing records on paper. Any number of printing formats can be created using the Database Definition services. Only display formats already created can be changed. How to get the desired display format for viewing the records when needed, is explained below. In the CIR database three display formats are used.

. •

(1) CIR display format

- (2) Loan display format
- (3) Due display format.

When the CDS/ISIS is initiated and database CIR is accessed, the display format and worksheet are reported on the bottom of the screen as follows:

Worksheet: CIR Format : CIR

This means the current format is "CIR". In order to change it to "DUE" the following procedure should be followed.

- (1) Select option 'S' Information retrieval services from the main menu.
- (2) From the Information retrieval services menu, select the option "F = change display format." This will give the CIR format on the screen.
- (3) Press F6 key to clear the screen .
- (4) Type '@ due' and press enter key.
- (5) You will see that the format name has changed to 'due'.

Similarly you can change the format to CIR or you may select any display format created by you for displaying records.

CHAPTER 4

4.1 IMPORTING DATA FROM THE ALREADY EXISTING CATALOGUING DATABASE (REFORMATTING (FST) FIELD SELECT TABLE)

For the smooth functioning of this CIR database each user and each book on loan should have a unique number. In the case of books the unique number would be the accession number of the book. You will encounter a problem when you export book records from the cataloguing database to the circulation database with respect to Acc. Number. In most cataloguing databases the Acc. Number field is a repeatable field to permit entry for more than one copy of a book. However, in the circulation database the Acc. Number field will not be repeatable. This ensures uniqueness. Thus, the following procedure can be followed to convert book data which has only one copy of the book. The first step towards this is to search books and store in a save file.

In order t o export the records of an already existing database option 'E' should be used. Export CDS/ISIS file' using Master file service (EXCH) menu of the Cataloguing database.

4.1.1 Step 1

(1) Create a Reformatting FST in the CIR database using database definition services menu as follows:

Reformatting FST depends on the existing cataloguing database.

Most libraries in Sri Lanka use MIBIS (Microcomputerbased Bibliographic Information Systems).

Database structure developed by Anne Di Lauro and Ed Brandon of International Development Research Centre (IDRC), Canada, for creating cataloguing databases. A copy of MIBIS format can be obtained form NARESA.

The following procedure may be adopted to transfer book data from MIBIS database to CIR database.

Select option 'D-Database definition services' from Main Menu of the CIR database. Then select option 'U'Modify database definition' and then option 'E - Create/Update FST. Next give the name of the FST. Type "CONVI" and fill in the table as follows, if the cataloguing structure is according to MIBIS/FDT (Field Defination Table) If a different structure used prepare CONVI. FST accordingly.

CONVI -FST for exporting records from a cataloguing Database which has MIBIS structure

| Database Name: CIR | FST for Sorting | FST name:CONVI | |
|--------------------|------------------------|----------------|--|
| I ID I IT | Data extraction format | : 1 | |
| - 1 0 | 'B' | | |
| - 10 0 | 'A'v413 | | |
| - 20 0 | (v110^a/) | | |
| - 30 0 | v100 | | |
| - 35 0 | v120 | | |
| - 40 0 | v411^a | | |
| - 40 0 | v411^b | | |
| - 50 0 | ۲ ' | | |

After completing the table press 'X-Exit'. Access the main menu and press option 'C-Change the database' and get the cataloguing database. In this example type 'MIBIS' for the Question "Database Name ?" to get the cataloguing database.

The following procedure may be adopted to export record of books having only one copy.

First search the books which have only one copy.

From the main menu of the MIBIS database select option 'S- information retrieval services' and then press 'S-search formulation' from the Information retrieval services menu. For this the following question will be asked:

'Search expression?'

Enter ? V412= '1' and press the enter key. This calls free text searching and the computer will sequentially search the records for the value 1 in the Number of copies (412) field. Your screen will display.

Set 1 :? v412 = '1'



Then press 'P - Save search results' and the system will ask 'Please enter Save file Name'. Give the name CIRBI as a save file name and press enter key.

4.1.2 Step 2

- ----

Select option 'M - Master file services' from main menu of the cataloguing database Select option 'E - Export cds\isis file' and the fill in the worksheet as given below:

Data interchange services - Export parameters



Once you have completed the worksheet the system will prompt you the following message.

Backup drive and / or directory?

Press enter key. The exported records will be stored in MST. ISO file in C:\ISIS\SYS directory.

The following report will scroll on the screen:

MFN 2 downloaded MFN 3 downloaded MFN 5 downloaded

•••••

Change the Database from main menu of the cataloguing database to CIR database by pressing 'C - Change the database' and type CIR.

Select 'M - Master file services' from the main menu of the CIR database. Choose option 'I-Import external file' and you will get the following worksheet:

Data interchange services - Import parameters

| Database name - C | IR |
|--|---------------------------------------|
| ISO file para | meters |
| Output ISO file name MST.ISO Re | Field separator # cord separator # |
| Load option | ns |
| First MFN to be assigned 1 or Input Load/Merge/Update M | t Tag containing MFN |
| Reformattin | ng parameters |
| Reformatting FST CONVI | Gizmo conversion file |

Once you have completed the worksheet the system will prompt you the following messages (Remember to enter CONVI as Reformatting FST):

Backup drive and /or directory?

Press enter to start importing records from MST. ISO in C:\ISIS\SYS directory. The following report will scroll on the screen:

> MFN 200 added MFN 201 added.....

After the imported process is completed press 'X - No more diskettes' to end the process.

This procedure can be adopted for importing records of books having one copy from cataloguing database.

4.1.3 Step 3

In order to download books details of which the cataloguing database has two copies, change the search expression in the cataloguing database as follows:

'Search expression?"

Enter ? $V412 = 2^{\circ}$ as a reply to this question and press enter key. The computer will search the records with value 2 in the Number of copies (412) field. Then press 'P - Save search results'. The system will ask ' Save file Name' Give CIRB2 as the save file name.

4.1.4 Step 4

Select option 'M- Master file services' from main menu of the cataloguing database. Select option 'E-Export cds\isis file. Fill the worksheet as follows:

| Data | abase name MIBIS |
|--------------------------------------|--------------------------------------|
| ISO file | parameters |
| Output ISO file name MST.IS Recor | O Field separator # d separator # |
| Selection param | eters |
| MFN limits 1/32000 Save file | name CIRB2 Hit file (Y/N)? N |
| Reformattin | ng parameters |
| Reformatting FST | Gizmo conversion file |
| Renumber records from | |

Data interchange services - Export parameters

Once you have completed the worksheet the system will prompt you the following message:

Backup drive and/ or directory?

Press enter to export the MST. ISO file in the current directory. (C:\isis\sys)

Change the Database from main menu of the cataloguing database to CIR database by pressing 'C-Change the database' and type CIR.

Follow the procedure Step 1 to create CONV2 reformatting FST in the CIR database.

Type as follows once you get the worksheet:

| | ID | IT | Data extraction | formt |
|---|----|----|-----------------|-------|
| - | 1 | 0 | 'B' | ٠ |
| - | 10 | 0 | 'A' | |
| - | 20 | 0 | (v110^a/) | |
| - | 30 | 0 | v100 | |
| - | 35 | 0 | v120 | |
| - | 40 | 0 | v411^a | |
| - | 40 | 0 | v411^b | |
| _ | 50 | 0 | ʻL? | |

Database Name : CIR FST for Sorting FST name: CONV2

Note that for ID 10, data extraction format has changed from 'A' v 413 to 'A'. Thus, in the Acc. number field of converted records only letter 'A' would appear. Select M - Master file services from the menu of the CIR database. Choose option I - Import external file' and you will get the following worksheet.

Data interchange services - Import parameters



Once you have completed the worksheet the system will prompt you the following message: (Remember to enter CONV2 as Reformatting FST)

Backup drive and / or directory?

Press enter key to import records from MST. ISO file.

Once the records are imported press enter again to download the same records as these books have two copies on loan. Finally enter X - for No More Diskettes to end the process. Later you have to fill relevant Acc. Numbers for these records manually.

Similary you can search for books which have three copies in the cataloguing database to create CIR B3 save file and export them. These records should be imported to the CIR database. Import of records should be done three times. Enter CONV 2 as reformatting FST in the CIR import worksheet. You can follow the same procedure in respect of books having more than three copies.

CONV1 FST for downloading records which have only one copy from HELLIS(HIS) Cataloguing Database.

| D | IT | Data extraction format | 1 | |
|------|----|------------------------|---|--|
| - 1 | 0 | 'B' | | |
| - 10 | 0 | 'A' v820 | | |
| - 20 | 0 | (v300^*/) | | |
| - 30 | 0 | v200^* | | |
| - 35 | 0 | v260 | | |
| - 40 | 0 | v810 | | |
| - 50 | 0 | 'L' | | |

Database Name: CIR FST for Sorting FST name: CONVI

CONV2 FST for downloading records which have more than one copy from HELLIS (HIS) Cataloguing Database.

| Databa | ise Na | me: CIR FST for Sorting | ; FST name CONV 2 | |
|----------|--------|-------------------------|-------------------|---|
| ID | I IT | Data extraction format | | |
| - 1 | 0 | 'B' | | |
| - 10 | 0 | 'A' | | |
| - 20 | 0 | (v300^*/) | | |
| - 30 | 0 | v200^* | | |
| - 35 | 0 | v260 | : | |
| - 40 | 0 | v810 | · · | • |
| - 50 | 0 | . °Г, | | |
| | | | | |

Use these FSTs for downloading records from HIS database. (Developed by Mr.N.U. Yapa for the HELLIS (Health Literature Library and Information Services) Network participating libraries). These FSTs should be created in the CIR database. Except for the FST the entire procedure will be the same as downloading records from MIBIS cataloguing database. Remember to search books which have only one copy, two copies, three copies etc. in the library and store in different save files before downloading.

Note : There is a quicker method of importing book records from the cataloguing database to the CIR database. This is done by creating a HIT file.

CAHAPTER 5

5.1 PROCEDURES

5.1.1 To find books borrowed by any particular user

In order to find the books borrowed by a user first get the membership number of the user by searching his name in the database.

For example, if you want to find the books borrowed by Mr. M.B. Samarawickrama you should adopt the following procedure:

When you are in the main menu of the CIR database select option S and get the Information Retrieval services Menu. Check whether the format name is CIR on the bottom right - hand corner of your screen. Otherwise change the format to CIR as described in chapter 3 under HOW TO SELECT A DISPLAY FORMAT. Press option T to get Dictionary list and answer the question by typing letters 'samara' and pressing enter key. Now the screen will list the names and words starting with lettrers 'samara' You could choose the name you desire by moving up and down arrow keys. When the cursor is on the name you want, press letter S to select the name and then press X to exit. Now you will see the number of records which has the name you have selected. Unless the database has the same name as the author of a book in the collection and unless you have more than one member for this same name, the number of records should be (1) one. Now press D to display the record. The display would be as follows:

00080

MEMBER RECORD

Mr. Samarawickrama M.B. Membsership Number: P0912 Year of admission: 87/88 Category : MS Address: 568 B, Hirimbura Rd, Karapitiya, Galle. Home - Address : Maragala, Hiramadagame, Kahawatta.

Now you will notice that the membership number of the selected user is P0912. In order to find out the books he has borrowed you should search for LP0912. Next press T again and answer the question, by typing LP0912 and press enter key. Now you will see LP0912 on your screen provided that the user you selected had borrowed any books from the Library. Select LP0912 by pressing 'S' when the cursor is on that and press X to exit and press enter. Now you will see the number at the last row of the screen which is the number of books the selected user has borrowed.

By pressing D you can display the loan records which will look as follows: However, the books which are already returned to the library will not appear on the screen if your displaying fomat is 'CIR'

03845

LOAN RECORD

Due date : 951122 Fine : Rs 350.00 Name of the book: Clinical Pharmacy and Therapeutics/ by Herfindal, Eric T; Hirschman, Joseph 1. // Acc No : A 50793 Book Category: Lending Book Borrowed by ; Name of the Student: Mr Samarawickrama M.B.

03846

LOAN RECORD

Due date : 951122 Fine : Rs 350.00

Name of the book: Lecture notes on Pharmacology / by Grundy, H.F. Acc No : A 60149 Book Category: Lending Book Borrowed by ; Name of the Student: Mr Samarawickrama M.B.

03847

LOAN RECORD

Due date : 951122 Fine : Rs 350.00

Name of the book:<The> beta - lactin antibiotics : Penicillin and cephalosporin/ by Selwyn, Sydney

Acc No : A 56131

Book Category: Lending Book

Borrowed by ; Name of the Student: Mr Samarawickrama M.B.

5.1.2 To find a user who borrowed any particular book

To find out whether any particular book has already been borrowed or not, it is necessary to find the Acc No of the book first by searching the database by author or title of the book.

For example, if you want to check whether the book title "Clinical Pharmacy and Therapeutics" by Herfindal, Eric T. and Hirschman, Joseph I, has already been borrowed or not you can approach the search in two ways:

(1) By Author(2) By Title

(1) From the main menu of the CIR database select option S and get the Information Retrieval Services Menu. Press option T to get the Term Dictionary and type "clinical" and press enter key. Now you will see the list of terms starting with "clinical". By moving up and down arrow keys get the cursor on to "Clinical Phartmnacy and Therapeutics". Note that the long title would be shortened by the system. Once the cursor is on the desired title press 'S' to select and press 'X' to exit and press enter key once. Now you would see a number of records (books) which have the selected title. The number may be greater than one simply

because the library may have different editions of the same book. Press option 'D' to display the records. Note down the Acc Number of the desired edition. In the above example the Acc Number is "A50793". Now you have to search the database again for "LA50793" to find the user who has borrowed the book which has the Acc. Number "A 50793". Press T from the Information Retrieval Menu and get the term dictionary. Answer the question by typing 'LA' and pressing enter key. Now the screen will list terms starting with letters 'LA' moving up and down arrow keys get the cursor on to the "LA50793" and press 'S' to select and press 'X' to exit and press enter key once. Now press 'D' to display records and your screen will appear as shown below (However, the books which are already returned to the library will not appear on the screen if your displaying format is "CIR").

03845

LOAN RECORD

Due date : 951122 Fine : Rs 355.00

Name of the book: Clinical Pharmacy and Therapeutics / by Herfindal, Eric T; Hirschman, Joseph I. Acc No : A 50793 Book Category: Lending Book Borrowed by ; Name of the Student: Mr Samarawickrama M.B.

(2) Search by author is similar to the previous procedure. The only difference is instead of title you should search the database by author.

From main menu press 'S' then 'T' and type "Herfindal" and Press enter key. Press 'S' to select the Author "Herfindal, Eric T". Press 'X' and enter Key and 'D' to display records. After finding the desired Acc Number, follow the previous procedure from there onwards.

5.1.3 To find the books borrowed on any particular day

Search the database by a date. Suppose you wish to find out the books borrowed on 22 nd of December 1995, you should search the database for "DB951222"(DB -means Date Borrowed). However, the books which are already returned to the library will not appear on the screen if your displaying format is "CIR".

5.1.4 To find books due on any particular day

Similarly you can search the database for books due on a particular date. To find out books due on 25th of December 1995 you should search the database for "DD951225". However, the books which are already returned to the library will not appear on the screen if your displaying format is "CIR".

5.1.5 Printing overdue notices.

Before printing it is necessary to search the database for due date and store the search results in a save file, Printing could be done using this save file.

You should change the display format to "DUE" before searching. Instructions for changing display format are given in Chap 3 under HOW TO SELECT A DISPLAY FORMAT. Once the display format has been changed to "DUE" you should search the database for any due date. For instance, suppose you wish to send overdue notices to the users who have not

returned books on the due date, which was 25th December 1995, then search the database for "DD951225". Once the records are displayed on the screen press 'P' to save search results. Answer the question "Save file name" by typing any name you wish. Suppose you typed "Due951225" as a save file name. Now you could print the overdue notices using option 'P' Sorting and Printing services from main menu. Now press 'P' again to select System print worksheet. Once you press 'P' your screen will look as follows;

WORKSHEET FOR PRINTING AND SORTING

Database Name : CIR MFN limits : 1/32000 Save file name:

| First Title: | |
|--|---|
| Second Title: | |
| Third Tile: | |
| Print Format: | |
| Line width 70 Numbe Lines/page 60 First pa Date indention 0 Sort? Print fi Last page Edit: Replace Note that some data is already a follows: Database Name : CIR M | r of Columns 1 Column width 70 age number 1 EOC tolerance 3 N Sort worksheet name le name available in the worksheet. You should fill the worksheet as MFN limits : 1/32000 Save file name: DUE 951225 |
| First Title: | |
| Second Title: | |
| Third Tile: | |
| Print Format: @DUE | |
| Line width 70 Lines/page 60 Date indention 0 Sort? | Number of Columns 1 Column width 70 First page number 1 EOC tolerance 3 N Sort worksheet name Print file name |
| Last page Edit: Replace | |

.

You may either print the notices directly by filling print file name field as "LPTI" or you can fill the field of print file name by giving a name. If you have given a name that file will go to c:\isis\work directory or current directory (C\:isis:\sys) and you may print the file later.

Overdue notices would be as follows:

Dr. Wijesiri, W.A.A. Dept: of Community Medicine, Faculty of Medicine, Karapitiya.

According to our records the following book/s//is/are in your possession and you are hereby requested to return the book/s immediately.

. •

.......... Senior Assistant Librarian

Lecture notes on Community Medicine Acc No: A51673

5.2 FINES FOR OVERDUE BOOKS

CDS\ISIS has not provided a programme to calculate library fines. Therefore, you should develop your own programme to do so. Once developed you could compile it using Advanced programming services of the main menu of the ISIS programme.

The following is a programme which calculates fines from the due date to current date. For this the following formula will be used:

Fine = (Current date - due date) x 5

This amount in rupees would appear on the screen when student's loan records are displayed using CIR display format or Loan display format. In some instances there may be categories of users (e.g.:- Teaching staff of the University) who may not be fined for overdue books. In such cases these fines will not appear with the loan records of the said categories. However, if you want to make it appear in records other than students category records the display formats should be edited.

The following program should be written in the C:\isis\prog directory by a name Fine.pas using text editor programme such as 'E - Editor or EDLIN When writing care should be exercised typing colon(:), comma(,) semi colon(;) etc. Once the programme is written in the Directory of C:\isis\prog under the name of Fine.pas it can be compiled using the Advanced programming services of the main menu of CDS\ISIS programme.

```
PROGRAM PAYMENT (SI: String; Iw,ccc: real; S2: string ) [FORMAT]
VAR TMD: STRING:
       ST,CKCHK,PAY, MONEY: REAL;
       DAYI, DAY2, YY, MM, DD, YEAR, MONTH, DATE: REAL;
PROCEDURE CH (A:REAL);
YAR J,K:REAL;
BEGIN CHK;=0;K;=92;
       WHILE (A>K) DO
       K:=K+4;
       IF A=K THEN CHK: = 1;
END;
```

```
PROCEDURE COUNT (SY,SM,SD:REAL);
VAR CC, DA, 1, CY, CM: REAL
BEGIN CY:= CM:=0; CC:= 1;
      FOR1:=92 TO (SY-1) DO
        BEGIN CY:=+365;CH(1);
          IF CHK= 1 THEN
             CY:=CY+1;
                                      ľ,
       END;
    IF SM 1THEN
      FOR 1:=1 TO (SM-1)DO
       BEGIN
         CM:=CM+30;
        IF I =2 THEN
       BEGIN
        CC:=1;
       IF CHK=1THEN
        CM:=CM-1
        ELSE
        CM:=CM-2
       END
      ELSE
      BEGIN
        IF (CC=1) OR (1=8) THEN
         BEGIN
          CM:=CM+1;CC:0
         END
        ELSE
        CC:=1
       END
      END;
    DA:=CY+CM+SD;
    IF CK = 0 THEN DAY1:=DA
     ELSE DAY2:=DA;
  END;
 BEGIN {Main program}
    PAY:=0;DAY1:=0DAY2:=0;
YY:= VAL (SUBSTR (DATESTAMP, 7,2)); MM:=VAL (SUBSTR(DATESTAMP,1,2));
   DD:=VAL (SUBSTR(DATESTAMP, 4,2));
   CK:=0; COUNT(YY,MM,DD);CK:=1
   BEGIN
      YMD:=SI;
    YEAR:=VAL (SUBSTR(YMD,1,2)); MONTH:=VAL (SUBSTR(YMD,3,2));
     DATE:= VAL (SUBSTR(YMD, 5, 2));
     BEGIN COUNT(YEAR, MONTH, DATE);
       PAY:=(DAYI-DAY2)*5);
       S2:ENCINT(PAY,5);
    END;
    END
```

END.

From the menu of the ISIS select option 'A-Advanced programming services. Then press 'C' main to compile. The system will ask the question "Name of the program" and answer this by typing 'fine'. If your programme is correct the system "will compile it without interruption. Then you will be able to read the fines in rupees when you display loan records using CIR display format or Loan display format.

-A-

Accession Number of the book ; 6 Address Home 6 Local, Admission Year 6 Author/Authors of the book 6

-*B-*

Book Record Author/Authors 6 Call number 6 **Edition 6** Loan category 6 Title 6 **Book Records** Accession Number 6 Books borrowed by day 23 Books due by day 23 Borrowed book Searching 22 Borrowed books by day 23 Borrower's name Searching 21 Borrowing date 11

-*C*-

Call number of the book 9 Category Member 11 CDS/ISIS 8,12,13 CIR displlay format, 3 CIR worksheet 5 CIRB worksheet 5, 7, 12 CIRL worksheet 5,8,11, 12 CIRM worksheet 5,8,12 Creation of a database 12 -D-

Data entering Book data 12 Data entry 12 Data entry worksheets 4 Database creation 12 Database definition services 12, 14 Date Borrowed 11 Date returned 11 **Display** format Due.ft 3 **Display** format Cir.pt, 3 Loan.pft 5 Display format selection 13 Downloading data. See Importing data Due books by day 23 Due Date 11 Due display format 5

. •

-*E*-

Edition of the book 9 Entering Data 12 Expiry date Membership. <u>See</u> Membership Export CDS/ISIS file 14

-F-

Field guide 9 Field Select Table 3 Reformatting 14 Fines 25 FST. <u>See</u> Field Select Table

-H-

HELLIS(HIS) Cataloguing Database 17

-I-

IDRC 14 Importing Data 14 International Development Research Centre See IDRC Item number as book identification number 11

-L-

Loan category 10 Loan display format 4 Returning date 11

-М-

Membership Expiry date 11 Membership number 10 as member idendification 10 Membership record Member's name 10 MIBIS 14 Microcomputer-based Bibliographic information System See MIBIS System print worksheet 23

-N-

NARESA 1,14

-*O*-Overdue notices 4, 22

-P-

Printing overdue notices 23 Procedures 21 Program for fines 25, 26

-R-

Record display by Due display format 4 Loan display format 4 Records Displayed by CIR display format 3 Record type 12 Reformating FST for importing book record which has one copy in HIS database 17 for importing books which have more than one copy in MIBIS database 17 for importing books which have one copy in MIBIS database 15 Reformatting Field select Table 14 Reformatting, FST 14 for importing book records which have more than one copy in HIS database 18

-S-

 A Searching Borrowed book 22 Borrower's name 21 Selecting a worksheet 12 System Files Field definiton Table 2 Field Select Table 2

-*T*-

Telephone 10 Title of the book 9 Type of Record 8, 12

-U-

UNESCO 1

-W-

Worksheet for book data 10 for entering all three kinds of data CIR worksheet 5 for exporting data 18 for importing data 20 for Loan data 7 for Member data 7 for printing. 23 Worksheet selection 12 Worksheets Data entry 5

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