IDRC

CANADA

MINISIS

bulletin

MINISIS Resource Centre - Latin America

The International Development Research Centre (IDRC) and the Centro de Información Científica y Humanística (CICH) of the Universidad Nacionál Autónoma de México (UNAM), in Mexico City recently signed an agreement establishing CICH as the MINISIS Resource Centre (MRC) for Latin America. The objective of the MINISIS Resource Centre program is to decentralize MINISIS support so each region has local support carried out by local experts. This is our first MRC in Latin America.

Under the terms of the agreement, CICH provides introductory MINISIS training with the installation of MINISIS, and advanced courses to the users of Latin America. As well, CICH offers technical support (solutions to problems met while using MINISIS), coordinates the Spanish translation of MINISIS materials, and is the contact point with IDRC for users in the Region. CICH and IDRC may also cooperate in specific activities such as testing new versions of MINISIS in Spanish, or developing specific programs or training materials.

CICH, a user of MINISIS since 1985, is known for its activities in the field of information sciences. The activities of CICH cover: searching services in national and international data bases; the creation and dissemination of the Latin American data bases PERIODICA and CLASE that analyze the principal journals in the Sciences and Humanities; consultancies in the design and development of information centres; consultancies in the design of data bases and in the application of new information technologies; subscribing to journals for the libraries of the UNAM (about 10,000 titles). CICH also does research in the field of Information Sciences in areas such as bibliometrics, educational programs, information structures and information marketing. CICH has also previously collaborated with IDRC to give introductory MINISIS courses and technical support.

MINISIS users who wish to communicate with CICH should contact Ing. Enrique Barreto who is coordinating the support to the users of the Region. The complete address is:

Ing. Enrique Barreto
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Universidad Nacionál Autónoma de México

In this Issue

What's New in the MINISIS Group at IDRC

by Terry Gavin, Associate Director, Computer Systems Group

Version H Update

In April of last year, Version H prototype demonstrations were done in selected cities throughout the world (see "MINISIS Version H Road Show" by Kathie DeLoria and Terry Gavin in the Vol.9, No.3 issue of the MINISIS Newsletter). The prototype simulated the screen layouts, user interface and functionality planned for version H. The intention of the protoype demonstrations was to elicit user input into the design of the Version H software.

The revised schedule for Version H (micro and HP3000 versions) is to have Beta testing in May 1992 and the software completed by the end of 1992.

The input received from people who viewed the prototype proved invaluable. It showed that the design introduced some inconsistencies and duplication. This encouraged us to re-evaluate certain aspects of the new functionality and user user interface of the software. As a result, we updated the design under the guidance of Richard Lee, the Head of the Future Systems.

We will show a slideshow reflecting the updates made to the design now being implemented at the next MINISIS Users' Group meeting in Trinidad April 29-May 3, 1991. The slideshow, like the prototype before it, will simulate the flow of screens and functionality of version H.

The revised schedule for Version H (micro and HP3000 versions) is to have Beta testing in May 1992 and the software completed by the end of 1992. We will release the complete MINISIS version H product, which includes the documentation and training manuals, shortly afterwards.

New MINISIS G.01 Documentation

Users are accustomed to having the latest version of the MINISIS documentation as files on the MINISIS release tapes. These documentation files can be printed on a local printer connected to an
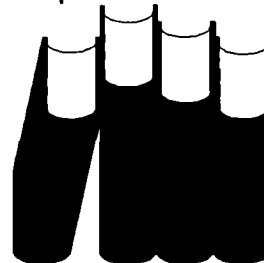
HP3000. An exception was made for the G.01 release tape. It carried the G.00 documentation. All users received G.01 documentation updates in paper form with the G.01 release sent out early last year. The updates reflect documentation changes and corrections to the G.00 documentation.

The documentation group at IDRC, consisting of WandaJane Phillips and Kathie DeLoria, has been working with WordPerfect 5.0 and Ventura desktop publishing software to improve the look and ease of use of the current Vol I and II of the MINISIS documentation. Both Kathie and WandaJane have reviewed the comments made by users over the years about the MINISIS documentation. As a result, we are producing an updated set of G.01 manuals. The major changes being made are:

- an extensive index for each volume;
- a new format with clear headings amd pagination;
- a re-write of INDEX, COMPUTE and part of the section on DS structures;
- standardization of terminology and elimination of redundancies.

Paper copies of the new documents (Vol I,II) will be mailed to all MINISIS users beginning some-

time in June. Since the documentation is now in Ventura format, it can no longer be distributed on tape.

The ILS - Integrated Library System

Bob McKercher is working to produce the functional specifications for the Integrated Library System (ILS). The ILS will be an application of MINISIS version H, designed to meet the needs of libraries in managing their work.

Bob is visiting MINISIS Resource Centres, selected MINISIS users, libraries and institutions involved in the management of library information. In all, some twenty sites will be visited. Bob is collecting user input for the functional specifications of the ILS.

The functional specifications are expected to be done by June 1991. Then work will begin on the detailed functional specifications and a prototype of the ILS.

The ILS will not be part of the first release of MINISIS version H. Future issues of the Newsletter will

keep the users informed about ILS developments.

The MINISIS Group gets a HP 3000 model 922 LX

We will soon have a HP 3000
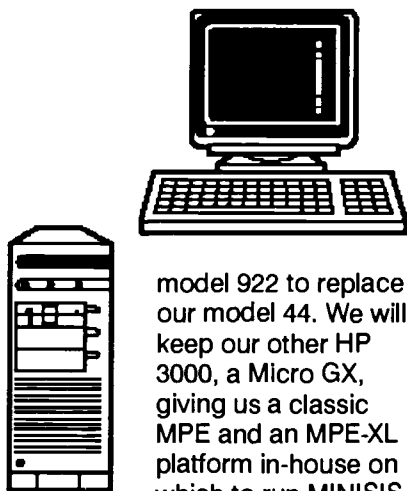
model 922 to replace our model 44. We will keep our other HP 3000, a Micro GX, giving us a classic MPE and an MPE-XL platform in-house on which to run MINISIS.

Richard Palmer comes back

Richard Palmer who has been helping OAPI, the MINISIS Resource Centre in Cameroun for

Francophone Africa, is returning to IDRC in Ottawa this March.
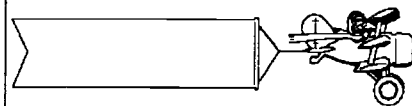
The MINISIS Group Welcomes a New Member

Ruth Richmond, who has worked with us as a contract programmer-analyst, now takes on the permanent position of "Programmer-Analyst" in the Future Systems group under the direction of Richard Lee. Ruth will be one of the people programming MINISIS version H.

Bill Swift has been promoted to Senior Programmer-Analyst. He's working with Richard Lee on the final design of Version H.
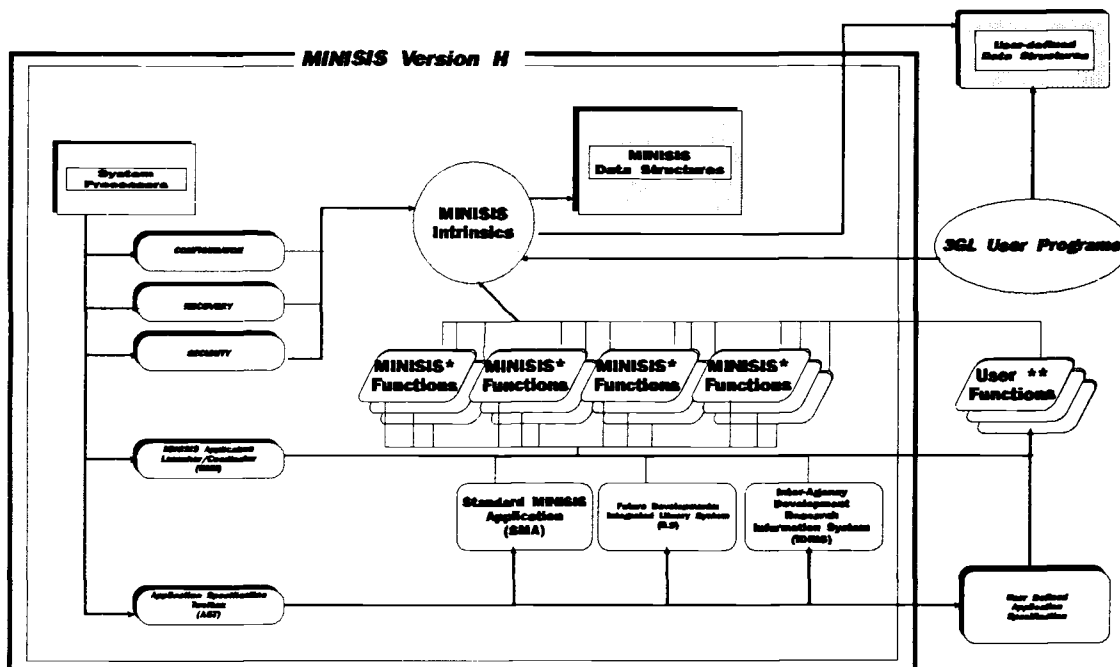
MINISIS Version H (Design Representation)

The MINISIS Data Dictionary

Creating Offline Jobs from the MINISIS Data Dictionary, by Ron Davies, from Vol. 9 No. 1 of this newsletter, describes how printing data from SYSDICTN can generate batch jobs automatically. In this follow-up article, we are presenting more information on the uses of SYSDICTN. Once you understand the principles behind SYSDICTN, you will be able to take greater advantage of the MINISIS data dictionary.

MINISIS Version G introduced the data dictionary feature. This was done to maintain database integrity. It was also done so users could manage the information about their databases.

MINISIS stores data definitions in a database, called SYSDICTN, in each account with MINISIS databases. Before version G, data definitions MINISIS stored data definitions in an MPE file.

OBJDKEYD and SYSDICTN

MINISIS uses the SYSDICTN database, provided by IDRC, to record the database options selected in DATADICT. Options are available on two levels: database header and field information. Options available in the database header level are items like the MASTER FILE NAME and DEFAULT PRINT FORMAT FILE. Options available at the field information level are items like the field TAG, MAXIMUM LENGTH and VALIDATION. MINISIS stores this information in a database with one field defined for each of these options. This is the SYSDICTN database provided by IDRC. The data definition for SYSDICTN is in the MINISIS account. However, the master and cross reference files for SYSDICTN are in the accounts where the user has defined MINISIS databases. The data definition is global while the data files are local.

The list below illustrates how MINISIS stores data definitions. The list shows the records in the SYSDICTN database for a database called BIBLIO in the data model LIBRARY. BIBLIO contains only two fields - B100 for title and B200 for author.

```
ISN 926
      H030 DMNAME      :      LIBRARY
      H010 DBNAME      :      BIBLIO
      H070 GPNAME      :      DATA
      H110 XRNAME      :      XBIBLIO
      H090 MTNAME      :      MBIBLIO
      H190 AUTONB      :      Y
      H210 DEFQRY      :      B100
      H250 DEFFMT      :      PRBIBLIO.DATA
      H650 PTSEQN      :      Y
      X010 TYPE        :      RD
      X050 FTYPE       :      MASTER
      X300 STATUS      :      OBJ
      H800 FLDLST      :      BIBLIO B100
                              BIBLIO B200

ISN 927
      X010 TYPE        :      RD
      D900 RECID       :      BIBLIO B100
      D010 FDNAME      :      Document title
      D030 MNMONC      :      TITLE
      D050 TAG         :      B100
      D090 MAXLEN      :      100
      D210 PROMPT      :      Y
      P150 INVERT      :      Y
      D370 ONLINV      :      Y
      D430 INFTYP      :      B
      D470 EXTLEN      :      20
      D490 MAXKEY      :      20
      D510 EXTYPE      :      W
      D590 STRIP       :      N
      D650 INVROT      :      TITL
ISN 928
      X010 TYPE        :      RD
      D900 RECID       :      BIBLIO B200
      D010 FDNAME      :      Authors
      D030 MNMONC      :      AUTHOR
      D050 TAG         :      B200
      D090 MAXLEN      :      40
      D110 REPEAT      :      Y
      D210 PROMPT      :      Y
      P150 INVERT      :      Y
      D370 ONLINV      :      Y
      D430 INFTYP      :      B
      D470 EXTLEN      :      40
      D490 MAXKEY      :      10
      D650 INVROT      :      AUTH
```

The header information is in the first record. It has the following fields:

- H030 (data model name),
- H010 (database name),
- H070 (group name),
- H110 (XREF file name),
- H090 (master file name),
- H800 (database and field tags).

The field information follows. MINISIS uses individual records to store the field definitions. The records have the following fields:

- D900 (database name and field tag),
- D010 (field name),
- D030 (mnemonic),
- D090 (max. length of field),
- D210 (prompt),
- P150 (inversion),
- D370 (inversion on-line).

OBJDKEYD

As it compiles a database, DATADICT:

- takes the data definition stored in SYSDICTN,
- reformats it and
- writes it to the OBJDKEYD file in the PUB group of the account.

OBJDKEYD contains the compiled format of the data definitions, and the names and location of all the KEYD files in the account. This is similar to what MINISIS kept in the KEYGROUP file of earlier versions. OBJDKEYD also contains the last ISN for each database with auto-numbering. This is similar to what MINISIS kept in the NUMBERS file of earlier versions. Most MINISIS processors retrieve the data definition of a database from OBJDKEYD. MINISIS enters changes to the data definition in SYSDICTN. Compiling the changed definition writes the changes to OBJDKEYD.

THE SYSTEM OBJDKEYD, THE LOCAL OBJDKEYD AND SYSDICTN.

The MINISIS account comes with a file called OBJDKEYD in the PUB group. This OBJDKEYD con-
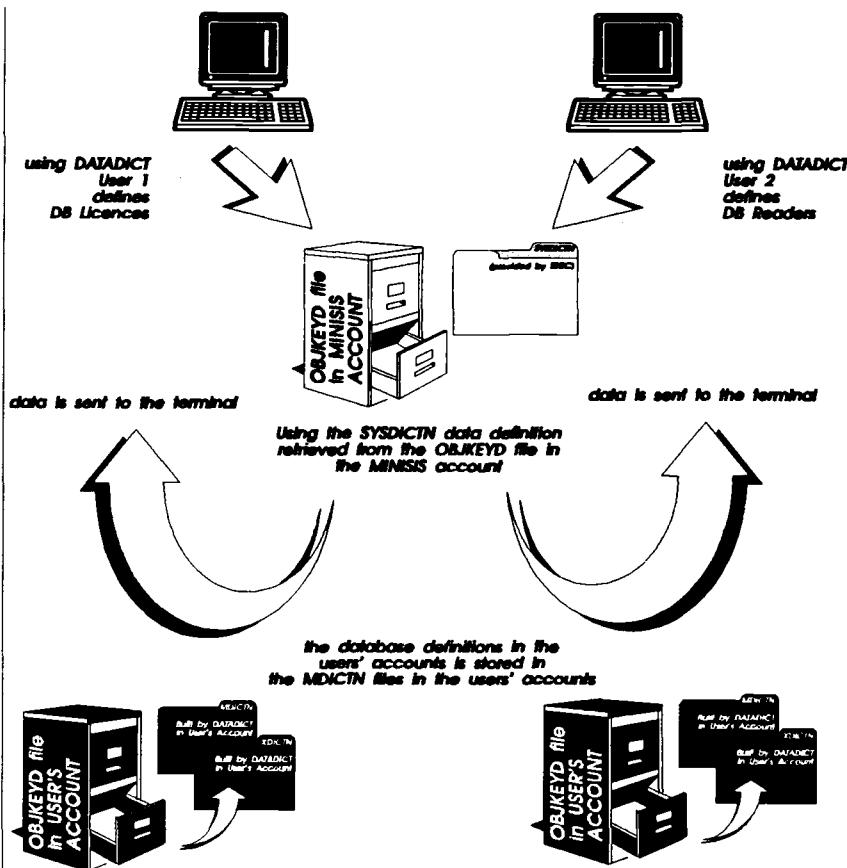

Figure 1: Interactions between SYSDICTN, MDICTN and XDICTN

tains only the SYSDICTN compiled data definition. IDRC does not provide the source data definition of SYSDICTN. The Appendix of Volume II of the MINISIS documentation describes the SYSDICTN fields.

When a user defines a database using DATADICT (See Figure 1), MINISIS gets the data definition for the SYSDICTN database from the MINISIS OBJDKEYD file. MINISIS stores the database definition in MDICTN, the MASTER file for the SYSDICTN database in the user's account.

Each account has a local MDICTN with the definitions of the databases in that account. The file XDICTN is the corresponding XREF file. The OBJDKEYD file in each account contains the compiled versions of the data definitions in the account.

Each account has inverted files related to the data in the master file MDICTN. Some of the inverted files are:

- RNXXKEYD for field D650 (root name of inverted file) and field D310 (root name of validation file),
- IDXXKEYD for D900 (record identifier),
- DBXXKEYD for H010 (database name) and
- DMXXKEYD for H030 (data model name).

DATADICT uses these inverted files to manage data definitions.

How SYSDICTN and OBJDKEYD are used

VERIFY

The command VERIFY used in DATADICT uses the following procedure:

- retrieve information from the SYSDICTN database
- search the inverted file DBXXKEYD (database name)

and IDXXKEYD (record identifier) for the records

• and extract the data definition.

VERIFY gets the KEYD file information from the OBJDKEYD file.

The system generates data not stored in SYSDICTN and assigns a Y tag. This includes data such as the highest used ISN. The system also gives Y tags to the data retrieved from OBJDKEYD.

The Y fields generated are:

• Y010 (highest used ISN),
• Y020 (maximum number of ISNs in the database),
• Y030 (maximum size of master or KSAM file),
• Y050 (root name of inverted file),
• Y060 (inverted file type) which can contain:
  • 0 for REG,
  • 2 for LEFT,
  • 3 for LEFTADJ,
  • 4 for DOT,
  • 5 for BIT,
  • 8 for FREQ and
  • 9 for KSAM,
• Y070 (next assigned ISN).

The corresponding print format (from the FORMAT group) displays the information. Some print formats are offered, for example, POFFRDnn.FORMAT and POVERnn.FORMAT. The nn represents the language code of the print format. The print formats contain Y fields to print the system generated information.

You may want to create a print format for VERIFY that displays only the last ISN used or only the KEYD field information. In such cases, create a format with Y010 or one with Y050 and Y060 (with TEST conditions to determine file type) and call these formats using the FORMAT option of the VERIFY command.

DBLIST

The DBLIST command in DATADICT gets its information from the inverted files DMXXKEYD (data model name).

LISTDDT

The LISTDDT processor uses the OBJDKEYD file to get its information, rather than the SYSDICTN file.

REORG

This command in DATADICT runs GARBAGE on the SYSDICTN database of the account, recovering wasted space in the MDICTN master file found in the PUB group.

SHOWJOBLIB

This command in DATADICT displays a list of jobs to execute on the SYSDICTN database of the account. One of the jobs re-inverts the system inverted files such as DMXXKEYD. The other jobs make use of SYSDICTN to produce database information. You can create your own jobs to produce customized reports for your site.

If you experience problems with DBLIST or VERIFY, chances are that your SYSDICTN B-Trees are corrupt and you should re-invert.

Transferring Database Definitions

Using ISOCONV and BATCHIN data definitions can be passed to another account or another system. IDRC provides a Correspondence Definition, called CDSYSDIC, in compiled format in the OBJDKEYD file of the MINISIS account. Users who want to create a BATCHIN output of SYSDICTN will have to create the appropriate print format using the field tags of SYSDICTN.

Use the ISOCONV LOAD operation to create an ISO 2709 file of a particular data definition. Use ISOCONV in the database account.

LOAD FROM = SYSDICTN.MINISIS,TO = CDSYSDIC.MINISIS

Select the records using H010 (database name) and D900 (record identifier).

= H010 BIBLIO OR D900 BIBLIO@

To DUMP a database definition to an account run ISOCONV in the account and select DUMP.

DUMP FROM = CDSYSDIC.MINISIS,TO = SYSDICTN.MINISIS

Then select SUBSET = ALL (all records). Once the DUMP operation is complete, the database must be compiled using the COMPILE command in DATADICT.

COMPILE database name

Using ISOCONV or BATCHIN to transfer data definitions does not transfer information about associated B-Tree into OBJDKEYD. To register B-Trees in the OBJDKEYD file, use the CREATE BTREE command in DATADICT.

If you run under security, you must add SYSDICTN.MINISIS and CDSYSDIC.MINISIS to your security profile before you can use any MINISIS processor on this database.

Of course, if you transfer a PS or DS definition you must also transfer its components.

Searching and Printing the Contents of SYSDICTN

To search SYSDICTN for data definitions in an account give the name SYSDICTN.MINISIS in QUERY and use the IDRC supplied print format called PRDICTN.FORMAT. To search for the BIBLIO data definition in QUERY:

• name SYSDICTN.MINISIS as the database
• name PRDICTN.FORMAT.MINISIS as the print format,
• and use the query expression " = H010 BIBLIO OR D900 BIBLIO@."

To search SYSDICTN for databases using the print format SIMPLE use the query expression " = H250 SIMPLE." Since H250 is not inverted, it would be a free text search.

This information is intended to help you work with the newer features of MINISIS. If you want this series to continue, or if you have a feature you want explained further, please let us know.

Centro de Recursos MINISIS para América Latina

El Centro Internacional de Investigaciones para el Desarrollo (CIID) y el Centro de Información Científica y Humanística (CICH) de la UNAM, México, recientemente firmaron el convenio "Centro de Recursos MINISIS - América Latina" el cual establece que CICH es el Centro de Recursos MINISIS (CRM) para América Latina. El objetivo del programa CRM es de descentralizar el apoyo a los usuarios para que lcada región tenga apoyo local y efectuado por sus propios expertos. Este es nuestro primer CRM en América Latina.

Bajo los términos del convenio, en general CICH provee servicios de entrenamiento MINISIS (cursos básicos que vienen con la instalación de MINISIS y cursos avanzados) a los usuarios de América Latina, brinda soporte técnico (solución de problemas encontrados al usar MINISIS), coordina la traducción al español del material MINISIS y es el punto de enlace entre el CIID y los usuarios en la Región. También el CICH y el CIID podrían cooperar en actividades específicas tales como probar versiones nuevas de MINISIS en español o bien desarrollar rutinas específicas o material de entrenamiento.

CICH, usuario de MINISIS desde 1985, es un instituto reconocido por sus actividades en el campo de la información. Las actividades de CICH abarcan consultas a bases de datos nacionales e internacionales, la creación y difusión de las bases de datos latinoamericanas PERIODICA y CLASE que analizan las principales publicaciones periódicas en Ciencias y Humanidades, asesorías en el diseño y desarrollo de centros de información, asesorías en el diseño de bases de datos y en la aplicación de nuevas tecnologías de información, subscripción de las publicaciones periódicas de las hemerotecas de la UNAM (alrededor de 10,000 títulos) e investigación en Ciencias de la Información (bibliometría, programas docentes, estructuras de información, mercadotécnia). CICH ha colaborado anteriormente con el CIID en la difusión y entrenamiento de MINISIS, dictando cursos básicos y proveyendo soporte técnico.

Para comunicarse con CICH, los usuarios deben dirigirse al Ing. Enrique Barreto, quien coordina el apoyo a los usuarios de MINISIS. La dirección completa es:

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De acuerdo a la descentralización de apoyo a los usuarios, el CIID actualmente apoya los CRM para las regiones siguientes (los institutos correspondientes están entre paréntesis):

- China (ScienTech Information Centre)

- India (SNDT Women's University)

- Los países arabes (Documentation & Information Centre, Arab League, Egipto)

- Africa de habla francés (Organisation Africaine de la Propriété Intellectuelle, Camerún)

Las comunicaciones de los usuarios de América Latina se pueden efectuar directamente con CICH, centro dedicado al apoyo para los usuarios de América Latina, o bien con el CIID.

MINISIS Resource Centre–Latin America

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In line with IDRC's commitment to decentralize MINISIS support, IDRC currently supports MINISIS Resource Centres in the following regions (the corresponding institutions are in parenthesis):

- China (ScienTech Information Centre)

- India (SNDT Women's University)

- Arab speaking countries (Documentation & Information Centre, Arab League, Egypt)

- Francophone Africa (Organisation Africaine de la Propriété Intellectuelle, Cameroun)

MINISIS users in Latin America are invited to correspond directly with CICH, the centre dedicated to supporting MINISIS users in Latin America, or with IDRC.

Newsletter Notices This edition of the newsletter introduces a new design and direction. Included in this edition is a new column, User to User.	The newsletter will be published three times a year, not four. The bibliography is not included in this issue of the newsletter, it will return in subsequent issues.	We are updating the information and format. Contributions and comments are welcome.

User to User

I received a letter recently from **Michael Afar at ICURR in Toronto.**

"When printing our thesaurus, I would like it to print so that the first word of each new letter will start on a new page, with the other words following.

I have modified the print format to include a Y-tag field, which I preceded the Main Term English Tag. I changed the page level specifications to reflect columnar formatting and for NUMBER OF PAGES TO SKIP IF HEADING CHANGES, I selected the value 1.

At the record level specifications, I selected YES for EQUAL SUP-PRESSION and NO for the PRINT AT TOP OF PAGE ONLY prompt for the Y-tag. For the T100 (Main Term English) tag I selected YES for EQUAL SUPPRESSION and YES for the PRINT AT TOP OF PAGE ONLY prompt.

Following, is the way I indexed the terms:

Try the following adjustments to your PRINT format:

select PAGE EJECTION = YES for the Y-tag field, with EQUAL SUPPRESSION set at YES, MINISIS will consider the Y-tag as not present until the contents change and will go to a new page every time the character changes

(database)	THESMAS
	ISN = 1/9999
	OUTPUT = INDXBK
(primary sort key)	KEY = FLETTER,LENGTH = 1
	FIELD = T100
	END
(secondary sort key)	KEY = MAINTERM,LENGTH = 60,ALTLABEL = YES
	FIELD = T100
(Forbidden Term English)	ALTERNATIVE = T200

From Colin Townsend at Brandt Computer Services in Ottawa, we received (via Systems Management) the following suggestion:

FIXING CORRUPTED KSAM FILES — AN OPTION

If your system crashes with KSAM files open it is necessary to run the KSAMUTIL utility with the KEYIN-FO name;RECOVER option to reset the end of file pointer. If this is not done you may not be able to access the file. However it appears that occasionally you will be able to access the file but such access may cause the file to be corrupted with keys written out of sequence.

If you have such a situation and do not have an easy recovery path to rebuild the KSAM then the following technique may be useful:

1. Use FCOPY to copy the KSAM to a new KSAM employing the special syntax required for KSAM files, namely:

`FCOPY FROM=OLDKEYD;TO=(NEWKEYD,NEWDIR);NEW`

This will stop if any duplicate or out of sequence key is found, but will report the record number where the problem was found.

2. Set a file equate that will allow you to append data to the new KSAM:

`FILE F=NEWKEYD,OLD;ACC=APPEND`

3. Use FCOPY with the subset option to continue the copy. For example if the copy aborted at record 1000:

`FCOPY FROM=OLDKEYD;TO=*F;SUBSET=1002 ,9999`

This will skip one record and continue the copy for 9999 records (assuming your KSAM is smaller than this).

4. If there are more duplicates step 3 may have to be repeated until the EOF is reached.

5. Purge or rename the original OLDKEYD and OLDDIR.

6. Finally FCOPY from the new KSAM to the original names:

`FCOPY FROM=NEWKEYD;TO=(OLDKEYD,OLDDIR);NEW`

Note that you cannot rename a KSAM KEYD or DIR file as the system does not recognize them afterwards, hence step 6 is required.